

Relationship between Internet Social Media Addiction and Communication Patterns among Adolescents

Nora Faisal Yussef¹, Mona Hassan Abdel-Aal² and Fathyeya Said Sayed Ibrahim³

(1) Teacher, Kafer Shoker Nursing School, Kafer Shoker Specialized Hospital, Egypt, (2) Professor of Psychiatric & Mental Health Nursing, Faculty of Nursing, British University in Egypt and (3) Assistant Professor of Psychiatric & Mental Health Nursing, Faculty of Nursing, Benha University, Egypt.

Abstract:

Background: Internet social media and availability of mobile devices have an impact on the way people communicate. Adolescents have a wide range of positive and negative impacts come from the use of social media. **Aim:** Assess the relationship between internet social media addiction and communication patterns among adolescents. **Design:** A descriptive correlational design was utilized. **Setting:** The study was carried out at Technical Nursing Institutes in Benha city which consists of 2 Institutes and contain total (320) students from Benha Technical Nursing Institute for girls with total (170) students and from Benha Technical Nursing Institute of Health Insurance for girls with total (150) students. **Sample:** A Convenience sample of 170 students out of 320 from the above mentioned Technical Nursing Institutes were included in this study. **Tools:** Data were collected using the following tools: **Tool (1)** Structured Interview Questionnaire, it consists of two parts: **(Part I):** Socio-demographic characteristics, **(Part II):** The Bergens' Facebook Addiction Scale (BFAS). **Tool (2):** Instagram Addiction Scale (IAS). **Tool (3):** Adolescent Relationship Scales Questionnaire. **Tool (4):** The Parent-Adolescent Communication Scale (PACS). **Results:** About (50.6%) of the studied students were moderate level of facebook addiction, (78.2%) were mild level of instagram addiction, also (71.8%) were fair level of the total adolescent relationship and (68.2%) were average level of total parent-adolescent communication scale. **Conclusion:** There was positive correlation between Facebook Addiction and Instagram addiction. On the other hand, there was no correlation between Facebook Addiction, adolescent relationship and also parent-adolescent communication, no correlation between Instagram addiction, parent-adolescent communication and also adolescent relationship. **Recommendation:** Psychological Counseling centers or psychiatric clinics in the schools and institutes for early detection and treatment of students who are at high risk or addicted internet social media.

Key words: Internet Social Media, Addiction, Communication Patterns, Adolescents.

Introduction

Social media addiction is a behavioral addiction that is defined by being overly concerned about social media, driven by an uncontrollable urge to log on to or use social media, and devoting so much time and effort to social media that it impairs other important life

areas (Hilliard, 2023). This study is conducted on only two internet social media APPS which is limited to (Facebook and Instagram).

Adolescence is a period of life in which peers play an important role. In this period, adolescents show a strong need to belong to a

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group and social self-esteem is an important characteristic for the development of good emotional and behavioral functioning. Social network platforms seem to meet these adolescents' social needs. Researches had shown that adolescents who are more socially isolated and experience a greater sense of loneliness use social media more frequently and adolescents who show a stronger sense of belonging and have more positive relationships with their peers demonstrate a lower use of social networking platforms. It seems that the use of social network platforms leads to false need satisfaction. Indeed **(Ballarotto, et al., 2021)**.

Internet addiction is frequently the result of social crisis, lack of self-confidence, a need to conform, boredom, and the accessibility of an interesting and amusing pastime. Scientists still debate whether internet addiction should be included in the diagnostic and statistical manual of mental disorders (DSM). In the fifth edition of the DSM, internet addiction has equated the addiction to internet games. However, the scientific community has not yet reached a consensus on whether internet addiction and addiction to internet games should be viewed together or separately. Adolescents are the major users of new technologies and their major purpose is online development social interaction **(Robert, 2022)**.

