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The Influence of Social Media on Health Behaviors among University Students in the Gaza Strip

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The Influence of Social Media on Health Behaviors among University Students in the Gaza Strip

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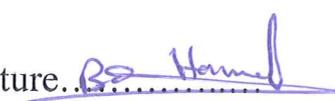## The Influence of Social Media on Health Behaviors among University Students in the Gaza Strip

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Dedication

To whom they strive and never stint what they own to push me in the successful path.

To my beloved family. To my parents, both of you have motivated me to climb the life stairs wisely and patiently.

To my sisters, you are always a source of inspiration and encouragement.

To my sons, Khaled and Abdelrahman, to my princess Joury, you have supported me a lot.

To the soul of my husband.

To all those who encouraged, supported and helped me all the way.

I dedicate this research for all of them

Nadeen Baderaldeen El Redaisi

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 thesis or any of its parts has not been submitted for higher degree to any other university or institution.

Signed:

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Date:……./………………/……………..

Acknowledgment

Abstract

Social media is increasingly becoming very popular among university students, where university students spend a substantial amount of their time using social media; however, little is known regarding whether such use is associated with positive or negative effects on their health behaviors. This study explores the influence of social media on health behaviors of university students in Gaza.

The design of the study is a methodologically triangulated one. The quantitative component was carried out, through a face-to-face questionnaire with 411 participants who were studying at local universities in Gaza at the time of data collection. Convenient systematic sample was used to survey students exiting the selected universities. A structured interviewed questionnaire was used for data collection and the response rate was (75%). In addition, five key informant interviews were conducted with relevant service providers and policy makers. Moreover, six focus group discussions with university students were conducted. Quantitative data were analyzed using the SPSS software and the qualitative data were analyzed using open coding thematic technique.

Findings show that of the participants, 98.1% owned a mobile, 51.6% used Facebook for texting. The most commonly in use application by the respondents is Facebook followed by Instagram, (89.3%), (68.1%), respectively. The results show that having Instagram profile was more common among females (76.3%) than males (59.2%) and the variations were statically significant. Nearly half of the respondents are usually active on social media in the evenings. The majority of participants use social media for keeping in touch with friends (81.8%).

A considerable proportion of participants use the internet (34.5%) and social media (31.9%) as a common source for getting health information. Nearly half of participants had accessed health and lifestyle related information from Facebook. Similarly, half of participants said that social media had positive effects on their health behaviors. Physical activity and nutrition were the most interesting themes for the participants to get information about (45%), (24.3%) respectively. Of the respondents, 54% reported adapting some healthy behaviors after using social media. Moreover, 49.9% of respondents quitted some bad behaviors after using social media. With regard to nutritional behaviors, 40.3% of participants said that social media had positive effect on their eating habits. Regarding psychosocial status, Internet (43.3%) and social media (33.3%) were also used for accessing psychosocial status related information, 39.4% reported that social media had promoted their psychosocial status. Only 19.5% of participants reported that social media contributed to combating smoking. Facebook encouraged smoking (reported by 61.3% of the participants) and at the same time it helps in combating it (67.4%). Only 14.3% of participants said that social media decrease drug and substance abuse. Regarding sleeping, nearly half of participants reported that social media decreases sleeping hours, 47% indicated that they skip sleeping hours because of using social media, 50.2% agreed that using social media at a late time hinders the academic achievement. YouTube had positive effect on physical activity as reported by 59% of participants and on PSS (38.2%), while Facebook had the most positive effect on nutrition (61.9%), smoking (35.4%), drugs (33.4%) and health information seeking behaviors (67.4%). However, Facebook had the most negative effect on sleeping (41.7%).

The study provided important information about the use of social media by the university students in Gaza and flags an important missed opportunity for using social media to positively influencing health behaviors. Youth specific health related information can be effectively communicated via social media applications particularly through using face book and Instagram.

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List of Abbreviations

DM	Diabetes Mellitus
ERP	Enterprise Resource Planning
FGD	Focused Groups Discussions
GAGE	Gender and Adolescence: Global Evidence
GDP	Gross Domestic Product
GS	Gaza Strip
ICT	Information and Communication Technology
ILS	New Israeli Shekel
KII	Key Informant Interviews
Km	Kilometer
MD	Median
MOH	Ministry of health
MOHE	Ministry of Higher Education
MTIT	Ministry of Telecommunications and Information Technologies
N	Number
NCDs	Non-communicable Diseases
PCBS	Palestinian Central Bureau of Statistic
PNA	Palestinian National Authority
PSS	Psychosocial Status
SMS	Short Messaging Service
sq	square
Std	Standard Deviation
UNFPA	United Nations Population Fund
UNRWA	United Nations Relief and Works Agency for the Refugees of Palestine in the Near East
USD	United States Dollar
WB	West Bank
WHO	World Health Organization

Chapter One

Introduction:

1.1   Background:

Nowadays social media Plays an important role in influencing people's views and is an important part of everyday life for many people (Moorhead et al, 2013). Used as an umbrella term "social media" which describes web applications that allow users to generate, share, receive and comment on content via social networks (Kaplan & Haenlein, 2010). More and more social media provide promising potential in the dissemination, collection of information, and information from it is becoming increasingly important in the everyday lives of people (Pálsdóttir, 2014).

Modern lives are going digital, and healthcare is no exception. Social media provides intense information which affects peoples' interactions and behaviors. Currently, there are several social networking platforms: Facebook, Twitter, Instagram, YouTube, and Whatsapp which are available to connect people and enable them to share their ideas toward several issues including health. Social networks have become an important health resource (Newberry, 2019). It is worth to mention that social media influences have tremendous effect in the adoption of health behaviors (Laranjo et al, 2014).

With nearly 2 billion active users on Facebook, Twitter and other social platforms across the world, social media are pervasive in daily life, with high use and ease of participation; it is an attractive tool for health behaviors interventions (Maher et al., 2014). Targeted applications such as Facebook, Twitter and others promote some aspects of health and offer new perspectives on health-related behaviors (ibid).

Since social media are hugely popular, coupled with high rates of use and ongoing participation, they provide an unprecedented opportunity for policymakers and clinicians to introduce online social behavior change interventions (Pagoto et al., 2016). Furthermore, suitable use of social media can improve user access and satisfaction in accessing health care information (Ventola, 2014). The World Health Organization (WHO) has stated that patients' use of social media has registered greater satisfaction, and that health care

organizations for business development and visibility use social media as a means of resolving healthy play by eliminating geographical boundaries (Masic, 2012).

Social media have the ability to support, enhance, and influence information behaviors. For example, health professionals can provide good information about healthy living and inspire people to discover this information (Moorhead et al, 2013). Additionally, friends or acquaintances can provide support and revelation through discussions. In addition, Internet resources have been made through monologues, where information is disseminated through web pages, newspapers or magazines on the web, to make people communicate, ask questions, exchange information, and get comments from each other (Pálsdóttir, 2014). Although this may create challenges, it is possible to publish inaccurate and misleading information. On the other hand, it provides health professionals with new opportunities to disseminate information about healthy living, as well as for people to collect this information and receive health support. Meanwhile, health promotion is one of the most important determinants of the health status of the individual and makes him responsible for his health (Shaheen et al., 2015).

Health behaviors at younger ages are important factors that affect the individual risk of non-communicable diseases (NCDs) and other disorders that may occur later in life (Racette et al., 2014). The relationship has been documented between lifestyle behaviors such as physical activity and NCDs (Alpar et al., 2008), there is a high correlation between these diseases and unhealthy lifestyles, including inadequate nutrition, lack of exercise, smoking, excessive caffeine intake, and unhealthy sleep habits.

University students have moved from childhood to adulthood, and this stage is marked by physical, psychological, social and sexual development. The promotion of healthy behaviors during this period increases their chances of becoming healthy adults in the future (Hoyt et al., 2012)

Although there is too much information about the percentage of social media users, less is known about the influence of use of social media. It is unclear if users use social media in a constructive or destructive manner?

1.2   Problem statement:

Social networking sites are websites that motivate people to create a "communications network" for others. Today's college students are known as the "net generation" or the millennium generation. Technology such as the Internet, e-mail, blogs and social networks are regarded as communication and connection tools for university students at a higher rate than individuals from any other generation (Junco & Cole-Avent, 2008).

Many aspects of social networking sites, including social support, empowerment, peer pressure, exchange of information and interactive emotion, can influence patients' health behaviors and increase commitment to and participation in patient health behaviors (Rozenblum & Bates, 2013). According to the PCBS, (2016) the percentage of youth communication through Facebook or Twitter daily reaches to 35.7%, using Whatsapp reaches 16.8%, using emails reaches 6.7% and SMS 12.6%.

Indeed, little is known about the actual impact of social media on behavior change in health and factors that may affect user interactions and experiences, such as ease of use, user satisfaction, and the level of technology acceptance or participation. Therefore, there is an urgent need to understand the effective impact of social media on broader health behaviors not simply assuming that interventions can be ported from one medium to another. Thus, this study fills important gaps about the effect of social media in influencing health behaviors, which might be highly beneficial to different audiences as detailed below.

1.3   Justification

This study is the first of its kind in Palestine in studying the effects of social media on health behaviors, thus the research will add it to the body of knowledge as one of the most important branches in social sciences in university student's life.

Social media in particularly has been the most common tools used by young people worldwide. According to the PCBS (2016) 43% of youth (15-29) in Palestine are talking through Facebook and Twitter (social media applications).

Social media has demonstrated great influence on mobilizing Palestinian community though their battle against the Israeli occupation, especially the youth who have the enthusiasm, energy, and desire to change (Ben-Israel, 2018).

The study explores the possibility of extending the role of social media to influence behaviors; especially the large size of users opens a new horizon for influencing behaviors. This is particularly important for health promotion programs.

In the last couple of years, few certified Arabic medical companies which provide health education, promotion and consultation to millions of the followers, use Facebook pages, Instagram, twitter, etc., to communicate health content. A good example is Altibbi Company, which has reliable social media pages, has 1.9 million followers from the Middle East and North Africa region on Facebook. Can we apply such thing in Gaza? What is the size of the benefit that affects our youth? If we provide this application which benefits do they get?

The youth, at colleges or universities, experience serious changes in their bodies, eating and health behaviors. They tend to consume fast food, soft and energy drinks, smoke, or reduce the portion of meals they take to maintain their body shape, consume illegal drugs, use fat burner supplement, and bodybuilding drugs. University age is critical as people develop health behaviors that sustain long. Those youth, who are the main target of this study, are also the vast majority of social media users in Gaza Strip (GS), respondents to social media campaigns, in need to have awareness about the consequences of unhealthy behaviors. The big responsibility will be on the shoulders of certified health expert who will communicate these messages throughout the social media.

The research will focus on the effect of social media on the health behaviors among the college or university students, the findings of this study might be used by policy makers like the Ministry of Health (MOH), Ministry of Youth, service providers in health sector, universities, colleges and advocates in health. The study findings will direct them to formulate strategies and set regulations for some social media contents published by companies, restaurants and others who provide related products that affect the youth health. For instance, in the educational sector curriculum, developers will be informed when developing curriculum for the youth. For the health education and promotion

programs, it will help doctors especially those dealing with counseling of the youth to know which tool s to use to effectively communication to the youth.

The results of the study are likely to influence further scholarly research by other researchers who may be interested in this field of knowledge and initiate appropriate mitigation. As well as enhancing the importance of developing reliable social media contents tailored to the health awareness among youth.

1.4 Aim

This study aims at identifying the effect of social media on health behaviors of the university students, ultimately the study will provide recommendations for utilizing social media as a tool for improving appropriate health behaviors which could be reflected on the health status and practices.

1.5 Objectives

1. To appraise the contribution of the social media in influencing the health behaviors of university students.
2. To recognize both positive and negative contributions of social media to health behaviors particularly in nutrition, exercising, sleep pattern, drug and substance abuse, smoking, seeking health information and psychosocial issues.
3. To identify variations associated with the influence of social media on health behaviors in reference to characteristic and social media usage related variables.
4. To provide suggestions and recommendations contributing to appropriate rate development of the role of social media in health behaviors.

1.6 Questions

1. Do social networking sites contribute to the discussions of contemporary health issues that concern university students and improve their healthy behaviors?
2. What are the positive impacts of social media on health behaviors?
3. What are the negative impacts of social media on health behaviors?
4. How do students receive information on their health behaviors?
5. Do the social media motivate the students to improve their healthy behaviors?

6. What are the practical interventions that can be significant to promote the effective role of health behaviors?

7. Is social media a useful source to educate students about good health behavior?

8. Which of the applications are used more among university students?

9. Who has more effect of social media, male or female students?

10. What is the message that university students may get from social media?

11. Are there any variations in using social media through university students?

12. Which applications are more influential in use?

13. Which groups are more likely to be influential more?

1.7   Context
1.7.1   Demographic context

The GS is a narrow piece of land on the southern eastern coast of the Mediterranean Sea. With its area of 365 Sq. Km2, constituting about 1.35% from the Palestinian land (MOH, 2014). It is a very crowded area, with a population density of 5,203 individuals by Km2 (PCBS, 2018). In 2018, the total population of the Palestinians in both GS and West Bank (WB) is about 4,705,601 (1,875,317 in GS). The percentage of people aged 60 years and above in GS is 4.3%%from the total population (PCBS, 2018). Among Palestinians, life expectancy is 72 years for males, and 75 years for females.

In Palestine, the proportion of youth (15-29) years constitutes 24.3% of the total population, as nearly 40% of them suffer unemployment distributed by 37% in the age group 15-19 years, and 63% in the age group 20-29 years, while the percentage in GS for age group 20-24 years is 10.2%. Data from the Palestinian Youth Survey 2016 indicated that the percentage of households headed by youth (15-29) years is 14%, 17% in the GS. The data also indicated that 72% of the households have at least one youth, 74% in the GS (PCBS, 2015).

According to PCBS (2015) the percentage of youth using Facebook or Twitter daily reached to 35.7% in the GS 16.8% Whatsapp, 6.7% email and 12.6% SMS, 61.3% use computer by internet usage, 79.5% owning a mobile phone, 86.6% male and 72.2% female. These are considered as a high percentage and indicate the importance of social media in the Palestinian culture.

1.7.2   Socioeconomic characteristic

Years of conflict and blockade have devastated Gaza's economy and left 80% of the population relying on the international humanitarian aid (UNRWA, 2016). Poverty rate among individuals in the GS according to household monthly consumption is 49% (PCBS, 2017). Deep poverty rate in the GS is 33.8% (PCBS, 2017).

The unemployment rate has increased significantly to 41% (PCBS, 2015). The total Gross Domestic Product (GDP) in GS is 3,1341 USD Million (PCBS, 2015). The complex political and economic situation is exacerbating people's lives, with restriction of goods passage across the borders, both importing and exporting goods to and from GS is restricted because of the frequent closure of borders. This increases the use of social media, especially among the young people who uses the social media and considered the venture through which they communicate with the outside world, which can't to communicate with it.

Since social media benifited the Palestinian community as it showed the Palestinian issue, its use and its impact on health is unknown. In addition to the need for students to educate health and improve health behaviors which are neglected largely and is not focused on them, despite the great importance that contribute to improving the health behavior of society as we mentioned above, and according to many studies on the role of social media to improve this health behaviors.

1.7.3   Education system

The illiteracy rate among Palestinians aged 15 years and above is 3.3%, distributed as 1.4% of males and 4.8% of females (PCBS, 2015). It is 3.0% in GS. Literacy rate among Palestinians aged 15 to 19 years is 99.4% distributed as 99.4% for males and 99.4% for females, while the literacy rate among Palestinians aged 20 to 24 years is 99.1% distributed as 99.5% for males and 99.1% for females. Mean years of schooling among Palestinians aged 15 years and above is 10.67, distributed as 10.77 among males and 10.56 among females. It is 11.04 in the GS (PCBS, 2015).

According to Ministry of Higher Education (MOHE) and Higher Education system in Palestine, there are 14 universities: 5 universities in the GS, in addition to 19 colleges that grant bachelor's degrees: 6 in the GS. There is only one university for open

education, which has 5 centers in the GS (MOHE, 2018). Moreover, there are 18 community colleges: 7 in the GS. The number of students in universities in Palestine is 204745, distributed as 79809 males and 124936 females. While, the number of students in community colleges in Palestine is 11283, distributed as 5376 males and 5907 females (MOHE, 2018). On the other hand, number of students in GS is 84817, distributed as 39455 males and 45362 females (MOHE, 2018).

1.7.4 Health status of youth in Gaza

In Palestine, Cardiovascular diseases stills the leading cause of death among Palestinians, accounting for 30.6% of deaths recorded in 2016, Cancer was the second leading cause of death, with 14.0% of deaths. Cerebrovascular diseases were the third leading cause of death, with 12.8% of causes leading to death. Conditions in the perinatal period were the fourth leading cause of death 8.0%. In addition to that, complications of diabetes came in the fourth rank with a proportion of 8.0% (MOH, 2016). The prevalence and risk of NCDs are high (WHO, 2016).

There are four main health care providers in Palestine: the Ministry of Health (MOH), the main provider of health services in the Gaza Strip, followed by the United Nations Relief and Works Agency for Palestine Refugees (UNRWA), non-governmental organizations and private profit providers (NGOs). MOH provides comprehensive services to the population, including primary, secondary and tertiary health services, and the procurement of health services not available to patients required from local and external health care providers. UNRWA is the second provider of health care after MOH, providing primary health care services only to refugee patients and purchasing secondary care services for hardship cases from other service providers such as MOH and private hospitals. NGOs provide primary and secondary services and some higher education services depend on projects and funds. The private sector provides services at the three level of care through specialized hospitals and specialized centers for profit reasons.Additionally, there are 32 hospitals in the GS. The MOH provides its services through 56 health labs. There are 158 primary care centers, 22 belonging to UNRWA, and 51 belonging to MOH. In addition, there is a Department of Health Education in the MOH, and health education activities are through international projects focusing on reproductive health and youth health (MOH, 2018).

Moreover in GS, 21.4% of young people in age group (13–15) years (30.2% boys, 11.6% girls) have ever smoked cigarettes, while 47.4% have been affected by passive smoking (MOH,2016), furthermore the prevalence rates of overweight (18.8%) and obesity (20.8%) among university students in GS (Abu Hamad, S., 2017).

There are many reports showing that there is a gap in information among young people. GAGE study refer that the most pressing problems faced by adolescents are sexual and reproductive health and risky behaviors such as smoking and drug abuse. Girls are particularly affected by sexual and reproductive health issues (Abu Hamad et al, 2017). Additionaly GAGE study added that health services rarely match the specific needs of adolescent girls and boys, which adversely affect their use. In addition, the basic package of health services is overly medical and does not include adolescent preventive services, designed specifically to meet their special needs, especially information and awareness (ibid).

Additionally, those youth, who are the main target of this study, are also the vast majority of social media users in GS, and the great respondents to social media campaigns, in need to have awareness about the consequences of unhealthy behaviors.

1.7.5 Health behaviors

Little is known about university students specific health status. According to a recent UNFPA study (2016), 16% of young people had a health problem in the two weeks prior to collecting household data, while 3% had at least one chronic disease, including disability, which are barriers to access to health care in Gaza. There are many obstacles that prevent young people from accessing health care. Girls have expressed many obstacles to access sexual and reproductive health, financial constraints (27%), access to services (11%), have no time (21%), either access to public health services, lack of knowledge of where to go (11%); inability to obtain permission, lack of access to money (36%); unwillingness to go alone (39%); and lack of health workers (32%) (UNFPA, 2013). As for males, the barriers were more financial than social (WHO, 2013).

In the General Service category, 42.0% in the 15-29 age group eat breakfast daily, 14% smoke, 67.4% do not exercise daily, 34.9% do not hear about sexually transmitted diseases, In addition to limited access to appropriate information, even in maternal matters, only 15% of mothers have been able to name at least five risk signs (UNFPA, 2013).

1.7.6 Telecommunication sector

The total number of Internet companies operating and registered in the Ministry of Telecommunications for 2015 was 56 companies; 40 wireless Internet companies (WIFI), 6 companies for VOIP, 10 companies for broadband Internet access, and 40 companies for importing communications equipment (PCBS, 2014).

Furthermore, the number of mobile subscribers reached 3.7 million by the end of 2016. Jawwal and Wataniya are the two major Palestinian mobile phone companies operating in the WB and GS. 74% of Palestinians use Jawwal, 15% use Wataniya and 11% use Israeli companies (Social Studio, 2016).

In fact, Jawwal and Paltel control 70% of the Palestinian cellular and ADSL market. Founded in 1995 by the Palestinian Authority, Paltel is the main telecommunications company in the Palestinian Territory and provides Internet services, communications lines, web hosting and domain name services. (PCBS, 2014).

Today, about ten in companies compete to provide internet services in the Palestinian territories. Despite the Israeli siege of the sector, paltel operates 400.000 fixed lines in the WB and GS. The sector currently employs about 8,500 people working in 600 companies. In addition, the total production volume in this sector is about 900 million, representing 6.1% of the Palestinian GDP and is still growing rapidly after 1995. The Palestinian National Authority (PNA) administration and the private sector have recently invested in the hardware and software. (Abudaka, 2018).

1.8 Definition of terms
1.8.1 Social media

Social media is a computer-based technology that facilitates the creation and exchange of information, ideas, professional interests and other forms of expression across virtual communities and networks (Kietzmann et al., 2011).

1.8.2 Health behaviors

Any activity is done to prevent or detect disease or to improve health and well-being (Conner and Norman, 1996).

Chapter Two

Literature Review & Conceptual Frame Work

2.1   Conceptual framework

A conceptual framework is A tool used by researchers to develop a framework for their research studies, where it make it easy for researchers to find links and relationships between existing literature and their research objectives and goals (Miles & Huberman, 1994). The conceptual framework explains either graphically or numerically, the variables, the main areas to be studied and the assumed relationship between them (Miles & Huberman, 1994).

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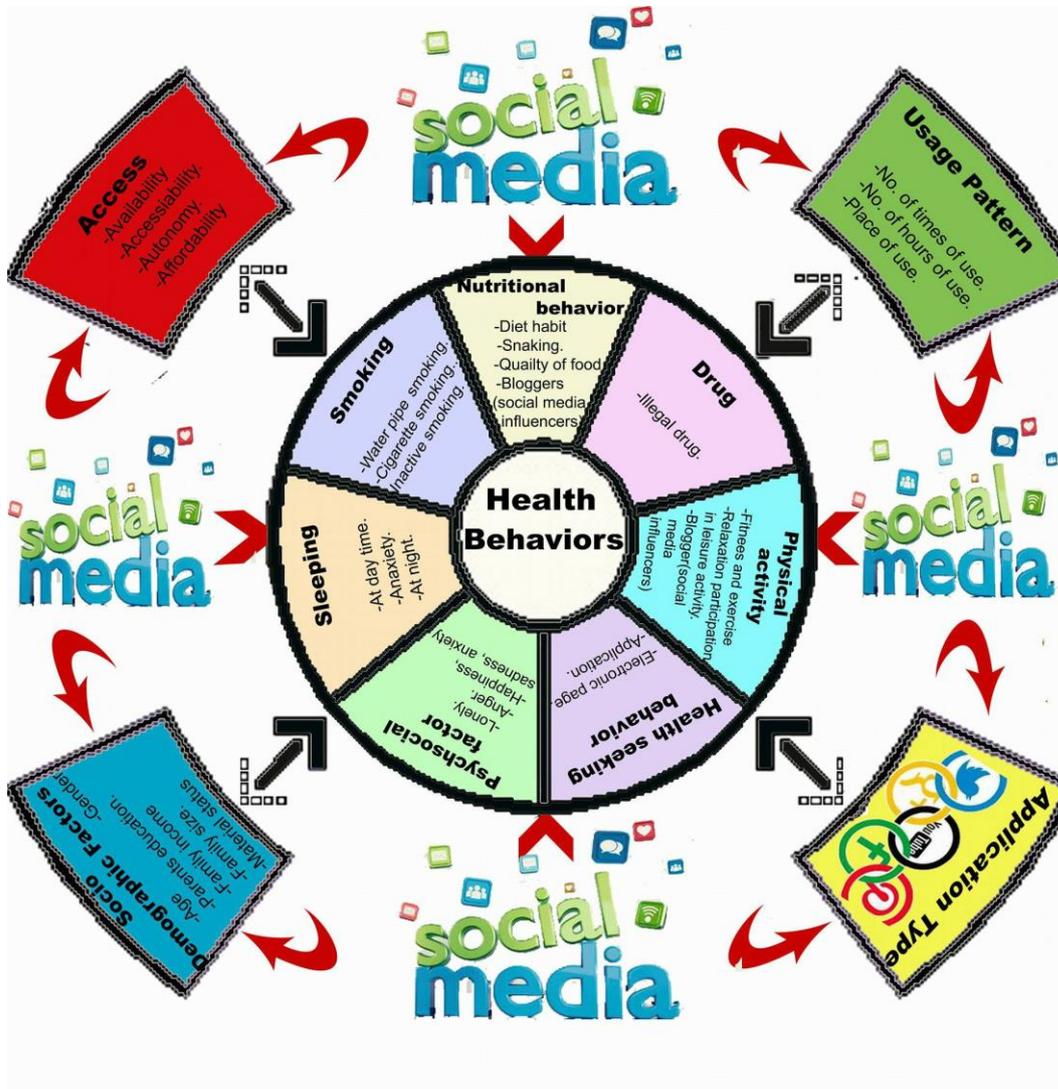
Figure (2.1): Conceptual Framwork

2.1.1 Social media

In this study, social media is regarded as the independent variable which might affect university student's health behaviors in the GS. The researcher will explore details related to the use of social media such as access, usage pattern, and type of applications.

2.1.1.1 Access

Represents the extent to which students have access and can use social media; this includes accessibility in broader terms including availability, affordability and freedom in use.

2.1.1.2 Usage patterns

The researcher explored the usage pattern such as number of hours, time and, what else how these might affect health behaviors.

2.1.1.3 Application types

Application types might influence the effect of social media on health such as Facebook, Instagram, Twetter, WhatsApp, and YouTube.

2.1.2 Socio-demographic factors

Sociodemographic factors are intervening factors that might affect the use and the effect of social media. It represents personal characteristics and includes: age, sex, family size, parent education, family income. These factors explore the potential effects of self and context, with a greater emphasis on self-specific characteristics on the use of social media.

2.1.3 Health behaviors

In this study health behaviors are the dependent variable and include six domains: physical activity, nutritional behaviours, health Information seeking behavior, smoking, drug and substance abuse, sleeping and psychological status (PSS).

2.1.3.1 Physical activity

Physical activity is defined as any physical movement produced by the skeletal muscles and leads to a substantial increase in the expenditure of comfortable energy (Ulijaszek, 2007). The researcher in this study investigates physical activity including fitness, exercise, relaxation, and participation in leisure activity and the influence of social media on these practices.

2.1.3.2 Health information seeking behavior

Health information seeking behavior is seen as the way people get information about health, illness, health risks and health promotion (Hurst, 2017).

The researcher investigates the influence of social media on health information seeking behaviors including electronic pages and applications.

2.1.3.3 Nutritional behaviors

"The sum of all planned, spontaneous, or habitual actions of individuals or social groups to procure, prepares, and consumes food as well as those actions related to storage and clearance (Department of Nutritional Behavior 2010; based on definitions by Leonhäuser et al. 2009, 20; and Oltersdorf 1984, 189). In this context the researcher focused on several dietary behaviors such as, breakfast skipping, meal patterns, snacking, eating fast food, eating during using social media, and if the social media has a positive correlation with weight loss.

2.1.3.4 Smoking

Smoking is the act of inhaling and exhaling the fumes of burning plant material, through the mouth, usually of tobacco in a cigarette, cigar, or pipe (Hilton, 2019).
In this study the researcher investigated the influence of social media in smoking including anti smoking messages, pro smoking.

2.1.3.5 Sleeping

Sleep is a normal state of mind and physiology, characterized by variable consciousness, relatively inhibitory sensory activity, almost all voluntary muscle inhibition, reduced interactions with the surrounding (Ferri et al, 2008).
The researcher explored the relation between hours sleep at night, at daytime and anxiety with social media use, and the effect of social media on the nerve system and eyes.

2.1.3.6 Drug and substance abuse

Drugs are substances that affect the way the body works. If the property is classified as "illegal", it is prohibited by law. Various illicit drugs affect people with different effects and are affected by many factors. This makes them unpredictable and dangerous, especially for young people (Drug & Alcohol Information, 2019). The researcher investigates the relationship between drug and social media.

2.1.3.7 Psychological status

The researcher investigates the relationship between using social media and some of psychological factors namely; stress, depression, socialization, being lonely, anger, happiness, sadness and anxiety.

2.2   Literature review

2.2.1   Introduction

The love child of the World Wide Web is social media, which comes in many forms, including blogs, forums, business networks, photo-sharing platforms, social gaming, micro blogs, chat apps, and social networks (Social Media Statistics & Facts, 2019).

Social media are the umbrella of information and communication technologies used to share information, ideas and opinions, mostly through communication with individuals and other groups (Çömlekçi & Güney, 2016).

Social media are rooted in everyday life, with high utilization and ease of participation, making it an attractive tool for health behavior interventions (Maher et al, 2014).

Values of social media

Social communication has four main strengths: collaboration, participation, empowerment and time. Social media are a means of cooperation and participation by its nature as it is defined by social interaction. It is a tool to provide users with the ability to communicate with each other and enable them to form communities for social communication or information sharing and it is possible to achieve a common goal or interest. Social media can be able to empower their users because they provide them with a platform to speak (Magro, 2012). It offers the opportunity to disseminate or broadcast information in an inexpensive way to anyone with access to the Internet. In terms of time, social media technologies allow users to instantly publish information in real-time (Bertot et al., 2010).

Social media users have the ability to increase the number of interactions, thus providing them with more information that is available, shared, and customized. Social media can generate more health information as users create and share medical information online (Adams, 2010). Additionally, social media can expand access to those who may not have easy access to health information through traditional methods, such as youth (Chou et al, 2009).

