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Prevalence of Internet Addiction and Socio-Demographics Correlates among Undergraduate Students of Private University of Eastern Africa, Nairobi, Kenya

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Abstract:

Cyberspace is more than ingrained in individuals' daily lives, especially in lives of university students. Internet dependency is a growing problem affecting university students globally. The research was carried out to find out prevalence of World Wide Web dependency, determine its socio demographic correlates with internet use at the Catholic University of Eastern Africa (CUEA). The quantitative descriptive research design was used to determine association between variables. Simple random sampling was applied to choose 360 participants. After careful scrutiny of questionnaires, data for 327 participants was analyzed using SPSS version 23.0. Data was collected using the socio demographic survey forms and the Internet Addiction Test Scale. The study established that overall internet addiction in CUEA was 18.3%; with the prevalence among females being 20.3% and among male students 15.6%. The study further confirmed that undergraduates commonly used the internet for non-educational work inclined towards socialization and entertainment. However, some students used internet for academic work. Lastly, the study found age and duration on cyberspace to be critical correlates of internet use, $p < .05$. However, the study did not confirm critical impact of gender, year of study and faculty on internet use, $p > .05$. Finally, the findings stipulated that Web dependency emerged as a problem that needs categorization under DSM-V. As such, the results should raise awareness to mental health specialists and CUEA administration that internet addiction is a potential problem affecting students; who are required to be selective readers and proficient knowledge analyzers with a view to succeeding in educational achievements.

Keywords: *Cyberspace, Internet use, Internet addiction, Undergraduates, CUEA.*

1. Introduction

Internet being a global communication system and its easy accessibility has since the 1990s transformed all aspects of human life. The adjustment to swift network in the early 2000 altered cyberspace usage (Universal Access to information 2017). Conversion is indicated by the increasing number of World Wide Web customers to 3.8 billion global effective end users and 2.91 billion social media customers; 731 million Web surfers; United states of America had 287 million online buyers (ICT,2017). Nigeria web purchasers totaled 98.23 million, the highest in Africa and Kenya had 15 million by December 2012 (ICT, 2017).

Researchers confirmed hyperspace as a powerful part of educational achievement owing to the important part it plays in meeting information needs of organizations (Chen & Peng, 2008). It profits institutions and the public through increased access to information globally and providing ways to spread knowledge to various sectors of the world. Furthermore, it allows intellectuals to interchange ideas on varied study fields. It also grants growth of distant learning globally, equips scholars with transmission structures regardless of the area (Holmes & Gardner 2006). The widespread internet use by scholars justifies the reasons educational establishments are early adaptors of the cyberspace (De Fleur & Dennis 2002).

The favorable aspects of the web include providing useful information, being a convenient means of communication, increasing e-learning and effecting cyberspace sourcing of information easier for students (Suhail & Bargees, 2006). Individuals profit by connecting through email and accessing knowledge via cyberspace. The instant message and receiving response almost immediately online have made work easier for students and teachers. Electronic mail, the Net, news groups and mailing lists are the most popular internet services. As technology advanced, social network increased among students.

The rapid change in telecommunication generated issues of extensive web usage. Worldwide adaptation of cyberspace lead to daily use of devices that also contribute to uncontrolled utilization of the Net. Destructive internet use is defined in varied approaches by academicians, such as Internet Addiction which is uncontrolled preoccupation or behavior with regard to hypertext connection that could lead to deterioration.

The perception of web dependency is described as an irresistible and destructive usage of computerized technology. Persons obsessed with the Net are unable to control its use and this can be harmful both physically and psychologically. The mental instabilities and social upheavals manifest in the way individuals interact with others and the need to be online always. Internet addicts give priority to the internet over relationships. Researchers reported that physical, psychological and social problems lead to poor academic performance due to internet addiction (Young, 2009; Christos, 2007).

Internet addiction symptoms include thinking of the internet all the times, spending long hours on the web; withdrawal syndromes and continued use regardless of negative effects. The individuals who experience these symptoms isolate themselves from others and become lonely when not online regardless of the unfavorable consequences. Further cyberspace dependency appears to be a recent emotional problem that brings about nervous disorder, mental instability and social problems (Griffith, 2000; Young, 2010).

