Evaluation of the Impact Brought By Social Networks on Academic Performance of Higher Learning Students.
A Case of State University of Zanzibar (Suza)

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Abstract: *Social networking sites and applications play an important role in the present generation or in today's society in terms of communications and learning environment to some extent in which now educators or teachers are finding the way on how can these social networks be used as teaching and learning tools. Even though they have simplified communications among students and teachers they have also brought some impact to students in academic performance.*

The aim of this study was to explore how the students of State University of Zanzibar are using the social networks and then find out the impact of those social networks on academic performance of higher learning students in Zanzibar because no research has been conducted to find out why the academic performance of students are degrading (or becoming poor) day to day.

160 students from all levels of State University of Zanzibar (SUZA) were surveyed for the purpose of data collection and the questionnaires were distributed randomly in the library during academic hours. The data were collected based on convenience methodology. It was found that the use of social networks brought negative effects on academic performance of students in higher learning institutions. It was recommended that for students' academic performance to improve, strong restrictions must be placed on the use of social networks during lecture hours, also students must be counseled on the hours spent on using social networks in the sense that if possible they should be advised to use one or two hours only per day.

Keywords— Smartphones, Academic Performance, GPA, Social Networks, Whatsapp, Social networks addiction

I. INTRODUCTION

Social networking sites and applications play an important role in the present generation or in today's society in terms of communications and learning environment to some extent in which now educators or teachers are finding the way on how can these social networks be used as teaching and learning tools.

The introduction of social networks in the present generation have caused the social interactions to be simple among human beings, as people now communicate easily through the communicating social sites or smartphone applications like Whatsapp, Instagram, Telegram, Wechat, Imo, Line, Facebook, messenger lite, Twitter, Qq, Badoo, Friendster, MySpace (popular with the music/party community) etc. So interactions using the few mentioned social networks have led people to either lose concentrations or focus on the matters they are handling before being interrupted by the messages from friends who are sharing some information in their registered groups like whatsapp groups of students who either studied together in lower levels of education or they are working together (or they studying together in higher learning levels).
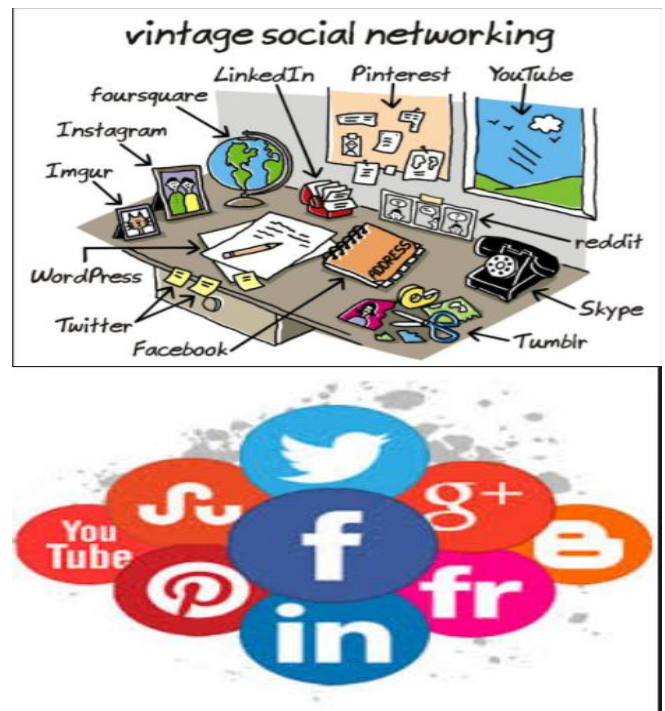

Figure 1: Showing some social network applications

Social networking sites have created a new social aspect where individuals can increase their social attentiveness by keeping in touch with old friends, making new friends, dispensing new data or products and gathering information

in other aspects of everyday life. This helps individuals become more knowledgeable, which is very beneficial for students [1].

A social network is a social structure made up of a set of social actors (such as individuals or organizations), sets of dyadic ties, and other social interactions between actors [2]. In a computer mediated communication context, social pairs exchange different kinds of information, including sending a data file or a computer program as well as providing emotional support or arranging a meeting. With the rise of electronic commerce, information exchanged may also correspond to exchanges of money, goods or services in the "real" world [3].

The use of online social networks by school libraries is also increasingly prevalent and they are being used to communicate with potential library users, as well as extending the services provided by individual school libraries thus social networks and their educational uses are of interest to many researchers [4].

Social networks are used also in some higher learning institutions by lecturers and students as a communication tool, so it is a bi-directional process as students are using these mediums to share comments with their teachers.