Drawbacks of using social media

The main limitations of social media are quality concerns, and the lack of reliability of the health information (Adams, 2010). In addition to, Web authors are often unknown, or there may be many authors, or the line between product and audience is unclear, thus, it is difficult for individuals to distinguish the reliability of information on the Internet (Adlassnig, 2009).

Several studies have shown worries about privacy, confidentiality, data security, and potential harms when personal data is indexed (ibid.). Social media users are often unaware of the risks of disclosing personal information over the Internet and communicating with harm or incorrect advice using social media (Adams, 2010).

Use of internet and social media

Social media has been developed in 1997 (History Cooperative, 2019).

According to social media statistics of 2019, there are 3.2 billion users of social media around the world, and there is an increasing number in this number. This represents about 42% of the current population (Emarsys, 2019).

Facebook remains the most popular social networking platform with more than 2.32 billion active monthly users. Active users are those who have logged into Facebook in the last 30 days. Nearly two thirds of adults in the United States (68%) now report that they are Facebook users (Pewinternet, 2018).

Facebook and YouTube dominate this scene, and adults in the United States are the vast majority who use these sites. At the same time, for the age group from 18 to 24 years old, about. 78% of them use Snapchat, and 71% of those users visit the platform several times a day. Similarly, 71% of Americans in the same age group now use Instagram and nearly half (45%) of Twitter users (Oberlo, 2019).

The use of social media in the Middle East has reached its peak, especially in countries such as the United Arab Emirates, which recorded the highest penetration rate of social media ever reached 99% in 2018. Saudi Arabia also recorded the highest annual growth rate in the number of users of social media by 32% (Crowd Analyzer, 2018).

Internet permeation in the WB and GS reached 63.2% by mid-2016 with a total number of 3 million Palestinian internet users (Internet World Stats report). According to (PCBS) in 2014, almost 48.3% of Palestinian households have internet connection, an increase of 18% from the year 2011(PCBS, 2015). The latest statistics from PCBS published in 2017 show that the total number of ADSL subscribers reached 320,500 in total (226,855 in the WB and 93,645 in the GS) (PCBS, 2017).

Nearly, 1 in 3 Palestinians is present on social media (SocialStudio, 2015). Facebook is the most widely used social media platform with a total of 1.6 million Palestinian users (constituting 33% of total internet users in the WB and GS).

2.2.2   Social media values on health

A study was conducted on how people use social media with regard to health information and lifestyle among different groups of Icelanders and compare them to searching for information in other channels. The findings suggest that social media can improve their awareness of health and lifestyle, as well as other sources of information on the Internet (Pálsdóttir, 2014).

Additionally, Fox and Duggan (2013) added that social media besides being a source of entertainment, it is becoming the main platform for obtaining health information besides the option of consulting a health practitioner. Among individuals using the internet, 72% of the users searched for health inquiries in a search engine before deciding whether to follow up with a health professional.

Another study was conducted by Laranjo and colleagues to evaluate the use and effectiveness of interventions using social networking sites to change health behaviors. Five databases were scanned using a predefined search strategy. Studies were included if they focused on patients/ consumers, involved social networking sites intervention, had an outcome related to health behavior change, and were prospective. Studies were screened by independent investigators, and assessed using Cochrane's risk of bias tool. Randomized controlled trials were pooled in a meta- analysis. The database search retrieved 4656 citation studies (7411 participants) met the inclusion criteria. Facebook was the most utilized social networking sites, followed by health- specific social network site and

Twitter. Eight randomized controlled trials were combined in a meta- analysis. Appositive effect of SNS interventions on health behavior outcomes was found. (Laranjo et al, 2014).

Additionally, a study conducted by Hill (2013), the purpose of this study was to study the relationship of social media with college student lifestyle and health behaviors regarding nutrition, fitness, and overall health and wellbeing in Health and Rehabilitation Sciences Students. The findings of this study refer that the number of student using social media was very high. Facebook was most commonly used, with 97% of rparticipents reporting using the media. On the other hand a majority of students used YouTube (90%). Most students use one or more social media sites (websites) for less than 1 hour per day. In general, these figures suggest that social media are strongly present in the daily life of college students (Hill, 2013).

Moreover, in a cross sectional study using self-administered questionnaire was conducted to study the impact of Facebook and others social networks on academic performance and social life among medical students, 27 item self-administered questionnaire were distributed to 275 medical students, the prevalence of Facebook and other social networks users is 93.1%, the researcher found that the males use Facebook and other social networks more than females by (97.6%). The main social networks used are Facebook (98.8%). The most purpose of using social networks were connecting with family and friends (86.7%) following the news (76.6%). Additionally, 96.1% of users use social networks for academic purposes, but the prevalence of negative effect of using the SNs on academic performance is high (A'lamElhuda & Dimetry, 2014).

In another study conducted by Alahmar (2017), the aim of this study was to explore the influence of social networks on the grade of second stage medical students at the college of Medicine, University of Babylon, Iraq. 50 medical students were asked about type of social networks they used frequently, time spent on these media, main reason for use and the impact of their social interaction on study time and grades, the findings of this study refer that all students have been using Facebook and 96% have been using Facebook messenger and other social networks, 84% of them reported that social networks reduce social interaction, students understand the impact of these networks on their academic performance as well as social interaction. However, the use of these networks seems to have no effect on the study time or student grades that may be due to the controlled use of social networks or the use of these networks as an educational tool (Alahmar, 2017).

More and more, a study examines the issues of the relation between social media and its impact on behavior change of the youth, the study aims to find out what these social media are, what are their use in the lives of the University students and their implications on their behavior. The study also examines to determine the risks that come with the use of social media on Kenyan youth; the study is a blending with qualitative and quantitative approaches, the researcher proposed to use the descriptive survey design to gather data relating to the impact of social media among the youth on behavior change, attitude and perception. The study found out that the youth in Kenya use social media a lot and they spend more time on the computer, most of the youth were on social media with Facebook, WhatsApp and Twitter topping the list. The study found that the youth prefer social media because their message is received in real time, 63% of them agreed to a large extent that social networks help them in maintain contacts with old friends and create new friends (Njoroge, 2013).

2.2.2.1 Application Types

Social media are an important part of everyday life for many people. The term "social media" is used as a comprehensive term and describes web applications that allow users to create, share, receive, and comment on content across social networks (such as Facebook); blogs and micro blogs (e.g. Word- Press and Twitter); content communities (e.g. YouTube) (Kaplan & Haenlein, 2010). Additionally, as reported in the 2010, Media Industry Fact Sheet, two-thirds of the population over the age of 13 is connected by cell phones. Also, the U.S. Census Bureau (2010) found the results of the survey and concluded that 68% of households on average have a computer connected to the Internet. Moreover, according to Facebook's statistics, 1 in every 13 people in the world has an active profile on Facebook.

Facebook has been developed in February 2004 (Barr, 2018). Additionally, it has been the most popular social networking platform that appears in health behavior change research (Maher et al., 2014). Studies have targeted a wide range of health behaviors, including weight loss (Herring et al., 2014), physical activity (Joseph et al., 2015), smoking cessation (Foster et al., 2010).

Kalpidou and colleagues (2011) said that Facebook has the ability to influence health behaviors of individuals and improve public health, and in other study Foster and his

colleagues illustrated Facebook as a way to make a positive change in behavior. They noted that simple portable devices can act as an inexpensive and accessible catalyst for this behavioral change without the need to use highly complex and expensive applications or portable devices.

Twitter is a social networking service and small blogs, enabling registered users to read and post short messages, so-called Twitter. Twitter messages are limited to 140 characters and users can also upload photos or short videos (Inc., 2017).

Twitter is a way to increase the success of online interventions as it promotes social participation (Maher et al., 2014). Twitter promoted the dissamination of information and enriched social networks in an online quit smoking program (Pechmann et al., 2015) and enhanced social support for weight loss (Pagoto et al., 2014). In addition, Twitter has been extracted as a source of public and searchable data relating to health behaviors (Maher et al., 2014).

Instagram Instagram launched on 6th October 2010 and its growth was nearly immediately (Eudaimonia, 2017). Additionally, Instagram is a social networking application through which images is exchanged and allows users to capture and edit images using a set of digital filters. Instagram also started to view video sharing and Instagram stories. Instagram also allows users to comment on photos and videos published by people who follow them (Hernandez & Smouse, 2017).

Blogs are generally defined as ''web-based journals in which entries are published in reverse chronological sequence'' (Herring et al., 2014).

YouTube has been developed on 2005 (Dickey, 2013). It is an American video-sharing website, YouTube allows users to upload, view, rate, share, add to playlists, report, comment on videos, and subscribe to other users (ibid).

WhatsApp is a freeware, cross-platform messaging service; it has been developed on 2009, it allows users to send text messages and voice messages (Metz, 2016).

2.2.2.2   Usage pattern

Social media statistic reveals that an average of two hours and 22 minutes is spent per person per day on social networks and correspondence (Oberlo, 2019).

On the other hand, according to PCBS (2016), 61.7% of youth (15-29) use computer in GS, 61.3% use computer by internet usage, also PCBS clarified that 79.5% of youth owns mobile in GS, 86.6% male and 72.2% female. Additionally according to the same source, 35.7% of youth (15-29) use Facebook and Tweeter daily.

2.2.2.3   Access

Another factor that reflects the appropriateness of using social media is availability. Availability is one of the important playing factors for using social media; it's obvious that assuring proper access would enhance the students to proper use social media. Accessibility also important factors to us social media.

Nearly, 3.7 million Palestinians had mobile phone subscriptions by the end of 2016 (SocialStudio, 2015).

Furthermore, according to PCBS (2016), 55% of Palestinians access Facebook through their smartphones in comparison to only 10% who access the platform from a computer or a laptop.

2.2.3   Demographic factors

Pew Research Center (2014) found that there are many factors affect social media usage such as socioeconomic factors, in the report of Pew Research Center appear that age is strongly associated with the use of social media: Those ages 18 to 29 have always been the most likely users of social media by a considerable margin, besides gender, the study revealed that females were more likely than males to use social networking sites for a number of years (Pew Research Cente, 2014). Moreover, many studies agreed with Pew Research Center where in the study the researcher explored that the use of social media also differed by age. The results of this study show that younger participants are more likely to use social media. The level of education has an impact as this study has shown that the more educated participants were more likely to use social media (Pálsdóttir, 2014).

2.2.4 Effect of social media on health behaviors

2.2.4.1 Health Behaviors

The health promoting behaviors, Is one of the most important determinants of health, it is an important factor to avoid many diseases and is an important factor for promoting health and preventing diseases that are directly related to these behaviors (Li et al., 2012).

University students undergo a transition from childhood to adulthood characterized by physical, psychological, social and sexual development. Promoting health behaviors during this period increases their chances of becoming healthy adults in the future (Hoyt et al., 2012). The benefits of health-promoting behaviors are known, but many studies have shown that university students have an unhealthy lifestyle, such as physical inactivity, which needs to be highlighted, as well as many unhealthy behaviors (Shaheen et al, 2015).

Many studies reveal that social media has positive effect on health behaviors, one of these studies were conducted by Laringo and colleages (2014), the aim of this study was to assess the use and effectiveness of interventions using social networking sites to change health behaviors. Five databases were scanned using a research strategy. The results showed positive impact of social media on health behavior outcomes.

Physical Activity

A qualitative study, using a semi-structured interview design, was conducted to discover the range of beliefs and understandings about physical activity and responses to media coverage, the results of the study showed that social media are able to promote physical activity through the influence of beliefs, social norms and personal behaviors (Smith and Bonfiglioli, 2015).

A one-way Analysis of Variance (ANOVA) was performed to investigate the validity of the hypothesis that individuals who follow Instagram accounts will spend more time in the exercise than those who do not follow the Instagram accounts for exercise. The results showed that those who followed Instagram exercises exercised much longer than those who did not follow the Instagram exercise account. This indicates that the application of the instagram has a positive and effective effect to motivate people to be physically active.

On the other hand, Another ANOVA test for the hypothesis that individuals who follow the food Instagram accounts will spend less time eating than those who do not follow the food Instagram accounts. The results showed that there were no differences between those who followed Instagram's food accounts and those who did not follow the Instagram accounts. But the research found that males who followed Instagram's food accounts eat less frequently, the researcher confirmed the role of Instagram calculations that encourage exercise and dietary habits (Kosek, 2015).

In a descriptive qualitative study was to describe the ways in which social networking sites provide college females with social support for their diet and/or physical activity goals. a purposive sample of 12 college females, data from three sources were collected over the course of four weeks, three types of data were collected from each participant over the course of four weeks. During the first three weeks of the study, each woman completed a participant journal, which is an open-ended questionnaire, and the researcher conducted daily observations of each participant's social network sites activity. During the fourth and final week of the study, a semi-structured interview was conducted with each participant. All data were collected through the use of social media. The participants of this study engaged with the topics of diet and physical activity regularly during their personal social network sites use on Facebook, Instagram and Pinterest Participants received three general types of support for their diet and/or physical activity goals from social network sites use getting new information, receiving motivation, and providing accountability for their goals. (Kies, 2016)

2.2.4.1.1 Health information seeking behavior

Pew Research Center (2014) reported that 31% of cell phone owners and 52% of Smartphone owners seek health or medical information through their phones.

Drescher and Hasselbach conducted a study; the aim of the study is to find out whether students in Germany use the Internet as an information source for diet problems. If this information affects their behavior, the sample was 330 international students in Germany. The results showed that the more the student uses the Internet, and the more the student searches the Internet for information related to health and diet, the more they change their dietary behavior (Drescher & Hasselbach, 2014).

According to a cross-sectional survey, which aimed to exam in college students' use of the Internet for locating health information, the results showed that more than half of the students wanted to find health information on the Internet and about one-third would participate in the Internet Health Program (Escoffery et al., 2005).

A study conducted by Bannor and colleagues (2017), the purpose of this study is to comprehensively understand the effectiveness and assessment of existing health communication methods media used in Ghana. The researcher used two different methods. He did a qualitative and quantitative research. In-depth interviews were conducted with health promotion professionals in Ghana and 150 members of the public were surveyed. The results showed that the general public sees social media as an effective place for health professionals to exchange health messages. They believe that health messages disseminated via social media are effective and have a positive effect, but are concerned that traditional methods lose their effectiveness as a tool for delivering health-related messages.

A nother study conducted by Sin & Kim (2013), the study analyzed international students' everyday life information needs, their usage of social network sites for everyday life information seeking (ELIS), Findings indicate that a majority of the respondents frequently used social network sites for ELIS. Younger students, undergraduates, and extroverts were more likely to use social network sites for ELIS, This indicates that social network sites serve as a valuable channel for purposeful everyday life information seeking, and beyond its social support value added to that top daily life information needs were finance, health, and home country news.

In a study conducted by Magnezi and colleagues, their study aimed to evaluate the effects and benefits of participation in an online health-related social network and to determine which variables predict perceived site usefulness, while examining patient activation. The researchers found that active participation in a health-related social networking site on the Internet indicated a significantly higher benefit. (Magnezi et al, 2014).

2.2.4.1.2 Nutritional Behaviors

There is an influx of data regarding the differences in prevalence of adolescent obesity between rural and urban populations. Rural residents struggle with socioeconomic

disadvantages such as high poverty and unemployment rates, lower literacy levels and lack of access to nutrient dense foods compared to urban populations which may attribute to their higher rates of obesity (Bardenhagen et al., 2017) the prevalence rates of overweight (18.8%) and obesity (20.8%) (Abu Hamad, 2017). Abu Hamad added that there is significant relationship between overweight and obesity, and daily average hours of surfing social media applications, eating while visiting social media and eating chips and snacks while on social media.

On the other hand, many research studies have found that social media applications are useful in dietary behavior, in one study; the purpose of this study was to learn about the effectiveness of using the SmartWiz application to support healthy lifestyle options in adolescence. The research sample was between the ages of 16 and 19 years of education in full or part time. The participants used paper notes to record eating and exercise for 4-5 weeks. There was food awareness and support during this stage, and then they used the applications for the same period. At this stage, personal messages sent in response to the application activity were received at the end of each stage. During the study stages, participants completed an online questionnaire to describe their experience using paper notes and applications. The results showed that participants preferred to apply the phone application to paper notes, and that the application was less boring to use and more acceptable in social settings and this reinforces the idea of a more effective approach to improve the levels of diet and exercise (Jimoh et al, 2018).

Additionally, in another study, the research's aim was to examine whether different types of posts differentially affect participant engagement and if engagement with social media enhances weight loss. The research team made analysis for data from a randomized weight loss study with a 4-month follow-up support period via private Facebook groups and monthly meetings. Engagement with Facebook was significantly associated with weight loss during the 4-month maintenance period. The findings provide evidence for ways to provide social support during weight loss interventions using remote methodology (Hales et al., 2014).

He and colleagues (2017) in their study explored that the weight loss intervention campaign based on an official WeChat account focused on an occupation-based population in Shunyi District was effective for males. The more active male participants were in using

WeChat, the more weight they lost, the research team added with regard to female may be there is no effect or negative effect.

2.2.4.1.3 Sleeping

Woods & Scott (2016) study aimed to studying how social media use including night use and emotional investment in social media is linked to the quality of sleep, self-esteem, anxiety and depression in adolescents. The higher the levels of social media use, the lower the quality of sleep. The higher levels of anxiety were also associated with the increased use of social media in general. The greater the use of social media in general, the greater the depression.

In a cross-sectional study was conducted among 306 health care workers comprising of doctors and nurses in a Malaysian public health hospital to examine if there is a relationship between whatsapp use and sleep disturbance, the findings explored that the prevalence of sleep disturbances among health workers using Whatsapp in their study sample was relatively high (Ganasegeran et al., 2017).

Another study conducted by Scott (2015), the purpose of this study is to explore the extent to which adolescent media use is related to sleep quality, self-esteem, levels of anxiety and depression. In addition, this study is the first to examine how emotional investment in social media relates to these aspects of well-being. The results of the study were 467 adolescents who completed the survey questionnaire on the use of social media in general and night. The results showed a correlation between the use of social media in general and the use of social media at night and emotional investment in social media such as poor sleep, anxiety and depression. Social networking measures showed 13.5% of the variation in sleep quality. The use of social media at night was a major indicator of poor sleep quality after controlling for depression, anxiety and self-esteem.

More and more a study conducted by Levenson and colleagues (2017), their study aimed to determine the independent association of social media use during the 30 minutes before bed and disturbed sleep while controlling for covariates including total social media use throughout the day. A nationally representative sample of 1763 young adults aged 19-32. Participants estimated to what extent they used social media in the 30 minutes before bed. After testing the proportional adds assumption Ordered logistic regression was used to

compute the independent association between social media use before bed and sleep disturbance controlling for covariates, including total social media use. The results of this study refer that the use of social media in 30 minutes before sleeping is independently linked to sleep disturbance among adults. (Levenson et al, 2017).

Additionally, a cross – sectional design using an anonymous self-administered questionnaire was conducted to assess the impact of using social media (i.e., Twitter and WhatsApp) on sleep quality and to identify risk factors associated with poor sleep quality among medical students in King Khalid University, the researcher found that 76.2% of students use both Twitter and WhatsApp, 21.5% use WhatsApp only, 1% use Twitter only, while 1% do not use any. Most medical students (89.8%) use Twitter/WhatsApp every day, almost one third of students have poor sleep quality, especially 2nd and final year medical students and those who use social media for more than two hours daily (Asiri et al, 2018).

2.2.4.1.4 Smoking

In a study of Australia's indigenous population, which has a smoking rate of 41 percent, according to the Australian Bureau of Statistics, a quick review was conducted to find out effective ways and means that could affect smoking, prevent chronic diseases and promote health for a healthy lifestyle for Australians. The research revealed many methods that promote healthy lifestyles with a focus on tobacco control and quitting smoking. The research resulted in projects and interventions to increase healthy lifestyles, with a focus on prevention and cessation of smoking. These included social marketing campaigns that proved their effectiveness and their strong impact on behavior chang, where research has shown that it has the ability to have a strong impact on attitudes and beliefs related to smoking, but messages need to be related to personal and cultural to be effective (Upton et al., 2014).

Another study conducted by Yoo and colleagues (2016), the aim of the study was to investigate the effect of smoking-related messages on social media on smoking of university students. The study was conducted by 366 university students from 3 US universities. The researchers studied the effects of expression and reception of smoking-related messages on smoking using path analysis, the results show that social media have a direct and indirect effect on smoking. Social media serve as an effective channel for

generating, sharing, receiving and commenting on smoking-related content, and thus influencing the smoking of college students.

On the other hand; Felton (2018) conduct a study on 871 students at the University of Texas at Austin, The research followed the Integrative Model of Texas of Behavioral Prediction to attempt to understand the smoking behavior of young adults who use social media. After collecting information on students' perceptions of their ability to resist smoking and smoking history and beliefs about societal views on smoking, researchers tried to gather how many times participants surveyed social media for smoking over the next three months. The researchers found that the more students interacted with social networking platforms, the more likely they were to be exposed to pro-smoking information. After a follow up for six month from the researcher, the researcher found that students who frequent pro-smoking information scanning using social media were more likely to smoke at follow-up.

2.2.4.1.5 Drug and substance abuse

A 2011 report by the National Center on Addiction and Substance Abuse at Columbia University showed that teenagers who use social media use tobacco, alcohol and marijuana more than teenagers who do not use social media, and the risk is higher for those who have seen children's photos.

Grund (2009) said that the correlations between social media use and public acceptance of illicit behavior are not underground. It includes drug use and abuse. In addition to the many complaints about the social media. There are studies and analysises that that assured the relation between drug and social media, including one such analysis found deep correlations between social media use and subsequent drug abuse. Additionally, Grund (2009) added that by surveying 2,000 adolescents ages 12 to 17 about both social media use and lifestyle habits. The researchers identified that teens using social media are two or more times as likely to have tried tobacco, alcohol, or marijuana.

Moreover, Ridings (2016) said that viewing alcohol or drug related content could develop what is known as digital peer pressure, an increased interest for teenagers to try these substances. Ridings (2016) added that social media can also be a method of arranging a

drug deal; he assured his words based on a report out of Houston in 2014, which describes how Instagram can be used to attract teenagers to take out drugs.

2.2.4.1.6 Psychosocial status

In a study to help understand how people behave and seek satisfaction when using social networking sites, in this study, the researcher focused on people who avoid face-to-face communication and who lack meaningful relationships. The results showed that through social media, these people can express their feelings without discouragement, get the social and emotional support they desire, and thus increase their sense of well-being, and disclosure of personal information is also easier because of anonymity and the absence of any kind of criticism coupled with feeling that you are dominant (Das, 2014).

Also, according to Kalpidou and colleagues (2011), university students who have more friends on Facebook have less emotional adjustment for total life, and those who spend more time on Facebook report that they have less self-confidence than those who spend less time.

Another study aimed to to detect the link between the use of social media and depression in a representative sample at the national level of young people, and the evaluation of the use of social media through the total self-reported time on social media means, and visits per week, the results showed that the use of social media increases depression (Lin et al, 2016).

Chapter Three

Methodology

This chapter provides information on the methods applied in this study. It describes the design of the study, sample selection and sampling methods, methods of data collection and analysis of data and models. It describes the pilot phase and the modifications that have been made as a result of the pilot phase. In addition, the study period and response rate are illustrated. The information, reliability and suitability of the study instrument are preceded by the study limitations that appear at the end of this chapter.

3.1 Study design

The design of this study is triangulated, descriptive, and analytical, cross sectional one. Descriptive research used to obtain information concerning the current status, which means describe what already exist, what the characteristic for common population, while analytical research critical understanding for what exist to generate new knowledge and produce new relation between variables (Bhat, 2019). Cross sectional design reflects the existing facts at the same point of time of data collection, it is less expensive and it consumes less time than other longitudinal studies.

In this study, methodological triangulation provided combination between **quantitative** (Interviewed questionnaire with students) and **qualitative** paradigms (focus group and KII) to explore more information and, for insure what we were obtained from quantitative part of data collection have the same directions.

The qualitative component was carried out after the quantitative one in order to explore issues that emerge from the quantitative study.

3.2 Study Population

The study includes two populations

Quantitative Part

Study population consists of all university students in the GS, the number of total students in all universities is 84817 (PCBS, 2018). According to PCBS (2018) the number of accredited and licensed higher education institutions reaches 28 institutions.

Qualitative part

The first population is university students. As the researcher conducted 6 Focus Groups Discussions (FGDs) with the university students.

The second population were experts, five key informants interviews (KII); three from health education department and two from media department.

3.3 Eligibility criteria

3.3.1 Inclusion criteria

- Both male and female students who are registered at an undergraduate degree at the four universities are included.
- Students aged from 17 to 24 years old.

3.3.2 Exclusion criteria

- Postgraduate students.
- Any student older than 24 years old.

3.4 Study setting

The study was taken place in GS universities, from in which 5 universities were selected randomly.

3.5 Period of the study

The study consumed 13 months; it has started in June, 2018 and completed by July 2019.

3.6 Sampling

3.6.1 Sample size

Quantitative Part

The total number of students is 84817 (PCBS, 2018), the researcher used Epi-Info sample size statistical calculator and considered following parameters

- Confidence level is 95%
- The odds ratio is assumed to equal 2

- The power is 90%
- The suggested sample size of students is 383 (Annex 1).

The researcher increased the number of students to 411.

The total number of the study participants is 411 students, were distributed according to their proportion in each of the selected university, proportionate to the gender distribution.

Qualitative Part

In the qualitative part, 60 students were purposively selected and called on voluntary basis to participate in six FGD. Focus groups participants were selected in a way that ensures they represent male, female, from all level of study and from different colleges.

5 KII were selected from health education experts and media experts.

3.6.2 Sampling process

Quantitative Part

The sample in this study is a multistage one. The researcher selected five universities randomly using simple random technique. The samples of the 411 university students were selected using stratified approach by dividing the GS areas according to their representation from the total number of students. Thus, the proportion from each university was identified (Annex 2) (Annex 3). Then, a systematic convenient selection for students was done depending on visits schedules per each university during the data collection dates. Accordingly, the Kth students exiting the university were calculated and the researcher selected the 5th students entering the university. Universities were visited within two months.

Qualitative part

For qualitative part, 6 FGD were conducted 3 for male and 3 for female, each composed of 6-10 students. Purposive sample was selected from students with variations in faculties and different levels of study.

A non-probability purposive sample of five KII was selected. The key informants sample included three from health education department and two from media department.

3.7 Study Instrument

Quantitative Part

A face-to-face interview questionnaire was used in this study (Annex 4) (Annex 5), the questionnaire was developed according to the study objectives; the following components were included in the questionnaire:

- Background and demographic information
- Socioeconomic information
- General social media use
- Information Sources
- Health information seeking behavior:
- Physical Activity and body image:
- Nutritional behavior
- Psychosocial and socialization
- Smoking
- Drugs
- Sleeping
- General Questions

Qualitative Part

The researcher with the help of one person who is a note taker collected the data through open ended (semi-structured) questions. Those questions were asked by the researcher within both the FGD with university students (Annex 6), as well as through the face to face in-depth KII (Annex 7). And short notes were taken through the interviews and they were recorded to allow further capturing of information. Interviews were conducted in the third month after the end of quantitative data collection.

3.8 Pilot study

Quantitative

A pilot study on 20 students was done to explore the appropriateness of the study instruments and let the researcher train for data collection. In addition, a pilot FGD interview was done. This also allowed for further improvement of the study validity and reliability of the study.

3.9   Ethical Considerations

An academic approval was asked for from School of Public Health at Al-Quds University and an official letter of approval to conduct the research was obtained from Helsinki Committee (Annex 8). An admenstrtive approval was asked from the director of each of the five universities (Annex 9). To guarantee participants rights, a constant form indicating that the participation is voluntary and confidentiality was assured for all of them. For the students who were selected from the students they were asked for their agreement to participate in the study.

3.10   Method of data collection

3.10.1 Quantitative part

After the pilot study, data collectors were trained for five hours of training in a formal training environment. The training included refresher information on sampling and orientation towards the study objectives, and explained the main concepts, terminology and ideas of the questionnaire to standardize the understanding of data collectors, language and style as a step to ensure quality. In addition, a detailed instruction sheet was attached to the questionnaires to guide data collection process and to unify the way of presenting the study to respondents to obtain their voluntary consent. This training is for the aim of understand the method of collect the data in same way with same explanation, with unify method to ask the question for insuring complete the questionnaire prior leave, and minimize error of data obtained.

After choosing the targeted student from by random selection method. In addition to that, data was collected by face-to-face interviews, and took place at the students university after obtaining their verbal consent acceptance of participation and data collector told the participants that they can drop out once they want. An interview with the respondent was done for a duration of 35 to 50 minutes, during the interview the data collector briefed to respondent what understand to assure that respondent express their opinion in clear way, also data collector confirmed the confidentiality of work and the free to drop out once need to. In addition, data collector insured to the participent the goal of this study and positive achievement might achieved by their participant on our society and our countries. In case if no respondent happen or incomplete answers the data collector went to next target students, using the same method of data collection.

3.10.2 Qualitative part

In this part the data is collected by semi-structured questions by the researcher. Each concentration group was conducted for 70-90 minutes, an average of 80 minutes and 6-10 participants; during the focus group, the researcher welcomed the participant, presented herself and secured verbal approval for participation.

The introductory question was prepared at the beginning of the focus group to explore participants' ideas and perspective. The researcher then gave a brief introduction to the goal of the study, after exploring the idea for the participant, many short questions that were asked, and each question and another waiting time available to make sure that all participants included their idea about the question.

During the focused group, we made sure everyone was exploring their idea, and the discussion continued so that more information could not be achieved without exhaustion. After each focus group was completed, quick data notes, called the researcher's report, were prepared on the outcome of meeting understanding, participant expression, gesture and tone.

In depth interviews with five key informant from health education sector and social media department. Prolonged engagement and probing techniques were used to make sure that ideas are reasonably reflected and each interview last around one hour.

3.11 Scientific rigor

3.11.1 Quantitative part (questionnaire)

Reliability

The following steps were done to assure instruments reliability

- Training of data collectors on the students interviewing steps and the way of asking questions. This assured standardization of questionnaire filling.
- Ongoing checking and verifications of the completed questionnaires.
- Then, the data entry in the same day of data collection allowed possible interventions to check the data quality or to re-fill the questionnaire when required.

