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## Prevalence of Internet Addiction among Seminarians in a Major Seminary in Kenya

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### **Abstract:**

*The advancement of information communication technology goes hand in hand with some maladaptive behaviours. With increased internet connectivity in Low- and Middle-income countries, Internet addiction has emerged among adolescent and young adult. With limited research on prevalence of internet addiction in Seminaries in Kenya, this study investigated the prevalence of internet addiction among 173 seminarians in a Major Seminary in Kenya. Descriptive cross-sectional research design was used. Stratified sampling and simple random sampling techniques were used to select the participants. Study instruments used were the social demographic questionnaire and Internet Addiction Test. Data was analyzed used the SPSS version 23.0. The study revealed that 4.6% of the participants had severe internet addiction whereas 34.1% were moderately addicted to the internet. Thus, the prevalence of internet addiction was 38.7%. The school of Philosophy had the highest prevalence of internet addiction of 47.1%. There was no statistically significant association between internet addiction and the school of formation ( $p=0.128>.05$ ). Lastly, the study revealed that the seminarians are not always aware of their addiction. There is need for the Seminary authority to carry out random screening on internet addiction develop support programmes to help them not develop internet addiction, while those addicted to be supported.*

**Keywords:** Internet, Internet Addiction, Seminary, Seminarian;

### **1. Introduction**

Internet, a global system of telecommunications network is part of our daily lives and is being used everywhere in the world (Wallace, 2014). People use internet for various reasons: academic purposes, professional work, connecting to relatives and friends, online shopping and advertisement or leisure (Deursen & Dijk, 2009). Schools and universities use internet for teaching and learning. The more an institution uses technology as a way of learning and teaching the better the students are expected to perform (Condie & Munro, 2007). Thus, increased use of internet for academic purpose is supported by the public, the media and policy makers.

The internet users in the world represent 4.2 billion which is 55.1% of the world population (Internet World Stats, 2018). According to the National Center of Education Statistic in United States of America (USA), the category of the population mainly using internet is the adolescent, who utilize internet more than once on a daily basis (Kist, 2008). A study conducted by Moreno and Kolb (2012) found that 22% of adolescents spend almost 10 hours each day using internet. It also revealed that youth may consider the cyber space more real, online information truer and more accurate rather than the real world.

With increased popularity of the internet, people are using this as a medium for various activities with potential for addiction (Leung & Lee, 2012). While many people are excited about the convenient use of the internet (Schroeder, 2018; Weber, 2011), researches have proved that some of the internet users while trying to satisfy their needs through the internet are likely to manifest features of internet addiction (IA) (Spada, 2014; Young, 1998). IA is described as an impulse control problem expressed by an incapacity to slow down internet use that exerts a negative impact on major life domains such as physical health issues, interpersonal relationship problems (Yuan, Qin, & Liu, 2011). While IA is presently not included in the Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-5), it is actually regarded as a disorder of concern (Cheng & Li, 2014, Young, 1998).

Internet addiction rates vary among young people from different countries. In Europe and in America, prevalence of internet addiction ranks from 7.9% to 25.2% among adolescents while the Middle-East and Africa had rates from 17.3% to 23.6% (Xin et al., 2018). In Africa, the prevalence of internet addiction is 36.1% (Internet World Stats, 2018). In Kenya, technology and especially internet has considerably changed the habit of people. Through use

of mobile phone costing less than KSh 2000 (\$ 20), internet is easily affordable and available to phone users (Sanchez, 2011). The Communication Commission of Kenya (CCK) (CCK, 2012) reported that use of internet has drastically grown in Kenya due to telephone companies. They provide easy access to internet by offering new package and facilities to people with the report adding that young people, aged between 18 and 28, are the most consumers of internet with a prevalence of internet addiction which was established to be 74% (Communication Commission of Kenya, 2012; Sanchez, 2011; Waithaka, 2013).