Academic performance relates to how students achieve in accomplishing the goals set by him/her to obtain the certificate related to the level of studies (like ordinary certificate, diploma, advanced diploma, undergraduate level, Masters level or PhD level) with higher marks or higher GPA, so the student with good or higher GPA is said to have achieved the goal but the one with lower marks is said to have underperformed academically.

The most common users of social networks are young people who are mostly students in higher education and most of them use social networks to stay in touch with each other.

Figure 2: Showing students interacting during lecture hours

The aim of this study was to explore how the students of State University of Zanzibar are using the social networks and then find out the impact of those social networks on academic performance of higher learning students in Zanzibar because no research has been conducted to find out why the academic performance of students are degrading (or becoming poor) day to day. So the nature of this research is exploratory one because it tries to explore the reasons behind poor academic performance.

Currently, the State University of Zanzibar consists of the School of Kiswahili and Foreign Languages (SKFL), the School of Continuing and Professional Education (SCOPE), the School of Education (SoE), the School of Natural and Social Sciences (SNSS), the School of Health and Medical Sciences (SHMS), the Centre for Graduate Studies and Research (CGSR), Global Centre for Kiswahili Studies and Advancement (GCKSA) and the Tropical Research Center for Oceanography, Environment and Natural Resources (TROCEN). Additional institutes and schools will be established in the future as demanded by the Act and as the University grows.

II. BACKGROUND AND LITERATURE SURVEY

Kabilan *et* al [5], investigated if university students consider Facebook (FB) as a useful and meaningful learning environment that could support, enhance and/or strengthen their learning of the English language and they found that students believed FB could be utilized as an online environment to facilitate the learning of English although teachers or language instructors have to integrate FB as an educational project with pre-determined learning objectives and outcomes for the learning experience to be meaningful.

In their paper titled "*Relationships among smartphone addiction, stress, academic performance, and satisfaction with life*" Samaha *et* al [6], found that smartphone addiction risk was negatively related to academic performance, but the latter was positively related to satisfaction with life.

Ainin *et* al [7], examined the impact of Facebook usage on students' academic performance and found that there was a positive relationship between students' Academic Performance and Facebook usage i.e. the higher the usage the better they perceived they perform.

Helou *et* al [1], conducted a preliminary survey of a group of Malaysian university student to gather initial findings on their use of social networking sites and its influence on their academic performance and after analysis with Statistical Package for Social Sciences (SPSS) software they found that the majority of respondents agreed that social networking sites have a positive impact on their academic performance.

Juang *et* al [8], concluded that, social networking site - Facebook - can effectively raise students' learning achievement, motivation, and interaction in adopting the modified WIRE model that consists of warm-up, review and

exercise of classroom lessons. Facebook effectively inspired more discussions and more learning achievement after the long-term employment.

Yang *et* al [9], used data from a 40-student course on Advanced Management Information Systems (AMIS), they tested how social networks (friendly, advising, and adversarial) related to students' performance, they found that, advising network variables are positively related to student performance both in the class and on the forum and adversarial variables are negatively correlated with almost all students' performance also advising and adversarial network variables were found to be good determinants for overall academic performance

In his study titled "*Student class standing, Facebook use, and academic performance*" Junco Reynol [10], examined the time students at different class ranks spent on Facebook, the time they spent multitasking with Facebook, as well as the activities they engaged in on the site (N = 1649), his results showed that seniors spent significantly less time on Facebook and spent significantly less time multitasking with Facebook than students at other class ranks, the time spent on Facebook was significantly negatively predictive of Grade Point Averages (GPA) for freshmen but not for other students, multitasking with Facebook was significantly negatively predictive of GPA for freshmen, sophomores, and juniors but not for seniors.

According to Maqableh *et* al [11], there was a significant impact of Social Network sites (SNS) on the student's academic performance, also, there was a significant impact of SNS use per week on the student's academic performance, whereas no differences found in the impact of use of SNSs on academic performance due to age, academic achievement, and use per day to most used sites.

In their paper De-Marcos *et* al [12], presented the results of testing both social networking and gamification in an undergraduate course, comparing them in terms their effect on students' academic achievement, participation and attitude, in which they found that both approaches presented better performance than a traditional e-learning approach in terms of academic achievement for practical assignments, but that, when it came to assessing knowledge, the traditional e-learning approach was better.

Hamid *et* al [13], focused their research on students' experiences with using OSN for student–student and student–lecturer interactions and their analysis revealed that students identified a number of positive outcomes from using OSN to interact with each other and with their lecturers which they thought would enhance their academic performance.

