

THE CONTRIBUTION OF VIRTUE ETHICS TRAINING ON ETHICAL UTILISATION OF CELL PHONES BY MBA STUDENTS AT NKUMBA UNIVERSITY IN UGANDA

Wilson Muyinda Mande

ABSTRACT

This paper reports the findings of the study that was carried out to analyse the contribution of the training in virtue ethics on ethical utilisation of cell phones by MBA students. The study examined the relationships between virtue ethics training, acquisition of cell phones and their ethical utilisation. It was found that the training in virtue ethics had a positive relationship with acquisition of cell phones [$r(46) = .330, p < 0.05$]. On possession of cell phone and ethical utilisation, there was no relationship [$r(46) = .043, p > 0.05$]. The training in virtue ethics explained 38% ethical utilisation of cell phones by MBA students. In view of these findings the paper proposes inclusion of practical or field work when virtue ethics training is executed.

INTRODUCTION

The cardinal task of the current study was to analyse the contribution of virtue ethics training to ethical utilisation of cell phones by MBA students. The research focused on the Master of Business Administration (MBA) students at Nkumba University. The University requires every MBA student to offer the Business Ethics course unit. This requirement cuts across all areas of MBA specializations of marketing, management, finance, information technology and procurement management (Nkumba University Prospectus, 2016). The primary objective of teaching ethics to MBA class is to enable students adopt a culture of applying ethical reasoning to every decision and action students get involved in while still at the university.

The term ethics originated from Greek word ethikos from which English derived terms like ethos and ethics. In Greek ethics meant actions, character, conduct or behaviour that was valued. Actions are valued if they affect people positively or negatively. Actions that do not affect anyone are of no concern to ethical discourse. Ethics is about how we ought to live. It examines the various patterns of morality that exist in the habits of people, the fabric of communities, the teachings of the wise and analyses which ought to be followed and how we know. Ethics emphasises living trustworthy and honourable lives and not living as cheats, liars, exploiters or oppressors especially in business and public undertakings.

Virtue ethics is a normative enquiry. It endeavours to arrive at moral standards that regulate right and wrong conduct. This may involve articulating the good habits that we should acquire, the duties that we should follow or the consequences of our behaviour on others. We should do to others what we would want others to do to us. Since I would want people to lend me money when I am in need, then I should also lend people who are in need of money. So a normative theory establishes a single principle against which we judge all actions.

As far as virtue ethics training is concerned, the University intention is to have students embrace ethical conduct when they are still studying. Practising ethical conduct ought to have started when they were still small children. A family is primary socialising agent as far as virtues are concerned. The University is supposed to enhance and engrain more virtues into the students.

The intention that students who have read ethics would start practising it while at university was tested against the use of cell phones. Cell phones became common in Uganda in the second half of the 1990s. That is a period equivalent to almost a full generation. There are many people in Uganda who have subscribed to mobile phones. By close of 2018, about

32 million sim cards had been acquired from the telecommunication companies. This number was shared out as shown in the table 1 below.

Table 1: SIM cards of cell phones in Uganda by 2017 -2018

	Telecom company	Customers in millions
1	MTN Uganda	18,048,353
2	Airtel Uganda	10,076,051
3	Africell Uganda	3,588,583
4	Uganda Telecom	213,768
5	Smart	113,595
6	K2	81,904
7	Others	85,529
	<i>Total</i>	<i>32,207,783</i>

Source: Mpairwe (2017)

It is worth noting that the number of people using cell phones in Uganda was relatively big. The number of subscribers accounted for 56% of the total population. The number of Ugandans using cell phones had been growing steadily since the year 2000. In 2018 it is also estimated that about 2.6 million Ugandans were active on social media (Sebunya, 2018). Most of these were young people especially students in universities and tertiary institutions.

The figures in table 1 accounted for SIM cards. It is worth to note that the number of sim cards is not equal to people who own cell phones. The number of people who own cell phones is about 25 million. The difference is explained by the fact that some people own more than sim card and other sim cards are owned by organisations. The number of individuals owning sim cards has been growing every year since 2008. The changes in ownership of cell phones in Uganda is provided in Table 2.