The unfavorable aspect of the web is attributed to unhealthy utilization of the internet. Mostly youth are the highest users and are vulnerable to internet dependency (Bernardi & Pallanti, 2009). This is due to free access and availability of internet in computer labs in campus, mobile phones, at home and cybercafés. Whereas the internet makes life easier, it can cause problems when used unaware of its negative effects (Muslu & Bolisik 2009). Scholars are conscious of the adverse consequences of exorbitant use of the cyberspace and associated emotional difficulties (Griffiths, & Greenfield, 2000). Mental health disturbances such as anxiety and loneliness are as a result of internet obsession. This could lead to increased anxiety and evasion of direct interaction (Lee, & Stapinsk.,2012). Individuals who are addicted to the computerized equipment form relationships with the Net and tend to associate with online friends and entertainment. Internet addiction prevalence studies had been carried in various regions. Globally, Ahmadi, et al., (2014) did a study that sought to assess the extent of cyberspace dependency on computer gaming, DVDs, videos, association with anxiety and depression in Secondary School Students. Another research by LaRose, Lin and Eastin (2003) concentrated on determining the effect of unregulated cyberspace use on addiction, habit and deficiency in self-regulation. In Europe, Durkee et. al, (2016) reported (in a study of 11,931 students, mean age 14.9) extent of problematic computerized equipment use of 5.2% male and 3.9% female. In China, a study carried out constituted 6,468 graduates, mean age 13.8, reported critical level of cyberspace dependency of 0.96% (Xin.et al., 2018; Kuss, et al., 2013). United Kingdom, a research of 2,257 scholars average age 22.7, the results indicated internet addiction prevalence of 3.2%. United States of America reported that extent rates of pathological internet use ranged between 0% - 26.3% (Moreno, et. al., 2013). Ni, et.al., (2009) noted that students used the internet more compared to the general public.

In Africa studies on extent of web dependency in Mauritius university prevalence rates of 51% was reported (Mauritius is an island nation in the Seven Seas thought about as part of Africa) (Smita, & Azhar, 2018). The level of cyberspace dependency was higher than the number of total respondents studied. Nath, et al., (2013) researched the extent of web dependency among Namibia and Uganda students. The results indicated that students from both universities experience periodic dependency issues owing to excessive use of the net. Lopez-Fernandez (2015) reported pathological Net use prevalence rate from 1.7% to 5.3%, a study carried out in South African. The study comprised of 1,795 participants aged between 19-35 years. Chinatu-Nwankwo (2015) noted level of cyberspace dependency in a study of 200 respondents in Nigeria. 87 (43.5%) females and 113 (56.5%) males. Participants age ranged from 21-25 (56.0%) and findings were that most participants had severe internet craving problems.

In Kenya, Nyamboga, Ongonda and Raymond (2004) monitored students' feelings on Web usage at Egerton University. Further, Waithaka, (2013) did a study that sought to investigate internet use among University of Nairobi students. According to Kariuki (2010) Internet use by Kenyan secondary school provided many benefits such as social, entertainment, access to educational resources and increased communication. Majority of graduates had 24 hours access to the Net through mobile devices (Kariuki, 2010; Ndungu, 2011). Waithaka (2013) noted that university students utilize the internet for extracurricular activities. This is indicating that Kenya university students are progressively relying on the Net and have a high probability of becoming addicted.

Students' unmanageable use of the Net is a challenge that both academic and university libraries face. ICT adaptation agreement states that the greatest used Web application is on line correspondence for social interaction (Kamonde, 2003). This is attributed to availability of hyperspace in universities and subscriptions through mobile devices. This renders graduates the greatest World Wide Web users in the Kenya (Communication Commission of Kenya (2014); Kariuki, (2010). Kwanya (2005) noted that majority participants did not use hyperspace for academic work. Many studies have been done worldwide, however, there are no documented studies that focused on the extent of cyberspace dependency and sociodemographic associates in CUEA. This study sought to address the gap and inform future research on determining extent of cyberspace usage in a social setting.

2. Method

Catholic University of Eastern Africa is a recognized Christian university; located in Langata constituency, southwest of Nairobi city. The institution offers postgraduate, bachelor's degrees, and certificate of achievement courses. It has six departments with major division of knowledge: theology, art and social sciences, education, law, commerce and science. The University has a total of 5,680 registered undergraduates, from all over Africa and different parts of Kenya. The population is composed of both lay and religious students.

