ETHICAL USE OF FACEBOOK IN ICT CONTEXT: STUDENTS AND FACULTY PERSPECTIVES

A THESIS SUBMITTED TO THE GRADUATE SCHOOL OF APPLIED SCIENCE OF NEAR EAST UNIVERSITY

By

MARIE STELLA GATERA RUKUNDO

In Partial Fulfilment of the Requirements for The Degree of Master of Science in Computer Information Systems

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Approval page

I affirm that all the information declare in this research has been obtained and delivered in agreement with academic rules and ethical conduct. I also affirm, that as required by these rules and conduct, I have completely quoted all referenced materials and results that are original to this work.

Name:

Last name:

Signature:

Date:

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To my parents…

ABSTRACT

Social Network Sites tools end up noticeably numerous in later past years, these days; is connected in our social life, as well as in scholarly system area. ICT tools such as PCs are the most utilized as a part scholarly environment. The motivation behind this work is the increase of ethical issues that originates from utilizing some of SNS tools i.e. Facebook in scholastic medium. This study aims to identify the current viewpoints of students and faculty members, their differences and gender-based differences on ethical use of Facebook in ICT context using Mason's (1986) PAPA framework. The data were analyzed SPSS from the instrument composed of 27 information ethics scenarios on Facebook usage in ICT context with a distributed sample of 530 participants, 380 students and 150 faculty members in university of Rwanda; College of Science and Technology. The scenarios were assessed with 5 Likert option scales from crime to ethical. The average scores faculty responses change between 'unethical' to 'questionable' whereas student perspectives change between 'questionable' to 'acceptable'. The faculty members were more cautious in their responses about PAPA issues than students; therefore, significant differences in all dimensions of PAPA have been detected supporting the earlier findings that students are more optimistic or somehow superficial about evaluating scenarios compared to their faculty counterparts. Thus, gender does not play an important role in evaluating such scenarios. This work serves as a foundation for future directions and emerging framework for ethical issues of SNS usage from pedagogical standpoint.

Keywords: Ethics; Facebook; ICT; PAPA; SNS

ÖZET

Son yıllarda sosyal paylaşım sitelerinin sayısı önemli derecede artmış ve günümüzde hem sosyal yaşantımızda hem de akademik ortamda yerini almıştır. Akademik ortamlarda BİT araçları arasında en çok kullanılan bilgisayarlardır (PC). Bu çalışmanın yapılma nedeni akademik ortamlarda Facebook gibi SPS araçlarının kullanılmasından kaynaklanan etik konulardaki artıştır. Çalışmanın amacı Mason tarafından geliştirilen (1986) PAPA modelini kullanarak BİT kapsamında Facebook'un etik kullanımını öğrenci ve öğretim üyelerinin bu konuda farklılık ve cinsiyet farklılığına dayanan görüşlerini alarak incelemektir. Veriler, BİT kapsamında Facebook kullanımına ilişkin 27 bilgi etik senaryosundan oluşan enstrüman aracılığıyla SPSS programı kullanılarak Ruanda Üniversitesi, College of Science and Technology'de eğitim gören 380 öğrenci ve eğitim veren 150 öğretim görevlisi olmak üzere toplam 530 kişinin katılımıyla toplanmıştır. Senaryolar 5'li Likert Ölçeği doğrultusunda suçtan etik olarak kabul edilen maddelerle değerlendirilmiştir. Fakülte tarafından verilen cevaplar 'etik dışı' ve 'tartışmaya açık' olarak belirlenirken, öğrencilerin cevabı 'tartışmaya açık' ve 'kabul edilebilir' olarak belirlenmiştir. Öğretim üyeleri PAPA konularına ilişkin olarak cevaplarını daha dikkatli vermiştir. Bu nedenle, önceki bulgularda da görüldüğü gibi, öğrencilerin öğretim görevlilerine kıyasla senaryoları değerlendirmekle ilgili olarak daha optimistik veya yüzeysel olduğu görülmekte ve PAPA ölçütlerinde anlamlı farklar bulunmaktadır. Dolayısıyla, bu gibi senaryoların değerlendirilmesinde cinsiyet önemli bir yer taşımamaktadır. Bu çalışma, pedagojik açıdan ileriki çalışmalar ve SPS kullanımına ilişkin etik konularda hızla gelişen çerçeve için zemin oluşturacaktır.

Anahtar Kelimeler: Etik; Facebook; BİT; PAPA; SPS

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LIST OF ABBREVIATION

ICT:	Information Communication Technology
PAPA:	Privacy, Accuracy, Property and Accessibility
PC:	Personal Computer
SNS:	Social Network Sites
FB:	Facebook
TV:	Television
RSS:	Really Simple Syndication
US:	United States
SNA:	System Network Architecture
CNN:	Cable News Network
SLA:	Software License Agreement
AVG:	Anti-Virus Guard
UAC:	User Account Control
CMC:	Computer Mediated Correspondence
NASW:	National Association Science Writers
ECAR:	Center for Applied Research
GPA:	Grade Point Average

CHAPTER 1

INTRODUCTION

Social networking refers to a variety of Internet-based services and moveable devices that let users to take part in interactions, create user generated content, or participate in online groups. Types of Internet services typically associated with social networks are commonly referred to as Web 2.0, includes blogs, wikis, status updates, social bookmarks, social networking sites etc. These groups overlap to some extent. For example, Twitter is a status update service as well as social sharing sites. Similarly, users of social interacting sites like Facebook can share photos while users at the same time can follow others on SNS, like Pinterest.

Like the way Internet has transformed how people acquire music, organize holidays, and carry out research on school-based projects, it has also influence how interact socially. By using SNS, individuals are able to share videos and news, pictures, stories, share thoughts on blogs, and partake in online dialogs. Also, SNS let a person, institutions, establishments, governments and politicians to relate with a huge number of individuals. In concurrence with the increasing online action there are worries about the way in which private information made public by SNS users could be gathered and evaluated.

The advanced expansion of Facebook usage allows it for educational purpose. For now, many social system administrations are accessible, the most commonly used systems are school links. It seemed to be well known among university students in the academic environment that was a significant part of their social life (Jenny, 2013; Mason, 1986). In this research, the expectation is to provide an improved understanding of Facebook as a tool to increase learning and the learning of ethical issues following its use by faculty members and students to support classroom practices. Today, combined learning is widely adopted in the field of higher education to facilitate better learning for students inside and outside classes, but ethical issues associate with its usage has been on the increase. The popularity of mixed learning can lead to changes in education, training and instructing in higher schooling (Petrovic et al., 2013). Students can request a comprehensible platform for instructing and learning and other important policies to

facilitate access and experience of science and classroom knowledge and other ethical issues related to Facebook. However, in some institutions such as the Rwanda University of Science and Technology, most faculty members and students have conservative attitudes towards the use of new pedagogy to carry out teaching and learning activities as a result of possible upward ethical challenges. Gosling et al. (2007) wrote that several higher education students are using social networking and SNS such as Facebook for social activities and increases in use, and students earn seriously popularity, but most university students in Africa sees it as a distraction to make 'effective learning and complaints. Shembilu, (2013) shows that many Tanzania universities do not use this contemporary and enhanced way of learning and social networking. Petrovic et al. (2013), defined Facebook as a platform for student and staff for sharing information, between students, staff of a department and maybe a whole school and is capable of providing data on various scenarios which describes how Facebook can be integrated to improve learning and ethical usage can be improved. The case study finally ends with problems to ponder not only for faculty members, but numerous participants in advanced learning which are mostly students and higher learning experts.

The emergence and development of business social networking locales, for example, Facebook, Friendster, LinkedIn, Live Journal, and MySpace has been broad and far reaching (Boyd, 2008 and Ellison et al., 2007). Given the rising fame of Facebook, it appears to be intelligent to consolidate this prominent tool with the objective of enhancing web educating and learning. Further, since students encourage the sharing of information something else, the technologies utilized as a part of social networking locales help dialog and make closeness among online students, as they can connect and manufacture group in a socially and learning constructed network. The colossal improvements in information and correspondence technologies and expansion in the utilization of Facebook conveyed numerous chances to various fields and particularly to separation learning (Aydin and Tirkes, 2010). In the course of the most recent decade, foundations of advanced learning around the globe have perceived separation learning as a feasible option (or supplement) to conventional, classroom direction (Larreamendy-Joerns and Leinhardt, 2006). Separation learning utilizes network innovation, different mixed media tools and programming like video conferencing, joint effort, online examination gatherings,

composing, try to make, fuse, convey vital information and use the internet capabilities to upgrade the process (Kamsin et al., 2005; Huremovic et al., 2010). It has become an instruction to incorporates concentrated use of separation learning electronic media and where the learning procedure is generally isolated in time and space. Dissimilar to customary (vis-à-vis) instruction where students can't take courses whenever, yet at the time dictated by instructive organization, and flexibility of separation learning empowers students to improve their knowledge at their own pace, at a spot and time of their decision. They can review the information as frequently as they need contingent upon their advantage, needs and ability level. Thus, separation learning is particularly valuable for students who experience troubles in going to customary classes, for reasons of separation, individual challenges and obligations, work, family or social responsibilities.

1.1 Problem Definition

SNS usage such as Facebook in educational and social life has developed into an important measure of all institute of learning including graduated and undergraduate level. Succession of research has been carried out in this field, however many of these studies analyze Facebook as a single entity. Ethical issues associated with its use will be investigated and various views will be seen and critically examined based on ethics (Mason, 1986; Petrovic et al., 2013). Conclusions from earlier studies by Balakrishnan and Gan, (2016); Schlenkrich and Sewry, (2012); Sobaih et al, (2016) showed that SNS have an abundant probable at refining learning practice over active communication and cooperation. Nevertheless, there still exist a huge gap that needs to be examined further as only a few studies on ethical perceptions or opinions of faculty members and students of higher education have been carried out in this regard (Weiss, 2017). Therefore, there is a need for awareness and comprehensive study of higher education faculty members and students' perceptions of online SNS Facebook and ethical issues associated with its use.

1.2 Significance of this Study

The significance of the research states as follows:

- The significance of online media for teaching and sharing information will be analytically examined starting from point of view of learning professionals and the student's perspective too.
- Views and conflicting interest on the topic will simply be acknowledged and resolved while new solution is proffered on ethical issues.
- To carry out research on current literature, regarding information, information sharing and ethics, community involvement, opinions of higher learning experts and student's opinion on ethical concerns about the use of Facebook. Improved knowledge of the study issue and associated problems will be gotten from the detailed analysis of the applicable information of learning rule on the use of Facebook policy for instructing and the ethical issues related with its use.
- To proffer recommendation centered on the results to afford the opportunity for better usage of Facebook and ethical issues in learning and offer a better channel for more study on the topic.
- It is important to identify any notable differences between higher learning professionals and students on ethical use of Facebook in ICT setting.

1.3 Aim of the Study

The aim of this study is to investigate on ethical use of Facebook in ICT context by Recognizing and evaluating views of students and faculty members and how ethical issues that come with the use of Facebook can be reduced, from students and faculty members opinions, using PAPA framework. More ethical issues will be look into critically in the scholarly concept and how they can be deal with to the barest minimum. PAPA are still mainly unresolved issues that are faced in SNS usage today and there is evolving facet of technology which is premature integrated into scholarly system with new situation which require attention from ethical perspectives (Başaran, 2017).

1.4 Research Questions

Below are the study problems which will be responded to in the research:

- What are the views of university students' and faculty members on ethical use of Facebook in ICT context?
- Are there any significant differences amongst faculty members and student's views on ethical use of Facebook with respect to PAPA dimensions?
- Are there any significant differences in views of faculty members' and students on ethical use of Facebook in ICT context in the dimensions of privacy, accuracy, property and accessibility with respect to gender?

  a) Are there any significant differences with respect to gender among students' views on PAPA dimensions?

  b) Are there significant differences with respect to gender among faculty' views on PAPA dimensions?

1.5 Limitations of the Study

The possible limitations that may be encountered in this thesis study may be: Due to limited time and budget resources, there may be bias samples within the scope of the researcher's current research, personal understandings by the student, and sample mistakes that may be present in the results. The convenience sampling method was used the results could be interpreted with caution. Only privacy, accuracy, property and accessibility aspects were considered in this study. This study is restricted to Facebook usage only.

1.6 Thesis Overview

Chapter 1: This is the first chapter of the thesis; it gives details on the ethical usage and the views of higher learning professionals and students view on SNS (Facebook) usage for learning, the problem definition, the importance and significance of this study, various objectives and objective of this study and limitation of this study and on a serious note the step by step approach used in the study.

Chapter 2: This chapter presents various related research on the ethical use of Facebook by faculty members and students for learning and other scholarly activities like social survey.

Chapter 3: This chapter offers the theoretical outline of different dimensions of the model and principles that will form the basis of the ethical usage of SNS Facebook by faculty members and students for learning.

Chapter 4: This chapter dwells on the study method that is applied in this research, the study model, participants, research setting, method of data collection, the instrument used in data collection, the data analysis technique that was used, and the data collection procedure will be discussed also.

Chapter 5: The result of the data collected, analyzed and discussed extensively.

Chapter 6: This chapter includes the conclusion on the study, recommendations on the study, areas of future research and suggestion which may be adopted for further study in the field.

CHAPTER 2

LITERATURE REVIEW

2.1 Social Media

2.1.1 Introduction and Background

Social media is defined as a web site and a group of interactive platforms, Internet applications, based on the conceptual and technological basics of Web 2.0, that permits users to make and share user-generated content (Kaplan et al., 2008). Social media, allows users to make and share content and partake in social networks (Mao, 2014). Safko and Brake, (2009) state that social media also denotes actions, activities and practices between groups that collect data from the Internet, information and response to share, and web-based applications that offer a usefulness for creating and transmitting content via messages, images, video, and audio.

Daily reports show that the amount of social networking operators is increasing dramatically globally; In addition, social networking opportunities are more effective. And, social networks are more or may less difficult and available; somewhere people of all age can make and share content, and relate simply over social networks. Social media comprises of video, podcasts, message, audio, images, and other software messages. In nowadays, social media is unquestionably among the many most very influential sources of information and update, as a well as constant news supported platforms such as Twitter, Facebook and Wikipedia (Ralph and Ralph, 2013). Then social networks include a variety of on-line technology tools that allow users to easily connect across the internet and disseminate information and properties.

2.1.2 Web 2.0 Technologies

Web 2.0 Technology – is a web-based service that is centered on user-generated content such as Flickr, Facebook or YouTube (Klopfer, et al., 2009). Social media - a type of computer-supported connection that occurs by Web 2.0 technology, resembling the idea of Tim Web 2.0, which described the change in the digital are, when the Internet is a way by which shared acumen (Tim, 2005). The data is active and numerous; in which the software is in continuous beta, and the relationship is significant than knowledge. It is a social, original and collective space where

minor pieces are freely united. Advent of Web 2.0 was preceded by the normal use of the social media term, but it includes all the crucial thoughts. Conceptualization signals a model move in the way it now communicates and interacts with the ideas of both users and developers. This practical reorganization of the web was developed in individual and social drive, where it requires a platform for interaction between people. This social network now extends outside the PC to the related devices we wear and convey; thereby personalizing the Web as Platform articulation. Tim (2005), the space for the use of collective intelligence, lives on Shared and permanently improved data. Its tools are easily, designed for simplicity and functionality, and device markup - to create a rich user interface.

Web 2.0 makes it easier to create and upgrade online social networking sites in the digital context. Constantinides et al. (2008) defined social media in five parts.

Five major groups of social media acknowledged includes:

1) Blogs, which are identified as online diaries in which individuals or corporations can upload and share videos, images, thoughts and links to other web pages;
2) Social Networking is a place in which the user can create their personal web sites for sharing information;
3) Content of the community are websites where some kinds of content could be downloaded and transmitted to others;
4) Forums / dispatch sheets are sites focused on exchange of thoughts and information, as a rule and special interests;
5) Content Aggregators or platforms that let users to completely modify the web content they want to use.

Many social media platforms offer structures such as chat, remarking, evaluating, updating the status and exchanging information for its users. Also, the main structure of social networks is a constant connection to multiple recipients. Social networks have streamlined the sharing of videos, images, thoughts, compassions and displeasures to the globe, and find quickly that people commented. Social networking sites frequently comprise social networking services to simplify interaction and communication between individuals in the computer-generated public

with Internet social networking sites like Facebook, Twitter, Instagram, YouTube, MySpace, and the rest. That is one of the advanced forms of social networking that offers a contemporary way of communicating and exchanging information for its users (Haenlein and Kaplan, 2010).

2.1.3 Various Types of Social Media

Social networking sites let users and groups to create, cooperate, and modify user-generated content. The main features include a rich Web 2.0 user interface where users relate with data that is generated dynamically based on user effort. Users act as site members through surveys and comments and allow users to sort and locate Web information. Features 2.0 form a firm basis for social networking, as noted by Kaplan and Haenlein (2010), and the opposite of the association is marked by managers (Hendler and Golbeck, 2008). Social media exist in different types, which are seen in Table 2.1 below.

Table 2. 1: Various types of social media adapted from Grahl **(**2013)

Forms of social media	Description
Social networking sites (SNS)	Users create a profile to connect with their friends or other users with the same service or interests. Profile includes personal information of users. SNS offers different means by which users can connect with each other. E.g, SNS contain Facebook and LinkedIn.
Bookmarking sites	This service let users to save searches and organize links to different resources and web sites. Most services let you to mark shortcuts for easy searching and searching. E.g, booking reservation.
Micro blogging sites	This services that combine SNS and blogs, and again is inadequate in relation to edited message mass. Users must subscribe to these services. E.g microblogging sites are Twitter.
Media sharing sites	These services let uploading and sharing media, like videos and photos of users, and for users to make comment and write to the media. E.g, multimedia sharing platform like include YouTube and Flickr
Social news sites	This services that allow several users to choose on news write up and link them to outer items sent by users. News write up that receive the majority of polls are shown clearly on the site. E.g, Digg and Reddit.
Blogs and forums	Blogs are like a series of online magazines that allow other users to share feedbacks on blog posts. Groups let listed users to chat with several other users by sending messages. E.g, Wordpress.

Table 2.1 illustrates several methods of social media, which users may be able to connect and relate to others, if or not, be that their colleagues at work or friends, or outsiders. The attractiveness of social media, as demonstrated by figures (Curtis, 2011), Facebook, equal to 1.1 billion users, Twitter has 500 million registered users, Flickr's photos kept 8 billion and had 87 million of users, and LinkedIn - 225 million users, while MySpace boasts of 25 million users, was characterized the feat of Web 2.0 (Curtis, 2011).

2.2 SNS Impact on Students and Faculty Members

The framework was brought out by thought that started individually for every of the writers in a joint operation, by analyzing our understanding of SNS, because it was significant for advanced learning (and maybe because it’s not), the structure has rapidly appeared. This was not conclusive, but its intentions were beneficial as a tool to excite dialog. The rapid revolution of the Internet into a social network Tim (2005) associated with technological change, just like the use of the browser, rather than desktop application, mobile technology development and the accessibility of cloud computing. As such, platforms and services, such as wiki, social network sites, online groups, blogs, and social labeling apparatuses, turn into significant routines in life, and learning contexts.

These tools, technologies, and services can also impact how individuals learn, communicate, and build awareness (Kolbitsch and Maurer, 2006). Students can actively participate in communication with other people and participate in creating content (for example, contributing to wiki articles, posting private information, taking part in group discussions, blogging, and tagging properties). The difference among users and content creators stopped existing Bruns (2006), since anyone can use social networks to circulate their information of the simple and inexpensive way. As a result, SNS allows to work with a large number of heterogeneous users (Tapscott and Williams, 2006).

The online Encyclopedia Wikipedia is a good example of huge set of volunteer operators create the world's biggest wiki-based by researchers, students, educational professionals (Cress et al., 2013; Halatchliyski et al., 2014). The impression of utilizing SNS for partnership modified to

numerous other perspectives like information managing (Levy, 2009; Matschke et al., 2012). Collective social networks also cause variations in formal educational and learning environments.

2.2.1 Social Interactions

SNS play a significant portion in the growth of social interaction between students and the public in general, which means expanding the boundaries of learning from the classroom blocks to be inside the community. Gruzd and Goertzen (2013) identified three educational ideologies relating to social science learning networks:

Principle 1: *Social Connections Motivate* - This means students get to take measures that are associated with social communication or community advantage (for example, reprocessing) is regularly much simple.

Principle 2: *Teaching Teaches the Teacher,* wherever old-fashioned learning circumstances the effort and difficulty of mind instead of being socially involved, won't aid students in learning, not to mention teaching evolution.

Principle 3: *Instant Feedback Improves Learning* at a point quick and several responses improve understanding and knowledge.

2.2.2 Informal Science Learning

Informal science learning denotes to the process that take place outside of the school environment, that is not mainly designed for school purpose but is also designed to participate in the current curriculum. It is voluntary and not mandatory for participation Hul et al. (2015), which also includes activities related to SNS (television, radio and cinema, PC), research institutes, cybernetics in young people, in and extracurricular courses. Informal science learning is increasingly attractive to people all over the world because it permits enhanced understanding of scientific and usual occurrences, and it is better to retain it as it involves the student's individual understanding (Battrawi and Muhtaseb, 2010).