Kibona and Mgaya in their paper titled "*Smartphones' Effects on Academic Performance of Higher Learning Students.*" [14] found that, there is positive correlation between gender, age group, marital status, addiction to smartphone usage, program taken at University and the usage of smartphone in the sense that there is a certain group affected by those factors mentioned they also concluded that

there is a negative correlation between high academic performance and the factors mentioned earlier because the majority GPAs of the surveyed respondents were found to be below 3.

Lepp *et* al [15], assessed the relationship between cell phone use and actual college grade point average (GPA) after controlling for known predictors and found that, increased cell phone use was associated with decreased academic performance even though more research is needed to identify the underlying mechanisms, findings suggested a need to sensitize students and educators about the potential academic risks associated with high-frequency cell phone use.

Yeboah *et* al [16], identified the impact of social network (whatsapp messenger) on the performance of tertiary students in Ghana from the perspective of the students and it was revealed that whatsapp takes much of students study time , results in procrastination related problems, destroys students' spellings and grammatical construction of sentences, leads to lack of concentration during lectures, results in difficulty in balancing online activities (whatsapp) and academic preparation and distracts students from completing their assignments and adhering to their private studies time table.

Kuznekoff *et* al [17], examined the mobile phone use in the classroom by using an experimental design to study how message content (related or unrelated to class lecture) and message creation (responding to or creating a message) impact student learning, in which they found that sending/receiving messages unrelated to class content negatively impacted learning and note-taking, while related messages did not appear to have a significant negative impact.

As per Ravizza *et* al [18], internet use negatively predicted exam scores and added to the prediction of classroom learning, above a measure of intellectual ability which means that higher rates of internet use were associated with lower test grades and students' beliefs about this relationship did not reflect their ability to multi-task effectively.

Junco *et* al [19], found that college students use instant messaging at high levels, they multitask while using instant messaging, and over half report that instant messaging has had a detrimental effect on their schoolwork. Higher levels of instant messaging and specific types of multitasking activities are associated with students reporting not getting schoolwork done due to instant messaging.

In his research Ahn June [20], suggested that the Facebook/GPA relationship is an interesting avenue for future studies. However, aside from the fact that many youth use Facebook, there appear to be no substantive theoretical reasons *why* Facebook use might influence GPA. If perhaps a large percentage of youth interactions on Facebook were school-or academic-related, one might find a relationship to measures such as GPA.

Amry, Aicha Blehch [21], explored the impact of using WhatsApp mobile learning activities on the achievement and

attitudes of online students using mobile devices at the university and the results of the experimentation showed that there are real differences, at 0.05 alpha level, in the achievements and attitudes of the experimental group compared with the control group.

Mingle et al [22], identified social media network sites and their usage among students, how students networked and participated on social media networks, time invested by students on social networks, the effects of social media on students' grammar and spelling as well as the effects of social network participation on the student's academic performance within the context of the social learning and the use and gratification theories in which they revealed that majority of respondents used Whatsapp and Facebook for making friends and chatting. In addition, majority of respondents experienced negative effects such as poor grammar and spelling, late submission of assignment, less study time and poor academic performance due to the heavy participation on social media networks.

ES Dr, Kavitha [23], found that there is a significant relationship between gender, age and concern department of the faculty members and their opinion on negative perceptions of SNS on student's academic performance, however there is no association between the designation of faculty members' and their opinion on negative perceptions of SNS on student's performance, the study also pointed that there is no significant relationship between the gender and designation of faculty members' and their on positive perceptions of SNS on student's performance.

Rithika *et* al [24], indicated that the effect of social media can be positive as this study closely determined the real effect of social media sites. In recent time it encourages the carrier and future of students .The social media sites like Facebook, twitter, Google+ .And Skype capture the attention of students for study and affecting positively their academic Grade points.

After a comprehensive review of various literatures on social networks, the authors could find that there are gaps in knowledge as far as the negative effect of the use of social networks and students' academic performance especially, in higher learning institutions in Zanzibar is concerned, and that merits a closer investigation.

III.   MATERIALS AND METHODOLOGY

The methodology employed in this study involves both secondary and primary data collection methods. Secondary information sources used for the present research include the journals, magazines and internet sources. A well-structured and administered questionnaires were prepared and distributed to the University students of different levels from short causes to PhD at State University of Zanzibar (SUZA) for data collection as primary source. This university was chosen because of its strategic importance as a world-class research university with a wide range of specialized courses

and subjects at the professional diploma, undergraduate and postgraduate levels. 160 students from all levels have been surveyed for the purpose of data collection and the questionnaires were distributed randomly in the library during academic hours. The data were collected based on convenience methodology. Students having strong experience of smartphones have been considered as respondents to collect information. The data collected were analyzed through percentages and frequencies in which the data were presented in bar charts, pie charts and histograms which were obtained using Excel and some using SPSS (Statistical Package for Social Science). The study was conducted during January 2018 to March 2018.