Quantitative descriptive research design was used to establish association between variables. Cross sectional survey was used to collect data. Study population from six faculties was 5,680 undergraduates. From these samples, the respondents

were selected proportionally using Population. Participants model size. Target population' was calculated using Krejcie and Morgan (1970) formula.

$$s = \frac{\chi^2 NP(1 - p)}{d^2(N - 1) + \chi^2 P(1 - P)}$$

S = needed representative sample 360

χ^2 = the table value of chi-square for one degree of freedom at the desired confidence level

N = undergraduate population in CUEA: 5,680

P = the population proportion (assumed to be .50 since this would provide the maximum sample size)

d = how close measurement is to the true value (degree of accuracy) is expressed as a proportion (.05) at 95% certainty that the population resembles the sample with approximately 3% sampling error is applicable in the above case.

$$s = \frac{3.84 * 5680 * 0.5(1 - 0.5)}{0.0025 * 5679 + 3.84 * 0.5 * 0.5} = 360$$

The illustrative sample size was 360 however, the model size was increased to give a sample of 375 in order to account for uncompleted questionnaires. In allocating samples to the faculties, Population Proportion to Size (PPS) sampling was employed. This mainly involved allocating samples in proportion to the measure of size (population size) of the respective faculties. Sample correction was achieved through data weighting according to the proportions of the student population by the faculties as indicated in Table 1.

Faculty	Enrolment	Population Proportion	Sampling Distribution
Education	744	13%	49
Theology	454	8%	30
Law	591	10%	38
Commerce	1874	33%	124
Art Social Sciences	801	14%	53
Science	1216	21%	79
Total	5,680	100%	375

Table 1: Student Enrolment Population and Sample Distribution by Faculty

2.1. Data Collection Instrument

The questionnaires comprised of socio-demographic correlates and Internet Addiction Test Scale to assess the level of internet addiction. The IATS, established by Kimberly Young in 1998, which consists of 20 points evaluated in a psychometric response scale specifying level of agreement in 5 points: from (1) strongly agree to (5) strongly disagree was used to assess prevalence of Net usage and how it affected individual's habits, social life, productivity and emotional distress. A participant can score points 100 highest and 20 lowest. The higher the score, the greater the level of internet use. Points 0-19 showed normal hyperspace usage, 20-49 mild Web utilization, while scores 50-79 presented moderate Net use. Scores of 80-100 indicated severe excessive internet use. Balta and Horzum (2008) established internal consistency of Internet Addiction Test at 0.89. This was substantiated in different environments (Davis, Flett, & Besser, 2002). Though the instrument has been tested in many countries, a study conducted to test IAT psycho-metric among Namibians and Ugandan university students suggest that some adaptation and update of the instrument are needed when using it with African population. That difference may be attributed to the difference in national culture, economic condition and information technology infrastructure (Nath, et al., 2013). Preliminary testing was done to examine the instrument prior to conducting the study in order to examine authenticity and suitability of the instrument.

In the study, Cronbach's alpha (α) for the Internet Addiction Scale was 0.88. Since the scale had Cronbach's alpha more than of 0.8, which is an excellent level of reliability indicating good internal consistency of the data collection instrument (Cronbach, Schönemann, & McKie, 1965).

2.2. The Study Procedure

The participants were gathered in the conference hall where the researcher explained the nature of the study. The researcher informed the participants that confidentiality will be observed, their participation was voluntary, and one could withdraw at any stage of the study without any consequences. For anonymity, the respondents were not required to write their name or give their registration number or any form or identification. The study was cleared by Tangaza Ethical Review Board (TERB) and the National Commission for Science, Technology, and Innovation (NACOSTI). Permission to carry out the study was granted by the Catholic University Administration. Using simple random sampling technique, the researcher divided the whole population in the faculty of registration. Respondents were then requested to pick a sheet of paper placed in a box marked 'yes' or 'no'. All the students who picked 'yes' were allowed to participate in the survey. Once fieldwork was concluded, the researcher conducted questionnaire screening by eliminating void and incomplete

questionnaires. Cleaned questionnaires were then entered using into the SPSS V23.0 spreadsheet through question labelling and response coding. Data cleaning then followed using missing value analysis, double entry elimination, errors analysis in the data and reverse-coding of questions as guided by the researcher.