Among people who dedicated their life in a special way to the service of the Lord, the use of the internet and ICT in general during their training has a recent history. During formation at the seminaries, seminarians get the opportunity to learn on information technology besides spirituality, philosophy and theology, thereby becoming conversant with internet use like the rest of the world. However, most of the young men before entering seminaries have average skills in the use of information technology, including use of internet acquired while in schools, as young men join seminary after completing secondary education in Kenya.

In his communication for the 48th World Day of Social Communication, Pope Francis (2014) highlighted among other things that the transformation in communication media and information technologies correspond to an immense and breathtaking challenge. He continues to say that the church must act in response to that challenge with unmarked vigor and mindset as it seeks to spread all over the world the message and the splendor of God. In a seminar held in India to discuss how Catholic trainers are taught to handle seminarians' internet use, The Church's response to internet addiction, pornography, and abuse of social media were among the topics tackled at the meeting (Matters India, 2017). Sister D'Souza (2017), a member of the Daughters of St Paul congregation and an expert in computer systems, management, and internet, pointed out that smartphones have become part of seminary and religious life.

In Africa, the challenge of internet use during seminarians' training has been made more urgent in Bigard Memorial Seminary in Enugu, Nigeria. Two major actions were taken there. In the first place, the library of the seminary was digitalized. Bigard Memorial Seminary is among the pioneer, if not the first seminary in Nigeria to accomplish such exploit (Bigard Memorial Seminary, 2014). The digitalization of the library launched the Catholic Church squarely into the digital world. The second event, between May 7<sup>th</sup> and 10<sup>th</sup> in 2014, the rectors of the seminaries held an annual workshop on the theme: Information Communication Technology (ICT) and Seminary Formation in Nigeria Today. At the closing stages of the seminar, they resolute among other decisions that efforts should be made towards the regulation of the utilization of the internet in the seminaries. It is vital that maturity and prudence should be accentuated on the use of ICT during seminarians' training. There should be sufficient and uninterrupted formation of the seminarians on the constructive and unconstructive connotation of the use of ICT. The candidates to the priesthood should accelerate actions towards computerization of their libraries, so as to offer the enabling milieu for seminarians to make use of the resources for fundamental formation (Bigard Memorial Seminary, 2014).

In Tanzania, Bishop Mfumbusa (2014) noted that the use of the internet was no longer optional. The Tanzania bishop stated that to survive in the information era is to be online. In the present day, everyone must have a basic knowledge of ICT and how to make prolific exploit of it. This is accurate for all the priests and future priests if they are to partake and minister successfully in the current hi-tech civilization. Humanity has evolved into the digital time and the priest's ministry in the upcoming years will be a digitally mindful community, to inhabitants of the digital way of life.

The rapid increasing of internet technology therefore necessitates a reflection on the implications of this medium for seminary formation knowing the positive and negative effects that internet has on people and youth especially (Shahnaz & Karim, 2014; Jin, Liu, & Austin, 2014). The nature of ICT knowledge poses a serious problem both for the lay people formation and for the missionary intellectual formation. The prevalence of seminarian's addiction to the internet is not known to the researcher. However, literatures have shown that some of them and some of their elders who are priests or already definitely engaged in the religious life have lost their efficiency in their ministry because of the excessive use of internet as highlighted by D'Souza (2017), McMahan (2010) and Weber (2008). Internet addiction indeed was found to affect consecrated people and left them with psychological disturbance, psychopathology issues and life challenges (Weber, 2008).

Therefore, the aim of the study was to establish the prevalence of internet addiction among the Seminarians in a Major Seminary in Central Kenya. The study also wanted to find out if the prevalence of the internet addiction varies in the different schools (spiritual, philosophy and theology). Finally, the study wanted to establish if the seminarians are aware of their status as far as internet addiction is concerned.