Validity

The questionnaire was evaluated by 10 experts to assess its relevance, and their comments were taken in consideration see (annex 10).

Also, a pilot study was conducted before the actual data collection to examine students' responses to the questionnaire and how they understand it. This enhanced the validity of the questionnaire after modifying it to be better understood.

3.11.2 Qualitative part (in-depth interviews)

The following was done to assure the trustworthiness of the qualitative part in this study. First, a peer check was done through health experts to revise the FGD questions to assure that they covered all the required dimensions. Then, a member check was done to assure accuracy and transparency of the transcripts during the focus group. Prolonged engagement was done as the researcher tried to probe for answers and covered all the interview dimensions properly. In addition, recording the FGD enhanced tracking up facts and re-checked the accuracy of the transcripts. Finally, all the transcripts and recordings were kept for tracking the information by others at any time (Audit trail).

3.12 Data entry and analysis

Quantitative part

The Statistical Package of Social Sciences (SPSS) program, version 23 was used for data entry and analysis. After the data reviewing and coding, the computerized SPSS program was used to enter the data and the data was cleaned. The analysis process was performed by using the different tests of the SPSS. Descriptive statistics was performed for the quantitative variables to find out the mean, median, and other statistics. For the qualitative variables, percentages were found out. The researcher used inferential analysis to test the statitistical significance of differences. Chi-square test was used to determine the relation between two categorical variables, for example gender and the effect of social media on eating habits, residency and the effect of social media on health behaviors. Advanced statistical tests of P-value of .05 or less were considered as statistically significant.

Qualitative part

Open coding thematic analysis method was used to analyze the transcripts of FGD. The researcher obtained the main findings from the transcripts of FGD. Then, categorization of related ideas, and comparison and integration between the quantitative and the qualitative findings were done to create rich items for discussion and representation.

3.13 Limitations of the study

- Personal interview questionnaire was expensive and time consuming.
- Recall bias.
- Difficulties in recruitment of participants and data collection from the five universities.
- Limited literature resources such as books and journals.
- Limited resources including funds and facilities for data collection and data entry.

Chapter 4

Results and Discussion

4.1 Introduction

This chapter demonstrates the results of the analysis of quantitative and qualitative data combined, including descriptive analysis that present the demographic characteristics and inferential statistics which explore the statistical significance of differences among groups and categories.

4.2 Descriptive statistics

4.2.1 Demographic characteristics of respondents

Table (4.1): Distribution of study respondents by demographic data (characteristics)

Variable	N	%
Age		
18 years old	81	21.0
19 years old	103	26.7
20 years old	70	18.1
21 years old	64	16.6
22 years and more	68	17.6
Total	**386**	**100.0**
Mean= 20.38, MD = 20.00 , Std= 8.34		
Gender		
Male	196	47.7
Female	215	52.3
Total	**411**	**100.0**
Place of residency		
North Gaza	85	20.7
Gaza	184	44.8
Midzone	73	17.8
Khanyounis	47	11.4
Rafah	22	5.4
Total	**411**	**100.1**
Marital status		
Not Married	394	95.9
Married	17	4.1
Total	**411**	**100.0**

Name of university at which participants currently study		
Islamic	129	31.4
Al –Aqsa	116	28.2
Al azhar	82	20.0
Palestine	47	11.4
Universal college of applied science	37	9.0
Total	**411**	**100.0**
College at which participants are currently study		
Health related colleges	110	26.8
Education	71	17.3
Economics and administrative Sciences	60	14.6
Engineering	51	12.4
Media and Press	41	10
Law	32	7.8
Science	17	4.1
Other	29	7.0
Total	**411**	**100.0**

Table 4.1 shows that the highest percentage of the respondents were aged 19 years (26.7%) followed by the age18 years. The mean age of participants was 20.38 years. Females were slightly more represented than their males' counterparts (see table 4.1), this is because the female registered numbers in the universities were more than males. These findings were consistent with the PCBS recent report which reveals that the university attendants, 53.4% were females compared to 46.5% of males (MOHE, 2018).

Nearly half (44.8%) of respondents were residing in Gaza, 20.7% were residing in North Gaza. With regard to marriage, less than 5% of the respondents were married at the time of data collection. The participants from Islamic university formed the highest proportion in the study (31.4%), followed by Al- Aqsa University (28.2%). This distribution is congruent with the PCBS (2018) report which shows similar proportions. Regarding the college at which respondents were registered at; health related colleges elicited the highest proportion, while the science colleges were the lowest (17%).

4.2.2   Socioeconomic status of respondents

Shifting the light to the family size, respondents' parent family median size was 8. Comparing with other studies in the GS, the median family household size in the GS in 2017 was 5.6 (PCBS, 2018a), and in 2015 the family size was 5.7 members (PCBS, 2016).

Findings show that 40.4% of the participant's fathers studied 13-16 years while the lowest percentage was for post graduate education (above 16 Years) at (14.8%). The same was for the mother's education where the mothers who were educated for 12 years were the most (41.6%).

Table (4.2): Distribution of study respondents by socioeconomic information

Variables	N	%
Family size		
6 members and less	101	24.6
From 7 to 8 members	156	38.0
Above 8 members	154	37.4
Total	**411**	**100.0**
Mean= 8.04, MD = 8.00 , Std= 2.63		
Father's years of schooling		
Less than secondary (Less than 12 Years)	71	17.3
Secondary (12 Years)	113	27.5
University (13-16) Years	166	40.4
Post graduate education (above 16 Years)	61	14.8
Total	**411**	**100.0**
Mean= 13.64, MD = 14.00 , Std= 3.89		
Mother's years of schooling		
Less than secondary (Less than 12 Years)	79	19.2
Secondary (12 Years)	171	41.6
University (13-16) Years	132	32.1
Post graduate education (above 16 Years)	29	7.1
Total	**411**	**100.0**
Mean= 12.76, MD = 12.00 , Std= 3.26		
Father's employment status		
Working full time	146	35.5
Working intermittent	69	16.8
Not working	108	26.3
Retired	56	13.6
Other	32	7.8
Total	**411**	**100.0**
Mather's Employment status		
Housewife	334	81.3
Working full time	46	11.2
Working intermittent	12	3
Retired	9	2.2
Other	10	2.4
Total	**411**	**100.1**
The average monthly household income from all sources		
Less than 1000 ILS	96	26.1
From 1000 to 1500 ILS	132	35.9
From 1501 to 2000 ILS	60	16.3
Above 2000 ILS	80	21.7
Total	**368**	**100.0**
Mean= 1706.62, MD = 1350.00 , Std= 1863.46		
Working besides studying		
Yes	62	15.1
No	349	84.9
Total	**411**	**100.0**

Table 4.2 shows, nearly one third (35.5%) of respondents reported that their fathers are working at the time of data collection; nevertheless, only 11% reported that their mothers were working. According to PCBS (2018) unemployment in Gaza reached 52% in 2018, women's unemployment in Gaza was 74.5% in 2018. The percentage of women in Gaza participating in the workforce in 2018 stood at 25.5%. Moreover, another youth survey was done in 2016 revealed that 26.6% of general population was unemployed, 51% of youth graduated student were unemployed, and for the GS reached as high as 60% (PCBS, 2016).

Nearly one third of respondents (35.9%) reported that their monthly household income was from 1000ILS (New Israeli Shekel) to 1500ILS. Comparing with other studies, in the general population in 2015, it revealed that the least average for income was 7581 for those who are 60 years, followed by age groups 30-44 their average monthly income was 9709. The percentage of the respondents who works besides studying was 15.1% while the percentage of the respondents who don't work was 84.9%. Regarding to PCBS, the percentage of workers in the age group 20-24 reaches to 52.1% in GS. (PCBS, 2018).

4.2.3   Participants use of social media

Table (4.3): Distribution of study respondents according to their responses about general use of social media

Variables	N	%
Age when first heard about social media		
10 Years and less	84	20.5
From 11 to 12 Years	121	29.5
From 13 to 15 Years	146	35.6
Above 15 Years	59	14.4
Total	**410**	**100.0**
Mean= 12.79, MD = 12.50 , Std= 2.70		
First use of social media		
12 Years and less	89	21.7
From 13 to 15 Years	167	40.7
Above 15 Years	154	37.6
Total	**410**	**100.0**
Mean= 14.68, MD = 15.00 , Std= 2.56		
Access to mobile phone		
Yes, owned by the participant	403	98.1
Yes, owned by someone else	4	1.0
No	4	1.0
Total	**411**	**100.1**
Access to a computer		
Yes, mine	251	61.5
Yes, owned by someone	109	26.7
No	48	11.8
Total	**408**	**100.0**

41

Variables	N	%
Using ICT for texting		
Yes, largely	287	69.8
Sometimes	111	27.0
Rarely	13	3.2
Total	**411**	**100.0**
Applications used for texting		
Facebook	212	51.6
WhatsApp	162	39.4
Instagram	28	6.8
Twitter	9	2.2
Total	**411**	**100.0**
Social media applications in use now		
Facebook	367	89.3
Instagram	280	68.1
WhatsApp	271	65.9
YouTube	144	35.0
Twitter	112	27.3
Blogger	18	4.4

The average amount of time per day spent on social media by hours	Mean	Median	Std
Facebook	2.29	2.00	2.00
Twitter	1.84	1.00	1.98
YouTube	0.44	0.00	1.13
WhatsApp	2.28	1.92	2.60
Instagram	2.03	2.00	2.09
Blogger	0.08	0.00	0.65

The average amount of leisure/social time spent chatting face-to-face with others	N	%
60 Min. and less	56	13.7
From 61 min to 120 min	78	19.1
From 121 to 240 Min.	131	32.0
Above 240 Min.	144	35.2
Total	**409**	**100.0**
Mean= 233.41, MD = 180.0 , Std= 166.73		
The most times active on social media		
Morning	21	5.1
Afternoon	21	5.1
Evening	205	49.9
Any time, no pattern	164	39.9
Total	**411**	**100.0**

Participants current use of social media applications

Application		Usually active	Sometimes active	Occasionally active	Not active	Mean number of publication per day
Facebook	N	141	117	126	27	1.51
	%	34.3	28.5	30.7	6.6	
Twitter	N	29	31	75	276	0.56
	%	7.1	7.5	18.2	67.2	
Instagram	N	154	109	67	81	1.58
	%	37.5	26.5	16.3	19.7	
You Tube	N	123	111	97	80	0.35
	%	29.9	27	23.6	19.5	
Blogger	N	10	11	19	371	0.02
	%	2.4	2.7	4.6	90.3	

Kind of activities participants are engaged on social media	N	%
Keep in touch with friends	336	81.8
Send messages using Instant Messaging (IM)Share & post photos,	297	72.3

Variables	N	%
videos and music		
Read general news	258	62.8
Post comments on a friend's page or wall	231	56.2
Look for health, diet and fitness information	218	53.0
Look for information about policy, social issues, sport and current events on computers and mobile phones	209	50.9
Keep in touch with family	196	47.7
Create an entry on my social media site like Facebook	181	44.0
Look for the latest fashion trends	160	38.9
Read technology, computer and mobile phone news/reviews	125	30.4
Buy things online	73	17.8
Look for information on services like travel, tourism, airlines	66	16.1
Other	36	8.8
Topics of interest for participants on social media		
Just general chatting	273	66.4
Advice	160	38.9
Healthy program	111	27.0
Products	78	19.0
Promotion & offers	62	15.1
Services	54	13.1
Support groups	30	7.3
Other	26	6.3
The preferable contents/outputs on social media		
Videos	310	75.4
Pictures	157	38.2
Articles	105	25.5
Blogs	6	1.5
Other	3	0.7
Agreement with the statement that social media inspires a healthy lifestyle		
Yes, to high extent	27	6.6
Yes, to some extent	284	69.1
No	100	24.3
Total	**411**	**100.0**

Nearly one third of respondents (35.6%) reported that the first time they heard about social media was when they were 13 to 15 years. The average age when respondent's first used social media was 12 years. Of respondents, 40% used social media when they were between 13 to 15 years. (Mean= 12.79, MD = 12.50, Std= 2.70). FGDs revealed that the age at which people use social media will change in the next generations, as a female said '*For the next generations, they will have a mobile and have a social media profile at a younger age and maybe less than 10 years*' (FGD, females)**.**

Regarding the access to mobile phone, the majority of respondents said that they own mobile 98.1%, and only 1% of respondents use a mobile owned by someone else. In 2016, according to PCBS, 78% of males aged 15-17 own their own phones, only 38% of females

do in the same age group and 97.9% for the (23-29 years) youth males and 92% for females in the same age group. This highlights the wide spread of communication technology in the population. This was confirmed by FGDs where the respondents noted that it is difficult to find a house in Gaza without a mobile or internet which became part of the essentials in peoples' life as one male said '*There is no family member who does not own a mobile phone so children have their own devices at the age of 10'* (FGD, males)**.** These results correspond to a study conducted by Alfawareh& Jusoh (2014) at Najran University in Saudi Arabia, where the results showed that 94.4% of respondents owned smartphone. In another study that was conducted in Japan by White and Mills (2012), results show that 100% of the respondents owned mobile phone.

More than half of the respondents have a computer (61.5%), only 11.8% don't have a computer while 26.7% said that they use a computer owned by someone else. Regarding using ICT for texting, nearly two thirds of the respondents (69.8%) said that they use ICT for texting largely.

About applications that are currently in use by university respondents, 51.6% of the respondents reported using Facebook, followed by WhatsApp (39.4%), then Instagram (6.8%) and lastly Twitter (2.2%). Comparing the findings of this study to study that was conducted on King Khalid University, Saudi Arabia, 76.2% of respondents use both Twitter and WhatsApp, 21.5% use WhatsApp only, 1% use Twitter only (Asiri et al, 2018)**.** This gives an idea about which application to focus on when targeting this age category. The vast majority (89.3%) of the respondents have a profile on Facebook application followed by Instagram application (68.1%) then WhatsApp (65.9%), YouTube (35%), and Twitter (27.3%). These results coincided with the results of Njoroge (2013) study which was conducted in universities in Nairobi, Kenya, the findings for this study refer that the most common social networking site for the respondents in his study was Facebook (43.8%). Additionally, many other studies have revealed that Facebook is the most common social media applications as found in Maher and colleagues (2014) and Bassett and colleagues (2016), where they found that Facebook is from the top three most commonly social media platforms where 28% of respondents were using Facebook. This means that Gaza youth use of social media application is similar to the other places.

The mean time for using social media applications was the highest for using Facebook (2.29 hours), followed by WhatsApp (2.28), then Instagram (2.03), Twitter (1.48), YouTube (.44) and for Blogger was (0.08). Regarding to the average amount of

leisure/social time per day they spend face-to-face with others, 35.2% reported that they spend above 240 min with their families, and 13.7% of them spend 60 min and less. Regarding timing of using social media, half of the respondents (49.4%) use social media mostly at the evening and only 5.1% said that they use social media at morning and afternoon respectively.

Nearly one third of respondents (34.3%) are usually active on Facebook, 7.1% are usually active on Twitter. Of the respondents, 37.5% are usually active on Instagram, 26.5% of them are sometimes active, and 19.7% are not active on it. Nearly one third of respondents are usually active on YouTube. Only 2.04% of the respondents reported that they are usually active on blogger, the majority of respondents are not active. It was clear from the FGDs that the blogger is not known for the university respondents while Facebook, YouTube and Instagram are the mostly used applications. A female said *'This is the first time I hear about Blogger'* (FGD, females).

The majority of respondents (81.8%) use social media to keep in touch with friends, and only 16.1% of them use social media to look for information on services like travel, tourism, airlines, these findings were consistent with the findings of other studies, A'lamElhuda and Dimetry (2014) found that the most purposes of using social media were connecting with family and friends (86.7%), following the news (76.6%). Another study carried out in Jordan by Al-Oqily and colleagues (2013), and the results of this study showed that the top two reasons to use social media being to keep in touch with friends and find general news. In relation to the topics that they are interested on social media, 66.4% of them were interested in general chat, 7.3% of them are interested on support groups. FGDs revealed that social media is the easiest way to connect with the internal and external world. Nearly two thirds the respondents (75.4%) prefer to see videos on social media. These results correspond to a study carried out by Bassett and colleagues (2016), where they found that 46% of respondents use social media to maintain contact with friends. Of the respondents, 69.1% agree that social media inspires them to work out and live healthy life style to some extent. In the FGDs the respondents confirmed that they greatly benefit from social media in improving their health behavior and promoting their health practices where one of the respondents said 'Social *media promoted my health behavior, and I practice health behaviors which I haven't practiced before, after reading and watching through social media'(FGD, males).*

4.2.4   Information Source

Table (4.4): Distribution of study respondents according to their responses about health information sources

Variables	N	%
Visiting sites or health centers to get health information		
Yes, regularly	49	11.9
Sometimes	142	34.5
Rarely	162	39.5
Never	58	14.1
Total	**411**	**100.0**
Source of health information		
Internet	142	34.5
Social media	131	31.9
Health care centers	74	18.0
Private doctor	53	12.9
Other	11	2.7
Total	**411**	**17.3**
Speaking to doctors or nurses or other health care providers about concerns that they might have about growing up		
Yes	129	31.4
No	104	25.3
Don't Know	178	43.3
Total	**411**	**100.0**
Speaking to a doctor or a nurse or another health care provider about concerns that they might have		
Yes	203	49.4
No	208	50.6
Total	**411**	**100.0**
Speak to a counselor or a therapist about feeling		
Yes	164	39.9
No	247	60.1
Total	**411**	**100.0**
Usually after how many days of your sickness you go to health centers		
After One Day	68	17.2
After 2 Days	235	59.5
After 3 Days	59	14.9
More than 3 Days	33	8.4
Total	**395**	**100.0**
Mean= 2.36, MD = 2.00 , Std= 2.32		
The reaction at illness		
Consult the doctors	124	30.2
Visit Health center	108	26.3
Home treatment (Traditional)	96	23.4
Take treatment on your own responsibility	42	10.2
Consult relatives	16	3.9
Nothing	16	3.9
Consult friends	2	.5
Other	7	1.6
Total	**411**	**100.1**

In relation to the respondent's information about health, 11.9% of them reported visiting the health centres regularly to get the health information they need. Some of the

respondents in the FGDs expressed their surprise at the idea of going to the health center specifically just to take information, while others said that there are cases and information should not be taken only through the health center, and cannot rely on social media or the Internet to receive the needed information, one of the respondents said *'I do not need to go to a health center to get the information; the Internet and Social media will be easier and faster'* (FGD, males). Another participant said, *'My decision to go to the health center or to social media center depends on the situation or the nature of information I want to get. If the information is simple and you do not need a specialist, I go immediately to social media, but if there is a disease and I need a doctor, immediately to the health center"* (FGD, females).

Of the respondents, 34.5% reported getting their health information from the internet, 31.9% of them get information from social media, while 18% of them go to health centres to get information. These results are consistent with Hill's study (2013) for college respondents, where the findings of his study refer that the vast majority of the respondents were using social media for health related purposes and health information. One of the respondents in the FGDs appreciated the use of social media as he said *'The best option is the Internet and then social media, but health centers are not the best'* (FGD, males). Another female respondents added *'I live in Khanyounis, it is not logical to go to a doctor in Gaza to get information, I prefer the Internet and social media'*(FGD, females). Inconsistent with the findings of Zhang (2012) study who found that the college respondents in his study do not consider the use of social media to obtain health information behavior is common among them and is not a good source of health information. Nearly one third of respondents (31.4%) speak to doctors or nurses or other health care providers about concerns that they might have about growing up. GAGE reported that 22% of adolescents speak to doctors or nurses about concerns they might have about their growing bodies and puberty (Abu Hamad, Gercama, & Jones, 2017). Nearly half of the respondents (50.4%) reported that they don't speak to doctors or nurses about concerns that they might have. Of the respondents, 59.5% said that they usually go to health centers after 2 days of their sickness, 17.2% after one day of their sickness. The respondents in the FGDs confirmed going to a doctor or health center in certain conditions but not just when feeling tired. One of the females said *'Going to a doctor depends on how is my condition. If it is serious, I go to the doctor immediately, but if you suffer from something as simple as flu, I do not go'* (FGD, females). Nearly one third of the

respondents (30.2%) consult doctors when they have illness, and only 0.5% consults their friends when they have illness. Adding to that, a male student mentioned this point' *'My mother is the doctor at home, and I trust her treatment more than anyone else'* (FGD, males).

4.2.5 Health information seeking behaviors

As Table 4.5 shows, nearly one fourth of the respondents get a lot of their health information from social media while only 5.4% of them don't try to get any health information from social media. In this context, a senior manager said, '*Because the use of social media is a reality, decision makers must provide clear indicators of the quality of health information on sites, such as the source of information and the profession or reputation of shareholders. Mechanisms, such as an effective voting system, can be established to assist users in assessing the quality of information'* (KII).

Table (4.5): Distribution of study respondents according to their responses about Health information seeking behavior and the use of social media

Items	N	%
Trying to get health information from social media		
A lot	104	25.3
Some	209	50.9
A little	76	18.4
None	22	5.4
Total	**411**	**100.0**
The most common source of health and lifestyle information		
Facebook	210	51.1
You Tube	125	30.4
Instagram	40	9.7
WhatsApp	21	5.1
Twitter	8	1.9
Blogger	7	1.8
Total	**411**	**100.0**
The value of information obtained through social media		
Useful	121	29.4
Somewhat useful	286	69.6
Harmful	4	1.0
Total	**411**	**100.0**
The effect of social media on the health behaviors		
Positive effect	192	46.7
No effect	157	38.2
Negative effect	62	15.1
Total	**411**	**100.0**

Nearly half of the respondents get information from Facebook, followed by YouTube 30.4%, then Instagram (9.7%), then WhatsApp (5.1%), then Twitter (1.9%) and Blogger (1.8%). In consistent with these results, a study conducted by Zhang (2012) refer that almost all the participants in the study use Facebook for health and wellness related information. Through the FGDs, respondents said they could find any information they were looking for and found no difficulty in doing so, one of the female respondents said *'I always find what I'm looking for in social media'* (FGD, females).

Nearly two thirds of the respondents (69.6%) said that the information they get from social media was somewhat useful, and only 1% of them said that the information they get from social media was harmful. This was evident during the FGDs as one student said *'The information we get from social media is often useful, especially if it is from a professional account like a doctor'* (FGD, males). A study was conducted on International students by Sin & Kim (2013) found that the international students in a college perceived that everyday life information, including health-related information, which they found from social networking sites, was useful in solving their information needs in the United States. Another study confirmed these results where Magnezi and colleagues (2014) found that active participation in a health-related social networking site on the Internet indicated more benefit.

Figure 4.1 shows that nearly half of the respondents said that social media has a positive effect on health behaviors while 15.1% of them said that it has negative effect and these results are consistent with a study conducted by Laranjo and colleagues (2014) which refer to the positive effect of social media interventions on health behavior outcomes. One key informant said "*Social media have become ubiquitous in student's daily lives, making them particularly attractive in public health. On the one hand, they provide a low-cost opportunity to disseminate health information and possibly improve the cost-effectiveness of health interventions*; *on the other hand, they can promote social support and social impact, and facilitate the change of health behavior" (KII).*

It is worth mentioning that the respondents in the FGDs explained that social media has positive and negative effect. Additionally, they pointed out that it is the language of the era. They said '*Social media is a means, and you can determine the use of this method, if used correctly and purposeful will improve your health behavior, and if used in the wrong way will have a negative impact on you*' (FGD, males). Some respondents referred to the

positive impact of social media in terms of it guidance of healthy food and the role of sport in human life. As for the negative impact, most of them referred to social isolation resulting from the use of social media as well as the lack of sleep and its impact on the educational level of individuals. One of the respondents said "*social media had a great role to eat vegetables and fruits and to walk for half an hour a day*" (FGD, females). Another one said "*I forgot that my sister's wedding will be next week because I do not sit with my family, but most of my time with my mobile*" (FGD, males).
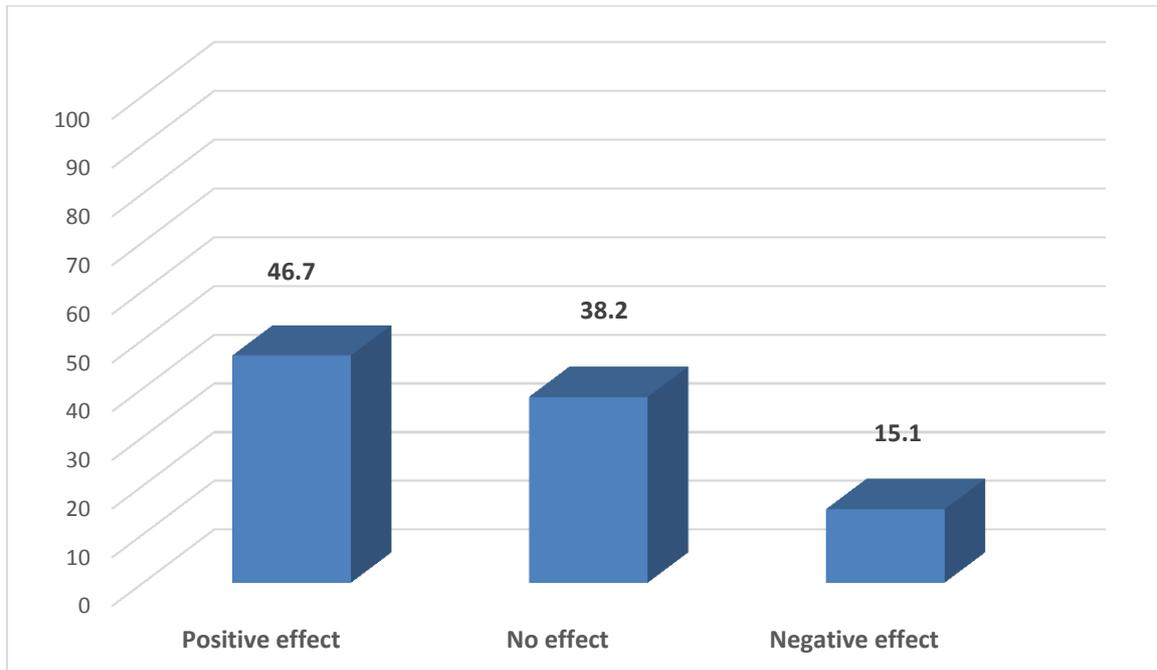
Figure (4.1): The effect of social media on health behaviors

4.2.6 Information seeking barriers

Nearly half of the respondents (53.3%) face barriers to some extent to get health related information, and only 6.1% of them face barriers to high extent. Regarding the type of barriers they face, nearly one third of those who faced barriers face financial barriers, 23% doesn't know where to go, because social media is accessible and cheap, many of these barriers can be overcome.

Table (4.6): Distribution of study respondents according to their responses about barriers they face in seeking information

Variables	N	%
Facing barriers to get the health information they need		
Yes, to high extent	25	6.1
Yes, to some extent	219	53.3
No	167	40.6
Total	**411**	**100.0**
Type of barriers faced (Yes only) N 244		
Financial accessibility	72	29.5
Not knowing where to go	56	23.0
Staff not cooperative	41	16.8
Not having the resources	38	15.6
Social restriction	24	9.8
Other	13	5.3
Total	**244**	**17.3**
Having an idea about centers/providers that provide health information		
Yes sure	115	28.0
To some extent	194	47.2
No	102	24.8
Total	**411**	**100.0**
The last time that you approached a health provider to get information		
Never	194	56.6
Within the past 30 Days	75	21.8
More than 30 Days	74	21.6
Total	**343**	**100.0**
The topics participants get information about		
Physical activity	185	45.0
Nutrition	100	24.3
Psychosocial	59	14.4
Drugs	17	4.1
Smoking	14	3.4
Sleeping	13	3.2
Other	23	5.6
Total	**411**	**100.0**
The value of health information from the service provider		
Useful	187	45.5
Somewhat useful	218	53.0
Not useful	6	1.5
Total	**411**	**100.0**
Usefulness of the different sources for seeking information-which is more useful		
Health care providers	179	43.6
Social media	89	21.7
No differences	43	10.4
Can't decide, depends on the topic	100	24.3
Total	**411**	**100.0**
The frequency of visiting health providers after using social media		
Decreased	156	38.0
Same	227	55.2
Increased	28	6.8
Total	**411**	**100.0**
Health providers use social media to interact with beneficiaries		
Yes	341	83.0
No	70	17.0
Total	**411**	**100.0**

Variables	N	%
Adapting of healthy behaviors after using media		
Yes, many	95	23.1
Some	222	54.0
No	94	22.9
Total	**411**	**100.0**
Quitted bad behaviors after using social media		
Yes, many	87	21.1
Some	205	49.9
No	119	29.0
Total	**411**	**100.0**

Comparing with other studies the barriers that prevented young women seeking general health services included: not knowing where to go (11%); not being able to get permission (17%); not being able to get money (36%); not being willing to go alone (39%); and lack of female health workers (32%) (UNFPA, 2013). Moreover, FGD revealed that many male and female respondents mentioned multiple gaps in the health centers including overcrowding, uncleanliness and lack of privacy, one of the FGD female participant said *'There is no section dedicated to information at our health centers '*(FGD, females). Another one added, *'as a female I cannot go when I just want to get information'* (FGD, females). On the other hand the respondents in FGDs mentioned that the financial and economic situation in the country has a significant impact and they added that it is possible that the person will not go to the health center because of the poor financial situation, one of the male respondents said *'The financial situation prevents us from thinking about going to health centers to get information in addition to poor treatment by health personnel'* (FGD, males). Additionally all of the key informants agreed that there are many obstacles that students face when accessing information through health centers, one of them said *'First, the topics of health education in the health centers depend on the funding, in addition to the financial and social obstacles faced by the students to reach these centers, and the topics in the health centers are traditional subjects, where there is no innovation and do not meet the needs of youth or answer their questions, It is natural that they use social Media to look for these questions. Therefore, decision-makers must take into consideration the needs of young people. This is only through their participation, taking their views and finding out what interests them and what they need'* (KII).