2.3. Data Analysis

The cleaned data was analyzed using SPSS Version 23.0. The study used both descriptive analysis (frequencies, percentages, mean and standard deviation) and inferential statistical analysis using One-way Analysis of variances (One-way ANOVA) to check for the effect of the demographic correlates age, gender, year of study, faculty of enrolment and duration with internet use.

3. Results

3.1 Response Rate

Based on the sample size of 375 questionnaires administered to the undergraduate students from CUEA, the successful and complete questionnaires were 327. This resulted to 90.8% response rate, which is excellent for analysis (Mugenda & Mugenda, 2003). The respondents' rate per faculty are summarized in Table 2.

Faculty of Enrolment	Sample Distribution	Sample Achieved	Response Rate (%)
Education	53	43	81.1
Theology	29	26	89.7
Law	39	34	87.2
Commerce	123	108	87.8
Art and social science	46	46	100.0
Science	70	70	100.0
Total	360	327	90.8

Table 2: Response Rate by Faculty of Enrolment

3.2. Socio-demographic Characteristics of Respondents

Population based profile which covered number of years, year of study, gender and faculty of enrolment were assessed. The results of Table 3 indicate that participants mean age 20.7 (SD = 3.5), most of them 42.7% (n = 139) between 19 -22 years old. Most of the participants 47.1% (n = 154) were on their first year of study; majority 58.7% (n = 192) being females. A wider proportion of the participants 33% (n = 108) were selected from the faculty of Commerce, followed by those from the faculty of Science 21.4% (n = 70). The findings were summarized in Table 3.

Demographic Variables		Frequency (n)	Percent (%)
Age Group	16-18 years	106	32.4
	19-22 years	139	42.5
	23-25 years	56	17.1
	Over 25 years	26	8.0
Year of study	1	154	47.1
	2	36	11.0
	3	79	24.2
	4	58	17.7
Gender	Male	135	41.3
	Female	192	58.7
Faculty of enrolled in	Education	43	13.1
	Theology	26	8.0
	Law	34	10.4
	Commerce	108	33.0
	Art /Social Sciences	46	14.1
	Science	70	21.4
Total		327	100%

Table 3: Socio-demographic Characteristics of the Respondents

Note¹: N = 327; M Means Mean; SD Means Standard Deviation

3.3. Prevalence of Internet Addiction among CUEA Students

The initial goal was to establish the extent of cyberspace dependence among under graduates. This was done in two phases; first, all the 20-IAT items were scored, summed up for each participant. Second phase established the prevalence of internet addiction, where the IAT scoring system was applied. Scores between 0-19 indicated normal internet users, 20 to 30 showed benignant level of internet usage, 31-49 and scores of 50 to 79 stipulated modest level and 80 to 100 specified grave Net dependence. The results were plotted in a bar chart as shown in Figure 1.

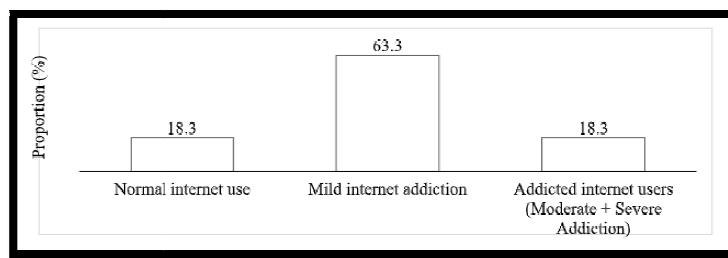


Figure 1: Prevalence of Cyberspace Dependency in CUEA

Note²: Sample Size, n =327

The results of Figure 1 revealed that 81.6% (n = 267) of the internet users fell into the normal user category (normal users + mild), whereas 18.3% (n =60) were at risk addiction (moderate + severe addiction).