## 2. Method

The study took place in a Major National Catholic Seminary located in Central Kenya. The seminary is one of the five national major seminaries owned and run by the Kenya Conference of Catholic's Bishops (KCCB). The seminarians are young Catholic adults aspiring to be priests in the Catholic Church. They come from all archdioceses and dioceses in Kenya, are from different family background and socio-economic status. They study spirituality, philosophy and theology. The three form distinct schools of formation within the same compound. It is on the basis of this uniqueness of this Seminary that this site was chosen.

Cross-sectional design was chosen. Stratified and simple random samplings were used to select the respondents. Stratified sampling technique was used to select the first sample. This technique allowed the researcher to select a sample from the three distinct schools of formation: Spirituality, Philosophy and Theology. Simple random sampling was then used to pick respondents from each school proportional to the size in number of each school. Yamane (1973) formula was used to calculate the sample size.

The formula is  $n = N / [1 + N (e)^2]$

Where n = sample size,

N = population size

e = error term (0.05)

Hence,  $n = 306 / [1 + 306(0.05)^2] = 173$

The sample size of the study was 173 respondents. This number represents 56.5% of the target population. The number of the respondents was determined in each school of study by applying the same formula:

In the school of spirituality which has 55 students, the number of the seminarians who participated in the survey was:  $55 / [1 + 55(0.05)^2] = 31$ .

In the school of philosophy which has 124 students, the number of the seminarians who took part of the survey was:  $124 / [1 + 124(0.05)^2] = 70$

And finally, in the school of theology which has 127 students, the number of the seminarians who participated in the survey was:  $127 / [1 + 127(0.05)^2] = 72$

A total number of 173 seminarians participated in the survey as Table 1 illustrates it clearly.

| School of Formation | Number of Students | Participants in the Survey | Percentage |
|---------------------|--------------------|----------------------------|------------|
| Spirituality        | 55                 | 31                         | 10.13%     |
| Philosophy          | 124                | 70                         | 22.87%     |
| Theology            | 127                | 72                         | 23.52%     |
| Total               | 306                | 173                        | 56.52%     |

Table1: Respondents Repartition

The study used the researcher developed social demographic questionnaire and the Internet Addiction Test (IAT) by Young Kimberly (Young, 1998). The IAT was chosen based on its strength and also on its good psychometric properties proven by several studies (Rezaul & Nigar, 2014; Fioravanti & Casale, 2015; Mihajlov & Stojmiski, 2017). It is a self-administered questionnaire. It has 20 items rated in a five-point Likert scale (from 1 - rarely, to 5 - always). Although the scale has good psycho-metrics properties, Nath, Chen, Musingi and Lubega (2013) who tested its psycho-metric properties among Namibians and Ugandan university students suggested that an adaptation of the instrument is needed when using it with the African population. That difference may be attributed to the difference in national culture, economic condition, and information technology infrastructure. Therefore, to be relevant to the population under the study, some items of the IAT were adapted as summarized in Table 2. Since some items of the IAT have been adapted, the researcher carried out a pre-test at a Religious Formation House in Lang'ata, Nairobi in Kenya to verify and ensure its validity and reliability.

| Young's Version of the IAT |   | Adapted Version of Some Items of Young IAT for This Current Study |  |
|----------------------------|---|---|--|
| Q.2                        | How often do you neglect household chores to spend more time online?                  | Q.11  | How often do you neglect seminary chores to spend more time online?  |
| Q.3                        | How often do you prefer the excitement of the internet to intimacy with your partner? | Q.12  | How often do you prefer the excitement of the Internet to socialization or real relationship with friends?                   |
| Q.7                        | How often do you check your email before something else that you need to do?          | Q.16  | How often do you check your email, Facebook, WhatsApp, YouTube before something else that you need to do?                    |
| Q.8                        | How often does your job performance or productivity suffer because of the Internet?   | Q.17  | How often do any other kinds of activities in the seminary or outside suffer because of the amount of time you spend online? |

Table 2: Table of the Young's version of the IAT and its adapted items for this study

The structure of the whole questionnaire takes account three principal sections (see appendix). The first section covered the description of the study and the consent of the participants. The second section presented the demographic information of the respondents. The third section covered the specific objective of the study: Internet Addiction Test.

