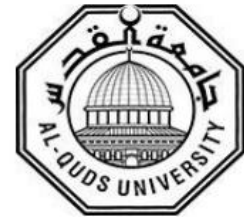


**Deanship of Graduate Studies  
Al-Quds University**



**The Influence of Internet Use on the Development of  
Internet Addiction and Social Isolation among Al-Quds  
University Undergraduate Students**

**Marian G. A. Saadeh**

**M.Sc. Thesis**

**Jerusalem - Palestine**

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**The Influence of Internet Use on the Development of  
Internet Addiction and Social Isolation among Al-Quds  
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A thesis is Submitted in Partial fulfillment of requirement  
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**Al Quds University**

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**Master in Community Mental Health/ School of Public Health**

**Thesis Approval**

**The Influence of Internet Use on the Development of Internet Addiction  
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## **Dedication**

*To my beloved ones...*

**Declaration:**

I certify that this thesis submitted for the degree of Master, is the result of my own research, except where otherwise acknowledged, and that this study (or any part of this study) has not been submitted for a higher degree to any other university or institution.

Signature: \_\_\_\_\_

**Marian George Anton Saadeh**

Date: 14/12/2016

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## Abstract

**Background:** Internet use including social networking may cause internet addiction and social isolation. The use of internet and social networks, internet addiction and social isolation had been highlighted by different studies as a major concern in the world and particularly among young adult. However, there is a lack of such studies in Palestine.

**Aim:** To assess the use of internet, including social networking, and its effects on internet addiction and social isolation among Al-Quds University undergraduate students aged 18-22.

**Method:** A cross sectional design was utilized to achieve this purpose. The data was gathered between beginning of August, 2015 and finished at the end of October, 2015. The sample included 219 students from Al-Quds University - Abu Dies Campus. The data was collected using self-administrated questionnaire including the socio-demographic data, Internet Addiction Test for internet addiction and UCLA Loneliness Scale for social isolation. Statistical analysis was performed using the statistical package for social sciences (SPSS), version 16.0 and were analyzed by using parametric tests such as frequency, T-test, ANOVA's test, Chi-square test and Pearson's test.

**Findings:** Analysis of the participants' characteristics showed that males were (37.9%) and females were (62.1%). Their ages ranged between (18-22) years old and they were (44%) from the Faculty of Arts and (56%) from Health Complex Building. Findings showed that (57%) of the participants spent equal to or less than 5 hours per day on internet and social networks while (42.9%) spent more than 5 hours. The current study showed a positive correlation between internet use including social networking and internet addiction at P-Value =0.01, where those who spent more time on the internet and social networking had higher frequent problem and significant problem of internet addiction.

Moreover, the current study showed no relationship between the hours spent on social networking and the social isolation at P-Value (0.635), as severity of isolation and loneliness was almost equal for those who spent more than 5 hours and less or equal to 5 hours per day. The overall result of UCLA Loneliness Scale showed that (52%) of the

participants had frequent or severe social isolation, compared to (48%) who had average or below average problems. Finally, there was a strong positive relationship between internet addiction and social isolation at P-Value (0.00), which means that those who had higher internet addiction had higher social isolation scores.

**Conclusion:** The study found that the use of social networking may cause internet addiction and social isolation among Al Quds University students and there is a positive relationship between them.



# تأثير استخدام الانترنت على تطور إدمان الانترنت والعزلة الاجتماعية لدى طلبة

## البكالوريوس في جامعة القدس

إعداد الطالبة: مريان سعادة

إشراف: د. منى حميد ود. معتصم حمدان

### ملخص

**خلفية الدراسة:** إن استخدام الانترنت قد يسبب إدماناً عليه وعزلةً اجتماعية، بالرغم من وجود نقص بالدراسات حول هذا الموضوع محلياً. إلا أن استخدام شبكات التواصل الاجتماعي وإدمان الانترنت و العزلة الاجتماعية خاصة لدى البالغين موضوع تم مناقشته عالمياً في عدد من الدراسات وباهتمام بالغ.

**الهدف:** إن الهدف من هذه الدراسة هو تقييم استخدام الانترنت وتأثيره على إدمان الانترنت والعزلة الاجتماعية لدى طلبة البكالوريوس في جامعة القدس.

**منهجية الدراسة:** تم استخدام المنهج الكمي المقطعي من أجل تحقيق هذا الهدف، حيث تم جمع البيانات خلال شهر اغسطس 2015 - واکتوبر 2015، شملت العينة 219 طالباً من جامعة القدس وتم الحصول عليها من خلال استخدام منهجية العينة الملائمة لاختيار المشاركين. كما واستخدم برنامج الرزم الإحصائية للعلوم الاجتماعية النسخة 16.0 لتحليل الاستبانة التي احتوت على المعلومات الديمغرافية واختبار إدمان الانترنت لقياس إدمان الانترنت، ومقياس جامعة كاليفورنيا لوس

انجلوس للعزلة لقياس العزلة الاجتماعية، وتم تحليلها عن طريق اختبار تحليل التباين الأحادي، واختبار تي تست، واختبار كاي سكوير، والاختبار الارتدادي واختبار بيرسون.

**النتائج:** تحليل بيانات المشتركين أشارت إلى أنه يوجد (37.9%) ذكور و (62.1%) إناث، تراوحت أعمارهم ما بين (18-22) سنة وكان منهم (44%) من كلية الآداب و (56%) من مبنى المجمع الصحي.

أظهرت النتائج أن (57%) من المشتركين أمضوا ما يساوي أو أقل من خمس ساعات يومياً على الانترنت و (42.9%) أمضوا أكثر من خمس ساعات. إن هذه الدراسة أظهرت ارتباطاً إيجابياً بين استخدام الانترنت وإدمان الانترنت حيث معامل الارتباط (0.01)، حيث أن أولئك الذين أمضوا وقتاً أطول على شبكات التواصل كان لديهم مشكلة إدمان الانترنت متكررة وكبيرة.

أظهرت الدراسة الحالية عدم وجود علاقة بين عدد الساعات التي تم إمضاؤها على الانترنت وشبكات التواصل الاجتماعي والعزلة الاجتماعية حيث معامل الارتباط (0.635)، حيث أن شدة العزلة الاجتماعية كانت مساوية لأولئك الذين أمضوا وقتاً أقل أو يساوي خمس ساعات وأكثر من خمس ساعات يومياً.

أما بالنسبة للعزلة الاجتماعية والتي تم قياسها بمقياس جامعة كاليفورنيا- لوس انجلوس للعزلة فقد أظهرت النتائج أن (52%) من المشاركين حصلوا على عزلة اجتماعية حادة أو متكررة، مقابل (48%) حصلوا على معدل طبيعي وأقل من المعدل الطبيعي. كان هناك علاقة قوية بين إدمان الانترنت والعزلة الاجتماعية عند معامل ارتباط (0.001) مما يعني أن أولئك الذين لديهم إدمان انترنت أعلى كان لديهم عزلة اجتماعية أكبر.

**الخلاصة :** وجدت الدراسة أنّ استخدام شبكات التواصل الاجتماعيّ قد تسبب إدمان الانترنت والعزلة الاجتماعية بين طلبة جامعة القدس وهناك علاقةً ايجابيةً فيما بينهم.

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## **List of Abbreviations/Acronyms**

<b>(SNS)</b>	Social Networking Sites
<b>(ICT)</b>	Information & communication Technologies
<b>(FB)</b>	Facebook
<b>(WB)</b>	West Bank
<b>(PT)</b>	Palestinian Territories
<b>(CMC)</b>	Computer Meditated Communication
<b>(IAD)</b>	Internet Addiction Disorder
<b>(IAT)</b>	Internet Addiction Test
<b>(SE)</b>	Self Esteem
<b>(SI)</b>	Social Isolation
<b>(WWW)</b>	World Wide Web
<b>(http)</b>	Hypertext Transfer Protocol
<b>(PIU)</b>	Pathological Internet Use
<b>(CIU)</b>	Compulsive Internet Use

# **Chapter 1**

## **Introduction**

# Chapter I

## Introduction & Problem Statement

---

### 1.1 Introduction

New technologies such as computers, smart phones and electronic pads have become pervasive in the lives of young adults and youth (Guan & Subrahmanyam, 2009). All of these technologies had eased the access to the internet via different private and public locations, which enabled the phenomena of social networking to emerge among these young adults in a short period of time during the last decade (Ryan, 2011). Nowadays, in an age of information and communication technologies (ICT), tens of thousands of young people are connected to their electronic devices during their leisure time, at work, at home and even at school (Norman, 2008).

A report by the Palestinian Central Bureau of Statistics (PCBS) about the “Percentage of distribution of household by availability of computer for the year 2011”, showed that the availability of computers was (50.9%) in the Palestinian Territory, where (53.2%) of houses had computers in the West Bank and (51.7%) in Gaza Strip (PCBS, 2011).

Facebook is still the number 1 most popular social network among teens; and its use increased from 93% to 94% between 2011 and 2012. The next most popular social network was Twitter, which is used by 26% of teens (Mashbale, 2013).

Also, it was found that Facebook is by far the biggest social network in the world with 750m users. Whereas, Twitter came in the third level with 200m users, and MySpace has declined since the year 2008 to reach 50m users only (The Telegraph, 2011). Further, it was reported that 20% of the world population is using social networking websites (Gaudin, 2013).

With this increase of internet and social networking sites (SNS) usage in all the countries around the world, Palestine isn't an odd country. People started as well using the SNS for different reasons during the last decade. Unfortunately, studies about the use of SNS in Palestine were limited. Only two studies were found in literature review. First study was in the

West Bank for Khubaib Ayoub (2011) about “Internet addiction among Palestinian University Students- facts and perspectives”. This study used the internet addiction test with (2,230) students at An-Najah University and showed that those who use internet for longer duration and whose most common use is social networks, chatting or e-mail were highly addicted. The second study was conducted in Gaza, by Bashir Al-Hajjar (2014) about “Internet addiction and psychological morbidity among nursing students in Gaza”. The findings of this study concluded that Palestinian nursing students in Gaza were highly addicted on internet as (30.1%) of the participants scored high level of internet addiction, and this affected their psychological morbidity.

Therefore, this study highlighted the use of internet including social networks among Palestinian students within an academic setting to understand more about the phenomena of using SNS and the risks inflicted by the normal, moderate and overuse of the internet and social networks, such as social isolation (SI) and internet addiction(IA).

## **1.2 Problem statement& its significance**

Pathological use of digital technologies, particularly the Internet and video games, is a topic of increasing research and conjecture in psychology and psychiatry (Sim et al. 2012).

Bon (2007) stated that the survival in academics without the internet is hardly imaginable. The internet has found useful applications in online data repositories, library catalogues, journals, news services, student and financial administration systems, online supported or solely online conducted teaching, as well as in digital communication with fellow students and lecturers. Other contemporary uses of Internet by students include purchasing, entertainment, and even dating. The investigation of how the Internet fits into the daily life of staff and students at educational institutions is worthwhile when one considers the ubiquitous and all pervasive communications tool features of the Internet. Consequently, studies have been carried out in many places to understand how University students use the Internet, the purposes for which the students use the Internet, the search engines used, their Internet skills as well as problems that hinder efficient Internet use (Baker et al., 2011; Kittinger et al, 2012; & Esen et al., 2013).

Despite that many people desire using SNSs, there are negative effects of this use. Addiction is one of these effects and it’s identified as any compulsive, habitual behavior that limits the

freedom of human desire (May, 1988). It's often associated with physiological tolerance and withdrawal effects. It refers to a disorder in which an individual becomes intensely preoccupied with a behavior that at first provides a desired effect. The addictive behavior occurs with several pattern variations, but always repeatedly, involving great deal of time thinking about and engaging in the behavior, which operates beyond the need to remove intense anxiety common in compulsive disorders (Sussman et al., 2011).

In relation to some studies that had examined predictors of internet addiction with young people. It had been found that females (17–24) years, members of the 'net-generation' are more likely to be addicted to the internet than males; internet addicts are usually heavy users of the internet no matter how long they have been a user (Lan, & Lee, 2013). Also, Wilson et al. (2010), addressed young adults (aged 17–24) years in university, these students were found to spend more time on social networking sites and these attributes predicted an addictive tendency measured by three highly correlated dimensions which were: the level of salience; loss of control; and withdrawal and social isolation. Based on the research and using the addictive tendencies scale, the variables significantly predicted the use of SNSs by the participants with high addictive tendencies scores  $P\text{-Value} < 0.01$ . Participants reported using SNSs 4 days per week with a mean (4.49) and reported logging on to their SNSs nearly 10 times per week with a mean (9.97).

As mentioned internet addiction is related to social isolation and is considered a state in which the individual lacks a sense of belonging socially, lacks engagement with others, has a minimal number of social contacts and they are deficient in fulfilling and quality relationships (Nicholson, 2013). Loneliness/social isolation might be defined as emotional response to a discrepancy between desired and achieved levels of social contact (Russell, 1996).

Moreover, a study for Vida Fallahi (2011), who used the UCLA loneliness scale and Young Scale for Internet Addiction Test to gather data from a random sample of 500 students from Shiraz university who were selected from two colleges, indicated that 13.2% of student's were addicted to the net and more result showed significant difference between users groups. Addicted group were more alone than other groups. The mean of social isolation for group-addicted users was the highest (53.36). The results represent that there was a meaningful difference between group 1 and 3 (normal users and addicted users of the internet) and

between groups 2 and 3 (at risk users and addicted users of the internet) at the significant level of  $p < 0.001$ .

In Palestine, according to the Palestinian Ministry of Telecommunications and Information Technology report, it showed that there's a noticeable increase in the percentage of having the internet among household and individuals. For example, 55.0% of young people (15-29 years) are using internet in Palestine in 2011 compared with one fifth in 2004(PCBS & MoTIT, 2013).

There is a lack of studies that assess the internet addiction and social isolation resulting from the use of the SNSs on the wellbeing of the Palestinian students. Therefore, this study aimed at finding out the risks of using internet, including (SNS) including internet addiction and social isolation among the students of the Health Complex and Arts faculties of Al-Quds University.

### **1.3 Justification of the Study**

This study is significant because:

- There's a lack of scientific studies about the risks and the benefits of using internet, including the social networks, in the Arab world, especially in Palestine.
- To help policy makers at Al-Quds University and other Palestinian universities in planning and implementing safety measures on the use of social networks within the university campuses.

### **1.4 Main Objective**

The aim of this study is to assess social isolation and internet addiction in relation to the use of internet, including the social networking sites, among Al-Quds University students attending both the Health Complex faculties and the Faculty of Arts.

## **1.5 Specific Objectives**

- 1) To assess the relationship between the use of the internet, including SNSs and internet addiction among Al-Quds university students studying in the Faculties of the Health Campus and the faculty of Arts.
- 2) To assess the relationship between the use of the internet, including SNSs and social isolation among Al-Quds university students studying in the Faculties of the Health Campus and the faculty Arts.
- 3) To assess the relationship between socio-demographic variables:(such as age, gender, department, academic year), the use of the internet including the SNSs, and social isolation and internet addiction.
- 4) To assess the relationship between social isolation and internet addiction.

## **1.6 Study Feasibility**

1. Ethical approval was obtained from Al-Quds University.
2. The researcher is a master student at Al-Quds University, which facilitated the collection of data inside the university.
3. The interest and knowledge of the researcher helped in the process of conducting this research.

## **1.7 Limitations**

Despite the feasibility of this study, each study has its limitations and this one is presented by:

- The generalization of the findings of this study might be limited, as this study only included Al-Quds University students and excluded other universities and other faculties



within Al-Quds University.

- Randomized sampling wasn't used in the study and instead a convenience sampling was used which might limit the generalization of the findings.

## 1.8 Definitions & Keywords

- **Internet:** A collaboration of more than hundreds of thousands of interconnected networks of communicating devices (Forouzan, 2007).
- **Computer:** a computer is a device that accepts data in one form and processes it to produce data in another form (French, 1996).
- **World Wide Web:** It is a repository of information linked together from points all over the world, and allows computer users to locate and view multimedia-based documents on almost any subject.(Forouzan, P.851) The WWW has a unique combination of flexibility, portability, and user-friendly features that distinguish it from other services provided by the internet. The WWW project was initiated by CERN (European Laboratory for Particle Physics) to create a system to handle distributed resources necessary for scientific research (Deitel, 2004).
- **Social network sites:** web-based services that allow individuals to construct a public or semi-public profile within a bounded system, articulate a list of other users with whom they share a connection, and view and traverse their list of connections and those made by others within the system. The nature of these connections may vary from site to site(Boyd & Ellison, 2007). Examples on these sites are: Facebook, LinkedIn, Instagram, Twitter etc. (Kallas, 2016).
- **Social network applications:** communication tools typically handle the capturing, storing and presentation of communication, usually written but increasingly including audio and

video as well. It's an interactive tools handle mediated interactions between a pair or group of users. They focus on establishing and maintaining a connection among users, facilitating the mechanics of conversation and talk (Wikipedia, 2016). Examples of these apps are: Whatsapp, Viber. Messenger etc. (Kallas, 2016).

- **Internet addiction:** Internet addiction is characterized by excessive or poorly controlled preoccupations, urges or behaviors regarding computer use and internet access that lead to impairment or distress (Shaw & Black, 2008).
- **Social Isolation:** a state in which the individual lacks a sense of belonging socially, lacks engagement with others, has a minimal number of social contacts and they are deficient in fulfilling and quality relationships(Nicholson, 2013).
- **Loneliness:** an emotional response to a discrepancy between desired and achieved level of social contact (Russell, 1996).

The next chapter discusses the literature review of this current study.

## **1.9 Summary**

- The literature revealed the lack of studies in Palestine that assessed the relationship between the use of internet including SNSs and internet addiction and social isolation among Al-Quds university students studying in the Faculties of the Health Campus and the Faculty of Arts.
- The aim of this study was to assess the relationship between the use of internet including SNSs and internet addiction and social isolation among Al-Quds university students studying in the Faculties of the Health Campus and the Faculty of Arts.
- The chapter also presented the problem statement, the study objective, research questions, limitation and feasibility of the current study.

**Chapter II**  
**Literature Review**

## Chapter II

### Literature Review

---

#### 2.1 Introduction

The global system of networked computers, servers and routers known as the Internet has transformed many aspects of modern society and social interaction. The online distribution of goods and services, for instance, has influenced almost every industry and has radically transformed many. Alongside commerce-oriented technological development has been a rise in what has been termed “social media.” One of the most significant developments connected to social media is the rise of social network sites (SNSs), such as Facebook, LinkedIn, MySpace and Google Plus. Although sites of this nature first emerged around 1997, they rose to cultural significance as a phenomenon in 2003, when Friendster first attracted mass media attention. Less than a decade later, millions of people of all ages across the globe have joined SNSs (Anderson & Bernoff, 2010).

Boyd and Ellison (2007) defined social network sites as web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system. This definition served a need, but the social and technical landscapes of these sites has changed dramatically since. As SNSs proliferate and evolve, defining what constitutes a social network site becomes increasingly challenging. Some of the features that initially distinguished them have faded in significance; while others have been reproduced by other genres of social media. Media sharing websites, gaming sites, and locative media all encourage participants to list contacts and “Friends,” making this affordance a poor criterion for distinguishing between social network sites and other genres. Meanwhile, other features, such as media streams like Facebook’s “News Feed,” have emerged as more salient components of the SNS user experience. In short, the technical affordances that define a social network site have become increasingly fluid. People’s practices, expectations, and social norms have also co-evolved alongside the technical features and social interaction opportunities (Boyd & Ellison 2013).

Finally, Boyd & Ellison (2013) has defined a social network site as a networked communication platform in which participants 1) have uniquely identifiable profiles that consist of user-supplied content, content provided by other users, and/or system-provided data; 2) can publicly articulate connections that can be viewed and traversed by others; and 3) can consume, produce, and/or interact with streams of user generated content provided by their connections on the site.

This chapter will discuss the following issues:

Section I: Internet & social network sites

- Internet and communication.

Section II: Positive impact of social networking

Section III: Negative impact of social networking

- Internet addiction and its characteristics.
- Social isolation.

Section V: Studies that assessed the relationship between the use of social networking sites and internet addiction and social isolation.

## **2.2 Section I - Internet and social network sites**

As mentioned previously, since the early 2000s, there was major rise of the “social web”, which has impacted society as a whole in at least as great a manner as the advent of the WWW itself. As well as social networking, a huge increase in the popularity of online gaming and adoption by businesses and educational institutions to utilize what has been called ‘Web 2.0’, has been observed across all societies, most markedly those with highly-integrated, efficient Internet systems (Tam & Walter, 2013).

Online social networking sites had certainly become popular and it was much more likely that one’s friends and the people one would like to make friends with are already present in the cyberspace. These sites are increasingly becoming spaces where many users interact over long periods of time for message posting, information sharing and inter-friend communication (Jahan & Ahmad, 2012).

The rise of the internet and WWW has massively changed not simply the way we access entertainment, but also how we communicate, form new social connections, obtain education and engage in employment. Some major new developments, either just arrived or over the horizon, include Google Glass (a sophisticated web-enabled pair of glasses) and the use of other ‘wearable technologies’. Further down the track, improved internet/brain interfacing (such as direct thought control of devices) is likely to be a quantum leap forward into what is broadly termed ‘enhanced reality’(Tam & Walter, 2013).

The internet has the potential to greatly affect the independence and social connectedness of people. It has improved access to and expanded opportunities for conducting business, interacting with others, obtaining information, and pursuing leisure activities (Miller, 2008).Physically, the internet is a lot of computers connected to each other, using only telephone lines, each has a common language, or protocol, known as TCP/IP (Transmission Control Protocol /internet Protocol). Metaphysically, it is an international community connected by computers of every sizes, shapes, and forms. The primary mission of the Internet is communication of ideas, work and play (Thomas, 1996).

It is becoming an integral part of society, whether through direct or indirect use. People's first introduction to the internet was mostly through school, work, community projects, and the need to stay with people abroad (Aouragh, 2011).

According to Thomas (1996), there are basically four uses for the internet:

- 1- Communication
- 2- Document or file transfer
- 3- Interactive browsing
- 4- Reading and posting to topic- specific bulletin boards.

The Internet is utilized by hundreds of millions of people worldwide, with its numerous benefits only leading to an increase in the number of users. (Starcevic, 2012). However, society encountered problematic forms of online behavior. These include both instances of excessive use, in the form of the so-called internet addictions (LaRose et al. 2001).

The term network typically refers to a set of objects and the mapping of the interaction and relationships between the objects. Social network theory refers to the objects as people or groups of people (Yamkoyenko & Hatala, 2014). Also, a social network is a cluster of people connected for a specific reason, they come in all shapes and sizes and serve all kinds of purposes. Some social networks are for the most basic level of interaction, like sharing specific information, and some are designed for complex problem solving. These social networks are the basis for survival and advancement of the human species (Ryan, 2011).

Boyd and Ellison explains that social network sites (SNS) are web-based services that allow individuals to construct a public or semi-public profile within a bounded system, also articulate a list of other users with whom they share a connection, and view and traverse their list of connections and those made by others within this system. The nature of these connections may vary from site to site. While they use the term "social network site" to describe this phenomenon, the term "social networking sites" also appears in public discourse, and the two terms are often used interchangeably. While networking is possible on these sites, it is not the primary practice on many of them, nor is it what differentiates them from other forms of computer-mediated communication (Boyd & Ellison, 2007).



Social network sites are unique not only because they allow individuals to meet strangers, but also because they enable users to articulate and make their social networks visible. This can result in connections between individuals that would not otherwise be made, but that is often not the goal, and these meetings are frequently between "latent ties" who share some offline connection. On many of the large SNSs, participants are not necessarily networking or looking to meet new people; instead, they are primarily communicating with people who are already a part of their extended social network. To emphasize this articulated social network as a critical organizing feature of these sites, we label them "social network sites" which includes online/offline social networks (Boyd & Ellison, 2007).