2.2.3 Safety of SNS Tools

Cultural and common sites like Facebook, MySpace, and Bebo, has nevertheless, attracted extreme feedback from colleges who fear for the security of online students. Making use of these sites coupled with the fact that students may abuse them for a period which is thought to be schools' hours. As a consequence, a number of substitute sites has arisen to offer tutors with a platform that best suits online classroom communities. Additionally, tutors can also make their own social network hosted on a reliable site (Klopfer, et al., 2009). It is usual for parents and tutors, who use social networks and digital devices as smart phones because of possible negative consequences. Teachers worried about the digital devices, although they are divided on the influence of digital instruments for the students. Tutors see a discrepancy or disagreement in access to digital platforms that have at minimum several influences on the students. According to Purcell et al., (2013) over half (54%) of tutors said that all or most of the students have enough access to digital platform at school, while only one fifth of tutors (18%) said approximately all of their students have access to tools Digital which are needed at home.

Verma and lalnunpui (2017) found that there are students who wish to use SNS even if they do not have internet connection, but also most of young students who have internet connection do not use their true identity while creating accounts for scholarly purpose. Not only students having fake accounts, but also others specific issues were discovered that is distraction, accuracy of information, cyber-bullying and unsuccessful cooperation and interaction from students who use various functionalities of Facebook for scholarly purpose (Mazman and Usluel, 2010). Kim and Yoo, (2016) identified security and piracy on SNS while accomplishing study or work as negative issue from using SNS tools.

2.3 Facebook Usage Students and Faculty

2.3.1 Introduction and Background of Facebook

Facebook originally started in February, 2004 just as a social site at Harvard University. However, From September, 2006, Facebook has been opened to anybody who has a valid email address. By July, 2010 Facebook had collected over 500 million active users (Hew,2011).

Facebook is free and its main task, as stated on its home page, is to give people the opportunity to share and make the world more open and connected (Facebook, 2012); virtually anyone with access to internet can be connected to Facebook (Cassidy, 2006).

SNS has had an influence on the success and development of many university students and many scholars and professionals have taken interest on how Facebook has affected students (Abramson, 2011; Kamenetz, 2011). As reported by many researchers, Facebook is one the most popular website used as a social network by many students with an estimation of 85 % to 99 % of students are actively engaged in Facebook (Hargittai and Walejko, 2008; Jones and Fox, 2009; Matney and Borland, 2009). From EDUCAUSE Center for Applied Research (ECAR) data that was conducted in 126 Canadian universities and the united states universities, 36,950 students were used as sample and results indicated that out of 90 % of the students that uses SNS websites, 97 % of the students says they use Facebook and they are actively engaged in its usage on a daily basis (Caruso and Smith, 2010).

Facebook users are able to show themselves to others through their personal Facebook profiles. Your profile may contain a photo, contacts individual information as well as your Facebook friends. In other places, users are able to include their preferred information, such as personal interests (Ellison et al., 2007). Members accrue Facebook friends on a mutual ground, so a friendship request to be a friend, have to be approved for the user to be included among your friends list (Lewis and West, 2009). When the request is accepted, both users will be listed as friends on Facebook by another user's profile the way of hyperlinks (Kolek and Saunders, 2008).

Status update also let users label their friends, leaving others reporting their updated post. Facebook users may be able to relate by using page function. The page is found on the profile page, and serve as a forum wherein friends are able to chat to each other. This lets users to relate and connect simultaneously by simply responding to any other message. The Wall - is the most commonly used service on most user pages on Facebook (Lenhart, 2007). Personal messages can be forwarded to other users who have their inbox, a function that is like e-mail (Calvert et al.,2009). Also, video sharing is permitted if users tag friends or individuals appearing in the

general video. In addition to video sharing, users can upload photos to folders and share them with friends using their own or other editorial labeling albums as audiences.

Another way to communicate through a note on Facebook, this feature works like a blog which allows users to share their frame of mind, with friends by tagging. Other substitute way to use this feature is the import coming from blog domains, like as Blogger and Xanga, just to share among friends, which allows the function to aid as a means for diaries. The chat feature permits user to share data in real-time via prompt messaging among friends who are connected.

Many kinds and variants of social network sites exists like Facebook, MySpace, Hi5 and Cyworld. Facebook is the most regularly used of all these networks (statista.com, 2017). The number of FB users has been growing rapidly (Socialbakers, 2017). The world's tenth in the world where the largest amount of FB users is in India, United States, Brazil, Indonesia, Mexico, Philippines, Vietnam, Thailand, Turkey and Unite Kingdom. The number of FB users is still growing rapidly (Socialbakers, 2017). In addition, Cyprus has the highest percentage of Facebook users in Europe and Internet penetration is so high to be coined the term social-media island (McEvoy,2017). Currently, with 901.369 internet users ,553900 are Facebook users in Cyprus**,** which makes it #92 in the ranking of all Facebook statistics by country (cyprusnewsreport,2017). These statistics show that FB and its functions are taken by many people around the world to the extent that use continues to increase.

Table 2. 2: List of countries on Facebook (Statista, 2017)

Range	Country	Users (millions)
1	India	241
2	United States	240
3	Brazil	139
4	Indonesia	126
5	Mexico	85
6	Philippines	69
7	Vietnam	64
8	Thailand	57
9	Turkey	56
10	United Kingdom	44

To better understand why FB is popular, it is useful to look at its features. FB actually has many features including a simple model, so individuals can create so-called FB profiles personal web pages, which usually consist of a series of personal data (Kolek and Saunders, 2008). He launched the Timeline program allows people to tell their life story with photos, friends, and personal stops such as the release of, or to travel to new places (Facebook, 2012).

Smith and Casuro (2009) stated that from the data gathered by the Center for Applied Research 90% of students who use social networking websites, 97% from a trial of 36,950 students from 126 United State universities and one Canadian university said they used Facebook. Students use Facebook to minimize their anxiousness by linking with other different students online rather than make an effort trying to link with the same people in direct surroundings (Clayton et al., 2013).

Junco (2012) found that students who use Facebook the higher the usage the better they perceived they perform; Some researchers like Mazman & Usluel (2010), studied how Facebook is applied for scholarly purposes by undergraduate students including sharing resources or materials, communication and teamwork, plus the budding for endorsing allied learning (Nguyen, 2017).

Stutzman et al. (2013) study proved that some members of Facebook find it very important to them for learning, get in touch with colleagues and for making it more suitable for populace to stay in touch with them. Other scholars like Ottenbreit-Leftwich and Ertme (2010); Palak and Walls (2009) have their own opinion that the student should be the main focus when integrating technology effectively into the classroom.

Scholars like Cassidy, (2006) have all emphasized the impact of being motivated in order to have a successful scholarly career, all the theories pin pointed in this research, try to highlight the significance of technology advancement which SNS Facebook is a part of making student fulfill their academic achievement while engaging in its usage and the faculty members utilize SNS (Facebook) as an instructing aid in constructively guarding the students in their pursuit of

academic success; Livingstone and Brake (2010) study on the influence of SNS on an individual, they stated that for many students, SNS networking offers significant benefits in terms of communication and relationships, others like Cain (2008) also agree to their opinion and he stated that SNS networking sites like Facebook offer persons a means of preserving and consolidating social connections, that can be useful in social and academic surroundings.
Fewkes and McCabe (2012) study from the question of whether students accept as true that Facebook can be utilized as scholarly instrument, 73% of students who did the questionnaire had used Facebook for scholarly purposes because the students who believed that Facebook could be used in education stated advantage of Facebook counting easier communication with colleagues, fast and easy debate forums, group collaboration, awareness operations, increased self-organization, and classwork help, also good comment from Facebook intensificate students' self-confidence (Kaya and Bicen, 2016). It is further proved by Nadkarni and Hofmann (2012) who showed that people who use Facebook accomplish two basic social needs: need to fit in some online SNS group and need for self-presentation.

Asterhan and Rosenberg (2015) believe that that faculty member-student Facebook interaction assists as social-relational, scholarly-instructional and psycho-pedagogical, the factor of perceived usefulness greatly affected the decision of students to use Facebook as a learning support. Perceived usefulness affected students use of Facebook as a learning support; thus, as identified by Kim and Yoo (2016), SNS has positive effects including efficiency in work, relationship building and information acquisition and communication. Parveen (2011) conducted a study to measure the use of Facebook in marking awareness among the library science professional and found that Facebook functioned as an effective instrument for conveying information or knowledge and prove to be helpful in making awareness among Library and Information Science Professionals of University libraries. Majority of the participants were pleased in the use of Facebook to share knowledges, opinions and participated in creating awareness, but some studies like Lambić, (2016) proved that Facebook use for wide-ranging objective does not affect the scholarly performance.

At this present time, Facebook is using the largest online social network worldwide and is actively involved in connecting people from distinct geographical regions and with different cultural backgrounds. According to the statistics available on its official website, its monthly active users are more than 1.79 billion and daily active users are more than 1.18 billion as of 2016 , Facebook(2017), which makes it the biggest and most popular social networking site in the world (Mathiyalakan et al., 2016). As the usage of Facebook continues to be an important part of people's everyday life, enriching our understanding of the impact of Facebook on its users will better inform researchers and the general public alike about the psychological impact of using Facebook.

Facebook research to date has specifically examined five topics: descriptions of Facebook users, motivations for using Facebook, identity presentation, the effects of Facebook use on social interaction, and privacy concerns/information disclosure (Proudfoot et al.,2017). Various theories such as the dual factor model have been proposed to clarify the primary drivers of Facebook use: self-presentation (Nadkarni and Hofmann, 2012). Interestingly, current empirical evidence has resulted in mixed and even contradictory results as a result of its influence and implications for users' social relationships. From one point of view, studies have shown certain usefulness and advantages of intensive Facebook. For example, intensity of Facebook use is positively linked to students' life satisfaction, social trust, civic engagement, and political participation (Valenzuela et al., 2009). Furthermore, updating one's Facebook status has been proven to lessen loneliness by increasing users' daily social connectedness (Deters and Mehl, 2013). The power of the smile in Facebook photos predicts changes in life satisfaction over time (Seder and Oishi, 2012). Thus, studies have shown that Facebooking can provide social benefits for users' social relationships.

One the other hand, studies also show disadvantages of Facebook usage. For instance, the number of Facebook friends is negatively linked to how people feel about theirselves and academic adjustment in college (Kalpidou et al., 2011), greater Facebook use predicts reduction in cognitive and affective well-being over time (Kross et al., 2013). Moreover, more Facebook interactions has been proven to be associated with greater stress directly and indirectly via a

two-step pathway which involves more communication overload and lower self-esteem (Chen and Lee, 2013).

In addition, when people share their most positive experiences to construct an attractive online persona, "Facebook jealousy" may occur. Indeed, evidently, Facebook envy mediates the relation between Facebook surveillance and depression (Tandoc et al., 2015) and may be a danger to users' life satisfaction (Krasnova et al., 2013). Even more interestingly, Facebook use is found to be simultaneously positively associated with relatedness-need dissatisfaction (Sheldon et al., 2011). Exhaustive Facebook has its advantages and disadvantages to users' social engagements (Hu et al.,2017).

Argument problematic Facebook use has been recently defined as the use of Facebook which causes a defect and problems in users' life, such as social, school, or work problems (Marino et al., 2016). Different issues are argued about by individuals, from less important things, everyday decisions, and relationship issues, to financial and socio-political matters (Cionea, et al., 2015). Research on social networking sites (SNS) suggests that conflict usually happens on Facebook, albeit less frequent than on other websites that allow users anonymity (Halpern & Gibbs, 2013). Multiple scholars (Halpern & Gibbs, 2013; Hutchens et al., 2015; Sveningsson, 2014) have reported that people engage in arguments on Facebook that involve topics that directly challenge their beliefs. A lot of this research has focused on negative parts in relation to conflict, such as verbal aggressiveness, which may cause an individual not to go into a conversation on Facebook. Sveningsson (2014), for instance, has reported that young Swedes were reluctant to engage in political argumentation (different conversation) on Facebook because they were afraid of being attacked by verbally aggressive users. In addition, Chen (2015) has found that insults led to angry retaliation as they threatened people's positive face. Also, according to Tsovaltzi et al., (2015), SNS were made mainly for sharing personal information among users. However, the writers have explained that academic, scientific opinions are also exchanged on such platforms, and can actually lead to information sharing, collaboration, and learning from engaging in an opinion conflict on Facebook.

For example, verbally aggressive behavior and bullying happens often on Facebook, despite research that has found that it is usually a little amount of users who engages in such behaviors (Halpern & Gibbs, 2013; Hutchens et al., 2015).

Irrespective of these complains, Facebook users still increase daily, the researcher chooses to continue the evaluating these ethical issues using the PAPA framework in terms of scholarly environment as Başaran (2017) stated that there still more unresolved issues concerning the use of Facebook in scholarly system.

2.3.2 SNS Facebook Services and Security

Facebook and other social systems administration advances have added extra touch of dreadfulness and new stratums of multifaceted nature to the present level-headed discussions amid Scholars about computers and educative safety. For instance, standing philosophical level-headed discussions about whether protection ought to be characterized as far as restriction over data Elgesem (1996), limiting admittance to data Tavani (2007) or logical trustworthiness Nissenbaum (2004) should now be reevaluated in bright of the security and ethical usage of Facebook, Twitter and different SNS which became a focus of more fundamental thought.

Certain major actions of worry comprise: (a)the possible accessibility of clients' information to outsiders for the motivation behind the implementation of business promotion, extraction of information, examination, observation , (b)the face recognition programming limit to naturally separate the contacts in the transferred pictures; (c)the ability of external candidates to aggregate and distribute customer information without prior authorization or attention; (d)Use of pick-in security controls, constantly programmed by Facebook; (e)Behave to control online client exercises after leaving an SNS; (f)Using the management of social field systems based on potential customers to monitor their physical development or to control other illegal; (g)Sharing government data or customer data or sample actions; (h)and to wrap things up, customers, as well as sharing their information or sharing information as defined by the different entities and elements, deliberate, but unwise, educated or less immoral invocation capabilities of data to adopt applications of sharing. Facebook has been a special lightning bolt for security alert in feedback Spinello and Arras (2011), but the characters on the SNS screen of the most remarkable

individuals which is much more complete and complex systems, a considerable amount of information that can access the person without contact.

These new on-screen characters in the data environment make specific issues as for security standards. For instance, since it is the capacity to get to data uninhibitedly shared by others that makes SNS particularly appealing and helpful, and for the fact that clients frequently diminish or disregard to totally understand the implications of sharing data on SNS, we might discover that in opposition to usual viewpoints of data protection, affording clients extra noticeable power over their data sharing acts may really cause quick reduced security for themselves or others. Also, movement from (early Web 2.0) client made and kept up locales and systems to (late Web 2.0) exclusive social systems, numerous clients are yet to completely handle the possible for struggle among their own inspirations aimed at utilizing SNS and the benefit determined inspirations of the partnerships who have their information (Baym & Levine, 2011). And, Lanier (2014) outlines the fact skeptically when he expresses that: The main trust in social systems administration destinations since a professional perspective is for an enchantment equation to show up which certain strategy for damaging protection and nobility gets to be worthy.

Researchers additionally take note of the path where which SNS models are regularly harsh to the granularity of human society (Hull, 2015). This kind of models be likely to regard human affairs as though which are the majority of a type, disregarding the significant contrasts within sorts of social connection (hereditary, proficient, friendly, business, and community). As an outcome, the protection controls of such models regularly neglect to represent the variability of security standards inside various however covering social circles like faculty members and students. Among instructive records of security, Nissenbaum's (2010) perspective of logical trustworthiness has appeared too numerous to be especially appropriate to clarifying the differing qualities and many-sided quality of protection desires created by recent SNS (Capurro ,2005). Logical respectability requests that our data regard connection touchy security standards, where setting alludes not to the excessively coarse refinement amongst private and open, however to a far wealthier cluster of social settings described by unmistakable parts, standards and qualities. For instance, the same bit of data made open with regards to an announcement to

family and companions on Facebook may be considered by the same discloser to be private in different connections; that is, she may not anticipate that same data will be given to outsiders, kindred students or even her faculty members.

Hargittai, (2010) likewise observe the evident versatility of client demeanors about security in SNS settings, as confirm by the example of across the board shock over changed or recently uncovered protection activities of SNS suppliers being trailed by a time of convenience to and acknowledgment of the new practices. An associated worry is the ‘protection Catch 22’, in which clients’ willful activities online appear to give their very own false representation expressed qualities concerning security. These wonders raise numerous ethical concerns, the broadest of which might be this: by what method can static regularizing originations of the estimation of protection be utilized to assess the SNS rehearses that are ruining those exceptionally originations? All the more as of late, working from the late compositions of Foucault, Hull (2015) has investigated the route in which the 'self-administration' model of online security insurance encapsulated in standard notice and assent rehearses just strengthens a slender neoliberal origination of protection, and of us, as items available to be purchased and trade.

In an early investigation of online groups, Bakardjieva and Gaden (2012) and Feenberg (1999) recommended that the ascent of groups based on the open trade of data may truth be told oblige us to migrate our center in data morals from security worries to worries about estrangement; that is, the abuse of data for purposes not expected by the important group. Uplifted worries about information mining and other outsider employments of data distributed on SNS might appear to offer more value to Bakardjieva and Feenberg's contention. These contemplations offer ascent to the likelihood of users conveying resistant strategies of deception, for instance, by giving SNS users to have wrong identification, birthdates, addresses main residences or job data. Such strategies might expect to undermine the rise of another computerized authoritarianism that utilize the force of data control (Capurro,2005).

At last, security and ethical issues with SNS highpoint a more extensive logical issue including the intercultural measurements of data morals; Capurro (2005) has noticed the route in which

barely Western originations of protection impede other true blue ethical worries in regards to new media hones. For instance, he takes note of that for people stresses over shielding the private space from open presentation, we should likewise take consideration to shield people in general circle from the inordinate interruption of the private. Despite the fact that he represents the point with a remark about meddlesome employments of mobile devices out in the open spaces, the ascent of versatile SNS has enhanced this worry by a few variables. The time one must rival Facebook for the consideration of one's supper allies and relatives, as well as students, the honesty of people in general circle comes to look as delicate as that of the private.

2.4 High educational use of ICT

The most important motivational constituent which has been reported were internal and personal ones associated with immediate advantages of ICT in condition of increasing their teaching commit, increasing learning of students, and improving their job contentment. External constituent including physical and moral motivational constitute, as well as university support and encouragement, had a reasonable influence on the participants' usage of ICT for sholarly intention (Gasaymeh et al.,2017).

ICT evolution is increasingly popular research tool. It provides new opportunities for researchers, but raise new challenges for scholarly system including privacy, consent, and confidentiality (Moreno, 2013) and the effective integration of technology into classroom practices poses a challenge to faculty members (Pawar, 2017). Students spend more time on computers for recreational and other purposes than for academic purpose (Siddiquah and Salim, 2017). Good quality content is one of the major issues and directly affects the standards of education and quality (Pawar, 2017). ICT services have improved historical research by facilitating access to information, analysis of data and dissemination of research findings (Ogutu, 2017). ICT is an electronic means of capturing, processing, storing, communicating information but generally not considered central to the teaching, learning and evaluation process (Jadhao, 2017).

The opportunities ICT presents appear to outweigh the risks (Gemmel et al., 2015; McKinnon et al., 2015). Free of geographic and physical restraints, ICT crosses borders without maneuvering through immigration policies, and allows collaboration and competition between students for greater diversity and enhanced quality of education (Hénard et al., 2012). The main risks are pedagogical integration of internationalization and dependency on shared technology, advanced enough to deliver and conform to teaching goals and students' learning needs (Hénard et al., 2012). While ICT can support greater ease and efficiency for international exchange, little is known about how it shapes the quality and outcomes of education through internationalization.

Despite the popularity of massive online open courses, Hénard, (2012) suggest that many institutions hesitate to use ICT possibly due to lack of awareness of its potential, lack of training and experience in using it, and even resistance against using it (Leung et al.,2017).

The use of ICT in the classroom was examined as well as identifying the challenges and advantages. Part of the student's benefits were easier access to research through the Internet, facilitated organization through the use of Google drive, and the use of social networks. Challenges were similar to those found in in mainstream schools with concerns of technical problems, off task behavior, and improper referencing. The faculty members and administrator identified barriers preventing the increased use of ICT, including the lack of professional development, resources, and Indigenous language software (Laronde et al. 2017). More institutes have been continuing the research to offer educating on the potential impact of computer ethics and related ICT behavior and responsibility on society (Matthew and Richard, 2016).