Nearly half of the respondents (47.2%) have to some extent information about the centres /providers from which they can access their health information. More than half of the respondents (56.6%) never approached health providers to get information. About half of the respondents get information about physical activity (45%), 24.3% about nutrition,

14.4% about psychosocial information (see table 4.6). The respondents in the FGDs emphasized on these topics more than others as one of respondents said *'Sports and Physical Activity are the most popular as a youth to search for in social media'* (FGD, males).

Nearly half of the respondents (53%) said that the health information they obtain from the providers is useful to some extent. Of the respondents, 43.6% said that health care providers are the most useful in term of seeking information, then 21.7% said that social media is useful while 24.3% of them said it depends on the topics and 10.5% said that there is no difference about the usefulness. The respondents in the FGDs confirmed that visiting the health center is very important when they are sick, and when the case require examination by the doctor, there are diseases that are difficult to treat without a doctors examination, either if the person is looking for information regarding health behaviors , social media and internet will save time, money and effort, an engineering female student said *' If there is no disease that needs to be examined by the doctor, I prefer social media, but if there is a disease there is no substitute for the doctor'* (FGD, females). This is consistent with Zhang study (2012) where the findings of his study show that who used social media for health information used it mostly for health updates, lifestyle information, and treatments of mild conditions, rather than more serious health issues. Through the FGDs, the respondents stressed that there is wrong and correct information on social media applications, and the person must know where to look for information that he wants, and deal with reliable account to benefit from the information he wants, a medical male student said *'All the information I got from social media was great and useful'* (FGD, males).

About half of the respondents (55.2%) said that there is no change in the frequency of their visit to the health providers after using social media. Of the respondents, 83% said that health providers use social media to interact with beneficiaries. The respondents in the FGDs did not agree with these results, they said that very few doctors communicate through the pages of social media, and stressed that it is necessary to have pages for doctors and thus obtain reliable information. Additionally all of the key informants agreed that social media is an effective tool and should be used correctly. One manager said *'The health institutions must include in their system the communication service through social media, because it is the first means that the students and the majority of the people use, and this will facilitate the performance of their services, especially the projects that are based on awareness and guidance, because through social media will mobilize as many of*

the target group as possible'(KII). Another one added '*The use of social media is not an option but a reality, an issue that cannot be overcome and must be accepted and used to be an effective way to deliver health information to university students*" *(KII).*

Figure 4.2 shows that nearly half of the respondents (54%) said that they adapt some of their health behaviors after using social media. The FGDs also revealed that there were behaviors that have been modified as a result of the use of social media; some respondents said they were exercising by watching YouTube and others have become interested in healthy eating. It is worth mentioning that respondents noted the easy access to health information and that it saves time and money. A student from the college of Law said '*I learned and benefited a lot from social media by modifying my health behaviors like taking care of my skin and hair, healthy food'* (FGD, females). Another one added '*Social media saves money and time and makes life easier'* (FGD, males). On the other hand, one of the respondents pointed out that she eats a lot of chocolate and chips while using her mobile, despite the knowledge that these foods are not healthy food, but consider it as snacks. Many of the respondents assured that. One of the respondents confirmed that this is common among young people, they confessed that it is unhealthy habit, she said "*I used to eat chips and chocolate as snacks while I use social media*" (FGD, females).
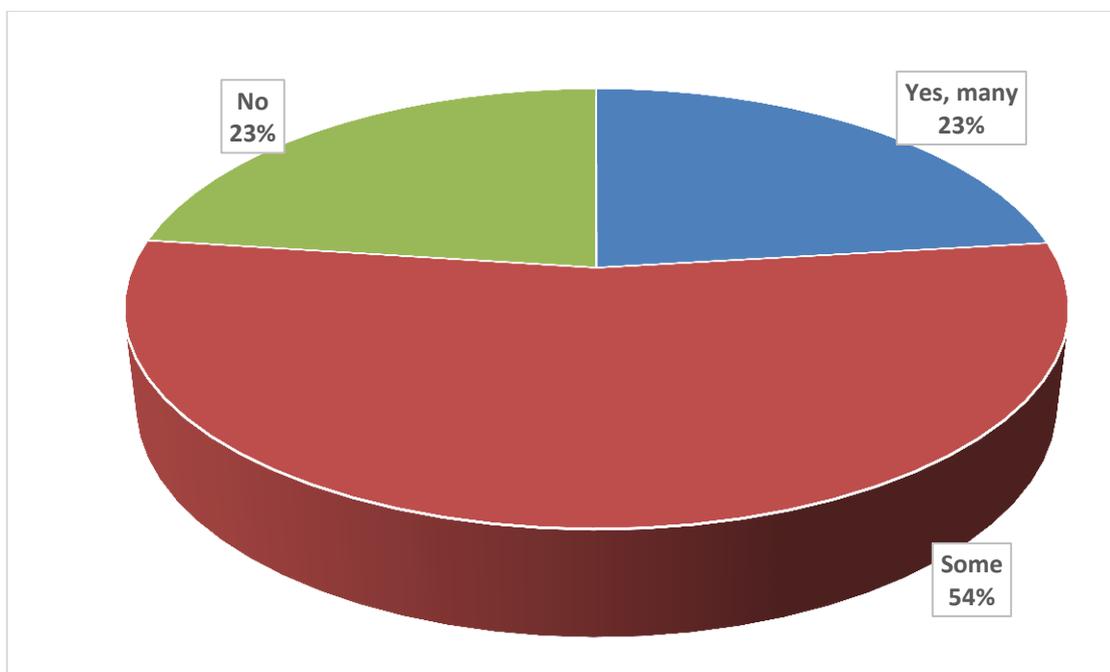
Figure (4.2): Adapting of health behaviors after using media

Figure (4.3) shows that nearly half of the respondents (49.2%) said that they quit some bad behaviors after using social media. The respondents in the FGDs said that they have modified many health behaviors and took away many bad behaviors, including quitting smoking through support groups and a diet for weight loss, also through support groups, as they stressed that the support groups are working great stimulation to its members and it is more successful than that of the person who is trying to quit something alone. As a male student said *'I quit smoking because of support groups on messenger'* (FGD, males).

One of the key informant added that *'Through social media it is possible to mobilize a large number of students and explain to them about the health behaviors and must be presented as an interesting material and can be displayed through pictures or videos to attract students, social media is an effective means of health education, where it is possible to know the number of readers and it is possible to take feedback on the material they read and the size of the interactions that occurred with this article either by the number of sharing to this topic or the number of likes or by comments'(KII).*
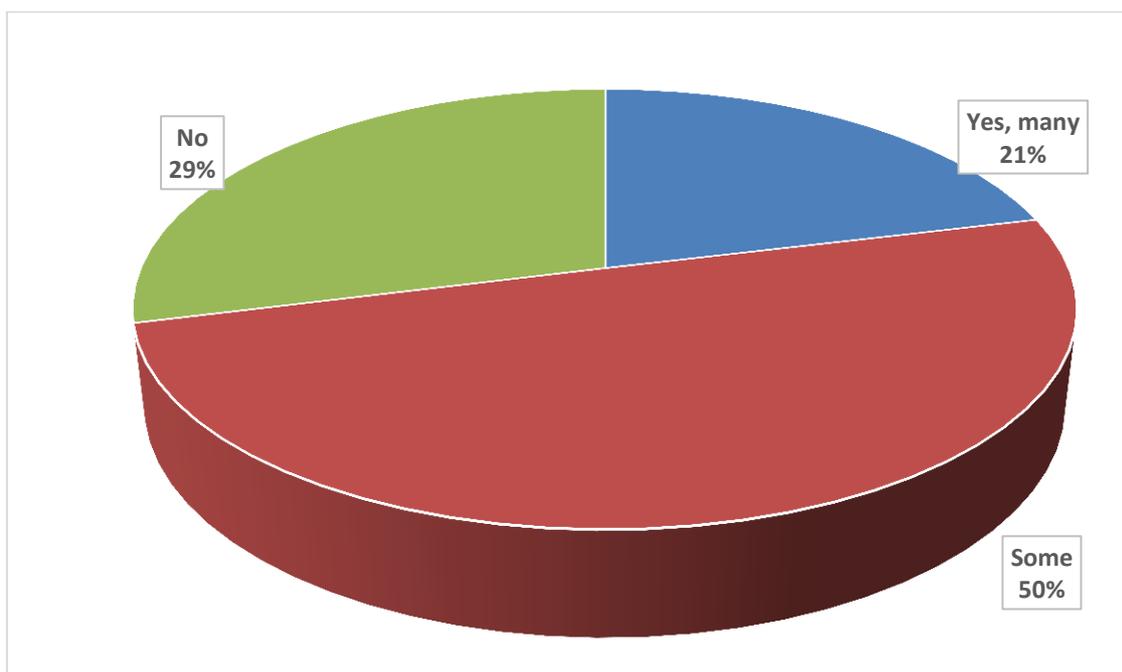
Figure (4.3): Quitted bad behaviors after using social media

4.2.7 Physical Activity and body image

As table 4.7 shows, 45.3% of the respondents said that their body are fairly suitable. These results are consistent to PCBS (2016) report which highlights that 69.4% of youth (15-29)

have appropriate weight (fit), 8.7% of them have little below appropriate weight and 3.1% of them have much above appropriate weight. These results were not consistent with a study carried out by Musaiger (2015) among female university respondents in five Arab countries, the results indicated that 32% − 39% of females were dissatisfied with their weight. A study of female university students in Kuwait showed that 81% of obese females were dissatisfied with their current weight, compared with 30% of non-obese females (Musaiger et al, 2013). There are several socio-cultural factors associated with body weight concern, such as nutrition transition, economic status, mass media, globalization, westernization, influence of parents and peer pressure (Ball & Crawford, 2010).

Table (4.7): Distribution of study respondents according to their responses about Physical Activity and body image and the use of social media

Variables	N	%
Perceptions about body built		
Suitable	177	43.1
Fairly suitable	186	45.2
Too little	41	10.0
Too much	7	1.7
Total	**411**	**100.0**
Physical activity play a role in overall health		
Yes	330	80.3
Not sure	57	13.9
No	9	2.2
DK	15	3.6
Total	**244**	**17.3**
Practice exercise		
Yes regularly	78	19.0
Occasionally	224	54.5
Rarely	85	20.7
No	24	5.8
Total	**411**	**100.0**
Practices or perceptions about exercising are attributed to social media		
Yes	190	46.2
Not Sure	173	42.1
No	48	11.7
Total	**411**	**100.0**
The effect of social media on exercising		
Decreased	71	17.3
Same	218	53.0
Increased	80	19.5
I don't exercise	42	10.2
Total	**411**	**100.0**
The number of fitness applications followed		
Never	76	21.6
From 1 - 2 applications	117	33.2
From 3 to 5 applications	109	31.0
More than 5 applications	50	14.2
Total	**411**	**100.0**
Mean= 3.51, MD = 2.00 , Std= 4.93		

Adding post fitness relating to content on social media accounts (body care, pictures of food, videos of workout routine)		
Never	254	62.1
Sometimes	143	35.0
Usually	12	2.9
Total	**409**	**100.0**
Comparing body with those seen on social media		
Yes	146	35.6
No	169	41.2
Never thought about that	95	23.2
Total	**410**	**100.0**
The comparison of body with fitness models more than supermodels and celebrities		
Yes	341	83.0
No	70	17.0
Never thought about that	00	00.0
Total	**411**	**100.0**

The majority of the respondents (80.3%) said that physical activity plays a role in their overall health. It is worth mentioning that the respondents in the FGDs stressed on the importance of exercise and that the poor financial and economic situation is preventing young people from exercising, in addition to that there are no streets in the country that prepared for sports or even walking or riding a bike, and young people wish that officials take into consideration the needs of young people to provide places to exercise, a male student said *'Exercising makes us more energetic and active'* (FGD, males). Nearly half of the respondents (54.5%) said they practice exercise occasionally. These results are not consistent with the results of the PCBS (2016) where 32, 6 % of youth said that they practiced sports on a daily basis and 67.4% of them said that they did not practiced sports on a daily basis.

Nearly half of the respondents (46.2%) said that their perception and practices about exercising are attributed to the use of social media. Through discussion in the FGDs, the respondents explained that social media was an easy way to practice sports and that it was a catalyst for sports through the subjects that spread the importance of sports and videos that illustrate exercise. One participant added that *'Social media created a routine for me to practice Sports, and I practice sports on a daily basis even if it is a walk for a while'.* Another one added *'Social media has compensated us for registering with gyms and sports centers and has saved our money. I practice sports through videos posted on YouTube'* (FGD, males). Another female student referred to social restrictions that are imposed on females and not to allow them to go to clubs and gym for sports, and added that social media has a great role to exercise and compensate them for going to the gym as she said *'I was hoping go to gym for exercising but my dad was rejecting the subject and saying it*

was socially unacceptable, and now I'm practicing sports on YouTube, thanks to social media' (FGD, females).

These results are consistent with a study in Bahrain which concluded that 67% of women believe that the lack of opportunities for females to participate in physical activity is due to gender discrimination, where most sports and exercise facilities are provided to men. The researchers also found that 24% of these females consider that the negative attitudes of society and family members towards women who exercise prevent them from exercising. (Musaiger& Al-Roomi, 2014).

Nearly half of the respondents (53%) said that there is no effect of social media on their exercising. There were differences in the opinions of the FGDs on this subject, where some respondents stressed that social media promoted exercising, and the other part of the respondents said that' *it is possible to waste time and forget to exercise or waste time exercise while they use social media because social media has an implicit role in making a person enjoying himself so much that s/he enjoys a great time sitting in his/her room alone with his mobile and the applications of social media'* (FGD, males).

Nearly one third of the respondents (33.2%) said that they follow from 1 to 2 applications of fitness, and only 14.2% of them follow more than 5 applications (Mean= 3.51, MD =2.00, Std= 4.93). Of the respondents, 62% said that they never add any post, and only 2.9% of them usually add post fitness relating to content on their social media accounts. Regarding comparing of their body with those they see on social media, 41.2% of the respondents don't compare of their body with those they see on social media. These results were consistent with a study carried out by Musaiger (2015) where 17% − 31% of females wanted their body shape to be similar to Western fashion models. The majority of respondents (83%) said that they compare their bodies with fitness models more than supermodels and celebrities. Through the FGDs with the male respondents, they confirmed that most young people wish that their bodies become as athletes and that many of them are trying to follow a diet and practice exercises to reach such bodies and one of the respondents said *'I like Ronaldo's body and I try to have my body like him'* (FGD, males).

4.2.8 Nutritional behaviors

Table 4.8 shows that 65.2% of the respondents don't follow a balanced diet. It was clear that 51% of the respondents said that using balanced diet is not attributed to the use of social media.

Table (4.8): Distribution of study respondents according to their responses about nutritional behaviors and the use of social media

Variables		N		%	
Following a balanced diet					
Yes		143		34.8	
No		268		65.2	
Total		**411**		**100.0**	
Using the balanced diet is attributed to using social media					
Yes		70		49.0	
No		73		51.0	
Total		**143**		**100.0**	
Changing dietary habits because of using social media					
Yes		177		43.1	
No		170		41.4	
DK		64		15.6	
Total		**411**		**100.1**	
Type of change in diet as a result of using social media					
Take enough time while eating		55		31.1	
Have meals regularly		51		28.8	
Have breakfast		28		15.8	
eat or avoid fast food		21		11.9	
Snaking		13		7.3	
Skip any main meal		9		5.1	
Total		**177**		**100.0**	
The sources of information about nutritional behaviors					
Internet		219		53.4	
Social media		99		24.2	
Health care centers		92		22.4	
Total		**410**		**100.0**	

Perceptions about using social media in nutrition		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I find out valuable dietary information on an application	N	27	35	199	130	20
	%	6.6	8.5	48.4	31.6	4.9
If you have a question related to food habits, you can usually find the answers on an application.	N	15	58	148	175	14
	%	3.7	14.1	36.1	42.7	3.4
The information provided by other members of an application helps you plan your food system.	N	28	65	154	136	25
	%	6.9	15.9	37.7	33.3	6.1
You get good tips on how to eat healthy food from an application.	N	14	35	126	184	51
	%	3.4	8.5	30.7	44.9	12.4
If you have a weight related question you want to answer, you will post a question on an application to get a response.	N	92	122	77	101	19
	%	22.4	29.7	18.7	24.6	4.6

Knowing about application that helps you understand which foods you should and shouldn't eat		
Yes	210	51.6
No	197	48.4
Total	**407**	**100.0**
The effect of social media on eating habits		
Positive effects/promoted	165	40.3
Same/no change	211	51.6
Negative effect	33	8.1
Total	**409**	**100.0**

With regard to the changes in dietary habits because of using social media, figure 4.4 shows that 43.1% of the respondents have changed dietary habits because of using social media, while 41.4% of them haven't changed any dietary habits. Consistent with the findings of this study Jimoh and colleagues (2018) found that the smartphone applications are more effective in improving adolescent diet where when the respondents used the smartphone application change their dietary habits as increased fruit consumption and reduced consumption of chocolate snacks.
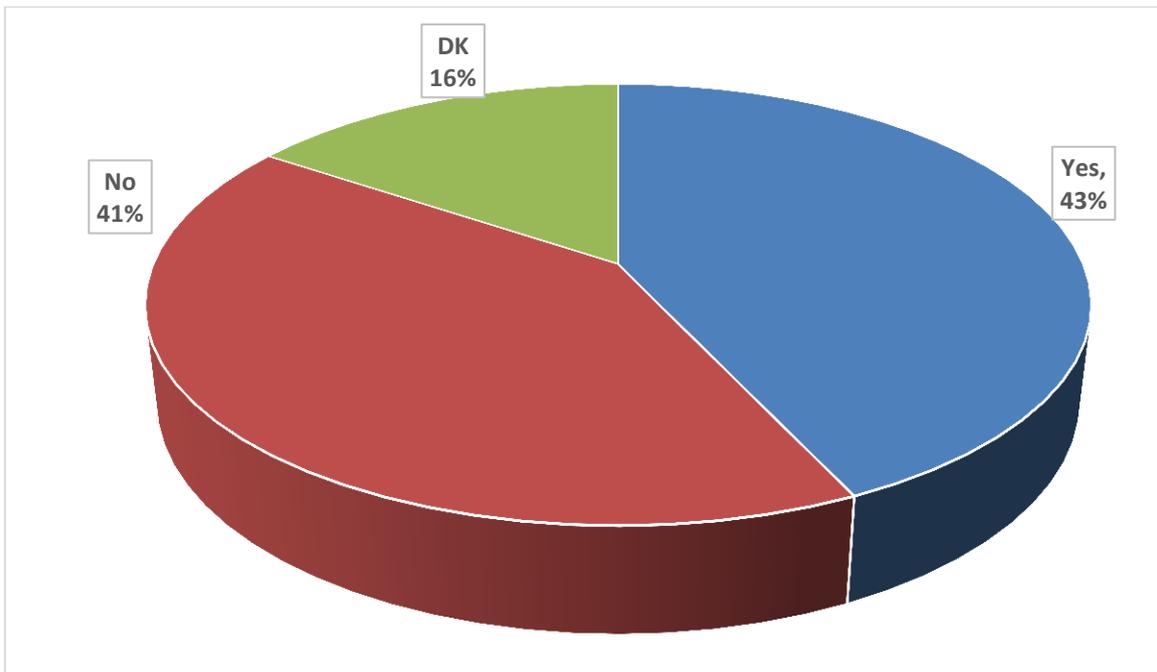
Figure (4.4): Changing any dietary habits because of using social media

With regard to the changes in nutritional behaviors as a result of using social media, table 4.8 shows that 31.1% of the respondents who reported having changes in diet attributed to social media, said that they take enough time while eating and 5.1% of them skip any main meal as a result of using social media. During the discussions in the FGDS, participants showed variations in the changes that resulted in their nutritional behaviors because of the

use of social media. Some of them explained that they had regular breakfast after reading about its importance through the pages of social media. Others said they had moved away from fast food and were looking for the number of calories in the food products before they buy it, and one of the females respondents in the FGDs indicated that she became obsessed with calculating the calories for her food as she said '*Before I buy any food, I calculate the number of calories in it and if these calories are suitable for me or not, I am obsessed about that*'. On the other hand, some of the participants in the FGDs explained that they changed their nutritional habits, but to the worst, because of their addiction to social media, it is possible that they forget to eat one of the main meals, eating fast food, chips, popcorn and snacks while using their mobile.

Findings show that 53.4% of respondents use internet as a source of information about their nutritional behaviors while 24.1% of them use social media as a source for information and 22.4% of them use health centers as a source for getting information. One of the key informant said *"University students are in transition when they start university, and among the things that affect their nutrition behaviors, at this stage should be working to raise them up from the beginning about the importance of healthy food and guidance about the risks of obesity and overweight and their consequences., This can be done by publishing the information on social media pages, because it is difficult to gather and mobilize students and ensure that they will attend awareness and guidance sessions. To ensure that the information arrives, a group of young people themselves must be involved to deliver this information through their own profiles or through profiles created specifically for such topics"* (KII).

Regarding finding valuable dietary information on an application, a total of 48.4% of respondents were neutral, 36.5% of the respondents said that they find out valuable dietary information on an application (mean=64). Nearly half of respondents (46.1%) indicated that they can usually find the answers for a question related to food habits on an application (mean=65.6*)*. In confirmation of these results, the respondents said in a discussion in the FGDs, they are most likely to find what they are looking for information or diet or even recipes to prepare food, and females confirmed that social media provided them with a lot of information on healthy food and its benefits and they try follow diets to maintain a perfect weight. One of the female respondents said *'Any information I want to get, I can find it in social media'* (FGD, females).

Of the respondents, 39.4% indicated that the information provided by other members of an application help them plan their food system, while 22.8% of the respondents indicated

that the information provided by other members of an application don't help them plan their food system. They differed in the FGDs with these results where some of the respondents said that the information published by the members of the page encourages them and serves as a motive to follow certain approach but others said that the page members' contributions reflect their personal experience and that it is not necessary that they benefit from it, but the pages of specialists are the ones we are looking for, and they are the reference for them. One female respondent said *"When a female says she used a particular diet and had an effective result, this thing motivates me to use this diet"* (FGD, females).

Nearly half of the respondents (57.3%) said that they get good tips on how to eat healthy food from an application. The FGDs revealed that respondents find a lot of information about healthy food but said they read this information but few of them apply the information, the group applying the information said that there was a significant change in its dieting style and that the change was for better, a female student said *"I started to eat vegetables and fruits and reduced eating of fast food after I read about their bad influence in social media"* (FGD, females). Nearly half of the respondents (52.1%) indicated that if they have a weight related question they want to answer, they will not post a question on an application to get a response. According to their knowledge about applications that help them understand which foods they should and shouldn't eat, it was clear that 51.6% of the respondents said yes while 48.4% of them said no.

Figure 4.5 shows that nearly half of the respondents (51.6%) said that social media has no effect on their eating habits while 40.3% of them said that social media promoted their eating habits. The results of this study is consistent with a study conducted in U.S on college females, where the findings of Kies study (2016) refer to the positive role of social media on diet and physical activity. On the other hand our results are not consistent with the study of Abu Hamad (2017) where their results refer that there is significant relationship between overweight and obesity, and daily average hours of surfing social media applications, eating while visiting social media and eating chips and snacks while on social media. There were also differences in opinions about the impact of social media on nutrition.

The FGDs revealed that a group of respondents confirmed the positive impact of social media on nutrition and it was clear how it affects their nutritional behaviors, whether the quantities they should eat or the importance of the three main meals or through what is

healthy food and what is unhealthy. On the other hand, a group of respondents stressed that their nutritional style was the same as that of their parents before, and that they do not apply what they read in the media. It is worth mentioning that one of the male student said *'Social Media has no effect on my dietary habits but my mom is the one that has the effect'* (FGD, males). Another female student said *'Social Media helped me improving nutritional behavior. The articles I read and the posters I showed in social media to illustrate healthy eating, the benefits of breakfast and the reduction of sweets, all helped me improving nutritional behavior'* (FGD, females).
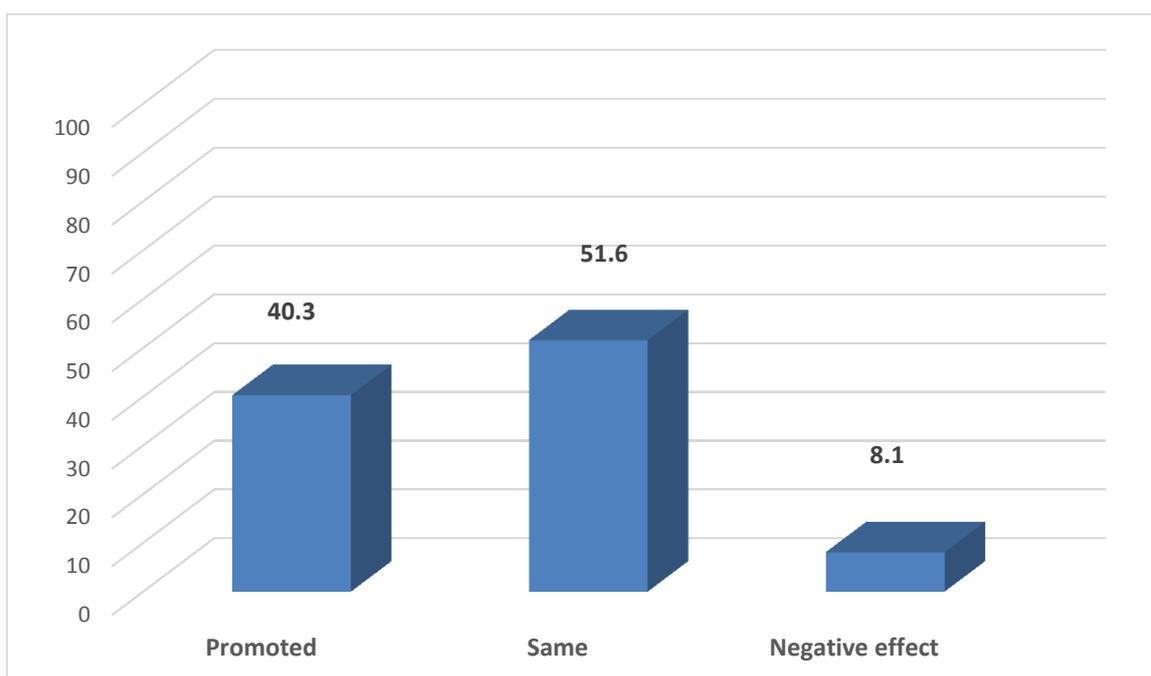
Figure (4.5): Social media affect your eating habits

4.2.9 Psychosocial and socialization behaviors

Table 4.9 shows, according to respondents, it was clear that nearly half of respondents (52.3%) were psychosocially good, and only 12.4% of the respondents were not good PSS status. These results correspond to the results of the PCBS (2016), 63.4% of youth were somewhat happy, 16.2% of them were neither happy nor unhappy and 4.1% were somewhat unhappy.

Of the respondents, 43.3% seek their PSS information by internet, 33.3% of them by social media while 23.4% of them by health centers. FGDs revealed that the main source for PSS information for the respondents was from social media and internet and nearly all the respondents in the FGDs excluded the idea of going to a health center or even a private

doctor to get information about PSS. The respondents explained that the idea of going to a psychiatrist is still stigma. The respondents said that social media and the internet made it easier for them to access such information, especially as they are kept secret and maintain privacy; a female student said *'Internet and social media are the best options to search for PSS information'* (FGD, females).

Table (4.9): Distribution of study respondents according to their responses about Psychosocial and socialization behaviors and the use of social media

Variables			N			%
Description of PSS status						
Good			215			52.3
Neutral			145			35.3
Not Good			51			12.4
Total			**411**			**100.0**
Source of seeking PSS information						
Internet			178			43.3
Social media			137			33.3
Health center			96			23.4
Total			**411**			**100.0**
Information about psychosocial						
Useful			155			37.8
Somewhat useful			216			52.7
Harmful			39			9.5
Total			**410**			**100.0**
Effect of using social media on PSS status						
Promoted			161			39.4
Same			189			46.2
Negative effect			59			14.4
Total			**409**			**100.0**

Perceptions about using social media in PSS status		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
You feel that members of this page care about you as and they are related to what you have	N	49	52	145	86	79
	%	11.9	12.7	35.3	20.9	19.2
You gain a feeling of acceptance from using an application.	N	26	67	133	139	46
	%	6.3	16.3	32.4	33.8	11.2
Seeing the success of others on this page helps me stay on my weight loss program and fitness	N	40	65	95	122	89
	%	9.7	15.8	23.1	29.7	21.7
You prefer to observe rather than post messages on this page.	N	26	36	89	91	169
	%	6.3	8.8	21.7	22.1	41.1
You would classify yourself as an interactive user of this page.	N	78	107	111	75	40
	%	19	26	27	18.2	9.7
You do not interactively communicate on this page as you have nothing to contribute.	N	68	105	122	61	55
	%	16.5	25.5	29.7	14.8	13.4
It's easy to take things the wrong way during social networking.	N	62	113	131	75	30
	%	15.1	27.5	31.9	18.2	7.3
People cannot effectively solve problems using social networking	N	33	63	131	99	85
	%	8	15.3	31.9	24.1	20.7

Variables		N			%	
Social networking has made a positive impact on society	N	43	52	162	92	62
	%	10.5	12.7	39.4	22.4	15.1
Social networking makes friendships stronger	N	52	70	129	100	60
	%	12.7	17	31.4	24.3	14.6
How much are you in agreement with the argument that people who rely on social networking are less interactive with others	N	24	68	118	81	120
	%	5.8	16.5	28.7	19.7	29.2

Nearly half of the respondents (52.7%) said that the finding of information about psychosocial were somewhat useful, and only 9.5% of them said the information were harmful. Nearly half of the respondents (46.2%) indicated that there is no effect of social media on the respondents PSS. These results may be not consistent with a study conducted by Lin and colleagues (2016) where the findings of this study show that there is a strong and significant association between social media use and depression.