Unlike typical online social networks, online/offline social networks are designed to help people create social groups intended to meet and function in person. These social networks provide a venue for advertising the goals and intentions of the members so that others can find the group and hopefully join (Ryan, 2011). For example, MySpace and Facebook, are web-based services that allow individuals to construct public or semi-public profiles, connect with other users, and view and traverse their list of connections and those made by others within the system (Baker & White, 2011). Additionally, these networks provide members with excellent tool for communicating within the groups to make arranging meetings and in-person gathering easily manageable (Ryan, 2011).

After joining a social network site, users are prompted to identify others in the system with whom they have a relationship. The label for these relationships differs depending on the site—popular terms include "Friends," "Contacts," and "Fans." Most SNSs require bidirectional confirmation for "Friendship", but some do not. These one-directional ties are sometimes labeled as "Fans" or "Followers," but many sites call these Friends as well. The term "Friends" can be misleading, because the connection does not necessarily mean friendship in the everyday vernacular sense, and the reasons people connect are varied (Boyd & Ellison, 2007).

Social networking services are one form of CMC that may help shy individuals form quality relationships. Most services also allow users to establish a profile containing personal information (e.g., interests, religious and political beliefs, hobbies), indicate other users with

whom they share a connection (i.e., friends), send private messages to other users, leave publicly viewable messages on others' profiles, join social groups, and organize social gatherings (Boyd & Ellison, 2007).

### **2.2.1 Internet and communication**

Computer based activities have been demonstrated empirically, under certain conditions, to become psychologically, socially and/or physically detrimental to the user (Kuss & Griffiths, 2012). Over the last few years, the number of people who use the Internet to communicate with others has increased dramatically (Peter & Valkenburg, 2006).

Communication is the process through which human develop their individual humanity and their relationships with others. Their environment, themselves and others constantly give off cues that can be selected, organized, and given meaning by us and by others. An individual cannot stop to communicate. It is continuous in which individuals create inside themselves the meanings of what is going on in our environment by selecting cues from what is happening around, by organizing and classifying them, by comparing them to what they might already know, and by assigning meaning to them (Myers, 1976).

Social networking services may facilitate communication between people. The amount of information available (e.g., hobbies, favorite books, religious and political views) makes it easy to learn about, and disclose to, others. Given that learning about others and disclosing personal information often leads to greater intimacy using social networking services that allow personal information exchanges may facilitate relational development. These sites also allow multiple modes of communication (i.e., public messages, private messages similar to email, and private synchronous messages similar to instant messages) that may meet different communication needs. Because people often choose their mode of communication based on situational needs (e.g., speed of desired response, the number of recipients, privacy needs) the multiple communication modes of these websites facilitate more frequent communication, creating feelings of intimacy (Baker & Oswlad, 2010).

Computer conferencing emerged, also somewhat unexpectedly, as a tool for using the communication capacities of the networks to build social relationships across barriers of space and time (Rheingold, 1994).

Much of human interpersonal communication depends on how they define the situation in which they find themselves. People appraise how threatening or nonthreatening their interaction is with others in relation to their own self –esteem. Most of the speaking with others and interacting with them involves some kind of risk to the own self. How the communication climate already is, and how individuals are likely to change it, became important parts of humans guessing about how much risk there is to them in communicating(Myers, 1976).

Moreover, the Internet has developed as the primary medium for communication and socialization, particularly among adolescents. However, excessive Internet use may detrimentally affect academic performance, family relationships, and emotional development among youth. Such problematic Internet use has been identified as Internet Addiction (IA), and related diagnostic criteria have been proposed (Tistsika, 2011).

The Internet is at once like no other communication device and like every other communication device. It is a personal and mass medium of communication. It is capable of transmitting communication in any format-print, audio, or video. The dimensions of communication have been available previously but not through the same medium. By harnessing the power of the computer to previous communication advancements, the Internet has become the most versatile media (Koltz, 2004).

Internet cafes are places where the offline and the online are placed together. More than any other setting related to the Internet, the Internet cafes lies at the intersection between politics, technology and society. Particularly those operating in extremely challenging conditions, capture important aspects of the relationship between virtual and everyday life. Internet cafes, via the low-cost internet access they make possible, offer virtual mobility and virtual escapism to the community (Aouragh, 2011).

Computerized communication has the potential to change the lives of human on three different, but strongly inter-influential levels. First, as individual human beings have perceptions, thoughts, and personalities (already shaped by other communications technologies) that are affected by the ways they use the medium and the ways it uses them. At this fundamental level, it appeals to them as mortal organisms with certain intellectual,

physical, and emotional needs. Young people around the world have different communication proclivities from their pre-elders. The second level possible computerized and media communication triggered change is the level of person-to-person interaction where relationships, friendships, and communities happen. The third level of possible change in human lives, the political, derives from the middle and social level (Rheingold, 1994).

These computerized communication tools have impacted daily life and social relationships in a profound way. They have also raised important questions. There is a debate whether social networking sites provide positive ways for people to share and stay in touch, or whether they are encouraging people to become ever more isolated from another, as they avoid face-to-face conversation in favor of connecting online. Many fear that SNS make users vulnerable to identity theft, threaten privacy, and even expose young people to online predators. Regardless of popular opinion as their worth, SNSs have quickly become one of the most popular methods of communication (Lusted, 2011).

### **2.3 Section II: Positive impact of internet use including social networking**

The future of the internet has become too important for specialists and special interests, as it influences the lives of a growing number of people, and more and more citizens must contribute to the dialogue about the way public findings are applied to the development of the Net, and join the debate about the way it should be administered (Rheingold, 1994).

The Internet has altered human lives by providing a whole range of new possibilities. It permits easy access to a vast quantity of information resources, enables fast synchronous as well as asynchronous communication and offers a wide array of entertainment prospects. Moreover, it allows diversifying the personal social circle by enabling access to more and more diverse individuals than one might have in the 'real' world. The emergence of the Internet has also seen a rise of various types of online social activities, including instant messaging, blogs, newsgroups and forums. Another type of online community that has obtained dramatic popularity in recent years is the social networking sites (SNSs) as mentioned in previous sections. Introduced in the late 1990s, social networking sites have attracted millions of users particularly adolescents around the world (Jahan & Ahmad, 2012).

In a study for Isrealashvili et al (2012) tested the hypothesis that the Internet can serve as a valuable tool assisting adolescents in pursuing the developmentally related need for self-concept clarity. Based on convenience sampling participants in the study were 278 adolescents, they all completed questionnaires relating to their levels of Internet use, Internet addiction, ego development, self-consciousness, self-concept clarity, and personal demographic data. This study supports the relevance of adolescents' levels of self-concept clarity and ego development in explaining the variance in adolescents' level of internet over-use. After controlling adolescents' levels of ego-development, adolescents whose level of self-concept-clarity was lower tended to be more involved in internet over-use. If ego-development had not been statistically controlled for one, one might have been able to speculate that the impact of self-concept-clarity on Internet addiction is limited to those whose preliminary- or current- level of ego development is low. Level of ego-development, those whose self-perception was vaguer tended to be more involved with the internet, according to the finding, adolescent' level of self-concept clarity is significantly related to internet over-use more than

their level of ego development. Whose self-concept is not yet clearly defined might use the Internet more intensely than others.

Baker et al. (2011) conducted two studies on the characteristics of bloggers and the psychosocial effects of blogging. Over a period of 3 weeks, searches were conducted using the major online blog search engines available targeting 167 sources from different ages. Inductive analysis was conducted in order to examine the comments for emerging themes. In this study that evaluates the social connectedness, satisfaction with friendship, and psychological distress among bloggers, and 80% of the comments suggested a positive experience while blogging. There was a general agreement that blogging leads to expanded social networks and greater social support. It allows marshaling of social support through enabling links with like-minded and empathetic people, regardless of where they live or whether opportunities are available to meet offline.

While Liu & Yu, (2013), focused specifically on Facebook, and proposed a research model to examine the relationships between Facebook use, online social support, general social support, and psychological wellbeing. A convenience sample that consisted of 400 college students in Taiwan, who completed a questionnaire, was the target of this study in order to measure the four variables. The Smart-PLS 2.0 measure was used to analyze the data and the results showed that using FB helped college students to obtain online social support, and that online social support and well-being are mediated through the factor of general social support. The findings showed that using FB can enable people to maintain online social support, and that online social support can enhance social support for college students. In addition, the relationship between online social support and well-being is mediated through general social support.

Another relevant study about seeking support by Rui et al. (2013), examined the types of social support provided and sought by health organizations on Twitter, where a content analysis was conducted on 1500 tweets sent by a random sample, indicated that providing informational and emotional support, as well as seeking instrumental support, were the main types of social support exchanged by health organizations through Twitter.

Sachdev (2010) showed that social networking isn't for everyone, but it's now such a massive part of all our lives, whether we embrace or reject the notion, that it can no longer be ignored. It allows you to live a life unhindered by small talks it is "In touch with the world" allow people to communicate; it opens the world for people, especially with family living abroad. And there's no doubting that social networking sites can lead to the breaking up of relationships. But there is another side to the tale, which is that people are moving onto other, perhaps better, relationships at the same time. SNS can put people (back) in touch with those whom they have lots of common with and that common ground is often the starting point for long-lasting relationship.

One study described the informational and treatment opportunities offered by the internet and comments on the advantages, disadvantages and potential dangers of its role in mental health and mental health research. Two perspectives were taken: (i) the impact of the Web from the point of view of the clinician, and (ii) the impact of the Web on the public's knowledge of mental health. The study showed that the Web, due to its accessibility, has advantages in providing access to information, online therapy and adjunctive therapy in mental health. Problems include information overload, poor information quality, potential harm and lack of scientific evaluation (Christensen & Griffiths, 2000).

For clinicians, the Internet provides information that might serve a number of purposes for the psychiatrist or mental health professional in clinical practice. First, information of use to the practitioner's clinical work and continuing education is available. Second, information that might be used to facilitate patient management and education is also available. From the community health perspective, a wide range and quality of mental health information is available for use by consumers on the Internet. First, such information may inform the public about the nature and effective treatment of mental health disorders. Second, the Internet is also a useful medium for educating practitioners and public health organizations about consumers' views of the appropriate treatment for psychiatric illness, and their perceptions of the limitations of current treatments. The Internet is likely to facilitate access to information, to increase mental health literacy and to provide a broader range of information for those outside the medical sphere (Christensen & Griffiths, 2000).

Despite the positive findings about SNSs, Baker & White (2011), in a sample of qualitative research consisted of 69 Australian students, indicated two reasons for why teenagers don't use SNSs; the primary reasons were that many students nominated reasons such as lack of motivation (51%), poor use of time (42%), preference for other forms of communication (41%), preference for other activities (25%), cyber safety concerns (23%) and a dislike of self-presentation online (15%) to explain why they did not currently use SNSs. While, their secondary reasons were that limited access (10%), parents' concerns (6%), and friends' influence (4%) as reasons for not currently using SNSs.



## **2.4 Section III: Negative impact of internet use including social networking**

As mentioned in the current chapter, the Internet has become one of the most important communication tools in the modern society and feature significantly in the daily life of many people. The use of the Internet has been increasing dramatically over the past few years. Almost anyone can use the Internet for a variety of goals and purposes. The impact of the Internet on people has led to worries of excessive use of the Internet. Several definitions and concepts have been applied to this problematic and worrisome phenomenon (Guan et al. 2012). The way social networks will affect the human, is not directly inscribed into its technological properties: it rather hinges on the network of socio-symbolic relations (e.g. of power and domination), which always and already over-determines the way cyberspace affects us (Zizek, 1998).

Sachdev (2010), summarizes the negative impact of SNS on youth by: (i) the time-consuming nature of online social networking sites, youth admitting that they waste a lot of time on these sites. (ii) Concern about access to personal information by others, with almost half of the youth worried that “non friends” may see their personal information. (iii) Concern that information posted may be used against them. However the time they observe the more time they spend online, the more connected they get hence the urge to not miss out on anything. This induces an invisible layer of stress and pressure on the individuals. Also, sites such as FB, and Twitter are said to shorten attention spans, encourage instant gratification and make young people more self-centered. (iv) Technologies are infantilizing the brain into the state of small children who are attracted by buzzing noises and bright lights, which have a small attention span and who live for the moment. Speedy communication is causing alarming changes in the brains of young users and encouraging poor grammar, usage and spelling, allowing the spread of misinformation that may be perceived as fact even in light of evidence to the contrary, exposing children to online predators.

Another study about the psychological negative impact of SNS use was conducted by Yen et al. (2007) and targeted a total of 2114 students (1204 males and 910 females) from 33 senior high schools in Taiwan. It aimed to study the comorbid psychiatric symptoms of Internet addiction, which was measured by a designed questionnaire that has different scales,

demonstrated that adolescents with Internet addiction had higher Attention Deficit and Hyperactivity Disorder (ADHD) symptoms, depression, social phobia, and hostility. Higher (ADHD) symptoms, depression, and hostility are associated with internet addiction in male adolescents, and only higher ADHD symptoms and depression are associated with internet addiction in female students.

Young & Rogers (1998), investigated personality traits of internet users by an exploratory survey consisting of both open-ended and closed-ended questions administered on volunteers by electronic collection showed that 259 cases of dependents were classified based upon modified Diagnostic and Statistical Manual –IV (DSM-IV) criteria for pathological gambling. Dependents ranked high in terms of self-reliance, emotional sensitivity and reactivity, vigilance, low self-disclosure, and non-conformist characteristics. This preliminary analysis discusses how such traits may act as triggers of addiction in order to fulfill an unmet psychological need through on-line stimulation.

Also, White et al. (2010) sought to predict young adults' use of SNSs and addictive tendency towards the use of SNSs from their personality characteristics and levels of self-esteem. University students (N=201), aged 17-24 years, reported their use of SNS and addictive tendencies for SNSs use, and completed the NEO Five-Factor Personality Inventory and the Coppersmith Self Esteem Inventory. Multiple regression analyses revealed that, as a group, the personality and self-esteem factors significantly predicted both level of SNSs use and addictive tendency but did not explain a large amount of variance in either outcome measure. The findings indicated that introverted and unconscientious individuals reported higher levels of both SNSs use and addictive tendencies.

Finally, Romano et al. (2013) in regard of the psychological impact of SNSs explored the immediate impact of Internet exposure on the mood and psychological states of internet addicts and low internet-users. Participants who were 60 volunteers (27 males and 33 females with a mean age of 24, were given a battery of psychological tests to explore levels of internet addiction, mood, anxiety, depression, schizotypy, and autism traits. They were then given exposure to the Internet for 15 min, and re-tested for mood and current anxiety. Internet addiction was associated with long-standing depression, impulsive nonconformity, and autism traits. High internet-users also showed a pronounced decrease in mood following Internet use

compared to the low internet-users. The immediate negative impact of exposure to the Internet on the mood of internet addicts may contribute to increased usage by those individuals attempting to reduce their low mood by re-engaging rapidly in internet use.

Internet addiction and the social isolation will be discussed in more details, as they are the focus of this study.

### **2.4.1 Internet Addiction**

The growth of Internet users has been exponential. Since 1989, the online population worldwide has grown from 500,000 to over 700 million users worldwide, with this growth has come a number of questions about the impact of Internet use. Among these is whether some individuals develop disturbed patterns of online behavior including Internet abuse. The networking accounts of the Internet addicts date to the early 1990s and within a few years began to appear in the popular press. Clinicians also reported clients with Internet-related disturbances, and some responded by instituting centers such as the Computer Addiction Service at McLean Hospital, which is a partner with Harvard University, and online support groups such as the Internet Addiction Support Group. Also, Internet abuse and other Internet-related problems have found that 5.9% to 13.0% of Internet users exhibit disturbed behavior on the Internet, and 15% of university students in the United States and Europe know someone who is addicted to the Internet. (Martin, 2005).

Beginning in 1994, psychologist Kimberly Young began to work toward professional, clinical and public support for the recognition of internet addiction disorder (IAD) and pathological computer use [PCU] as a legitimate mental disorder. More specifically, Young's goal was to have IAD included in the *Diagnostic and Statistical Manual of Mental Disorders (DSM)* as a category of mental pathology. However, the IAD designation proved to be a controversial one, and Young's efforts to gain acceptance by the American Psychiatric Association encountered significant debate. Young established the Center for On-Line Addiction (COLA) in 1995. At this same time public use of computer networks grew rapidly and there emerged much public concern about what were the most appropriate and efficient ways to engage with this new technology (Reed, 2002).

Young has gained credibility by connecting IAD and PCU to the *DSM* through building analogies first to substance dependence, and then to pathological gambling and disorders of impulse control. This association has been usefully put into clinical practice and has given form to IAD, allowed it to materialize and function as a clinical disorder (Reed, 2002).

Young have stated that Internet addiction is real. Like alcoholism, drug addiction, or compulsive gambling, it has devastating effects on the lives of addicts and their families: divorce, job loss, falling productivity at work, failure in school, and in extreme cases, criminal behavior. The problem has already reached epidemic proportions in the United States, and the number of 'netaholics' continues to grow rapidly as more households and businesses go on-line (Young, 1998).

Guran & Subramanian (2009) found that online risks such as addiction, cyber bullying and sexual solicitation are associated with negative consequences for youth. This research review suggested that some of the online risks facing youth are addiction, exposure to inappropriate material, cyber bullying and sexual solicitation. Research is only now beginning to determine which youth may be at most risk for online addiction, with regard to treating addiction, cognitively based treatment approaches have shown some success, but more research is needed.

Turel and Serenko (2012), who collected data by means of online questionnaire administered to SNSs users who were 226 students' ages ranged between 19-40 years with an average of 23 years, taking a sophomore year marketing class. Their findings supported the idea that Internet use is no different from other behaviors, and that bad internet use habits, that turn into addiction which causes unproductive and undesirable outcomes, may emerge. On the one hand, users who enjoy their experience become highly engaged with the technology, which is often viewed positively by users, technology providers and policymakers. On the other hand, when users of SNSs increase their use time, the range of functionalities they employ and their hedonic gains (enjoyment), the use of SNW becomes habitual. When the level of habitual use increases, some users may start presenting core technology addiction symptoms.

Addiction is any compulsive, habitual behavior that limits the freedom of human desire. It is caused by the attachment, or nailing, of desire to specific objects. The word behavior is

especially important in this definition, for it indicates that action is essential in addiction (May, 1988).

Although often previously associated with physiological tolerance and withdrawal effects, the term “addiction” has achieved a broader definition. “Addiction” has come to refer to a disorder in which an individual becomes intensely preoccupied with a behavior that at first provides a desired or appetitive effect. The appetitive effect generally is equated with changes in firing in the mesolimbic dopaminergic system, but there are numerous brain neurotransmission and hormonal systems involved. The addictive behavior occurs with several pattern variations, but always repeatedly, involving a great deal of time thinking about and engaging in the behavior, which operates beyond the need to remove intense anxiety common in compulsive disorders (Sussman et al. 2011).

An addiction disorder also involves loss of ability to choose freely whether to stop or continue the behavior (loss of control) and leads to experience of behavior-related adverse consequences. In other words, the person becomes unable to reliably predict when the behavior will occur, how long it will go on, when it will stop, or what other behaviors may become associated with the addictive behavior. As a consequence, other activities are given up or, if continued, are no longer experienced as being as enjoyable as they once were. Further negative consequences of the addictive behavior may include interference with performance of life roles (e.g., job, social activities, or hobbies), impairment of social relationships, criminal activity and legal problems, involvement in dangerous situations, physical injury and impairment, financial loss, or emotional trauma(Sussman et al. 2011).

The short definition of Internet addiction (IA) is the lack of ability to control Internet use and involvement leading to progressive loss of control. With negative social effects, Internet addicts use the Web as a social and communication tool, once they experience higher levels of pleasure and satisfaction when online than in real life (Abreu et al., 2008). Also, problematic, pathological, or addictive Internet use can be defined as “use of the Internet that creates psychological, social, school and/or work difficulties in a person’s life”. Problematic Internet use (PIU) affects a large number of people with incidence rates ranging between 0.7% and 18.3% (Spada et al. 2013).

Symptoms of internet addiction disorder (IAD) include: a need for more time online to achieve satisfaction; obsessive thinking about being online; neglect of work; disruption of familial relationships; financial hardship due to Internet activity, among other indications (Young, 1998). In the workplace, Internet addictive behavior symptoms include a decline in work performance and a withdrawal from coworkers, leading to reduced job satisfaction and decreased efficiency (Byun et. al, 2009).

Further, internet addiction generally refers to “maladaptive cognitions and behaviors involving Internet use”. It is a bi-dimensional construct comprised of two elements: cognitive preoccupation and uncontrolled Internet use. Cognitive preoccupation is a psychological disruption wherein a person becomes fixed to some aspect of Internet use. Preoccupation exists as persistent or even obsessive thoughts and feelings of anxiety or discomfort while away from the Internet. For people with preoccupation, the Internet is seen as an irresistible medium that serves critical functions in their lives. These cognitive distortions may also accompany anticipatory thoughts about returning to the internet. Uncontrolled internet use, described as “an inability to control one’s online activity along with feelings of guilt about the lack of control” (Tokunaga, 2012).

Finally, a reading of the literature revealed various names for Internet addiction, including cyberspace addiction, Internet addiction disorder, online addiction, Net addiction, Internet addicted disorder, pathological Internet use, high Internet dependency, and others. Among these terms, Internet addiction is most popular. However, while Internet addiction has received attention from studies in various fields, no clear definition currently exists. Therefore, they define Internet addiction following Beard’s holistic approach wherein “an individual is addicted when an individual’s psychological state, which includes both mental and emotional states, as well as their scholastic, occupational and social interactions, is impaired by the overuse of the medium” (Byun et. al, 2009).

### **Symptoms of Internet Addiction:**

In a study about Internet addiction, Starcevic (2012) summarized the behaviors and the symptoms associated with behavioral addiction as follows:

1. Salience of the activity, which refers to preoccupation with it because of its pleasurable or mood-altering effects so that the person craves for it, experiences it as central to their lives and neglects other important everyday activities.
2. Loss of control over the activity, such that the person finds it difficult to stop it despite an awareness that it is or that it might be detrimental and despite their willingness to cease the activity.
3. Tolerance, which is a need to spend more time performing the activity to achieve the same pleasurable or mood-altering effect as when the activity was performed initially.
4. Withdrawal manifestations, which refers to the occurrence of adverse mood states and behaviors (e.g. irritability and agitation) and perhaps physical symptoms, when it is not possible to continue with the activity.
5. Negative consequences, such that activity engagement leads to interference with occupational, academic, interpersonal and/or social functioning or that it has other detrimental effects (e.g. financial difficulties, sleep disturbance, significant weight change or various physical problems) (Starcevic, 2012).Table (2.1): showed the characteristics of internet addicts according to Ma (2011):

**Table (2.1): the characteristics of internet addicts**

Characteristics	Typical Behaviors
(1) Excessive use of Internet	Spent more than 40 hours online per week.
(2) Obsessive thought about the Internet	Unable to refrain from thinking about the internet.
(3) Pleasant feeling in Internet use	Internet exposures are pleasurable, entertaining, interactive, and relaxed.
(4) Tolerance	The need to use the Internet with increased amount of time in order to achieve satisfaction.
(5) Diminished impulse control	Reduced emotional self-regulation to control one's impulses to reach a goal; unable to stop using internet.

(6) Withdrawal	Unpleasant feeling when the Internet activity is being stopped or cut down.
(7) Impact on daily life	Risking the loss of a significant relationship, educational or career opportunity because of the Internet; lying to others, and escaping from problems.
(8) Parental and Family Interactions	Spent less time with family members, the tension with parents is usually high.
(9) Friendship and romantic relationships	Less friends and romantic relationships.
(10) Health Problems	Less willing to seek medical treatment and less motivated to develop stress-relieving practices.
(11) Academic performance	Usually at lower level.
(12) Lonely Character	Lonely people used the Internet when they felt lonely, depressed or anxious.