Table 2. population owning cell phones in Uganda 2008-2018

	Year	Millions
1	2008	8.55
2	2009	9.38
3	2010	12.83
4	2011	16.7
5	2012	16.36
6	2013	18.07
7	2014	20.37
8	2015	20.22
9	2016	22.84
10	2017	23.00
11	2018	24.95

Source: <https://www.statista.com/statistics/501155/>

Since the individuals with cell phones has risen from 8.55 million in 2008 to 24.95 in 2018, it is plausible to argue that more than half of the Ugandan population own and use cell phones. For that matter, cell phones are a dominating phenomenon which deserves all attention. Cell phones have been the centre of communication, money transactions, photographing, video recording, advertising, information storage, data capture and as a platform for collecting excise duty.

Virtue Ethics Training

Virtue Ethics training at MBA level is concerned with teaching students to approach business decisions and personal conduct in an ethical manner. The way people make decisions and conduct themselves in business and in public life, not to mention in private life, is often influenced by the values they acquired from their families, culture, religion, experience, context, peers and other socialising agencies. This means that university education is one of the socialising agencies. Each socialising agencies

have an area of emphasis. It is for this reason that virtue ethics as part of business ethics is taught to MBA students.

THE NEED FOR THIS STUDY

The training virtues ethics is expected to influence the learners' decision-making, conduct and actions. This is what is expected of the MBA students at the university. In spite of that presumption, there are many instances which seem to suggested that as far as cell phones are concerned, it may not the case. For instance, some university students were reported to have used cell phones to cheat during examinations (Okello, 2014). In the same year, in Eastern Uganda students and staff clashed over mobile phones (Papa, 2014). Similarly, another study (Ahimbisibwe, 2017) pointed out that some 18 students were punished for examination malpractice. Overall, in 2013 the Ministry of Education had issued a ban on mobile phones in schools because of the following reasons: “Government registered an overwhelming rate of exam malpractices. This was particularly noted when students were reported to use phones to receive questions and answers of leaked examinations prior to sitting Examinations; cell phones were also found to encourage other unethical actions (Ouga, 2013). In 2015 there as a debate whether to ban or allow digital devices in educational institutions (Kamugisha and Ninsiima, 2015). At Nkumba University some students were found guilty of violating examination rules by carrying cell phones into examination rooms (Nkumba University Senate records, 2016). Some staff complained about students who use phones to send obnoxious messages to cause trouble at university including organising violent strikes (Nkumba staff, 2018). On a wider level, research of 2015 indicated that cell phones had had “good influence on the realms of education, personal relationships and the economy but had negative on morality in emerging and developing nations (Pew, 2015)

The above reasons suggest that university students may not be using cell phones ethically. For that reason, it was appropriate to carry out the current research especially on MBA students who had already offered the ethics course to determine whether it had any impact on their conduct.

OBJECTIVES

- 1) To analyse the relationship between virtue ethics training and acquisition of cell phones by MBA students at Nkumba University
- 2) To assess the relationship between acquisition of cell phones and the ethical utilisation of cell phones by MBA students at Nkumba university
- 3) To gauge the contribution of virtue ethics training on ethical utilisation of cell phones by MBA students.

LITERATURE REVIEW

The purpose of virtue ethics training at the University is to equip students with competencies to make ethical decisions and minimisation of unethical aspects in business and public life (Mande, 2014). Ethics especially virtues are important for the people who serve or interact with others.

The current review of related literature focused on five sub-themes namely: concept of virtues ethics training, acquisition or ownership of cell phones, ethical utilisation of cell phones. These are the key sub-themes which have relevance to the topic under study.