IV.   RESULTS AND DISCUSSION

The following are the results and findings obtained from primary data which were collected through questionnaires and interviews.
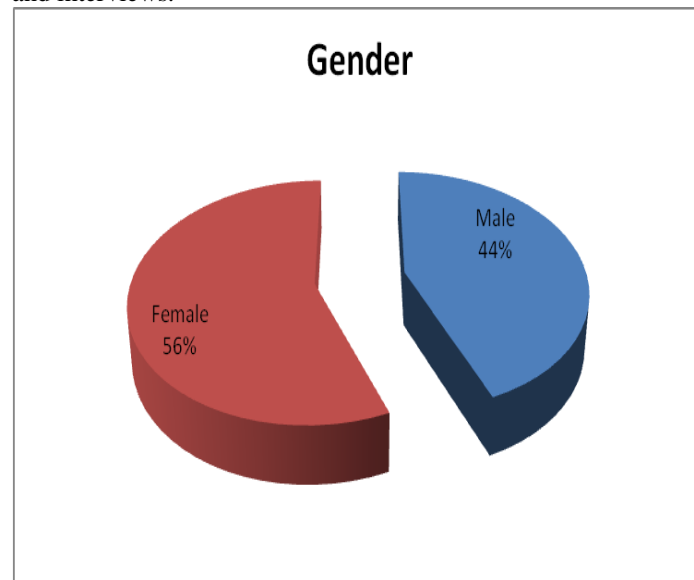

Figure 1: Gender of the respondents

As per figure above, it was found that 56% of the respondents were female compared to 44% of the male respondents who were using social networks by either using laptops or using smartphones to access social networks like Whatsapp, Facebook and other kinds of social networks. So it can be easily concluded that female students preferred more to use social networks compared to male students.
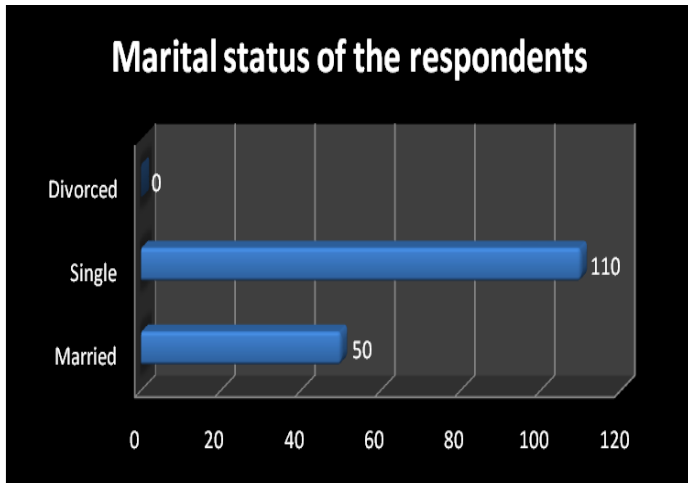
Figure 2: Marital status of the students
As shown in figure 2, most of the students who were interviewed and filled the quesstionaire were still single (Not married) 69% compared to 31% who are married, which indicates that most of the social network users at the State University of Zanzibar (SUZA) were single and free so they may be using social network like Whatsapp to find friends or to make couples or in simple language to initiate new relationships which may result into marriage, and this can be done either by using social network groups like one of the respondent who were interviewed and responded as
"… *I'm always using Whatsapp application to find the woman who may become my wife in later stages..*"
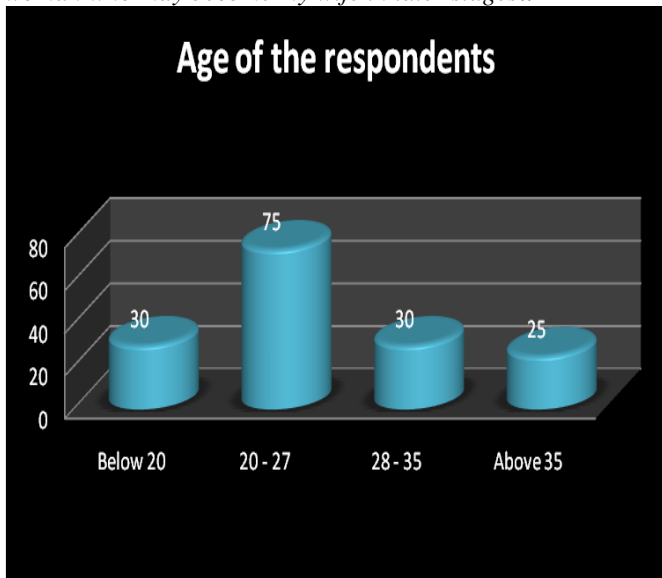