Few respondents in the FGDs emphasized the impact of social media on the PSS. They stressed that they are here in the GS there is nothing that affects their PSS as it is affected by the siege and the occupation. On the other hand, they added that social media can be a window to them around the world to break this siege somewhat, especially as the possibility of travel is very limited and for humanitarian cases only. One of the male students said *'It is possible that social media will have a negative and positive impact on the psychological situation and this depends on what is posted on the pages of social media'* (FGD, males).

Nearly half of the respondents (40.1%) indicated that they feel that members of this page care about them as and they are related to what they have. These results are not consistent with Bassett study (2016), since the results of his study found that most respondents were neutral when asked if more followers and likes bring happiness.

Nearly half of the respondents (45%) said that they gain feeling of acceptance from using an application. Nearly half of the respondents (51.4%) said that the success of others on this page help them on their weight loss program.

There were differences in the opinions of the respondents in the FGDs, as some respondents stressed that what is published from the personal experiences of the members of the page, it can have a positive impact and motivate the rest of the members of the page and serves as a success story for them, others had a different opinion is that these posters do not affect them, one of the female student said *'When I see the success of others on social networking pages, this encourages me to try the diet or sports they used, and give*

me a positive feeling' (FGD, females). Another one said *'I do not think I can try any diet as a result of seeing someone else's success on the application, it is something personal and each is unique'* (FGD, females).

Of the respondents, 63.2% prefer to observe rather than post messages on this page, and only 15.1% of the respondents prefer to post messages rather than observe on this page. Nearly half of the respondents (45%) don't classify themselves as an interactive user of this page. When asked them if they do not interactively communicate on this page as they have nothing to contribute, 42% of them indicated no, and 28.2% of them said that they do not interactively communicate on this page as they have nothing to contribute.

Of the respondents, 42.6% indicated that it isn't easy to take things to the wrong way during social networking. These results correspond to a study carried out by Bassett study (2016), where the results of his study found that 66% of respondents do not agree that social media leads to other problems in life.

Nearly half of the respondents (44.8%) indicated that people cannot effectively solve problems using social networking. Referring to the positive impact of social media on society, 37.5% of them said that social networking has made a positive impact on society and 23.2% of them said that social networking has not made a positive impact on society. It was clear through discussions in the FGDs, that there is a consensus among the respondents that social media facilitated the communication with the world, which led to the improvement of their PSS. More of that the respondents pointed out that it is only a sense that they communicate with the outside world even if through social media gives them a sense of satisfaction, as one of the respondents said '*When I feel depressed, I isolate myself in my room and live with the virtual world through social media, and that makes me get out of depression'* (FGD, males). Another one said *'Social media is the only outlet for us, without social media we will be isolated from the world especially that we are in large prison'* (FGD, females). Another male student said *'Internet for us is life and it is the only respite'* (FGD, males).

Of the respondents 38.6% indicated that social networking makes friendships stronger. When asked the respondents how much are they in agreement with the argument that people who rely on social networking are less interactive with others, about half of them (48.9%) were agreed and 22.3% of them disagreed. This corresponds to a study conducted on university of Babylon, Iraq where (84%) of the medical respondents think that social media reduce face-face social interaction between people (Alahmar, 2017).

It should be noted that all the respondents in the FGDs confirmed that despite the benefits of social media and it saves time and effort and money for many aspects of the whole life, but it isolates people socially and reduce the face-to-face communication and only communicate through social media applications, which leads to social isolation between individuals and the disintegration of the family. The respondents stressed that they could not see their families for two days and they live in the same place and to be satisfied with social media. It is funny to point out what one participant said: '*When my mother wants something sends me a message via WhatsApp and I am out of the question in the same way*' (FGD, males). Another female said '*Social media has certainly reduced social communication among individuals*' (FGD, females).

4.2.10 Smoking

As table 4.10 shows, of the respondents, 7.1% were smoking. These results are lower than the results found in the PCBS (2016), where the percentage of smokers in the PCBS for the age (18-22) was 14.9%. Of the respondents, 57.9% indicated that the smoking isn't attributed in any way to social media. Regarding to the effect of social media on smoking 56.9% of the respondents indicated that social media has no effect on smoking while 23.6% of them said that social media increases smoking. These results are not consistent with a systematic review conducted by Naslund and colleagues (2017) which refer to the effective role of social media on smoking cessation. In contrast, a study was conducted by Felton (2018) at University of Texas at Austin, the findings of this study point out that the more students engaged with social media platforms, the more often they were exposed to pro-smoking information and then they become more likely to smoke.

Through the FGDs, respondents said that social media does not affect smoking, but the poor psychological situation that young people suffered from the lack of employment opportunities and unemployment, and security instability in addition to political division. They added that all these factors stimulate smoking and stimulate the lack of interest in the person's health, all smokers know that it is harmful to health and it wastes money, but there is nothing in their lives worth fighting for, one of the respondents pointed out that smoking is a habit that is difficult to overcome. Another participant pointed that he does not think that smoking-promoting publications do exist on the applications of social media, saying '*Social media does not reduce or supply smoking, but the bad situation we are living is what makes us go to smoking in addition to smoking is a social custom in Gaza*' (FGD, males).

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Table (4.10): Distribution of study respondents according to their responses about Smoking and the use of social media

Variables	N	%
Smoking		
Yes	29	7.1
No	382	92.9
Total	**411**	**100.0**
Smoking is attributed to the use of social media		
To high extent	38	9.4
To some extent	133	32.8
No	235	57.8
Total	**406**	**100.0**
Effect of social media on smoking		
Increased	97	23.6
Same	234	56.9
Decreased	80	19.5
Total	**411**	**100.0**
Accessed any anti-smoking message		
Yes	135	32.8
No	276	67.2
Total	**411**	**100.0**

Perceptions about anti-smoking messages		Strongly disgree	Disagree	Neutral	Agree	Strongly agree
Providing useful information	N	15	12	48	50	10
	%	11.1	8.9	35.6	37	7.4
Easy to understand	N	7	18	39	54	17
	%	5.2	13.3	28.9	40	12.6
Scaring Messages are effective in combating smoking	N	24	18	35	36	22
	%	17.8	13.3	25.9	26.7	16.3

Variables	N	%
Media teaches different ways of smoking		
Disagree	40	30.1
Agree	46	34.6
DK	47	35.3
Total	**133**	**100.0**
Media uses different models to promote smoking		
Disagree	35	26.3
Agree	29	21.8
DK	69	51.9
Total	**133**	**100.0**
Media shows the social importance of smoking		
Disagree	52	38.5
Agree	38	28.2
DK	45	33.3
Total	**135**	**100.0**
Media promotes discussion among university respondents about smoking and its side effects.		
Disagree	27	20.0
Agree	59	43.7
DK	49	36.3
Total	**135**	**100.0**

Variables			N		%	
Communication/interactions about smoking		Strongly disgree	Disagree	Neutral	Agree	Strongly agree
In the last month, how often have you posted antismoking messages	N	242	66	53	27	23
	%	58.9	16.1	12.9	6.6	5.6
In the last month, how often have you seen or heard antismoking messages	N	138	96	106	45	26
	%	33.6	23.4	25.8	10.9	6.3
In the last month, how often have you posted pro smoking messages	N	264	68	43	29	7
	%	64.2	16.5	10.5	7.1	1.7
In the last month, how often have you seen or heard pro smoking messages.	N	206	92	60	37	16
	%	50.1	22.4	14.6	9	3.9
Type of application used in pro smoking message (e.g., tobacco advertisement, cool images of smoker, benefits of smoking, or celebrity smoking) on a blog						
Facebook			252		61.3	
Instagram			106		25.8	
You Tube			27		6.6	
Twitter			23		5.6	
Blogs			3		0.7	
Total			411		100.0	
Type of application used in antismoking message (e.g., tobacco advertisement, cool images of smoker, benefits of smoking, or celebrity smoking) on a blog						
Facebook			277		67.4	
Instagram			53		12.9	
You Tube			50		12.2	
Twitter			17		4.1	
WhatsApp			13		3.2	
Blogs			1		.2	
Total			411		100.0	

On the other hand, in the female FGD, one of the female participants mentioned an important point that it is possible that what is displayed from pictures and videos of the youth and they smoke make us want to experiment and practice this habit even if only for fun where she said *'What we see from videos published in the Instagram, from the pictures of the females they smoke stimulates us to try smoking'*

Nearly two thirds of the respondents (67.2%) said that they didn't access any antismoking message. For those who accessed antismoking message we asked them about these messages, 44.4% of the respondents said that the antismoking message provide useful information. The respondents in the FGDs pointed out that the anti-smoking messages are useful and powerful and show them the risks of smoking, but this thing does not work for them in the GS because there is no strong incentive for that. One of the participant said *'Antismoking messages give us great information about the effects of smoking and the*

benefits of quitting smoking, but nothing in our country encourages us to keep our health' (FGD, males). Others said that support groups can help those who wish to quit smoking because they have moral support among individuals and see other experiences that have succeeded in quitting smoking. When asked them if these antismoking messages were easy to understand, nearly half of them agreed and strongly agreed. About if the fear Message is effective, 43% of them agreed and strongly agreed.

Nearly one third of the respondents (34.6%) agreed that media teaches different ways of smoking, and 30.1% disagreed. Of the respondents, 21.8% agreed and 26.3% disagreed with the statement: media uses different models to teach smoking to university respondents. The FGDs show that social media may be a tool to either teach smokers new ways to smoke, such as electronic shisha and other things, or to be a tool to quit smoking as the establishment of support groups on messenger and WhattsApp. In line with these findings the study of Baskerville and colleagues (2015) that social media platform can complement the traditional cessation service for young adult smokers seeking help to quit.

And refer to what came in the FGDs, participants said that social media is like any other medium and can be used correctly or wrongly and this depends on the person and the person who determines what he wants and what suits him. The respondents stressed that they have the enough wisdom and knowledge to be able to choose what suits them, one of the male respondents said *'I knew of the electronic shisha from social media'* (FGD, males). Other one said *'The success stories that I read on social media pages of people who quit smoking were the first way for me to quit smoking'* (FGD, males). One of the key informants pointed out that *'Decision-makers should use social media to break the bad habits of university students through support groups to quit smoking or lose weight because of its great effectiveness'* (KII).

On the other hand, 38.5% disagreed and 28.1% of the student agreed with the statement: media shows social importance of smoking. Of the respondents, 43.7% agreed and 20% disagreed with the statement: media promotes discussion among university respondents about smoking and its side effects.

Of the respondents, 61.3% indicated that Facebook is the application which used in pro smoking message. The respondents of the FGDs varied in their perceptions in the FGDs about the most encouraging application of smoking, some said that Facebook is the most widely used application among young people and is also considered to be the most catalyst

for smoking, while others said that the Instagram is an application that publishes photos and videos of smokers, whether young or famous, so it is the most motivating on smoking where one of the male respondents said *'Instagram is the most common application that encourages smoking because of what is published in pictures of young people smoking'*(FGD, males). At the same time nearly two thirds of them (67.4%) said that the same application can promote the antismoking messages. The respondents in the FGDs added that Facebook is the most popular application which tries to combat smoking through videos of smoking damage or publications on diseases caused by smoking. A female student said *"A lot of posts that is posted on Facebook support quitting smoking"* (FGD, females).

4.2.11 Drugs

As table 4.11 shows, the majority of the respondents (81.3%) said that they don't take any drugs that make them feel better. Nearly two thirds of them (70.8%) don't know any one similar to them in age who takes drugs. Regarding to the effect of media on using drugs, 44.8% of the respondents agreed that social media increases the drug abuse. These results correspond to a study conducted by Grund and colleagues (2009) where they found that teens that use social media are two or more times as likely to have tried tobacco, alcohol, or marijuana. These results consistent with a study conducted by Columbia University's National Center suggests that teens that use social media on a daily basis were five times more likely to use tobacco, three times more likely to drink alcohol and twice as likely to smoke marijuana.

Table 4.11 shows that nearly two thirds of the respondents (70.6%) indicated that Facebook is the most effective application in avoiding taking drugs. Of the respondents 78.8% don't participate in any applications that support avoiding them of taking any types of drugs.

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Table (4.11): Distribution of study respondents according to their responses about Drugs and substance abuse and the use of social media

Variables	N	%
Taking drugs/substances that make them feel better		
Yes	77	18.7
No	334	81.3
Total	**411**	**100.0**
Knowing anyone similar to them in age who is taking drugs to feel happy		
Yes	120	29.2
No	291	70.8
Total	**411**	**100.0**
Effect of social media on the drug substance abuse in Gaza		
Increased	184	44.8
Same	168	40.9
Decreased	59	14.3
Total	**411**	**100.0**
Which of the social media applications is more effective in avoiding taking drugs		
Facebook	290	70.6
Instagram	50	12.2
You Tube	49	11.8
Twitter	22	5.4
Total	**411**	**100.0**
Participate in any applications that support avoiding substance abuse		
Yes	87	21.2
No	324	78.8
Total	**411**	**100.0**
Times of applications in the last 30 days that used to avoid taking drugs (Yes only) N 310		
Zero	217	70.0
One	22	7.1
Two	42	13.5
Three and More	29	9.4
Total	**310**	**100.0**
Mean = 0.69 , MD= 0.00, Std= 1.25		
Agreeing that social media contribute to preventing youth from using drugs/substances		
Yes	161	39.6
No	88	21.6
DK	158	38.8
Total	**407**	**100.0**
Agreeing that social media contribute to increase drug abuse		
Yes	198	48.8
No	208	51.2
Total	**406**	**100.0**
Having university subjects that show the influence of social media on avoiding university students from drugs		
Yes	111	27.3
No	295	72.7
Total	**406**	**100.0**
Type of information about drugs sought on social media applications		
Side effect of drugs	60	14.7
Kinds of drugs	58	14.2
Articles about drugs	27	6.6
Other thing	68	16.6
Nothing	196	47.9
Total	**409**	**100.0**

Nearly two thirds (70%) of the respondents don't access any applications in the last 30 days that used to avoid taking drugs (mean = 0.69, Std=1.25). Regarding to the effect of social media in preventing drugs use, 39.6% said yes, 21.6% said no. The participants in the FGDs pointed out that social media does not affect either positive or negative drugs, and they confirmed that those who intend to take such drugs do not need to read about them in social media, but it is possible that friends have the biggest role in encouraging these things, and always start taking drugs for experiment or fun and entertainment and it develops until it becomes addictive.

Nearly half of the respondents (51.2%) said that the use of social media don't attributes in increasing in drug abuse. Nearly two thirds of the respondents (72.7%) said they have never studied any university subjects that show the influence of social media on avoiding university students from drugs. Additionally, half of the respondents (47.9%) do not seek any information on social media applications, and only 6.6% of them seek about articles about drugs. Nevertheless, the respondents in the FGDs said that there is no effect for social media in drugs; they added that in the countries of the world, social media may facilitate the purchase and sale of these drugs or encourage them to buy it. However, the situation in the GS is different, and as they have pointed out previously that the poor economic situation, the political situation, the frequent wars and the insecurity they are living in are what drives the youth to take these drugs. A senior manager pointed out that '*Social media is not sufficient as a tool alone, but it should be linked with traditional health education tools, especially on sensitive issues such as drug use, because of its seriousness and importance'(KII).*

4.2.12 Sleep pattern

As table 4.12 shows, nearly half of the respondents sleep 6 to 8 hours daily, while only 11.1% of them sleep less than 6 hours (mean= 7.82, Std=2.26). Of the respondents, 42.6% said that the number of sleeping hours decreased because of using social media. In addition, 41.3% said that they sometimes feel tired on a given day (mean= 66.6). It was clear that 37.3% of them said that they often and very often have experience sleep disturbances (mean= 60.8). About the time they spend on social media just before going to bed, 62.8% of them indicated that they often and very often spend time just before going to bed (mean= 77.0).

Table (4.12): Distribution of study respondents according to their responses about sleep and the use of social media

Variables	N	%
Number of sleeping hours daily		
Less than 6 hours	44	11.1
From 6 to 8 Hours	231	58.2
More than 8 Hours	122	30.7
Total	**397**	**100.0**
Mean = 7.82 , MD= 8.00, Std= 2.26		
The effect of using social media, on the number of sleeping hours		
Increased	36	9.0
Same	194	48.4
Decreased	171	42.6
Total	**401**	**100.0**

Sleeping Patterns		V Rarely	Rarely	Sometimes	Often	Very Often
Feeling tired generally on a given day	N	21	56	168	93	69
	%	5.2	13.8	41.3	22.9	17.0
How likely are you to experience sleep disturbances?	N	56	89	110	88	64
	%	13.8	21.9	27	21.6	15.7
the time you spend on social media just before going to bed	N	15	32	106	106	152
	%	3.6	7.8	25.8	25.8	37.0
How frequently do you check social media in the 30 minutes before falling asleep at night	N	46	63	99	84	119
	%	11.2	15.3	24.1	20.4	29.0

Variables	N	%
Using social media have bad effect on sleeping by using a big number of messages or videos before going to bed		
Yes	260	63.4
No	118	28.8
Don't Know	32	7.8
Total	**410**	**17.3**
Using social media affects negatively on optical and nerve system		
Yes	299	72.9
No	79	19.3
Don't Know	32	7.8
Total	**410**	**100.0**
The application that mostly posts posters or videos about the side effects of going to sleep late		
Facebook	239	59.0
Instagram	77	19.0
You Tube	52	12.8
WhatsApp	21	5.2
Twitter	15	3.7
Blogs	1	.2
Total	**405**	**100.0**
Sharing any materials with medical information about sleeping		
Many Times,	33	8.1
Sometimes	160	39.3
No	214	52.6
Total	**407**	**100.0**

Agreeing that using social media at a late time hinders the academic achievement		
To high extent	147	36.2
To some Extent	205	50.5
No	54	13.3
Total	**406**	**100.0**
Agreeing that using social media late may hinder getting up early and starting the day in an active way		
To high extent	173	42.5
To some Extent	187	45.9
No	47	11.5
Total	**407**	**100.0**
Using social media may hinder the going to sleep		
To high extent	146	35.6
To some Extent	183	44.6
No	81	19.8
Total	**410**	**100.0**
Using social media prevents going to sleep		
To high extent	105	25.7
To some Extent	148	36.3
No	155	38.0
Total	**408**	**100.0**
Using social media leads to illness because of inadequate time of sleeping		
To high extent	73	17.9
To some Extent	159	39.1
No	175	43.0
Total	**407**	**100.0**
Using the mobile or computers at night may negatively affect eyes and makes it difficult to go to sleep		
To high extent	177	43.5
To some Extent	165	40.5
No	65	16.0
Total	**407**	**100.0**
Skipping sleeping hours because of using social media		
To high extent	116	28.9
To some Extent	189	47.0
No	97	24.1
Total	**402**	**100.0**
Sharing any applications that talk about the benefits of regular sleep		
Yes	103	25.9
No	295	74.1
Total	**398**	**100.0**
The effect of social media on the sleep pattern among youth		
Increased sleeping hours	106	25.9
Same	115	28.0
Decreased sleeping hours	189	46.1
Total	**410**	**100.0**

Table 4.12 shows that half of respondents (49.4%) are often and very often check social media in the 30 minutes before falling asleep at night (mean= 68.2). Moreover, 63.4% said that social media has bad effect on their sleeping by using a big number of messages or videos before they go to bed. Comparing the findings of this study to study conducted in King Khalid University, Saudi Arabia, 29.7% of medical respondents have poor quality of sleep because of using social media (Asiri et al, 2018).

When asked them about if using social media a lot has negative effects on their eyes and their nerve system that makes them worry, nearly two thirds of the respondents (72.9%) said yes, while 19.3% of them said no. The FGDs revealed the bad influence of the media on the eye and the nervous system of the human body and that it exhausts the person and causes headache and fatigue. However, the respondents ' knowledge of these negatives, but they acknowledged that they cannot skip their mobile even for one day only, where one participant said *'The use of social media makes my eyes too tired, but this evil is a must and cannot do without'* (FGD, males).

Of the respondents, 59.0% said that Facebook is the most application that posts more posters and videos about the bad effect of going to sleep late followed by Instagram. Nearly half of the respondents (52.6%) said that they didn't share any applications that use some medical information about sleeping to send them for respondents, and only 8.1% of them said that they share. Nearly half of the respondents (50.5%) said that using social media at a late time hinders them in their academic achievement to some extent, and 13.3% of them said no.

As for academic achievement, the respondents in the FGDs said that few respondents who can skip their mobile and their communication through social media at the time of exams, which leads to a decline in the academic level and one participant pointed out that he is trying to stay away from the media at the time of exams, but he can't because social media is addictive, a female student said 'I *Use social media as a means of study with my friend. Instead, we talk about other things other than studying, so we waste our time'* (FGD, females). These results differ with the study conducted by Al-Ahmar (2017) at University of Babylon in Iraq, where there was no impact of social media on the academic achievement of university respondents.

Nearly half of them (45.9%) said that using social media late may hinder them to some extent to get up early and start their day in an active way. Of the respondents, 44.6%

indicated that using social media may hinder them to some extent to going to sleep and make them awake.

When asked the respondents if social media is considered as an addiction that hinders their sleep, 38% of them said no while 36.3% said yes to some extent. Additionally, 43% said that using social media from their mobile or others doesn't make them feel ill because of the inadequate time of sleeping. It was clear that 43.5% of the respondents indicated that using the mobile or computers at night may affect negatively on their eyes and face to high extent that makes them can't go to sleep.

Nearly half of the respondents (47%) indicated that they skip sleep hours to some extent because of using social media. The respondents in the FGDs confirmed that they could spend the night using social media applications and that they could skip their sleeping hours without being noticed because they were busy surfing through applications. One female said she could spend the night watching her favorite series and other male student said '*Spend the night watching football matches on YouTube and this leads to the loss of the first lecture'* (FGD, males). Another one said *'I intend to watch one hour of the series, but I find myself watching more than three hours'* (FGD, females). Regarding to sharing their mobile with any applications that talk about the benefits of organizing their sleeping, nearly two thirds (74.1%) of them said they don't share while 25.1% of them said yes.

Nearly half of the respondents (46.1%) said that social media decrease the sleep pattern among youth like them. The respondents insisted on the FGDs that social media reduces sleep hours among young people, and that electricity plays a role to determine their sleep, where respondents pointed out that the presence of electricity means that there is Internet so there is social media thus will reduce the hours of sleep, and one of the respondents said that ' *now many homes add battery for the router, so even when the power outage, the Internet remains available',* other one added ' *Most of our friends spend the night communicating with social media, as long as electricity is available, nothing stops us'* (FGD, males).

4.2.13 Effects of using social media

Table (4.13): Distribution of participants' responses about the effect of social social media on health behaviors themes

Items		Effect					Who is more positively affected					
		Positive effect to high extent	Positive effect to some extent	No effect	Negative effect to some extent	Negative effect to high extent	Boys	Girls	Both	Youngs	Older	Both
Physical Activity	N	107	170	52	70	11	129	78	69	60	184	30
	%	26.1	41.5	12.7	17.1	2.7	46.7	28.3	25	21.9	67.2	10.9
Nutrition	N	99	190	61	45	11	69	190	28	64	194	27
	%	24.4	46.8	15	11.1	2.7	24	66.2	9.8	22.5	68.1	9.5
Smoking	N	40	67	137	71	88	83	4	20	23	64	20
	%	9.9	16.6	34	17.6	21.8	77.6	3.7	18.7	21.5	59.8	18.7
Drugs	N	37	95	116	82	64	87	23	21	27	87	17
	%	9.4	24.1	29.4	20.8	16.2	66.4	17.6	16	20.6	66.4	13
Sleeping	N	78	88	65	124	47	69	71	26	39	102	24
	%	19.4	21.9	16.2	30.8	11.7	41.6	42.8	15.7	23.6	61.8	14.5
Psychosocial	N	65	130	74	97	31	63	87	44	49	102	43
	%	16.4	32.7	18.6	24.4	7.8	32.5	44.8	22.7	25.3	52.6	22.2
Health information seeking behavior	N	111	207	63	15	7	78	172	66	52	199	65
	%	27.5	51.4	15.6	3.7	1.7	24.7	54.4	20.9	16.5	63	20.6

As table 4.13 shows, of the participants, 41.5% said that social media has positive effect to some extent on physical activity and nearly half of them (64.7%) said that males are more positively affected than females while 67.2% of them said that older are more positively affected than young. The findings of this study are consistent with Smith and Bonfiglioli (2015) study; they found that social media communication has strategic value in physical activity promotion to influence beliefs, socials norms and personal behaviors. In addition to that, Joseph and colleagues (2015) in their study found that social media has positive effect on physical activity.

About nutrition, nearly half of the participants (46.8%) indicated that social media has positive effect to some extent on nutrition and 66.2% of them said that females are more positively affected than males while 68.1% of them said that older are more positively affected than young.

Regarding to smoking, 21.8% of the students indicated that social media has highly harmful effect on smoking and 77.6% of the participants said that males are more positively affected than females while 59.8% of them said that older are more positively affected than young. These results differ with the study by Baskerville and his colleagues (2015), where the results indicate that the applications of social media have an effect and it complement the traditional way to quit smoking for adults who seek help to be able to quit smoking. When asked them about drugs, nearly one third of the participants (37%) said that it has some harmful effect and highly harmful effect, 66.4% of them said that males are more positively affected than females while 66.4% of them said that older are more positively affected than young. These results are consistent with the results of the Grund Study (2009) where he found that teens using social media are two or more times as likely to have tried tobacco, alcohol, or marijuana.

About sleeping, nearly one third of the participants (30.8%) indicated that social media has some harmful effect and 42.8% of them said that females are more positively affected than males while 61.8% of them said that older are more positively affected than young. These findings are consistent with many studies, where Kelly and colleagues (2018) who showed that social media was associated with poor sleeping, other study for Levenson and colleagues (2016) showed that the increased use for social media leads to sleep disturbance.

Regarding to psychosocial, nearly one third of the participants (32.7%) indicated that social media has positive effect to some extent on psychosocial and 44.8% of the students said that females are more positively affected than males while 52.6% of them said that older are more positively affected than young. These results are in line with the Das study (2014), which showed that social media has a positive impact on people who avoid face to face communication where they can express their feelings without fear.

When asked them about Health information seeking behavior, nearly half of the participants (51.4%) indicated that social media has positive effect to some extent on health information seeking behavior and 54.4% of the students said that females are more effected than males while 63% of them said that older are more effected than young (mean= 40.2). These results are consistent with a study conducted by Drescher and Hasselbach (2014), where the results showed that social media has a positive impact on Health information seeking behavior.

Table (4.14): Distribution of responses about the effect of the different social media applications on health behaviors themes

Theme		Facebook			Twitter			YouTube			WhatsApp			Instagram		
		Negative effect	No effect	Positive effect	Negative effect	No effect	Positive effect	Negative effect	No effect	Positive effect	Negative effect	No effect	Positive effect	Negative effect	No effect	Positive effect
Physical Activity	N	44	135	232	63	293	49	45	121	244	53	261	97	49	191	170
	%	10.7	32.8	56.4	15.6	72.3	12.1	11	29.5	59.5	12.9	63.5	23.6	12	46.6	41.5
Nutrition	N	37	118	252	44	290	70	28	131	251	46	262	102	42	195	174
	%	9.1	29	61.9	10.9	71.8	17.3	6.8	32	61.2	11.2	63.9	24.9	10.2	47.4	42.3
Smoking	N	89	173	146	74	275	49	83	194	128	62	286	58	76	252	81
	%	21.8	42.4	35.8	18.6	69.1	12.3	20.5	47.9	31.6	15.3	70.4	14.3	18.6	61.6	19.8
Drugs	N	86	185	136	74	281	45	68	214	127	65	291	53	72	255	82
	%	21.1	45.5	33.4	18.5	70.3	11.3	16.6	52.3	31.1	15.9	71.1	13	17.6	62.3	20
Sleeping	N	170	131	107	100	252	48	153	148	109	121	235	55	139	189	83
	%	41.7	32.1	26.2	25	63	12	37.3	36.1	26.6	29.4	57.2	13.4	33.8	46	20.2
Psychosocial	N	94	158	151	66	266	66	82	176	154	73	243	93	80	208	119
	%	23.3	39.2	37.5	16.6	66.8	16.6	20.3	41.4	38.2	17.8	59.4	22.7	19.7	51.1	29.2
Health information seeking behavior	N	26	107	275	42	269	90	22	128	261	48	243	118	35	202	172
	%	6.4	26.2	67.4	10.5	67.1	22.4	5.4	31.1	63.5	11.7	59.4	28.9	8.6	49.4	42.1

Generally, table 4.14 shows, Youtube had positive effect on physical activity as reported by 59% of participants and on PSS (38.2%), while Facebook had the most positive effect on nutrition (61.9%), smoking (35.4%), drugs (33.4%) and Health information seeking behaviors (67.4%). However, Facebook had the most negative effect on sleeping (41.7%).

As table 4.13shows, nearly half of the participants indicated that Facebook has positive effect on physical activity, and 59.5% of them said that YouTube has positive effect, while 72.3%, 63.5%, and 46.6% of the students indicated that Twitter, WhatApp, and Instagram have no effect on physical activity respectively. These results are consistent with a study conducted by Joseph and colleagues (2015) where the findings of the study refer to the positive effect of Facebook in physical activity including decreased sedentary behavior, increased light- and moderate-lifestyle intensity physical activity, on the other hand these results are not consistent with a study conducted in Saudi Arabia, Al-Eisa and colleagues (2016), for female university students where the results showed that the instagram is an effective way to stimulate physical activity.

In relation to the effect of social media on the nutrition, it was found that 61.9%, 61.2% of the participants said that Facebook and YouTube have positive effect on nutrition respectively while 71.8%, 63.9%, 47.4% of the students indicated that Twitter, WhatsApp, and Instagram have no effect on nutrition respectively.

Regarding to smoking, the majority of the students indicated that all the applications have no effect on smoking. Of respondents, 37.5% said that Facebook have positive effect on psychosocial, these results are consistent with the study conducted by Nabi & So (2012), which refer to number of Facebook friends associated with stronger perceptions of social support, which in turn associated with reduced stress, and in turn less physical illness and greater well-being. In contrast, a study conducted by Kalpidou and colleagues (2011) referred that students who spend more time on Facebook and have more friends on Facebook have low self-stem. Nearly half of the students confirmed that other application have no effect on psychosocial.