In scoring and interpretation, Internet addiction scores are to be generated for each participant by summing the scores of the 20 Internet Addiction Test items. The scores are then grouped as follows: 20 – 39 scores represent normal users; scores of 40 - 69 represent moderate addiction; a score of 70 – 100 shows severe addiction.

The study procedure: The participants were gathered in the seminary hall where the researcher explained the nature of the study involved the researcher informing the participants about 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 seminary number or any identifying information. 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 Major Seminary Administration. Using stratified sampling technique, the researcher divided the whole population in the seminary into sub-populations. From these sub-populations, using simple random sampling, the respondents to the survey were selected by picking a sheet of paper placed in a box where it was written "yes" or "no". All the seminarians who picked "yes" were allowed to participate in the survey.

Data Analysis: After data entry and cleaning, it was analyzed using the Statistical Package of Social Sciences (SPSS) version 23.0.

### 3. Results

In this chapter, the researcher presents and interprets the study findings; whose main objective was to establish the prevalence of internet addiction among seminarians in a Major Seminary in Kenya.

#### 3.1. Reliability of the Instrument

In the present study, some items of the Internet Addiction Test were adapted in order to be relevant to the population under study. Cronbach's alpha (Cronbach, Schönemann, & McKie, 1965) was used to measure the internal consistency of the data collected through the IAT. The Cronbach's alpha ( $\alpha$ ) generated from SPSS version 23.0 for the scale was 0.917. Since the scale has Cronbach's alpha more than 0.9, it has excellent levels of reliability indicating good internal consistency of the data collection instrument (Bhattacharjee, 2012).

| Dimensions               | No. of Items | Mean  | Std. Dev. | Cronbach's $\alpha$ |
|--------------------------|--------------|-------|-----------|---------------------|
| Internet Addiction Scale | 20           | 38.19 | 13.58     | 0.917               |

Table 3: Reliability of Instruments for the Present Study

#### 3.2. Response Rate

The study targeted 173 participants but increased the questionnaires by adding 10 more questionnaires in each group to cater for any attrition or spoilt questionnaire. A total of 173 questionnaires were retained after inspection and elimination of questionnaire incompletely filled. This allowed the researcher to meet the targeted population resulting to 100% response

| School of formation | Target | Achieved | Response Rate |
|---------------------|--------|----------|---------------|
| Spirituality        | 41     | 31       | 100%          |
| Philosophy          | 80     | 70       | 100%          |
| Theology            | 82     | 72       | 100%          |
| Total               | 203    | 173      | 100%          |

Table 4: Response Rate for the Study Based on the School of Formation

### 3.3. Demographic Information

The results of the social demographic characteristics are as shown in Table 5. Majority of the participants were below 30 years. The school of Theology had the highest proportion of those aged over 30 years 36.1% (26/72); close to half 48.9% (85) of the participants had attained undergraduate degree; close to 90% 87.9% (156) of the participants had Android phones.