Figure 3: Average age of the respondents
47% of the respondents were found to be at the age between 20 – 27 which is the age most of the students are pursuing undergraduate studies (Bachelor degree) and at this age it can be observed that the majority are still not married so they use social networks effectively to find their partners rather than using it to share the materials or files conerning their studies, also at this age group, most of the time spent are on

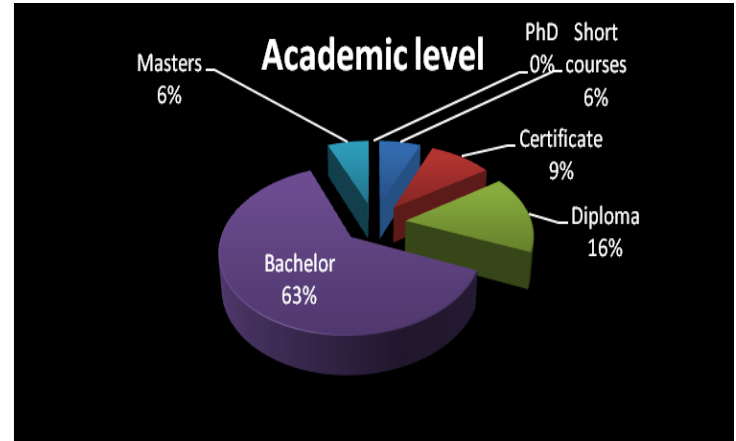chatting rather than using social networks on discussing academic issues.

Figure 4: Academic level of the respondents
As it can be seen in the figure above, 63% of the respondents were bachelor students followed by diploma students(16%), which indicates that most of the social network users are of the age below 27 years old so they use them mostly for socialization rather than using them for academic purpose because it is in this age group most of the students starts to establish relationship or strengthen the relationships which may end up into marriage.
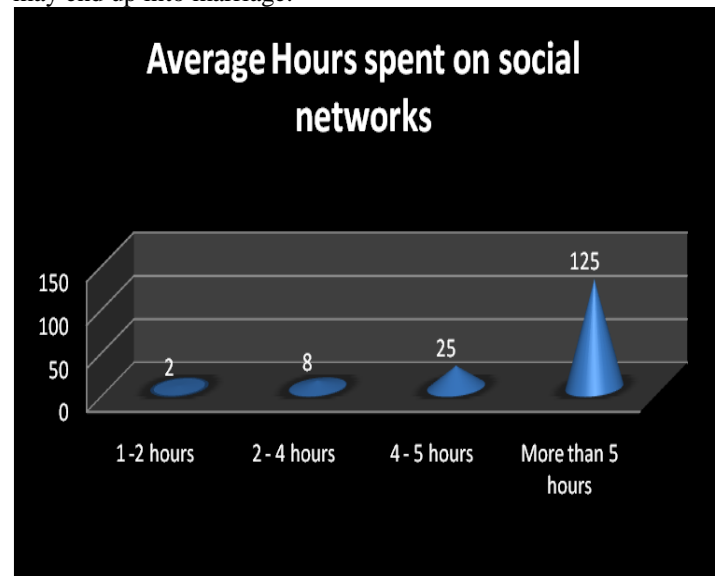

Figure 5: Showing average time spent on social networks
Social network have made most of the students at SUZA to be addicted on it as it can be shown in figure 5 that most of the respondents 78% spent more than 5 hours on social networks which is not good academically because the time lost on social networks not in academic issues cannot be compensated which eventually will have negative impact on academic performance biut some respondents were smart enough in the usage of social networks as they have set the time limit to be on social network for example one of the respondent argued that:

"... I spent time on social network for only one hour or maximum two hours and those time when im at my dormitory resting and relaxing but when im in class I switch off all notifications of Whatsapp and I keep my smartphone in airplane mode so that to not receive anything till I finish my classes..."