3.3.1. Prevalence of Internet Addiction (Cyberspace Dependency) by Faculty of Enrolment

Furthermore, cross tab in Table 4 was conducted to show the level of web dependency by faculties. Greater percentage of those addicted to the internet were from faculties of Commerce and Law, where the level of severe internet addiction was 4.6% (n = 5) and 2.9% (n = 1) respectively. By carefully analyzing the results of Table 4, it can be concluded that most of the undergraduates are normal internet users.

Internet addiction severity	Education		Theology		Law		Commerce		Art Social Sciences		Science	
	F	%	F	%	F	%	F	%	F	%	F	%
Normal internet use	2	4.7%	6	23.1%	2	5.9%	28	25.9%	3	6.5%	19	27.1%
Mild internet	31	72.1%	14	53.8%	27	79.4%	59	54.6%	35	76.1%	41	58.6%
Moderate internet	10	23.3%	6	23.1%	4	11.8%	16	14.8%	8	17.4%	10	14.3%
Severe internet addiction	0	0.0%	0	0.0%	1	2.9%	5	4.6%	0	0.0%	0	0.0%
Total	43	100%	26	100%	34	100%	108	100%	46	100%	70	100%

Table 4: Prevalence of Internet Addiction by Faculty Enrolment

Note³: F means Frequency; Total sample size, n =327

4. Discussion

The findings of the study found the prevalence of internet addiction among the students in CUEA to be 18.3%. The prevalence is within the range of 17 % -23% found by Xin, et. al., (2018) on a study conducted among youth in Africa. A study by Landry, Mbwayo & Ireri (2019) reported that the prevalence of internet addiction among seminarians in a major seminary in Kenya was 38.7%. The overall internet addiction gap between CUEA students and the seminarians is because CUEA participants were undergraduate students whereas the seminarians were both undergraduate and postgraduate students. In their study, Landry et. al., (2019) reported that postgraduate students emerged to be highly addicted to the internet at 41.7% level. The authors attributed the high prevalence of internet addiction among the seminarians to free and continuous access of internet by the seminarians as opposed to the university students who have internet access from their homes, university libraries and cybercafés. They also linked the high prevalence of internet addiction to loss of purpose in life, depression and other addictive behaviour.

The high risk posed by undergraduate students accessing internet at home means that parents have roles to play to control students' internet use. This is because students risk having emotional fatigue by spending many hours on the internet. This may affect their concentration in class work. As such, parents need to have cordial relationship with the students to encourage them to openly discuss emotional and any other issues affecting their lives. The question that remains unanswered: Can parents influence university students' internet use positively in their homes?

5. Conclusion and Recommendations

Internet has become widely ingrained in people's daily lives, especially university students. The research adds to the knowledge of the prevalence of internet addiction and socio-demographic correlates among students in CUEA, Nairobi. In conclusion, the study found out that about a fifth of the students were dependent on internet.

The researcher's finding is that cyberspace dependency among undergraduates seems to be a compulsive disorder that needs to be categorized under DSM-V. The conclusion is that the study should raise awareness to mental health specialists and CUEA administration that computerized equipment addiction is a potential issue affecting students. Consequently, it is evident that internet has become part and parcel of students for educational achievement, hence the need for students to be eager and proficient information evaluators. This will help them succeed in their educational and research work. Therefore, it is alarming that extensive internet use is highly likely to cause mental health illness and suicidal ideation. Preventive measures and early diagnostics such as close parent-student communication and keeping track of students' internet use would be the most expedient next ground for action.

As a result, it is recommended that parents and the CUEA administration should encourage the undergraduate students to be selective proofreaders and proficient knowledge evaluators in order to achieve their objectives. Moreover,

students should also openly and honestly inform the administration and their parents about their addiction problems and needs. Future research should assess the triggers of internet addiction behaviors and devise curative measures to the students' internet addiction problems.