| Socio-demographic factors                              |                       | Total<br>(n=173) | Spirituality<br>(n=31) | Philosophy<br>(n=70) | Theology<br>(n=72) |
|--|-----------------------|------------------|------------------------|----------------------|--------------------|
|  |                       | % (f)            | % (f)                  | % (f)                | % (f)              |
| Age Group  | Below 25 yrs.         | 34.1 (59)        | 58.1 (18)              | 57.1 (40)            | 1.4 (1)            |
|  | 25 - 29 yrs.          | 48.6 (84)        | 38.7 (12)              | 38.6 (27)            | 62.5 (45)          |
|  | 30 and above yrs.     | 17.3(30)         | 3.2 (1)                | 4.3 (3)              | 36.1 (26)          |
| Age  | Mean (Std. Dev)       | 26.2 (3.7)       | 23.5 (3.4)             | 24.5 (2.6)           | 29.0 (2.7)         |
| Year in school   | First                 | 41.4 (72)        | 100.0 (31)             | 32.9 (23)            | 24.7 (18)          |
|  | Second                | 26.4 (46)        |                        | 32.9 (23)            | 31.5 (23)          |
|  | Third                 | 26.4 (46)        |                        | 34.3 (24)            | 30.1 (22)          |
|  | Fourth                | 5.7 (10)         |                        |                      | 13.7 (10)          |
| Degree attainment                                      | Undergraduate degree  | 48.9 (85)        | 38.7 (12)              | 26.8 (19)            | 75.0 (54)          |
|  | Postgraduate degree   | 13.8 (24)        |                        | 8.5 (6)              | 25.0 (18)          |
|  | No degree             | 37.4 (65)        | 61.3 (19)              | 64.8 (46)            |                    |
| Type of phone  | iPhone                | 4.6 (8)          | 3.2 (1)                | 5.7 (4)              | 4.1 (3)            |
|  | Android (Smart phone) | 89.7 (156)       | 80.6 (25)              | 92.9 (65)            | 90.4 (66)          |
|  | Basic/feature phone   | 5.7 (10)         | 16.1 (5)               | 1.4 (1)              | 5.5 (4)            |
| Ownership of personal laptop                           | Yes                   | 65.9 (114)       | 19.4 (6)               | 64.3 (45)            | 87.5 (63)          |
| Participants' own assessment about their ICT knowledge | Beginner              | 18.4 (32)        | 41.9 (13)              | 11.3 (8)             | 15.3 (11)          |
|  | Average               | 75.3 (131)       | 58.1 (18)              | 78.9 (56)            | 79.2 (57)          |
|  | Advance               | 6.3 (10)         |                        | 9.9 (6)              | 5.6 (4)            |

Table 5: Participants' Demographic Characteristics in the Study

### 3.4. Prevalence of Internet Addiction among the Seminarians and the School the Most Affected

Table 6 shows that majority of the internet users 61.3% (106) fell into the normal users' category. The prevalence of internet addiction was found to be 38.7%.

| Variables          |   | Overall |     | School of Formation |    |            |    |          |    | $\chi^2$ | p-value |
|--------------------|---|---------|-----|---------------------|----|------------|----|----------|----|----------|---------|
|                    |   | %       | F   | Spirituality        |    | Philosophy |    | Theology |    |          |         |
|                    |   |         |     | %                   | F  | %          | F  | %        | F  |          |         |
| Internet Addiction | Addicted internet users (Moderate + severe) | 38.7    | 67  | 38.7                | 12 | 47.1       | 33 | 30.6     | 22 | 4.115    | 0.128   |
|                    | Normal internet users                       | 61.3    | 106 | 61.3                | 19 | 52.9       | 37 | 69.4     | 50 |          |         |
|                    | Total                                       | 100     | 173 | 100                 | 31 | 100        | 70 | 100      | 72 |          |         |

Table 6: Summary Showing the School the Most Affected by Internet Addiction

Of these, 34.1% (59) were moderately addicted while only 4.6% (8) had severe internet addiction. Higher proportion of the respondents found with severe internet addiction were from the school of spirituality and the lowest proportion were from the school of Theology as showed in Table 7. When we calculate the number of moderate and severe addicted to the internet, the school of philosophy has the highest proportion. However, this was not statistically different ( $p=0.128$ ) as showed in Table 6.

| Prevalence of internet addiction                       | Total (n=173) | Spirituality (n=31) | Philosophy (n=70) | Theology (n=72) |
|--|---------------|---------------------|-------------------|-----------------|
|  | % (f)         | % (f)               | % (f)             | % (f)           |
| Normal users   | 61.3 (106)    | 61.3 (19)           | 52.9 (37)         | 69.4 (50)       |
| Moderate addiction                                     | 34.1 (59)     | 29.0 (9)            | 41.4 (29)         | 29.2 (21)       |
| Severe addiction                                       | 4.6 (8)       | 9.7 (3)             | 5.7 (4)           | 1.4 (1)         |
|  | M (SD)        | M (SD)              | M (SD)            | M (SD)          |
| Internet Addiction Score: (Total possible score = 100) | 38.2 (13.6)   | 41.0 (16.9)         | 40.8 (13.7)       | 34.5 (11.1)     |