**(Ma, 2011)**

Though, some authors have challenged the notion that problematic technology use should constitute a mental disorder in its own right (Blaszczynski, 2008). In another publication, King disagreed with the classification of the internet disorder, explaining that the proposed internet use disorder classification in its current format is not sensitive to this delineation, as it contains nine criteria that refer to both activities. Specifically, the criteria refer to: (1) preoccupation with Internet gaming; (2) withdrawal symptoms when Internet access is taken away; (3) tolerance: the need to spend increasing amounts of time engaged in Internet gaming; (4) unsuccessful attempts to control Internet gaming use; (5) continued excessive Internet use despite knowledge of negative psychosocial problems; (6) loss of interests, previous hobbies, and entertainment as a result of, and with the exception of Internet gaming use; (7) use of Internet gaming to escape or relieve a dysphoric mood; (8) has deceived family members, therapists, or others regarding the amount of Internet gaming; and (9) has jeopardized or lost a significant relationship, job, or educational or career opportunity because of Internet gaming



use. As can be observed, seven of the nine criteria refer to Internet gaming (video gaming), whereas the remaining criteria refer to general Internet use. Although this problem of conceptualization may be considered on first impression as relatively minor, it may have significant consequences in regard to clinical formulation and treatment. (King et al., 2013).

In a study for Young (1999), she summarized the following consequences of social networking addiction which caused marked:

- a. Familial Problems.
- b. Academic Problems.
- c. Occupational Problems.

Kuss, & Griffiths in a literature review study (2011), intended to provide empirical and conceptual insight into the emerging phenomenon of addiction to SNSs by: (1) outlining SNSs usage patterns, (2) examining motivations for SNSs usage, (3) examining personalities of SNSs users, (4) examining negative consequences of SNSs usage, (5) exploring potential SNS addiction, and (6) exploring SNSs addiction specificity and comorbidity. Despite that some of the study findings indicated that SNSs are predominantly used for social purposes, mostly related to the maintenance of established offline networks. Moreover, extraverts appear to use social networking sites for social enhancement, whereas introverts use it for social compensation, each of which appears to be related to greater usage, as does low conscientiousness and high narcissism. There was on the contrary a negative correlation of SNSs usage which included the decrease in real life social community participation and academic achievement, as well as relationship problems, each of which may be indicative of potential addiction.

Addiction attacks every part of what Freud called our “Mental apparatus”. Subjectively, however, the attacks, seems focused on two primary areas: the will, which is our capacity to choose and direct our behavior, and self esteem, which the respect and value with which we review ourselves. Addiction splits the will in two, one part desiring freedom and the other desiring only to continue the addictive behavior. The greatest damage to self-esteem, however, comes from repeated failures at trying to change the addictive behavior (May, 1988).

For example, a cross-sectional study conducted by Fiovanti et al. (2012) which included 257 adolescents, found that the mediating role of the perceived relevance of some internet features in the relationship between self-esteem and preference for online social interaction has never been investigated. Through, using mediation analyses, they found evidence among females for the mediating role of preference online social interaction in the relationship between self-esteem and internet addiction, and the subjective relevance of some internet features in the association between self-esteem and of preference online social interaction, while no significant effects were found for males.

Furthermore, Aydin et al. (2011) study sample consisted of 324 adolescents from Trazbon, Turkey, and completed self reported questionnaires that were IAT and Coopersmith Self-Esteem Scale and their results showed that general self-esteem, social esteem, family self-esteem and total self-esteem were significantly and negatively correlated with internet addiction. Furthermore, social self-esteem and family-home self-esteem were found to be significant predictors of Internet addiction. Internet addiction was significantly and negatively correlated with general self-esteem ( $r=-.29, p<.01$ ), social self-esteem ( $r=-.24, p<.01$ ), home-family self-esteem ( $r=-.23, p<.01$ ) and total self-esteem ( $r=-.31, p<.01$ ). School-academic self-esteem was not found as correlated with internet addiction ( $r=.01$ ). The findings indicated the adolescents' who score lower on general self-esteem, social self-esteem and school-academic self-esteem and total self-esteem had higher internet addiction scores. In other words, social self-esteem and home-family self-esteem were found to be significant predictors of internet addiction among adolescents.

Tsitika et al. (2011) mentioned in their study that internet addiction (IA) is associated with adverse psychosocial development and mental disorders. The study aims were to evaluate the psychosocial profiles and psychiatric comorbidities associated with IA among adolescents. A case-control study was conducted among 129 adolescents in the outpatient setting of the Adolescent Health Unit of the Second University Department of Pediatrics in Athens, Greece. This study assessed the association between personal, family, and academic characteristics, as well as the presence of comorbid mental health conditions, and IA among adolescents. The main study findings indicated that IA among adolescents was associated with dysfunctional and/or problematic family relationships. In addition, adolescents with IA were more likely to

have poor academic performance, limited extracurricular activities, and engagement in high-risk behaviors. Finally, IA among adolescents was associated with the presentation of emotional problems and concomitant psychiatric conditions, including depression. The striking majority (95.4%) of adolescents with IA were male. The elevated occurrence of IA among male adolescents has been also reported in other cultural contexts, and may be potentially attributed to both the differential frequency and nature of Internet use observed among this group. The case group consisted of 86 adolescents with IA as evaluated following psychiatric interview with two independent examiners.

The control group consisted of 43 adolescents without IA, frequency matched for age and gender with case group participants. The study findings indicated that adolescents with IA were significantly more likely to have divorced parents ( $p = 0.012$ ) and/or dysfunctional familial relationships ( $p < 0.0001$ ). The proportion of adolescents with poor academic performance ( $p < 0.0001$ ) and unexcused school absences ( $p = 0.004$ ) was greater among those with IA. Moreover, approximately two thirds of the adolescents with IA were engaged in high-risk behaviors ( $p < 0.0001$ ). Finally, adolescents with IA were 3.89 times more likely to present with comorbid psychiatric conditions (CI 95%: 1.19–12.70), including depression (10.5 vs. 0%;  $p = 0.022$ ). Adolescent IA is associated with deterred familial functions, poor academic performance, engagement in high-risk behaviors, and an augmented likelihood for depression (Tsitika et al. 2011).

Also, Tonini et al. (2011) who assessed 33 subjects asked for a clinical consultation for problematic internet use in a hospital-based psychiatric service found that IAD patients showed significantly higher scores on the IAT compared to subjects of the control group. Only item 7 (how often do you check your e-mail before something else that you need to do?) showed a significant inverse trend. Anxiety and depression correlated with number of weekly hours spent online in IAD patients. So findings suggest a misuse of internet, characterized by many hours spent online avoiding interpersonal relationships with real and known people, could be an important criterion in the clinical interview in order to diagnose the IAD. The association between the lost interest in communicating with real people and psychological symptoms such as anxiety and depression could be relevant to detect IAD patients who are 21. In-consistent with other studies, a negative correlation between total score of IAT and age was

found in this study, suggesting there are many young people among excessive internet users. Significant differences were found on many symptoms of SCL-90-R among minimal, moderate and excessive internet users. Also, there were no differences between IAD patients  $\geq$  and  $<45$  h of use, which suggest that the misuse of the internet, which does not encourage or prevent establishing and maintain relationships with real and known persons, could be an important criterion in diagnosing IAD.

Also, Kittinger et al. (2012), who assessed a range of variables related to Facebook use, and sought to determine how the use of Facebook relates to problematic internet use. Undergraduate participants (N=281, 72 percent women) completed self-report measures, including the internet addiction test, via an online interface. The results of the study suggest that a sizable minority of students experience problems related to internet use and that the use of Facebook may contribute to the severity of symptoms associated with internet addiction. The study characterized college-student Facebook use and examined potential negative consequences. Consistent with previous studies, a sizable minority of participants reported occasional or frequent problems in life because of their use of the internet. The study also suggested that students who scored above the IAT cut-off score for problematic internet use were more likely to report problems related to their Facebook use, with items related to time management emerging as the most frequently related to problems. In terms of predicting IAT scores, the number of times a participant logged onto Facebook was more predictive than the total amount of time spent using the application. This finding suggests that various aspects of how Facebook is used are more important predictors of problems than the total amount of time it is used. It is also notable that Facebook use added variance to the prediction IAT scores after accounting for time spend online, which suggested that Facebook use is not simply a proxy for time online but instead a unique indicator.

#### **2.4.2 Social isolation and loneliness**

Social Isolation is a state in which the individual lacks a sense of belonging socially, lacks engagement with others, has a minimal number of social contacts and they are deficient in fulfilling and quality relationships (Nicholson, 2013).

Loneliness may be defined as an emotional response to a discrepancy between desired and achieved levels of social contact (Russell, 1996). It can occur when a discrepancy exists between the social relationships one wishes to have and those that one perceives they have. As such, loneliness signals that personal relationships are in some way inadequate, and it is therefore a key marker of difficulties in establishing and maintaining satisfying relationships with others (Heinrich & Gullone 2006). Loneliness is not just a symptom of other problems such as depression, but also highlights the fundamental motivation of the human need to belong, both of which are aspects of social and emotional wellbeing (Australian Institute of Health and Welfare, 2012).

Loneliness is a subjective evaluation of inadequacy or deficiency in one's social network. This inadequacy is experienced when people feel there are too few members in their social network or the quality of their relationships is unsatisfactory. Because loneliness is often triggered by unmet companionate needs, some believe lonely people are motivated to seek social interactions despite the anxiety that may be associated with in-person communication. The need to belong is a powerful and pervasive desire in people's lives, which influences cognitions, emotions, and social behaviors. The internet can be used to seek social interactions and, in turn, create satisfying interpersonal relationships necessary to relieve lonely feelings (Tokunaga, 2012). Satisfying social relationships are important for social and emotional wellbeing, and loneliness may be a marker of social relationship deficits (Junttila & Vauras 2009).

Furthermore, loneliness is defined as perceived deficiencies in one's ongoing relationships in both number and quality. Such deficiencies occur when "a person's network of relationships is either smaller or less satisfying than the person desires". It was found a significant relationship between loneliness and deficits in social interaction, especially when talking to others. Lonely people tend to talk less, have lower levels of involvement and attention, and inappropriate levels of self disclosure. In addition, lonely people are more likely to be relationally incompetent, and as a result, they spend less time on social activities but more time being alone. Loneliness maybe related to deviant drug and alcohol use, overeating, and even suicide. It has also been found to be significantly associated with Internet addiction and

found that lonely people with poorer social skills tend to have more frequent use of the Internet (Bian & Leung, 2015).

Lonely people generally feel less socially competent than other people in face-to-face situations and more socially isolated. Second, lonely people are socially passive. Third, in face-to-face settings, lonely people rarely actively influence the issues or the course of an interaction. Finally, lonely individuals have difficulties with self-disclosure in face-to-face situations. In comparison with adolescents who are not, lonely adolescents appreciated the controllability of internet communication more and also perceived it to have more reciprocity, more breadth, and more depth than face-to-face communication (Peter & Valkenburg, 2006).

In a study for Vida Fallahi (2011), who used the UCLA loneliness scale and Young Scale for internet addiction to gather data from a random sample of 500 students who were selected from two colleges, results indicated that 13.2% of student's were addicted to the net and more result showed significant difference between users groups. Addicted group were more alone than other groups. The mean of social isolation for group addicted users was the highest (53.36). The results represent that there was a meaningful difference between group 1 and 3 (normal users and addicted users of the internet) and between groups 2 and 3 (at risk users and addicted users of the internet) at the significant level of  $p < 0.001$ .

In the process of developing a self-image, individuals develop feelings about who they think they are and tend to look for confirmation of these feelings from other people. That confirmation, when they get it, makes them feel that they are entitled to have an image of themselves. Self-esteem is that feeling which individuals get when what they do matches their self-image and when that particular image approximates an idealized version of what they wish they were like. Maintenance of self esteem is complex. Many times the attempts at maintaining positive feelings about themselves are successful. Sometimes they try to hide parts of themselves from others, fearing that if they knew these parts of them, they might reject us (Myers, 1976).

Therefore, another study conducted by Esen et al. (2012), to examine the relationship between university students' internet use and loneliness and social self efficacy. The sample of the study consisted of 507 university students to determine students' degree of internet use so

“internet addiction scale” was used, and to determine the degree of loneliness so “UCLA loneliness scale” was used. The result of the analysis suggested that there was a meaningful relationship between internet use and loneliness score, whereas no relationship was observed with social self-efficacy scores. On the other hand, it has been found that students with a higher score on internet use have a higher degree of loneliness when compared to students who had moderate and low degree of internet use. Also, the study found that while loneliness increases with the degree of internet use, social self-efficacy was not affected. In order to identify the source for the difference in students’ internet use and their average on loneliness the Turkey HSD test was conducted. Findings suggest that students with high internet use levels had a higher degree of loneliness when compared to the ones with low (I-J=4,3114;p.000) and average (I-J=4.5461;p.000) internet use.

#### **2.5 Section IV: Studies that assessed the relationship between internet use including social networking and internet addiction and social isolation.**

A study by Jahan & Ahmed (2012) reported the results of perceptions of academic use of social networking sites (SNSs) by students of the University of Dhaka, Bangladesh. A survey questionnaire was designed and distributed to gather data for this study. The results indicated a positive attitude towards academic use of SNSs by the students. Although there are some differences in terms of students’ opinions on the academic applications of SNSs, these differences were largely due to the fact that the use of these sites in academic contexts was not well-defined. The higher academic institutions need to devise appropriate policies and strategies on how they can utilize social networking sites to support education and learning beyond the classroom. This study found that those students who use the Internet are also likely to use social network sites. Out of 224 Dhaka University students responded to the survey, 218 (97.32 percent) students use Internet and 209 (95.87 percent) of them use SNSs. The results indicated that students use social networks mostly to communicate with friends and classmates. They are also keen on using SNSs in academic related work. The capacity and features offered by these sites also support students in their education. In general, SNSs provide opportunities for students to become independent managers of their own learning by seeking, exploring and testing ideas with others within their own social network beyond the

constraints of a classroom. This study found that those students who use the Internet are also likely to use social network sites (Jahan & Ahmad, 2012).

Peter & Valkenburg (2011) drew on a survey among 687 adolescents, this study investigated to what extent their perceptions of internet communication differ and what background variables (i.e. age, gender, social anxiety, loneliness, need for affiliation) underlie these differences. The analysis focused on how adolescents perceive the controllability, reciprocity, breadth and depth of internet communication in comparison with face-to-face communication. Younger, socially anxious and lonely adolescents more strongly value the controllability of internet communication and perceive it as broader, deeper and more reciprocal than older, non-socially anxious and non-lonely adolescent respondents. Boys perceive internet communication as more reciprocal than girls do. The greater the adolescents' need for affiliation, the more often they regard internet communication as deeper than face-to-face communication. The findings demonstrated that internet communication may be an important means for socially anxious and lonely adolescents to overcome their inhibitions of face-to-face settings. In internet conversations, socially anxious and lonely adolescents appear to feel less distressed and less passive, as well as being able to address more diverse and more intimate topics than in face-to-face conversations (Peter & Valkenburg, 2006).

Leung and Lee (2011), conducted a study to examine how demographics, addiction symptoms, information literacy, parenting styles and internet activities can predict 'internet risks'. Data were gathered from a probability sample of 718 adolescents and teenagers, aged 9–19 in Hong Kong, using face-to-face interviews. Results show that adolescents who are often targets of harassment tend to be older boys with a high family income. They are targets probably because they spend a lot of time on social networking sites (SNSs) and prefer the online setting. Adolescents who encounter a lot of unwelcome solicitation of personal or private information online tend to be older girls. In information literacy, they are generally very competent with publishing tools but are not structurally literate, especially in understanding how information is socially situated and produced. This study set out to empirically examine the inter-relationships among adolescents' encountered internet risks, internet addiction, information literacy, parenting style, and level of internet activities. According to the theory



presented at the outset, children and adolescents who suffer from internet addiction are more likely to encounter various forms of internet risks than healthier individuals.

The results supported the proposition that internet addiction symptoms are key indicators for internet risks, especially for being the target of harassment. This may be because internet addicts have a strong preference for the online world and perceive that they are more comfortable with computers than with people, more confident socializing online than offline, feel safer, and are treated better in the online environment. With such perceptions, adolescents increase their chances of being harassment targets. In addition to preferring the online environment, internet addicts often lose track of time spent online and had difficulties themselves in controlling their amount of use, which may result in negative consequences such as missing class, work, and social obligations. All these symptoms are important signs that children and adolescents may have a higher probability of experiencing harassment or cyber-bullying online (Leung & Lee, 2011).

A study by Randler et al. (2014) sought to investigate whether Internet addiction (IA) is associated with age, gender, BIG-5 personality, and chronotype in a Turkish university student sample. Six hundred and sixteen students filled out a set of questionnaires. Evening types and males had higher IA scores than others. Furthermore, agreeable and conscientious students reported lower IA. No consistent relationship was observed between students' IA scores and openness to experience, extraversion, and neuroticism. They concluded that evening types may be more prone to IA than morning-oriented persons because eveningness is related to personality styles that foster Internet addiction.

Another study aimed to compare risk factors for problematic Internet use (PIU) among Japanese and Chinese university students. A sample of 267 Japanese and 236 Chinese first year university students responded to questionnaires on the severity of PIU, depression, self-image/image of others, and perceived parental child-rearing styles. The results indicated that Japanese participants were more likely to demonstrate PIU than their Chinese counterparts. Compared to Chinese students, Japanese students reported more negative self-image, lower parental care, greater over-control, and higher depression scores. The PIU group had a higher

depression score compared to the normal Internet use group. Compared with the non-PIU group, the PIU group consisted of more male and Japanese participants. Further, they tended to have more negative self-images, saw their mothers to be less caring, and perceived their mothers and fathers as more overcontrolling. PIU is strongly associated with depression, negative self-image, and parental relations. Finally, mediation analysis revealed that such national differences in PIU between Japanese and Chinese were clarified in depression and perceived mother's care. This cross-national study indicated that depression and perceived mother's care were both significant risk factors that were associated with the national difference in PIU between Japanese and Chinese participants (Yang et al. 2013).

Further, a study about the internet addiction was conducted in Malaysia examined the level of Internet addiction amongst Malaysian youth. The purpose of that study is to identify the use of Internet among Malaysian youth and the relation of excessive use to the addictive level. The findings of this study indicate that the youth are indeed susceptible to Internet addiction. A total of 203 participants took part in the survey; general description of the participants is follows: The participants were categorized into four segments based on the hours spent on the Internet usage: 1) normal user; 2) moderate user; 3) at-risk user; and 4) extreme user. A large number of participants (64%) consider themselves as Internet addicts whereas the opposite (36%) did not consider that they were addicted. Their findings in relation to Internet addiction among Malaysian youth show that they are at high risk of Internet addiction. Those in the age range of 18 - 25 are found to be susceptible to Internet addiction, especially those going to college or university. Addictive behavior however may not be all that harmful and is subjected to the individual's intentions, actions and self-discipline, which determine the real harm to the individual and the society (Kapahi et al, 2013).

According to this study, the factors affecting internet addiction were found as follows:

1. Task-relevant Factor: There were many reasons to go online, including the distant learning, working online and so forth. 83% of the participants go online for task-related purposes; whereas the remaining 17% of the participants do not use the internet as a tool for study or work purposes.

2. Ease of Access: the ease of access is an important factor to determine how long the user stay connected to the Internet.
3. Access location appropriate for the internet users.
4. Motive: the motive to stay Online often followed by reasoning.
5. Impulsive surfing (Kapahi et al, 2013).

While the impact of Internet addiction was found to be as follows:

- 1) Insomnia: Refers to those who surf the Internet until late at night and have sleeping disorders. 69% participants did not suffer from insomnia, whereas (31%) were found to suffer from the late-night log-ins and problems related to sleep.
- 2) Physical Changes: Refers to immediate impact on the physical changes such as weight loss, backaches or headaches. 57% participants were found to experience. some form of physical changes whereas 43% had observed no physical changes.
- 3) Inferiority: Refers to a feeling of low esteem and unimportant in social relationships. 61% participants did not encounter difficulty in socializing with other people whereas 39% encountered some difficulty in socializing with other people.
- 4) Loss of concentration: Refers to immediate impact on daily activities at work or at school or otherwise. 52% participants maintained regular level of concentration while studying or at work whereas the 48% found it difficult to stay focused, resulting in drop of concentration.
- 5) Loss of productivity: The direct impact on outcome at work or schools due to long surfing habits. 59% of the participants suffered from loss of performance whereas 41% maintained regular performance and productivity.
- 6) Withdrawal Syndrome: When a person stops using the Internet, they experience unpleasant feelings or physical effects. It was found that a large number of the participants who suffered any of the above symptoms were also susceptible to withdrawal syndrome and felt uneasy and missing something if they did not access the Internet a few times daily (Kapahi et al, 2013).

Another study about extensive internet involvement discussed the concept of “behavioral addictions”, based on biological mechanisms such as the reward systems of the brain, identified 1,147 participants from the Swedish survey on internet use. The prevalence of excessive use parallels other similar countries. Respondents in this study showed that the

(mean value) 9.8 hours per week online at home, only 5 percent spend more than 30 hours per week. There are both positive and negative social effects at hand. Many respondents have more social contacts due to the use of Internet, but there is a decline in face-to-face contacts. About 40% of the respondents indicate some experience of at least one problem related to Internet use, but only 1.8% marked the presence of all problems addressed like less contact with friends & less contact with family members. Most significant predictors for problem indicators, except for age, relate to “time” and time consuming activities such as gaming, other activities online or computer skills (Bergmark & Findahl, 2011).

Focusing on female users, one study was conducted to investigate the internet addiction and its psychological-social effects among female internet users in Isfahan City, in the year 2006. The statistical population of this study was the whole population of the female internet users of the cities of Isfahan and Shaheenshar. 115 people (54 single females and 61 married females) who were the internet users of Isfahan City comprised the sample of this study. They were selected using the multi strata cluster sampling method. The instrument of this investigation was a researcher-made questionnaire which contained 23 items measuring addiction to the Internet. The analysis to the question, how is addiction to the internet among the female internet users, showed that the addiction to the internet is more than the mean level ( $X=3.12$ ), which means that 73.9% of the internet users in this study were addicted to the internet and 26.1% of them weren't. While, the analysis of the answer to the question how the social effects of using the internet among the internet addicted females showed that the mean score of the social effect of using the internet on female users addicted to the internet is more than the mean level( $x=4-19$ ). Female users with addiction to the internet prefer working on the internet to being with their family, walking around with others and visiting relatives and friends (Iravani, 2008).

The next chapter discusses the conceptual framework of the study.

## **2.6 Summary**

1. There are negative and positive impacts of Social networking on the lives of humans.
2. The positive impacts of social networking could be observed through the clinical and academic field and how it eases the procedures.
3. The negative impact of social networking could overweight the positive impact if internet and SNS were used excessively.
4. Internet addiction is widely spread among youth and is connected to different variables.
5. Social networking correlated to social isolation and loneliness and vice-versa. However cause-effect relationship might be difficult to generalize.