In relation to the effect of social media on sleeping, 41.7% and 37.3% of the students indicated that Facebook and YouTube have negative effect on sleeping respectively while 63%, 57.2% and 47% of the students said that Twitter, WhatsApp and Instagram have no effect on sleeping respectively. These results are not consistent with a study conducted by

Ganasegeran and colleagues (2017), where the results showed that WhatsApp has a negative impact on sleep and that females are more affected than males.

Regarding to the effect of social media applications on health information seeking behavior it was clear that 67.4% and 63.5% of the students indicated that Facebook and YouTube have positive effect on health information seeking behavior while 67.1%, 59.4%, 49.4% of the students indicated that Twitter, WhatsApp and Instagram have no effect on health information seeking behavior respectively.

4.3 Inferential analysis

4.3.1 Variations in having a current profile of social media applications

Table (4.15): Differences in having Facebook profile by characteristic variables

Variable	Having Facebook profile						X^2	Sig
	Yes		No		Total			
	No	%	No	%	No	%		
Gender								
Male	180	91.8	16	8.2	196	100.0		
Female	187	87.0	28	13	215	100.0	2.5	0.075
Total	367	89.4	40	10.6	411	100.0		
Residency								
North	81	95.3	4	4.7	85	100.0		
Gaza	164	89.1	20	10.9	184	100.0		
Midzone	67	91.8	6	8.2	73	100.0	10.5	0.033
Khanyounis	38	80.9	8	19.1	47	100.0		
Rafah	17	77.3	5	22.7	22	100.0		
Total	367	89.3	44	10.7	411	100.0		
University								
Al azhar	70	85.4	12	14.6	82	100.0		
Islamic	123	95.3	6	4.7	129	100.0		
Palestine	40	85.1	7	14.9	47	100.0		
University college of applied science	31	83.8	6	16.2	37	100.0	8.3	0.080
Al –Aqsa	103	88.8	13	11.2	116	100.0		
Total	367	89.3	44	10.7	411	100.0		
Collage								
Health related colleges	102	92.7	8	7.3	110	100.0		
Science	58	82.9	12	17.1	70	100.0		
Art and Humanities	135	90.0	15	10.0	150	100.0		
Economics and Administrative Sciences	53	88.3	7	11.7	60	100.0	4.5	0.336
Other	2	9.5	19	90.5	21	100.0		
Total	44	10.7	367	89.3	411	100.0		

Table 4.15 shows that the percentage of males who having Facebook profile (91.8%) was higher than female (87.0%) counterparts. However, the differences between the two groups were not statistically significant (p value = 0.075). This could be attributed to the use of

social media in general and the possession of a profile on Facebook in particular, has become available to all and there were no differences between females and males and there is a consciousness in families that females have the right and freedom for using social media. The results of this study are consistent with the study conducted at Khartoum University by A'lamElhuda and Dimetry (2014) where they found that the males use Facebook more than females by (97.6%), (91.1%). Likewise, there were no statically significant differences between universities in having Facebook profile (P value= 0.080); however, Islamic University has the highest score (95.3%).

Regarding colleges, it was clear that the health related colleges have the highest score in having Facebook profiles (92.7%) but there were no statically significant differences between them, (p value = 0.336). On the other hand, statically significant differences in having Facebook profiles were attributed to residency; chi square test shows that the statically significant differences occurred between governorates where North Gaza was the highest percentage in having Facebook profile (95.3%), this could be attributed to that there are no entertainment places, young people can spend their time.

Table (4.16): Differences in having Instagram profile by characteristic variables

Variable	Having Instagram profile						X^2	Sig
	Yes		No		Total			
	No	%	No	%	No	%		
Gender								
Male	116	59.2	80	40.8	196	100.0	13.8	0.001
Female	164	76.3	51	23.7	215	100.0		
Total	280	68.1	131	31.9	411	100.0		
Residency								
North	56	56.9	29	34.1	85	100.0	2.1	0.712
Gaza	121	65.8	63	34.2	184	100.0		
Midzone	54	74.0	19	26.0	73	100.0		
Khanyounis	33	70.2	14	29.8	47	100.0		
Rafah	16	72.2	6	27.3	22	100.0		
Total	280	68.1	131	31.9	411	100.0		
University								
Al azhar	54	65.9	28	34.1	82	100.0	3.6	0.457
Islamic	90	69.8	39	30.2	129	100.0		
Palestine	31	66.0	16	34.0	47	100.0		
University college of applied science	21	56.8	16	43.2	37	100.0		
Al –Aqsa	84	72.4	32	27.6	116	100.0		
Total	280	68.1	131	31.9	411	100.0		
Collage								
Health related studies	75	68.2	35	31.8	110	100.0	6.7	0.151
Science	53	75.7	17	24.3	70	100.0		
Art and Humanities	96	64.0	54	36.0	150	100.0		
Economics and Administrative Sciences	45	75.0	15	25.0	60	100.0		
Other	11	52.4	10	47.6	21	100.0		
Total	280	68.1	131	31.9	411	100.0		

Table 4.16 shows that the percentage of females who having Instagram profile (76.3%) was higher than males (59.2%) counterparts. There were statically significant differences between males and females in having Instagram profile (p value= 0.001). This could be attributed to the high privacy of the Instagram and thus the female use more freely, in addition to what is published on the Instagram is images and videos are more attractive to females than males. This result is consistent with Pew Research Center (2015), where revealed that women continue to be more likely than men to be Instagram users.

On the other hand, Midzone has the highest percent in having Instagram profile (74.0%) but there were no statically significant differences between governorates (P value= 0.712). In term of universities, it was clear that Islamic university has the highest percent in having Instagram profile but also there were no statically significant differences between universities. On the other hand, the science colleges have the highest score (75.7%) but as other variables, there were no statically significant differences between colleges in having Instagram profiles (P value= 0.151).

Table (4.17): Differences in trying to get health information from social media by characteristic variables

Variable	Trying to get health information from social media										X^2	Sig.
	A lot		Some		A Little		None		Total			
	N	%	N	%		%	N	%	N	%		
Gender												
Male	46	23.5	96	49.0	40	20.4	14	7.1	196	100	2.7	0.290
Female	58	27.0	113	52.6	36	16.7	8	3.7	215	100		
Total	104	25.3	209	50.9	76	18.5	22	5.4	411	100		
Residency												
North	24	28.2	46	54.1	12	14.1	3	3.5	85	100	14.4	0.276
Gaza	40	21.7	89	48.4	45	24.5	10	5.4	184	100		
Midzone	19	26.0	41	56.2	9	12.3	4	5.5	73	100		
Khanyounis	16	34.0	21	44.7	8	17.0	2	4.3	47	100		
Rafah	5	22.7	12	54.5	2	9.1	3	13.6	22	100		
Total	104	25.3	209	50.9	76	18.5	22	5.4	411	100		
University												
Al azhar	19	23.2	39	47.6	20	24.4	4	4.9	82	100	12.2	0.423
Islamic	32	24.8	63	48.8	24	18.6	10	7.8	129	100		
Palestine	15	31.9	20	42.6	10	21.3	2	4.3	47	100		
University college of applied science	12	32.4	19	51.4	3	8.1	3	8.1	37	100		
Al –Aqsa	26	22.4	68	58.6	19	16.4	3	2.6	116	100		
Total	104	25.3	209	50.9	76	18.5	22	5.4	411	100		
Colleges												
Medical	40	36.4	52	47.3	14	12.7	4	3.6	110	100	21.9	0.038
Science	17	24.3	30	42.9	15	21.4	8	11.4	70	100		
Art and Humanities	26	17.3	88	58.7	29	19.3	7	4.7	150	100		
Economics and Administrative Sciences	15	25.0	29	48.3	13	21.7	3	5.0	60	100		
Other	6	28.6	10	47.6	5	23.8	0	**0.0**	21	100		
Total	104	25.3	209	50.9	76	18.5	22	5.4	411	100		

Table 4.17 shows that the percentage of females who reported trying to get a lot of health information (27.0%) was higher than male (23.5%) counterparts. However, the differences between the two groups were not statistically significant (p value =0.29). . Likewise, residency, university were not a reason to create differences in trying to have health information from social media.

On the other hand, chi square test showed that there were statically significant differences between the collages in trying to get health information from social media (P value= 0.038 < 0.05), here the health related colleges have the highest score (36.4%). This could be attributed to that their studies and interests are centered on health matters.

Table (4.18): Differences in the effect of social media on health behaviors by characteristic variables

Variable	Effect of social media on health behaviors						Total		X^2	Sig.
	Positive		No effect		Negative					
	N	%	N	%	N	%	N	%		
Gender										
Male	102	52.0	68	34.7	26	13.3	196	100.0		
Female	90	41.9	89	41.4	36	16.7	215	100.0	4.3	0.116
Total	192	46.7	157	38.2	62	15.1	411	100.0		
Residency										
North	40	47.1	33	38.8	12	14.1	85	100.0		
Gaza	83	45.1	73	39.7	28	15.2	184	100.0		
Midzone	33	45.2	27	37.0	13	17.8	73	100.0	5.2	0.733
Khanyounis	28	59.6	13	27.7	6	12.8	47	100.0		
Rafah	8	36.4	11	50.0	**3**	13.6	22	100.0		
Total	192	46.7	157	38.2	62	15.1	411	100.0		
University										
Al azhar	37	45.1	25	30.5	20	24.4	82	100.0		
Islamic	46	35.7	60	46.5	23	17.8	129	100.0		
Palestine	25	53.2	17	36.2	5	10.6	47	100.0		
University college of applied science	25	67.6	10	27.0	2	5.4	37	100.0	22.5	0.004
Al –Aqsa	59	50.9	45	38.8	12	10.3	116	100.0		
Total	192	46.7	157	38.2	62	15.1	411	100.0		
Colleges										
Health related colleges	60	54.5	37	33.6	13	11.8	110	100.0		
Science	33	47.1	26	37.1	11	15.7	70	100.0		
Art and Humanities	69	46.0	60	40.0	21	14.0	150	100.0		
Economics and Administrative Sciences	22	36.7	28	46.7	10	16.7	60	100.0	11.1	0.195
Other	8	38.1	6	28.6	7	33.3	21	100.0		
Total	192	29.4	157	69.6	62	1.0	411	100.0		

Table 4.18 shows that the percentage of males who reported positive effect of social media on their health behaviors (52.0%) was higher than female (41.9%) counterparts. However, the differences between the two groups were not statistically significant (P value= 0.038).

This could be because they are in terms of age, thinking and study alike. Efforts to promote the positive effects of social media on health behaviors should target both males and females. Regarding to universities, Palestine University has the highest percentage (53.2%) in term of the positive effect of social media on their health behaviors. Findings show that there were statically significant differences between universities (P value= 0.004). As though, the findings refer that Khanyounis has the highest score (59.6%) but there were no statically significant differences in terms of residency between governorates in the positive effect of social media on their health behaviors (P value=0.733). Also, the results indicate that there were no statically significant differences between colleges in the positive effect of social media on student's health behaviors (P value= 0.195), but Health related colleges have the highest score (54.5%).

Table (4.19): Differences in the value effect of social media on the health information by characteristic variables

Variable	The value of health information from social media						Total		X^2	Sig.
	Not Useful		Somewhat useful		Useful					
	N	%	N	%	N	%	N	%		
Gender										
Male	47	24.0	138	70.4	11	5.6	196	100.0	5.9	0.050
Female	60	27.9	152	70.7	3	1.4	215	100.0		
Total	107	26.0	290	70.6	14	3.4	411	100.0		
Residency										
North	20	23.5	61	71.8	4	4.7	85	100.0	6.7	0.565
Gaza	44	23.9	136	73.9	4	2.2	184	100.0		
Midzone	22	30.1	49	67.1	2	2.7	73	100.0		
Khanyounis	16	34.0	29	61.7	2	4.3	47	100.0		
Rafah	5	22.7	15	68.2	2	9.1	22	100.0		
Total	107	26.0	290	70.6	14	3.4	411	100.0		
University										
Al azhar	18	22.0	56	68.3	8	9.8	82	100.0	23.7	0.003
Islamic	24	18.6	104	80.6	1	0.8	129	100.0		
Palestine	17	36.2	29	61.7	1	2.1	47	100.0		
University college of applied science	12	32.4	23	62.2	2	5.4	37	100.0		
Al –Aqsa	36	31.0	78	67.2	2	1.7	116	100.0		
Total	107	26.0	290	70.6	14	3.4	411	100.0		
Colleges										
Health related studies	31	28.2	75	68.2	4	3.6	110	100.0	5.1	0.745
Science	17	24.3	50	71.4	3	4.3	70	100.0		
Art and Humanities	40	26.7	103	68.7	7	4.7	150	100.0		
Economics and Administrative Sciences	13	21.7	47	78.3	0	0.0	60	100.0		
Other	6	28.6	15	71.4	0	0.0	21	100.0		
Total	107	26.0	290	70.6	14	3.4	411	100.0		

Table 4.19 shows that the percentage of males who reported that the health information from social media is somewhat useful (76.0%) was higher than female (72.1%) counterparts. However, the differences between the two groups were statistically significant (p value= 0.05). Likewise, for universities, there were a statically significant differences between universities, the Islamic university was the highest score (81.4%), (P value = 0.003). In term of the governorates, Khanyounis has the highest percent regarding to usefulness of the health information from social media (34.0%). However, there were no statically significant differences between governorates (P value= 0.565). Regarding to colleges, Health related studies colleges have the highest score regarding to the usefulness of the health information from social media (28.2%), this could be attributed to that health related colleges students through their studies they can distinguish between useful health information for them from social media. However, there were no statically significant differences between colleges (P value=0.745).

Effects of social media on health behavior themes

Table (4.20): Differences in the effect of social media on exercising by characteristic variables

Variable	The effect of social media on exercising								Total		X^2	Sig.
	Decreased		Same		Increased		I don't Exercise		Total			
	N	%	N	%	N	%	N	%	N	%		
Gender												
Male	38	19.4	110	56.1	36	18.4	12	6.1	196	100	8.0	0.046
Female	33	15.3	108	50.2	44	20.5	30	14.0	215	100		
Total	71	17.3	218	53.0	80	19.5	42	10.2	411	100		
Residency												
North	16	18.8	48	56.5	16	18.8	5	5.9	85	100	10.4	0.575
Gaza	33	17.9	95	51.6	36	19.6	20	10.9	184	100		
Midzone	12	16.4	42	57.5	11	15.1	8	11.0	73	100		
Khanyounis	8	17.0	25	53.2	10	21.3	4	8.5	47	100		
Rafah	2	9.1	8	36.4	7	31.8	5	22.7	22	100		
Total	71	17.3	218	53.0	80	19.5	42	10.2	411	100		
University												
Al azhar	12	14.6	46	56.1	17	20.7	7	8.5	82	100	14.5	0.270
Islamic	27	20.9	68	52.7	21	16.3	13	10.1	129	100		
Palestine	7	14.9	20	42.6	11	23.4	9	19.1	47	100		
University college of applied science	4	10.8	19	51.4	7	18.9	7	18.9	37	100		
Al –Aqsa	21	18.1	65	56.0	24	20.7	6	5.2	116	100		
Total	71	17.3	218	53.0	80	19.5	42	10.2	411	100		
Colleges												
Health related colleges	18	16.4	61	55.5	19	17.3	12	10.9	110	100	8.9	0.708
Science	14	20.0	33	47.1	14	20.0	9	12.9	70	100		
Art and Humanities	25	16.7	80	53.3	28	18.7	17	11.3	150	100		
Economics and Administrative Sciences	12	20.0	34	56.7	13	21.7	1	1.7	60	100		
Other	2	9.5	10	47.6	6	28.6	3	14.3	21	100		
Total	71	17.3	218	53.0	80	19.5	42	10.2	411	100		

Table 4.20 shows that the percentage of females who reported that social media increases exercise (20.5%) was higher than males (18.4%) counterparts. The differences between the two groups were statistically significant (p value =0.046). This could be attributed to that females try to reach the ideal weight and slim body. Regarding residency, Rafah has the highest percentage (31.8%) that social media increase exercising. However the findings show that there were no statically significant differences between governorates (P value= 0.575).

In term of universities, Palestine University has the highest percentage (23.4%) that social media increase exercising. Also there were no statically significant differences between universities (P value= 0.270). In the term of colleges, Economics and Administrative Sciences colleges have the highest percentage (21.7%) that social media increase exercising and also there were no statically significant differences between colleges (P value= 0.708).

Table (4.21): Differences in the effect of social media on eating habits by characteristic variables

Variable	Effect of social media on eating habits						Total		X^2	Sig.
	Promoted		Same		Negative effect					
	N	%	N	%	N	%	N	%		
Gender										
Male	73	37.6	104	53.6	17	8.8	194	100.0	1.1	0.553
Female	92	42.8	107	49.8	16	7.4	215	100.0		
Total	165	40.3	211	51.6	33	8.1	409	100.0		
Residency										
North	37	44.0	39	46.4	8	9.5	84	100.0	6.2	0.623
Gaza	70	38.3	96	52.5	17	9.3	183	100.0		
Midzone	27	37.0	39	53.4	7	9.6	73	100.0		
Khanyounis	21	44.7	25	53.2	1	2.1	47	100.0		
Rafah	10	45.5	12	54.5	0	0.0	22	100.0		
Total	165	40.3	211	51.6	33	8.1	409	100.0		
University										
Al azhar	28	34.1	48	58.5	6	7.3	82	100.0	7.9	.439
Islamic	53	41.1	66	51.2	10	7.8	129	100.0		
Palestine	18	38.3	25	53.2	4	8.5	47	100.0		
University college of applied science	16	43.2	21	56.8	0	0.0	37	100.0		
Al –Aqsa	50	43.9	51	44.7	13	11.4	114	100.0		
Total	165	40.3	211	51.6	33	8.1	409	100.0		
Colleges										
Health related studies	46	41.8	57	51.8	7	6.4	110	100.0	5.3	0.717
Science	32	45.7	33	47.1	5	7.1	70	100.0		
Art and Humanities	57	38.3	80	53.7	12	8.1	149	100.0		
Economics and Administrative Sciences	19	32.2	33	55.9	7	11.9	59	100.0		
Other	11	52.4	8	38.1	2	9.5	21	100.0		
Total	165	40.3	211	51.6	33	8.1	409	100.0		

Table 4.21 shows that the percentage of females who reported that social media promoted eating habits (42.8%) was higher than male (41.3%) counterparts. However, the differences between the two groups were not statistically significant (P value =0.553). This could be attributed to the awareness among young people, whether male or female that there is need to improve the nutritional behavior in addition to easy access to information through social media. Social media should be used as a tool to improve the nutritional behavior of both males and females.

Similarly, in terms of residency, despite that Khanyounis has the highest percentage (44.7%), there were no statically significant differences between governorates (P value= 0.623). This could be attributed to the convergence of culture, and the similarity of economic conditions. For universities, Al Aqsa has the highest percent (43.9%) but also there were no statically significant differences between universities (P value=0.439). In term of colleges, science colleges have the highest score (45.7%) but there were no statically significant differences between colleges (P value=0.717).

Table (4.22): Differences in the effect of social media on drug and substance abuse by characteristic variables

Variable	The effect of social media on drug and substance abuse						Total		X^2	Sig.
	Increase		No Change		Decrease					
	N	%	N	%	N	%	N	%		
Gender										
Male	86	43.9	76	38.8	34	17.3	196	100.0	2.8	0.246
Female	98	45.6	92	42.8	25	11.6	215	100.0		
Total	184	44.8	168	40.9	59	14.4	411	100.0		
Residency										
North	35	41.2	38	44.7	12	14.1	85	100.0	6.2	0.619
Gaza	85	46.2	74	40.2	25	13.6	184	100.0		
Midzone	32	43.8	33	45.2	8	11.0	73	100.0		
Khanyounis	24	51.1	15	31.9	8	17.0	47	100.0		
Rafah	8	36.4	8	36.4	6	27.3	22	100.0		
Total	184	44.8	168	40.9	59	14.4	411	100.0		
University										
Al azhar	45	54.9	30	36.6	7	8.5	82	100.0	2.9	0.113
Islamic	56	43.4	56	43.4	17	13.2	129	100.0		
Palestine	24	51.1	13	27.7	10	21.3	47	100.0		
University college of applied science	17	45.9	13	35.1	7	18.9	37	100.0		
Al –Aqsa	42	36.2	56	48.3	18	15.5	116	100.0		
Total	44.8	184	168	40.9	59	14.4	411	100.0		
College										
Health related colleges	52	47.3	39	35.5	19	17.3	110	100.0	6.8	0.555
Science	34	48.6	26	37.1	10	14.3	70	100.0		
Art and Humanities	64	42.7	70	46.7	16	10.7	150	100.0		
Economics and Administrative Sciences	27	45.0	24	40.0	9	15	60	100.0		
Other	7	33.3	9	42.9	5	23.8	21	100.0		
Total	184	44.8	168	40.9	59	14.4	411	100.0		

Table 4.22 shows that the percentage of females who reported that social media increase drug and substance abuse (45.6%) was higher than male (43.9%) counterparts. However, the differences between the two groups were not statistically significant (P value =0.246). For governorates, Khanyounis has the highest percentage (51.1%) regarding that social media increase drug and substance abuse. However, the differences between governorates were not statistically significant (P value =0.619). In the term of universities, Al Azhar University has the highest percentage (54.9%) regarding that social media increase drug and substance abuse, but there were no statically significant differences (P value = 0.113). For colleges, Science colleges have the highest score (48.6%), but there were no statically significant differences between them (P value =0.555).

Table (4.23): Differences in skipping sleep hours due to the use of social media

Variable	Skipping sleep hours regarding social media								X^2	Sig.
	Yes		No		Dk		Total			
	N	%	N	%	N	%	N	%		
Gender										
Male	72	37.7	75	39.3	44	23.0	191	100.0	14.6	0.001
Female	44	20.9	114	54.0	53	25.1	211	100.0		
Residency										
North	24	28.6	44	52.4	16	84	84	100.0	9.4	0.302
Gaza	50	27.9	91	50.8	38	21.2	179	100.0		
Midzone	18	25.0	30	41.7	24	33.3	72	100.0		
Khanyounis	17	37.0	16	34.8	13	28.3	42	100.0		
Rafah	7	33.3	8	38.1	6	28.6	21	100.0		
Total	116	28.9	189	47.0	97	24.1	402	100.0		
University										
Al azhar	37	46.3	30	37.5	13	16.3	80	100.0	32.0	0.001
Islamic	29	22.7	70	54.7	29	22.7	128	100.0		
Palestine	19	41.3	12	26.1	15	32.6	46	100.0		
University college of applied science	12	34.3	15	42.9	8	22.9	35	100.0		
Al –Aqsa	19	16.8	62	54.9	32	28.3	113	100.0		
Total	116	28.9	189	47.0	97	24.1	402	100.0		
Colleges										
Health related studies	33	30.6	46	42.6	29	26.9	108	100.0	7.3	0.504
Science	25	35.7	28	40	17	24.3	70	100.0		
Art and Humanities	36	25.0	75	52.1	33	22.9	144	100.0		
Economics and Administrative Sciences	15	25.4	28	47.5	16	27.1	59	100.0		
Other	7	33.3	12	57.1	2	9.5	21	100.0		
Total	116	28.9	189	47.0	97	24.1	402	100.0		

Table 4.23 shows that the percentage of males who reported that social media increases skipping sleep hours (37.7%) was higher than females (20.9%) counterparts. The differences between the two groups were statistically significant (p value =0.001). This could be attributed to that males have greater freedom than females even at bedtime.

In the terms of residency, Khanyounis has the highest percentage (37.0%) in skipping sleep hours regarding social media, but there were no statically significant differences between governorates (P value=0.302). Al Azhar university has the highest score (46.3%) in skipping sleep hours using social media between universities. The results show that there were statically significant differences between universities (P value=0.001). For colleges, Science colleges have the higher percentage (35.7%) in skipping sleep hours using social media, but there were no statically significant differences between colleges (P value= 0.504).

Chapter Five

Conclusion and Recommendation

5.1 Conclusion

This study is carried out to explore the influence of social media on health behaviors among university students in the Gaza Strip. It has been done using a combination of quantitative and qualitative approaches in order to explore the effect of social media on physical activity, nutritional behaviors, health information seeking behaviors, smoking, drug and substance abuse and sleeping pattern.

Findings show that the majority of the students own a mobile, many of them own a computer, in addition, they use ICT for text massages. Facebook and WhatsApp are the most common in use social media applications that are used for texting. Most of students have a profile on Facebook and Instagram. Respondents used social media more at evenings. Respondents mainly used social media for keeping in touch with friends. More importantly, social media and the Internet are the most common sources for students to access health information; in particular, Facebook is the mostly accessed application for getting health information.

The most interesting topics to access information about through media were nutrition and exercises. YouTube has been one of the most used applications for exercise, especially for females, and many reported that their eating habits have been promoted as a result of using social media. This opens a window for using social media to impact health behaviors. Internet and social media are the main sources for university students to get health information because it is easy way, and saves time and money. n the other hand, there are many barriers that face university students to get the health information they need. The main barriers face university students, the financial accessibility and not knowing where to go. Therefore, more efforts are needed to guide youth to the credible sources of information.

The students confirmed that the social media has positive effect on their health behaviors, nearly half of respondents indicated that they had adapted positive health behaviors after using social media; in terms of changing their diets, nearly one third of the participants take enough time while eating, having meals regularly. On the other hand, half of

respondents quitted some bad behaviors after using social media. Social media motivates university students to improve their health behaviors, where nearly half of them said that their practices or perceptions about exercising are attributed to social media. Internet was the most common source for access information about nutrition followed by social media. Moreover, nearly one third of students get good advice on healthy eating from social media. Nearly half of them said that they changing dietary habits because of using social media, one third of them said that the information provided by other members of an application helps them in plan their food system, and they get good tips on how eat healthy food from an application and social media promoted their eating habits.

At the negative side, social media has negative effect on sleeping, where it decreases the number of sleeping hours, hindering their academic achievement, and nearly half skipped sleeping hours because of using social media. These are important areas to focus on to optimize the use of social media

Findings confirm that there is positive effect of social media on participants PSS. Additionally, many factors play a role like support of the members on their page have positive effect on participants, in addition the success of their friends on their account motivate them. On the other hand, one third of students consider themselves to be non-interactive users, and confirmation of that more than half of them prefer to observe rather than to post. Nearly half of students agree with that social media reduces direct social communication. Because of the siege and isolation, social media can a play a role as a vent and a copying mechanism to address PSS challenges. While social media has no effect on smoking, nevertheless antismoking message is a good approach to combat smoking. Facebook is controversial it encourages smoking on one hand and it contributes to combating it on the other hand, all as reported by respondents.

While, YouTube had positive effects on physical activity and on PSS, the Facebook had positive effect on nutrition, smoking, drugs and health information seeking behaviors. Ironically, Facebook had the most negative effect on sleeping. Policy makers need to consider these findings on how best to approach youth and adolescents.

There were no differences between males and females on having a Facebook profile; in contrast, there are statically significant differences between male and females in having Instagram profile. There are no clear differences between females and males in relation to the influence of social media on their health behaviors, but females are affected more

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positively than males with regard to nutrition. In contrast, males are more positively affected than females by the influence of social media on the exercise, smoking and drug, while females are more positively affected than males on sleeping and health information seeking behavior. These variations are important to consider when setting health promotion strategies.

Findings of this study show that there were statically significant differences in having Facebook profiles between governorates; North Gaza was the highest percentage in having Facebook profile. Additionally there were statically significant differences between the collages in trying to get health information from social media; health related colleges have the highest score. Regarding to the value of health information from social media, there were statically significant differences between universities as the Islamic university has the highest score. The revealed variations are important to consider when designing health education programs.

5.2   Recommendations

5.2.1   General Recommendations

- Because university students have good access to social media, therefore it could be used as an effective strategy for health promotion and disseminating health related information.

- The extensive rate of social media use among university students implies that health educators and clinicians can use the social media as a tool to communicate health related messages to meet the needs of this important category of the population.

- The study points to important in appropriate behaviors such as inadequate exercise, unhealthy food, inadequate sleeping hours and substance abuse that require more focus by health promotion programs.

- University students prefer using social media to get health related information rather than visiting a health provider therefore health services need to incorporate that in their health strategies in order to target this important category.

- The effect of social media on health behaviors is generally positive especially on nutrition, exercising, health information seeking behavior, smoking cessation, psychosocial status, therefore policy makers can build on that by developing strategies that are made available on the web.

- The use of social media doesn't go without drawbacks such as negative effects on sleeping and interactions with others; therefore more awareness is needed to enhance the optimum use of social media.

5.2.2   Specific Recommendations

- Different social media applications are used to access different kinds of information. It is important for health promotors to consider university students preferences and practices when designing and communicating health education messages.

- The most commonly used applications are Facebook and Instagram, these applications need to be considered by health promotors when targeting university students

- Social media has a positive effect on exercise; therefore more efforts are needed to reinforce exercising.

- Social media has a positive effect on promoting nutritional practices; therefore, more concentrated efforts to use social media as a tool to improve nutritional behaviors among young people.

- Social media contributes to promoting psychosocial status, so concerned parties can address psychosocial vulnerabilities using social media including awareness, support group and learning life skills.

- The dissemination of antismoking messages has a positive effect on combating smoking, therefore more is needed. On the other hand, it is advised that policy makers monitor the smoking related materials that promote smoking.

- Social media has a negative impact on sleep, so youth should be educated about the optimal use of social media

- The study highlighted important significant variations in the use of social media and its impacts in reference to demographic and characteristics variables. These are important to consider when targeting young people. Health promotion strategies need to be tailored (not generic) in order to be effective.

5.2.3 Recommendation for new area of research

- A cross-sectional study regarding the influence of social media on the health behaviors among other categories including children, adolescents and adults is needed.

- An in-depth study about the underlying reasons of choosing one particular program other than the other for accessing particular information is needed.

- Since this study has targeted the general social media application, an in-depth study can be done on the specific social media platforms, such as Facebook or Twitter.