Table 7: Prevalence of Internet Addiction in each School of Formation

### 3.5. Seminarians' awareness of their internet use status

The study also tried to find the participants objective addiction versus subjective addiction. From the results 38.7% (67) of the participants had objective addiction compared to 14.5% (25) who reported subjective addiction. The deviation between objective and subjective internet addiction is highest in the school of Philosophy where only 12.9% (9/70) of the respondents think that they are addicted to internet use when close to 50% of them (47.1% (33/70) were addicted. This is an indication that many students don't know that they are addicted (moderately or severely addicted) to internet as showed in Table 8.

| Socio-Demographic Factors |                              | Subjective Addiction | Objective Addiction (Moderate + Severe Addiction) |
|---------------------------|------------------------------|----------------------|---|
|                           |                              | % (f)                | % (f)   |
| Overall                   |                              | 14.5 (25)            | 38.7 (67)   |
| School of formation       | Spirituality                 | 19.4 (6)             | 38.7 (12)   |
|                           | Philosophy                   | 12.9 (9)             | 47.1 (33)   |
|                           | Theology                     | 15.3 (11)            | 30.6 (22)   |
| Age Group                 | Below 25 years               | 13.6 (8)             | 40.7 (24)   |
|                           | 25 - 29 years                | 19.3(16)             | 41.0 (34)   |
|                           | 30 and above years           | 6.5(2)               | 25.8 (8)  |
| Year in school            | First                        | 25.0 (18)            | 45.1 (32)   |
|                           | Second                       | 4.3 (2)              | 33.3 (15)   |
|                           | Third                        | 13 (6)               | 32.6 (15)   |
|                           | Fourth****                   | 0.0 (0)              | 40.0 (4)  |
| Having degree             | Undergraduate degree         | 12.9 (11)            | 38.8 (33)   |
|                           | Postgraduate degree          | 26.1 (6)             | 41.7 (10)   |
|                           | None                         | 13.8 (9)             | 36.9 (24)   |
| Type of phone             | iPhone****                   | 0.0 (0)              | 25.0 (2)  |
|                           | Android (Smart phone)        | 16.7 (26)            | 41.0 (64)   |
|                           | Ordinary or simple phone**** | 0.0 (0)              | 11.1 (1)  |
| Owning personal laptop    | Yes                          | 16.8 (19)            | 36.8 (42)   |
|                           | No                           | 10.2 (6)             | 42.4 (25)   |

Table 8: Comparison for Subjective Internet Addiction and Objective Internet Addiction among the Seminarians

Note: \*\*\*\* Means Low Sample Size for Statistical Analysis

## 4. Discussion

According to Wallace (2014), young people are dependent on the internet so as to study, communicate, socialize and play. The excessive use of the internet by young people leads to poor social functioning, low self-esteem and low life satisfaction (Lai, Watanabe, Jeong, Kim, & Bahar, 2015).

Overall, the prevalence of internet addiction among the seminarians was 38.7%. Among these, 4.6% seminarians in the seminary had severe internet addiction. These findings are lower than the finding by Waithaka (2013) that 74% of the students in institutions of higher learning in Kenya were addicted to internet use. The

difference can be explained by the fact that the two studies used different instruments and different populations, one a public university and the other a seminary. However, the findings are within the range of those found among youth in the community in other parts of the world. However, these are youth not in the seminary. For example, in England prevalence of 18% has been reported, 12.3 to 15.3% in Taiwan, 21.9% in China, 34.7% in Greece and 39.6% in Iran (Al-Gamal, Alzayyat, & Ahmad, 2016). Thatcher and Goolam (2005) in South Africa found that 5% of the country's population has pathological internet use. This is close to the findings of this study where 4.6% had severe addiction. The prevalence of internet addiction among seminarians is not known. However, literature has shown that some of them and some priests have lost their purpose in life and efficiency in their ministry because of the excessive use of the internet as highlighted by D'Souza (2017), McMahon (2010) and Weber (2008).