# **Chapter III**

## **Conceptual Framework**

## Chapter III: Conceptual Framework

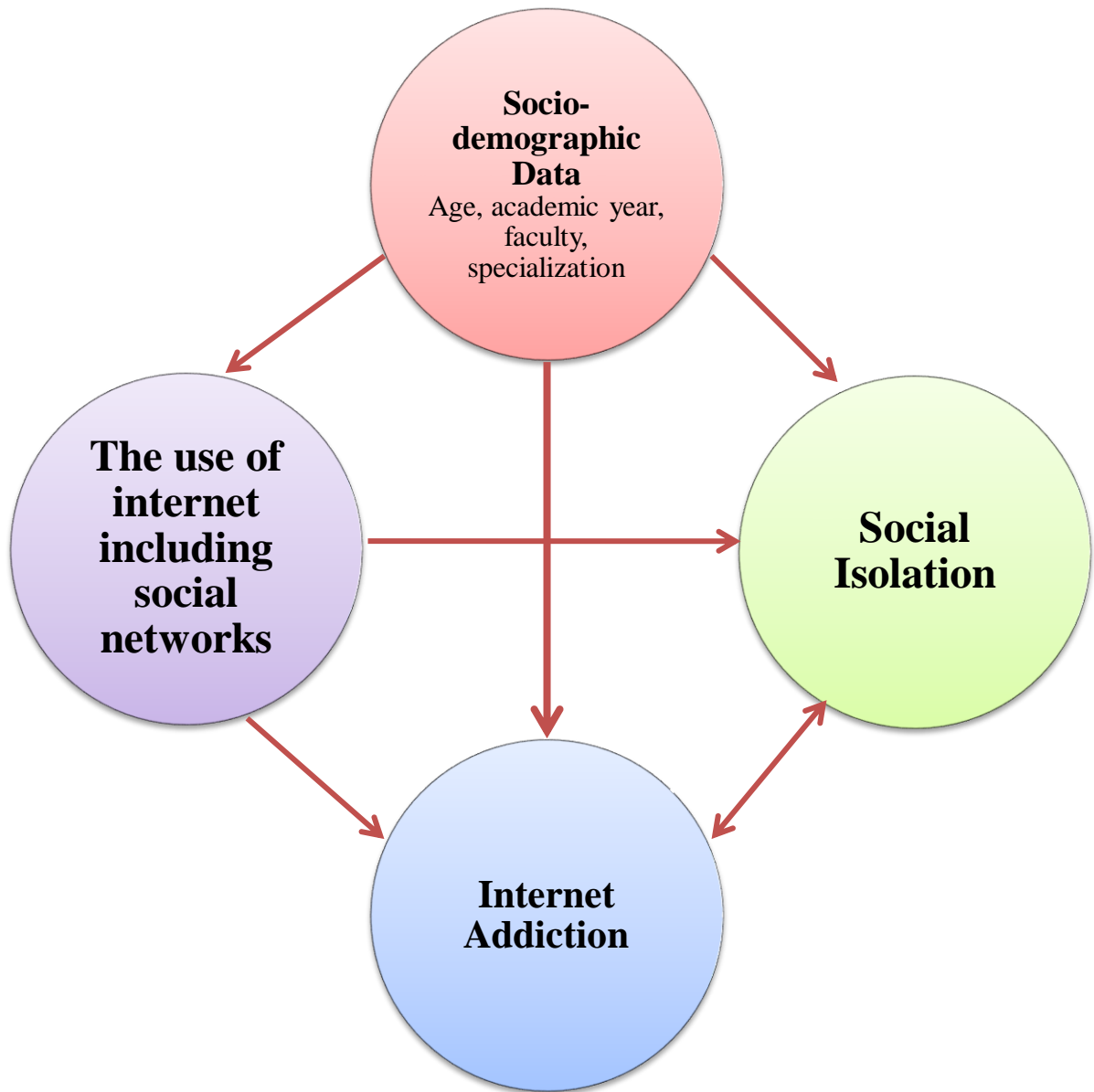
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### 3.1 Introduction

The definitions of conceptual and theoretical frameworks are unclear and sometimes intertwined. (Knobloch, 2004). Camp (2001) defined the conceptual framework as a structure of what has been learned to best explain the natural progression of a phenomenon that is being studied. While Jabareen (2009), defines the *conceptual framework* as a network, or “a plane”, of interlinked concepts that together provide a comprehensive understanding of a phenomenon or phenomena. The concepts that constitute a conceptual framework support one another, articulate their respective phenomena, and establish a framework-specific philosophy. Conceptual frameworks possess ontological, epistemological, and methodological assumptions, and each concept within a conceptual framework plays an ontological or epistemological role. The ontological assumptions relate to knowledge of the “way things are,” “real” existence, and “real” action. The epistemological assumptions relate to “how things really are” and “how things really work” in assumed reality. The methodological assumptions relate to the process of building the conceptual framework and assessing what it can tell us about the “real” world. (Guba & Lincoln, 1994).

The conceptual framework of this current study was based on previous studies, conceptual analyses, and theories that exist in the literature. Literature helps researches to frame the problem, support the problem, synthesize the knowledge base, and creating a need for the study. (Knobloch, 2004).

The conceptual framework of this study included internet use, and the socio-demographic data as independent variable, and internet addiction and social isolation as dependent variables as seen in figure (3.1). Each concept will be discussed in more details below.



**Figure (3.1): Framework of the current study including dependent and independent variables.**



## **3.2 Independent Variables**

### **3.2.1 Internet use including social networking**

As mentioned in previous chapter, internet use and social networking can be defined as: web-based services that allow individuals to construct a public or semi-public profile within a bounded system, articulate a list of other users with whom they share a connection, and view and traverse their list of connections and those made by others within the system. The nature and nomenclature of these connections may vary from site to site (Boyd & Ellison 2007).

The concept of internet use was measured through one question that asked about the number of hours spent daily on internet including social networks, as showed in the questionnaire, (question number 7) (see appendix 1).

This study assumed that students who used internet for 5 hours or less for educational and other social purposes were normal internet users and students who spent more than 5 hours were internet over users.

### **3.2.2 Socio-demographic variables:**

In the current study, independent variables included socio-demographic data (such as gender, age, faculty, specialization, academic year, and place of residence).

The variables were presented in section (1) of the questionnaires (question 1-6) and they were:

- 1) Sex: referred by the American Psychological Association (2011) to a person's biological status and is typically categorized as male, female, or intersex (i.e., atypical combination of features that usually distinguish male or female). This variable was assessed in section (1) - question (1) "What is your sex?" (1) male or (2) female.
- 2) Age: is defined as the completed age in years of the enumerated person, which is the difference between the date of birth and the date of interview. The exact age is the time elapsed between the day of birth and a given day, including parts of a year (*Palestinian Central Bureau of Statistics. 2004*). In the current study, the students were classified

into these five age groups (18, 19, 20, 21 & 22) and section (1) - question number (2) “What is your age?” assessed it.

- 3) Faculty: Is defined by Oxford Dictionaries as a group of university departments concerned with a major division of knowledge (i.e. the Faculty of Arts). In the current study the faculty was assessed in section (1) - question (3) “What faculty do you attend?”
  - a. Faculty of Arts
  - b. Faculties of the Health Campus.
  
- 4) Specialization: Is defined by Oxford Dictionary as Concentrate on and become expert in a particular subject or skill. In the current study the students’ specialization was assessed in section (1) - question (4): “What is your specialization?”
  
- 5) Academic year: According to the Oxford Dictionary, it is defined as the period of the year during which students attend school or university, usually reckoned from the beginning of the autumn term to the end of the summer term. Section (1) - question (5): assessed it as the following:

What’s your academic year?

  - a. First Year
  - b. Second Year
  - c. Third Year
  - d. Fourth Year
  - e. Fifth Year
  - f. Sixth Year
  
- 6) Place of residence: it refers to the name of the residence in which the person spends most of his time during the year (*Palestinian Central Bureau of Statistics. 2012*). In the current study, section (1) - question number (6) “In which city do you live?” assessed it.

### 3.3 Dependent Variable

#### 3.3.1 Internet Addiction

Internet addiction is characterized by excessive or poorly controlled preoccupations, urges or behaviors regarding computer use and internet access that lead to impairment or distress. (Shaw & Black, 2008) Symptoms of Internet addiction disorder (IAD) include: a need for more time online to achieve satisfaction; obsessive thinking about being online; neglect of work; disruption of familial relationships, financial hardship due to internet activity (Young, 1998).

In the current study, internet addiction was assessed using the Internet Addiction Test -(IAT): which is a 20-item, self-report questionnaire developed the year 1998 by Dr. Kimberly Young to measures mild, moderate, and severe levels of Internet addiction (Young, 1998). In section (2) of the questionnaire, the IAD was assessed in section 2 -questions (1-20). IAT scores were classified into 4 categories as follows (see appendix 1):

<b>Range</b>	<b>Score</b>
Below Average	0-19
Average	20-49
Occasional or frequent problem	50-79
Significant problem	80-100

#### 3.3.2 Social Isolation

Social isolation is a state in which the individual lacks a sense of belonging socially, lacks engagement with others, has a minimal number of social contacts and they are deficient in fulfilling and quality relationships (Nicholson, 2013).

Revised UCLA Loneliness Scale - social isolation is a 20-item, designed to measure ones

feeling of loneliness and social isolation (Russel, 1978). In this study, section (3) of the questionnaire assessed the social isolation and loneliness using this scale. The total result was scored according to the regular scale. The scores were classified into 4 categories as the following(see appendix 1):

<b>Range</b>	<b>Score</b>
Below average	0-14
Average loneliness	15-20
Frequent loneliness	21-30
Severe loneliness	31-40

The next chapter will discuss the methodology of the current study.

### **3.4 Summary**

- This chapter presented the conceptual framework, which was developed, based on literature review.
- It consisted of two major concepts: the dependent variables including the use of internet including social networking, socio-demographic variables such as (gender, age, faculty, specialization, academic year, and place of residence) and social isolation. While, the independent variable was internet addiction.

# **Chapter IV**

## **Methodology**

## Chapter IV

### Methodology of the Study

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#### 4.1 Introduction

This chapter discussed the design of this study, the setting, the study population and the sample with its inclusion and exclusion criteria. Also, the instruments used in the data collection process, statistical analysis, instrument validity and reliability, and the ethical considerations of this study were discussed.

#### 4.2 Study Design

There are different types and scientific methods of researches that vary in their purpose, approach and process. In this study, the quantitative cross sectional descriptive research was utilized.

Quantitative research is an approach involving the collection and analysis of numerical data in order to describe phenomena. It is referred to this approach as the traditional or positivist approach. It is commonly used to investigate relationships between two or more variables, and explore cause-and-effect relationships of phenomena of interest. Moreover, a quantitative approach involves clearly stated questions, rationally conceived hypotheses, fully developed research procedures, controlling extraneous factors that might interfere with the data collected, using relatively large samples of participants in order to provide meaningful data, and employing data analysis techniques based upon statistical procedures (Boumgranter & Hensly, 2006).

The main advantages of quantitative measurement according to Barker et al. are as follow:

- Using numbers enables greater precision in measurement. There is a well-developed theory of reliability and validity to assess measurement errors; this enables researchers to know how much confidence to place in their measures.
- There are well-established statistical methods for analyzing the data. The data can be easily summarized, which facilitates communication of the findings.

- Quantitative measurements facilitate comparison. They allowed researchers to get the reactions of many people to specific stimuli and to compare responses across individuals.
- Quantitative methods fit in well with hypothetic-deductive approaches. Hypothesized relationships between variables can be specified using a mathematical model, and the methods of statistical inference can be used to see how well the data fit the predictions.
- Sampling theory can be used to estimate how well the findings generalize beyond the sample in the study to the wider population from which the sample was drawn (Barker et al., 2002).

A descriptive study is undertaken in order to ascertain and be able to describe the characteristic of the variables of interest in a situation. The goal of a descriptive study, hence, is to offer a profile or describe relevant aspect of the phenomena of interest to the researcher from different perspectives (Sekran, 2000). Descriptive research attempts to gather information from groups of subjects in order to describe systematically, factually, and accurately specific characteristics of interest or conditions that presently exist. Quite simply, a descriptive study first determines and then describes the way things are (Hensley, 2006).

There are different types of descriptive studies, and in the current study, a cross sectional design was utilized (Bowling, 2002). Cross sectional study is a study that can be done in which data are gathered just once, perhaps over a period of days or weeks or months, in order to answer a research question (Sekran, 2000). The cross-sectional survey method also enabled the answers to secondary questions to be estimated for the population and certain types of hypotheses to be tested (Bowling, 2002). Also, a cross-sectional design is cheap, quick and ethically safe. (Cohen et al., 2007).

But, cross-sectional research cannot always answer questions that longitudinal research answers (Hensley, 2006). This type of design may have limitations in the generalization of the results to a wider population since it measures both the prevalence of the outcomes and the determinants in a population at a point in time or over a short period of time.



### **4.3 Setting of the study**

The study was conducted at Al-Quds University campus in Abu Dies including - Health Complex Faculties and Arts Faculty.

### **4.4 Study Population**

The target population of this study included the undergraduate students studying at the Faculty of Arts including all the specializations (English, Arabic, Social work, Political Science, Fine arts, Physical education, Media and TV, History, Philosophy, Geographic and Urban studies, Musicology, Applied sociology and developmental studies) and the Faculties of the Health Campus faculties which were (the Faculty of Medicine, Dentistry, Pharmacology, Public health and Health professions) at Al-Quds University. Students are familiar with the internet use including social networking sites and who use it through their daily lives activities. The total number of the population of this study was 4371 students, (1939 from the Faculty of Arts and 2432 from the Faculties of the Health Campus.

### **4.5 Study Sampling method and size**

The study included a sample of the baccalaureate students of Al-Quds University- Health Complex Faculty and the Arts Faculty by using a convenience sampling method because of the time limits to finish the thesis. The sample was calculated by taking 5% of the total population. This would mean that 219 students filled in a total of 219 questionnaires. Therefore, 97 students from the Faculty of Arts and 122 Faculties of the Health Campus filled in the questionnaires, with a response rate of 100%.

### **4.6 Inclusion criteria:**

1. Participants were all undergraduate students from the Faculties of the Health Campus and the Faculty of Arts in Al-Quds University.
2. Participants included different departments/faculties of the Faculties of the Health Campus and the Faculty of Arts.
3. Participants were selected from the academic years (1-6).
4. Participants' ages were between 18 – 22 years old.

#### **4.7 Exclusion criteria:**

The master students were excluded, as these students did not meet the inclusion criteria of the study.

#### **4.8 Research Variables**

- *Independent variables* are those that (probably) cause, influence, or affect outcomes. They are also called treatment, manipulated, antecedent, or predictor variables (Creswell, 2009). The independent variables in this study were the socio-demographic data such as (age, gender, faculty, department, specialization, academic year and place of residence), use of internet including social networking which included the number of hours spent daily by the students on internet and social networking.
- *Dependent variables* are those that depend on the independent variables, they are the outcomes or results of the influence of the independent variables. Other names for dependent variables are criterion, outcome, and effect variables (Creswell, 2009). The dependent variables of this study were internet addiction and social isolation.

#### **4.9 Study Instruments**

The data collection tools that were used in this study were a self-administrated questionnaire that were translated from English into Arabic, modified, and approved by 4 different professionals who are specialized in psychiatry, mental health, and psychology. The questionnaire included socio-demographic data, Internet Addiction Test and UCLA Loneliness Scale, as seen in table (4.1).

**Table (4.1): Instruments used in the study**

No.	Instruments	Number of questions in each instruments
1.	Part (1): Socio-demographic self-administered sheet	<ul style="list-style-type: none"><li>▪ 6 questions for socio- demographic data.</li><li>▪ 1 question for the number of hours spent daily on the internet</li></ul>
2.	Part (2): IAT – Internet Addiction Test	<ul style="list-style-type: none"><li>▪ 20 questions</li></ul>
3.	Part (3): UCLA Loneliness Scale	<ul style="list-style-type: none"><li>▪ 20 questions</li></ul>

As mentioned in table (4.1), the instrument that was used in this study consisted of three major components, which were:

1. Socio-demographical data that included: age, gender, faculty, program of study, academic year, place of residence, and the number of hours spent on the Internet on daily basis.
2. (IAT) – Internet Addiction Test which is a 20-item, self-report questionnaire developed the year 1998 by Dr. Kimberly Young to measures mild, moderate, and severe levels of Internet Addiction (Young, 1998).
3. UCLA Loneliness Scale - social isolation that is a 20-item, designed to measure ones feeling of loneliness and social isolation (Russel, 1978).

#### **4.10 Reliability & Validity of the instrument**

##### **4.10.1 Reliability**

Reliability of a measure indicates the extent to which the measure is without bias (error free) and hence offers consistent measurement across time and across the various items in the

instrument. (Serkan, 2000) In other words, it's a degree to which a measure is consistent and unchanged over a short period of time (Baumgranter & Hensly, 2006).

To estimate the reliability of a measure we have two way:

- Test-retest reliability: the reliability coefficient obtained with a repetition of the same measure on a second occasion (Serkan, 2000).
- Internal consistency of measures: it is an indicative of the homogeneity of the items in the measure that tap the construct. This can be seen by examining whether the items and the subset of items in the measuring instruments are highly correlated. The most popular test of to measure this is Cronbach's coefficient Alpha, where the higher the coefficient the better the measuring instrument (Sekran, 2000).

Cronbach's Alpha was developed by Lee Cronbach in 1951 to provide a measure of the internal consistency of a test or scale; it is expressed as a number between 0 and 1. Internal consistency describes the extent to which all the items in a test measure the same concept or construct and hence it is connected to the inter-relatedness of the items within the test (Tavakol & Dennick, 2011). In the current study; Cronbach Alpha was calculated to measure the reliability by using SPSS and it was found to be 0.91 for the Internet Addiction Test and 0.92 for the UCLA Loneliness Scale.

It is important to note that reliability is a necessary but not sufficient condition of the test of goodness of a measure. For example, one could very reliably measure a concept establishing high stability and consistency, but it may not be the concept that one set out to measure (Serkan, 2000).

#### **4.10.2 Validity**

Validity refers to the extent to which a questionnaire / or test measures what it purports to measure (Muller, 2012).

Validity has four different types presented below:

- Content validity: it assesses whether the measure adequately covers the different aspects of the construct that are specified in its definition (Barker et al., 2002).

- Criterion validity: a correlation coefficient between scores on a test and scores on a criterion measure or standard, it involves determining the correlation between scores (Baumgranter & Hensly, 2006).
- Face validity: is similar to content validity and assesses whether the measure looks right on the face of it, that is, that it self-evidently measures what it claims to measure (Barker et al., 2002).
- Construct validity: this tests the link between a measure and the underlying theory. If a test has construct validity, you would expect to see a reasonable correlation with tests measuring related areas (Shields, 2004).

The questionnaires of this study were used in many different previous studies to assess IAD and SI. The content validity was utilized in the current study. To check the content validity, the questionnaires were first examined by the supervisors of this thesis, later by four experts from Al-Quds University who had a degree in mental health and in public health, and psychiatrists from the Palestinian Ministry of Health and local NGOs, in order to test the content and suitability of the three questionnaires. No changes in the content or language were requested by them.

#### **4.11 Data collection Process**

After getting the approval from the Faculty of Public Health and the Faculty of Graduate Studies in Al-Quds University, the process of distributing the questionnaire was started and the researcher distributed and collected the questionnaires from all the students.

The researcher started administering the questionnaires to the Faculties of the Health Campus and Faculty of Arts students (219 students) who accepted to fill in the questionnaire. The data collection process took almost 8 weeks during the early August 2015 – beginning of October 2015. The students were very helpful and cooperative which played a crucial role in obtaining a high response rate (100%).

#### **4.12 Statistical Analysis**

The data was analyzed using the SPSS -Statistical Package for Social Sciences software program version 18.0 used for statistical analysis. The data were checked for entry errors (data clearance). The relationship between the socio demographic data, IAT- Internet Addiction Test, and UCLA Loneliness Scale were analyzed using the parametric test such T-test, ANOVAs test and Pearson test.

#### **4.13 Ethical Considerations**

Before starting the study, the proposal was submitted to the Public Health Faculty at Al-Quds University and approval to conduct this study according to the thesis preparation guide of the Faculty of Graduate Studies was obtained.

Verbal consent was obtained verbally as all the participants were provided with the information sheet about the study including the aim of this study; objectives, procedures, and they were informed that they had the right to refuse to participate in the study.

Nevertheless, the researcher guaranteed the confidentiality and privacy of participants by assuring that the information will not be available for anyone who is not directly involved in the study other than the main researcher and supervisors. The name of the participants wasn't required.

#### 4.14 Summary

- A cross-sectional design was utilized in this study because it is cheap, quick and ethically safe.
- The data collection tool used in this study was self-reported questionnaires including 3 different parts: (1) socio-demographic data, (2) IAT –Internet Addiction Test, (4) UCLA Loneliness Scale.
- The data was analyzed through SPSS statistical package testing. This was done according to international and local standards of research taking into consideration the ethical and scientific rules and obligations.
- Reliability of the study was tested by using Cronbach Alpha coefficient for the two scales and it was found that Cronbach Alpha 0.91 for the IAT and 0.92 for the UCLA Loneliness Scale, while the content validity of the questionnaires was examined by a committee of 4 experts in mental health from Al-Quds University, Ministry of Health, and NGOs.
- The total population of the study was 4371 students and 5% from the total population were targeted, and the sample was (97) students from the Faculty of Arts and (122) students from the Faculties of the Health Campus in Al-Quds University, and in total 219 questionnaires were filled in.
- Confidentially and different ethical measures were taken into considerations.

# **Chapter V**

## **Results**



## **Chapter V:**

### **Results**

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#### **5.1 Introduction**

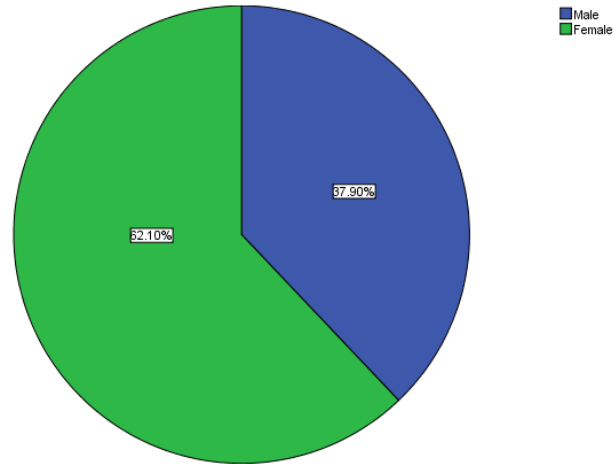
As mentioned in the previous chapter, across sectional study was utilized and a sample of (219) students participated in this study with a response rate of 100%. Data were collected two scales: Internet Addiction Test for Internet Addiction and UCLA Loneliness Scale for the Social Isolation and socio-demographic sheet.

This chapter presented the findings of the current study as the following:

1. Section one: Description of the socio-demographic characteristics.
2. Section two: The use of internet including social networking and its relation with other variables.
3. Section three: The results of IAT – Internet Addiction Test and its relationship with other variables.
4. Section four: The results of UCLA Loneliness Scale and its relationship with other variables.

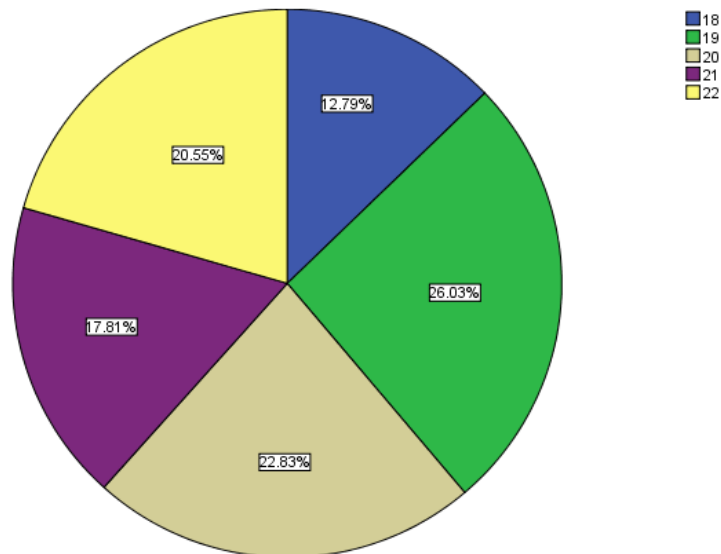
## 5.2 Section one: The socio-demographic characteristics of the participants

The baseline data analysis showed that 219 respondents returned the questionnaires, and 37.9% (n=83) of them were males, and 62.1% (n=136) were females (see figure 5.1).