Virtue ethics training and acquisition or ownership of cell phones

The sub-theme of cell phone ownership or acquisition has been handled by many studies. The predominant motif is that the number of the people with cell phones has been increasing each year the world over. In 2016 about 2.1 billion people were estimated to own cell phones. The number

rose to 2.32 billion and 2.53 billion in 2017 and 2018 respectively (Baron, 2018). In Universities, it was found that about 94.4% of students owned cell phones at Najran University in Saudi Arabia (Alfawareh and Jusoh, 2014). It was found that the majority of students at the University of Dar es Salaam in Tanzania owned cell phones (Mwabungulu and Mugwabi, 2017). One other study found out that some students especially female ones would do anything including unethical ones for the sake of acquiring a smartphone (Murungi, 2017). Although the acquisition of cell phones is common and increasing, its relationship with the ethics education is not included in the debate. It is for that reason that the current set out to examine the relationship between ethics education and acquisition of cell phones. Hence the first null hypothesis:

H_0^1 There is no significant relationship between virtue training and acquisition of cell phones.

H_A^1 There is a significant relationship between virtue training and acquisition of cell phones.

Acquisition of cell phones and ethical utilisation of cell phones

As far as utilisation of cell phones was concerned, some studies found that there was a consideration addition to them (Haug, Kwon, Kowatsch, Paz Filler and Schaub, 2015). The addiction was found to be among young users of cell phones (Kumcagiz, 2018). Although addiction was associated with young adolescents, that is, between 15 and 16 years, When compared with younger adults, that is 19years and older, it was revealed that the young adults experience less addiction (Haug, et, 2018). Another dimension of the debate was that addiction to smartphones was found to reduce the rate of working and productivity (Duke and Montag, 2017).

Some studies Suhail (2017) in Uganda; Masika et. al., (2015) in Kenya; Kushwaha (2017) in India; Mojaye (2015) in Nigeria and Quist and Quarshie (2016) in Ghana found that there was a high number of young people who owned and used cell phones. On the other hand, however, other studies like that of Wanyama et al (2018) young people between the ages of 18 to 24 years did not use cell phones to learn about HIV / AIDs. The usage for that purpose was as low as 30%.

Some studies have contended that some people have used smartphones so much so that they have even developed a state of nomophobia (Tams, Legoux and Leger, 2018).

It could be noted that the debate of numbers among these authors, though useful, did not involve those who have offered ethics as a course unit at University level, neither do they include MBA students in their samples. Furthermore, they did not associate addiction ethics. When a person acts under the influence of addiction can such person be held ethically responsible? So there is gap which the above debates have not filled. For those reasons it is as plausible as it is true to assert that the above authors debate did not help in answering the question of ethics education and use of cell phones by MBA students at Nkumba University. It is the current study that is trying to answer that question. Given the debate raised above the second hypothesis of the study is formulated as stated below:

H_2^o There is a significant relationship between acquisition of cell phones and ethical utilisation.

H_2^A There is a significant relationship between acquisition of cell phones and ethical utilisation.

Virtue ethics training and ethical utilisation of cell phones

From production to usage of cell phones, there are ethical issues associated with cell phones. The 40 plus materials which are needed in production of cell phones, necessitate mining and processing (DiMarco, 2017). These activities involve unethical activities. For that matter, another study contended that talking about ethical smartphone is an oxymoron (Richmond, 2016). This view seems to suggest that smartphones are everything unethical.

Other studies were more concerned with ethical utilisation of cell phones. Some researchers (Nabulyalo, Jeyaseelah, Malagelada and Heaton, 2016) focused on ethical use of smartphones in orthopaedics. They concluded that many medical personnel using smartphones, record, store and share images of patients. This is an unethical use of cell phones.

It was also observed that beneath the text messages pictures, and other things transmitted through the cell phones, there is a dark and disturbing story (Dancey-Downs, 2018). For instance, companies in Democratic republic of Congo and sustain armed and ruthless militia there so that companies can mine metallic ore use to build mobile capacitors; tropical forests were destroyed in Indonesia to do tin mining; and human rights in various places have been abused because companies want to make cell phones (Dancey-Downs, 2018). The debate in the above literature is very informative. However, it did not cover the effects ethics education would have over ethical utilisation of cell phones, especially in Ugandan setting. This is the gap the current study sets out to fill. In view of the literature on ethics and cell phones, the third hypothesis of the study is formulated as stated below:

H_3 There is no significant contribution of virtue ethics training on
 H_0 ethical utilisation.