On the same line, internet addiction is when a person has a compulsive need to spend a great deal of time on the Internet, to the point where other areas of life (such as relationships, work or health) are allowed to suffer. The person becomes dependent on using the Internet and needs to spend more and more time online to achieve the same 'high. There is a range of behaviors that can be referred to as Internet addiction. Other terms for this

addiction include Internet addiction disorder (IAD) **(Robert, 2022)**.

The social media and internet landscape is constantly evolving, and so too is the way that communication is influenced by them. As new technologies and platforms emerge, people are able to communicate in new and innovative ways. The way they consume media and information has also changed dramatically in recent years, with the rise of social media, and mobile devices all of these changes have had a profound impact on the way people communicate. In many ways, the way people communicate today is very different to how parents or grandparents did. People are now more connected than ever before, and the speed and convenience of modern communication means that they can share thoughts and ideas with anyone, anywhere in the world **(Britannica, 2022)**.

Adolescent go through many growing tasks and despite, the time spent on the internet; this could have a different function for them. Social media and internet addiction is a behavioral disorder in which adolescents become enthralled by social media and are unable to reduce or cease their consumption of online media despite clear negative consequences and severe drawbacks. At the same time, many young adults engage in some form of online media daily (including Facebook, Instagram, Twitter, YouTube, Vine, Snap Chat, and video games) **(Cinelli, 2022)**.

Adolescents have noted a wide range of positive and negative impacts when it comes to the use of social media. Social media can help to improve an individual's sense of connectedness with real or online communities and can be an effective communication (or marketing) tool for corporations, entrepreneurs, non-profit organizations, advocacy groups, political parties, and governments. Adolescents have also seen that

there has been a rise in social movements using social media as a tool for communicating and organizing in times of political unrest (**Bowman, 2021**).

Furthermore, there are also some negative aspects to this increased connectivity. The constant stream of information can be overwhelming, and it can be difficult to filter out the noise from the signal. Social media can also create echo chambers where people only see information that confirms their existing beliefs. When general characteristics of social media addiction have been examined, it has been found that individuals tend to have restless thoughts concerning the urges and craving to be on social media, lose their self-control over their use of social media, spend excessive amounts of time staying on (or thinking about) social media which in turn lead to negative impacts on their relationships with their families and friends, and compromise their occupation and/or education (**Roman, 2021**).

Recently communication is greatly influenced by media and information. In the past, people relied on face-to-face interactions and word-of-mouth to communicate. The nature of the human relations between the members, family roles and boundaries are reconstructed in this technological environment supporting new interactions and relationship patterns among members. However, with the advent of technology, media and information have become essential components of communication. Media provides a platform for people to share their ideas and thoughts, while information allows people to connect with others who might share similar interests (**Kozma, 2022**).

The whole world where people are constantly bombarded with media and information, it is easy to forget the importance of communication. This research will explore how communication is influenced by media

and information, and how people can use this to their advantage. Social media use has become part of daily life for many people. Earlier research showed that problematic social media use is associated with psychological distress and relationship satisfaction. There are many different types of media and information out there, and each one can have a different influence on communication (**Willis, 2021**).

Parents should look at how they communicate with their children. Work out strategies to improve their communication. Brainstorm solutions together, select what is important to argue over. A basic guideline is that safety issues, that are always worth fighting over. Other things, like cleaning up the messy bedroom, might be best to ignore – just keep the door shut. Offer constructive criticism. Acknowledge and celebrate their achievements. Set a good example by apologizing when being wrong (**Bavelas, 2022**).

The role of community mental health nurse involved three levels of prevention. The primary level of prevention includes interventions that performed to prevent addiction from occurrence through setting goals for when adolescents can use smartphones. The secondary level of prevention aimed to early detection for the problem and how to control. Assess for early signs of addiction like increasing loneliness and depression. On the tertiary prevention, the community health nurse plays a key role in the rehabilitation and restoration of the social media addict persons to an optimal level of functioning, negotiation of predisposing factors, counseling, and support for addict person (**Thomas, 2022**).