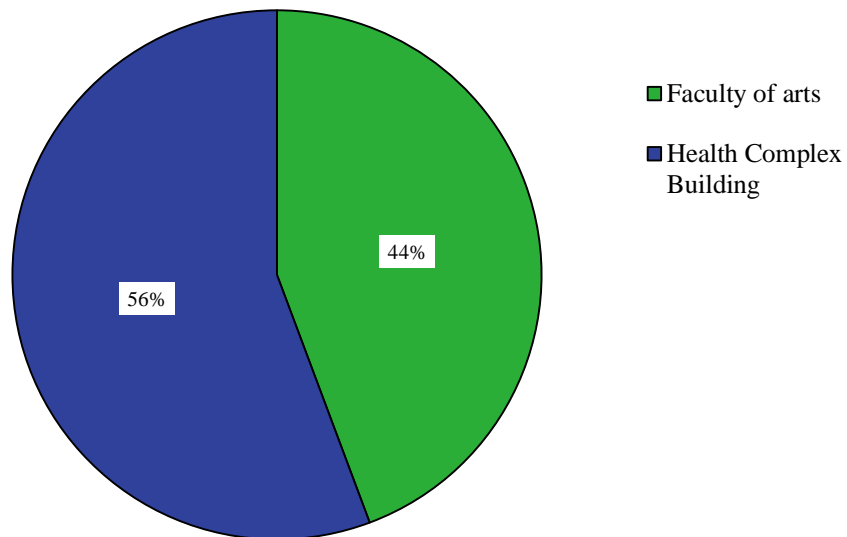
**Figure (5.1): The distribution of the participants by their gender**

Also, 12.8% (n=28) of the participants were 18 years old, 26.0% (n=57) were 19 years old, 22.8% (n=50) were 20 years old, 17.8% (n=39) were 21 years old, and 20.5% (n=45) were 22 years old (see figure 5.2).



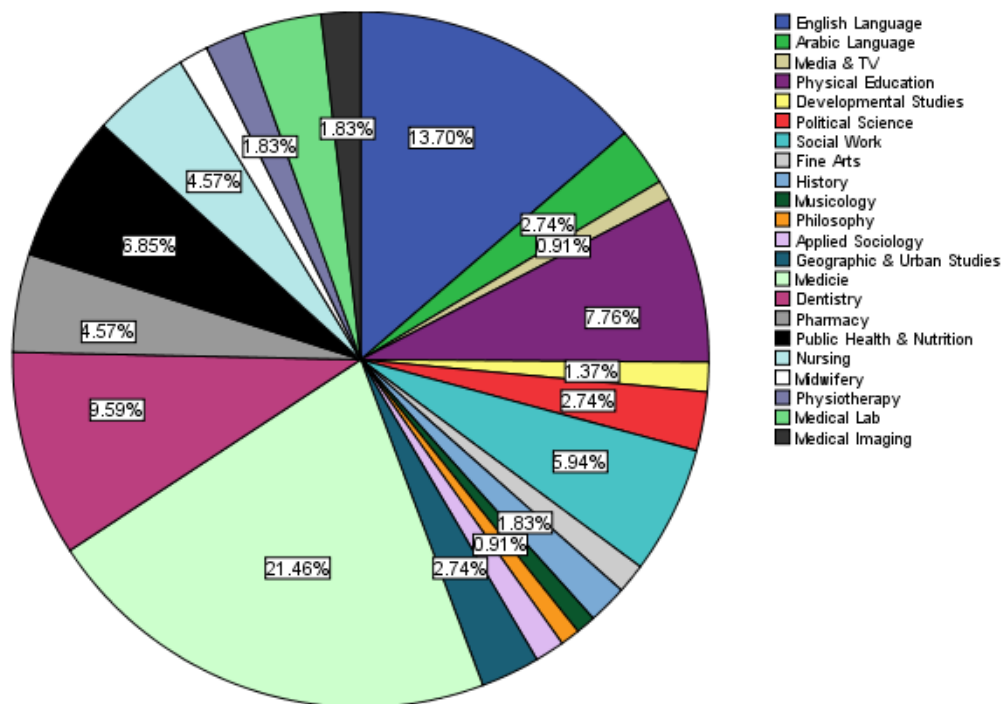
**Figure (5.2): The distribution of the participants by their age**

Furthermore, 44.3% (n=97) of the participants were from the Faculty of Arts and 55.7% (n=122) were from the Faculties of the Health Campus.



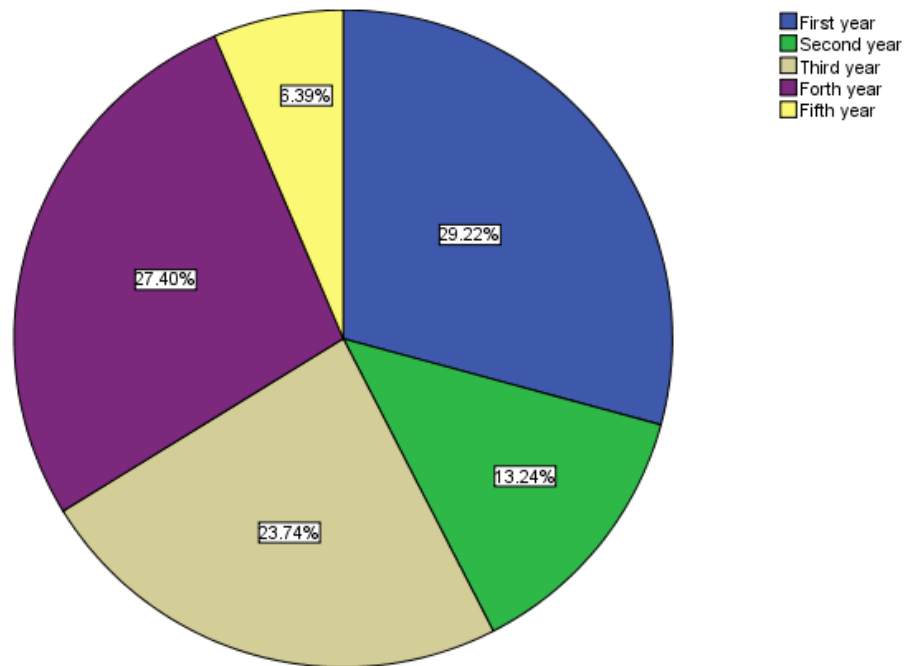
**Figure (5.3): The distribution of the participants by the faculty**

As shown in figure (5.3), each faculty had different specialization, therefore the students specializations were 13.7% (n=30) were from the English Language, 2.7% (n=6) were from the Arabic language, 0.9% (n=2) were from the Media &TV specialization, 7.8% (n=17) were from the Physical Education, 1.4% (n=3) were from the Developmental Studies, 2.7% (n=6) were from Political Science, 5.9% (n=13) were from the Social Work, 1.4% (n=3) were from the Fine Arts, 1.8% (n=4) were from the History, 0.9% (n=2) were from the Musicology, 0.9% (n=2) were from the Philosophy, 1.4% (n=3) were from the Applied Sociology, 2.7% (n=6) were from the Geographic & Urban Studies, 21.5% (n=47) were from the Medicine, 9.6% (n=21) were from the Dentistry, 4.6% (n=10) were from the Pharmacy, 6.8% (n=15) were from the Public Health & Nutrition, 4.6% (n=10) were from the Nursing, 1.4% (n=3) were from the Midwifery, 1.8% (n=4) were from the Physiotherapy, 3.7% (n=8) were from the Medical Laboratory and 1.8% (n=4) were from the Medical Imaging (see figure 5.5).



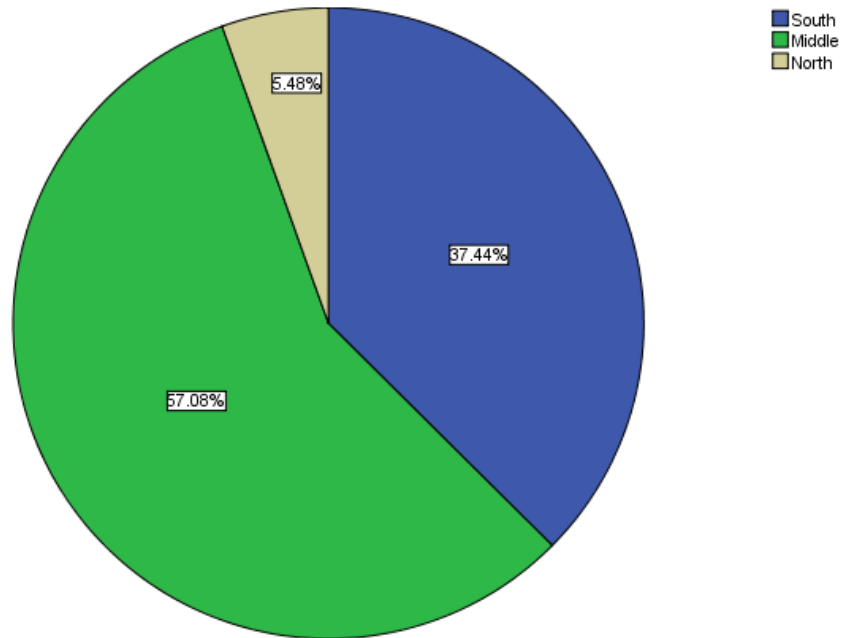
**Figure (5.4): The distribution of the participants by the study specialization**

For the scholastic year, 29.2% (n=64) of the participants were from the first year, 13.2% (n=29) were from the second year, 23.7% (n=52) were from the third year, 27.4% (n=60) were from the fourth year, and 6.4% (n=14) were from the fifth year (see figure 5.4).



**Figure (5.5): The distribution of the participants by the scholastic year**

Also, the students came from different Palestinian cities. For example, 37.44% (n=82) were from the South (Bethlehem and Hebron), 57.1% (n=125) were from the Middle (Jerusalem, Ramallah and Jericho), while 5.5% (n=12) were from North (Nablus, Jenin, Tulkarem and Qalqilia (see figure 5.6).



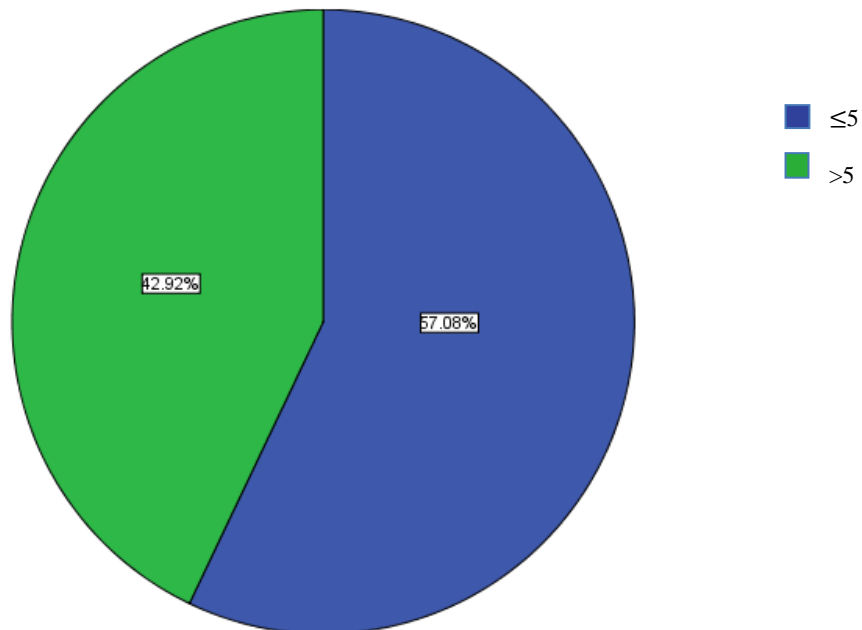
**Figure (5.6): The distribution of the participants by the place of residence**

### 5.3 Section two: The use of internet including social networking and its relation with the other variables

This section addressed the use of internet, including social networks among Al-Quds university students and its relation with the socio-demographic data, IAT and UCLA

#### 5.3.1 The use of internet including social networks

One question was used to assess the amount of hours spent by the university students on the internet and social networks. Findings showed that 57.1% (n=125) of the participants spent equal to or less than 5 hours, while 42.9% (n=94) of the participants spent more than 5 hours per day on the internet (see figure 5.7).



**Figure (5.7): The distribution of the participants by their daily rate of hours spent on the internet including the social networks**

### **5.3.1 The relationship between internet use including social networking and the socio-demographic data**

To assess the relationship between the internet use including social networking and the socio-demographic data, two tests were used: T-test and One Way ANOVA.

In regard of the relationship between internet use including social networking and the gender of the participants, T-test revealed no significant relationship at P-Value (0.132), female mean was (1.38) and male mean was (1.49) as shown in table (5.1).

Furthermore, ANOVA test revealed no statistically significant relationship between the age of the students and the use of internet including social networking at P-Value (0.676). For example, the mean of age group 18 years old was the highest (1.50), 19 years old mean (1.47), 20 years old mean was (1.38) and the lowest mean (1.35) was for the age 22 years old as shown in table (5.1).

Regarding the relationship between the use of internet and social networking and the faculty, ANOVA test revealed statistically no significant relationship at P-Value (0.518). For example, the Faculty of Arts mean was (1.45), the Faculties of the Health Campus mean was (1.40) as shown in table (5.1).

Moreover, ANOVA test revealed statistically no significant relationship between internet use and social networking and the specialization at P-Value (0.462). The highest mean was for the Philosophy (2.00) and the same for Media and TV, followed by mean (1.66) for Applied Sociology, and Geographical Studies, while the lowest mean (1.00) was for the Nursing specialization as shown in table (5.1).

Also, ANOVA test revealed a statistically no significant relationship between the use of internet including social networking and the academic year at P-Value (0.855). For example, the students attending 1<sup>st</sup> year's mean was (1.41), 2<sup>nd</sup> year's mean was (1.48) and the highest, 3<sup>rd</sup> year's mean was the lowest and was (1.36), 4<sup>th</sup> year's mean was (1.43) and the mean for the 5<sup>th</sup> year was (1.42) as shown in table (5.1).

Finally, ANOVA test revealed a statistically no significant relationship between the place of residence and the use of internet including social networking at P-Value (0.424). The mean for



the South was (1.39), the mean for the Middle was (1.44) and the highest mean for the North was (1.58) as shown in table (5.1).

**Table (5.1): the relationship between the internet use including social networking and the**

Independent variables		Mean	SD	P-value
Sex	Male	1.49	0.50	0.132
	Female	1.38	0.48	
Age	18	1.50	0.50	0.676
	19	1.47	0.50	
	20	1.38	0.49	
	21	1.35	0.48	
	22	1.44	0.50	
Faculty	Faculty of Arts	1.45	0.50	0.518
	Faculties of the Health Campus	1.40	0.49	
Specialization	English Language	1.53	0.50	0.462
	Arabic Language	1.16	0.40	
	Media & TV	2.00	0.00	
	Physical Education	1.41	0.50	
	Developmental	1.33	0.57	
	Political science	1.50	0.54	
	Social Work	1.23	0.43	
	Fine arts	1.33	0.57	
	History	1.25	0.50	
	Musicology	1.50	0.70	
	Philosophy	2.00	0.00	
	Applied sociology	1.66	0.57	
	Geography	1.66	0.51	
	Medicine	1.52	0.50	
	Dentistry	1.40	0.51	
	Pharmacy	1.26	0.51	
	Public health &	1.30	0.45	
	Nursing	1.00	0.48	
	Midwifery	1.25	0.00	
	Physiotherapy	1.62	0.50	
Medical Laboratory	1.62	0.51		
Medical Imaging	1.25	0.50		
Academic year	1 <sup>st</sup> year	1.41	0.50	0.855
	2 <sup>nd</sup> year	1.48	0.50	
	3 <sup>rd</sup> year	1.36	0.48	
	4 <sup>th</sup> year	1.43	0.49	
	5 <sup>th</sup> year	1.42	0.51	
Place of residence	South	1.39	0.49	0.424
	Center	1.44	0.49	
	North	1.58	0.51	

### 5.3.2 The relationship between internet use including social networking and internet addiction

Chi Square test was used to assess the relationship between the hours spent on internet including social networking and internet addiction. Chi Square was 29.442, P-Value=0.001 and df=3. Results showed that 57.1% (n=125) used the internet and social networks less than or equal to five hours of whom 19.2% (n=24) scored below average on the internet addiction test as shown in table (5.3).

While 51.2% (n=64) get a result of average internet problem out of those who used the social networks less than or equal to 5 hours, compared to 44.7% (n=42) students who used it more than 5 hours and had average internet problem as seen in table (5.3).

Those who got the result as a frequent problem using internet including social networks less than 5 hours where 29.6% (n=37) compared to 52.1% (n=49) of students who used it more than 5 hours as shown in table (5.3).

The participants who had a result of significant problem of using the internet including social networks less than or equal to 5 hours where 0% (n=0), compared to 3.2% (n=3) used it for more than 5 hours, and 52.1% (n=49) had frequent problem as shown in table (5.3).

Further, Fisher's Exact test was used because there were categories less than 5. The result showed that there was a significant relationship between IAT and internet use at P-value= (0.0001) as shown in table (5.2).

**Table (5.2): The relationship between IAT and internet use including social networking**

Items	Below Average		Average		Frequent Problem		Significant		Total		Chi Square	Sig (2-sided)	Fisher's Exact Test	Df
	F	%	F	%	F	%	F	%	F	%				
≤5 hours	24	19.2	64	51.2	37	29.6	0	0.0	125	57.1	29.442	0.001	0.001	3
>5 hours	0	0.0	42	44.7	49	52.1	3	3.2	94	43.9				

### 5.3.3 The relationship between internet use including social networking and social isolation

Chi square test was used to analyze the relationship between the use of internet including social networking and UCLA loneliness scale which was not significant. Chi-square was (1.708),  $p=0.635$  and  $df(3)$ . 57.1% ( $n=125$ ) of the students used the internet less than or equal to five hours per day, of whom 39.2% ( $n=49$ ) scored below average on the loneliness scale, 12.0% ( $n=15$ ) had average score, while 25.6% ( $n=32$ ) had frequent loneliness and 23.2% ( $n=29$ ) had severe loneliness as shown in table (5.6).

On the other hand the students who used the internet including the social networks more than 5 hours per day were 42.9% ( $n=94$ ) of whom 31.9% ( $n=30$ ) had a score of below average, 11.7% ( $n=11$ ) had scored average, 26.6% ( $n=25$ ) were facing frequent loneliness and 29.8% ( $n=28$ ) had severe loneliness as shown in table (5.6).

**Table (5.3): the relationship between social networking and UCLA Loneliness scale**

Items	Below Average		Average		Frequent Loneliness		Severe Loneliness		Total		Chi Square	Sig (2-sided)	df
	F	%	F	%	F	%	F	%	F	%			
≤5 hours	49	39.2	15	12.0	32	25.6	29	23.2	125	57.1	1.708	0.635	3
>5 hours	30	31.9	11	11.7	25	26.6	28	29.8	94	42.9			

## **5.4 Section three: results of the Internet Addiction Test (IAT)**

This section consists of two parts: Al Quds University students' answers to the Internet Addiction Test (IAT), and the relationship between internet addiction and other variables.

### **5.4.1 Internet Addiction Test**

Twenty questions were used to assess the internet addiction among Al-Quds University students aged 18-22 years old. Frequency, percentages, mean and standard deviation were used to analyze the data. In general, findings showed that participants' responses varied between doesn't apply and always to questions of the scale (see table 5.4).

In general, it was noticed that more than half of the participants answered frequently, often and always for 6 questions in the scale (Q1, Q7, Q10, Q14, Q16 & Q17). For example, the participants were asked about how often do they find that they stay online longer than they intend, 70.3% (n=154) of them responded by frequently, often and always, while 25.6% (n=56) responded that they rarely and occasionally found so. Moreover, when the students were asked about how often they check their email before something else, 50.7% (n=111) answered frequently, often and always, while 36.1% (n=79) answered rarely and occasionally. Also, 54.8% (n=120) of the participants frequently, often and always blocked out disturbing thoughts about their life with soothing thoughts of the internet, while those who rarely or never did were 39.7% (n=87) as seen in table (5.4).

Further, 59.3% (n=130) of the participants answered that they frequently, often or always found themselves saying "Just few more minutes" when they were online, while 35.1% (n=77) rarely or occasionally said this to themselves. Moreover, those students who were frequently, often and always trying to cut down their time spent online and failed were 57.6% (n=126) compared to 32.9% (n=72) of those who answered by rarely and occasionally. Not only that they stayed few more minutes, but 46.6% (n=102) of the participants frequently, often and always had their grades and school work suffer because of the amount spent online, while 37.5% rarely or never had problems in grades and school work as seen in table (5.4).

It was remarkable that half & more of the participants answered to 14 questions (Q2, Q3, Q4, Q5, Q6, Q8, Q9, Q11, Q12, Q13, Q15, Q18, Q19, & Q20) by it didn't apply, rarely and

occasionally. For example, the question that asked about how much do the students feel preoccupied with the internet when offline or fantasize about it 68.5% (n=150) of the students answered it didn't apply, rarely and occasionally and 31.5% (n=69) answered by frequently, often and always as seen in table (5.4).

Also, when students were asked about how often do they feel depressed, moody or nervous when they were offline 68.5% (n=150) answered that it didn't apply, rarely or occasionally and 31.5% (n=69) answered by frequently, often and always. Furthermore, 65.3% (n=142) of the participants didn't apply, rarely or never chose to spend more time online over going out with others, and 35.1% often, frequently and always chose to stay online than to be with others as shown in table (5.4).

The highest was when students were asked about how often do they form new relationships with online users 72.2% (n=158) answered that it didn't apply, rarely or occasionally do, and less than third of them (27.8% n=61) said they either frequently, often or always form new online relationships. Furthermore, 71.7% (n=175) of the participants answered didn't apply, rarely or never acted annoyed when someone bothered them while they were online compared to less than one third of the participants (27.9% n=61) were frequently, often and always bothered by this as shown in table (5.4).

Almost equally, around (55.3%) of the participants answered that it didn't apply, rarely or never had their job performance suffer because of the internet, and (44.7%) said that they frequently, often and always had their performance suffered due to the internet use. Similarly, 57.6% (n=126) answered that they never, rarely or it didn't apply that they neglected the household chores to spend more time online, while 42.4% (n=93) frequently, often and always neglected their household chores as found in table (5.4).

Finally, the results showed that only 1.4% (n=3) of participants face significant problem, 39% (n=86) face occasional and frequent problem, 48.4% (n=106) have average problem and 11% (n=24) had the problem as below average as seen in table (5.4).