- A study at the national level is needed to explore the effectiveness of social media on impacting health behaviors.

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Annexes

Annex (1): Calculation of Sample

Annex (2): Number of students representing the study population from the three universities

University Name	Number	Percent from the theoretical population
Islamic University	17951	31.9
Al-Aqsa University	15380	27.3
Al-Azhar University	11636	20.6
Palestine University	6041	10.7
University College of Applied science	5232	9.3
Total	**56240**	**100**

Annex (3): Distribution of sample size among the five universities

University Name	Number
Islamic University	129
Al-Aqsa University	116
Al-Azhar University	82
Palestine University	47
University College of Applied science	37
Total	**411**

Annex (4) the study instrument Arabic

The Influence of Social Media on Health Behaviors among University Students in the Gaza Strip

عزيزي/تي المشارك:

أنا نادين الرديسي ، طالبة في برنامج درجة الماجستير في الصحة العامة ، مسار إدارة صحية ، في جامعة القدس ، أجري دراسة بحثية حول تأثير وسائل التواصل الاجتماعي على السلوك الصحي بين طلاب الجامعات في قطاع غزة. الدراسة جزء من متطلبات تحقيق درجة الماجستير في الصحة العامة.

تهدف الدراسة إلى التعرف على تأثير وسائل الإعلام الاجتماعية على السلوكيات الصحية لمجموعة مهمة في المجتمع ، وهي مجموعة الشباب الجامعي ، وربما تقدم الدراسة توصيات لتحسين السلوكيات الصحية المناسبة التي يمكن أن تنعكس على الحالة الصحية والممارسات.

تتضمن المشاركة في الدراسة ملء استبيان حول خبراتك وسيتم إجراء مقابلات مع الآخرين بشكل فردي أو في مجموعات. لا توجد إجابات صحيحة أو خاطئة ،. يستغرق ملء الاستبيان حوالي 45 دقيقة من وقتك الثمين.

على الرغم من أن المشاركة في هذه الدراسة طوعية وأن لديك الحق في المشاركة أو عدم المشاركة، إلا أن مشاركتك تحظى بتقدير كبير. أنت حر في المشاركة أو الانسحاب في أي لحظة.

سيتم الحفاظ على السرية ، ولن يتم ذكر اسمك أو جهات اتصالك على الإطلاق ، وسيتم استخدام المعلومات التي ستقدمها لأغراض البحث فقط. مرة أخرى ، أود أن أشكرك على موافقتك على المشاركة

شـــكـــــرا لحســـن تعــــاونكـــم

الباحثة / نادين بدرالدين الرديسي

	1. الخلفية والمعلومات الديموغرافية				
	الرقم المتسلسل:...............				
1	الاسم		2	العمر	
3	الجنس	1. ذكر		2. أنثى	
4	مكان الاقامة	1. شمال غزة	2.غزه	3. منطقة الوسطى	4. خانيونس	5. رفح
5	الحالة الاجتماعية	1. أعزب	2. متزوج	3.مطلق	4.أرمل
6	اسم الجامعة التي انت مسجل حاليا فيها	1. جامعه الازهر	2 الجامعة الاسلامية	3.جامعة فلسطين	4. كلية العلوم التطبيقية	5.جامعه الاقصى

#	السؤال					
7	اسم الكلية	1.طب	2.صيدلة	3.مهن صحية	4. علوم	5. فنون	6. طب اسنان
		7. اقتصاد وعلوم ادارية	8. زراعة وبيئة	9. تربية	10. تمريض	11. هندسة	12. حقوق	13.غير ذلك
8	السنة الدراسية	1.السنة الاولى	2.السنة الثانية	3.السنة الثالثة	4.السنة الرابعة	5.السنة الخامسة	6.السنة السادسة

2. المعلومات الاجتماعية والاقتصادية

#	السؤال		
9	عدد أفراد الأسرة		
10	سنوات تعليم الأب		
11	سنوات تعليم الأم		
12	وضع الأب الوظيفي	1.لا يعمل	2.دوام متقطع	3.دوام كامل
		4.متقاعد	5.عمل جزئي	6.غير ذلك
13	وضع الأم الوظيفي	1.ربة منزل	2.دوام متقطع	3.دوام كامل
		4.متقاعد	5.عمل جزئي	6.غير ذلك
14	متوسط دخل الأسرة الشهري	....................شيكل	
15	هل تعمل بجانب الدراسة؟	1. نعم	2. لا، اذا لا انتقل الى السؤال 17
16	ماهي مهنتك؟		

3. الاستخدام العام لوسائل التواصل الاجتماعية

#	السؤال			
17	فيما يتعلق بوسائط التواصل الاجتماعي ، كم كان عمرك عندما سمعت لأول مرة عن وسائل التواصل الاجتماعية	..........سنه		
18	فيما يتعلق بوسائط التواصل الاجتماعي ، كم كان عمرك عندما استخدمت وسائل التواصل الاجتماعي لأول مرة	........سنه		
19	هل لديك حق الوصول إلى الهاتف المحمول؟	1 نعم، ملكي	2.نعم،مملوكة لشخص ما	3.لا
20	هل لديك حق الوصول إلى جهاز كمبيوتر؟	1.نعم، ملكي	2.نعم،مملوكة لشخص ما	3.لا
21	هل تستخدم تكنولوجيا المعلومات والاتصالات لارسال الرسائل	1.نعم بشكل كبير	2.بعض الاحيان	3.نادرا

22	ما التطبيق الذي تستخدمه لارسال النص؟	1.فيسبوك	2.تويتر	3. .واتس أب	4. انستجرام

23	على أي من تطبيقات الوسائط الاجتماعية لديك ملف تعريف الآن؟ (يمكنك اختيار أكثر من واحد)	1.فيسبوك	2.تويتر	3.يوتيوب	4.واتس اب	5.انستجرام	6.بلوجر

24 — ما هو متوسط الوقت في اليوم الذي تقضيه على وسائل التواصل الاجتماعي؟

	فيسبوك	واتس اب	تويتر	انستجرام	يوتيوب	بلوجر
ساعه						
دقيقة						

25	كم يبلغ متوسط الوقت الترفيهي / الاجتماعي في اليوم الذي تقضيه وجهًا لوجه مع الآخرين؟	ساعة.............دقيقة..........

26	في أي الأوقات تكون أكثر نشاطًا على الشبكات الاجتماعية؟	1. صباحا	2.بعد الظهر	3.ليلا	4. في أي وقت ، لا يوجد تفضيل

27 — ما تطبيقات الوسائط الاجتماعية التي تنشط بها الآن؟ (يمكنك وضع علامة على أكثر من واحد)

		نشط جدا	نشط بعض الشيء	من حين لآخر نشط	غير نشط	عدد المشاركات أو أشياء من هذا القبيل تقوم بتطبيقها
	فيسبوك	1	2	3	4	
	تويتر	1	2	3	4	
	انستجرام	1	2	3	4	
	يوتيوب	1	2	3	4	
	بلوجر	1	2	3	4	

28	ما نوع الأنشطة التي تشارك فيها في تطبيقات الوسائط الاجتماعية؟ (ضع علامة على كل ما ينطبق)	☐ إنشاء إدخال على موقع الوسائط الاجتماعية الخاص بي مثل Facebook ☐ نشر التعليقات على صفحة أو جدار صديق ☐ إرسال رسائل باستخدام المراسلة الفورية ، مشاركة ونشر الصور ومقاطع الفيديو والموسيقى ☐ البقاء على اتصال مع العائلة ☐ ابق على اتصال مع الأصدقاء ☐ ابحث عن معلومات حول السياسة والقضايا الصحية والاجتماعية والرياضة والأحداث الجارية على أجهزة الكمبيوتر والهواتف المحمولة ☐ ابحث عن معلومات حول الخدمات مثل السفر والسياحة وشركات الطيران ☐ ابحث عن معلومات الصحة والغذاء واللياقة البدنية ☐ ابحث عن أحدث اتجاهات الموضة ☐ شراء الأشياء عبر الإنترنت ☐ اقرأ التكنولوجيا / الكمبيوتر والهاتف المحمول / المراجعات ☐ قراءة الأخبار العامة ☐ غير ذلك ، حدد _____		

29	عندما تستخدم وسائل الإعلام الاجتماعية ما هي المواضيع التي تهتم بها؟	1.منتجات	2.خدمات	3.دردشات عامة	4.نصائح
		5.برامج صحية	6.مجموعات دعم	7.الترويج و العروض	8.غير ذلك (يرجى التحديد………)

30	كيف تفضل مشاهدة المحتوى / المخرجات على وسائل التواصل الاجتماعي	1.فيديو	2.صور	3.مقالات	4. بلوجر	5.غير ذلك، اذكر...

31	هل تعمل وسائل التواصل الاجتماعى على ايجاد نمط حياتى صحى لك؟	1،الى حد كبير	2.الى حد ما	3.غير موافق

مصادر المعلومات				

32	هل تزور المواقع أو المراكز الصحية للحصول على معلومات حول الصحة؟	1.نعم بانتظام	2.بعض الاحيان	3.نادرا	4.ابدا

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#	السؤال				
33	من أين تحصل على معلومات عن الصحة؟	1.المراكز الصحيه	2.مواقع التواصل الاجتماعي	3.الانترنت	4.طبيب خاص	5.غير ذلك
34	هل يتكلم شباب مثلك في مجتمعك مع أطباء أو ممرضات أو غيرهن من مقدمي الرعاية الصحية حول المخاوف التي قد يتعرضن لها حول النمو	1.نعم	2.لا	3.لا اعرف		
35	هل سبق لك أن تحدثت إلى طبيب أو ممرضة أو أي مقدم رعاية صحية آخر عن المخاوف التي قد تكون لديك؟	1.نعم	2.لا			
36	هل سبق لك أن تحدثت إلى مستشار أو معالج حول ما تشعر به؟	1.نعم	2.لا			
37	عادة بعد كم يوم من ايام مرضك تذهب إلى المراكز الصحية	....	2.لا يحدث ابدا			

38	عندما يكون لديك مرض ، كيف تتفاعل	1.تأخذ العلاج على مسؤوليتك الخاصة	2.العلاج المنزلي (تقليدي)	3.استشر الأطباء	4.زيارة المركز الصحي
		5.استشر الأقارب	6.لا شيء	7.استشر الأصدقاء...	8.غيرها حدد ....

4.سلوك البحث عن المعلومات الصحية:

#	السؤال					
39	هل حاولت الحصول على أي نوع من المعلومات الصحية من وسائل الإعلام الاجتماعية لنفسك؟	1.كثيرا	2.بعض الشيء	3.قليلا	4.أبدا	
40	ما هو المصدر الأكثر شيوعًا للحصول على معلومات حول الصحة ونمط الحياة؟	1.فيسبوك	2.واتساب	3.تويتر		
		4.انستجرام	5.يوتيوب	6.بلوجر		
41	ما مدى جودة المعلومات التي تحصل عليها من خلال وسائل التواصل الاجتماعي؟	1.مفيدة	2.مفيدة بعض الشيء	3.ضارة		
42	كيف أثرت وسائل التواصل الاجتماعي على سلوكياتك الصحية؟	1.تأثير ايجابي	2.لا تأثير	3.تأثير سلبي		

معيقات البحث عن المعلومات

43	هل تواجه عوائق للحصول على المعلومات الصحية التي تريدها؟	1.نعم إلى حد كبير	2.نعم إلى حد ما	3.لا
44	إذا كانت الإجابة بنعم في السؤال السابق ، ما هي العوائق التي تواجهك؟	1.لا يعرفون أين يذهبون	2.الامكانية المالية	3.الموظفون غير متعاونين
		4.عدم وجود الموارد	5.قيود اجتماعية	6.غير ذلك ، يرجى ...... تحديد

#	السؤال	الخيارات
45	هل لديك أي فكرة عن المراكز / مقدمي الخدمات التي يمكنك من خلالها الوصول إلى المعلومات الصحية	1.نعم بالتأكيد — 2.الى حد ما — 3.لا
46	متى كانت آخر مرة اقتربت فيها من مقدم الرعاية الصحية للحصول على المعلومات؟	....
47	ما هو الموضوع الذي اردت الحصول على معلومات عنه أكثر؟	1.النشاط البدني — 2.تغذية — 3.التدخين — 4.السلوك النفسي — 5.العقاقير — 6.النوم — 7.غير ذلك حدد
48	كيف ترى المعلومات الصحية التي تحصل عليها من مقدم الخدمة؟	1. مفيدة — 2.مفيدة الى حد ما — 3.غير مفيدة
49	فيما يتعلق بالفائدة ، من هو أفضل من حيث البحث عن المعلومات	1. مقدمي الخدمات الصحية — 2.مواقع التواصل الاجتماعية — 3.لا يوجد فرق — 4. يعتمد على الموضوع
50	كيف ترى المعلومات الصحية التي تحصل عليها من السوشيال ميديا؟	1.مفيدة — 2.مفيدة الى حد ما — 3.غير مفيدة
51	كيف اصبحت وتيرة زياراتك لمقدمي الخدمات الصحية بعد وسائل التواصل الاجتماعي؟	1. انخفضت — 2.نفس الشيء — 3.زادت
52	حسب معرفتك ، استخدم مقدمي الرعاية الصحية وسائل التواصل الاجتماعي للتفاعل مع المستفيدين	1.نعم — 2.لا
53	هل قمت بتكييف السلوكيات الصحية بعد استخدام الوسائط	1.نعم — 2.بعض الشيء — لا، اذا لا انتقل الى السؤال 56
54	إذا كان الجواب نعم ، أشر إلى ما قمت به	
55	هل تركت السلوكيات السيئة بعد استخدام وسائل الاعلام الاجتماعية	1.نعم — 2.بعض الشيء — لا، اذا لا انتقل الى السؤال58
56	إذا كان الجواب نعم ، أشر إلى ما تركت	

5. النشاط البدني و صورة الجسم:

#	السؤال	الخيارات
57	كيف تعتبر بنية جسمك؟	1.مناسب — 2.مناسب إلى حد ما — 3.قليل جدا — 4.كثير جدا
58	هل يلعب النشاط البدني دورًا في صحتك العامة؟	1. نعم — 2.لست متأكد — 3.لا — 4.لا اعرف
59	هل تمارس التمرين؟	1.نعم بانتظام، كل......... — 2.من حين لاخر — 3.نادرا — 4. لا ، إذا لا اذهب إلى سؤال 63
60	هل هناك علاقة بين ممارساتك وتصوراتك وبين وسائل التواصل الاجتماعى؟	1.نعم — 2.ليس أكيد — 3.لا

61	كيف تؤثر الوسائط الاجتماعية على تمرينك؟	1. قلت	2.نفس الشيء	3.زادت	4.لا امارس
62	كم عدد حسابات اللياقة البدنية التي تتابعها؟	....			
63	هل لك اى منشورات خاصة بالنشاط البدنى على صفحات التواصل الاجتماعى مثل (العناية بالجسم وصور حول الطعام واو اى من الفيديوهات الخاصة بالنشاط اليومى؟	1.ابدا	2.بعض الوقت	3.دائما	
64	هل تقارن جسمك بتلك التي تراها على وسائل التواصل الاجتماعي؟	1.نعم	2.لا	3. لم افكر ابدا في ذلك	
65	هل ترغب في مقارنة جسمك مع نماذج اللياقة البدنية أكثر من العارضات والمشاهير؟	1.نعم	2.لا	3. لم افكر ابدا في ذلك	

6. السلوك التغذوي:

66	هل تتبع نظام غذائي متوازن؟	1.نعم	2.لا، اذا لا اذهب الى سؤال70		
67	هل استخدامك للنظام الغذائي منسوب لاستخدام وسائل التواصل الاجتماعي؟	1.نعم	2.لا		
68	هل قمت بتغيير أي عادات غذائية بسبب استخدام وسائل الإعلام الاجتماعية	1.نعم	2.لا، اذا لا اذهب الى سؤال72	3.لا اعلم، اذا لا اعلم اذهب الى سؤال72	
69	التغيرات التي قمت بها كنتيجة لاستخدام السوشيال ميديا	1. خذ وقتًا كافيًا أثناء تناول الطعام / 4. تناول وجبة الإفطار	2. تناول وجبات الطعام بانتظام / 5.اكل او تجنب اكل الوجبات السريعة	3. تخطي أي وجبة رئيسية / 6. المسليات	
70	ما هي المصادر التي تستخدمها للحصول على معلومات حول السلوك التغذوي	1. مراكز الصحة	2.انترنت	3. شبكة التواصل الاجتماعي	

موافق بشدة	موافق	متعادل	لا اوافق	لا اوافق بشدة		
5	4	3	2	1	أجد معلومات غذائية قيمة على تطبيق	71
5	4	3	2	1	إذا كان لديك سؤال يتعلق بالعادات الغذائية ، فعادة ما يمكنك العثور على الإجابات على تطبيق ما.	72
5	4	3	2	1	قبل من المقدمة المعلومات تساعدك النظام خطة تطبيق في أعضاءآخرين بك. الخاص الغذائي	73
5	4	3	2	1	يمكنك الحصول على نصائح جيدة حول كيفية تناول الطعام الصحي من تطبيق ما	74
5	4	3	2	1	إذا كان لديك سؤال ذو صلة بالوزن وتريد الإجابة عنه ، فستقوم بنشر سؤال على أحد التطبيقات للحصول على رد.	75

	لا ☐		نعم ☐		هل تعرف تطبيقًا يساعدك على فهم الأطعمة التي يجب عليك تناولها وما يجب ألا تأكله؟	76
3.تاثير سلبي		2.لا تغير		1.يعزز	كيف تؤثر وسائل التواصل الاجتماعي على عاداتك الغذائية؟	77

7. السلوك النفسي

3.غير جيدة		2.متعادل		1.جيدة	كيف تصف حالتك النفسية الاجتماعية؟	78
3. مواقع التواصل الاجتماعي		2.انترنت		1.المراكز الصحية	أين تطلب معلومات حالة الدعم النفسي الاجتماعي؟	79
		....			متى آخر مرة وصلت فيها إلى معلومات عن الدعم النفسي الاجتماعي؟	80
3.غير جيدة		2.جيدة الى حد ما		1.جيدة	ما مدى مهارتك في العثور على معلومات حول النفسية الاجتماعية؟	81
3.تأثير سلبي		2.نفس الشيء		1.تعزز	بشكل عام ، كيف تؤثر الوسائط الاجتماعية على الحالة النفسية الاجتماعية الخاص بك؟	82

في كثير من الأحيان	احيانا	في بعض الاحيان	نادرا	نادرا جدا		
5	4	3	2	1	تشعر بان اعضاء الصفحة يتواصلون معك ويهتمون بما لديك؟	83
5	4	3	2	1	يمكنك الحصول على شعور القبول من استخدام التطبيق.	84

85	رؤية نجاح الآخرين في هذه الصفحة يساعدني على البقاء على برنامجي فقدان الوزن واللياقة البدنية	1	2	3	4	5
86	تفضل أن تراقب بدلاً من نشر الرسائل على صفحة ما	1	2	3	4	5
87	يمكنك تصنيف نفسك كمستخدم تفاعلي لهذه الصفحة.	1	2	3	4	5
88	أنت لا تتواصل بشكل تفاعلي في هذه الصفحة لأن ليس لديك ما تساهم به.	1	2	3	4	5
89	من السهل أن تأخذ الأمور بطريقة خاطئة أثناء التواصل الاجتماعي.	1	2	3	4	5
90	لا يستطيع الناس حل المشاكل باستخدام الشبكات الاجتماعية بفعالية	1	2	3	4	5
91	لقد أحدثت الشبكات الاجتماعية تأثيرًا إيجابيًا على المجتمع	1	2	3	4	5
92	الشبكات الاجتماعية تجعل الصداقات أقوى	1	2	3	4	5
93	إلى أي مدى تتفق مع الحجة القائلة بأن الأشخاص الذين يعتمدون على الشبكات الاجتماعية أقل تفاعلًا مع الآخرين	1	2	3	4	5

8. التدخين

94	هل تدخن حاليا؟	1.نعم		2.لا	
95	هل يعزى ذلك إلى وسائل التواصل الاجتماعي؟	1.الى حد كبير	2. الى حد ما		3.لا
96	كيف تؤثر وسائل الاعلام الاجتماعية على التدخين؟	زيادة ☐	نفس الشيء ☐		نقص ☐
97	هل حصلت على رسائل للحد من التدخين؟	1.نعم		2.لا ، إذا لا اذهب إلى سؤال103	

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فعال جدا	فعال	متعادل	غير فعال	غيرفعال جدا	رسائل مكافحة التدخين	
5	4	3	2	1	توفير المعلومات التعليمية	98
5	4	3	2	1	سهل الفهم	99
5	4	3	2	1	رسالة الخوف فعالة	100

موافق	لا ادري	لا اوافق	ما هي وجهات نظرك حول	
3	2	1	تعلم وسائل الإعلام طرقًا مختلفة للتدخين لجمهورها	101
3	2	1	تستخدم وسائل الإعلام نماذج مختلفة لتدريس التدخين لطلاب الجامعات	102
3	2	1	الإعلام يظهر أهمية اجتماعية للتدخين	103
3	2	1	وسائل الإعلام تشجع النقاش بين طلاب الجامعات حول التدخين وآثاره الجانبية.	104

في كثير من الاحيان	احيانا	في بعض الاحيان	نادرا	نادرا جدا		
5	4	3	2	1	في الشهر الماضي ، كم عدد المرات التي قمت فيها بنشر تعليقات أو أسئلة أو صور أو مقاطع فيديو أو أي معلومات أخرى حول مكافحة التدخين (على سبيل المثال عن التدخين ، الإقلاع عن التدخين ، حظر التدخين ، المواقف السلبية تجاه التدخين ، أو عيوب التدخين) على مدونة؟	105
5	4	3	2	1	في الشهر الماضي ، كم عدد المرات التي شاهدت أو سمعت فيها التعليقات أو الأسئلة أو الصور أو مقاطع الفيديو أو أي معلومات أخرى حول مكافحة التدخين (مثل الإقلاع عن التدخين أو حظر التدخين أو المواقف السلبية تجاه التدخين أو عيوب التدخين) على مدونة؟	106
5	4	3	2	1	في الشهر الماضي ، كم عدد المرات التي قمت فيها بنشر التعليقات ، أو الأسئلة ، أو الصور ، أو مقاطع الفيديو ، أو أي معلومات أخرى عن التحفيز على التدخين (على سبيل المثال ، إعلانات التبغ ، أو الصور الرائعة للمدخن ، أو فوائد التدخين ، أو تدخين المشاهير) على مدونة؟	107

5	4	3	2	1	في الشهر الماضي ، كم عدد المرات التي شاهدت فيها أو سمعت تعليقات أو أسئلة أو صور أو مقاطع فيديو أو معلومات أخرى عن التحفيز على التدخين(مثل إعلانات التبغ أو الصور الرائعة للمدخن أو فوائد التدخين أو تدخين المشاهير) على مدونة؟	108
3.انستغرام 6.بلوجر		2. تويتر 5.يوتيوب		1.فيسبوك 4.واتس أب	أي من التطبيقات التي تستخدمها للتحفيز على التدخين (على سبيل المثال ، إعلانات التبغ ، أو الصور الرائعة للمدخن ، أو فوائد التدخين ، أو تدخين المشاهير) على مدونة؟	109
3.انستغرام 6.بلوجر		2.تويتر 5.يوتيوب		1.فيسبوك 4.واتس أب	أي من التطبيقات التي تستخدمها أكثر للحد من التدخين (مثل إعلانات التبغ أو الصور الرائعة للمدخن أو فوائد التدخين أو تدخين المشاهير) على مدونة؟	110

9. العقاقير

2.لا، اذا لا اذهب الى سؤال 115		1.نعم	هل تتناول أي أدوية تجعلك تشعر بتحسن؟	111
....			إذا كان الجواب نعم ، من الذي وصفها	112
2. لا		1. نعم	هل تعرف أي شخص مشابه لك في العمر يتعاطى العقاقير ليشعر بالسعادة؟	113
3.نقص		2،لم تتغير	1.ازداد	كيف يؤثر استخدام وسائل الإعلام على تعاطي المخدرات في غزة؟	114
3. انستغرام 6.بلوجر		2.تويتر 5.يوتيوب	1.فيسبوك 3واتس أب.	أي من تطبيقات وسائل الإعلام الاجتماعية التي تتبعها لديها فعالية أكبر في تجنب تعاطي المخدرات؟	115
2.لا		1.نعم	هل سبق لك أن شاركت في أي تطبيقات تدعم تجنب أي نوع من أنواع المخدرات؟	116
....			كم عدد التطبيقات في الـ 30 يومًا الماضية التي تم استخدامها لتجنب تعاطي المخدرات؟	117
3.لا اعرف	2.لا	1.نعم	هل تعتقد أن استخدام وسائل الإعلام الاجتماعية في غزة يؤثر على الشباب مثلك لمنعهم من تعاطي المخدرات؟	118
2.لا		1.نعم	هل تعتقد أن استخدام وسائل الإعلام الاجتماعية سبب في زيادة تعاطي المخدرات؟	119
2.لا		1.نعم	أثناء وجودك في الجامعة ، هل درست أي مواد جامعية تظهر تأثير وسائل الإعلام الاجتماعية على تجنب طلاب الجامعات من المخدرات؟	120

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121	ما نوع المعلومات التي تتناولها عن المخدرات على وسائل التواصل الاجتماعي؟	1.انواع العقاقير	2. غير ذلك	3. لا شيء
		4.مقالات عن العقاقير	5. الاثار الجانبية للادوية	

10. النوم

122	كم ساعة تنام كل يوم؟ ....

123	بعد استخدام وسائل الإعلام الاجتماعية ، كم تكون ساعات النوم الخاصة بك؟	1.زادت	2.لم تتغير	3.قلت

		نادرا جدا	نادرا	بعض الاحيان	احيانا	في كثير من الاحيان
124	كم تشعر بالتعب بشكل عام في يوم معين؟	1	2	3	4	5
125	ما مدى احتمالية تعرضك لاضطرابات في النوم؟	1	2	3	4	5
126	كم من الوقت تقضيه على وسائل التواصل الاجتماعي قبل الذهاب إلى الفراش؟	1	2	3	4	5
127	كم مرة تتفقد فيها وسائل التواصل الاجتماعي في الـ30 دقيقة قبل أن تغفو في الليل؟	1	2	3	4	5

128	هل تعتقد أن وسائل الإعلام الاجتماعية لها تأثير سيئ على نومك باستخدام كمية كبيرة من الرسائل أو مقاطع الفيديو قبل الذهاب إلى الفراش؟	1.نعم	2.لا	3.لا اعرف
129	هل تعتقد أن استخدام وسائل الإعلام الاجتماعية كثيرًا يؤثر على عينيك ونظامك العصبي الذي يجعلك تقلق؟	1.نعم	2.لا	3.لا اعرف

130	ما هو التطبيق الأكثر فعالية الذي يضع بعض الملصقات أو الفيديوهات حول الآثار الجانبية للنوم في وقت متأخر؟	1.فيسبوك	2. تويتر	3.انستجرام
		4. واتس أب	5.يوتيوب	6.بلوجر

131	هل تشارك في أي من التطبيقات التي تستخدم بعض المعلومات الطبية عن النوم لإرسالها للمشاركين؟	1.في كثير من الاحيان	2.بعض الاحيان	3.لا
132	هل تعتقد أن استخدام وسائل الإعلام الاجتماعية في وقت متأخر يعيقك في إنجازك الأكاديمي؟	1.الى حد كبير	2.الى حد ما	3.لا
133	هل تعتقد أن استخدام وسائل الإعلام الاجتماعية في وقت متأخر قد يعوقك عن الاستيقاظ مبكراً وبدء يومك بطريقة نشطة؟	1.الى حد كبير	2.الى حد ما	3.لا

134	هل تعتقد أن استخدام وسائل الإعلام الاجتماعية قد يعوقك عن النوم ويجعلك مستيقظًا؟	1.الى حد كبير	2.الى حد ما	3.لا
135	برأيك ، هل تستخدم وسائل الإعلام الاجتماعية التي تعتبر إدمانًا يجعلك لا تستطيع النوم؟	1.الى حد كبير	2.الى حد ما	3.لا
136	هل تعتقد أن استخدام وسائل التواصل الاجتماعي من هاتفك المحمول أو من الآخرين يجعلك تشعر بالمرض بسبب عدم كفاية وقت النوم؟	1.الى حد كبير	2.الى حد ما	3.لا
137	من وجهة نظرك ، هل استخدام الهاتف المحمول أو أجهزة الكمبيوتر ليلا قد يؤثر سلبًا على عينيك ووجهك مما يجعلك لا تستطيع النوم؟	1.الى حد كبير	2.الى حد ما	3.لا
138	هل تخطي ساعات النوم بسبب استخدام وسائل التواصل الاجتماعي؟	1. الى حد كبير	2.الى حد ما	3.لا
139	هل تشارك في هاتفك المحمول مع أي تطبيقات تتحدث عن فوائد تنظيم نومك؟	1. نعم	2.لا	
140	كيف تؤثر الوسائط الاجتماعية على نمط النوم بين الشباب مثلك؟	1.زيادة	2.لا تغيير	3.نقصان

أسئلة عامة

141		التأثير					من هو الاكثر تأثرا	
		تأثير ايجابي الى حد كبير	تأثير ايجابي إلى حد ما	لا تأثير	تأثير ضار الى حد ما	تأثير ضار جدا	1.اولاد 2.بنات	1. الاصغر 2. الاكر
	النشاط البدني							
	التغذية							
	التدخين							
	العقاقير							
	النوم							
	السلوك النفسي							
	سلوك البحث عن المعلومات الصحية							

بلوجر	انستيجرام	واتس أب	يوتيوب	تويتر	فيسبوك		142
						أي تطبيق كان أكثر تأثيرًا على التأثير على سلوكياتك 2 - تأثير إيجابي 1 - لا تأثير 0 - تأثير سلبي	
						النشاط البدني	
						التغذية	
						التدخين	
						العقاقير	
						النوم	
						السلوك النفسي	
						سلوك البحث عن المعلومات الصحية	

143 الآثار الإيجابية الرئيسية لاستخدام وسائل الإعلام الاجتماعية

....