2.5 PAPA

In 1986, Mason introduced four broad categories of information era ethical issues: privacy, accuracy, property, and access, otherwise known as PAPA. These four issues are the major issues of information ethics and have for some time been the principle worry in earlier research (Lam and Harcourt, 2003; Zamoon and Curley, 2008; Angst, 2009). Twenty years after Mason's

ethical issues essay, Peslak (2006) surveyed more than 200 people and verified that the four original PAPA issues were still looked at as timely and important ethical concerns. Using ethical dilemma situations, Conger et al., (1995) carried out a research that produced five clusters of information advancement related ethical issues. Two of the five clusters represented issues of responsibility and motivation which were not addressed in Mason's essay. Whitman et al., (1999) also used ethical dilemma scenarios, adding to those first developed by Paradise. A factor analysis of responses revealed three categories of issues: software license infringement, illegal use such as hacking and viruses, and misuse of corporate resources. Those categories were used to compare ethical tolerance levels of students from eight countries. The broad groupings of issues identified in prior research encompass different specific illegal, unethical, or questionable practices. For example, the use of pirated software, a property issue, is pervasive at universities and may even be happening in classrooms. Other studies found that students viewed making copies of protected software as socially and ethically acceptable. Kini et al. (2004), considered soft lifting, illegal copying of software for personal use, even more prevalent in universities than in the general population. A survey sponsored by the BSA indicated that 52 percent of university student respondents in the United States and 25 percent of academics believed that the use of pirated software (swapping or downloading digital copyrighted files such as software, music, and movies without paying for them) was acceptable, even in the workplace. Sources indicate that students in general have a greater tendency towards pirating software and other intellectual property. However, it is not necessarily the college environment that promotes the downloading of software. An older study looking at non-university subjects came to the same conclusion, that "young professionals have no scruples about copying software illegally". More recently, it was revealed that software cost and the severity and certainty of punishment for piracy may determine how likely individuals are to commit the act in the workplace. A study by Freestone and Mitchell (2004), found Generation consumers were more permissive of piracy because many reasoned that they were doing no direct harm to sellers, and were victims of inflated music prices. Although the specific scenarios and dilemmas faced by students and faculty members may change due to technological advances, it appears that broad categories of common ethical issues in information advancement remain fairly constant

(Moreno et al.,2013). As proved by Basaran (2017), PAPA are still mainly unresolved issues that are faced in social media usage today and there is evolving facet of technology which is premature integrated into scholarly system with new situation which require attention from ethical perspectives.

Given the solicitation and interest of computer and information ethics, four dilemmas have been recognized in the extent of computer and information innovation. From Parrish (2010), it has been clearly established that software piracy in privacy, accuracy, property and accessibility (PAPA) and common issues are the topics most often investigated (Ming.et al.,2017). Virtual social networks like Twitter have motivated contemplation on information divide and human behaviors in cyberspace, based on the identification of behaviors, another analysis was practicable to authenticate if the outline follow ethical principles of information sharing in social networking websites based on the PAPA framework (MASON, 1986). From the four-moral code privacy, accuracy, ownership, and accessibility Salmon et al. (2013) discovered the negative social action categorization of social and antisocial behaviors regarding issues of privacy, accuracy, ownership and accessibility on the impact of information shared on SNS by students, females were more ethical than males on cross-cultural differences attitudes towards four common information ethics issues and students' ethical evaluations of the target action were highly related to their morality judgments in the information ethics issues towards four common information ethical issues (i.e., privacy, property, accuracy, and access issue) (Liu & Yishan, 2012).

2.6 Ethical issues in education

The advancement of the scholarly system during the 21st century has been progressive and phenomenal. Various technological progression facilitated the learning process and made learning much easier for both the faculty members and the students to communicate and aid the learning process. Works by Girod and Wojcikiewicz (2009), has examined how online learning, usage of the web and learning based on computer has revitalize and transformed the graders and has made this generation of students learn faster and easier despite these technological advancements and advantages posed by the use of the internet. Many have also abused the usage

and instead used it as a means of oppressing and terrorizing their colleagues and course mates (Coombs et al., 2010).

Various universities administrations and lecturers are faced with the advantages and disadvantages of integrating social network which is a part of technological advancement into the university system, this research focuses on investigating faculty members and students ethical use of Facebook in ICT context.

In the last decade, there has been an exponentially growth of communication through SNS like Facebook, twitter and others, all of these are aided by computer communication. All these platforms are facilitated by online access worldwide, irrespective of where an individual is located as long there is internet service, individual can connect and communicate with others irrespective of cultural and religious background. Facebook has spread across the globe. The usefulness of communication and the ease in which it is possible to communicate through Facebook has brought bounders closer together and make the world seems like a small village.

Social and behaviors disciplines have inclined continually on the consequence of Facebook in learning about social systems administration and ethics take the major portion focused on subjects fewer openly based on experimental statistics (e.g., security, privacy). These themes are additionally firmly connected to the original components and particular functionalities of SNS services as Facebook in leaning, even so then some different matters of enthusiasm for computer and data morals that identified by more broad Internet functionalities for instance, matters of patent and licensed originality of inventions, creativity, property, innovation, cybercrimes.

One of the frameworks that are used to better understand how people shares information on social network profile is Signaling theory, according to Donath (2007), observation which states Whether face-to-face or on line, what people need to see is not openly noticeable. Her research reveals that individual communication is made up of signs that show an individual characteristic and their status. Therefore, the signaling theory is used to examine how an individual presents themselves on social network and how these self-presentation is used to build trust while

communicating with others and one's own identity. Illustration is when a contact in a user Facebook profile is shown as a friend, it then shows an indirect way of that the individual is someone you share a bond or intimacy in turn you can verge for who the person is but observation has indicated that majority of users on Facebook friends do not share intimacy or bond with the users, they are often added to increase the number of friends on their list thus making them feel popular and well known but this has a negative implication because some of these friends could be fraudsters and might even be using fake id, the indiscriminating of adding of people to friends list can reduce one's trust worthiness and credibility.

Another theory that's related to how individual is judged by others based on what they use on their Facebook profile is the warranty theory. Research conducted by Walter and other researchers indicated that people using Facebook are ranked consistently as being attractive socially and physically by how attractive the individual friends are (Kim et al.,2012). Therefore attractive people have attractive friends so celebrity and famous people will have celebrity and famous individual as friends, another observation is the comment that is left on the wall of an individual Facebook user either negative or positive comments effect on the perception of how others see you ,as either attractive or less attractive, which conclude that Facebook and most SNS individual are mostly judged by their friends lists and comments made on their Facebook wall and pages.

Both warranting theory and signaling theory indicate that a statement generated by others tends to be more credible to people than information created by one's self, in turn individuals can change the information that is presented on their Facebook wall to manipulate what others write on their pages and what they say about them , as noted before, a statement made by others on Facebook tends to be more credible by people than a statement made by the owner of the profile page, as it shown by earlier research that the rate of attractive ascribed to a Facebook user is measured by the comments, post , and other information others writes on an individual wall than what the individual actually writes on one's page, hence our identity on Facebook is a measure of what other say about us (Walther et al.,2008). Therefore, the information is presented on an

individual Facebook profile consists of what is disclosed by the individual and what the individual friends says about them.

Verma and Lalnunpuii (2017) proved that Facebook is most popular SNS which used by students and faculty members, among all the SNS accounts they have, they use Facebook for scholarly intentions which they proved that it might be utilized as a link in communication among students and Faculty members.

Students create content and share them to their colleagues while using SNS, training and education, collaborative relationship in school, class announcements and debate and sharing and creating materials (Mutula,2013). The use of SNS keeps increasing day by day, Person (2013) survey, proved that 41% of high education faculty population have used SNS in teaching in 2013 compared to 34% of them using it in 2012. Educators and faculty member professionals see the potential in applying and integrating SNS technology to their teaching the reason of the growth use of SNS. This creates a growing phenomenon for the educational use of SNS to create, engage, and share existing or newly produced information between faculty members and students and among students. Many higher education institutions and faculty members are now finding themselves expecting to catch up with the world of SNS application and SNS users.

Nevertheless, using SNS advancements in higher education is not an easy and straightfoard method. Some faculty members see SNS tool as an operative educational platform, but some believe that it was not important at all. others stated that the use of SNS can help the achievement of student learning outcomes and other ones said that it lets them make the classes more collaborative. Although there is a rising frame of experimental study on the use of SNS in higher education in the advanced nations. Lee et al. (2015) found that faculty members and students have used SNS Facebook in university for scholarly intention due to its use by many people, easiness and convenience; still some faculty members acknowledge that Facebook is not made for scholarly, thus, should not be made obligatory or decree for formal scholarly platform, positive attitude of the faculty members and students were crucial.

Chen and Bryer (2012) found privacy and security dilemma to be central for faculty members in determining whether to use SNS tools for teaching or not, in their study. Focusing on the same issues, Rodriguez (2011) and Obrien (2012) stated out that entire privacy cannot be controlled when working with SNS because it has a tendency to store information long after it had been removed from the site and this direct to a possibility of the removed information reappear someplace, which endangered the privacy of faculty members and their students using SNS instruments. Also on accessing of SNS content, Rodriguez (2011) see restricted access to a platform as a danger factor to privacy in a way that anybody with the right of access might record content about another and could possibly publicize it after to a wrong person on SNS; privacy was also exposed, cyber-bullying, identity theft were also mentioned, and copyright under property and some of SNS especially Facebook were concerned about security and identity theft from faculty members and students who use SNS Facebook. Haneefa and Sumitha (2011) studied the views and usage of SNS by the students described that a big number of students were utilizing SNS and maximum of them stay at SNSs twice in a week even if students indicated that privacy issue and lack of security as major issues but they have positive attitudes towards social networking sites in general.

Srivastava (2012) investigated on the effect of SNS in the scholarly system and the study indicates that faculty members and students are now pushing learning over the limit of the classroom through SNS, this innovation also comes with complications, including the fact that many schools still denied access to certain sites inside their classroom walls he suggested that universities should also challenge the worries and problems surrounding privacy dilemmas and cyber security when they exposed their windows to SNS. On the use of SNS among university students, Hamade (2013) proved that a higher number of percentage of students use Facebook and Twitter and the majority of them use the sites to views different notifications rather than posting a message and they feel that there are some dilemmas with SNS as also proved by Cheung and Vogel, (2011) that there was a negative perspective about privacy concerns and communications via Facebook between faculty members and students.

Facebook, blogs, Twitter, and YouTube are the main SNS instruments used in scholarly system, though a high number of studies described positive behavior by students regarding scholarly functionalities of SNS technologies, faculty members opinions were more reserved. The major problems well-known by students are privacy issue, disobedience of socializing through scholarly interactivity, and data burden but Faculty members are most worried about the huge range of SNS procedures and the lack of training assistance in evolving interactive- technology in universities (Piotrowski, 2015). Another problem of concern for faculty members was on marginalization of some students where faculty members have online relationship with some students and not others which cause bad interactions between students (Chen and Bryer 2012).

Plagiarism and absence of scholarly truthfulness by students were also recognized as ethical issues of concern to faculty members because plagiarism don't follow the rules for the intellectual property privileges of the content originator (Kennedy et al.,2008). Faculty members who responded to the 2012 Pearson survey highlighted that the truthfulness of student submissions was an issue to worry about (Moran et al., 2012). Unconventional naturalness of SNS may, probable, stimulate this kind of conduct. The absence or unavailability, inaccessibility, unreliability and instability of such infrastructure affects the extent to which SNS can be used in academic work by both the learner and faculty member (Rodriguez,2011). Closely related to the issue of plagiarism was the issue of authenticity.

Another access issues of concern found to contribute to the extent of use of SNS by both faculty members and students was the ability to use the SNS and the digital content and digital literacy (Chen and Bryer, 2012; Gaffar et al.,2011). However, on the whole, faculty members showed that their ethical predispositions did influence the extent of their choice and use of SNS in academic practices. Other factors that influence faculty members when applying information ethics to the use of SNS for academic work, control beliefs. followed by ethical predispositions and lastly, by normative beliefs when applying information ethics in the use of SNS in academic practice (Maisiri and Hikwa,2013).

While SNS can be useful for professional intention, faculty members may oppose or refuse the importance within in such implement, which they perceive may impact the ways that they

observe themselves, their education, and their research. According to Park (2010), most faculty members were not active users their SNS skills of concludes in a tension between personal connection and professional obligation as they attempt to negotiate their participation on SNS, they meet issues of establishing limits, maintaining suitable and expressive connections with others, structuring participation so that others see them in a good way and using their time efficiently (Veletsianos and Kimmons, 2013).

Akayir (2017), proved that Some of the students when asked their opinions on the use scholarly environments, said that they worry about their post which can be seen by their faculty members even if they have positive views on the use of SNS for scholarly intentions and the different factors that affect them for the usage of SNS include nature of utilizing internet, being familiar with information advancement, peer influence and desire of expression (Park, 2010).

To make an online narrow for debate on a scientific claim student wished to evaluate by inviting them to post and comment on science articles, with respect to the level of sharing as well as diverse ways of using SNS Facebook group, they exceeded the expectations set by the faculty members by discussing on topics which are out of the subject (Sarapin and Morris ,2015). Students and faculty members views on the use of SNS in the classroom, all the two groups show worries about privacy, but faculty members were more worried about the legal impact of students who make faults openly online (Hickerson & Kothari, 2016).

Lastly, from comparing students and faculty members on the use of SNS Facebook, they are both open to the reliability of utilizing FB and other identical technologies to assist scholarly work but still faculty members prefer to keep utilizing common technologies like email while they are sharing document or assignments between them and students (Roblyer et al.,2010).

2.6.1 Information Ethics and SNS

Shortly, ethics can be defined as making moral judgments according to right or wrong or good and evil. Ethical dilemma or issue is a condition that can include or bring a visible misunderstanding among ethical essential. The growth of SNS brought out worries about the

moral of people and their ethical right like data protection, privacy, security, trust and confidentiality being violated by certain users. These SNS have increased and become a worldwide phenomenon on networks and made the classroom a public place where moral and ethical right like accessibility, privacy and confidentiality are no longer covenant (Mutula, 2013).

According to Ellis and Griffith (2001), information ethics is a domain with investigate on the ethical dilemma that comes from the evolution and implementation of information technology which are related to the domain of computer ethics and information philosophy. It offers a judgmental framework to take ethical issues into account about moral agency, informational privacy, dilemma that comes from life-cycle of information (processing, creation, distribution collection, recording, collection) and new domain issues. Information sharing and literacy are important interest in implementing an ethical structure that encourage and aid fairness, responsible practice and equitable.

In general, information ethics investigate on the issues that are associated to security, owner ship, community and privacy. Information technology influence basic rights including accountability, copyright protection, security and intellectual freedom. Intellectual property has some of the main issues include copying software and unauthorized downloading, students are aware of the abuse and the misuse of computer relevant to scenarios related to property, privacy and accuracy (Ellis and Griffith, 2000).

Even though it might be hard or difficulty to stay away from ethical issues that comes from SNS use completely, they can be possible to reduce ethical peril, authenticate and indicate ethical duties in order to improve human morality as called for by, between other online social community, Mason (1986); Additionally, the progress evolving information arrangement and changing and growing information needs precondition the constant reconsideration of ethical standards, ethical codes and how they have to be used (Floridi, 2008). As stated by Garcia-Febo et al. (2012), ethical codes are necessary for all professionals and informational worker plus that students need to learn information ethics principles and other related research to implement the information sensitivity (Gwak et al.,2013). As for Chatterjee et al. (2012), concluded that unethical use of information advancement is basically motivated by social, directional and

technological analysis while illegal unauthorized purpose of an action done willingly lead to unethical conduct (Chan et al., 2008).

The investigation of the ethical consequences of SNS can be viewed as a sub-part computer and data morals (Bynum, 2008). While Computer and Information Ethics unquestionably oblige an interdisciplinary methodology, the direction and issues of that field. However, this has not been the early concern for the morals of social systems administration. Mostly because of the worldly unexpected event of the social systems administration marvel with rising observational investigations of the utilization and impacts of computer-mediated-correspondence (CMC) which is the area of studies that have been identified and are now called 'Internet Studies' have become an important subject (Consalvo and Ess, 2011). The ethical insinuations of social systems administration advances remained at first focused for request by a free alliance of researchers (Boyd, 2008; Ellison et al., 2007).

Subsequently, individual thinkers who have revolved their regard for social systems administration and morals needed to choose whether to seek after their request freely, sketching just from conventional philosophical assets connected with computer morals and the logic of innovation, or to build up their perspectives in line with the developing collection of observational information and assumptions as of now being produced by different orders. While this passage was basically kept itself from exploring standing logical exploration on social systems administration morals, joins between those who looks into and thinks about other disciplinary connections keep on being very huge. Amid the main sites that use the new gauges especially for overall social systems administration objects are Orkut, MySpace, Friendster, Habbo, Bebo, LinkedIn and Facebook. Later, particular patterns in online social systems administration incorporate ascents of locales committed to microblogging (Tumblr, Twitter), media sharing (YouTube, Flickr, Instagram, Vine), enthusiasm sharing (Pinterest) and area-based systems administration (Foursquare, Loopt, Yelp, YikYak). Among the principal logicians that took an enthusiasm for the ethical essentialness of social employments of the Internet, they were phenomenological thinkers of innovation Borgmann and Dreyfus. These scholars were intensely affected by Heidegger's (1954/1977) perspective of innovation as a solid

power with a particular course of impact, which has a tendency to compel or devastate the personal knowledge of certainty in particular methods. Borgmann and Dreyfus were principally reacting to the instant fore-runners of Web 2.0 social systems (examples: talk rooms, internet gaming, newsgroups, and email), their decisions went for internet sociality comprehensively translated, straightforwardly pertinent to SNS.

Borgmann's (1984) initial scrutinize of current innovation tended to what he called the gadget worldview, an innovatively determined aim to accommodate our collaborations to the world to an ideal of simple utilization. By 1992's crossing the post-modern divide, Borgmann had turned out to be more centered around the ethical and social effect of data advancements, utilizing the idea of hyper-reality to investigate (among different parts of data innovation) the path which online social systems may undermine natural social substances by permitting individuals to give each other adapted renditions of themselves for loving or friendly stimulation Borgmann (1992) as opposed to permitting the completion and unpredictability of their genuine personalities. While Borgmann concedes social hyper-reality appears to be ethically inactive, but then, he went ahead to assert that online social situations are themselves ethically insufficient:

On the off chance that everybody is impassively present paying little respect in which one is situated on the globe, nobody is really present. The persons who get to be accessible by means of a communication, have a less closeness, since we can simply make them vanish if they get to be troublesome. Also, we can protect ourselves from unwelcome individuals through and through by using SNS tools.

Regardless of whether this is at last Borgmann's perspective (or Heidegger's), his investigation is likely answering to comments of this sort: Social hyper reality has start to change the social environment and finally it will prompt disoriented and disconnected certain kind of life… It is clearly developing and thickening, choking out certainty and making humankind less careful and clever. (Borgmann, 1992).

While Borgmann (1992) and Dreyfus (2003) opinions keep on informing the philosophical discussion about social systems administration and morals, two of these initial Scholars activities with the marvel show sure prescient disappointments as it is maybe inevitable when

thinking about new and quickly developing innovative frameworks. They didn't anticipate the path where in well-known SNS, e.g., Facebook, LinkedIn and Google+ would advance farther away from the later online standards of anonymous and personality play, instead offering true characters an online nearness which in several means is rapid than actual aspect.

2.6.2 Ethics of Identity Aspect on Facebook

Social systems administration revolutions, exposed additional kinds of ethical space where personal characters and groups, including virtual and real, are advanced, displayed, decided, supervised and achieved. Appropriately, Bakardjieva and Gaden (2012) savants have investigated SNS about their usages as innovation of the self which inspire the growth and implementation of specific character, and regarding the particular kinds of public ethics and good performance created by SNS (Parsell 2008).

Ethical problems produced through the development of effective attitudes, collections then drew more logician interest (Introna, 2011 and Rodogno, 2012). However as well-known by Stokes (2012), not like, the former kinds of online groups where anonymity and the improvements change self-images were common, for example, Facebook increasingly grappled portions of the attitudes and links with open, typified personalities and detached away from the net 'true' structures. The result will then be a character grounded in the ones tools correctness and encapsulation yet exceptionally intelligent and ambition (Stokes 2012) in its appearance. Numerous ethical problems were raised: to start with, (a)from what source of regulating the course or quality does the positive affluence of a SNS client's identification fundamentally come from? (b)Do personality displays on SNS for the most part express to the same desires and reflect the same worth profiles as clients disconnected from the net character appearance? (c)Do they display some eminent differences from the positive traits of non-SNS customers? (d)Are the potentials and yearnings through SNS surroundings abundant or not heteronomous in beginning than those connected in non-SNS effects? (e)Do all the more expressly positive nature displays on SNS motivate customers to upgrade and to really characterize those desires logged off, or do they enervate the drive to do as such?

While Parsell (2008) trusts that specific Web 2.0 affordances empower dangerous assortments of individual flexibility; for instance, he depicts Facebook's dependence on seemingly perpetual profiles connected as way of life, a means for fighting de-individuation and uplifting accountable help to the group.

Such devices, in any case, come at some expense to client self-sufficiency—a worth that in different conditions is faultfinder regarding the ethical requests of personal ID, as stated by (Manders-Huits, 2010). Manders-Huits investigates the strain about the path where in SNS regards clients as outlined and forensically re-identifiable objects, while in the meantime giving individual clients an alluring freedom for continuous character development. She contends that SNS engineers have an obligation to secure and advance the benefits of its clients in self-sufficiently building and dealing with its personal particular good and characters.