6. References

- i. Ahmadi, J. et al. (2014). Prevalence of addiction to the internet, computer games, DVDs, and videos and its relationship to anxiety and depression in a sample of Iranian High School Students. *Iranian Journal of Psychiatry and Behavioral Sciences*, 8(2): 75.
- ii. Balta, Ö.Ç. & Horzum, (2008). MB: İnternet bağımlılığ testi. *Educational Science and Practice* 2008; 7:87-102
- iii. Bernardi, S., & Pallanti, S. (2009). Internet addiction: a descriptive clinical study focusing on comorbidities and dissociative symptoms. *Comprehensive psychiatry*, 50(6), 510-516.
- iv. Chen, Y. F., & Peng, S. S. (2008). University students' Internet use and its relationships with academic performance, interpersonal relationships, psychosocial adjustment, and self-evaluation. *Cyber Psychology & Behavior*, 11(4), 467-469.
- v. Chinatu-Nwankwo, O. M. (2015). Prevalence of Internet Addiction among Medical Students in Abia State University, Uturu, Nigeria. *Abia State University Medical Students' Association Journal*, 10(1).
- vi. Christos (2007) Internet addiction among Greek university students CNS Drugs 22: 353-365.
- vii. Communications Commission of Kenya (CCK) (2014), *Quarterly Sector Statistics Report: 1st Quarter 2013/2014, Nairobi*
- viii. Cronbach, L.J., Schönemann, P., & McKie, D. (1965). Alpha coefficient for stratified-parallel tests. *Educational and Psychological Measurement*, 25, 291-312.
- ix. DeFleur, M. L., & Dennis, E. E. (2002). *Understanding mass communication*. Boston, MA: Houghton Mifflin.
- x. Durkee T, Carli V, Floderus B, Wasserman C, Sarchiapone M, Apter A, et al. (2016). Pathological Internet Use and Risk-Behaviors among European Adolescents. *Int J Environ Res Public Health*. 2016; 13.
- xi. Greenfield, D. N., 2000. Psychological characteristics of compulsive internet use: A preliminary analysis. *Cyber Psychology & Behavior*, 5, 403-412.
- xii. Griffiths, M. (2000). Internet addiction - Time to be taken seriously? *Addiction Research*, 8(5), 413-418.
- xiii. Holmes, B. & Gardner, J. (2006). *E-Learning: Concepts and Practice*, London: SAGE Publications
- xiv. Hossain, M. A., & Rahman, M. H. (2017). Comparative study of internet usage among university students: A study of the University of Dhaka, Bangladesh. *European Scientific Journal, ESJ*, 13, 34.
- xv. Hupfer, M.E. & Detlor, B. (2006). Gender and Web information seeking: A self-concept orientation model. *Journal of the American Society for Information Science and Technology*, 57(8): 1105-1115
- xvi. ICT, (2017), Facts & figures: The world 2017 ITU 15th World Telecommunication/ICT Indicators Symposium (WTIS), 14-16 November 2017, Tunisia retrieved 3rd November From www.itu.int/en/ITU-D/Statistics/Pages/events/wtis2017/default.aspx
- xvii. Kamonde, RM. 2003. The diffusion, adoption and development of ICTs for research, teaching and communication in public universities in Kenya. MA thesis, University of Nairobi.
- xviii. Kariuki, V.W. (2010). *Uses and gratifications of the internet: A survey study of Mt. Kenya university and Gretsa university in Thika Municipality*. (Unpublished Thesis). University of Nairobi.
- xix. Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610. M
- xx. Kwanya, T.J.M. (2005). Uses and gratification among secondary school students in Kenya. MA research project, University of Nairobi.
- xxi. Kuss, D.J., & Griffiths, M.D. (2015). *Internet addiction in psychotherapy*. London: Palgrave.
- xxii. Landry, BAD., Mbwayo A., Ireri N. (2019) Prevalence of Internet Addiction among Seminarians in a Major Seminary in Kenya. *The International Journal of Humanities & Social*.
- xxiii. LaRose, R., Lin, C. A., & Eastin, M. S. (2003). Unregulated internet usage: Addiction, habit, or deficient self-regulation? *Media Psychology*, 5(3), 225-253.
- xxiv. Lee, B. W., & Stapinski, L. A. (2012). Seeking safety on the internet: Relationship between social anxiety and problematic internet use. *Journal of anxiety disorders*, 26(1), 197-205.
- xxv. Lopez-Fernandez, O. (2015). How has Internet addiction research evolved since the advent of Internet Gaming Disorder? An overview of cyber addictions from a psychological perspective. *Current Addiction Reports*, 2(3), 263-271.
- xxvi. Moreno, A. et al., (2013). Problematic internet use among older adolescents: a conceptual framework. *Computer Human Behavior* 2013; 29:1879-1887
- xxvii. Muslu, G.K, Bolisik, B. (2009). Internet usage among children and young people. *TAF Preventive Medicine Bulletin*, 8(5): 445-450.
- xxviii. Nath, R., Chen, L., Muyingi, H., N. (2013), An empirical study of the factors that influence in-class digital distraction among university students: A.U.S.- Namibia cross-cultural study, working paper A cause of concern. *Cyber Psychology & Behaviour*, 6 (6), 653- 656.
- xxix. Ndung'u, M. N. (2011). Development outcomes of the new technologies to the quality of life of low-income households in Kenya: A case study of Nairobi. *Unpublished doctoral dissertation, University of Nairobi, Nairobi, Kenya*.