Excessive use of internet is not necessarily internet addiction. However, for people who have dedicated their lives to serve God, the internet addiction level seems higher because internet addiction may make them lose their purpose in life and efficiency in their ministry (D'Souza, 2017; McMahon, 2010; Weber, 2008). Quick measures need to be put in place to control internet use. This is because internet addiction just like other addictions puts the group at risk of psychological disorders and low commitment to the seminary work as required (Diaz *et al*, 2014). The study did not establish what the seminarians use their internet for. Assumptions would be the social media or reading. However, it has been shown that there is relationship between increased use of internet and phonography addiction (Weber, M. 2008).

## 5. Conclusion and Recommendations

This study experienced a major challenge on paucity of literature on the topic. We hope it forms the basis of more studies in such areas. It will inform the persons in charge of forming future religious leaders on guidance on the different types of addictions. Overall, this study contributes to the understanding of internet addiction among the seminarians in a seminary and add to the literature on the same. Moreover, the high prevalence of internet addiction of 38.7% among seminarians in the study is a cause for concern. This study should raise awareness to mental health specialists, teachers, formators in religious institutions, superiors of the religious communities, church's leaders and bishops that internet addiction is a potential problem for the seminarians as was warning sister D'Souza (2017). Preventive measures and early diagnostics would be the most important course of action. According to Atwoli, Mungla, Ndung'u, Kinoti, and Ogot (2011), young adults who use internet excessively have psychosocial warning signs that could be linked to depression and other addictive behaviours. This discovery poses recommendations for serious steps to reduce the rate of internet use in the formation; and even the 34.1% who are moderately addicted to internet among the seminarians in the Major Seminary need to be closely monitored. The leaders of the Seminary should develop support programmes to help seminarians with high internet addiction. For proper monitoring and verification of the prevention programmes, follow up intervention studies are recommended.

For the seminarians addicted psychological intervention is needed in order to help them overcome this disorder. Support groups can be created in the seminary where the seminarians who are addicted will meet other and share their experiences. These support groups will be like their study groups, chores groups or fraternity in the seminary. Another study with a larger sample drawn from diverse geographical locations and cultures can be done to compare the results. This will yield results that examines internet addiction on a wider perspective.

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## Appendix

### *Research Consent Form – Participants*

#### Tangaza University College – Cuea: Research Consent Form – Participants

Title of research project:

Prevalence of Internet Addiction among Seminarians in a Major Seminary in Kenya

- This study is being conducted as requirement for the Degree of Master of Arts in Counselling Psychology
- The study involves no known risk to participants and contains no deception. It takes approximately 20 minutes to take part in the present phase of the study.
- The task requires the participant to fill a questionnaire.
- All responses will be treated as strictly confidential. No participant's results will be presented individually but only in 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: Bromi Aiguissi Didier Landry

Position of researcher: M.A Student in Counselling Psychology / ID: 16/00483

Contact address for researcher: Tel: +254 704304144

Contact of the College: P.O Box 15055-00509 Langata South Rd, Nairobi, Kenya,

Tel: +254 722204724

Signed by researcher

Date

Statement to be signed by the participant:

- I confirm that the researcher has explained fully the nature of the project and the range of activities which I will be asked to undertake. I confirm that I have had adequate opportunity to ask questions about this project.
- I understand that my participation is voluntary and that I may withdraw at any time during the project, without having to give a reason.
- I agree to take part in this project.

Signature

Date

### *Demographic Information*

Instruction: Please fill in or tick the appropriate answer. Remember that these are very subjective questions and that there are no right or wrong answers.