The ethical worry regarding SNS limitations on client self-governance is likewise declared by Bakardjieva and Gaden (2012) who take notation of if they desire their personalities towards being framed and utilized as a part of this way or not, the online personalities of SNS clients are established by the classifications built up by SNS engineers, and positioned and assessed by coin which essentially drives the slender good economy of SNS people group: prominence.

The chaotic impact of my family, companions and associates on Facebook can be controlled with different instruments presented by the site, permitting me to send presents just on particular sub-arranges that I characterize. In any case, the far less complex and less tedious system is to grapple with the impact—permitting every system part to get a look at who I am to others, whereas in the meantime questioning for myself if these extended exhibitions extend a man that is more multi-dimensional or one that is obviously deceitful. As Floridi (2011), honest and ethical clients of Facebook for instructive reason put it: I am subsequently no more profoundly allowed to participate in making a totally fictive self, I should get to be somebody genuine, not who we truly are pre-given since the begin, however who we are permitted to be and what we are ready to arrange in cautious element as what I need to be and what my companions after these various electorates see us, permit us, and allowed us to be.

Indeed, though in this way, Cocking (2008) contends that numerous internet social situations, by putting dynamic parts of self-presentation on our immediate control, unable the importance capacity of inactive methods that encapsulate self-presentation far from our knowledgeable control, for example, non-verbal communication, outward appearance, and unconstrained showcases of feeling. He sees these as considerable pointers of character that assume a basic part by the way others see us, and by augmentation, how we come to comprehend ourselves through others' recognitions and responses. On the off chance that Cocking's perspective is right, then the length of Facebook keeps on privileging content based and parallel interaction, our capacity to utilize them to develop and express bona fide personalities might be fundamentally affected. Ethical distractions and the effect of SNS on one's valid self-building and representation may likewise be viewed as incorrect polarity amongst online and logged off characters; the scholarly hypothesis of individual personality problematizes the feature (Luciano, 2011). Soraj (2011) utilizes such an instructive metaphysic to refuse whichever unmistakable limit which be pulled amid ones disconnected from the net selves and us as developed through SNS. Somewhat, our own personalities online and off are taken as distantly established by our helpful associations to divers selves, occasions and questions. Ess (2010) proposes to seek after, and labor to empower the development of, 'crossover selves' that develop the separate good and commonsense ethics expected to thrive inside our arranged and epitomized associations.

2.6.3 Ethical Impact of the use of Facebook for Students and Faculty Members

As students move from being a run of the mill undergrad to somebody in an expert social work program, for example, educating, the desire that they will get to be engrossed into its way of life of the instructing or learning calling over the safeguarding of potentials, dispositions, learning, and abilities (Weiss et al., 2004). Capable socialization or the way that it can occur for students has not been reasonably shown confidential in social work writing, yet is deliberated used in the classroom and over field arrangements, overview to capable situations, and displaying actions of companions and faculty members (Barretti, 2004; Weiss et al., 2004). Despite the fact that inquiries remain with respect to the procedure of expert socialization, the fast development of

innovation and multiplication of online social system locales (Facebook) still include another additional environment that permits thought for faculty members and students.

Once in the public arena when an undeniably taught open is putting more noteworthy requests on experts Randall and Kindiak (2008), students and faculty members in a scholarly program in a higher instructive location must be made perceptive of possible ethical concerns identified with individual security, limit situation, and the constancy and pursuit capacity of data shared inside practical groups as they advance to proficient status. Genuine or potential ethical predicaments connected with the exhibition of an expert self-incorporate the amateurish utilization of inclination and critical dialect, and experiencing irreconcilable circumstances and rupturing privacy identified with students and faculty members.

Challenges inside the simulated domain distinguished by Palen and Dourish (2003) which could prompt possible drawbacks for students and faculty utilizing Facebook for academicals reason programs incorporate an absence of comprehension and administration of spatial and fleeting limits, and the convergence of different spaces. Advancing from an asset for perusing substance and discovering data, the Internet is presently similarly home to Web 2.0 media, in turn individuals effectively speak with different clients and take part in the formation of substance (Giffords, 2009). Facebook can be identified as: an electronic administration that permits people to build open or semi-open profiles within a limited outline; express a summary of several customers by whom they share a friendship and sight and maneuver their summary of groups with those created by others within the agenda (Boyd ,2008).

Systematic elements of internet social systems consist of an individual profile talking to oneself with the end goal of fact reached or reaching out to other people that share the website and vice-versa (Acquisti and Gross 2005).

While social systems administration had extended, social work faculty members, are exploring unknown domain as far as how online associations by students ought to be administered and how to characterize what speaks to fitting proficient conduct inside online social groups (MacDonald et al., 2010). Study has shown that many clients of SNS don't exploit security surroundings (Gross and Acquisti, 2005; MacDonald et al., 2010). Online posts were discovered

to uncover individual data that may bring out the adjusting of the expert relationship amongst customer and specialist (MacDonald et al., 2010).

Attached to an expert picture is the movement of impression administration, generally utilized same by personal delivery with self-presentation, and speaking to a cognizant or oblivious push to pass on particular data around oneself (Goffman, 1959). In a scholarly social work package, at hand is a desire that students will build up an expert guided by a consistent familiarity with social work's main goal, morals, and ethical measures for practices (Workers, 2008). The student's improvement of the aptitudes to fittingly deal with his or her expert performance is of most extreme significance for expert socialization procedure.

As cutting-edge experts, students must figure out how to manage, regulate, and make perfect limits inside the connection of different individual and expert interrelationships between themselves and faculty members (Workers, 2008). By this learning procedure, students get to be conscious of in what way and at what time to present one's self in a suitable way among different set ups where they will collaborate as experts while it's pretentious via mindfulness and a sensation of presence in the common population limelight, impress management, or the presentation of an expert self, and is connected with limits which move progressively as settings modified (Palen and Dourish, 2003). Students in higher institution figure out how to conform their activities in light of the surroundings (i.e., management, directing periods, staff gatherings, and casual discussions) and populace with which they are effectively included. Criticism in face to face area incorporates spoken and non-verbal correspondence enveloping seeing, sound-related, and material signs that are main components in helping students to learn suitable association methods. In connection to the last mentioned, the absence of logical signals in the simulated world may bring out possible slips in connection to a suitable performance of an expert self.

Initially, an incredible measure of characters important data might be dispersed effectively through a social system site – and imparted to huge and obscure quantities of companions and outsiders – including present or future users. Just about 33% (30%) of Facebook clients will make the majority of their profile data accessible to an arbitrary outsider and his/her system of

companions (Acquist and Gross, 2005). Individual data might not be distributed among the connection of a social work substitute's alternative groups with a friend is often punctually nearby to these persons, as well as to a considerably more extensive, frequently unexpected assembly of individuals traverse into other position whereas similarly receiving to be steady in while (Kornblum, 2006).

Subsequently, Transient limits mirror the capacity of data to be registered and its ensuing diligence for impending gatherings of people (Palen and Dourish, 2003). Students' data identified with their personal connections, social exercises, and university work is accessible for upcoming groups of onlookers, subsequently possibly affecting yet-to-come proficient connections. Different faculty members use social system destinations to screen their present representatives' practices outside of the working environment. Faculty members are one class of experts who have encountered plugged episodes identified with failures to comprehend the issues at hand bringing out expulsions or interruptions with vocation (Barak et al., 2008).

While students develop their expert pictures, communications inside a social system site may trade off regulator through their personal actually pertinent data, and capacity to build a precise good character. Others may add to this profile by transferring photographs or content about the students – regularly without the students' educated assent (Palen and Dourish, 2003). By Albeit (2004), a few students can have their own profiles turned to personal while their companions are not. Communicating via companions in social environment can bring out photos and identification inside the connection of a casual, amateur air being dispatched to the page of a companion who is yet to create a private profile. Firmly attached to the administration of an expert picture is the capacity to perceive and dispose of inclination and critical dialect inside one's professional discipline.

2.6.4 Ethics and learning

Human conduct has been a source of concern for researchers, philosophers and scholarly provider, scholarly ethics in countries of the world has been influenced and impacted by the teaching that believes that ethics is what we ought to do. Also, philosopher earlier in china has had impact on ethics learning in countries in the western part of the world, in Confucius words

Moral power never resides in isolation; it will always attract others. This simply means that people's action behavior is a replication of what they see others do, so if an individual act in a certain way there is bond to a response likewise this saying focus to study of ethics in the scholarly environment.

Ethics conduct principles are deeply rooted in culture and it stands as a guard in the way individual live their daily life according to Brandt and Rose (2004) ethics are principles of conduct that individual prefer that acts as a guide in the way they live their lives, acts or behave while in the scholarly field ethics is defined as those sets of practices or behavior that the scholarly profess put on itself (Sax, 1974).

Scholars with different views on ethics some believe that learning is a part of ethic activities and that faculty members and students should pose good ethical behavior such as academia integrity and honesty. Other scholars believe that direction in which people are supposed to behave, live, act or do is provided by ethics (Graesser, 1994). Scholarly ethics have had various challenges especially in the conduct of faculty members and their relation to the student hence researchers and scholar had taken time to look into the challenges that faculty members faces in scholarly ethics (Pope et al., 2009).

An argument by Pope et al., (2009) is on the basis that assessment in the classroom should take account of ethics and morality, ethics should serve as a guide to ensure that there is fairness and equality when give assessment in the classroom, youth do not care about and are not engaged with navigating privacy (Hargittai, (2010).

According to van den Berg and Leenes (2011), the analysis of the effect of privacy worries on members' attitude; a person's privacy worries are only an impuissant predictor of other members on the SNS, privacy worries people who open their accounts on SNS and leave a large amount of personal information; some of the user control their privacy by believing their possibility to manage the information they allow and the external access on it.

Millions of people all over the world, in all categories intentionally and voluntary use various SNS like Facebook, Match.com, Myspace, LinkedIn, Friendster and man other websites to

search friends, jobs, communicate and dates; then by doing so, they voluntarily bring out highly individual information to other user plus also to the who might accidentally or intentionally harm them. There is no one who force anyone to associate with SNS, and most of these SNS that we know encourage their user, but they don't force clients to announce their phone numbers, birthday, or their other normal living, Still, make public and consider how the shared information is to the outsider (van den Berg and Leenes, 2011).

In few words, there are hundreds and hundreds SNS from which Facebook is the most popular, from its easy functionalities and setting, students and faculty members are actively creating and participating in contents that SNS Facebook generate for various purpose including scholarly purpose (sharing material, assignment, learning, communication, …) to fulfil their academic achievement as the reason why they both accept Facebook as scholarly tool. But still, students abuse of these functionalities in scholarly domain by neglecting to practice ethical standards and harming their colleagues, accidentally or voluntarily using their fake or true identities, where comes the main various ethical issues concerning privacy, accuracy, property and accessibilities which has been constantly on the growth as they share contents on SNS Facebook. Faculty member also are facing challengers from integrating SNS technologies into scholarly medium specifically concerning privacy, property, access ethical issues and authenticity of student's submission work from using SNS, the reason why the researcher chose to investigate on these various ethical issues that challenge students and faculty member while using SNS Facebook in order to attempt to minimize them at barest minimum from their perspectives using Mason's PAPA framework model.

CHAPTER 3

3.1 Ethics and Facebook Usage

3.1.1 PAPA Framework and its Dimension as Privacy, Accuracy, Property and Accessibility

The purpose of this chapter is to offer an understanding on ethics that will cover the culture of different regions of the world and be applicable in consideration of the educational level and the adoption of this work piece. Mason (1986), the ethical aspects of privacy, accuracy, access and the availability of properties to be used for ahead development of this study.

3.1.2. PAPA and Social Network Sites

Ethical issues related to information use are vast and scale. Though, Mason (1986) argues that it is significant to emphasis on only four dimensions: privacy, precision, property and availability. As part of Mason, privacy information that a person has to share with others, with the guarantee that they must defend as a result of the exchange of information, human rights and not sharing information at all. Accuracy of information raises issues of authenticity, responsibility for information and mutuality as a result of harm caused by the use of wrong information. Property issues and the exchange of information are discussed in property matters. Finally, accessibility for issues related to admittance to information (Mason 1986).

Most claim that the scope of the PAPA framework is not widely sufficient to address the current ethical setting. E.g, Fairweather, (2000) states that PAPA's attention to four-way issues can lead to ignorance of other ethical issues and that some information technologies cannot adapt to the plan. It states that the PAPA is guided by knowledge rather than knowledge-based and applies all four areas covered by PAPA to all knowledge. For this reason, PAPA has been the basis for developing ethical rules for using social networking sites (SNS) since it emphases on more steady information quality than the vibrant flora of technology itself including Facebook that is currently use in scholarly environment.

3.1.2.1 Privacy

Mason (1986) noted that two forces intimidate our privacy. And one of these is advances in the field of information skill and the aptitude to seize, calculate and transfer information are increasing. The worth of others - the worth of what they can use for their benefits. For example, a mobile figuration device may be used to connect the SNS starting wherever in the globe. Though, the main risk to privacy is that it could capture pictures, record videos, write comments or any blend of the three and direct them directly to the SNS for use in the group. The information is useful not only for those who want to relish the profits of SNS, but also for those who hurt us at the same time. For example, research has shown that attempts to obtain information from man to extract personal data are more effective if they use information about the social context of the target (Jagatic et al., 2007). This proves the significance of compelling measures to safeguard the confidentiality of information shared by the SNS.

When considering the events of the world that have been discussed previously, the magnitude of the problem of confidentiality extends beyond the individual. For example, when in February 2009 the US representative made a trip to Iraq, he published a microblogging trip through Twitter's social networking site. However, he elaborated not only on their position, but also on the entire delegation of Congress on tour which is to be classified (Templeton, 2009). SNS change and modify Privacy Equation, for site users to be accountable for the confidentiality of the information, as well as keep the confidentiality of the information on everything that accompanies them, and for those in the same overall area.

Let's take another example of images shown in SNA in the streets of Tehran. Updates to newspaper protests with pictures and videos from unidentified bases (Mackey, 2009). Does capturing photos or record videos, their privacy ensuring secured by a secret code which protects people that appear on the image? Are they willing to make the entity information available worldwide? Who gives them privacy rights?

US forces have become also acquainted with these pressures because they use SNS in war zones in Iraq and Afghanistan. Identifying pressures that exist for themselves and others, but are also aware of the assistances offered by SNS. The global reply to pressures against the part of men

and women in confidential information service is to develop a self-censorship culture to ensure confidentiality, not only themselves, but also people with them (Templeton, 2009). This brings us to the initial SNS ethical code:

1. In the exchange of information on SNS it is necessary not merely to deliberate the privacy of personal information of users, nonetheless also to confidential information of other people who may be linked to the information they share.

3.1.2.2 Accuracy

In response to Iranian elections, issues related to the accuracy of SNS data were also covered. Most accounts and images created by anonymous sources have been sent to SNS. This provides the confirmation of information that is of excessive value to the use of the collections. E.g, take a glance at the replies of different media on a video showing the performance of a young lady known as Ned, posted on social network sites on YouTube and Facebook. As the pictures starts appearing in numerous world media, the Associated Press began investigating existing videocassettes after receiving various protests via e-mail or telephone, but who could not find anyone who really saw it (Murphy, 2009). CNN reports that the tested content has been fully transmitted, but the content received from the unsupported SNS sends a warning to the content in the full context. According to CNN Press Representative Murphy (2009), said:

It's important for the public to have a clear consideration not only of the verification practice, and also in some circumstances we cannot totally prove the content of such third-party sites, Pritchard said. Particularly in a condition with the media, as in Iran, it is important that all rudiments of our journalism are in full swing.In the face of such brutal and moving images, such as those used in the SNS, a proxy for accuracy if a context can serve.

This applies not only to the publication of anonymous content in SNS, which contributes to accuracy issues. Many people deliberately publish inaccuracies or pretend to protest, but in fact they are actually the public on the outline. For instance, however the Associated Press stated since social networking objects that may be related to real events, but are also conscious that some people are altering their position in Tehran, trying to improve greater coverage for their

publications (Murphy, 2009). Moreover, since in Iran execute of people who act like demonstrators, these publications have nothing to do with Iranian elections. Short twitspam.org view site will show that there are reports spreading false information and bad will against Iranian elections showing ferocity towards police through anti-Semitic statements or people spam with nudes along with other unwelcome websites (Twitspam, 2009). This issue is exacerbated by the fact that the spread of false information has the aptitude to make more versions in order to perform their agenda. Although such societies as Twit spam effort hard to inform SNS users that it will be wrong to use sites, ultimate responsibility is to ensure that users do not legitimize the inaccuracy of information by moving it to another. This is the basis of the next opinion of the ethical use of social networks:

2. When exchanging information on SNS is the manager who wants to share the information to validate the information before it spreads.

3.1.2.3 Property

Perhaps with the advent of the SNS PAPA no area has changed, and user-generated content distribute them extra than property. For property, then Mason's problem (Mason, 1986) has focused on getting information taken away from individuals (termed disemmindment) and its implementation in intellectual schemes. While intelligent property rights are clearly important, this document focuses on property issues from private information users in the SNS.

Recently, the question of who possesses the information published on the SNS has become one of the biggest debates. The discussion got to a serious level in February 2009, service Facebook terms and changing existing company user accounts after account closure were allowed to keep the content up to date indefinitely. This, of any content created by Facebook on any site like Facebook Selter (2009), owners of social networking sites who believe that their claims would have led to users' use and response. Facebook, if and in bad faith when claimed not only sort out not require the content of users of social networking sites, consumer associations problem to capture digital rights, as the name and users download everything you hear. With Stone and Selter, (2009) after three days, most annoyed users print, and then put in danger a number of customer protection associations, Facebook, SLA returned to a previous form of the conditions

and there are no provisions for the property for clients to provide more flexible service conditions for improvement.

Despite Facebook's withdrawal from service terms changes, users still have to think carefully about content they want to share with SNS if users don't wish to lose hold every day. This has nothing to do with the site. Rather, it depends on the search engines and cache storage capacity. For example, the user puts her picture on the official social network site and thinks a few days after. If it is held by the search engine, it can also be used independently of being deleted out of the site (Mitrano, 2006). Is this still a user photo? Do they have the veracious to raise? Of course, yes. However, they now have to work through a search engine to do so by succeeding the cache content removal procedure. So, they must track the similar path for all other track engines that can be indexed and hoarded in a social networking site (Mitrano, 2006).

In the above example, controlling information published in the SNS (or elsewhere on the Internet) with the help of technical rights is the loss of control and exclusive ownership. Think of people who will meet your profile and find somewhat motivating to share with others. Maybe, what happens to people who do not buy or receive a duplicate of all the information they find fascinating? Apparently, the indifference that Mason feared was facilitated by the widespread internet connection. Regardless of whether you are an inspiration or not, regardless of whether or not there is, positioning information in the SNS is not effective, possession even if the user cannot retrieve information from the property real. To have true knowledge you need not only have legal rights, but also consider different sites and have access to the case of ethical use of SNS by property:

3. SNS users do not need to send information about themselves, which, in their opinion, can be decided to give in the future. Additionally, SNS users would not publish information that is an invention of another's awareness if they do not include the consent of the person. In the two scenarios, when information is shared, it can be difficult to retire.

3.1.2.4 Accessibility

Access under Mason designed to deal with information literacy. Its access concept includes access to learning, information society citizens could develop intellectual capabilities to manage information, access to technological tools for information storage and processing. Access was a concern in 1986 when Mason first wrote the PAPA structure. A portion of Internet content service providers that allow access to another full bandwidth in give-and-take for a recompense may upset users access to information, but not in the same quality as Mason's time, it is experiencing problems like internet advancement. The impact on the Internet and globalization is well described in Toma Fridmana's book The World Is Right. In the text, Friedman talks about just how the Internet allows people to cooperate and contend globally (Friedman, 2005). One of the reasons for this is that information technology is everywhere in the global community and depends on the fact that it allows us connect to information and more. In this instance of SNS, it is partly owing to the fact that Web 2.0 technology makes it simple for people to make and use information or access on full information using the technology.

While the level of access that members of the modern information society has unprecedented, poses a risk. Private companies have found a reason to limit access to SNS to indicate reasons for loss of productivity, network resource usage, and security (Kelley and Yun, 2008). First of all, although the reasons why the document is a source of concern for organizations, the third issue concerns both companies and individuals. Earlier, when attackers used information from sources such as an SNS, it was noticed that phishing attacks were more successful (Jagatic et al., 2007). Though, SNS may be utilized as a tool to spread viruses and other malware, as well as phishing attacks (Kelley and Yun, 2008). Carminati et al., (2009) and physician Kelley and Yun, (2008) have developed methods to regulate access to SNS, particularly at organizational height. Given that shared access to information is a challenge for establishments and user, what are the ethical duties of user to access distribute information about social networking?