- xxx. Ni, X. L., Yan, H., Chen, S. L., & Liu, Z. W. (2009). Factors influencing internet addiction in a sample of freshmen university students in China. *Cyber Psychology and Behavior*, 12(3), 327-330
- xxxii. Nyamboga, C. M., Ongondo, M. A., & Ongus, R. W. (2004). Experiences in the use of the internet at Egerton University Library, Njoro-Kenya. *DESIDOC Journal of Library & Information Technology*, 24(5).
- xxxiii. Rotsztein, B. (2003, April). Problem Internet use and locus of control among college students: Preliminary findings. In *35th Annual Conference of the New England Educational Research Organization*.
- xxxiiii. Smita, G., & Azhar, F. A. (2018). Prevalence and Characteristics of Internet Addiction among University Students in Mauritius. *SMJ Case Rep*, 4(1), 1077.
- xxxv. Suhail, K., & Bargees, Z. (2006). Effects of excessive internet use on undergraduate students in Pakistan. *Cyber Psychol. Behav*, 9(3), pp. 297-307
- xxxvi. Universal Access in the Information Society *International Journal ISSN: 1615-5289 (Print) 1615-5297 (Online)*
- xxxvii. Waitaha, E. M. (2013). Internet use among University students in Kenya: A case study of the University of Nairobi *Unpublished MBA thesis, University of Nairobi at the University of South Africa*.
- xxxviii. Xin, M., Xing, J., Pengfei, W., Houru, L., Mengcheng, W., & Hong, Z. (2018). Online activities, prevalence of Internet addiction and risk factors related to family and school among adolescents in China. *Addictive behaviors reports*, 7, 14-18.
- xxxix. Young, K. (2009). Issues for Internet Addiction as a New Diagnosis in the DSM-V. Washington: American Psychological Association. <http://dx.doi.org/10.1037/e625212009-001>
- xl. Young, K. (2010). Internet addiction over the decade: A personal look back. *World Psychiatry*, 9(2), 91-91.

Appendix

Participant's Consent Form

Title of the project:

Prevalence of Internet Addiction among University Students

The study is being conducted by MA student at Tangaza University College

It has been approved by the Lecturer (contact: iys.ma@tangaza.org).

The study involves no known risk to participants in the present phase of the study.

The task requires the participant to answer a series of questions.

All responses will be treated as strictly confidential. No participant's results will be presented individually but only aggregate form.

Participation in this study is voluntary and there will be no monetary compensation. A refusal to take part will not lead to an individual being penalized, in any way, and all participants have the right to withdraw themselves and their data from the study at any time.

Name of researcher:

Position of researcher: MA student

Address and telephone number of the College:

Tangaza University College, Lang'ata, Nairobi Kenya 15055-00509

Signed by researcher.....Date

Statement to be signed by the participant:

I confirm that the organizer has explained fully the nature of the project and the range of activities which I will be asked to undertake and that I have received an information sheet.

I confirm that I have had adequate opportunity to ask questions about this project.

I understand that my participation is voluntary and that may withdraw at any time during the project, without having to give a reason.

I agree to take part in this project, by filling in the questionnaire.

Signed by participant.....Date.....

Student Questionnaire CUEA

Please answer the following questions, information obtained will be used strictly for academic purposes and will be treated with utmost confidentiality:

Part 1: Personal details

1. Age:

2. Year of study:

3. Student Reg. No.....

4. Gender: M F

5. Faculty of Education: (Please circle the appropriate faculty)