- 1) Age:
- 2) School of formation: Spirituality...../ Philosophy...../ Theology.....
- 3) Year in the school: 1<sup>st</sup> ...../ 2<sup>nd</sup> ...../ 3<sup>rd</sup> ...../ 4<sup>th</sup> .....
- 4) Do you have a(n): undergraduate degree.... / Postgraduate degree..../ None.....
- 5) Type of phone: Iphone / Android (smartphone) / Ordinary or simple phone
- 6) Do you use a personal laptop: Yes ...../ No.....
- 7) Do you access internet through: wifi ..... / Phone bundles .....
- 8) What is your knowledge in ICT: Beginner..... / Average...../ Advanced.....
- 9) Do you consider yourself as addicted to internet? Yes ...../ No.....

### *Internet Addiction Test*

Instructions: Using this scale of 5 choices, answer how often the questions below apply to your online behaviour. Choose one number in each line. Please remember that these are very subjective questions and that there are no right or wrong answers.

| N° | Statements   | Rarely<br>1 | Occasionally<br>2 | Frequently<br>3 | Often<br>4 | Always<br>5 |
|----|--|-------------|-------------------|-----------------|------------|-------------|
| 10 | How often do you find that you stay online longer than you intended?   |             |                   |                 |            |             |
| 11 | How often do you neglect seminary chores to spend more time online?  |             |                   |                 |            |             |
| 12 | How often do you prefer the excitement of the Internet to socialization or real relationship with friends?                   |             |                   |                 |            |             |
| 13 | How often do you form new relationships with fellow online users?  |             |                   |                 |            |             |
| 14 | How often do people close to you are concerned or complain about the amount of time you spend online?                        |             |                   |                 |            |             |
| 15 | How often do your grades or school work suffers because of the amount of time you spend online?                              |             |                   |                 |            |             |
| 16 | How often do you check your email, facebook, WhatsApp, you tube before something else that you need to do?                   |             |                   |                 |            |             |
| 17 | How often do any other kinds of activities in the seminary or outside suffer because of the amount of time you spend online? |             |                   |                 |            |             |
| 18 | How often do you become defensive or secretive when anyone asks you what you do online?                                      |             |                   |                 |            |             |
| 19 | How often do you block out disturbing thoughts about your life with soothing thoughts of the Internet?                       |             |                   |                 |            |             |
| 20 | How often do you find yourself anticipating when you will go online again?   |             |                   |                 |            |             |
| 21 | How often do you fear that life without the Internet would be boring, empty, and joyless?                                    |             |                   |                 |            |             |
| 22 | How often do you snap, yell, or act annoyed if someone bothers you while you are online?                                     |             |                   |                 |            |             |
| 23 | How often do you lose sleep due to late-night log-ins?   |             |                   |                 |            |             |
| 24 | How often do you feel preoccupied with the Internet when offline, or fantasize about being online?                           |             |                   |                 |            |             |
| 25 | How often do you find yourself saying "just a few more minutes" when online?   |             |                   |                 |            |             |
| 26 | How often do you try to cut down the amount of time you spend online and fail?   |             |                   |                 |            |             |

| <b>N°</b> | <b>Statements</b>   | <b>Rarely<br/>1</b> | <b>Occasionally<br/>2</b> | <b>Frequently<br/>3</b> | <b>Often<br/>4</b> | <b>Always<br/>5</b> |
|-----------|---|---------------------|---------------------------|-------------------------|--------------------|---------------------|
| 27        | How often do you try to hide how long you've been online?   |                     |                           |                         |                    |                     |
| 28        | How often do you choose to spend more time online over going out with others?                                     |                     |                           |                         |                    |                     |
| 29        | How often do you feel depressed, moody or nervous when you are offline, which goes away once you are back online? |                     |                           |                         |                    |                     |

*Table 10: Internet Addiction Test*

Adapted version of the Internet Addiction Test from this current study derived from © Young, S. K. (1998). Internet addiction: The emergence of a new clinical disorder. *Cyberpsychology & Behavior* 1(3), 237-244.