Mason (1986) noted that the system was ready to be used because the information was not literate. He also believed that the system had been found, so people had no knowledge. Today's access problems with people who have problems with intellectual and technological barriers can

lead to knowledge, rather than social and legal problems. Moreover, since technology and the SNS in general have made a widespread exchange of information, illiterate people in terms of quality information might be more susceptible to information abuse than information deficiency.

A new research conducted by an AVG safety software demonstrates that 43% of Facebook's SNS users use access controls on the site to restrict access to information.

The same research shows that 21% of SNS users submit friendly desires to the unknown, knowing their associated risks, but sharing 26% of the files on unknown bridges and sharing 64% of them. Consequently, 47% of respondents reported a malicious spasm, 20% of their character was searched while over than 50% of them fished (Ragan 2009). In addition, sites like Facebook and MySpace let users gain access to platforms and game profiles which is written by anybody.

Generally, it's not the person who shares the information for a risk, not just that. Persons can use a user-provided access to spasm others. Ragan (2009) writes: The idea of using dependence on the community website and around the group shows how several offenses have been fruitful. There is much risk that a root of source is considered safe and that it offers a source of content.

This means that when a SNS user accesses the information, in most cases the SNS provides access to the information of other related users. Although access to another user's information is incorrect, there is at least one of the reasons why it is trusted by a person or program that is accessible. For this reason, the SNS user has a certain height of accountability for any damage which can cause third parties because your account has genuine accessed or access to programs.

In this regard, SNS's liability may be required. Most of the SNS program, a program, or if you do not allow the user access to your account or access to be able to limit the available information. The regulations are available for SNS users, but the user must enable them. Probably it did so for applied motives because SNS was designed for information exchange, so an extraordinary level of protection is in contrast to the default SNS soul. In addition, SNS managers at UAC's Windows Vista site Albro and Dahl (2007) perceived as intrusive as a higher level of security and security can cause SNS even more concern that it would be a cost-oriented

system. The bottom line, while security has SNS, SNS users still have to give a definitive ruling on whether to allow or deny access to account or program users. The last principle comes from this flow of thoughts:

4. The SNS user system is responsible for determining the genuineness of an individual or package before permitting a person or package access to shared information.

In assumption, the SNA outburst has improved communication, cooperation and daily life. There is no doubt that the complexity of these technologies will continue to change. With these changes, however, we face new ethical problems initiated by our collaboration with technology. These variations require current social treaties that guide ethical conduct to continue to be operational in guarding the privileges of SNS users. The Mason Information Society (1986), which originally intends to PAPA, is still worried about the ethical use of information, although it has radically changed over the years. In short, the principles are:

1. In the exchange of information on SNS, it is necessary don't only to ruminate the privacy of private information of users, but also to confidential information of other people who may be linked to the information they share.
2. In an exchange of information on SNS is a manager who wants to distribute information to validate the information before it spreads.
3. SNS user does not need to send information about themselves, which, in their opinion, may decide to give in the future. Additionally, SNS users shouldn't publish information which is an invention of another's concentration if they do not include the consent of the person. In both cases, when information is shared, it can be unmanageable to retire.
4. The SNS user is responsible for determining the genuineness of an individual or program before allowing an individual or package access to shared information.

Ideologies in any case should not be a set of definitive instructions for SNS users presented here. Reasonably, the goal is to offer certain basic ideologies regarding the quality of information that can help users about the formation of novel ethical standards based on a novel social contract and specifically students and faculty members that us Facebook one of SNS as part of learning.

CHAPTER 4

METHODOLOGY

4.1 Research Model

This study is aim to investigate faculty members and students' ethical use of Facebook in ICT context. The first research question is answered by descriptive and frequencies. The second research question's independent variable is type (students or faculty members), dependent variables are the general average scores of PAPA dimensions. The third research question's independent variable is gender, dependent variables are dimensions of PAPA for students and faculty calculated separately. The dependent variables include the average score of privacy, accuracy, property and accessibility (PAPA). The questionnaire was based on the dependent variables where by questions 1 to 4 were on privacy 5 to 8 were on accuracy, 9 to 14 were on property and 15 to 19 were on accessibility. Average scores were calculated for each dimension of PAPA framework.

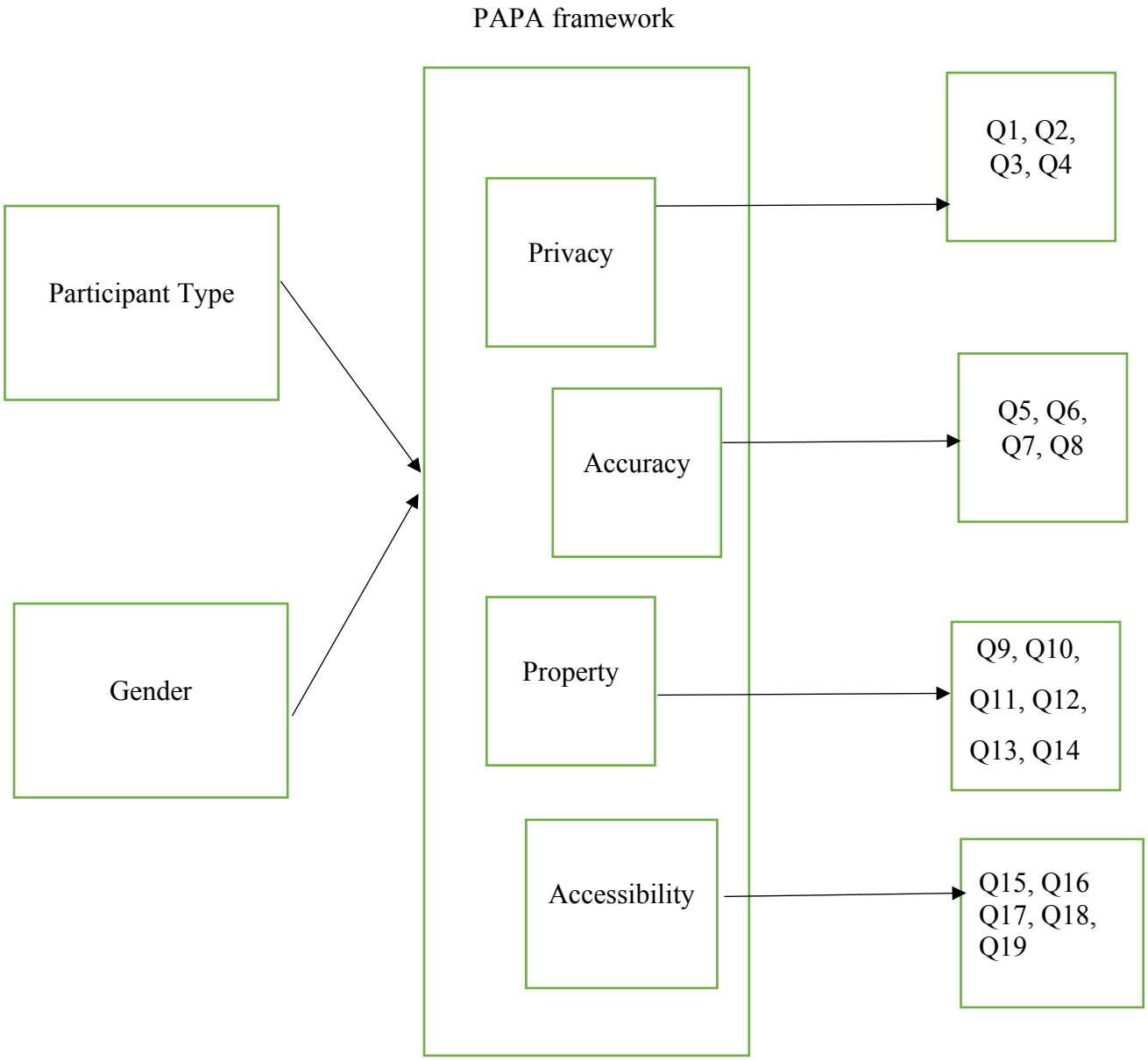

Figure 4.1: Research model of the study (PAPA framework)

4.1.2 Demographic Data of the Participants

The participants were divided into two groups, namely faculty members and students from university of Rwanda known as College of Science and Technology; The participants were chosen from 4 main departments; Department of Science, Department of Engineering, Department of Architecture and building and Department of Information and Communication technology.

4.1.3 Demographic Information of Participants

The results described that a total sample of 380 students responded to the questionnaire. There was 43.7% with a sample of 166 females and 56.3% with a sample of 214 males. Among the participants, 37.9 % with a sample of 144 students falls between the age group of 17 – 21, 44.2% with a sample of 168 students falls between the age group of 22- 26, and 17.9 % with a sample of 68 falls between the age group of 26 – 31. From their departments, 14.7% with a sample of 56 were science students, 48.9 %with a sample of 186 were engineering students, Architecture and building made up 111 students of 29.2 %, while information and communication technology which was the least accounted for 27 students of 7.1 %. From all the students sampled, 99.2 % with a sample of 377 has Facebook account and 0.8 % with only 3 students don't have Facebook account.

From 150 Faculty members came from different ethnics' groups, science faculty members made 24.7 % with the number of 37 faculty members, engineering faculty members made up 48.0% with the total population of 72, architecture and building made up 22.7 % with a sample of 34 while information and communication technology were the least populated with a percentage of 4.7 with a sample of 7 faculty members. With 54.7 % male which is about 82 faculty members of the total sample while 45.3% were 68 female faculty members; 35.3% with a sample of 53 faculty members falls between the age group of 26 to 31, 49.3% with a sample of 74 faculty members falls between the age group of 32 to 36, 15.3% with a sample of 23 faculty members falls up to 37.

With all participants together, engineering as the most populace made up 48.7% with the total of 258. With 55.8 % male which is about 298 of the total sample while 45.2% were 244 females; 37.5% with a sample of 218 of all participants falls between the age group of 26 to 31. Almost all participants, that is 96.5% with 511 participant has Facebook account, 81,5% use Facebook daily with a total sample of 432 participants, 93.4% of a sample of 495 participants find being friend on Facebook as a good idea, and 75% of a sample of 402 participants support the idea of personal communication between students and faculty members.

Table 4. 1: Demographic data of participants

Characteristics	**Participants Type**					
	Students		Faculty members		Students & Faculty	
	Frequency	**%**	**Frequency**	**%**	**Frequency**	**%**
Departments						
Science	56	14.7	37	24.7	93	17.5
Engineering	186	48.9	72	48.0	258	48.7
Architecture and building	111	29.2	34	22.7	145	27.4
Information and communication technology	27	7.1	7	4.7	34	6.4
Age						
17-21	144	37.9	0	0	144	24.8
22-26	168	44.2	0	0	168	28.9
26-31	68	17.9	53	35.3	218	37.5
32-36	0	0	74	49.3	74	12.9
37+	0	0	23	15.3	23	0.39
Gender						
Male	214	56.3	82	54.7	296	55.8
Female	166	43.7	68	45.3	234	44.2
FB usage						
Yes	377	99.2	134	89.3	511	96.4
No	3	0.8	16	10.7	19	3.6
FB visit						
Days	362	95.3	70	46.3	432	81.5
Week	11	2.9	65	43.3	76	14.3
Month	3	0.8	12	8.0	15	2.8
Month or more	3	0.8	3	2.0	6	1.1
Year	1	0.3	0	0	1	0.2
FB friends						
Yes	373	98.2	122	81.3	495	93.4
No	7	1.8	28	18.7	35	6.6
Communication						
Yes	360	94.7	42	28.0	402	75.8
No	20	5.3	108	72	128	24.2

4.1.4 Data Collection Tool

After a wide examination of the literature, 27 scenarios were developed from existing survey instrument to evaluate the ethical use of Facebook in ICT context students and faculty members. The instrument, referred to as the Ethical information sharing in Facebook within educational context through PAPA framework with 24 scenarios tested with 100 students in earlier study(Başaran,2017). The reliability of 4 dimensions with 21 scenarios in the final analysis yielded to 0.777 which is considered as acceptable in that study. The Mason (1986) PAPA framework were considered as foundation to these scenarios with a total number of 27 scenarios and the latest questionnaire for further analyses were composed by 19 scenarios (Privacy dimension with 4 scenarios, Accuracy dimension with 4 scenarios, Property dimension with 6 scenarios, Accessibility dimension with 5 scenarios). Some scenarios were recoded due to the negative meaning of some of the questions, the rest of the scenarios were used for this study in college of science and technology, university of Rwanda.

4.2 Instrument Tool Used as Questionnaire

Demographic information: is composed of 9 questions, including department, age, gender status, education level, and education level and 4 questions regarding Facebook usage.

PAPA: questions responded based on 5-point scale (crime, unethical, questionable, acceptable, ethical); by 4 questions in privacy (1 to 4), 4 questions in accuracy (5 to 8), 6 questions in property (9 to 14), and comes 5 questions in accessibility (15 to 19).

4.2.1 Reliability and Validity

From appendix, the questionnaire made up of 4 dimensions which are; privacy, property, accuracy and accessibility which made up a total of 19 items altogether, privacy has 4 items attached to it, accuracy has 4 items attached to it, property has 6 items attached while accessibility has 4 items attached to it.

The participants answered to the items on a scale with 5 Likert ranging from crime, unethical, questionable, ethical, and acceptable. The reliability of the questionnaire was calculated to be by using SPSS to calculate the Cronbach's alpha for the 19 items giving a Cronbach's alpha of

0.824. From the results, it can be deduced that the results of scale used was acceptable since it has a good reliability measurement of more than 0.60. The content of the form was revised by the supervisor to check the content related validity of this work. Some items were recoded, and The Cronbach alpha of the survey dimensions were intended and the result was 0.824 which is satisfactory according to different study which one of them conducted by George and Mallery (2003) describes that if the result is less than or equal to .5 is undesirable, greater than .5 is unfortunate, better than .6 is questionably greater than .7 is satisfactory, better that .8 is decent and .9 is brilliant.

4.3 Data Analysis

The data was analyzed by Statistical Package for Social Sciences (SPSS 20.0) version, descriptive statistics such as frequencies and 3 independent samples t-tests were used to analyze the data.

4.4 Procedure

This research was aimed to examine the ethical use of Facebook in ICT context in university of Rwanda, College of Science and Technology with a total of number 4311 students and 213 daily faculty members. The questionnaires were administered to students with a number 540 to students and 215 to faculty members distributed questionnaire in two months. Questionnaire were given to students and faculty members and collected in each four day, while they were in their departments; science, engineering, architecture and building, information and communication technology. This study was conducted by the researcher during spring semester 2015-2016.

The effort was prepared in a period of over 9 months with a section total of 380 students and 150 faculty members, after the pool of the questionnaire from the participants with total of 530 correctly filled questionnaire improved from the participant altogether. The different data analysis like frequency, percentage and liberated independent sample t-tests remained utilized in order to respond to the aim of the study and also the research questions. Right after the

analysis, all the results were discussed in detail, conclusions and recommendations from the results.

Table 4. 2: Thesis work duration

Procedure	Duration(weeks)
Review of Literature	11
Information Ethics FB Scenario design	2
Data collection and analysis	18
Last version of the thesis	3
Thesis review and submission of thesis to supervisor	4
Total	38 Weeks

CHAPTER 5

RESULT AND DISCUSSIONS

In this segment of this research, the researcher pulls out the findings and relates the outcome of those of earlier studies making an assumption based on the comparison of results or changes.

5.1 Faculty Members and Students' Views on Ethical Use of Facebook in ICT context

In order to understand the Faculty members and student's views on the ethical use of Facebook and how it affects their relationship in ICT context, an expressive investigation was used. Table 5.1 below show the mean and standard deviation for each dimension in PAPA framework. The means and standard deviations listed below are based on the responses of the participants chose on a 5-point measure in the questionnaire.

Result from the total mean score; all participants responses are between 'unethical' to 'questionable' for each dimension of the scale, the highest total mean score is property (M=3.58, SD=0.80) followed by access (M=3.28, SD=0.70) and privacy, (M=3.20, SD=0.71) and the lowest total mean score is accuracy (M=3.05, SD=0.76); For privacy dimension the highest rating was given to p3 'A student created a fake Facebook profile about a faculty member and sends requests to faculty member's all Facebook friends since faculty member did not accept his Facebook request' and lowest rating is given to p4 ' A student who is not Facebook friends with faculty member discovers from another faculty member's timeline post who is friends with him that the faculty member is on vacation at his home town and he visit her vacation place to convince her to higher up his final grade'. For accuracy dimension, lowest rating was given for p5 'Teaching assistant who is responsible to evaluate plagiarisms in students' reports that were posted in course' Facebook group did not inform faculty member about a fellow student who had done considerable amount of plagiarism and who told assistant that if he fails from this course his family would remove him from university studies' and highest rating is given for p7 'A student assistant is helping to faculty member to enter final grades for the course who is at overseas conference. He sends final grades through Facebook message to the assistant. Assistant provides a financial benefit from peers by altering the grades of students'. For property

dimension, highest rating was given for p12 ‘student shares lecture notes of the course that she is taking with a friend on Facebook who is not registered to the course’ and lowest rating was given for p10 ‘A faculty member shares her course presentation photos to Facebook friends, in Facebook another colleague who is friend with the faculty member and who is her superior took her photo and put it into a public website of the faculty for advertising purposes’. For accessibility dimension the highest mean score was given to p18 ‘A faculty member who is Facebook friends with students about his course, discovers from their Facebook posts that students engage heavily on gambling activities and reports this to the university administration’ and lowest rating was given to p15 ‘Faculty member hears from other students about one of her student starting a negative campaign about him in student’s Facebook, since as his advisor he refused to not to tell about his parents his failing from courses and not participating once to classes sessions’.

Considering the result for all the participant together, Students and faculty members are more concerned about property issues as they share information deliberately as confirmed by property dimension scenarios, that means that they find it as acceptable. Property dimension was the higher ethically rated comparing to other PAPA dimensions. This finding match with the finding of Kini et al. (2004) who proved that half of the students believed that the use of SNS contents and sharing them without any concern was acceptable and with Harncharnchai and Inplao (2015), who find that, from PAPA; property was one of the dimension which was ethically higher impact on attitude relationships with students’ intention as accuracy and accessibility dimensions while privacy dimension had low impact. Faculty members less concerned about the ethical issue of access since they are able to follow student’s activities on Facebook, while they are both aware of privacy issues of students who use fake accounts for scholarly purpose, seen as questionable, and lastly with accuracy issues specifically for student work and faculty members who tolerate copyright and plagiarism, seen as unethical as proved by Kennedy et al.,(2008)stating that plagiarism don’t follow the rules for ethical privileges of the content originator; in conclusion students and faculty members are aware of ethical issues of the abuse and the misuse of computer and information relevant to scenarios related to property, privacy and accuracy (Ellis and Griffith,2000).

Table 5.1: Descriptive parameters of students and faculty members' views with PAPA dimensions on ethical use of Facebook in ICT

	Students & Faculty members		Students		Faculty members	
Items	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**
PRIVACY						
P1	2.90	0.65	3.02	0.60	2.60	0.70
P2	2.80	0.74	2.92	0.64	2.51	0.90
P3	4.42	0.76	4.63	0.54	3.90	1.00
P4	2.58	0.70	2.65	0.64	2.85	0.85
Average Total	**3.20**	**0.71**	**3.31**	**0.61**	**2.85**	**0.85**
ACCURACY						
P5	2.50	0.75	2.62	0.66	2.15	0.85
P6	2.56	0.84	2.75	0.78	2.08	0.81
P7	4.28	0.74	4.63	0.54	3.76	0.83
P8	2.76	0.72	3.23	0.66	2.60	0.82
Average Total	**3.05**	**0.76**	**3.23**	**0.66**	**2.61**	**0.82**
PROPERTY						
P9	2.78	0.90	3.09	0.68	1.99	0.91
P10	2.77	0.82	3.01	0.60	2.15	0.97
P11	4.35	0.78	4.57	0.61	3.81	0.91
P12	4.43	0.74	4.63	0.54	3.94	0.94
P13	2.81	0.77	2.99	0.62	2.35	0.91
P14	4.32	0.78	4.63	0.54	3.53	0.75
Average Total	**3.58**	**0.80**	**3.82**	**0.60**	**2.96**	**0.90**
ACCESSIBILITY						
P15	2.35	0.63	2.43	0.58	2.15	0.71
P16	2.83	0.77	2.99	0.62	2.44	0.95
P17	4.02	0.63	4.11	0.56	3.77	0.73
P18	4.45	0.70	4.63	0.64	4.00	0.85
P19	2.76	0.76	2.94	0.64	2.31	0.85
Average Total	**3.28**	**0.70**	**3.42**	**0.60**	**2.94**	**0.82**

5.2 Difference between Faculty Members and Students Views with Respect to PAPA Dimensions

Privacy refers to information a Facebook user reveal when filling the Facebook profile and how this information are kept safe and for a better comprehend on the views of faculty members and students the privacy associated to the SNS. Independent samples t-test was used and a statistical investigation was carried out to find out if there is any variation between faculty members and students views on the ethical use of Facebook with respect to PAPA dimension considered as dependent variable.