$H \frac{3}{4}$ There is a significant contribution of virtue ethics training on ethical utilisation.

METHODOLOGY

This study was carried out in Uganda at Nkumba University. A sample of 46 was considered sufficient for two reasons: (i) according to Roscoe's rule of the thumb, any sample between 30 and 500 can produce credible results in social science research (Roscoe, 1975); (ii) respondents were all the 46 MBA students in their second year and final year of study. All the 46 students had coffered the ethics course unit and completed.

Their demographic characteristics were as follows: in terms of gender, 52% were male and 48% female; regarding nationality, 70% were Ugandan and 30% international students; the majority or 57% were above 25 years, 26% were above 35 years and 17% were below 24%. The study's respondents therefore were young adults. It is often held that young people are as fascinated as they are savvy at information communication technology (Makumbi, 2018).

Collinearity test

A collinearity test was intended to ascertain the independent variables were not highly correlated. This was necessary because if it happened that there was a severe collinearity, it would suggest that there was a problem of exaggerating the variance of regression coefficients making them unstable. The tolerance and collinearity test was executed in order to determine two things: (a) the strength of the linear relationship among the independent variables, otherwise known as tolerance; (b) to tell if collinearity was a problem for the data of the current study.

In detection of collinearity, the Variance Inflation Factor (VIF) is the most commonly used (O'Brien 2007; Wooldridge 2013). A VIF of 1 indicates that a variable is completely uncorrelated with other independent

variables while larger values indicate that a greater proportion of the variance can be predicated by other independent variables. The rule of the thumb is that there is collinearity problem if the VIF exceeds 4 or 10. So the variance VIF measures how much the variance of the estimated regression coefficients are inflated as compared to when the predictor variables are not linearly related.

Table 3 the test of collinearity

Model	Coefficients						Collinearity Statistics	
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Tolerance	VIF	
	B	Std. Error	Beta					
(Constant)	1.238	.607		2.038	.048			
1 Ethics education	.809	.150	.673	5.399	.000	.891	1.122	
Ownership of cell phones	-.226	.157	-.179	-1.438	.158	.891	1.122	

a. Dependent Variable: ethical use

From table 6 it can be seen that (a) none of the tolerance was small. All of them were high, that is, .891 which meant that they were not close to 0. This implied that collinearity was not a problem. The data of the current study had no possible replications. For that matter, the data and its outcome were good and credible.

Furthermore, given the fact that the VIF was around 1.122, it meant that the variables of ethics education and possession of cell phones were completely uncorrelated. This implied that there was inflation of the regression coefficients. For that matter the results of the regression tests were reliable predictors.

Methods and tool of data collection

The main method used was the survey method. Data was gathered using a structure questionnaire. Besides the items on the demographic characteristics, the rest of the items on the questionnaire were on Likert scale (that is, Strongly Disagree =1; Disagree =2; Neutral = 3; Agree = 4; and Strongly Agree = 5). One expert was used to rate the validity of the items on the questionnaire. The result of the content validity index was 0.785.

The Cronbach alpha coefficient was for the reliability of the questionnaire was 0.877. This implied that the tool was internally consistent.

RESULT AND INTERPRETATION

The ethics education offered to MBA students at Nkumba University focuses more on applied ethics. It covers many areas including virtue theory. This is one of the main three normative theories of ethics. By the end of the course the MBA students are expected to have gained information and skills of not only handling most business matters ethically but also behaving well.