So this is one of the few students who knows how to spend time on social networks but the majority do not control themselves as they may be chatting while lectures are carried on and then at the end of lecture they do not understand any thing taught because they were busy with their smartphone or they were busy chatting rather than listening to lectures.
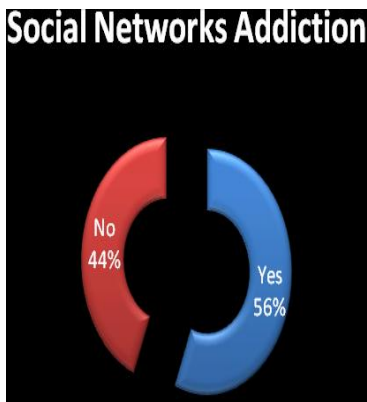

Figure 6: Showing social networks addiction

56% of the respondent argued that they are addicted to social network usage compared to 44% who agreed that they not prone to social networks, so those addicted to social networks means that they cannot afford even to mute their smartphone for a minute as most of the time they are either chatting with friends or sharing some information in their groups, so for those who are busy chatting all the time, it is very difficult to concentrate on academic matters rather they are busy with social matters going on in their groups, for example one of the respondent said:

"... I have many groups and they all active those groups includes the one for primary school level where we are always reminding ourselves with pictures during that time, ordinary level secondary school group which is also active and classmates are always sharing some information so it is active, advanced level group and now I have bachelor degree group which is also active as sometime lecturer may be elaborating something but we may start discussing the negative side of the lecturer in the group nad during the lecture so it is very difficult for me to switch off my smartphone even during classes..."
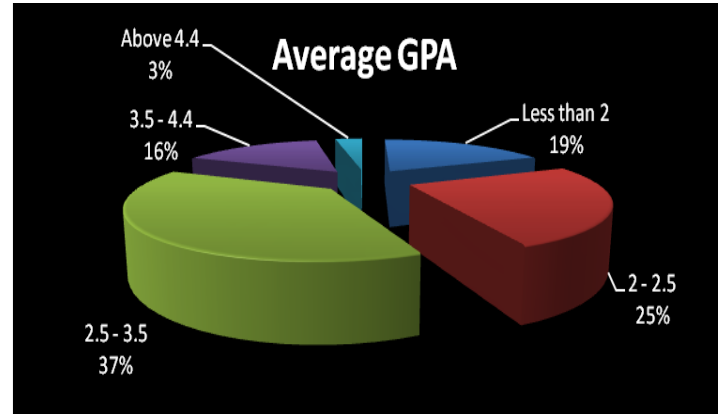

Figure 7:Showing average GPA of the respondents

According to figure7, 62% of the respondent were found to have a GPA between 2 and 3.5 in which 37% were having a GPA between 2.5 and 3.5 commonly known as lower class which indicates that most of the students do not do well or they do not perform well academically as it is expected the majority to get upper second or first class to categorize them as they have performed well academically but to have most of them have lower second class or gentleman GPA means they are underperforming and those with those class they are either prone or addicted to social network usage so that they do not concentrate during lecture hours or the combination of many factors may led them to get those lower GPA.
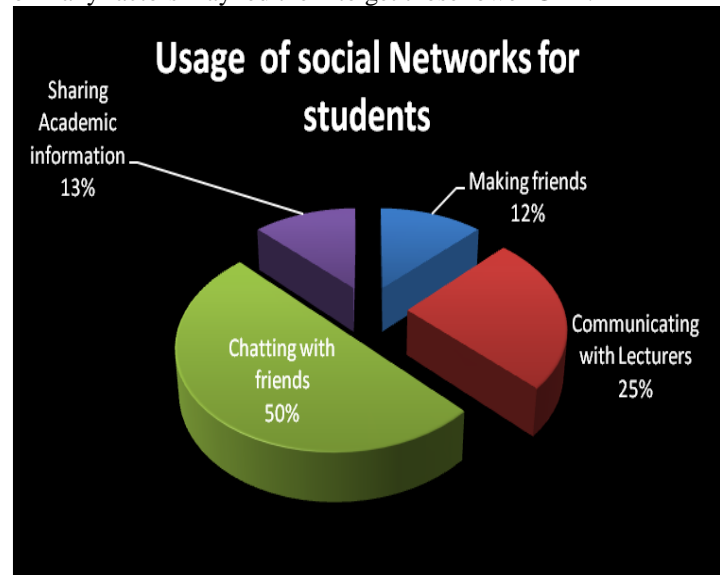