**Table (5.4): The participants' answers for the Internet Addiction Test (IAT), the frequency, the percentage, the mean and the standard deviation.**

	Questions	Doesn't apply		Rarely		Occasionally		Frequently		Often		Always		Mean	SD
		F	%	F	%	F	%	F	%	F	%	F	%		
1.	How often do you find that you stay on-line longer than you intended?	9	4.1	17	7.8	39	17.8	37	16.9	48	21.9	69	31.5	3.39	1.48
2.	How often do you neglect household chores to spend more time on-line?	31	14.2	41	18.7	54	24.7	36	16.4	29	13.2	28	12.8	2.34	1.57
3.	How often do you prefer the excitement of the Internet to be with significant others?	57	26.0	44	20.1	52	23.7	33	15.1	24	11.0	9	4.1	1.77	1.46
4.	How often do you form new relationships with fellow on-line users?	47	21.5	54	24.7	57	26.0	32	14.6	20	9.1	9	4.1	1.77	1.39
5.	How often do others in your life complain to you about the amount of time you spend on-	34	15.5	42	19.2	48	21.9	34	15.5	30	13.7	31	14.2	2.35	1.63
6.	How often do your grades or school work suffer because of the amount of time you spend on-	35	16.0	38	17.4	44	20.1	41	18.7	31	14.2	30	13.7	2.38	1.63
7.	How often do you check your email before something else that you need to do?	29	13.2	46	21.0	33	15.1	36	16.4	33	15.1	42	19.2	2.56	1.72
8.	How often does your job performance or productivity suffer because of the Internet?	28	12.8	40	18.3	53	24.2	41	18.7	34	15.5	23	10.5	2.37	1.52
9.	How often do you become defensive or secretive when anyone asks you what you do	54	24.7	37	16.9	42	19.2	42	19.2	22	10.0	22	10.0	2.03	1.63
10.	How often do you block out disturbing thoughts about your life with soothing thoughts of the	12	5.5	32	14.6	55	25.1	67	30.6	34	15.5	19	8.7	2.62	1.30
11.	How often do you find yourself anticipating when you will go on-line again?	38	17.4	40	18.3	51	23.3	51	23.3	24	11.0	15	6.8	2.12	1.46
12.	How often do you fear that life without the Internet would be boring, empty, and joyless?	33	15.1	31	14.2	47	21.5	38	14.6	32	14.6	38	17.4	2.54	1.66

13.	How often do you act annoyed if someone bothers you while you are on-line?	58	26.5	54	24.7	45	20.5	32	14.6	17	7.8	12	5.5	1.68	1.47
14.	How often do you lose sleep due to late-night	26	11.	29	13.2	46	21.0	36	16.4	38	17.4	44	20.1	2.74	1.6
15.	How often do you feel preoccupied with the Internet when off-line, or fantasize about being	75	34.2	36	16.4	39	17.8	36	16.4	21	9.6	12	5.5	1.67	1.57
16.	How often do you find yourself saying “just a few more minutes” when on-line?	12	5.5	34	15.5	43	19.6	43	19.6	43	19.6	44	20.1	2.92	1.52
17.	How often do you try to cut down the amount of time you spend on-line and fail?	21	9.6	32	14.6	40	18.3	47	21.5	41	18.7	38	17.4	2.77	1.57
18.	How often do you try to hide how long you’ve been on-line?	64	29.2	34	15.5	40	18.3	40	18.3	23	10.5	18	8.2	1.89	1.63
19.	How often do you choose to spend more time on-line over going out with others?	64	29.2	38	17.4	40	18.7	36	16.4	26	11.9	15	6.8	1.84	1.60
20.	How often do you feel depressed, moody or nervous when you are off-line, which goes away	71	32.4	38	17.4	41	18.7	33	15.1	25	11.4	11	5.0	1.70	1.56
<b>Overall results</b>															
		<b>Below Average</b>		<b>Average</b>		<b>Occasional or frequent Problem</b>		<b>Significant Problem</b>		<b>Mean</b>	<b>SD</b>				
		<b>F</b>	<b>%</b>	<b>F</b>	<b>%</b>	<b>F</b>	<b>%</b>	<b>F</b>	<b>%</b>						
<b>Overall results</b>		24	11.1	106	48.4	86	39.0	3	1.5	2.31	0.68				



#### **5.4.2 Part 2: The relationship between Internet Addiction Test and other variables**

The relationships between the internet addiction and the other variables (sex, age, faculty, specialization, academic year and place of residence) were assessed by using t-test and one way ANOVA test. The statistical significance was defined as a P-value of (0.05) as shown in table (5.5).

For the relationship between IAT and gender, T-test revealed a statistically significant relationship between gender and IAT at P-value (.002). The males had higher mean of internet addiction (2.49) than females (2.19) as shown in table (5.5).

Furthermore, ANOVA test showed a statistically significant relationship between IAT and age group at P-value (.027). The age 18 years old had the highest mean of internet addition (2.75), 19 years old mean was (2.45), 20 years old mean was (2.20), 21 years old mean was the lowest (2.15) and 22 years old mean was (2.22) as shown in table (5.5). Tukey Test was done and it showed no real significant relation between the age and IAT.

In addition, T-test showed a significant relationship between the IAT and the faculty at P-value (0.026). The faculty of Arts' mean was (2.19), the Faculties of the Health Campus mean was (2.40), as shown in table (5.5). Also, ANOVA test showed that there were no significant relationship between IAT and the specialization at P-value (0.118) as shown in table (5.5).

Moreover, ANOVA test showed a statistically significant relationship between IAT and the academic year of the students at P-Value (0.009). The 5<sup>th</sup> year had the highest mean (2.55), followed by the 1<sup>st</sup> year (2.51), then the second year (2.27), then the 4<sup>th</sup> year (2.26) and the lowest mean was for the 3<sup>rd</sup> year (2.07) as shown in table (5.5). For further investigation in this relation, Tukey Test was performed and it showed that the first and third year had significant relation with IAT at P-value (0.005).

Finally, regarding the relationship between IAT and the place of residence, there was no significant relationship as P-Value (0.362). For example, the North had the highest mean (2.58) followed by the Middle with a mean of (2.29), and the South with a mean of (2.29) as shown in table (5.5).

**Table (5.5): The relationship between IAT and the other variables**

Independent variables		Mean	SD	P-value
Sex	Male	2.49	0.61	0.002
	Female	2.19	0.69	
Age	18	2.57	0.69	0.027
	19	2.45	0.65	
	20	2.20	0.57	
	21	2.15	0.77	
	22	2.22	0.67	
Faculty	Arts	2.19	0.63	0.026
	Faculties of the Health	2.40	0.70	
Specialization	English Language	2.13	0.50	0.118
	Arabic Language	2.00	0.89	
	Media & TV	3.00	0.00	
	Physical Education	2.11	0.48	
	Developmental Studies	1.66	1.15	
	Political science	2.33	0.81	
	Social Work	2.00	0.70	
	Fine arts	2.33	0.57	
	History	2.75	0.50	
	Musicology	3.00	0.00	
	Philosophy	3.00	0.00	
	Applied sociology	2.66	0.57	
	Geography	2.00	0.63	
	Medicine	2.55	0.61	
	Dentistry	2.33	0.65	
	Pharmacy	2.50	0.84	
	Public health & nutrition	2.13	0.63	
	Nursing	2.20	0.78	
	Midwifery	2.33	0.57	
Physiotherapy	2.25	1.25		
Medical Laboratory	2.37	0.51		
Medical Imaging	2.50	1.29		
Academic year	1 <sup>st</sup> year	2.51	0.66	0.009
	2 <sup>nd</sup> year	2.27	0.59	
	3 <sup>rd</sup> year	2.07	0.58	
	4 <sup>th</sup> year	2.26	0.75	
	5 <sup>th</sup> year	2.53	0.66	
Place of residence	South	2.29	0.72	0.362
	Center	2.29	0.64	
	North	2.58	0.66	

## **5.5. Section four: the result of UCLA Loneliness Scale and its relationship with the other variables**

### **5.5.1 UCLA Loneliness Scale results**

20 questions were used to assess social isolation among Al-Quds University student aged 18-22 years old. Frequency, percentages, mean and standard deviation were used to achieve this purpose. In general, findings showed that participants' responses varied as seen table (5.6).

It was noticed that 19 questions out of 20 questions were answered by I never felt this way and I rarely felt this way by more than half of the participants. For example, 68.1% (n=149) of the participants never felt or rarely felt that they had nobody to talk to, while 31.9% (n=70) sometimes or often felt that they had nobody to talk to as seen in table (5.6).

Also, 70.8% (n=155) of the participants answered that they never or rarely felt that they were no longer close to anyone, while 29.2% (n=64) sometimes or often felt that way. Moreover, 71.2% (n=156) of the participants never or rarely felt that starved for company. And it was never or rarely difficult for 68% (n=149) of the participants to make friends and 31.9% of them found it sometimes and often difficult. Further, 73% (n=160) of the participants never and rarely felt shut out and excluded by others compared to less than third of them who sometimes and often felt that they were shut out and excluded. In addition, 47.5% (n=104) of the participants sometimes and often felt that they could not tolerate being so alone and 52.5% rarely or never felt so as shown in table (5.6).

Furthermore, 61.2% (n=134) participants never or sometimes felt that they were waiting for people to call or write, while more than third 38.9% (n=85) felt they sometimes and often felt they were waiting for someone to call or write to as shown in table (5.6).

In regard of the presence of someone whom they can turn to, 64.9% (n=142) of the participants never or rarely felt that they had no one to turn to and 35.1% (n=77) sometimes and often felt they had no one to turn to. 64.8% (n=142) of the participants indicated that they never or rarely felt that the people around them were not with them and 35.2% (n=77) sometimes and often felt that people were around them but not with them as shown in table (5.6).

Moreover, 72.6% (n=159) of the participants never or rarely felt unhappy being withdrawn. Also, 70.7% (n=155) of the participants never or sometimes felt that they were unable to communicate with those around them and 29.3% (n=64) felt that they sometimes and often were unable to communicate as shown in table (5.6).

On the other hand, only one question (Q1) was answered by more than half of the participants as “sometimes” and “often” felt this way. The result of this question showed that 58% (n=127) of the participants sometimes and often felt unhappy doing so many things alone while 42% (n=92) answered they never or rarely felt that way as shown in table (5.6).

On the other hand, the overall statistical analysis of the UCLA Loneliness scale showed different results from the participants’ responses to each item on the scale. For the severity of the social isolation and loneliness, 52% (n=57) of the participants reported severe and frequent level of social isolation, compared to who reported below average and average social isolation(36.1%, n=75) as seen in table (5.6).

**Table (5.6): Participants UCLA Loneliness scale results**

	Items									Mean	SD
		I never feel this way		I rarely feel this way		I sometimes feel this way		I often feel this way			
		F	%	F	%	F	%	F	%		
1.	I am unhappy doing so many things alone	43	19.6	49	22.4	67	30.6	60	27.4	1.65	1.08
2.	I have nobody to talk to.	93	42.5	56	25.6	41	18.7	29	13.2	1.02	1.07
3.	I cannot tolerate being so alone	69	31.5	46	21.0	64	29.2	40	18.3	1.34	1.10
4.	I lack companionship	97	44.3	50	22.8	45	20.5	27	12.3	1.00	1.07
5.	I feel as if nobody really understands me	64	29.2	59	26.9	60	27.4	36	16.4	1.31	1.06
6.	I find myself waiting for people to call or write	72	32.9	62	28.3	47	21.5	38	17.4	1.23	1.09
7.	There is no one I can turn to	104	47.5	38	17.4	41	18.7	36	16.4	1.04	1.15
8.	I am no longer close to anyone	104	47.5	51	23.3	35	16.0	29	13.2	0.94	1.08
9.	My interests and ideas are not shared by those around me	75	34.2	63	28.8	55	25.1	26	11.9	1.14	1.02
10.	I feel left out	92	42.0	57	26.0	30	13.7	40	18.3	1.08	1.13
11.	I feel completely alone	106	48.4	43	19.6	34	15.5	26	16.4	1.00	1.14
12.	I am unable to reach out and communicate with those around me	112	51.1	43	19.6	38	17.4	26	11.9	0.89	1.07
13.	My social relationships are superficial	77	35.2	59	26.9	50	22.8	33	15.1	1.17	1.07
14.	I feel starved for company	106	48.4	50	22.8	32	14.6	31	14.2	0.94	1.09
15.	No one really knows me well	64	29.2	64	29.2	57	26.0	34	15.5	1.27	1.04
16.	I feel isolated from others	110	50.2	43	19.6	35	16.0	31	14.2	0.94	1.10
17.	I am unhappy being so withdrawn	106	48.4	53	24.2	28	12.8	32	14.6	0.93	1.09
18.	It is difficult for me to make friends	108	49.3	41	18.7	41	18.7	29	13.2	0.95	1.10
19.	I feel shut out and excluded by others	117	53.4	43	19.6	30	13.7	29	13.2	0.89	1.21
20.	People are around me but not with me	87	39.7	55	25.1	44	20.1	33	15.1	1.10	1.09
<b>Overall Result of UCLA</b>		<b>Below Ave.</b>		<b>Average</b>		<b>Frequent</b>		<b>Severe</b>		<b>Mean</b>	<b>SD</b>
		<b>F</b>	<b>%</b>	<b>F</b>	<b>%</b>	<b>F</b>	<b>%</b>	<b>F</b>	<b>%</b>		
		79	36.1	26	11.9	57	26.0	5	26.0		

### **5.5.2. Part two: UCLA loneliness scale and the other variables**

The Relationships between social isolation and the other variables such as sex, age, faculty, specialization, academic year, spent hours on the internet and place of residence were assessed by using t-test and one way ANOVA test. The statistical significance was defined as a P-value of (0.05) as shown in table (5.7).

For the relationship between UCLA loneliness scale and gender, T-test revealed no significant relationship at P-Value (0.417). The female mean was higher (2.36) than male mean (2.05) as shown in table (5.7).

Furthermore, ANOVA test revealed no statistically significant relationship between UCLA Loneliness scale and the age group of the participants at P-Value (0.431). The mean for the age group 22 years old was the highest (2.60), 19 years old mean (2.56), 18 and 21 years old mean was (2.35) and the lowest mean was for the age 20 years old as shown in table (5.7).

Regarding the relationship between UCLA Loneliness scale and the faculty, T-test revealed no statistically significant relationship at P-Value (0.140). The Faculty of Arts mean was (2.55), the Faculties of the Health Campus mean was (2.31) as shown in table (5.7).

Moreover, ANOVA test revealed no statistically significant relationship between UCLA loneliness scale and the specialization at P-Value (0.871). The highest mean was for the Philosophy (3.50), followed by mean (3.33) for Developmental Studies, Fine Arts, Applied sociology and the Medical Imaging, while the lowest mean (1.93) was for the Public Health and Nutrition as shown in table (5.7).

Differently, ANOVA test revealed a statistically significant relationship between UCLA Loneliness Scale and the academic year of the participants at P-Value (0.018). The students attending 1<sup>st</sup> year's mean was (2.53), 2<sup>nd</sup> year's mean was (1.82), 3<sup>rd</sup> year's mean was (2.25), 4<sup>th</sup> year's mean was (2.65) and the highest mean was for the 5<sup>th</sup> year (2.78) as shown in table (5.7). Tukey Test was performed and it showed that the second and fourth year had a significant relation with the social isolation at P-value (0.023).

Finally, in regard to the relationship between the UCLA Loneliness scale and the place of residence ANOVA test revealed no statistically significant relationship at P-Value (0.373).

The southern part had the highest mean (2.56) followed by the north with a mean of (2.50), then the middle region with a mean of (2.32) as shown in table (5.7).

**Table (5.7): The relationship between UCLA loneliness scale and the other variables**

Independent variables		Mean	SD	P-value
<b>Sex</b>	Male	2.05	1.21	0.417
	Female	2.36	1.22	
<b>Age</b>	18	2.35	1.33	0.431
	19	2.56	1.16	
	20	2.18	1.18	
	21	2.35	1.24	
	22	2.60	1.23	
<b>Faculty</b>	Arts	2.55	1.21	0.140
	Faculties of the Health Campus	2.31	1.22	
<b>Specialization</b>	English Language	2.46	1.38	0.871
	Arabic Language	2.33	1.50	
	Media & TV	2.50	0.70	
	Physical Education	2.58	1.22	
	Developmental	3.33	0.57	
	Political science	2.00	1.09	
	Social Work	2.61	0.96	
	Fine arts	3.33	0.57	
	History	2.50	1.73	
	Musicology	3.00	1.41	
	Philosophy	3.50	0.70	
	Applied sociology	3.00	0.00	
	Geography	2.16	1.47	
	Medicine	2.46	1.17	
	Dentistry	2.00	1.14	
	Pharmacy	2.20	1.22	
	Public health &	1.93	1.16	
	Nursing	2.50	1.35	
	Midwifery	2.66	1.52	
Physiotherapy	2.50	1.73		
Medical Laboratory	2.25	1.38		
Medical Imaging	3.00	1.41		
<b>Academic year</b>	1 <sup>st</sup> year	2.53	1.19	0.018
	2 <sup>nd</sup> year	1.82	1.16	
	3 <sup>rd</sup> year	2.25	1.26	
	4 <sup>th</sup> year	2.65	1.19	
	5 <sup>th</sup> year	2.78	1.22	
<b>Place of residence</b>	South	2.56	1.26	0.317
	Center	2.32	1.18	
	North	2.50	1.24	



### 5.5.3 The relationship between internet addiction and social isolation

The relationship between internet addiction and social isolation was assessed in this study to investigate whether there is a positive or negative relationship. A Pearson's correlation was run to determine the relationship between internet addiction and social isolation values. Results showed a positive correlation between IA and SI ( $r=0.234$ ,  $N=219$ ,  $p<0.000$ ), as shown in table (5.8). The students who scored high on the internet addiction test scored high on UCLA loneliness scale which indicated that those who has internet addiction felt socially isolated and lonely.

**Table (5.8): the relationship between the internet addiction and the social isolation**

	<b>Pearson Correlation</b>	<b>Sig. (2-tailed)</b>	<b>Number</b>	<b>Mean</b>	<b>SD</b>
<b>Internet Addiction</b>	0.234	0.0001	219	2.31	0.68
<b>UCLA Loneliness Scale</b>	0.234	0.0001	219	2.42	1.22

## 5.6 Summary:

- The current study showed in general that the Internet Addiction for the students of Al-Quds University was not a significant problem (mean=2.31).
- The findings showed that 39% (n=86) of participants had occasional or frequent problem with internet addiction, while 48.4% (n=106) had average problem.
- The study found statistically insignificant relationship between IAT and sex, age, academic year and spent hours.
- The study did not find statistically significant relationships between IAT and faculty, specialization and place of residence.
- The findings revealed that in general students scored high on UCLA loneliness scale (mean=2.24). Those who had severe social isolation were 26% (n=57), 26% (n=57) had frequent problem, 11.9% (n=26) had average problem and 36.1% (n=79) scored below average.
- The study found statistically significant relationship between UCLA Loneliness Scale and the Academic year only.
- The study did not find a statistically significant relationship between UCLA Loneliness scale and sex, age, faculty, specialization, place of residence and the hours spent online.

**Chapter Six**  
**Discussion & Recommendations**

## Chapter six

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### 6.1 Introduction

This chapter discussed the major findings of the current study and the interpretation of its findings in relation to previously conducted studies found in literature review. The participants' characteristics and their responses to the questionnaire items are discussed. Also, many statistical analyses highlight the relationship between dependent and independent variables: ANOVA test, T-test, Chi square and Pearson's test were used. The results of these statistical tests are discussed in each of the following sections:

1. Section one: The characteristics of the participants and the use of internet including social networking and its relation with the other variables.
2. Section two: The results of IAT – Internet Addiction Test and its relationship with the other variables.
3. Section three: The results of UCLA Loneliness Scale and its relationship with the other variables.

### **6.2. Section one: Characteristics of the participants and the use of internet including social networking and its relation with the other variables**

In the current study, (62.1%) of the participants were females, and 37.9% were males. These findings are similar to another study that examined (201) university students (23.2%) males and (76.8%) females aged 17-24 (Wilson et al. 2010). Also, this is in consistency with a study conducted by Taweel (2007) that says (60%) of the students were females.

As younger people are the main users and are most likely to be the ones engaged in social networking (Rouis, 2012), the current study targeted age group ranged from 18 to 22 years old. The findings showed that 12.8% of the participants were 18 years old, 26.0% were 19 years

old, 22.8% were 20 years old, 17.8% were 21 years old, and 20.5% were 22 years old. This might be in consistency with the study of White (2010) who tried to sought to predict young adults' use of SNSs and addictive tendency towards the use of SNSs, university students (N=201) as well aged 17-24 years (White et. al, 2010). Another study suggested that the age range of (18-25) was found to be susceptible to Internet addiction, especially those going to college or university (Kapahi et al, 2013).

For the use of internet, including social networking sites, one question assessed the number of hours spent using internet, including social networks on daily basis. The findings revealed that more than half of the participants (57.1%) replied that they used the internet for less than or equal to 5 hours per day, while (42.9%) of the participants spent more than 5 hours per day on the internet. This result was inconsistent with the study conducted by Bergmark and Findhal (2011), about the excessive internet involvement which showed lower percentage than the current study in which the mean was 9.8 hours per week and only 5% out of (1,147) participants spent more than 30 hours per week on online time consuming activities. Also, another study showed an overall prevalence of internet addiction (4.4%) (Durkee et al., 2012). Many studies (Nawla, K. & Anand, A, 2003; Derbyshire et al., 2013) investigated the time of using internet higher or lower than 5 hours and they concluded that getting over 5 hours of internet use per day gives an indicator of having social networking dependency and other problems.

In addition to internet and social networks use, the relation between this dependent variable and the socio-demographic data showed no significance. For example, the relation between social networking and the gender was not significance at P-Value (0.132). In contrary a study about college students' social networking experiences on Facebook by Pempek et al. (2009), indicated that females respondents posted significantly more than males on facebook at P-Value <0.01. Also, in another study, users were disproportionately female users (56%), as women comprised the majority of email users (52%), users of instant message (55%) and sharing photos (58%). (Hampton et al., 2011). Inconsistently, another study found that internet addiction was higher among males than females and males had the highest ranked online activity on social networking (Durkee et al., 2012).

Furthermore, the current study showed no significant relationship between the age of the students and the use of internet including social networks at P-Value (0.676). One study in Thailand showed a significant relation between the age group of the participants, the internet use and social network use. The age group (15-24) had the highest percentage (47.3%) among all age groups users (Wanjak, K. 2011).

In regard of the relationship between the hours spent on internet and social networking and internet addiction, results showed a significant relationship (Chi Square was 29.442,  $p=0.0$  and  $df=3$ ). (57.1%) of the participants used the social networks less than five hours of whom 19.2% scored below average on the internet addiction test compared to 0% ( $n=0$ ) of those who used it more than 5 hours. As there were different categories less than Fisher's Exact test was performed and showed significant relation at P-value (0.0001). Further, (29.6%) of them had frequent problem compared to 52.1% the participants who used it more than 5 hours. The participants who used the social networks less than 5 hours and had a significant problem on the scale were 0%, compared to 3.2% ( $n=3$ ) of those who used for more than 5 hours. Debryshire et al. (2013) showed higher result of internet severity problem than the current study as those who used the internet for more than 6 hours per day and showed severe problematic use were (5.3%) while 81.8% reported mild symptoms. Tonini et al., (2011) suggested that the misuse of the internet could be an important criterion in diagnosing IAD

These findings may indicate the need to have a policy about the amount of time that these students are allowed to use internet at the university and further study to investigate the reasons behind using internet more than 5 hours per day by these students

For the relationship between internet use including social networking and social isolation, the finding showed no significant relationship as Chi-square was (1.708),  $p=0.635$  and  $df(3)$ . 57.1% ( $n=125$ ) students were using the social networks less than or equal to five hours per day, of whom (39.2%) scored below average on the loneliness scale, (12.0%) had average score, while (48.8%) had frequent and severe loneliness. On the other hand the students who used the social networks more than 5 hours per day were (42.9%) of whom (31.9%) students had a score of below average, (11.7%) students scored average, (56.1%) were facing frequent and severe loneliness. It was noticed that even the participants who used internet for more than 5 hours have had more severe and frequent problems than the users who used social

networking for less than or equal to 5 hours, both of them had a high percentages of social isolation which was not significant.

Inconsistently, a study for Morahan –Martin and Schumacher (2003), showed that social isolation was associated with increased internet use and SNSs use. They confirmed this as individuals who were socially isolated and lonely differed markedly from the non lonely in how they used the internet and social network. Compared with others, they used the SNSs for emotional support, to meet new people and to interact with others with similar interests, therefore they spent more time on SNSs as it made it easier for them to make friends. This was explained by the fact that lonely individuals used the internet and social networks for emotional support than others and it consistently enhanced their satisfaction with online friends whom they couldn't find face to face. In contrast, Cardak (2013) stated that internet addiction was associated with greater levels of loneliness, poorer social adaptation and emotional skills. The results of the current study may explain these findings which will be discussed later in this chapter as the majority of the participants did not show interest to build social relationship or to get support through internet and social networks.

### **6.3 Section two: the results of IAT**

For internet addiction, the results showed a discrepancy between how the participants answered each items of the scale and the findings of overall statistical analysis of IAT. For example, the findings showed that (1.4%)of the participants faced significant problem, (39%) faced occasional and frequent problem, (48.4%) had average problem and only (11%) indicated that the problem was below average. This indicated that (40.5%) of the students had significant, occasional and frequent problem of internet addiction and (59.5%) had average or below average problem. A study that was conducted by Kapahi, which examined the level of internet addiction amongst Malaysian university students didn't support the overall result and showed higher rate of internet addiction than the current study. The findings of this study indicated that the youth were indeed susceptible to internet addiction as a high percentage of them (64%) considered themselves as internet addicts whereas the opposite (36%) did not consider themselves as internet addicts. (Kapahi et al, 2013).