Prior to reviewing the writings, it is essential to exam the idea of privacy and confidentiality settings on Facebook, as the way Facebook user's pact with privacy is of fundamental importance for ethically-sound practice. Personal information, and name, address, email address, phone address, Alma Mater (High School and University), present employer and family status may be shown on Facebook (Facebook, 2013). Also questions about religious and political ideologies, interests and interests can be shared. Lastly a Facebook wall, is a type of simulated poster lets you view any comments one makes regarding an exact topic (for example, current events, topics or personal story) and has a service for uploading photos. With these primary area, users can control if the public, friends of friends, or friends can see this information. Creating Privacy is typically done in one of these three levels, and the Facebook default to public; therefore, if the user does not know how to set confidentiality, almost all of his or her information will be accessible for outside viewing. This last point particularly significant for students and faculty members as their knowledge with the technology of privacy settings openly responsible for the protection of the limit of their confidentiality and the keeping others from getting access to their personal information.

The analysis mean differences between students and faculty members, results show that, students have a higher mean score from privacy dimension with (M=3.31, SD= 0.30) while faculty members have (M=2.85, SD=0. 47). From accuracy students mean score is higher than for faculty members with (M=3.23, SD=0.38) and faculty members has (M=2.61, SD=0.41). From property dimension, students mean score is higher than faculty members mean score with (M=3.82, SD=0.35) and faculty members has (M=2.96, SD=0.35). From accessibility

dimension, students mean score is higher than from faculty members with (M=3.42, SD=0. 26) and faculty members with (M=2.94, SD=0.46), from Table 5.2.

Table 5. 2: Mean differences between students and faculty members regard to PAPA

Dimension	Type	N	M	SD	Std. Error M
Privacy	Students	380	3.31	0.30	0.02
	Faculty members	150	2.85	0.47	0.04
Accuracy	Students	380	3.23	0.38	0.02
	Faculty members	150	2.61	0.41	0.03
Property	Students	380	3.82	0.35	0.02
	Faculty members	150	2.96	0.35	0.03
Access	Students	380	3.42	0.26	0.01
	Faculty members	150	2.94	0.46	0.04

A statistical analysis was used to find if there is any significant difference between students and faculty members in each PAPA dimension. An independent sample t-test was conducted using the assumption stated by Levene's test for equality prior to testing each dimension in order to assess if the assumption satisfy each parametric test. The result showed that there are significant differences between students and faculty members in all dimensions concerning ethical use of Facebook in ICT in each PAPA dimension ($p<0.05$), on privacy at $t(528) = 13.155$, $p<0.000$, accuracy at $t(528) = 16.573$, $p<0.000$, property at $t(528) = 25.260$, $p<0.000$ and accessibility at $t(528) = 15.206$, $p<0.000$, as shown in table 5.3.

Table 5. 3: Statistical differences between students and faculty members regard to PAPA

Dimensions	F	df	Mean Difference	t	p
Privacy	39.380	528	.453	13.155	**.000***
Accuracy	.400	528	.624	16.573	**.000***
Property	.058	528	.859	25.260	**.000***
Access	85.184	528	.484	15.206	**.000***

*means $p<0.05$ (there exist statistical difference)

Accuracy refers to authenticity of information held by the user of SNS, who makes sure that the personal information filled by the users are correct; Property refers to ownership of the information used on SNS and how this information is being unlawfully used by others without the consent of the owners and Accessibility refers to how information is easily accessible by others, it dwells on how safe user information is, who can easily access these information on SNS. All dimensions have significant differences between students and faculty members. The same findings by Omar and Ahmed (2012) the study showed that students are thoughtful toward the ethicality of information privacy, information accuracy, and information access toward using information technology on the body growing of issues in information ethics. Mohamud (2015) found that the level of education indicated the presence of significance differences of the students' attitude toward Information Privacy. And with Masrom et al (2013), found that two variables, namely intellectual property and accuracy affected student's attitude toward using internet and also influence the behavior intentions and actual behavior in using internet plus Hickerson and Kothari, (2016) who found that the two groups of students and faculty members show worries about privacy issues but faculty members were more worried about inaccurate act of students who make faults openly online while using SNS in classroom.

5.3 Difference between Genders with Respect to PAPA Dimensions

Two separate independent samples t-tests were carried out to determine whether there is any difference from gender with respect to PAPA considered as a dependent variable by taking the average score of all sub-dimensional (PAPA).

5.3.1 Gender Differences among Students

According to mean difference, the result showed that gender male has a higher mean score from privacy dimension with (M=3.32, SD= 0.30) while female has (M=3.27, SD=0.29). From accuracy male mean score is higher than for female with (M=3.24, SD=0.37) and female has (M=3.21, SD=0.38). From property dimension, male mean score is higher than female mean score with (M=3.83, SD=0.36) and female has (M=3.79, SD=0.34). From accessibility dimension, male mean score is lower than from female with (M=3.41, SD=0.26) and female with (M=3.42, SD=0.24). Both male and female gender has more understanding on the issues that comes from using different SNS in education like Facebook.

Table 5. 4: Mean differences among Students with respect to PAPA dimensions

Type	Gender	N	M	SD	Std. Error M
Students-privacy	Male	214	3.32	0.30	0.020
	Female	166	3.27	0.29	0.022
Students-accuracy	Male	214	3.24	0.37	0.025
	Female	166	3.21	0.38	0.030
Students-property	Male	214	3.83	0.36	0.024
	Female	166	3.79	0.34	0.026
Students-access	Male	214	3.41	0.26	0.018
	Female	166	3.42	0.24	0.019

A statistical analysis was used to find if there is any significant difference between students with respect to gender in each PAPA dimension. An independent sample t-test was conducted using the assumption stated by Levene's test for equality of variances prior to testing each dimension in order to assess if the assumption satisfy each parametric test. Results displayed that there is no significant difference between students with respect to gender concerning ethical use of Facebook in ICT context in each PAPA dimension ($p<0.05$), with privacy at $t(378) = 1.826$, $p<0.69$, accuracy at $t(378) = 0.677$, $p<0.499$, property at $t(378) = 1.120$, $p<0.263$ and accessibility at $t(378) = -0.373$, $p<0.709$, as shown in table 5.5.

Table 5. 5: Statistical gender differences among students with respect to PAPA

Dimension	F	df	Mean difference	t	p
Students-privacy	0.253	378	0.057	1.826	0.069
Students-accuracy	0.230	378	0.027	0.677	0.499
Students-property	0.328	378	0.041	1.120	0.263
Students-access	0.807	378	-0.010	-0.373	0.709

From the result however, it could be noted that male and female students have different perception on the ethical use of Facebook in ICT context. The close mean difference may be due to the fact that both sexes give more attention or they are more careful when it involves to their personal use, most important since they are students. Mohamud (2015), there was no substantial modifications of the students' individuals' features with regard to gender on frequency of computer usage on their attitude towards information ethics issues of privacy dimension. But, Genis-Gruber et al. (2013) stated that significant differences ($p<0.05$) existed on gender in the both ethical use and user behavior plus Liu and Yishan, (2012) Who found that females students were more ethical than males concerning four common information ethics issues privacy, property, accuracy, and access issue.

5.3.2 Gender Differences among Faculty Members with Respect to PAPA dimensions

According to the result, gender male has a higher mean score from privacy dimension with (M=2.89, SD= 0.47) while female has (M=2.80, SD=0.45). From accuracy male mean score is lower than for female with (M=2.59, SD=0.39) and female has (M=2.62, SD=0.43). From property dimension, male mean score is higher than female mean score with (M=2.97, SD=0.35) and female has (M=2.94, SD=0.35). From accessibility dimension, male mean score is higher than from female with (M=2.94, SD=0.47) and female with (M=2.94, SD=0.44). Only from accuracy dimension male has lower mean score than for female.

Table 5. 6: Mean differences among faculty members

Type	Gender	N	M	SD	Std. Error M
Faculty member – Privacy	Male	82	2.89	0.47	0.052
	Female	68	2.80	0.45	0.055
Faculty member – Accuracy	Male	82	2.59	0.39	0.043
	Female	68	2.62	0.43	0.052
Faculty member – Properties	Male	82	2.97	0.35	0.039
	Female	68	2.94	0.35	0.043
Faculty member – Accessibility	Male	82	2.94	0.47	0.052
	Female	68	2.92	0.44	0.053

A statistical analysis was carried out to determine if there is any significant difference between gender with regards to all dependent variables for the ethical use of Facebook in ICT context. The researcher carried out an independent sample t test using the assumption stated by Levene's test for equality of variances prior to testing each dimension in order to assess if the assumption satisfy each parametric test. Results illustrated that there is no significant difference between the variables in the scores for male and female faculty members, with privacy at $t(148) = 1.196$, $p < 0.234$ accuracy at $t(148) = -0.443$, $p < 0.658$, property at $t(148) = 0.396$, $p < 0.692$ and accessibility at $t(148) = 0.339$, $p < 0.735$, as shown on Table 5.7 below.

Table 5. 7: Statistical gender differences among faculty members regards to PAPA

Dimensions	F	Df	Mean Difference	T	p
Faculty members-privacy	0.032	148	.092	1.196	0.234
Faculty members-accuracy	0.841	148	-.030	-0.443	0.658
Faculty members-property	0.018	148	.023	0.396	0.692
Faculty members-access	0.284	148	.026	0.339	0.735

These results indicated that there is no significant difference with respect to gender for faculty members towards ethical use of Facebook in ICT context. Case and Young (2009) the results show no significant gender differences on the perception of unethical behavior in Internet use among the six ethical dilemmas presented concerning PAPA issues. It can be concluded that the variances between the means may be due to chance and not due to gender differences. Similar findings by Garg et al. (2011) and Nkwe (2012) also found out that gender did not have any significant influence on the ethical use of Facebook in Education as for Suri and Sharma (2013), who revealed that no significant difference ($p>0.05$) exists among gender and attitude to the user of Facebook.

5.4 Summary of Findings

- All participants responses are between 'unethical' to 'questionable' for each dimension of the scale, the highest total mean score is property (M=3.58, SD=0.80) followed by access (M=3.28, SD=0.70) and privacy, (M=3.20, SD=0.71) and the lowest total mean score is accuracy (M=3.05, SD=0.76); property dimension is more ethically on students and faculty members comparing to other PAPA dimensions, as Ellis and Griffith,(2000) found that they know about the ethical challenges they face from using SNS for learning; students consider the sharing of content on SNS as acceptable while faculty members

are critically concerned about the inaccurate of the students work which they consider it as unethical.

- With statistical analysis from all the participant together, independent sample t test results showed that there were significant differences between students and faculty members in all dimensions concerning ethical use of Facebook in ICT in each PAPA dimension at ($p<0.05$), on privacy at $t(528) = 13.155$, $p<0.000$, accuracy at $t(528) = 16.573$, $p<0.000$, property at $t(528) = 25.260$, $p<0.000$ and accessibility at $t(528) = 15.206$, $p<0.000$. There is various ethical concern about the four main ethical issues, privacy with faculty members who share student's information or content about the students regularly without the students' assent, students who make their own profiles turned to personal while others don't, which make privacy, accuracy, property, accessibility dilemma to be central for faculty members in determining whether to use SNS tools for teaching or not, in their study; ethical codes are necessary for all professionals and informational worker plus that students need to learn information ethics principles and other related research to implement the information sensitivity while using SNS Facebook for their scholarly purpose.
- By using independent sample t test from student's participant, the results showed that there was no significant difference amongst students with respect to gender concerning ethical use of Facebook in ICT context in each PAPA dimension.
- With faculty member participants, independent sample t test showed that there was no significant difference between the variables in the scores for male and female concerning ethical use of Facebook in ICT context in each PAPA dimension.

CHAPTER 6

CONCLUSION AND RECOMMENDATION

This chapter sums up all the research results described in the previous chapters, and states recommendations which are proposed for further research to be carried out.

6.1 Conclusion

It was found that the usage of Facebook has continued to increase as the day goes by, Students and faculty members use Facebook for different purposes especially in the educational sector thus, they comprehend the ethical issues and the utilization of ICT; Students from Rwanda proved that Facebook is important as an educational and communication tool.

The results from this study shows that majority, if not all participants have a Facebook account and majority of them frequently log into their Facebook page on a daily base and this has impacted the way they connect with one another and their relationship.

Using independent sample t-test, the result for all the participant together, the higher ethical rate is on property dimension and the lowest is on accuracy dimension and there was a significant difference among students and faculty member's groups, in each PAPA dimension. The average scores faculty responses change between 'unethical' to 'questionable' whereas students' perspectives change between 'questionable' to 'acceptable' and gender does not play an important effect on the perspectives of students and faculty members on ethical use of Facebook in ICT context.

Faculty member find communication between students and them as a problem, they are not agreeing with personal communication with faculty members. There should be more rules in how Facebook should be used while communicating with students. Since all the items that are shared on Facebook between students and faculty members are not well controlled.

For example, photos, applications, lectures and notes and the ability to access the data or other information that are shared on Facebook in an easy way may lead to harm when it not well used.

University should put more standard rules, to be careful when sharing any item on Facebook, university need to put the head controlling and managing all the items exchanged between students and faculty member on Facebook, so that in case it is misused a warning should be given. Students should be taught how to secure their information when using their group studies on Facebook so that they can be accessible only with the ones in Facebook group studies.

Not all information or data has to be accessed without a code or a password and the password has to be renewed many times for more security and authentication of the information that are shared on Facebook and must be verified by the head management in order not to give wrong information or data. Example; grades, notes. Administration should put strong control and applications that manage all the documents that are shared on Facebook between students and students or students and any faculty member.

Faculty member and students, before using any type of SNS tools for learning or teaching purpose, they should learn the harm it may cause while not used in the right way and make sure they understand it properly before it is introduced to learning environment.

Results of the study highlighted the foreseen difference in approaches of students who could easil1y take information for granted and faculty members who are more sophisticated users are more cautious about making ethical judgements. Students awareness on such issues should be raised in future. Non-significant differences with respect to gender both among students and faculty members yielded that gender does not play an affecting role in ethical decision making. From these ethical scenarios, participants show more interest in recognizing the issues that comes with the sharing of material or information, PAPA framework can be expanded for more ethical issues in scholarly since the relationship between students and faculty members help to follow and monitor the students and their every activity online. The participants show that should be ethical standard to follow while emerging Facebook in educational system to avoid and minimize the future issues as for other SNS tools. Like Graesser, (1994) believe that learning is a part of ethic activities and that faculty members and students should pose good ethical behavior such as academia integrity and honesty.

6.2 Recommendations

More researches should be directed towards the safe usage of Facebook and the way it affects the learning process.

It is important that solutions should be given on Facebook ethics and how it should be properly used, also awareness should be created for students on the misuse of Facebook when communicating with their faculty members.

Other researches should be carried out on Facebook ethics in a different environment and countries to have a better understanding and knowledge for improvement.

Researches including comparing and contrasting views of different groups are required.

Expand PAPA framework or use different frameworks could be investigated other than PAPA dimensions.

It is recommended that future studies should be made and that it's essential to educate students on the matter of information ethics.

REFERENCES

Abramson, J., & Abramson, Z. H. (2011). *Research methods in community medicine: surveys epidemiological research, programmed evaluation, clinical trials*. John Wiley & Sons.

Acquisti, A., & Gross, R. (2005, June). Imagined communities: Awareness, information sharing, and privacy on the Facebook. In *International workshop on privacy enhancing technologies* (pp. 36-58). Springer, Berlin, Heidelberg.

Akayir, M. (2017). What do students think about SNS in education? University students\u2019 perceptions, expectations and concerns regarding educational uses of SNS. *Australasian Journal of Educational Technology*, *33*(5).

Albro, E., & Dahl, E. (2007). The most annoying things about Windows Vista. Retrieved on 07 January 2009 from http://www.pcworld.com/article/129126/ The most annoying things about windows vista.html.

Ang, C. S. (2017). Internet habit strength and online communication: Exploring gender differences. *Computers in Human Behavior*, *66*, 1-6.

Angst, C. (2009). Protect my privacy or support the common-good? Ethical questions about electronic health information exchanges. *Journal of Business Ethics, 90,* 169-178.

Apaolaza, V., Hartmann, P., Medina, E., Barrutia, J.M., Echebarria, C., 2013. The relationship between socializing on the Spanish online networking site Twenty and teenagers' subjective wellbeing: the roles of self-esteem and loneliness. *Computer. Human. Behavior. 29 (4), 1282–1289.*

Asterhan, C. S., & Rosenberg, H. (2015). The promise, reality and dilemmas of secondary school teacher–student interactions in Facebook: The teacher perspective. *Computers & Education*, *85*, 134-148.

Aydin, C. C., & Tirkes, G. (2010, April). Open source learning management systems in elearning and Moodle. In *Education Engineering (EDUCON), 2010 IEEE* (pp. 593-600). IEEE.

Bakardjieva, M., & Gaden, G. (2012). Web 2.0 technologies of the self. *Philosophy & Technology*, *25*(3), 399-413.

Balakrishnan, V., & Gan, C. L. (2016). Students' learning styles and their effects on the use of social media technology for learning. *Telematics and Informatics*, *33*(3), 808-821.

Barak, A., Hen, L., Boniel-Nissim, M., & Shapira, N. A. (2008). A comprehensive review and a meta-analysis of the effectiveness of internet-based psychotherapeutic intervantion. *Journal of Technology in Human Services*, *26*(2-4), 109-160.

Barretti, M. (2004). What do we know about the professional socialization of our students? *Journal of Social Work Education, 40*(2), 255-283.

Başaran, S. (2017) Investigating Ethical Information Sharing in Facebook within Educational Context through Adopted Papa Framework. *TOJET: The Turkish Online Journal of Educational Technology* vol. 10, [Special issue], 268 – 275. Retrieved from http://www.tojet.net/special/2017_11_2.pdt

Battrawi, B., and Muhtaseb, R. (2010) The Use of Social Networks as a Tool to Increase in Science and Science Literacy: A Case Study of Creative Minds' Facebook Page *International Conference on New Perspectives in Science Education.*

Baym, N., & Levine, R. S. (Eds.). (2011). *The Norton Anthology of American Literature: Eighth International Student Edition.* WW Norton & Company.

Borgmann, A. (1999). *Holding on to Reality: The Nature of Information at the Turn of the Millennium.* University of Chicago Press.

Bosch, T. E. (2009). Using online social networking for teaching & learning: Facebook use at the University of Cape Town. *Communication: South African Journal for Communication Theory and Research, 35*(2), 185-200.

Boyd, D. (2008). Facebook's privacy train wreck: Exposure, invasion, and social convergence. *Convergence*, *14*(1), 13-20.

Brandt, D., & Rose, C. (2004). Global networking and universal ethics. *AI & SOCIETY*, *18*(4) ,334-343.

Bruns, A. (2006). Towards prod usage: Futures for user-led content production.

Bynum, W. (2008). *The history of medicine: A very short introduction* (Vol. 191). Oxford University Press.

Capurro, R. (2005). Privacy. An intercultural perspective. *Ethics and Information Technology*, *7*(1), 37-47.

Carminati, B., Ferrari, E., & Perego, A. (2009). Enforcing access control in web-based social networks. *ACM Transactions on Information and System Security (TISSEC)*, *13*(1), 6.

Cassidy, J. (2006). Me media: How hanging out on the Internet became big business. *The New Yorker*, *82*(13), 50.

Chan, M., Estève, D., Escriba, C., & Campo, E. (2008). A review of smart homes—Present state and future challenges. *Computer methods and programs in biomedicine*, *91*(1), 55-81.

Chatterjee, S., Valacich, J. S., & Sarker, S. (2012, January). Unethical use of information technology: A two-country study. In *System Science (HICSS), 2012 45th Hawaii International Conference on* (pp. 3071-3080). IEEE.

Chen, B., & Bryer, T. (2012). Investigating instructional strategies for using social media in formal and informal learning. *The International Review of Research in Open and Distributed Learning*, *13*(1), 87-104.

Chen, W., & Lee, K. H. (2013). Sharing, liking, commenting, and distressed? The pathway between Facebook interaction and psychological distress. *Cyberpsychology, Behavior and Social Networking*, *16*(10), 728-734.

Cheung, R., & Vogel, D. (2011). Can Facebook enhance the communications between teachers and students? *International Journal of Learning*, *17*(11)

Cionea, I. A., Piercy, C. W., & Carpenter, C. J. (2017). A profile of arguing behaviors on Facebook. *Computers in Human Behavior*, *76*, 438-449.

Clare M., Julia, M., Jane, W., & Tristram, H. (2009). Facebook, social integration and informal learning at university: 'It is more for socializing and talking to friends about work than for actually doing work'. *Learning, Media and Technology, 34*(2), 141-155.

Clayton, R. B., Osborne, R. E., Miller, B. K., & Oberle, C. D. (2013). Loneliness, anxiousness, and substance use as predictors of Facebook use. *Computers in Human Behavior*, *29*(3), 687-693.

Cocking, D. (2008). Plural selves and relational identity: Intimacy and privacy online. *Information technology and moral philosophy*, 123-141.

Conger, S., Loch, K. D., & Helft, B. L. (1995). Ethics and information technology use: a factor analysis of attitudes to computer use. *Information Systems Journal*, *5*(3), 161 183.