Figure 8: Showing the use of social network for students

Referring to the age group between 20 and 27 years old who uses social networks most frequesntly it can be seen or observed in figure 8 that 50% of the students uses social networks for chatting with friends rather than using it for academic purposes as only 38% uses for academic purposes (13% uses social networks for sharing academic informations like providing timetable, reminding students about lectures, sharing teaching notes and the likes while 25% uses social networks for communicating with lecturers and this is ,mainly done by class representatives (CRs) or

during final year research or projects in which the student is obliged to communicate with his supervisor frequently) and 12% of the respondents were using social networks only to find new friends. So in general teenegers use social networks mainly for social matters like chatting and making new friends which amount to 62% compared to 38% who uses social networks for academic purposes.
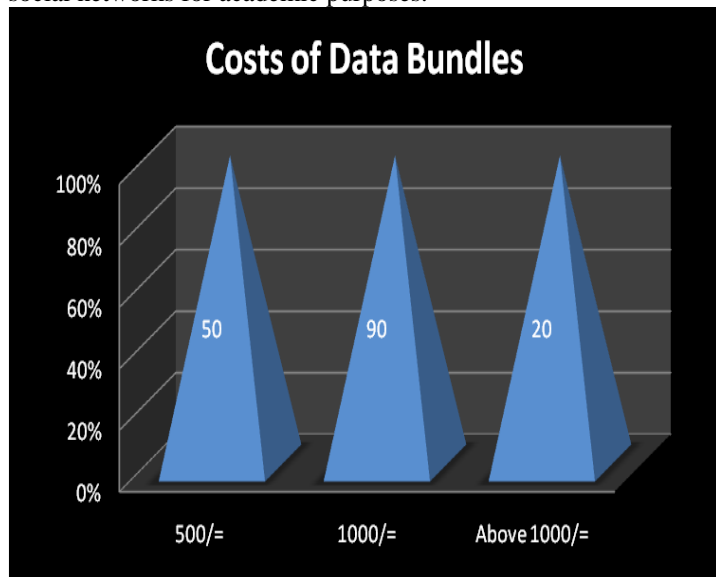

Figure 9: Showing the cost of data bundles

Most of the students in higher learning institutions like SUZA get stipend through loan board and the amount of money they get is very small and they are intended only for meals and accommodation, so the frequent use of internet makes them always spend some money to buy internet bundles for use in their smart phones or laptops, so for them to be active they have to buy data bundles daily or weekly and the lowest bundle per day starts from Tshs 500/= which only lasts for short time if the data is on all the time, and as it can be observed in figure 9, the majority (56%) uses data bundles which amounts up to Tshs. 1000/= , so for those who are not capable to afford these prices and they are addicted to social networks, it can be one of the cause of underperforming academically, because they will always be thinking where to get the data bundles instead of concentrating with studies.

V. CONCLUSSION

According to discussion above, it is now very easy to draw conclusion on the consequences of social networks on the academic performance of higher learning students, from which the results has revealed that the social networks (SNs) brings negative results or progression on students' performance academically. So there is a need to evaluate and understand better the use of social networks for higher learning students because students make their own choice and preference on which application to use, as it is discussed

above almost 78% of the respondents agreed that they tend to use social networks for more than 5 hours per day on social communications (62% which involves chatting with friends and making new friends) like Facebook, twitter, Instagram, WhatsApp and the like without considering that those time spent on social networks could have been used on academic related works and hence yield good results at the end of semester examinations.

Among the social networks users, female (56%) are more addicted on the usage than male (44%) and most of them are teenagers (in the age between 20 and 27 which is 47% of the respondents) who are not yet married (69%) so they use most often social networks to build up relationships which may results into marriage, also most notable results is 63% of the respondents are pursuing bachelor degree meaning that they are not yet matured enough to control themselves on the use and addiction of SNs.

Also there is positive correlation between age group, gender, marital status, academic level or program taken at University, kind of activity done on social networks for students and the social networks impacts in the sense that there is a certain group of students affected by those factors mentioned. There is also negative correlation between high academic performance and the factors mentioned (gender, marital status, age group, academic level) because majority of the respondents (81%) got their GPA below 3.5 meaning that the use of social networks for higher learning students impacts their academic performance.

Therefore, there is negative impact on the use of social networks for students of higher learning institutions (specifically SUZA) on their academic performance as observed on the discussion part above.

VI. RECOMMENDATIONS AND FUTURE WORK

For students' academic performance to improve, strong restrictions must be placed on the use of social networks during lecture hours, also students must be counseled on the hours spent on using social networks in the sense that if possible they should be advised to use one or two hours only per day.

In the future research must be done on the impact brought by online social networks in relation to the age group and marital status on the academic performance of higher learning students.

VII. ACKNOWLEDGMENT

REFERENCES

[1]   A. M. Helou and N. Z. A. Rahim, "The influence of social networking sites on students' academic performance in Malaysia," *International Journal of Electronic Commerce,* vol. 5, pp. 247-254, 2014.