On the contrary to the overall previous statistical results of the test, the answers of the participants to 6questions out of 20 items of the scale might indicate symptoms of internet addiction as they were answered by more than half of the participants as frequently, often and always. These questions were related to staying online more than intended, checking the email before doing something else they need to do, blocking out disturbing thoughts about their life with soothing thoughts of the internet, loss of sleep due to late night logins, saying just few more minutes when online and to cut down the amount of time they spent online. For example,(70.3%) of the participants answered frequently, often and always on finding themselves staying online longer than they intended, and(59.3%) of the participants answered that they frequently, often or always found themselves saying "Just few more minutes" when they were online. This result is considered to be one of the characteristics of internet addiction, which is the diminished control to one's impulses, and to stop using the internet (Ma, 2011). In other words, this may indicate that these participants according to Starcevic had loss of control over the activity and they found it difficult to stop it (Starcevic, 2012).

The previous result is supported by another a study for Leung and Lee (2011) who indicated that internet addicts often lose track of time spent online and had difficulties in controlling



their amount of use, which may result in negative consequences such as missing class, work and social obligations. Also, in the current study, (46.6%) of the participants indicated that the amount they spent online frequently, often and always affected their grades or schoolwork. According to Kapahi who studied the loss of concentration and loss of productivity and other variables related to internet addiction found out that (52%) of the participants maintained regular level of concentration while studying and working and (41%) maintained regular performance and productivity (Kapahi et al. 2013). Another study showed that students had difficulty completing homework assignments, studying for exams, or getting enough sleep to be alert in class due to such internet misuse, which went uncontrolled and eventually resulted in poor grades (Young, 1996). In this study, (53.9%) of the participants' sleep was often, frequently and always affected as well due to late night logins. This is considered a symptom of internet addiction because it causes excessive fatigue and would impair one's functioning in the academic and occupational realm (Nalwa & Anand, 2003).

Furthermore, (50.7%) of the participants were frequently, often and always checked their email before doing anything else. This finding is inconsistent with the findings of a study by Tonini et al. (2012) that addressed internet addiction and found that the participants were not interested in using the internet to check e-mail. However, the students may use emails for different purposes and mostly to communicate with their friends and classmates. In addition, they were keen on using SNSs in academic related work, as these sites might support students in their education. In general, SNSs provided opportunities for these students to become independent in their own learning seeking, exploring and testing ideas with others within their social network beyond the constraints of the classroom (Jahan & Ahmad, 2012). So task might be the strong factor for using internet and emails as (83%) of the participants go online for task oriented purposes (Kapahi et al., 2013).

The rest of the 14 items out of 20 questions were answered by more than half of the participants by didn't apply, rarely and occasionally. These questions were related to neglecting house chores by spending more time on the internet, decrease in the school grades, impacted job performance or productivity, becoming defensive or secretive when asked about what they did online, anticipating when going online, fearing that life without the internet would be boring, empty and joyless, get annoyed if someone bothered them they were online,

feeling preoccupied with the internet when they were offline, trying to hide how long they've been online and feeling depressed, moody or nervous when offline. These items are important characteristics to diagnose a patient with internet addiction. Specifically, findings may not indicate internet addiction for the majority of the participants as an internet addicts should spend 40 hours online per week, they would be unable to refrain from thinking about the internet, they should find the internet exposure pleasurable, entertaining and interactive, it reduces emotional self regulation to control one's impulses, feeling unpleasant when the internet activity is being stopped, risking the loss of significant relationships, lying to other, escaping from problems, spend less time with family, and less friends (MA, 2011).

For example, (63%) of the participants answered did not apply, rarely and occasionally they spent more time online then with significant others. Young (1996) indicated that people may use internet due to the unique reinforcement of virtual contact with online relationships which might fulfill unmet real life social needs to some of the individuals who feel misunderstood and lonely and used these virtual relationships to seek out feelings of comfort and community. Inconsistency with the current study, it was found that (54.3%) of the participants often, and always used the internet to block out disturbing thoughts about their lives with soothing thoughts of the internet. Another study indicated that social networks allowed marshaling for social support through enabling links with like-minded and empathetic people, regardless of where they live or whether opportunities are available to meet offline (Baker et al., 2011). Specifically, Liu and Yu (2013) findings showed that using FB can enable college student to maintain online support, and that the relationship between online social support and wellbeing is mediated through general social support. Therefore, emotional support could be the main type of social support that people ask for on social networks (Rui et al. 2013). Interestingly, (50.7%) of the participants answered that they rarely or never form new relationship with fellow online users. Baker and White (2011) indicated that (41%) of these participants preferred other forms of communications and (23%) were not sure of the cyber safety concerns, while (15%) dislike the online self-presentation.

Also, nearly (70%) of the participants answered that they didn't, rarely or occasionally preferred to spend time online over going out with others. Tonini (2012) showed significant & positive correlation with the hours spent online and the interpersonal contact avoidance by

excessive internet users. One study showed that 73.9% of the internet users were addicted to the internet and these female users with addiction preferred working on the internet to being with their family, walking around with others and visiting relatives and friends (Iravani, 2008).

This discrepancy in the answers of the participants in the current study might be explained by Young (1996) who indicated that individuals who constantly utilized the internet might not recognize the addictive use as a problem and therefore deny some of the symptoms or reduce the score as internet and SNSs became an integral part of their daily lives. Also, she claimed that new users of the internet might develop symptoms that are always present and these users are at high risk to develop internet addiction disorder at a later stage. Further study is needed to explore the reasons behind using social networking among university students.

The relationships between internet addiction and the socio demographic variables showed significant relationship with the gender, age, faculty and academic year. Tests showed that there were significant relationships between IAT and these demographical data at P-value of (0.05). Tukey Test was done and it showed no real significant relation between the years of study between the first and third year and IAT at P-value (0.005), while it showed significant relation in regard of the age. This goes along with a study by Randler et al. (2014) were sought to investigate whether Internet addiction (IA) is associated with age, gender, BIG-5 personality, and chronotype in a Turkish university student sample. Six hundred and sixteen students filled out a set of questionnaires, in which males had higher IA scores than females. However, in the current study females had higher internet addiction than males. Furthermore, on contrary to this study, one study suggested no meaningful relation between the age and IA (Ozsker et al., 2015). Also, internet addicts tended to be students and younger in age compared to non-addicts (Wanajak, 2011). In this study, third years students had the lowest internet addiction and the first year students had the highest internet addiction. Therefore, Turel and Serenko (2011), in their study found that age had a significant control variable with a negative effect and it was negatively correlated with addiction ( $p= 0.14$ ). He implied that younger individuals are more likely to develop social networking habits, which could later turn into addiction, than their older counterparts. The younger users are more prone to develop social network habit, which could increase their levels of addiction through neural sensitization and diminishing the attention they pay to potential long-term harms.

#### **6.4 Section three: UCLA Loneliness Scale result**

In regard of the severity of the social isolation and loneliness, statistical analysis showed that(26%) of the students had severe level social isolation and(%26)reported frequent level of social isolation, compared to those who got below average were (36.1%).Similarly, Esen et al found that while loneliness increases with the degree of internet use, social self-efficacy was not affected. In order to identify the source for the difference in students' internet use and their average, findings suggested that students with high internet use levels had a higher degree of loneliness when compared to the ones with low (I-J=4,3114;p.000) and average (I-J=4.5461;p.000) internet use. The result of their analysis suggested that there was significant relationship between internet use and loneliness score ( $P<0.05$ ), while no relationship was observed with social self-efficacy scores( $P>0.05$ ).

These findings were inconsistent with what the participants answered to UCLA Loneliness Scale items as 19 questions out of 20 questions were answered by more than half of the participants answered by never felt like this or rarely felt like this. These questions included having no body to talk to, not tolerating being alone, lacking companionship, feeling no body understands them, waiting for people to call or write, feeling no longer close to anyone, feeling left out and completely alone, feeling unable to reach out and communicate with those around them, having superficial relationships, feeling starved for company, feeling no one knows them well and being isolated from others, feeling unhappy being withdrawn, shut out and excluded by others, feeling difficulty to make friends and feeling that people are around them but not with them. For example, 70.7% said that they rarely and never feel that they are no longer close to anyone. Similarly, Baker and White (2011), in their study had laid reasons on why the participants didn't use SNSs, as(51%)reported lack the motivation to do so and (41%) preferred another forms of communication, while (32%) had safety concerns.

A study for Bowker et al. (2014), he emphasized that socially isolated individuals spend considerable time in solitude because they choose to be alone. This is inconsistent with the current study as (52.5%) of the participants answered that they never or rarely felt that they can tolerate being alone, while 72.6% of the participant rarely or felt unhappy being so withdrawn.

The results of this study show that the higher the use of internet by university students, the more lonely they feel. There are many studies which demonstrate that excessive use internet use leads to loneliness (Morahan- Martin, 1997; Nawla and Anand, 2003).

Also, this is inconsistent with the overall result of social isolation and loneliness in which (52%) of the participants reported severe and frequent social isolation. For example, (70.8%) of the participants never or rarely felt they were no longer close to anyone, which one of the main symptoms of social isolation and loneliness. While (72.6%) never or rarely felt unhappy being so withdrawn. As well, (73%) of the participants never or rarely felt being shut out and excluded by other. One study showed that social networking might increase the communication and social interaction which might decrease the symptoms of social isolation(Szwedo et al. 2012). On the other hand, Sussman et al. (2011), indicated that there are negative consequences of social networking, as it causes impairment of the social relationships.

Furthermore, one question out of the 20 was answered by (58%) of the participants that they were unhappy doing so many things alone. A study for Fallahi (2011), showed that the mean for social isolation in the groups of addicted users (13.2%) was (53.36) and higher than the normal users (55.6%) with a mean of (45.26) and at risk users 31.2% with a mean (46.31) of social isolation.

The Relations between the social isolation and the other variables such as sex, age, faculty, specialization, academic years, and place of residence were assessed using t-test and one-way ANOVA test. The statistical significance was defined as a P-value of (0.05). Results showed no significant relationship between the variables except with the academic year P-Value at (0.018), Tukey test also was performed and showed significant relation between the years. The students in their 5<sup>th</sup> year had the highest mean and these students come from the Faculties of the Health Campus with a specialty of medicine, and these students are busy with their medical residency and academic studies which causes them social isolation due to the lack of time to socialize. In regard of the age and the gender other studies had no significant relation as well and this was justified by the fact that both females and males are now having similar lives (Fallahi, 2011; Ozsaker, 2015; Panicker & Sachdev, 2014).

Moreover, the sample in this study were (62.1%) females. Kuo et al. (2013) revealed that results were higher for males than females as females use technology for social reasons compared to men. Also, a study for Panicker et Sachdev (2014), stated that excessive internet use can displace valuable time that people spend with family and friends, which leads to smaller social circles and higher levels of loneliness and stress. On the other hand, Morahan-Martin and Schumacher (2003) suggest that lonely people are drawn to the internet to expand their social networks and capitalize on some favorable characteristics of internet based communication, such as anonymity and the lack of physical presence. Furthermore, in a study for Bian and Leung (2015), results showed that the higher one scored on loneliness the higher the likelihood one would be addicted to smart phones and internet.

Also, a study for Morahan-Martin & Schumacher (2003) showed that students in the highest 20% (Lonely) were compared with all other students (Non-lonely). Lonely individuals used the Internet and e-mail more and were more likely to use the Internet for emotional support than others. Social behavior of lonely individuals consistently was enhanced online, and lonely individuals were more likely to report making online friends and heightened satisfaction with their online friends. The lonely were more likely to use the Internet to modulate negative moods, and to report that their Internet use was causing disturbances in their daily functioning.

Finally, it has been found that students with a higher score on internet use have a higher degree of loneliness when compared to students who had moderate and low degree of internet use (Esen, et al., 2012).

### **Relationship Between internet addiction and social isolation**

Online users who tend to lead a more solitary and socially inactive lifestyle may be at greater risk for internet addiction as they were more likely to feel comfortable with prolonged periods of social isolation. Thus, those who suffer from Internet addiction do not experience the same feelings of alienation others feel when spending long periods of time sitting alone (Young & Rodgers, 1998). Therefore, the relationship between internet addiction and social isolation was assessed in this study, and the results showed that there was a strong, positive correlation between IA and SI ( $r=0.234$ ,  $N=219$ ,  $p<0.000$ ). Another study had supported this positive correlation, in which they found a meaningful relation between university students with a

higher score on internet addiction with a higher degree of loneliness and social isolation (Esen et al. 2013).

Also, this result is consistent with a study for Vida Fallahi (2011), who used the same scales; UCLA loneliness scale and Young Scale for Internet Addiction as well and analyzed a random sample of 500 students who were selected from two colleges, results indicated that 13.2% of student's were addicted to the net and more result showed significant difference between users groups. Addicted group were more alone than other groups. The mean of social isolation for group-addicted users was the highest (53.36). The results represent that there was a significant difference between group 1 and 3 (normal users and addicted users of the internet) and between groups 2 and 3 (at risk users and addicted users of the internet) at the significant level of  $p < 001$ .

## 6.5 Conclusion

The current study assessed social networking, internet addiction and social isolation in Al-Quds university students aged (18-22) years old who attended the Faculties of the Health Campus and the Faculty of Arts. The findings indicated that 57.1% (n=125) of the participants used internet including social networks on daily basis less than or equal to 5 hours, which would be normal for the lifestyle of a student, while 42.9% (n=94) of the participants used internet including social networks more than five hours per day which might be time consuming and affecting their relationships and school work to a certain degree.

Further, the study findings showed that only 1.5% (n=3) of the participants had severe internet addiction problem, and 39% (n=86) of the students had frequent problem in internet addiction. In addition, the study results showed that there was significant relationship between the internet addiction test and the age, the gender, the faculty, and the academic year, while there was no significant relationship between internet addiction and the specialization or the place of residence. This result indicates that most of the participants didn't suffer from internet addiction despite that they answered to more 6 questions more than 50% which indicates having symptoms of internet addiction that might develop into an internet addiction disorder.

Furthermore, regarding the results of UCLA loneliness scale, findings showed that by more than half of the participants answered 19 out of 20 questions by never or rarely, but still in the overall result students who had severe social isolation were 26% (n=57) and those who had frequent problem were 26% (n=57) and the highest people would spend on social networking the higher they would score on the scale. Despite that there was no significant relationship between the independent variables and the UCLA loneliness scale and only one significant relation with the academic year, still this might indicate the need for further studies.

Also, Pearson's test showed that the relationship between internet addiction and social isolation was a strong positive relationship ( $r=0.234$ ,  $n=219$ ,  $p<0.000$ ) which meant that those participants who scored high on internet addiction where scoring high on social isolation and those who got a below average score on internet addiction received a low score on the social isolation.



Finally, the current study found strong positive relationship between social networking and the demographic variables like gender, age, place of residence & faculty.

## **6.6 Section four: Limitations and recommendations**

### **6.6.1 Limitations**

There were different limitations in the current study. For example, this study utilized a cross sectional design. This made it difficult to assess accurately the impact exerted by each factor and variable. Also, this type of design may have limitations in the generalization of the results to a wider population since it measures both the prevalence of the outcomes and the determinants in a population at a point in time or over a short period of time (Horn et al. 2008). Nevertheless, the cross sectional studies are highly useful for descriptive purposes and it is relatively quick, cheap and easy to undertake (Grove & Burns, 2005).

The data collection for this study used the self-administrated questionnaire. So, the reliability of the result may be impacted (Cohen et al, 2007). Further, this study was conducted only in limited faculties in Al-Quds University and excluded other universities which makes hard to generalize the results.

## **6.7.2 Recommendations**

### **Recommendations for the university**

- Increase knowledge and awareness about the negative impact of social networking and its relation with social isolation and internet addiction through education and raising students' awareness by the use of posters or social networks workshops.
- University need to provide counseling and support to the students who have problems of addiction on internet and social isolation to help them overpass these obstacles in order to achieve better in such an academic setting.
- Limit the access to social networks at the university campus through providing other, alternative activities on campus, such as social parties, charitable work and other beneficial activities that enhances the social life of the students.

### **Recommendations for the mental health professionals**

- Mental health workers and professionals in Palestine should start to give attention on the negative impact associated with social networking and internet use among young adults.
- Mental health workers should increase their knowledge and capacity in the field of internet addiction and social networking and the methods to treat internet addiction and other symptoms that would result from it.

### **Recommended research in the future:**

- There is a need for further quantitative study to assess the phenomena of social networking among youth and young adults by focusing on socio-demographic factors.
  
- There is a need for further quantitative study to assess the impact of social networking on the mental health of the youth in Palestine.
  
- There is a need for further qualitative studies to explore young adults experience of using social networking and assert the positive and negative impact of using them.
  
- Further studies are required to be conducted among other students in other Palestinian universities.

## References

### Books and Scientific articles

- Abram, C. (2013). Facebook For Dummies. Fifth Edition, Hoboken, N.J: John Wiley & Sons.
- Abramson, J. & Abramson, Z. (1999). Survey methods in community medicine. Fifth edition, Edinburgh, United Kingdom: Churchill Livingstone.
- Abreu, C. et al. (2008). Internet and videogame addiction: a review. Rev Bras Psiquiatr, 30(2): 156-67.
- Al-Hajjar, B. (2014). Internet addiction and psychological morbidity among nursing students in Gaza. Science Publishing Group, 3(4), 99-103, doi:10.11648/j.ajap.20140304.13.
- Aouragh, M. (2011). Palestine Online: Transformation, the internet and the construction of identity. London, NY: I.B.Tauris.
- Arendholz, J.(2013).(In)-Appropriate Online Behavior: A pragmatic analysis of message board relations. USA:John Benjamins.
- Australian Institute of Health and Welfare 2012. Social and emotional wellbeing: development of a Children's Headline Indicator. Cat. no. PHE 158. Canberra: AIHW. Accessed on 2014: <http://aihw.gov.au/WorkArea/DownloadAsset.aspx?id=10737421521>
- Aydin, B. & Sari, S. (2011). Internet addiction among adolescents: the role of self-esteem. Elsevier, Procedia Social and Behavioral Sciences, doi: 15:3500-3505.
- Ayoub, K. (2011). Internet Addiction among Palestinian University Students – Facts and Perspectives.” Part of requirements for the M.D degree, An-Najah University, Nablus, Palestine.

- Baker, L. & Oswald, D. (2010). Shyness and online social networking services. *Journal of Social and Personal Relationships*, 27 (7) 837-889.
- Baker, J. & Moore, S.(2011). An Opportunistic Validation of Studies on the Psychosocial Benefits of Blogging. *Rapid Communication, Cyberpsychology, Behavior and social Networking*, 14 (6), doi:10.1089/cyber.2010.0202
- Baker, R. & White, K. (2011).In *Their Own Words: Why Teenagers Don't Use Social Networking Sites*. Cyberpsychology, Behavior, and Social Networking, Mary Ann Libert, Inc. 14 (6).
- Barker, C. Pistrang, N. and Elliot, R. (2002). *Research Methods in Clinical Psychology*. Second Edition, UK: John Wiley & sons.
- Bergmark, K., Bermark, A., & Findahl, O. (2011). Extensive Internet Involvement-Addiction or Emerging Lifestyle?. *International Journal of Environment Research and Public Health*, 8, 4488-4501.
- Bian, M. & Leung, L. (2015). Linking loneliness, shyness, smartphone addiction, symptoms, and patterns of smartphone use to social capital. *Social science computer review*, 33(1), 61-79.
- Biordi, D. and Nicholson, N. Accessed on September 2015.  
[http://www.jblearning.com/samples/076375126X/LARSEN\\_CH05\\_PTR.pdf](http://www.jblearning.com/samples/076375126X/LARSEN_CH05_PTR.pdf)
- Bolter, J. (1991). *Writing Space: Computers, Hypertext, and the History of Writing*. N.J. USA: Lawerance Erlabum.
- Bon, A.(2007).Can the Internet in tertiary education in Africa contribute to social and economic development? *International Journal of Education and Development using Information and*

Communication Technology, (IJEDICT), 3 (3), 122-131.

- Bowling, A. (2002). RESEARCH METHODS IN HEALTH: Investigating health and health services. Second Edition. Buckingham, Philadelphia, UK & USA:Open University Press.
- Bowker, J. Nelson, L. Markovic, A. & Luster, S. (2014). Social withdrawal during adolescence and merging adulthood. Handbook of Solitude, loneliness and social isolation. USA: John Wiley & sons.
- Boyd, D. (2007). Why Youth Heart Social Network Sites: The Role of Networked Publics in Teenage Social Life."MacArthur Foundation Series on Digital Learning – Youth, Identity, and Digital Media Volume (ed. David Buckingham). Cambridge, MA: MIT Press.
- Boyd, D. & Ellison, N. (2007).Social Network Sites: Definition, History, and Scholarship. Journal of Computer-Meditated Communication, doi:10.1111/j.1083-6101.2007.00393.x
- Blaszczynski, A. (2008). Commentary: A response to “Problems with the concept of video game “addiction: Some case study examples”. International Journal of Mental Health and Addiction6: 179–181.
- Bluemke, M. & Zumbach, J. (2010). Assessing Aggressiveness via Reaction Times Online. Journal of Psychological Research on Cyberspace, 6(1), article 5, doi:10.5817.
- Byun, S. Ruffini, C. Mills, J. Douglas, A. Niang, M. Stepchenkova, S. Lee, S. Loutfi, J. Lee. J. Atallah, M. Blanton, M. (2009). Internet Addiction: Metasynthesis of 1996-2006, Quantitative Research. CyberPsychology & Behavior, Mary Ann Liebert, Inc. 12(2), 203-207. Doi:10.1089/cbp.2008.0102
- Camp, W. G. (2001). Formulating and evaluating theoretical frameworks for career and technical education research.” Journal of Vocational Education Research, 26(1), 4-25. Available online: <http://scholar.lib.vt.edu/ejournals/JVER/v26n1/pdf/v26n1.pdf>.

- Cardak, M. (2013). Psychological Well-Being & Internet Addiction among University Students. *Turkish Online Journal of Educational Technology*, 12 (3), 134-141.
- Christensen, H. & Griffiths, K. (2000). The Internet and mental health literacy. *Australia and New Zealand Journal of Psychiatry*, 34, 975-979.
- Cohen, L. Manion, L. & Morrison, K. (2007). *Research methods in education*. Sixth edition, London and NY: Routledge.
- Cotton, S. Anderson, W. & McCullough, B. (2013). Impact of Internet Use on Loneliness and Contact with Others Among Older Adults: Cross-Sectional Analysis. *J Med Internet Res*. (2013);15(2): e39, doi:10.2196/jmir.2306.
- Creswell, J. (2009). *Research Design: Qualitative, Quantitative, & Mixed Methods Approaches*. Third Edition, USA: SAGE.
- Collin, P. Rahilly, K. Richardson, I. Third, A. (2011) *Literature Review: The Benefits of Social Networking Services*. Cooperative Research Center for Young People, Technology and Wellbeing, Melbourne: University of Melbourne.
- Deitel, H. (2004). "Internet & World Wide Web, How to program". Third edition, USA Prentice Hall.
- Derbyshire, K. Lust, K.A. Schreiber, L.R. Odlaug, B. Christenson, GA, Golden, DJ, Grant, J.E. (2013). Problematic Internet use and associated risks in a college sample. *Comprehensive Psychiatry*, 54, 415-422.
- Durkee, T. Kaess, M. Carli, V. Parzer, P. Wasserman, BF. Apter, A. Balazs, J. et al. (2012). Prevalence of pathological internet use among adolescents in Europe: demographic and social factors. *Addiction*, 107 (12), 10-22. Doi:10.1111/j.1360-0443.2012.03946.x.