The relationship between virtue ethic training and acquisition of cell phones

Virtue is conceptualised as dispositions to behave properly and it embodies one's philosophy of life. That is, self-understanding and understanding the social and natural world around. Training in virtues stresses the point the view that what is important in moral life is not consistent adherence to principles and rules but reliable character, moral good sense and emotional responsiveness. Among the so many virtues taught to MBA students are:

Table 4 some of the virtues taught to MBA students

	<i>Virtue</i>	<i>Its meaning</i>
1	Accountability	The state of taking responsibility for one's own actions or inactions
2	Creativity	Being able to generate new ideas as a solution to existing gaps
3	Eloquence	Fluently and persuasively articulating issues at hand
4	Forbearance	Restraint under provocation
5	Gratitude	Being thankful for others good deeds
6	Honesty	Being sincere, not lying nor cheating
7	Humility	Not demonstrating false pride or haughtiness
8	Integrity	Consistency in values and actions

9	Impartiality	A proclivity to weigh both opinions equally without prejudice
10	Justice	Giving a deserved treatment or response
11	Knowledge	Information with guidance for action based on insight and experience
12	Punctuality	The proclivity to always keep the appointed time
13	Reliability	Being trusted to do something right and not to do something wrong
14	Sensitivity	Awareness of oneself and others' in social or personal relationships
15	Understanding	Holistic awareness and comprehension of facts
16	Assiduousness	Being hardworking and not loafing nor mooching lazily

Source: Nkumba University Business Ethics Course Outline, 2016

The methods used to teach the above virtues included the lectures. A lecture has been defined as a method whereby the professor reads aloud from a text and also offers a commentary or leads a discussion on the topic. This method is advantageous in that it inculcates virtues because it enables students to grasp terminologies and to gain a clear understanding of concepts. Other methods used in teaching virtues include were (question and answer), discussion and case studies. This training lasts a quarter of a year.

To analyse the relationship between virtue ethics training and acquisition of cell phones, Pearson's Product Moment Correlation test was carried out. The results of the Pearson's correlation test indicated that there was a low positive significant relationship between ethics education and acquisition or possession of the cell phones among the MBA students [$r(46) = .330, p < 0.05$]. The implication of this statistic was that to some extent, MBA students understood that as training in virtue ethics indicated, possessing a cell phone called for ethical considerations.

The regression test first revealed a model summary with the result which gave an R^2 of .109. This meant that virtue ethics training explained about

11% of the MBA students' impetus to possess cell phones. As far as linearity was concerned, the regression results were [$F(1, 44) = 5.368, .025$] showed a linear relationship between virtue ethics and possession of cell phones. That is to say, MBA students possess cell phones for ethical reasons. They believe that possessing a cell phone is an ethical matter. They arrive at this conclusion using virtue ethics training knowledge.

The first null hypothesis argued that "there would be no significant relationship between virtue ethics training and possession of cell phones". The results of the test of this hypothesis are reported in table 5.

Table 5 Coefficients on virtue ethics training and possession of cell phones

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	2.101	.490	4.291	.000
	Ethics education	.315	.136	.330	.025

a. Dependent Variable: possession of cell phones

The results of $Beta = .330, p < 0.05$ meant that the null hypothesis was rejected and the alternate one, "there would be a significant relationship between virtue ethics training and possession of cell phones", was supported instead. Virtue ethics training was therefore important for the 98% MBA students who had acquired cell phones.

The relationship between possession of a cell phone and ethical utilisation of the same

Possessing a cell phone is one thing and utilising it ethically is another. In respect of the second objective of the current study, the analysis of the relationship between the two variables was necessary because cell phones were understood to cause a lot of anxiety among people.

As far as MBA students were concerned, about 98% owned cell phones.

The remaining 2 % which in absolute numbers was one individual, had just lost the cell phone at the time of the field research. It was trendy for MBA students to possess cell phones. As much as 93% of these MBA students had had cell phones for several years. Of these, 61% had more than one cell phone set. About 85% were smart phones.

Table 6 MBA students' key reasons for acquiring cell phones

	<i>Key reason for acquiring a cell phone</i>	<i>percentage</i>
i	Socialising	85
ii	Safety	74
iii	Privacy	57
iv	Academic work	83
v	Status	22

Source: Field Research

From all this it was necessary to analyse the relationship between possessing a cell phone and using it ethically. In the general population there were instances when wrongdoers were said to have used cell phones to hoodwink their victims, to cause murder, to extort money from unsuspecting individuals, to tell lies and so on.