[2]   Wikipedia. (2018, 15 February 2018). *Social network.* Available: https://en.wikipedia.org/wiki/Social_network

[3]   L. Garton, C. Haythornthwaite, and B. Wellman, "Studying online social networks," *Journal of Computer-Mediated Communication,* vol. 3, pp. 0-0, 1997.

[4]   Wikipedia. (2018, 15 February 2018). *Social networking service.* Available: https://en.wikipedia.org/wiki/Social_networking_service

[5]   M. K. Kabilan, N. Ahmad, and M. J. Z. Abidin, "Facebook: An online environment for learning of English in institutions of higher education?," *The Internet and higher education,* vol. 13, pp. 179-187, 2010.

[6]   M. Samaha and N. S. Hawi, "Relationships among smartphone addiction, stress, academic performance, and satisfaction with life," *Computers in Human Behavior,* vol. 57, pp. 321-325, 2016.

[7]   S. Ainin, M. M. Naqshbandi, S. Moghavvemi, and N. I. Jaafar, "Facebook usage, socialization and academic performance," *Computers & Education,* vol. 83, pp. 64-73, 2015.

[8]   Y.-R. JUANG, "Integrating social networking site into teaching and learning," in *Proceedings of the 18th International Conference on Computers in Education 2010*, 2010.

[9]   H.-L. Yang and J.-H. Tang, "Effects of social network on students' performance: a web-based forum study in Taiwan," *Journal of Asynchronous Learning Networks,* vol. 7, pp. 93-107, 2003.

[10]   R. Junco, "Student class standing, Facebook use, and academic performance," *Journal of Applied Developmental Psychology,* vol. 36, pp. 18-29, 2015.

[11]   M. Maqableh, L. Rajab, W. Quteshat, R. e. Moh'd Taisir Masa, T. Khatib, and H. Karajeh, "The impact of social media networks websites usage on students' academic performance," *Communications and Network,* vol. 7, p. 159, 2015.

[12]   L. De-Marcos, A. Domínguez, J. Saenz-de-Navarrete, and C. Pagés, "An empirical study comparing gamification and social networking on e-learning," *Computers & Education,* vol. 75, pp. 82-91, 2014.

[13]   S. Hamid, J. Waycott, S. Kurnia, and S. Chang, "Understanding students' perceptions of the benefits of online social networking use for teaching and learning," *The Internet and Higher Education,* vol. 26, pp. 1-9, 2015.

[14]   L. Kibona and G. Mgaya, "Smartphones' effects on academic performance of higher learning students," *Journal of Multidisciplinary Engineering Science and Technology,* vol. 2, pp. 777-784, 2015.

[15]   A. Lepp, J. E. Barkley, and A. C. Karpinski, "The relationship between cell phone use and academic performance in a sample of US college students," *Sage Open,* vol. 5, p. 2158244015573169, 2015.

[16]   J. Yeboah and G. D. Ewur, "The impact of WhatsApp messenger usage on students performance in Tertiary Institutions in Ghana," *Journal of Education and practice,* vol. 5, pp. 157-164, 2014.

[17]   J. H. Kuznekoff, S. Munz, and S. Titsworth, "Mobile phones in the classroom: Examining the effects of texting, Twitter, and message content on student learning," *Communication Education,* vol. 64, pp. 344-365, 2015.

[18]   S. M. Ravizza, D. Z. Hambrick, and K. M. Fenn, "Non-academic internet use in the classroom is negatively related to classroom learning regardless of intellectual ability," *Computers & Education,* vol. 78, pp. 109-114, 2014.

[19]   R. Junco and S. R. Cotten, "Perceived academic effects of instant messaging use," *Computers & Education,* vol. 56, pp. 370-378, 2011.

[20]   J. Ahn, "The effect of social network sites on adolescents' social and academic development: Current theories and controversies," *Journal of the Association for Information Science and Technology,* vol. 62, pp. 1435-1445, 2011.

[21]   A. B. Amry, "The impact ofwhatsapp mobile social learning on the achievement and attitudes of female students compared with face to face learning in the classroom," *European Scientific Journal, ESJ,* vol. 10, 2014.

[22]   J. Mingle and M. Adams, "Social media network participation and academic performance in senior high schools in Ghana," *Library Philosophy and Practice,* p. 1, 2015.

[23]   K. ES Dr, "THE EFFECT OF SOCIAL NETWORKING ON STUDENTS'ACADEMIC PERFORMANCE: THE PERSPECTIVE OF FACULTY MEMBERS OF PERIYAR UNIVERSITY, SALEM," 2016.

[24]   M. Rithika and S. Selvaraj, "Impact of social media on student's academic performance," *International Journal of Logistics and Supply Chain Management Perspective,* vol. 2, pp. 636-640, 2013.