- Esen, B. Aktas, E. & Tuncer, I. (2013). An analysis of university students' internet use in relation to loneliness and social self-efficacy. ELSEVIER, Procedia- Social and Behavioral Sciences 84:1504-1508.
- Fallahi, V. (2011). Effects of ICT on the youth: A study about the relationship between internet usage and social isolation among Iranian students. ELSEVIER, Procedia Social and Behavioral Sciences, 15, 394-398. Available online: [www.sciencedirect.com](http://www.sciencedirect.com)
- Fioravanti, G. Dettore, D. & Casale, S. (2012) "Adolescent Internet Addiction: Testing the Association Between Self-Esteem, the Perception of Internet Attributes, and Preference for Online Social Interactions." Journal of Cyberpsychology, Behavior, and Social Networking, Mary Ann Liberet, Inc. 15(6), 318-223. Doi:10.1089/cyber.2011.0358
- Forouzan, B. (2007). Data Communications and networking". Fourth edition, USA: McGraw-Hill.
- Fox, Z. (2013). 7 Top Social Networks Among American Teens. <http://mashable.com/2013/08/16/teens-social-media-chart/>
- French, C. (1996). Computer Science. Fifth edition, UK: Thompson.
- Guan, S. & Subrahmanyam, K. (2009). Youth Internet use: risks and opportunities. Current Opinion in Psychiatry, 22:351-356.
- Guba, E. G. & Lincoln, Y. S. "Competing paradigms in qualitative research, Handbook of Qualitative research." SAGE journal, Thousand Oaks, CA, USA, (1994).
- Hampton et al. "Social networking site and our lives." Pew Research Center's internet & life project, USA, (2011).



- Heinrich, L. & Gullone, E. (2006). The clinical significance of loneliness: a literature review. *Clinical Psychology Review*, 26, 695-718.
- Hensley, L. & Baumgartner, T. "Conducting & Reading Research in Health & Human Performance." 4th ed, McGraw Hill, USA (2006).
- Israelashvili, M. Kim, T. & Bukobza, Gabriel (2012). Adolescents' over-use of the cyber world – Internet addiction or identity exploration? *ELSEVIER, Journal of Adolescence*, 35, 417-424.
- Iravani, M. (2008). A Survey on Addiction to the Internet and its Psychological/Social Effects among Female Internet Users in Isfahan City 2006. *Management and Labor Studies*, 33 (1), 111-123.
- Jabareen, Y. (2009). "Building a Conceptual Framework: Philosophy, Definitions, and Procedure." *International Journal of Qualitative Methods*, International Institute for Qualitative Methodology, Haifa, Israel: University of Technion, 8(4).
- Jahan, I. & Ahmed, S.M. (2012). Student' perceptions of academic use of social networking sites: a survey of university students in Bangladesh. *Information Development*, 28 (3), 235-247.
- Junttila, N. & Vauras, M. (2009). Loneliness among school age children and their parents. *Scandinavian Journal of Psychology*, 158, 9-721.
- Kallas, P. (2016). Top 15 Most Popular Social Networking Sites (and 10 Apps!). Last accessed on December 2016. Website: <https://www.dreamgrow.com/top-15-most-popular-social-networking-sites/>
- Kapahi, A. Ling, C. Ramadass, S. & Abdulla, N. (2013). Internet Addiction in Malaysia Causes and Effects. *iBusiness*, 5, 72-76.
- King, D. et al. (2013). Clinical features and axis I comorbidity of Australian adolescent

pathological Internet and video game users. *Australian & New Zealand Journal of Psychiatry*, 47 (11), 1058-1067.

- Kittinger, R. Correia, C. & Irons, J. (2012). Relationship Between Facebook Use and Problematic Internet Use among College Students. *Cyberpsychology, Behavior, and Social Networking*, 15(6), 324-327, doi:10.1089/cyber.2010.4010.
- Koltz, R. (2004) "The Politics of Internet Communication.", USA: Roman & Littlefield.
- Knobloch, N. A. (2004). Building Conceptual and Theoretical Frameworks that Inform Research. Germany: Purdue University. Accessed on 2014: <https://pdfs.semanticscholar.org/4688/c7761491812fd90d9404afdc9f40f09045dd.pdf>
- Kuss, D. & Griffiths, M. (2011) Online Social Networking and Addiction- A Review of the psychological Literature. *Int. J. Environ. Research Public Health*, 8, 3528-3552, doi:10.3390/ijerph8093528
- Ordini, F. & Saunders, G. (2008). The use of social networking by students and staff in higher education. *European Institute for E-Learning*, 236-242. Available at: <http://www.eife-l.org/publications/proceedings/ilf08/illearning-forum-2008>. Accessed February 7th, 2015.
- Ozsaker, M. Karayagiz, M. Kahraman, A., Beytut, D. Yardimci, F. & Basbakkal, Z. (2015). A Study on the Effects of Loneliness, Depression and perceived social support on problematic internet use among university students." *Anthropologist, Kamla-Raj*, 19(2), 533-542.
- Lan, C. & Lee, Y. (2013). The predictors of internet addiction behaviors for Taiwanese elementary school students.
- Landow, G. (1992). *Hypertext: The Convergence of Contemporary Critical Theory and Technology*. Baltimore: John Hopkins University Press.

- Larsen, M.C.(2008). Understanding Social Networking: On Young People's Construction &Co-construction of Identity Online.India: Icafi University Press.
- LaRose, R. Mastro, D. & Eastin, M. (2001). Understanding Internet Usage: A Social-Cognitive Approach to Uses and Gratification. Social Science Computer Review, 19 (4), 395-413.
- Leung, L. & Lee, P. (2011). The influence of information literacy, internet addiction and parenting styles on internet risks. New Media & Society 14(1),117-136.
- Liu, C. & Yu, C. (2013). Can Facebook Use Induce Well-Being? Cyberpsychology, Behavior, and Social Networking, 16(9), 674-678, doi:10.1089/cyber.2012.0301.
- Lusted, M. (2011). Social Networking: Myspace, Facebook, & Twitter. Minnesota, USA: ABDO Publishing Company.
- Ma, H. (2011). Internet Addiction and Antisocial Internet Behavior of Adolescents. The Scientific World Journal, 11, 2187-2196, doi:10.1100/2011/308631.
- Martin, J. (2005). Internet Abuse: Addiction? Disorder, Symptom? Alternative Explanation?. Social Science Computer Review, 23(1): 39-48.
- Magid, L. & Collier, A. (2007). MySpace Unraveled. USA: Peachpit Press.
- Masuda, N. Kurahasi, I. & Onari, H. (2013). Suicide Ideation of Individuals in Online Social Networks. PLoS One, (4): e62262. Doi: 10.1371/journal.pone.0062262.
- May, G. (1988). Addiction& Grace. N.Y., USA: Harper & Row.
- Middle East Newspaper. Accessed (2014). <http://beta.aawsat.com/home/article/10811>

- Mitchell, K., Finekelhor, D. & Wolak, J. (2001). Risk Factors for & Impact of Online Sexual Solicitation of youth. *Jama*, 285 (23), 3011.
- Miller, S. (2008). The effect of frequency and type of internet use on perceived social support and sense of well-being in individuals with spinal cord injury. *Rehabilitation Counseling Bulletin*, 51 (3),148-158.
- Morena, M. Jelenchick, L. Egan, K. Cox, E. Young, H. Gannon, BS. Becker, T. (2012). Feeling Bad on Facebook: Depressing disclosures by college students on a Social Networking Site.PMCID, *Depress Anxiety*, 28(6), 447-455, doi: 10.1002/da.20805.
- Morhan -Matsim, J. & Schumacher, P. (2003). Loneliness & Social uses of the Internet. *Computers in Human Behavior*, 19, 659-671.
- Muller, H. (2008). Quantitative Research: Important issues pertaining to research methodology &analysis strategy. Accessed on:<http://osprey.unisa.ac.za/TechnicalReports/e4.pdf>
- Myers, G., & Myers, M. (1976). *The Dynamics of Human Communication: A laboratory approach*. Second edition, USA:McGraw Hill.
- Nalwa, K. & Anand, A. (2003). Internet Addiction in Students: A Cause of Concern.*Cyberpsychology & Behavior*, 6(6), 6-656.
- Nicholson, N. (2013). A Review of Social Isolation: An important but under assessed condition in older adults. *The Journal of Primary Prevention*, 33(2-3)137-152.
- Norman, K. (2008). *Cyberpsychology: An Introduction to Human-computer Interaction*.N.Y., USA:Cambridge University Press.
- O'Reilly, T. & Milestein, S. (2012). *The Twitter Book*. Second edition, USA: O'Reilly.
- PCBS & MoTIT. (2013). *The occasion of World Information Society Day*. Palestine: PCBS &

MoTIT.

- Palestinian Central Bureau of Statistics. Accessed 2015.<http://www.pcbs.gov.ps/site/507/site/802/default.aspx>
- Palestinian Central Bureau of Statistics. Accessed 2015.[http://www.pcbs.gov.ps/Portals/\\_Rainbow/Documents/ICT\\_Households\\_Annual%2007\\_E.htm](http://www.pcbs.gov.ps/Portals/_Rainbow/Documents/ICT_Households_Annual%2007_E.htm)
- Palestinian Central Bureau of Statistics. Accessed 2015.<http://www.pcbs.gov.ps/site/881/default.aspx#HouseHold>
- Palestinian Central Bureau of Statistics. Accessed 2015.[http://www.pcbs.gov.ps/portals/\\_pcbs/PressRelease/Press\\_En\\_ITWD2013E.pdf](http://www.pcbs.gov.ps/portals/_pcbs/PressRelease/Press_En_ITWD2013E.pdf)
- Panicker, J. & Sachdev, R. (2014). Relations among loneliness, depression, anxiety, stress and problematic internet use. *International Journal of Research in applied natural and Social Sciences*, 2(9), 1-10.
- Pantic, I et al. (2012). Association between online social networking and depression in high school students: behavioral physiology viewpoint. *Psychiatria Danubina*, Zagreb, Croatia, 24(1), 90-93.
- Park, S. et al. (2012). The association between problematic internet use and depression, suicidal ideation and bipolar disorder symptoms in Korean adolescents. *The Royal Australian Psychiatry & New Zealand College of Psychiatrists*, 47 (2) 153-159.
- Pempek, J. Yermolayeva, Y, Calvert, S. (2009). College students' social networking experience on Facebook. *Elsevier*, 30 (3), 227-238.
- Peter, J. & Valkenburg, P. (2006). Research Note: Individual Differences in Perceptions of

Internet Communication. *European Journal of Communication*, 21(2), 213-226.

- Randler, C. Hozum, M., & Vollmer, C. (2014). Internet Addiction and Its Relationship to Chronotype and Personality in a Turkish University Student Sample. *Social Science Computer Review*, 32(4): 484-495.
- Reed, L. (2002). Governing (through) the Internet, the discourse on pathological computer use as mobilized knowledge. *European Journal of Cultural Studies*, 5(a) 131-153.
- Rheingold, H. (1994). *The Virtual Community: Finding connection in a computerized world*". London, Great Britain: Martin Secker & Warburg Limited.
- Romano, M. Osborne, L. Truzoli, R. & Reed, P. (2013). Differential Psychological Impact of Internet Exposure on Internet Addicts. *PubMed*, 8(2): e55162. Doi:10.1371/journal.pone.0055162
- Rouis, S. (2010). Impact of cognitive absorption on Facebook on student's achievement. *Cyberpsychology, Behavior, and Social Networking*, 13(2), 173-177.
- Rui, J. Chen, Y. & Damiano, A. (2013). Health Organizations Providing and Seeking Social Support: a Twitter-Baed Content Analysis. *CyberPsychology, behavior, and Social Networking*, 16 (9), 669-673.
- Russell, D. W. (1996). UCLA Loneliness Scale (Version 3): Reliability, Validity and Factor structure. *Journal of Personality Assessment*, 66 (1), 20-40.
- Ryan, P. (2011). *Digital & Information Literacy: Social Networking*. First Edition, N.Y., USA: The Risen publishing group.
- Sachdev, R. (2010). "Impact of Social Networking Sites(SNS) on The Youth of India: A Bird's

Eye View.”India: College of Management Studies, 82-86.

- Sanders, C. Field, E. Tiffany, M., Diego, M. Kaplan, M. (2000) “The relationship of internet use to depression and social isolation among adolescents.” *Adolescence* 35 (138), 237-242.
- Sekaran, U. (2000). *Research Methods for Business*. Third Edition, USA:John Wiley& Sons.
- Shaw, M. & Black DW. (2008). Internet addiction: definition, assessment, epidemiology and clinical management. *PubMed, USA*, 22(5), 353-365.
- Shields, L & Twycross, A. (2004). Validity and reliability – What’s it all about? *Pediatric Nursing*, 16(9), 125.
- Sussman, S., Lisha, N. & Griffiths, M. (2011). Prevalence of the Addictions: A Problem of the Majority or the Minority?. *Evaluation & the Health Professions*, 34(1), 3-56.
- Sim, T. Gentile, D.A. Bricolo, F. Serpelloni, G. & Gulamoydeen, F. (2012). A conceptual review of research on the pathological use of computers, video games, and the Internet. *International Journal of Mental Health and Addiction*, 10 (5), 748–769.
- Spada, M. et al. (2013). Desire Thinking as a Predictor of Problematic Internet Use. *Social Science Computer Review*, 32(4), 474-483.
- Sparkes, M. (2011). The ten most popular social networking websites. Accessed on: <http://www.telegraph.co.uk/technology/google/8718580/The-ten-most-popular-social-networking-websites.html>
- Starcevic, V. (2012). Is Internet addiction a useful concept?. *Australian& New Zealand Journal of Psychiatry*, 47(1) 16-19.
- Szwedo, D. Mikami, A. & Allen, J. (2012). Social Networking Site Use Predicts Changes in

Young Adults' Psychological Adjustment. *J Res Adolescence*, 122(3), 453-466.  
Doi:10.1111/j.1532-7795.013.00788.

- Tavakol, M. & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education* 2, 53-55.
- Tam, P. & Walter, G. (2013). Problematic internet use in childhood and youth: evolution of a 21<sup>st</sup> century affliction. *The Royal Australian Psychiatry & New Zealand College of Psychiatrists*, 21 (5): 533-536.
- Taweel, H. (2007). The academic profession in Paletine. PhD Dissertation, Boston College, USA.
- Thomas, BJ. (1996). *The Internet for Scientists & Engineers: Online tools & resources.* Washington, USA: SPIE & IEEE Press.
- Tokunaga, R. 2012. A Unique Problem or the Manifestation of a Preexisting Disorder? The Mediating Role of Problematic Internet Use in the Relationships Between Psychosocial Problems and Functional Impairment. *Communication Research*, 41(4) 531-560.
- Tonioni, F. D'Alessandris, L. Lai, C. Martinelli, D. Corvino, S. Vasale, M. Fanella, F. Aceto, P & Bria, P. (2012). Internet addiction: hours spent online, behaviors and psychological symptoms. *General Hospital Psychiatry* 34 (1), 80-87.
- Turel, O. & Serenko, A. (2012). The benefits and dangers of enjoyment with social networking websites." *European Journal of Information System*, 21 (5), 512-528.
- Tsitisk, A. et al (2011). Determinants of Internet Addiction among Adolescents: A case-control study. *The Scientific World Journal*, 11, 866-874.
- Wanjak, K. (2011). Internet use and its impact on secondary school students in Chiang Mai,



Thailand. Doctorate Thesis, Edith Cowan University, Research online, Thailand.

- Wilson, K., Fornasier, S., & White, KM. (2010). Psychological predictors of young adults: use of social networking sites. *Cyber-psychology, Behavior & Social Networking*, 13(2), 173-177.
- Wikipedia, Accessed (2016). [https://en.wikipedia.org/wiki/Social\\_software](https://en.wikipedia.org/wiki/Social_software)
- White, K. Fornaiser, S. & White, K. (2010). Psychological Predictors of Young Adults' use of Social Networking Sites. *Queensland University of Technology, School of Psychology and Counseling*, 13(2), 173-177.
- Yamkovenko, B. & Hatala, JP. (2014). Feedback-Seeking and Social Networking Behaviors During Job Search: A conceptual Model. *Human Resources Development Review*, 13(1) 102-124.
- Yang, C. et al. (2013). Prevalence and risk factors of problematic Internet use: A cross-national comparison of Japanese and Chinese university students. *Transcultural Psychiatry*, 50(2) 263-279.
- Yen, J. Ko, C., Yen, C. Wu, H.Y., Yang, M.J. (2007). "The Comorbid Psychiatric Symptoms of Internet Addiction: Attention Deficit and Hyperactivity Disorder (ADHD), Depression, Social Phobia, and Hostility." *Journal of Adolescent Health*, 41 (1), 93-98.
- Young, K. & Rodgers, R. (1998). The Relationship Between Depression and Internet Addiction. *CyberPsychology & Behavior*, 1(1), 25-28.
- Young, K. (1999) *Internet Addiction: Symptoms, Evaluation, and Treatment. Innovations in Clinical practice*, Chicago, IL.
- Young, k. & Rodgers, R. (1998). Internet addiction: personality traits associated with its development". Paper presented at the 69<sup>th</sup> annual meeting of the Eastern Psychological

Association, USA.

- Young, K. (1998). *Caught in the Net: How to Recognize the signs of Internet Addiction and a Winning Strategy for Recovery*. John Wiley & Sons, New York, USA.
- Zizek, S. (2006). Cyberspace, or, how to traverse the fantasy in the age of the retreat of the big other?. *Public Culture*, 10(3), 483-513.

Annex (a)



جامعة القدس

دائرة الصحة العامة

برنامج الصحة النفسية المجتمعية

"تأثير استخدام شبكات التواصل الاجتماعي على إدمان الانترنت والعزلة الاجتماعية لدى طلبة  
البكالوريوس في جامعة القدس"

أختي المبحوثة/ أخي المبحوث:

تحية وبعد...

تقوم الباحثة وهي من طلبة كلية الصحة العامة، برنامج ماجستير الصحة النفسية بإجراء دراسة حول "تأثير استخدام شبكات التواصل الاجتماعي على إدمان الانترنت والعزلة الاجتماعية لدى طلبة البكالوريوس في جامعة القدس" وذلك من أجل استكمال متطلبات التخرج، وقد وقع عليك الاختيار لتكون ضمن عينة الدراسة، لذا أرجو منك التعاون بالإجابة على أسئلة الاستبانة. علماً بأن الدراسة هي لأغراض البحث العلمي والأكاديمي فقط، وسيتم المحافظة على سرية الإجابة، لذلك لا داعي لكتابة الإسم أو ما يشير إليك، شاكرة لك حسن تعاونك في إنجاز هذه الدراسة.

أطيب التحيات...

الطالبة: مريان سعادة

إشراف:

د. منى حميد ود. معتصم حمدان

2014

## أسئلة الاستبانة

الجزء (1): البيانات الديمغرافية: يرجى وضع الاجابة الصحيحة في المكان المخصص لها

الجنس	أ. ذكر ب. أنثى
العمر	
الكلية	
التخصص	
السنة الدراسية	١.أولى ٢.ثانية ٣.ثالثة ٤. رابعة ٥. خامسة ٦. سادسة
مكان السكن	
معدل عدد الساعات التي تقضيها يومياً على الانترنت	

الجزء (2): يرجى وضع دائرة حول الرقم الذي يمتلك أكثر حيث (0= لا ينطبق، 1= نادراً، 2=أحياناً، 3=كثيراً، 4= غالباً، 5= دائماً)

المقياس						الأسئلة	
0	5	4	3	2	1	١. غالباً استغرق وقتاً على الانترنت اكثر مما كنت أنوي.	
0	5	4	3	2	1	٢. غالباً أهمل الأعمال المنزلية من أجل البقاء على الانترنت.	
0	5	4	3	2	1	٣. غالباً أفضل المتعة التي أحصل عليها من الانترنت على قضاء الوقت مع الأصدقاء.	

0	5	4	3	2	1	4. غالباً أنشأ علاقات جديدة مع آخرون يستخدمون الانترنت.
0	5	4	3	2	1	5. غالباً يشتكي المحيطين بي ( مثل عائلتي وأصدقائي) حول مدة الوقت التي أمضيها على الانترنت.
0	5	4	3	2	1	6. غالباً تتأثر علاماتي أو واجباتي الدراسية بسبب الوقت الذي أمضيه على الانترنت.
0	5	4	3	2	1	7. غالباً افحص بريدي الالكتروني قبل القيام بالأعمال التي يجب ان أقوم بها.
0	5	4	3	2	1	8. غالباً يتأثر أدائي أو انتاجيتي بالعمل بسبب الانترنت.
0	5	4	3	2	1	9. غالباً أكون دفاعياً أو متحفظاً عندما يسألني أي شخص ماذا أفعل على الانترنت؟
0	5	4	3	2	1	10. غالباً أقوم باستخدام أفكار جيدة حول الانترنت للتخفيف من أفكار مزعجة في حياتي.
0	5	4	3	2	1	11. غالباً أجد نفسي أترقب متى ساستخدم الانترنت مرة أخرى.
0	5	4	3	2	1	12. كم تكون خائفاً من أن الحياة بدون الانترنت ستكون مملة، وفارغة وغير ممتعة؟
0	5	4	3	2	1	13. غالباً أضرب أو أصرخ أو انزعج إذا ضايقتني أحدهم وأنا استخدم الانترنت.
0	5	4	3	2	1	14. غالباً اتخطى وقت النوم بسبب الاستعمال المتأخر للانترنت بالليل.
0	5	4	3	2	1	15. غالباً أكون مشغول بالتفكير بالانترنت وهو مطلقاً أو اتخيل أنني

						استخدمه.
0	5	4	3	2	1	16. غالباً أقول "سأمضي بضع دقائق أخرى" عندما أكون استخدم الانترنت.
0	5	4	3	2	1	17. غالباً أحاول أن أقلل من المدة الزمنية التي أقضيها على الانترنت ولكن أفضل.
0	5	4	3	2	1	18. غالباً أحاول أن أخفي الوقت الذي استخدم فيه الانترنت عن الآخرين.
0	5	4	3	2	1	19. غالباً اختار أن أمضي مزيداً من الوقت على الانترنت بدلاً من الخروج مع الآخرين.
0	5	4	3	2	1	20. غالباً عندما أكون بعيداً عن الانترنت، أشعر بأني مكتئب، مزاجي، أو عصبي ، وأجد أن ذلك يختفي عندما أعود لاستخدام الانترنت.

**الجزء (3):** يرجى وضع دائرة حول الرقم الذي يمتلك، مع العلم أن (1= غالباً أشعر بذلك، 2= أحياناً أشعر بذلك، 3=نادراً أشعر بذلك، 4=لا أشعر بذلك مطلقاً).

المقياس				الاسئلة	
4	3	2	1	1. أنا غير سعيد لقيامي بالعديد من الأمور لوحدي.	
4	3	2	1	2. لا يوجد لدي أحد لاتحدث معه.	
4	3	2	1	3. لا أستطيع أن احتمل بقائي وحيداً.	
4	3	2	1	4. افتقر إلى الرفقة.	
4	3	2	1	5. حقيقة أشعر كأنه لا يوجد أحد يفهمني.	

4	3	2	1	أجد نفسي انتظر من الناس أن تتصل أو تكتب لي.	6.
4	3	2	1	لا يوجد لدي أحد أتوجه له.	7.
4	3	2	1	أنا لم أعد قريباً من أي أحد.	8.
4	3	2	1	لا أشارك اهتماماتي وأفكاري مع من هم حولي.	9.
4	3	2	1	أشعر بأنني مهمل.	10.
4	3	2	1	أشعر بأنني وحيد.	11.
4	3	2	1	أنا لا أستطيع التواصل أو الاتصال مع المحيطين بي.	12.
4	3	2	1	علاقاتي الاجتماعية سطحية.	13.
4	3	2	1	أنا أشعر بحاجة شديدة لرفيق.	14.
4	3	2	1	بالحقيقة لا أحد يعرفني جيداً.	15.
4	3	2	1	أشعر بالعزلة عن الآخرين.	16.
4	3	2	1	أنا غير سعيد كوني منسحب.	17.
4	3	2	1	من الصعب علي أن أكون اصدقاء.	18.
4	3	2	1	أشعر اني مستبعد ومستثنى من الآخرين.	19.
4	3	2	1	الناس حولي ولكن ليسوا معي.	20.

شكراً جزيلاً لتعاونكم...