Unlike the general population, the MBA class is special group of people in that they are educated and have been exposed to training in virtue ethics. In that was ethics is supposed not only to influence their decision making but also their actions.

To assess the relationship between possession of cell phones and ethical utilisation, a Pearson's correlation test was done. It produced results which indicated that there was no significant relationship between the two variables [$r(40) = .043, p > 0.05$]. It implied therefore that acquiring a cell phone and using it ethically are two different things. In Uganda government tried to register all the sim cards so that if any cell phone is used to commit a crime, the police can easily identify the owner.

The second null hypothesis which stated that “there is no significant relationship between possession of a cell phone and ethical utilisation” was upheld. The simple linear regression test indicated that possession of cell phone had zero effect on ethical utilisation.

The contribution of virtue ethics training to ethical utilisation of cell phones

To gauge the contribution of virtue ethics training to ethical utilisation of mobile phones by MBA students constituted the third objective of the study. As already pointed out in virtue ethics training, the University endeavours to enable students to cultivate a sense of ethical conduct. In that way ethics training would lead to ethical utilisation of cell phones. Having undertaken the course, MBA students were not expected to use cell phones to steal, to lie, to cheat in exams, to convey obnoxious messages nor are they expected to relay fake information against others.

When a bivariate correlation test was executed, it yielded results which indicated that there is a moderate positive significant relationship between business ethics education and ethical utilisation of cell phones [$r(46) = .614, p < 0.01$]. This meant that the more training in virtue ethics MBA students received, the more they use their mobile phones ethically.

A simple linear regression test was also carried out. It produced a model summary with the result of $R^2 .376$ which indicated that virtue ethics training accounted for 38% of the ethical use of mobile phones. The remaining 62% was explained by factors outside this model. The regression results also revealed that there was a linear relationship between virtue ethics training and ethical utilisation of mobile phones [$F(1, 44) 26.569, p < 0.01$]. The implication of this is that a unit change in virtue ethical training leads to a proportionate unit change in the ethical utilisation of cell phones by the MBA students who will have attained the training.

The third null hypothesis which stated that “there is a moderate positive significant relationship between virtue ethics training and ethical utilisation of cell phones” was also tested. It yielded results are given in table 7.

Table 7 the Coefficients virtue ethics training and ethical utilisation ^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.764	.516		1.480	.146
1 Virtue ethics training	.738	.143	.614	5.155	.000

a. Dependent Variable: ethical use

From table 7, the result of the coefficient of regression gave Beta = .614, $p < 0.01$. This indicated that the null hypothesis, “there is no significant relationship between virtue ethics training and ethical utilisation of cell phone” was rejected. Instead the alternate hypothesis, “there is a significant relationship between virtue ethics training and ethical utilisation of cell phone”, was supported. From these results, it can be concluded that virtue ethics training is useful in enabling students to use cell phones ethically.

This inference was also revealed in the following responses from the MBA students:

Table 8 Some ethical aspects practised by MBA students while using cell phones

	<i>Ethical aspects practised by MBA students at the University</i>	<i>percentage</i>
i	I follow the university policy on the use cell phones at campus	76
ii	I tend to apply the ethics of using a cell phone	80
iii	I keep my cell phone silent mode during lectures	70

iv	I set my cell phone in vibration mode most of the time	57
v	Virtue ethics training helps to fight phone addiction	72
vi	Virtue ethics training helps assist others to use cell phones ethically	72
vii	As an MBA, I am ready to use my cell phone ethically	76

Source: field research

It is evident from table 8 that indeed training in virtue ethics helps MBA students to have uphold and practise some amount of ethics as far as cell phones are concerned.