Consalvo, M., & Ess, C. (Eds.). (2011). *The handbook of internet studies* (Vol. 14). John Wiley & Sons.

Constantinides, E., Lorenzo Romero, C., Boria, G., & Miguel, A. (2008). Social media: a new frontier for retailers?

Coombs, W, T., Frandsen, F., Holladay, S. J., & Johansen, W. (2010). Why a concern for apologia and crisis communication? *Corporate Communications: An International Journal*, *15*(4), 337-349.

Cress, U., Held, C., & Kimmerle, J. (2013). The collective knowledge of social tags: Direct and indirect influences on navigation, learning, and information processing. *Computers & Education*, *60*(1), 59-73.

Curtis, A. (2011). The brief history of social media. *The Brief History of Social Media.*

Deters, F. G., & Mehl, M. R. (2013). Does posting Facebook status updates increase or decrease loneliness? An online social networking experiment. *Social psychological and personality science*, *4*(5), 579-586.

Donath, J. (2007). Signals in social super nets. *Journal of Computer-Mediated Communication*, *13*(1), 231-251.

Dreyfus, H. L., & Spinosa, C. (2003). Heidegger and Borgmann on how to affirm technology. *Philosophy of technology: The technological condition—An anthology*, 315-326.

Dunn, P., & Shome, A. (2009). Cultural crossvergence and social desirability bias: Ethical evaluations by Chinese and Canadian business students. Journal of Business Ethics, 85 527-543.

Elgesem, D. (1996). Privacy, respect for persons, and risk. *Philosophical perspectives on* computer-mediated communication, 45-66.

Ellis, T. S., & Griffith, D. (2000). The evaluation of IT ethical scenarios using a multidimensional scale. *ACM SIGMIS Database*, *32*(1), 75-85.

Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook ‘‘Friends:’’ Social capital and college students’ use of online social network sites. *Journal of Computer-Mediate Communication, 12*(4), 1143–1168.

Ess, C., & Sudweeks, F. (Eds.). (2001). *Culture, technology, communication: Towards an intercultural global village*. Suny Press.

Estus, E. L. (2010). Teachers’ topics using Facebook within a geriatric pharmacotherapy course *American Journal of Pharmaceutical Education, 74*(8): 145.

Facebook (2012). Newsroom Facebook's latest news, announcements and media resources http://newsroom.fb.com/.

Facebook (2017). Facebook statistics. http://newsroom.fb.company-info/.

Facebook facts (2013). *News room Facebook key facts.* Retrieved Feb 20, 2013, from http://newsroom.fb.com/Key-Facts.

Fairweather, N. B. (2003). No PAPA: why incomplete codes of ethics are worse than none at all. WileyBlackwell.

Feenberg, A. (1999). Distance learning: Promise or threat. *Crosstalk*, *7*(1), 12-14.

Fewkes, A. M., & McCabe, M. (2012). Facebook: Learning tool or distraction?. *Journal of Digital Learning in Teacher Education*, *28*(3), 92-98.

Fletcher, D. (2010, May). *Friends without Borders.* TIME Magazine, 175(21), Page.32-38.

Floridi, L. (2011). The informational nature of personal identity. *Minds and machines*, *21*(4), 549.

Floridi, L. (2008). Information Ethics, its Nature and Scope in Moral Philosophy and Information Technology, 40-65, edited by J. van den Hoven and J. Weckert.

Fox, R., & Stuart, C. (2009). Creating learning spaces through collaboration: How one library refined its approach. *Educause Quarterly*, *32*(1), n1.

Freestone, O., & Mitchell, V. (2004). Generation Y attitudes towards e-ethics and internet-related misbehaviors. *Journal of Business Ethics*, *54*(2), 121-128.

Friedman, T. L. (2005). The world is flat: A brief history of the twenty-first century. Macmillan.

Gaffer, K., Singh, L. and Thomas, T. 2011. Are we ready for Web 2.0? Evidence from a Caribbean University. Caribbean teaching scholar 1(2): 129146.

Garcia-Febo, L. Hustad, A., Rösch, H. Sturges, P. and Vallotton, A. 2012. IFLA code of ethics for librarians and other information workers (full version). http://www.ifla.org/news/ifla-code-of-ethics-for-librarians-and-otherinformation-workers-full-version.

Garg, J., Sonu, B.G., & Choudhary, N. (2011). Effective Implementation of E Governance in Technical Institutions in India using ICT to make them World Class. *An International Journal of Engineering Sciences*, 4, 535-543.

Gasaymeh, A. M., Al-hasanat, H., Kraishan, O., & Abutayeh, K. (2017). Motivational Factors Affecting the Integration of Information and Communication Technology (ICT) in Education by Faculty Members: A Developing Country Perspective. *International Journal of Education*, *9*(3), 168-182.

Gemmell, I., Harrison, R., Clegg, J., & Reed, K. (2015). Internationalization in online distance learning postgraduate education: a case study on student views on learning alongside students from other countries. *Innovations in Education and Teaching International*, *52*(2), 137-147.

Genis-Gruber, A. H. U., Gonul., M., S and Tas, B. K. O. (2013). Obstacles to online shopping: Impact of gender and internet security issues. *Dokuz Eylul univeristesi itkisadi ve Idari Bilimler fakultsei dergisi.* 27 (2). 27-54.

George, D., & Mallery, M. (2003). Using SPSS for Windows step by step: a simple guide and reference.

Giffords, E. D. (2009). An examination of organizational commitment and professional commitment and the relationship to work environment, demographic and organizational factors. *Journal of Social Work*, *9*(4), 386-404.

Girod, M., & Wojcikiewicz, S. (2009). Comparing distance vs. campus-based delivery of research methods courses. *Educational Research Quarterly*, *33*(2), 47.

Goffman, E. (1959). The moral career of the mental patient. *Psychiatry*, *22*(2), 123-142.

Gosling, S. D., Gaddis, S., & Vazire, S. (2007). Personality Impressions Based on Facebook Profiles. *ICWSM*, *7*, 1-4.

Graesser, A. C., Singer, M., & Trabasso, T. (1994). Constructing inferences during narrative text comprehension. *Psychological review*, *101*(3), 371.

Grahl, T. (2013). The 6 types of social media. *Out: think*.

Gross, R., & Acquisti, A. (2005, November). Information revelation and privacy in online social networks. In *Proceedings of the 2005 ACM workshop on Privacy in the electronic society* (pp. 71-80). ACM. (Nielson, 2009). (Webster, 2010).

Gruzd, A., & Goertzen, M. (2013). Wired academia: Why social science scholars are using social media. In *System Sciences (HICSS), 2013 46th Hawaii International Conference on* (pp. 3332-3341). IEEE.

Gwak, S., Kim, H., & Lee, W. (2013, July). Development and application of the information ethical sensitivity measurement tool for college students in Korea. In *Computer Software and Applications Conference Workshops (COMPSACW), 2013 IEEE 37th Annual* (pp. 639-643). IEEE.

Halatchliyski, I., Moskaliuk, J., Kimmerle, J., & Cress, U. (2014). Explaining authors' contribution to pivotal artifacts during mass collaboration in the Wikipedia's knowledge base. International Journal of Computer- Supported Collaborative Learning, 9, 97–115. http://dx.doi.org/ 10.1007/s11412-013-9182-3.

Halpern, D., & Gibbs, J. (2013). Social media as a catalyst for online deliberation? Exploring the affordances of Facebook and YouTube for political expression. *Computers in Human Behavior*, *29*(3), 1159-1168.

Hamade, N. Samir (2013), "Perception and use of social networking sites among university students". Emerald Insights. Vol. 62 No.6/7, pp.388-397.

Haneefa, Mohamed V, and Sumitha, E (2011), "Perception and use of social networking sites by the students of Calicut University". DESIDOC Journal of Library and Information Technology. Vol. 31 No.4, pp 295-301.

Hargittai, E. (2010). Facebook privacy settings: Who cares?. *First Monday*, *15*(8).

Hargittai, E., & Walejko, G. (2008). The Participation Divide: Content creation and sharing in the digital age 1. *Information, Community and Society*, *11*(2), 239-256.

Harncharnchai, A., & Inplao, K. (2015). Information Ethics and Behaviors of Upper Secondary Students Regarding the Use of Computers and the Internet. *Journal of Information Ethics*, *24*(1), 98.

Havenstein, H. (2008). One in five employers uses social networks in hiring process. *Computerworld*.

Hénard, F., Diamond, L., & Roseveare, D. (2012). Approaches to internationalisation and their implications for strategic management and institutional practice. *IMHE Institutional Management in Higher Education.* Accessed on [http://www. oecd org/edu/imhe/Approaches% 20to% 20internationalisation% 20-% 20final% 20-% 20web. pdf], *11*(12), 2013.

Hendler, J., & Golbeck, J. (2008). Metcalfe's law, Web 2.0, and the semantic web. Web Semantics: Science, Services and Agents on the World Wide Web, 6, 14–20.

Hew, K.F., 2011. Students' and teachers' use of Facebook. *Computer Human Behavior*. 27, 1–676.

Hickerson, A., & Kothari, A. (2016). Learning in public: Faculty and student opinions about social media in the classroom. *Journalism & Mass Communication Educator,* 1077695816660639.

Hongladarom, S. (2011). Personal identity and the self in the online and offline world. *Minds and Machines*, *21*(4), 533.

Hoy, M. G., & Milne, G. (2010). Gender differences in privacy-related measures for young adult Facebook users. *Journal of Interactive Advertising*, *10*(2), 28-45. http://www2.cit.cornell.edu/policy/memos/facebook.html.

Hu, X., Kim, A., Siwek, N., & Wilder, D. (2017). The Facebook Paradox: Effects of Facebooking on Individuals' Social Relationships and Psychological Well-Being. *Frontiers in Psychology*, *8*, 87. http://doi.org/10.3389/fpsyg.2017.00087.

Hull, G. (2015). Successful failure: what Foucault can teach us about privacy self-management in a world of Facebook and big data. *Ethics and Information Technology*, *17*(2), 89-101.

Hutchens, M. J., Cicchirillo, V. J., & Hmielowski, J. D. (2015). How could you think that?!?!: Understanding intentions to engage in political flaming. *new media & society*, *17*(8), 1201-1219.

Ito, M., Horst, H., Bittanti, M., Boyd, D., Herr-Stephenson, R., Lange, P…, 2008. Living and Learning with New Media. MacArthur Foundation, Chicago, IL.

Jadhao, V. K. (2017). The role of ICT in teaching-learning and evaluation. *Research Journal*,20.

Jagatic, T., Johnson, N., Jakobsson, M., & Menczer, F. (2007). Social phishing *Communications of the ACM, 50(10), 94–100.*

Jenny, W. A. N. G. (2013). What higher educational professionals need to know about today's students: Online social networks. *TOJET: The Turkish Online Journal of Educational Technology*, *12*(3).

Joinson, A. N. (2008, April). Looking at, looking up or keeping up with people?: motives and use of facebook. In *Proceedings of the SIGCHI conference on Human Factors in Computing Systems* (pp. 1027-1036). ACM.

Junco, R. (2012). Too much face and not enough books: the relationship between multiple indices of Facebook use and academic performance. *Computers in Human Behavior28, 187e198.*

Kalpidou, M., Costin, D., & Morris, J. (2011). The relationship between Facebook and the well-being of undergraduate college students. *CyberPsychology, behavior, and social networking*, *14*(4), 183-189.

Kamenetz, A. (2011). Gates Foundation bets on Facebook app to help kids graduate. *Fast Company*, *14*.

Kamsin, A., & Is, E. (2005). Is e-learning the solution and substitute for conventional learning. *International journal of the computer, the internet and management*, *13*(3), 79-89.

Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. Business Horizons, 53, 59–68.

Kaplan, A., Haenlein, M., and Mason, R. (2008) *E-learning and social networking handbook: Resources for higher education*. New York: Routledege.

Kaya, T., & Bicen, H. (2016). The effects of social media on students' behaviors; Facebook as a case study. *Computers in Human Behavior*, *59*, 374-379.

Kennedy, G., Dalgarno, 8., Bennett, S., Judd, T., Gray, K. and Chang, R. 2008. Immigrants and natives: investigating differences between staff and students' use of technology. In Hello! Where are you in the landscape of educational technology? Proceedings ascilite Melbourne. http://www.ascilite.org.au/conferences/melbourne08/procs/kennedy.pdf .

Kim, C., Lee, S. G., & Kang, M. (2012). I became an attractive person in the virtual world: Users' identification with virtual communities and avatars. *Computers in Human Behavior*, *28*(5), 1663-1669.

Kim, S., & Yoo, S. J. (2016). Age and Gender Differences in Social Networking: Effects on South Korean Students in Higher Education. In *Social Networking and Education* (pp. 69-82). Springer International Publishing.

King, G., and Sen, M. (2013) The Teacher: How Social Science Research Can Improve Teaching American Political Science Association, *PS:Political Science and Politics* 46, no. (3) (pp 621-629).

Kini, R. B., Ramakrishna, H. V., & Vijayaraman, B. S. (2004). Shaping of moral intensity regarding software piracy: A comparison between Thailand and US students. *Journal of Business Ethics*, *49*(1), 91-104.

Klopfer, E., Osterweil, S., Groff, J., and Haas, J. (2009) *The Instructional Power of digital games, Social Networking, Simulations and How Teachers Can Leverage Them*. The Education Arcade: Massachusetts Institute of Technology.

Kolbitsch, J., & Maurer, H. (2006). The transformation of the web: How emerging communities shape the information we consume. Journal of Universal Computer Science, 12, 187–213.

Kolek, E.A., & Saunders, D. (2008). Online disclosure: an empirical examination of undergraduate Facebookprofiles, *NASPA Journal, 45*(1), 1-25.

Kornblum, J., Marklein, M.B. (2006): What you say online could haunt you http://www.usatoday.com/tech/news/internetprivacy/2006-03-08-facebook-myspace_x.html retrieved august 29,2007.

Krasnova, H., Wenninger, H., Widjaja, T., & Buxmann, P. (2013). Envy on Facebook: A hidden threat to users' life satisfaction?.

Krete, J., & Cronan, T. (1998). How men and women view ethics. Communications of the ACM 41(9), 70-76.

Kross, E., Verduyn, P., Demiralp, E., Park, J., Lee, D. S., Lin, N., ... & Ybarra, O. (2013). Facebook use predicts declines in subjective well-being in young adults. *PloS one*, *8*(8), e69841.

Kudumovic, M., Kudumovic, D., Mesanovic, N., & Huremovic, E. (2010). Modern Information Comunication Technologies and educational technologies applied to education of medicine. *HealthMED*, *4*(1), 158-162.

Lam, H., & Harcourt, M. (2003). The use of criminal record in employment decisions: The rights of exoffenders, employers and the public. Journal of Business Ethics, 47, 237-252.

Lambić, D. (2016). Correlation between Facebook use for educational purposes and academic performance of students. *Computers in Human Behavior*, *61*, 313-320.

Lampe, C., Ellison, N. B., & Steinfield, C. (2008, November). Changes in use and perception of Facebook. In *Proceedings of the 2008 ACM conference on Computer supported cooperative work* (pp. 721-730). ACM.

Lampe, C., Ellison, N., & Steinfield, C. (2006). A face(book) in the crowd: Social searching vs social browsing. In *Proceedings of the 20th anniversary conference on computer supported cooperative work* (pp. 167–170), New York: ACM.

Lampe, C., Ellison, N., & Steinfield, C. (2007). A familiar face(book): Profile elements as signals in an online social network. In Proceedings of the 26th annual SIGCHI conference on Human Factors in computing systems (pp. 435–444). New York, NY: ACM.

Lanier, J. (2014). *Who owns the future?*. Simon and Schuster.

Laronde, G., MacLeod, K., Frost, L., & Waller, K. (2017). A Case Study of The Integration of Information and Communication Technology in A Northern Ontario First Nation Community High School: Challenges and Benefits. *Journal of International Education Research (JIER)*, *13*(1), 27-34.

Larreamendy-Joerns, J., & Leinhardt, G. (2006). Going the distance with online education. *Review of educational research*, *76*(4), 567-605.

Lee, C. E. C., & Chong, A. Y. W. (2017). Students' Adoption of Facebook in Higher Education: A gender-based Comparison. In *SHS Web of Conferences* (Vol. 33). EDP Sciences.1.

Lee, C. E. C., Sooria, S. K. V., & Wong, S. P. (2015, July). Exploring the use of Facebook in the classroom: A Malaysia case study. In *ECSM2015-Proceedings of the 2nd European Conference on Social Media 2015: ECSM 2015* (p. 262). Academic Conferences Limited.

Leung, D., Carlson, E., Kwong, E. E., Idvall, E., & Kumlien, C. (2017). Exploring research cultures through internationalization at home for doctoral students in Hong Kong and Sweden. *Nursing & health sciences*.

Levy, M. (2009). Web 2.0 implications on knowledge management. Journal of Knowledge Management, 13, 120–134. http://dx.doi.org/10.1108/ 13673270910931215.

Lewis, J., & West, A. (2009). 'Friending': London-based undergraduates' experience of facebook. *New Media & Society, 11*(7), 1209–1229.

Liu, X., & Yishan, C. (2012). A Cross-Cultural Comparison Between Americans And Chinese In Their Attitudes Towards Information Ethics. *Issues Inf. Syst*, *13*(1), 59-67.

Livingstone, S., & Brake, D. R. (2010). On the rapid rise of social networking sites: New findings and policy implications. *Children & society*, *24*(1), 75-83.

Ma, Z. (2010). The SINS in business negotiations: Explore the cross-cultural differences in business ethics between Canada and China. Journal of Business Ethics, 91, 123-135.

MacDonald, J., Sohn, S., & Ellis, P. (2010). Privacy, professionalism and Facebook: a dilemma for young doctors. *Medical education*, *44*(8), 805-813.

Mackey, R. (2009). Thursday: Updates on Iran's disputed election [Electronic Version]. The New York Times. http://thelede.blogs.nytimes.com/2009/06/18/latest-updates-on-irans-disputed-election-2/?hpw.

Madge, C., Meek, J., Wellens, J., Hooley, T., 2009. Facebook, social integration and informal learning at university: ''It is more for socialising and talking to friends about work than for actually doing work''. *Learn. Media Technol. 34* (2), 141–155.

Maisiri, E., & Hikwa, L. (2013). Information ethics and use of social media in higher education: faculty members' perspectives. *Innovation: journal of appropriate librarianship and information work in Southern Africa*, *2013*(47), 43-69.

Manders-Huits, N. (2010). Practical versus moral identities in identity management. *Ethics and information technology*, *12*(1), 43-55.

Mao, J. (2014). Social media for learning: A mixed methods study on high school students' technology affordances and perspectives. Computers in Human Behavior, 33, 213—223.

Marino, C., Hirst, C. M., Murray, C., Vieno, A., & Spada, M. M. (2017). Positive Mental Health as a Predictor of Problematic Internet and Facebook Use in Adolescents and Young Adults. *Journal of Happiness Studies*, 1-14.

Martin, N. L., & Woodward, B. S. (2011). Computer ethics of American and European information technology students: A cross-cultural comparison. *Issues in Information Systems*, *12*(1), 78-87.

Mason, R. O. (1986). Four ethical issues of the information age. MIS Quarterly, 10(1), 5–12.

Masrom, M., Mahmood, N. H. N., & Zainon, O. (2013). Cyberethics and internet behavior of Malaysian primary education students. *Journal of Emerging Trends in Educational Research and Policy Studies*, *4*(1), 105.

Mathiyalakan, S., Ho, K. K., Law, W. K., & Heilman, G. E. (2016). Examining gender and age differences in the use and assimilation of Facebook among Guam college students. *Journal of International Management Studies*, *16*(2).

Matney, M., & Borland, K. (2009, March). Facebook, blogs, tweets: How staff and units use social networking to enhance student learning. In *Presentation at the annual meeting of the National Association for Student Personnel Administrators, Seattle, WA*.

Matschke, C., Moskaliuk, J., & Cress, U. (2012). Knowledge exchange using Web 2.0 technologies in NGOs. *Journal of Knowledge Management, 16, 159–176.* http://dx.doi.org/10.1108/13673271211199007.

Matthew,W., Richard,L., (2016) "Ethics and ICT: Why all the fuss?", Journal of Information, Communication and Ethics in Society, Vol. 14 Issue: 2, pp.167-169, https://doi.org/10.1108/JICES-12-2015-0043.

Mazman, S. G. (2009). *Adoption process of social network and their usage in educational context*. Unpublished master's thesis, Hacettepe University, Ankara.

Mazman, S. G., & Usluel, Y. K. (2010). Modeling educational usage of Facebook. *Computers & Education*, *55*(2), 444-453.

McCabe, A., Ingram, R., & Dato-on, M. (2006). The business of ethics and gender. Journal of Business Ethics, 64(2), 101-116.

McKinnon, S., Smith, A., & Thomson, J. (2015). A window to the world: Using technology to internationalize entrepreneurship education. *Journal of Perspectives in Applied Academic Practice| Vol*, *3*(3).