....

144 الآثار السلبية الرئيسية لاستخدام وسائل الإعلام الاجتماعية

....

....

145 ما الذي تقترحه لاستخدام وسائل الإعلام الاجتماعية كوسيلة لتحسين السلوكيات الصحية ؟

....

....

Annex (5) the study instrument in English

The Influence of Social Media on Health Behaviors among University Students in the Gaza Strip

Dear participant:

I am Nadeen El Redaisi, a student at the Master Degree of Public Health program,-Health management Track, at Al Quds University, conducting a research study about the influence of social media on the health behavior among university students in the Gaza Strip. The study is part of the requirements for the fulfillment of the master degree of public health.

The study aims to identify the effect of social media on health behaviors of an important group in the society, namely the university youth group, possibly the study provides recommendations for improving appropriate health behaviors which could be reflected on the health status and practices.

Participation in the study involves filling an interviewed questionnaire about your experiences and other will be interviewed individually or in groups. There is no right or wrong answers, answer as you feel/perceive. Filling the questionnaire takes approximately 45 minutes of your valuable time.

Although participation in this study is voluntary and you have the right to participate or not to participate, your participation is highly appreciated. You are free to participate or to withdraw at any moment.

Confidentiality will be maintained, and your name and contacts will not be mentioned at all, and the information you will provide will only be used for the research purposes. Again, I would like to thank you for agreeing to participate.

Nadeen El Redaisi

1.	Background and demographic information						
1.**Name** ……………………		**2.sex**	1-Male	2-Female		**3.Age** ………	
4.Residency	1.North Gaza	2.Gaza	3.Mid Zone		4.Khan Yonis	5.Rafah	
5.Marital status	1.Never married		2.Married		3.Divorced	4.widowed	
6.The name of un that you are curr enrolled in	1.Al azhar Universit	2.Islamic Universit	3.Palestine university	4.Universal college of applied science		5.Al –Aqsa University	
7.College you are registered at	1.Medicine	2.Pharmacy	3.Health science	4.Scienc	5.Arts and Humanitie	6.Dentistry	
	7.Economics and Administrative Sciences		8.Agricultu Environmer	9.Educatio	10.Nursi	11Engineer	Law	Other
8.The academic year that you ar currently enrolled in	First year	Second year	Third year		Fourth year	Fifth year	Sixth year

2. Socioeconomic information				
9	Family size		…….. members	
10	Father's years of schooling		…….. members	
11	Mother's years of schooling		……….. year	
12	Father's Employment status	Not working	Working intermittent	Working full time
		Retired	Working part time	Others…………..
13	Mother's Employment statu	Housewife (not employed)	Working intermittent	Working full time
		Retired	Working part time	Others…………..
14	The average monthly household income from all		……….. shekel	
15	Do you work besides studying?		1-Yes sometimes 2- No	
16	What is your occupation?			

3.general social media use						
17	With regard to social media, how old were you when you First heard about social media	……………….Years				
18	With regard to social media, how old were you when you First used social media	……………….Years				
19	Do you have access to mobile phone?		Yes, mine	Yes, owned by someone		No
20	Do you have access to a computer?		Yes, mine	Yes, owned by someone		No
21	Do you used ICT for texting	Yes, largely	Sometimes		Rarely	
22	Which program/application do you use to text? tick all that apply		Facebook		Twitter	
			Whatsapp		Instagram	
23	On which social media applications do you have a profile now? *(You may tick more than one)*		Facebook	Twitter		YouTube
			Whatsapp	Instagram		Blogger

24	What is the average of time per day you spend on social med		Facebook	Whatsapp	Twitter	Instagram	You Tube	Blogger
		hour						
		min						

25	What is the average amount of leisure/social time per day you spend face-to-face with others?	_____hours _____minutes				
26	At what times are you most active on social media?	Morning	Afternoon	Evening		Any time, no pattern
27	On which social media applications are you active on now? *(You may tick more than one)*		Usually active	Sometimes active	Occasionally active	Not active	Number of posts or things like that you apply

		Facebook		1	2	3	4
		Whatsapp					
		Twitter					
		Instagram					
		You Tube					
		Blogger					
28	What kind of activities do you participate on social media applications? *(tick all those that apply)-read or not read?*	☐ Create an entry on my social media site like Facebook ☐ Post comments on a friend's page or wall ☐ Send messages using Instant Messaging (IM)Share & post photos, videos and music ☐ Keep in touch with family ☐ Keep in touch with friends ☐ Look for information about policy, healthy, social issues, sport and current events on computers and mobile phones ☐ Look for information on services like travel, tourism, airlines ☐ Look for health, diet and fitness information ☐ Look for the latest fashion trends ☐ Buy things online ☐ Read technology, computer and mobile phone news/reviews ☐ Read general news ☐ Follow any blogger ☐ Other, specify _____					

29	When you use the social media what topics are you interested in?	Products	Services	General chat	Advice
		Healthy program	Support groups	Promotion & offers	Other, specify…….

30	How do you prefer to see content/outputs on social media as	Videos	Pictures	Articles
		Blogs	Other, specify…….	

31	Does social media inspire you to work out and live healthy lifestyles?	Yes to high extent	To some extent	No

Information Sources						
32	Do you visit sites or health centers to get information about health?	Yes, regularly	Sometimes	Rarely	Never	
33	Where do you get information about health?	Health centers	Social media	Internet	Private doctor	Other spicify…
34	Do youth like you in your community ever speak to doctors or nurses or other health care providers about concerns that they might have about growing up				Yes	No	DK
35	Have you ever spoken to a doctor or a nurse or another health care provider about concerns that you might have?				Yes	No
36	Have you ever spoken to a counselor or a therapist about how you are feeling?				Yes	No
37	Usually after how many days of your sickness you go to health centers ……… Never happened					
38	When you have illness, how you react	Take treatment on your own responsibility	Home treatment (Traditional)		Consult the doctors	
		Visit Health center	Consult relatives	Nothing	Consult friends	Other specify ……………

	4.Health information seeking behavior:						
39	Have you tried to get any health information from social media for yourself?	A lot		Some		A little	None
40	What are the most common source that you get information about health and lifestyle?	Facebook	Whatsapp	Twitter	Instagram	YouTube	Blogger
41	How good is the value of information that you get through social media?	Useful		Somewhat useful		Harmful	
42	How social media has affected your health behaviors?	Positive effect		No effect		Negative effect	

	Information seeking barriers:					
43	Do you face barriers to get the health information you want?	yes to high extent		yes to some extent	No	
44	If yes in the previous question, please what are the barriers you face?	not knowing where to go		financial accessibility	staff not cooperative	
		not having the resources		social restriction	Other, specify	
45	Do you have any idea about the centers/providers from which you can access health information	Yes sure		to some extent	No	
46	When was the last time that you approached a health provider to get information?	…………………………………				
47	What is the topic that you get information about it more?	physical activity		Nutrition	smoking	
		psychosocial		drugs	Sleeping	Others specify…..
48	How do you regard the health information that you obtain from the provider?		useful	somewhat useful	not useful	
49	With regard to usefulness, which is better in term of seeking information	seeking health providers	social media	no differences	Depends on the topic	
50	How do you regard the health Information you obtain from the social media?	Not useful		somewhat useful	useful	
51	How the frequency of your visits to health providers has changed after social media	decreased	same		increased	
52	According to your knowledge, do health providers use social media to interact with beneficiaries		Yes	No		
53	Have you adapted healthy behaviors after using media	Yes, many	some		No, if no go to Q56	
54	If yes indicate which behavior	…………………………………				
55	Have you quitted bad behaviors after using social media	Yes, many	some		No, if no go to Q58	
56	If yes indicate which behavior	…………………………………				

	5.Physical Activity and body image:				
57	How do you regard your body built?	Suitable	Fairly suitable	Too little	Too much
58	Does physical activity play a role in your overall health?	Yes	Not sure	No	DK
59	Do you practice exercise	yes regularly –every -----------	occasionally	rarely	No, if no go to Q 63
60	Do you attribute your practices or perceptions to the use of social media?	Yes	Not sure	no	
61	How does social media affect your exercising?	decreased	same	increased	I don't exercise

62	How many fitness accounts do you follow?	…………………………..			
63	Do you add post fitness relating to content on your social media accounts (body care, pictures of food, videos of workout routine)		never	sometimes	usually
64	do you compare your body with those you see on social media	yes		no	never thought about that
65	You like to compare your body with fitness models more than supermodels and celebrities?	yes		no	never thought about that

	6.Nutritional behavior:				
66	Do you follow a balance diet?		yes	No, if no go to Q63	
67	Is using the balance diet attributed to using social media?		Yes	No	
68	Have you changed any dietary habits because of using social media		yes	No, if no go to Q65	DK, , if no go to Q65
69	The change you do as a result of using social media is	Take enough time while eating	Have meals regularly		Skip any main meal
		Have breakfast	eat or avoid fast food		Snaking
70	What sources do you use to have information about nutritional behavior	Health center	Internet		Social media

		Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
71	I find out valuable dietary information on an application					
72	If you have a question related to food habits, you can usually find the answers on an application.					
73	The information provided by other members of an application helps you plan your food system.					
74	You get good tips on how to eat healthy food from an application.					
75	If you have a weight related question you want to answer, you will post a question on an application to get a response.					
76	Do you know an application that helps you understand which foods you should and shouldn't eat?				yes	no
77	How does social media affect your eating habits?	promoted	same		Negative effect	

	7.Psychosocial and socialization				
78	How do you describe your PSS status?	Good		neutral	Not good
79	Where do you seek PSS information?	Health centers		Internet	Social media
80	When was the last time you access PSS information about?	………………………..			
81	How good are you in finding information about psychosocial?	useful		Somewhat useful	harmful
82	How using social media affects on your PSS status?		prompted	same	Negative effect

	Question	Very rarely	rarely	sometimes	often	Very often
83	You feel that members of this page care about you as and they are related to what you have?					
84	You gain a feeling of acceptance from using an application.					

85	Seeing the success of others on this page helps me stay on my weight loss program and fitness						
86	You prefer to observe rather than post messages on this page.						
87	You would classify yourself as an interactive user of this page.						
88	You do not interactively communicate on this page as you have nothing to contribute.						
89	It's easy to take things the wrong way during social networking.						
90	People cannot effectively solve problems using social networking						
91	Social networking has made a positive impact on society						
92	Social networking makes friendships stronger						
93	How much are you in agreement with the argument that people who rely on social networking are less interactive with others						

8.Smoking						
94	Do you currently smoke?	yes		No		
95	Is this attributed in any way to social media?	to high extent	to some extent	No		
96	How does social media affect smoking among youth?	increased	same	decreased		
97	Have you ever accessed any anti-smoking message?		Yes	No, if no go to Q98		
	Anti-smoking messages on social media	SD	D	N	A	SA
98	Providing useful information					
99	Easy to understand					
100	Fear Message is effective					
	what is your perspectives about			disagree	DK	agree
101	Media teaches different ways of smoking to its audience					
102	Media uses different models to teach smoking to university students					
103	Media shows social importance of smoking					
104	Media promotes discussion among university students about smoking and its side effects.					
	Expression and Reception	Very rarely	rarely	sometimes	often	Very often
105	In the last month, how often have you posted comments, questions, pictures, videos, or other information about antismoking (e.g., quit smoking, smoking ban, negative attitudes toward smoking, or disadvantages of smoking) on a blog?					
106	In the last month, how often have you seen or heard comments, questions, pictures, videos, or other information about antismoking (e.g., quit smoking, smoking ban, negative attitudes toward smoking, or disadvantages of smoking) on a blog?					

107	In the last month, how often have you posted comments, questions, pictures, videos, or other information about pro smoking (e.g., tobacco advertisement, cool images of smoker, benefits of smoking, or celebrity smoking) on a blog?					
108	In the last month, how often have you seen or heard comments, questions, pictures, videos, or other information about pro smoking (e.g., tobacco advertisement, cool images of smoker, benefits of smoking, or celebrity smoking) on a blog?					
109	Which of the applications that you use more in pro smoking message (e.g., tobacco advertisement, cool images of smoker, benefits of smoking, or celebrity smoking) on a blog?	Facebook	Twitter	Instagram
		Whatsapp	YouTube	Blogs
110	Which of the applications that you use more in antismoking message (e.g., tobacco advertisement, cool images of smoker, benefits of smoking, or celebrity smoking) on a blog?	Facebook	Twitter	Instagram
		Whatsapp	YouTube	Blogs

9.Drugs				
111	Do you take any drugs that make you feel better?	yes	No, if no go to Q 117	
112	If yes, who prescribed it………………………………..			
113	Do you know anyone similar to you in age who is taking drugs to feel happy?	yes	no	
114	How does the use of media affect on the drug taking substance abuse in Gaza?	increased	same	decreased
115	Which of the social media applications that you follow have more effectiveness in avoiding taking drugs?	Facebook	Twitter	Instagram
		Whatsapp	YouTube	Blogs
116	Have you ever participated in any applications that support avoiding you of taking any types of drugs?	yes	no	
117	How many applications in the last 30 days that used to avoid taking drugs? ………………..			
118	Do you think that the use of social media in Gaza effect on youth like you to prevent them from the use of drugs?	yes	no	DK
119	Do you think that the use of social media attributes in increasing in drug abuse?	yes	no	DK
120	While at university, have you ever studied any university subjects that show the influence of social media on avoiding university students from drugs?	yes	no	
121	What kind of information about drugs do you seek on social media applications?	Kinds of drugs	Other thing	nothing
		Articles about drugs	Side effect of drugs	

10.Sleeping						
122	How many hours do you sleep every day? ……………………					
123	After using social media, how are your sleeping hours getting?			increased	same	decreased
		very rarely	rarely	sometimes	often	Very often
124	How tired do you feel generally on a given day?					
125	How likely are you to experience sleep disturbances?					
126	How much time do you spend on social media just before going to bed?					

127	How frequently do you check social media in the 30 minutes before falling asleep at night?						
128	Do you think that social media has bad effect on your sleeping by using a big amount of messages or videos before you go to bed?			yes	sometimes		no
129	Do you think that using social media a lot, affects on your eyes and your nerve system that makes you worry?			yes	no		DK
130	Which is the most effective application that puts some posters or videos about the side effects of going to sleep late?	Facebook		Twitter		Instagram	
		Whatsapp		YouTube		Blogs	
131	Do you share at any applications that use some medical information about sleeping to send them for participants?	many times		sometimes		no	
132	Do you think that using social media at a late time hinders you in your academic achievement?	To high extent		To some extent		No	
133	Do you think that using social media late may hinder you to get up early and start your day in an active way?	To high extent		To some extent		No	
134	Do you think that using social media may hinder you going to sleep and make you awake?	To high extent		To some extent		No	
135	In your opinion is using social media consider as an addiction which makes you can't go to sleep?	To high extent		To some extent		No	
136	Do you think that using social media from your mobile or others make you feel illness because of inadequate time of sleeping?	To high extent		To some extent		No	
137	In your point of view, is using the mobile or computers at night may affect negatively on your eyes and face that makes you can't go to sleep?	To high extent		To some extent		No	
138	Do you skip sleep hours because of using social media?	To high extent		To some extent		No	
139	Do you share in your mobile with any applications that talk about the benefits of organizing your sleeping?	yes		No			
140	How do social media affect the sleep pattern among youth like you?	increased		same		decreased	

General Questions								
143	Domain	Effect					Who is more affected	
		Positive effect to high extent	Positive effect to some extent	No effect	Some harmful effect	Highly harmful effect	1-Boys 2-Girls	1Younger 2-Older
	Physical Activity							
	Nutrition							
	Smoking							
	Drugs							
	Sleeping							
	Psychosocial							
	Health information seeking behavior							

144		Which application was more influential on impacting you behaviors 2-positive effect 1- no effect 0- negative effect											
		Facebook		YouTube		Whatsapp		Twitter		Instagram		Blogs	
	Physical Activity												
	Nutrition												
	Smoking												
	Drugs												
	Sleeping												
	Psychosocial												
	Health information seeking behavior												
	Others												

145. Main positive effects of using social media is on

………
………
……………………………………………………………………………………………………

146. Main negative effects of using social media is on

………
………
………
……………………………………………………………………………………………………

147. To use social media as a vehicle for improving health behaviors what do you suggest?
………
………
……

Annex (6) Focus group for university students

Introduction	Tell me about yourself and your family (probe for: age, number of living, education level, living place, economic status). When did you start to use social media? Why at this age? What do you think about the use of social media on the future regarding the starting age and about the coming generation? How do university students use social media in their daily lives? on what they focus From where they got health information How they use media to access information, what are the gaps in that
First part	What are the impacts of social media on the behavior change of university students? For example, what do you think about the effect of social media on smoking?
Second Part	What are the risks that come with use of social media among university students? Do students have the freedom to use social media at any time? Is there a difference in the use of social media based on gender?
Third part	How good the value of information that you get through social media? What's your opinion about that 69% of the students said that the value of the information get through social media is somewhat useful?
Fourth part	Have you change any behavior because of using social media? Give me example How did your nutrition and physical activity affected by using the social media? What is the most application you use to get information about health behavior?
Fifth part	How does social media affect smoking, drugs and psychosocial status about university students?
Sixth part	What should we do to benefit from the use of social media to improve the health behavior? by government, families, universities, associations, students universities themselves

Annex (7) KII questions

Part one	What do you think about the use of social media in general?
Part two	What do you think about the benefits of social media? For example how can the social media help in the health education process in the future?
Part three	What do you think about the role of social media and health education department in student's behaviors improvement? On nutrition, physical activity, smoking, drugs, psychosocial status, sleeping and health seeking behavior. How feasible using media in promoting youth health? Which programs can be implemented and what these should address
Part fourth	What are the risks that come with use of social media especially on university students?
Part fifth	How we can utilize media to promote youth health?

Annex (8) An official letter of approval from Helsinki Committee in the Gaza Strip

المجلس الفلسطيني للبحث الصحي
Palestinian Health Research Council

تعزيز النظام الصحي الفلسطيني من خلال مأسسة استخدام المعلومات البحثية في صنع القرار

Developing the Palestinian health system through institutionalizing the use of information in decision making

Helsinki Committee
For Ethical Approval

Date: 06/08/2018   **Number:** PHRC/HC/416/18

الاسم:

Name: Nadeen Al Redisy

We would like to inform you that the committee had discussed the proposal of your study about:

نفيدكم علماً بأن اللجنة قد ناقشت مقترح دراستكم

حول:

The Influence of Social Media on Health Behaviors among University Students in The Gaza Strip

The committee has decided to approve the above mentioned research. Approval number PHRC/HC/416/18 in its meeting on 06/08/2018

و قد قررت الموافقة على البحث المذكور عاليه بالرقم والتاريخ المذكوران عاليه

Signature

Member   **Member**

6/8/2018

Chairman

16   8   2018

Genral Conditions:-
1. Valid for 2 years from the date of approval.
2. It is necessary to notify the committee of any change in the approved study protocol.
3. The committee appreciates receiving a copy of your final research when completed.

Specific Conditions:-

E-Mail:pal.phrc@gmail.com

Gaza - Palestine   غزة ـ فلسطين
شارع النصر ـ مفترق العيون

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Annex (9) Universitisies Approval

Al-Quds University

Jerusalem

School of Public Health

جامعة القدس

القدس

كلية الصحة العامة

التاريخ 2019/1/23

حضرة الأستاذ الدكتور/ناصر فرحات   حفظه الله

رئيس الجامعة الإسلامية

تحية طيبة وبعد،،،

الموضوع:مساعدة الطالبة نادين الرديسي

نشكر لكم دعمكم الدائم لمسيرة العلم والتعليم وخصوصاً دعم كلية الصحة العامة وطلابها، ونود أعلامكم بأن الطالبة المذكورة أعلاه تقوم بعمل بحث كمتطلب للحصول على درجة الماجستير في الصحة العامة—مسار الإدارة الصحية بعنوان:

The Influence of Social Media on Health Behaviors among University Students in the Gaza Strip

وعليه نرجو من سيادتكم التكرم بالموافقة والايعاز لمن يلزم نحو تسهيل مهمة الطالبة في إنجاز هذا البحث والسماح لها بتعبئة استبانة مع عدد من طلبة جامعتكم الموقرة.

شاكرين لكم حسن تعاونكم ودعمكم للمسيرة التعليمية،،،

و اقبلوا فائق التحية و الاحترام،،،

د. بسام أبو حمد

منسق عام برامج الصحة العامة

جامعة القدس—فرع غزة

نسخة: الملف

2019 / 62

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جامعة القدس

القدس

كلية الصحة العامة

التاريخ 2019/1/23

حضرة الأستاذ الدكتور/رفعت رستم   حفظه الله

رئيس الكلية الجامعية التطبيقية

تحية طيبة وبعد،،،

الموضوع:مساعدة الطالبة نادين الرديسي

نشكر لكم دعمكم الدائم لمسيرة العلم والتعليم وخصوصاً دعم كلية الصحة العامة وطلابها، ونود أعلامكم بأن الطالبة المذكورة أعلاه تقوم بعمل بحث كمتطلب للحصول على درجة الماجستير في الصحة العامة—مسار الإدارة الصحية بعنوان:

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د. بسام أبو حمد

منسق عام برامج الصحة العامة

جامعة القدس—فرع غزة

نسخة: الملف

Al-Quds University

Jerusalem

School of Public Health

جامعة القدس

القدس

كلية الصحة العامة

التاريخ 2019/1/23

حضرة الأستاذ الدكتور/ عبد الخـالـق الفـرا   حفظه الله

رئيس جامعة الأزهـر

تحية طيبة وبعد،،،

الموضوع: مساعدة الطالبة نادين الرديسي

نشكر لكم دعمكم الدائم لمسيرة العلم والتعليم وخصوصاً دعم كلية الصحة العامة وطلابها، ونود أعلامكم بأن الطالبة المذكورة أعلاه تقوم بعمل بحث كمتطلب للحصول على درجة الماجستير في الصحة العامة–مسار الإدارة الصحية بعنوان:

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شاكرين لكم حسن تعاونكم ودعمكم للمسيرة التعليمية،،،

و اقبلوا فائق التحية و الاحترام،،،

د. بسام أبو حمد

منسق عام برامج الصحة العامة

جامعة القدس–فرع غزة

نسخة: الملف

3.02.2019

31-01-2019

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Annex (10) List of arbitrators

	Name
1.	Dr. Yehia Abed
2.	Dr. Bassam Zaqout
3.	Dr. Yousef Al Jeish
4.	Dr. Mueen Karreri
5.	Dr. Majed Turban
6.	Eman Abu hamra
7.	Mahmoud Al Kahlout
8.	Itimad Abu Ward

دراسة حول تأثير مواقع التواصل الاجتماعي على السلوك الصحي لطلاب الجامعات بقطاع غزة

اعداد: نادين بدرالدين الرديسي

اشراف: د بسام ابو حمد

ملخص الرسالة

تلعب وسائل التواصل الاجتماعي في الوقت الحاضر دورًا مهمًا في التأثير على وجهات نظر الناس بشكل عام وطلاب الجامعات بشكل خاص، وتعتبر جزءًا مهمًا من الحياة اليومية للكثير من خلال توفير معلومات مكثفة تؤثر على تفاعلات الناس وسلوكياتهم، وتسهيلها للتواصل ما بين الناس و هي تعتبر نافذة لقطاع غزة الى العالم الخارجي.

الهدف من الدراسة

تحديد تأثير وسائل التواصل الاجتماعي على السلوكيات الصحية لطلاب الجامعة ، السلوكيات الصحية التي تضمنتها الدراسة: ممارسة الرياضة، السلوك التغذوي، سلوك البحث عن معلومات صحية، التدخين، العقاقير و النوم.

و كان من اهداف هذه الرسالة تقييم مساهمة مواقع التواصل الجتماعي على السلوكيات الصحية لطلاب الجامعات، والتعرف على كل من المساهمات الايجابية و السلبية لمواقع التواصل الجتماعي على السلوك الصحي، بالاضافة الى وضع توصيات لتطوير دور مواقع التواصل الاجتماعي لتحسين السلوك الصحي لطلاب الجامعات.

منهجية الدراسة

وقد أجريت هذه الدراسة بطريقة التثليث الكمي والكيفي. في الجزء الأول الكمي من خلال اجراء مقابلات شخصية مع الطلاب لتعبئة الاستبانة المخصصة ، شمل مجتمع الدراسة على 411 طالب تتراوح أعمارهم ما بين 18 الى 24 عام من الجامعة الإسلامية، جامعة الأقصى وجامعة الازهر، جامعة فلسطين و الكلية الجامعية للعلوم التطبيقية حيث تم استخدام عينة عشوائية لاختيار الجامعات المشاركة والطلاب المشاركين من كل جامعة.

بينما تكون الجزء الثاني وهو النوعي من جزئين، حيث قيام الباحث بإجراء ست مجموعات بؤرية للنقاش مع طلاب الجامعات، حيث اجرى ثلاث مجموعات مع الاناث، و ثلاث اخرى مع الذكور، تم اختيارهم بحيث كانوا من كليات مختلفة و مستويات مختلفة من سنوات الدراسة. الجزء الاخر من الطريقة النوعية، قام الباحث باجراء مقابلات رسمية مع مسئولين بالتعليم الصحي و مسئولين بقسم مواقع التواصل الاجتماعي.

وقد تم تحليل البيانات باستخدام الحزمة الإحصائية للعلوم الاجتماعية (SPSS) حيث أجريت التوزيعات، الترددات والنسب المئوية، الجداول، كما حسبت النسب المئوية المتوسطة والعامة والجداول المتقاطعة واستخدام Chi-Square لإيجاد العلاقات بين المتغيرات.

نتائج الدراسة

أظهرت النتائج أن 98.1٪ من المشاركين يمتلكون هاتفًا محمولًا ، 51.6٪ منهم يستخدمون Facebook لإرسال الرسائل النصية. التطبيق الأكثر استخدامًا من قِبل المستجيبين هو Facebook متبوعًا بـ Instagram ، (89.3)٪، (68.1)٪ ، على التوالي. ما يقرب من نصف المشاركين ينشطون على وسائل التواصل الاجتماعي في المساء. غالبية المشاركين يستخدمون وسائل التواصل الاجتماعي للبقاء على اتصال مع الأصدقاء (81.8 ٪).

تستخدم نسبة كبيرة من المشاركين الإنترنت (34.5%) والوسائط الاجتماعية (31.9%) كمصدر شائع للحصول على المعلومات الصحية. قام ما يقرب من نصف المشاركين بالوصول إلى المعلومات المتعلقة بالصحة ونمط الحياة من خلال Facebook وبالمثل ، قال نصف المشاركين إن وسائل التواصل الاجتماعي لها آثار إيجابية على سلوكياتهم الصحية. يعتبر النشاط البدني والتغذية أهم الموضوعات الصحية التي يبحث المشاركين معلومات عنها (45 %)، (24.3 %) على التوالي.

أظهرت النتائج ايضا ان 54 % من المشاركين قاموا بتكيف بعض السلوكيات الصحية بعد استخدام وسائل التواصل الاجتماعية ؛ علاوة على ذلك ، 49.9 % منهم تركوا بعض السلوكيات السيئة بعد استخدام وسائل التواصل الاجتماعي. فيما يتعلق بالسلوكيات التغذوية ، قال 40.3 % من المشاركين أن وسائل التواصل الاجتماعي كان لها تأثير إيجابي على عاداتهم الغذائية.

يما يتعلق بالسلوك النفسي والاجتماعي (PSS) ، تم استخدام الإنترنت (43.3%) والوسائط الاجتماعية (33.3%) أيضًا للوصول إلى المعلومات ذات الصلة بـ PSS من بين المشاركين ، قال 39.4 % أن وسائل التواصل الاجتماعي قد عززت بالسلوك النفسي والاجتماعي.

السلوك الصحي الأكثر تأثرًا هو سلوكيات البحث عن المعلومات الصحية (51.4%) مع تأثير أكبر للإناث (54.4%) وخاصة بين كبار السن (63%).

أظهرت النتائج أن هناك فروق ذات دلالة إحصائية بين الذكور والإناث في وجود ملف تعريف Instagram حيث كانت نسبة الإناث اللائي لديهن ملف تعريف Instagram (76.3%) أعلى من الذكور (59.2%).

أفاد 19.5% فقط من المشاركين بأن وسائل التواصل الاجتماعي قللت من التدخين. و قد اظهرت النتائج ان الفيسبوك يلعب دورين في التدخين، من جهة يحفز التدخين (61.3%) وفي الوقت نفسه ساعد في محاربته (67.4%). قال 14.3% فقط من المشاركين أن وسائل التواصل الاجتماعي تقلل من تعاطي المخدرات.

فيما يتعلق بالنوم ، قال ما يقرب من نصف المشاركين أن وسائل التواصل الاجتماعي تقلل من ساعات النوم ، وأشار 47 % إلى أنهم يتخطون ساعات النوم بسبب استخدام وسائل التواصل الاجتماعي ، وافق 50.2 % من المشاركين على أن استخدام وسائل التواصل الاجتماعي في وقت متأخر يعوق التحصيل الدراسي.

كان لموقع Youtube تأثير إيجابي على النشاط البدني كما ذكر 59% من المشاركين وعلى PSS (38.2%)، بينما كان لـ Facebook التأثير الأكثر إيجابية على التغذية (61.9%) والتدخين (35.4%) والعقاقير (33.4%) و سلوك البحث عن المعلومات الصحية (67.4 %). ومع ذلك ، كان لموقع Facebook التأثير الأكثر سلبية على النوم (41.7%).

تعتبر وسائل التواصل الاجتماعي أداة جيدة من الممكن الاستفادة منها في التثقيف الصحي ، ويجب على صانعي السياسات العمل على برامج لتحسين استخدامها و استغلالها الاستغلال الامثل لتحسين السلوكيات الصحية لطلاب الجامعات، و قد اظهرت النتائج ان الفيسبوك هو اكثر التطبيقات استخداما لذلك يتوجب على القائمين على البرامج استخدام هذا التطبيق لتحقيق اهدافهم.