Ethical utilisation of cell phones is important because it helps to curb malpractices like:

- (a) Disruption of attention during lectures
- (b) Temptation to share unnecessary information or data
- (c) Cheating in examinations
- (d) Impairing one's sense of concentration
- (e) Failure to apportion and manage time well

RECOMMENDATION

Virtue ethics training focuses on inculcating a moral character. The people who possess virtues are the ones who self-actualised, well adapted, fully functioning and are good specimen of the humankind. Practising virtues of accountability, forbearance, honesty, respect, justice, prudence and others for a combination of theoretical and practical training. It is recommended therefore that the training in virtue ethics should involve students going out to businesses and communities to put into practice the ethical values learnt theoretically in the lecture rooms.

The practical training may involve drafting ethics policies for organisations, offering advice to businesses on ethical matters, debating ethical

topics with members of the community outside the University. They should also be to initiate a project on ethics and cell phones and work on for a year a semester or a year. During assessment, such practical training should account for 60% of the pass mark. Then other written examinations account for the remaining 40%. This approach is likely to generate more interest in the ethics generally and virtue ethics in particular.

CONCLUSION

It has become increasingly clear that virtues are as important as ICT. At Nkumba University normative ethical theories including virtues have been taught as a compulsory subject to all MBA students. However, the complaints about unethical use of cell phones have also been made rather often. The current study was undertaken in order to determine whether training in ethics modified the learners' moral character. It has been found that training in virtue ethics contributed only 61% to MBA students' tendency to use their cell phones ethically. In the light of this finding, this paper proposing inclusion of practical training if the university students are to be more ethical when using their cell phones.

REFERENCES

- Acharya J P, Acharya I & Waghrey D (2013) A Study on Some of the common health effects of cell phones amongst students. *Journal of Community Medical Health Education*.3:214.doi:10.4172/2161-0711.10002214
- Ahimbisibwe P (2017) 18 Makerere University students face expulsion over examination cheating. In *Daily Monitor*. <http://www.allafrica.com>
- Alfawerah H M and Jusoh S (2014) Smartphone usage among university students: Najran University Case. *International Journal of Academic Research*. Part B: Vol 6 , No 2. DOI:10.7813/2075-4124/6-2/B.48
- Baron, C (2018) Number of Smartphones users worldwide from 2014 to 2020 in billions. In *Statista*. <http://www.statista.com>
- Dancey-Downs K (2018) Reconnecting with ethics: An Alternative future or smartphones. In *The Ecologist. The Journal of Post Industrial Age*. <http://www.theecologist.org/>
- DiMarco S (2017) The New Era of Smartphones Ethics. In Good Journey Making Stewards.Com

- Duke E and Montag C (2017) Smartphone addiction daily interruptions and self-reported productivity. In *Addictive Behaviour Reports*. Vol <http://doi.org/10.1016/abrep.2017.07/>
- Haug S, Paz CR, Kwon M, Filler A Kowatsch T and Schaub (2015) Smartphone Use and Smartphone addiction among young people in Switzerland. In *Journal of Behavioural Addiction*. Vol 4 No 4. Doi: 10.1556/2006.4.2015.037
- Kamucagiz H (2018) Quality of life as a predictor of smartphone addiction risk among adolescents. In *Technology, knowledge and learning*.
- Kamugisha S L and Ninsiima R (2015) Students and Teachers Ponder Banning or Allowing Digital Devices in Schools. In the *Observer*. <http://www.observer.ug>
- Kushwaha , R. 2017.Usage of Mobile by Female Students in University India. *Journal of Mass Communication and Journalism*, Vol.7, Issue 1. doi:10.4172/2165-7912.1000329
- Makumbi R B (2018) *National Youth Policy and Job Creation for Youth with Particular Reference to KCCA and Mukono District*. Unpublished PhD Thesis Nkumba University.
- Mande W M (2014) Business Ethics Course and Readiness of MBA students to Manage Ethically. *African Journal of Business Ethics*. <http://www.ajobe.journals.ac.za>
- Masika, M M, Omondi, G B, Natembeya, D S, Mugane, E M, Bosire, K O, and Kibwage, I O (2015). Use of mobile learning technology among final year medical students in Kenya. *Pan African Medical Journal*. 2015, 21:127 doi:10.11604/pamj.2015.21.127.6185
- Masuki K F G, Kamugisha R, Mowo J G, Tami J, Tukahirwa J Mogoi J and Adera E O (2012) The Role of Mobile Phones in Improving Communications and Information Delivery for Agricultural Development: Lessons from South Western Uganda. <http://www.mak.ac.ug>
- Mojaye, E.M. (2015). Mobile Phone Usage among Nigerian University Students and its Impact on Teaching and Learning. *Global Journal of Arts Humanities and Social Sciences*, Vol. 3, No.1, pp.29-38.
- Mpairwe H (2017) The State of mobile phone subscriptions per telecom company in Uganda. <https://www.techjaja.com/>
- Mwabungulu E and Mugwabi H (2017) The Impct of smartphone usage on third year undergraduates in Tanzania: A case of the University of Dar es Salaam. In the *University of Dar es Salaam Library Journal*. <http://www.ajol.info/>