Mingoia, J., Hutchinson, A. D., Wilson, C., & Gleaves, D. H. (2017). The Relationship between Social Networking Site Use and the Internalization of a Thin Ideal in Females: A Meta-Analytic Review. *Frontiers in psychology*, *8*, 1351.

Mitrano, T. (2006). A Wider World: Youth, Privacy, and Social Networking Technologies. *Educause Review*, *41*(6), 16.

Mitrano, T. (2006, March 2009). Thoughts on Facebook. Retrieved 23 June 2009

Mohamud, I. K., Zeki, A. M., & Saidin, A. Z. (2015). Attitude towards Information Privacy Issues among Students of IIUM. In *Advanced Computer Science Applications and Technologies (ACSAT), 2015 4th International Conference on* (pp. 171-175). IEEE.

Moran, M., Seaman, J., & Tinti-Kane, H. (2012). Blogs, wikis, podcasts and Facebook: How today's higher education faculty use social media. *Boston, MA: Pearson Learning Solutions. Retrieved December*, *22*, 2012.

Moreno, M. A., Goniu, N., Moreno, P. S., & Diekema, D. (2013). Ethics of social media research: common concerns and practical considerations. *Cyberpsychology, Behavior and Social Networking*, *16*(9), 708-713.

Murphy, E. (2009). The Case Against the Case for Third-Party Doctrine: A Response to Epstein and Kerr. *Berkeley Technology Law Journal*, *24*(3), 1239-1253.

Mutula, S. M. (2013). Ethical Dimension of the Information Society: implications for Africa. *Information Ethics in Africa: Cross-Cutting Themes, Pretoria: AC*, 29-42.

Nadkarni, A., & Hofmann, S. G. (2012). Why do people use Facebook? *Personality and individual differences*, *52*(3), 243-249.

Nguyen, T. (2017). *Undergraduate students' use of Facebook for educational purposes: advantages, difficulties, and potential for connected learning* (Master's thesis).

Nissenbaum, H. (2004). Privacy as contextual integrity. *Washington Law Review*, *79*, 119.

Nkwe, N. (2012). E-Government: Challenges and Opportunities in Botswana. *International Journal of Humanities and Social Science*, 2(17), 39-48.

Obrien, L. O. 2012. Six ways to use social media in education. http://cit.duke. edulblogl2012/04/six-ways-to-use-social-media-in-education.

Ogutu, J. (2017). Adoption of information communication and technology on historical research at university of Nairobi Kenya: Implication of Teaching and Learning process. *Asian Journal of Educational Research Vol*, *5*(2).

Omar E.M. Khalil, Ahmed A.S. Seleim, (2012) Attitudes towards information ethics: a online. Information technology and moral philosophy, 123-141.

Ophus, J. D., & Abbitt, J. T. (2009). Exploring the Potential Perceptions of Social Networking Systems in University Courses, *Journal of Online Learning & Teaching, 5*(4), 639-648.

Tim, O. (2005). What is web 2.0? design patterns and business models for the next generation of software.

Ottenbreit-Leftwich, A. T., Glazewski, K. D., Newby, T. J., & Ertmer, P. A. (2010). Teacher value beliefs associated with using technology: Addressing professional and student needs. *Computers & Education*, *55*(3), 1321-1335.

Özmen, F., Aküzüm, C., Sünkür, M., & Baysal, N. (2011). Sosyal ağ sitelerinin eğitsel ortamlardaki işlevselliği. In *Proceeding of the 6th international advanced technologies symposium (IATS'11)*, (pp. 16-18), Elazığ, Turkey.

Palak, D., & Walls, R. T. (2009). Teachers' beliefs and technology practices: A mixed-methods approach. *Journal of Research on technology in Education*, *41*(4), 417-441.

Palen, L., & Dourish, P. (2003). Unpacking privacy for a networked world. In *Proceedings of the SIGCHI conference on Human factors in computing systems* (pp. 129-136). ACM.

Park, J. H. (2010). Differences among university students and faculties in social networking site perception and use: Implications for academic library services. *The Electronic Library*, *28*(3), 417-431.

Parrish Jr, J. L. (2010). PAPA knows best: Principles for the ethical sharing of information on social networking sites. *Ethics and Information Technology*, *12*(2), 187-193.

Parsell, M. (2008). Pernicious virtual communities: Identity, polarisation and the Web 2.0. *Ethics and Information Technology*, *10*(1), 41-56.

Parveen, N. (2011). Use of social networking site (Facebook) in making awareness among the library and information science professionals of university libraries of UP: a case study. *International Journal of Digital Library Services*, *1*(1), 9-17.

Pawar, M. N. (2017). The importance of ICT for quality education in developing India. *Research Journal*, 16.

Pempek, T. A., Yermolayeva, Y. A., & Calvert, S. (2009). College students' social networking experiences on facebook. *Journal of Applied Developmental Psychology, 30*(3), 227238.

Peslak, A. R. (2006). PAPA revisited: A current empirical study of the Mason framework. *Journal of Computer Information Systems*, *46*(3), 117-123.

Petrovic, N., Jeremic, V., Cirovic, M., Radojicic, Z., & Milenkovic, N. (2013). Facebook vs Moodle: What do students really think. In *International Conference on Information Communication Technologies in Education* (pp. 413-421).

Lenhart, A. M. M. (2007) Social Networking Websites and Teens: An Overview. *Pew Internet & American Life Project*.

Purcell, K., Heaps, A., Buchanan, J., & Friedrich, L. (2013). How teachers are using technology at home and in their classrooms. *Washington, DC: Pew Research Center's Internet & American Life Project*.

Piotrowski, C. (2015). Pedagogical applications of social media in business education: Student and faculty perspectives. *Journal of Educational Technology Systems*, *43*(3), 257-265.

Pope, N., Green, S. K., Johnson, R. L., & Mitchell, M. (2009). Examining teacher ethical dilemmas in classroom assessment. *Teaching and Teacher Education*, *25*(5), 778-782.

Proudfoot, J. G., Wilson, D., Valacich, J. S., & Byrd, M. D. (2017). Saving face on Facebook: privacy concerns, social benefits, and impression management. *Behavior and Information Technology*, 1-22.

Ractham, P., & Firpo, D. (2011). Using social networking technology to enhance learning in higher education: A case study using Facebook. In *Proceedings of the 44th Hawaii international conference on system sciences.*

Ragan, S. (2009). Privacy Issues Plague Facebook Users-Yet Again. *The Tech Herald*.

Ralph, M, and Ralph, L. (2013) Weapons of Mass Instruction: The Creative use of Social Media in Improving Pedagogy. *Issues in Informing Science and Information Technology* Volume (*10*) (pp 449-460). Retrieved 23 June 2009.

Randall, G. E., & Kindiak, D. H. (2008). Deprofessionalization or postprofessionalization Reflections on the state of social work as a profession. *Social work in health care*, *47*(4), 341-354.

Rimskii, V. (2011). The influence of the Internet on active social involvement and the formation and development of identities. *Russian Social Science Review*, *52*(1), 79-101.

Roblyer, M. D., McDaniel, M., Webb, M., Herman, J., & Witty, J. V. (2010). Findings on Facebook in higher education: A comparison of college faculty and student uses and perceptions of social networking sites. *The Internet and higher education*, *13*(3), 134-140.

Robson, C., Hearst, M., Kau, C., & Pierce, J. (2013). Comparing the use of social networking and traditional media channels for promoting citizen science. In Proceedings of the 2013 conference on computer supported cooperative work (pp. 1463–1468). New York, NY: ACM Press.

Rodogno, R. (2012). Personal identity online. *Philosophy & Technology*, *25*(3), 309-328.

Rodriguez, J. E. (2011). Social media use in higher education: Key areas to consider for educators.

Rogerson, S., Miller, K., Winter, J. S., & Larson, D. (2017). The Ethics of Information Systems–challenges and opportunities: a panel discussion. *MWAIS2017 Proceedings.12*. https://aisel.aisnet.org/mwais2017/12.

Roxas, M. L., & Stoneback, J. Y. (2004). The importance of gender across cultures in ethical decision-making. Journal of Business Ethics, 50(2), 149-165.

Safko Lon and Brake David 2009. *The Social Media Bible. Tactics, Tools and Strategies for business Success.* Publisher, John Wiley and Sons. Hoboken, NJ, USA.

Salmon, H. M., De Farias, C. M., Loureiro, P., Pirmez, L., Rossetto, S., Rodrigues, P. H. D. A., ... & da Costa Carmo, L. F. R. (2013). Intrusion detection system for wireless sensor networks using danger theory immune-inspired techniques. *International journal of wireless information networks*, *20*(1), 39-66.

Sanchez, R.A., Cortijo, V., Javed, U., 2014. Students perceptions of Facebook for academic purposes. Comput. Edu. 70 (1), 138–149.

Sarapin, S. H., & Morris, P. L. (2015). Faculty and Facebook friending: instructor–student online social communication from the professor's perspective. *The Internet and Higher Education*, *27*, 14-23.

Sax, G. (1974). *Principles of educational measurement and evaluation*. Wadsworth Pub.

Schlenkrich, L., & Sewry, D. A. (2012). Factors for successful use of social networking sites in higher education. *South African Computer Journal*, *49*(1), 12-24.

Seder, J. P., & Oishi, S. (2012). Intensity of smiling in Facebook photos predicts future life satisfaction. *Social Psychological and Personality Science*, *3*(4), 407-413.

Seery, M. D., Holman, E. A., & Silver, R. C. (2010). Whatever does not kill us: cumulative lifetime adversity, vulnerability, and resilience. *Journal of personality and social psychology*, *99*(6), 1025.

Selter, B. (2009). Facebook's users ask who own information [Electronic Version]. The New YorkTimes.http://www.nytimes.com/2009/02/17/technology/internet/17facebook.html.

Sheldon, K. M., Abad, N., & Hinsch, C. (2011). A two-process view of Facebook use and relatedness need-satisfaction: disconnection drives use, and connection rewards it.

Sheldon, P. (2008). Student favourite: Facebook and motives for its use. *Southwestern Mass Communication Journal, 23*(2), 39–53.

Shembilu, A. (2013). Importance of Social Networking for Student Participation in Education in Tanzania.

Siddiquah, A., & Salim, Z. (2017). The ICT Facilities, Skills, Usage, and the Problems Faced by the Students of Higher Education. *Eurasia Journal of Mathematics, Science and Technology Education*, *13*(8), 4987-4994.

Smith, S. D., Salaway, G., Caruso, J. B., & Katz, R. N. (2009). The ECAR study of undergraduate students and information technology, 2009.

Sobaih, A. E. E., Moustafa, M. A., Ghandforoush, P., & Khan, M. (2016). To use or not to use? Social media in higher education in developing countries. *Computers in Human Behavior*, *58*, 296-305.

Spinello, L., & Arras, K. O. (2011, September). People detection in RGB-D data. In *2011 IEEE/RSJ International Conference on Intelligent Robots and Systems* (pp. 3838 3843). IEEE.

Srivastava, Preeti (2012), "Social networking and its impact on education system in contemporary era". International Journal of Information Technology Infrastructure. Vol. 1 No. 2, pp11-18.

Statista (2017). Countries with the most Facebook users. https://www.statista.com/statistics/268136.

Stokes, P. (2012). Ghosts in the machine: do the dead live on in Facebook?. *Philosophy & Technology*, *25*(3), 363-379.

Stone, B., & Selter, B. (2009). Facebook Withdraws Charges in Data Use [Electronic Version] NewYorkTimes.http://www.nytimes.com/2009/02/19/technology/internet/19facebook.html. Retrieved 23 June 2009.

Stutzman, F., Gross, R., & Acquisti, A. (2013). Silent listeners: The evolution of privacy and disclosure on facebook. *Journal of privacy and confidentiality*, *4*(2), 2.

Suri, G., and Sharma, S. (2013) The Impact of Gender on Attitude towards Computer Technology and E-Learning: An Exploratory Study of Punjab University, India. International Journal of Engineering Research, 2, 132-136.

Sveningsson, M. (2014). "I don't like it and I think it's useless, people discussing politics on Facebook": Young Swedes' understandings of social media use for political discussion. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, *8*(3).

Tandoc, E. C., Ferrucci, P., & Duffy, M. (2015). Facebook use, envy, and depression among college students: Is facebooking depressing?. *Computers in Human Behavior*, *43*, 139-146.

Tapscott, D., & Williams, A. D. (2006). Wikinomics: How mass collaboration changes everything. New York, NY: Portfolio.

Tavani, H. T. (2007). Philosophical theories of privacy: Implications for an adequate online privacy policy. *Metaphilosophy*, *38*(1), 1-22.

Templeton, H. (2009). Social media benefity trump security fears [Electronic Version]. Medill Reports Retrieved 22 June 2009.

Tsovaltzi, D., Judele, R., Puhl, T., & Weinberger, A. (2015). Scripts, individual preparation and group awareness support in the service of learning in Facebook: How does CSCL compare to social networking sites?. *Computers in Human Behavior*, *53*, 577-592.

Twitspam. (2009). Twitspam. http://twitspam.org/. Retrieved 23 June 2009.

V an den Berg, B., & Leenes, R. (2011). Keeping up appearances: Audience segregation in social network sites. In *Computers, Privacy and Data Protection: an Element of Choice* (pp. 211-231). Springer Netherlands.

Valenzuela, S. (2009). Is there social capital in a social network site?: Facebook use and college students' life satisfaction, trust, and participation. *Journal of Computer- Mediated Communication, 14*(4), 875-901.

Veletsianos, G., & Kimmons, R. (2013). Scholars and faculty members' lived experiences in online social networks. *The Internet and Higher Education*, *16*, 43-50.

Venkatesh, V., Morris, M.G., Davis, G.B., Davis, F.D., 2003. User acceptance of information technology: toward a unified view. MIS Quarterly 27 (3), 425–478.

Verma, M. K., & Lalnunpuii, E. (2017) Perception and Attitudes of Teachers and Students towards Social Networking Sites: Case Study of NIT, Mizoram.

Walther, J. B., Van Der Heide, B., Kim, S.-Y., Westerman, D., & Tong, S. T. (2008). The role of friends' appearance and behavior on evaluations of individuals on Facebook: Are we known by the company we keep? *Human Communication Research, 34*(1), 28–49.

Weiss, R., Dziura, J., Burgert, T. S., Tamborlane, W. V., Taksali, S. E., Yeckel, C. W., & Sherwin, R. S. (2004). Obesity and the metabolic syndrome in children and adolescents. *New England journal of medicine*, *350*(23), 2362-2374.

Whitman, M. E., Townsend, A. M., & Hendrickson, A. R. (1999). Cross-national differences in computer-use ethics: A nine-country study. *Journal of International Business Studies*, *30*(4), 673-687.

Wood, W., & Glass, R. (1995). Sex as a determinant of software piracy. Journal of Computer Information System, 36(2), 37–43.

Workers, N. A. (2008). NASW code of ethics (Guide to the everyday professional conduct of social workers). *Washington, DC: NASW*.

Young, K. S., & Case, C. J. (2009). Computer ethics: gender effects and employee Internet misuse. *Issues in Information Systems*, *10*(2), 598-603.

Yun, J., & Kelley, J. (2008). How to approach access control in the social networking age [Electronic Version]. eWeek. http://www.eweek.com/c/a/Enterprise-Applications/How-to-Approach-Access-Control-in-the-Social-Networking-Age/. Retrieved 23 June 2009.

Zamoon, S., & Curley, S. (2008). Ripped from the headlines: What can the popular press teach us about software piracy? Journal of Business Ethics, 83(3), 515-533.

APPENDIX A

ETHICAL USE OF FACEBOOK IN ICT CONTEXT QUESTIONNAIRE (FINAL VERSION)

This survey is specifically designed for a thesis research study on ETHICAL USE OF FACEBOOK IN ICT Context. All information given will be used for the purpose of this project work and treated with outmost confidentiality. Please feel free to give accurate information and make sure that you have answered all questions.

Thanks in advance for your kind interests.

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SECTION I: Demographic Information

1) Department: ……...

2) Age: ☐ 17-21 ☐ 22-26 ☐ 26-31 ☐ 32-36 ☐ 37+

3) Gender: ☐ Male ☐ Female

4) Education level: ☐ Undergraduate ☐ Master ☐ PhD

5) Faculty member's title: Prof. ☐ Assist. Prof. ☐ Lecturer ☐
☐ Assistant Lecturer ☐ Senior Lecturer

6) Do you currently have a Facebook account? O Yes O No

7) If your answer is YES, how often do you visit Facebook?

O A few times a day O A few times a week

O A few times a month O Once a month or so O A few times a year

8) Do you think is it a good idea for Faculty members and students to be friends in Facebook?

O Yes O No

9) Do you use Facebook for personal communication between faculty members and students?

O Yes O No

SECTION II: Please read the following scenarios carefully and evaluate each statement by selecting only one option.

Crime: Unethical and illegal. The person responsible should be accused for a criminal act.

Unethical: It's a contrary act to your moral and ethical standard, but not a crime.

Questionable: There is some question as to the moral or ethical aspects of the action.

Acceptable: The act is acceptable to you, but you may have some doubts due to other's beliefs.

Ethical: There is no question that the action is correct in every sense of the word.

		Crime	**Unethical**	**Questionable**	**Acceptable**	**Ethical**
Privacy						
1.	A student who is not Facebook friends with faculty member sends Facebook messages as You should announce final grades at once! although the official deadline for announcing final grades according to academic calendar is not yet exceeded.					
2.	A faculty member is looking for participants for a research experiment decided to choose subjects from his students by looking at their profiles on Facebook.					
3.	A student created a fake Facebook profile about a faculty member and sends requests to faculty member's all Facebook friends since faculty member did not accept his Facebook request.					
4.	A student who is not Facebook friends with faculty member discovers from another faculty member's timeline post who is friends with him that the faculty member is on vacation at his home town and he visit her vacation place to convince her to higher up his final grade.					
Accuracy						
5.	Teaching assistant who is responsible to evaluate plagiarisms in students' reports that were posted in course' Facebook group did not inform faculty member about a fellow student who had done considerable amount of plagiarism and who told assistant that if he fails from this course his family would remove him from university studies.					

6.	A student claims to faculty member that materials at course's Facebook group were not accurate so that she could not properly study to exam and hence it was not a valid one.					
7.	A student assistant is helping to faculty member to enter final grades for the course who is at overseas conference. He sends final grades through Facebook message to the assistant. Assistant provides a financial benefit from peers by altering the grades of students.					
8.	A student who obtained high grade than he expected due to some announcement mistake at course's Facebook group did not make any objections upon correction of his grade.					
	Property					
9.	A student took photo of his midterm exam paper and posts it on his Facebook wall, while faculty member distributed papers to students during lecture for students to see their results.					
10.	A faculty member shares her course presentation photos to Facebook friends, in Facebook another colleague who is friend with the faculty member and who is her superior took her photo and put it into a public website of the faculty for advertising purposes.					
11.	Student writes an application to obtain personal information and invites Facebook friends to use this app.					
12.	A student shares lecture notes of the course that she is taking with a friend on Facebook who is not registered to the course.					
13.	A teacher on Facebook group with her students, was asked by another teacher to tag to her some photos of one of her students, since the other teacher wasn't a friend of one of the students he wanted.					
14.	Student has access to some information while in using fb password of faculty member, student changed some coding and could access confidential information without faculty member's knowledge, and spreads it to other students for access.					

		Crime	Unethical	Questionable	Acceptable	Ethical
Accessibility						
15.	Faculty member hears from other students about one of her student starting a negative campaign about him in student's Facebook, since as his advisor he refused to not to tell about his parents his failing from courses and not participating once to classes sessions.					
16.	Faculty member accidently discovers identities of students who submitted low ratings for his course evaluation from university's course-faculty member evaluation results since they were collected directly from Facebook accounts of students.					
17.	A student, who is officially registered, subscribes to a course's Facebook group and sends negative posts about the course.					
18.	A faculty member who is Facebook friends with students about his course, discovers from their Facebook posts that students engage heavily on gambling activities and reports this to the university administration.					
19.	A student who is assigned to submit course related material to course's Facebook group is also sending commercial spam messages to subscribed students.					

Thank you for your participation!

APPANDIX B

SIMILARITY REPORT

AUTHOR	TITLE	SIMILARITY	GRADE	RESPONSE	FILE	PAPER ID	DATE
Stella Gatera Rukund...	CHAPTER1 by Stella Gatera Rukundo	1%	--	--		911346933	05-Feb-2018
Stella Gatera Rukund...	CHAPTER2 byStella Gatera Rukundo	12%	--	--		911346937	05-Feb-2018
Stella Gatera Rukund...	CHAPTER3 byStella Gatera Rukundo	9%	--	--		911346938	05-Feb-2018
Stella Gatera Rukund...	CHAPTER4 byStella Gatera Rukundo	3%	--	--		911346940	05-Feb-2018
Stella Gatera Rukund...	CHAPTER5 byStella Gatera Rukundo	8%	--	--		911346942	05-Feb-2018
Stella Gatera Rukund...	CHAPTER6 byStella Gatera Rukundo	0%	--	--		911346947	05-Feb-2018
Stella Gatera Rukund...	MSc. by Stella Gatera Rukundo	20%	--	--		911346930	05-Feb-2018