- Murungi D (2017) Smartphones. A necessary Evil? In *Daily Monitor*.
<http://www.monitor.co.ug/>
- Nabulyalo W M, Jeyaseehal L, Malagelada F and Heaton H (2016) Legal, ethical and practical considerations of smartphones use in orthopaedics. <https://publishing.rcseng.ac.uk>. DOI: 10.1308.rcsbull. 2016. 252
- Nkumba University Prospectus* (2016) Entebbe, Nkumba University
- Nkumba University Senate Records* (2016). Entebbe University. Unpublished.
- O'Brien R M (2007) A Caution regarding rules of thumb for variance inflation factors. In *Quality and Quantity*. Vol.14 Issue 5. <http://link.springer.com>
- Okello A (2014) Examination Malpractice, the evil that will soon ruin Makerere University. <http://www.campusbee.ug>
- Ouga S (2013) Ministry of Education Bans Mobile Phones in Schools. *New Vision Paper*. <http://www.newvision.co.ug>, 10th September.
- Papa P O (2014) Tororo Teachers and Students Clash over Mobile Phones. In the *Observer*. <http://www.observer.ug>
- Pew Research Centre (2015) "Communication Technology in Emerging and Developing Nations". In <http://www.pewglobal.org>
- Quist, S. C., Quarshie, H. O. (2016). The Use of Mobile Phones among Undergraduate Students-a Case in Ghana. *South American Journal of Academic Research*, Special Edition of May.
- Richmond H (2016) Is "ethical smartphone" an oxymoron. Centre for digital ethics and policy. <http://www.digitalethics.org/>
- Roscoe J T (1975) *The Fundamental Research Statistics for Behavioural Sciences*. 2nd Edition. Holt, Rinehart and Winston. New York.
- Sebunya R (2018) 12 things you need to know about Uganda's mobile landscape. <https://www.techjaja.com/>
- Stephane (2016) Kaiser - Meyer- Oklin test for sampling adequacy. <http://www.statisticconsultation.com>
- Suhail N A (2017) Exploring Mobile Phone Usage at Higher Education: A Case Study of Kampala University, Uganda. *International Journal of Computer Applications* (0975 – 8887) Volume 174 – No.2, September. <https://www.ijcaonline.org/archives/suhail-2017-ijca-915331.pdf>
- Tam S, Legoux R and Leger P (2018) Smartphone withdrawal creates stress. A moderated mediation model of nomophobia, social threat and phone withdrawal context. In *Computers in Human Behaviour*. Vol 81. <https://doi.org/10.1061/j.chb.2017.11.026/>

- Wanyama J N, Nabaggala S M, Kiragga A, Owarwo N C, Seera M, Nakiyingi W, Naluwu S, Castelnovo B and Ratanshi R (2018) "High mobile phone ownership but low internet access and use among young adults attending an urban HIV clinic in Uganda". *Vulnerable Children and Youth Studies: An International Interdisciplinary Journal for Research, Policy and Care*. Volume 13, Issue 3. <https://www.tandfonline.com/doi/full/10.1080/17450128.2017.1418037>
- Wooldridge J M (2013) *Introductory Econometrics: A Modern Approach*. 5th Edition Mason HO: South-Western Cengage Learning