Significance of the study

The internet has permeated everyday lives. It is used to keep in touch with friends,

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share opinions, and watch hours of endless entertainment. The researches show that, there are 4.9 billion active internet users worldwide. That's 62% of the world's total population. Only 361 million people used the internet worldwide in 2000 (6% of the world's population at the time). A whopping 93% of Americans currently use the internet. There are roughly 500,000 new internet users every single day. 38% of the world's population still doesn't use the internet, as of 2022. At the start of 2021, there were roughly 6.38 billion new smartphone users worldwide, and that number has jumped to 6.65 billion as of 2022. That's an increase of 4% annually (Flynn, 2023). So this study aims to assess relationship between internet social media addiction and communication patterns among adolescents.

Aim of the study:

This study aimed to assess the relationship between internet social media addiction and communication patterns among adolescents.

Research questions:

- Is there a relationship between internet social media addiction and communication patterns among adolescents?
- What is the relationship between internet social media addiction and communication patterns among adolescents?

Subject and Methods

Research Design: descriptive correlational design used to achieve the aim of the study.

Research Setting:

This study was conducted at Technical Nursing Institutes in Benha city which consists of 2 Institutes and contain total number (320) students described as Benha Technical Nursing Institute for girls with total number (170) students and Benha Technical Nursing

Institute of Health Insurance for girls with total number (150) students. Each institute contains 5 grades.

Sampling type and size:

1. A convenience sample of nursing students in the two technical nursing institutes included in the study. The estimated sample size is 170.

$$n = \frac{N}{1+N(e)^2}$$

Where:

n= Sample size

N= Total population size

e = margin of error

Tools of Data Collection:

To fulfill the aim of the study, the data was collected using the following four tools: -

Tool (1): A Structured Interview Questionnaire:

Part (1): The questionnaire was developed by the researchers based on scientific review of literature and was designed on Arabic format in suitable language to assess the following data:

Socio-demographic data of students such as:

Age, Student ranking in the family, father's job, mother's job, family climate, parents social status, Family economic status, achievement in previous year, hobbies and interests.

Part (2): The Bergens' Facebook Addiction Scale (BFAS)

This scale developed by **Andreassen, et al., (2012)**. It was employed in order to identify the addicted adolescents from the total sample. The scale consists of 18 items, three reflecting each of the six core elements of addiction - salience, mood modification, tolerance, withdrawal, conflict, and relapse. These 18 items were scored on a 5-point scale ranging from 1(very rarely) to 5 (very often).

Scoring system:

- Non addicted < 25 (≤ 22 point)
- Mild addicted < 50 (from 23 to < 45 point)
- Moderate addicted from 50 to 75 (from 45 to < 77 point)
- Sever addicted > 75 (from 77 to 90 point)

Tool (2): - Instagram Addiction Scale (IAS)

The IAS was developed using a modified version of Internet Addiction Test developed by **Kircaburun and Griffiths, (2018)**. The modification was made by simply changing the word “Internet” with “Instagram”. Because of this modification, exploratory factor analyses (EFAs), and Confirmatory Factor Analysis (CFAs) were carried out. As a result of EFA, it was observed that 15 items. The scale comprises a 6-point Likert scale from 1 “never” to 6 “always” and scores can range between 15 and 90.

Scoring system:

- Non addicted < 25 (≤ 22 point)
- Mild addicted < 50 (from 23 to < 45 point)
- Moderate addicted from 50 to 75 (from 45 to < 77 point)
- Sever addicted > 75 (from 77 to 90 point)

Tool (3): Adolescent Relationship Scales Questionnaire

This scale developed by **Scharfe, (2002)**. The A-RSQ was used to measure the four attachment patterns (secure, dismissing, preoccupied, and fearful) as well as two attachment dimensions (self-model and other-model) of the participants. This scale consists of 17 items. The participant was asked to select the pattern that best described and corresponded to him or herself on a 7-point Likert scale (1 being not at all like me, 7 being very much like me).

Scoring system:

- Poor < 50 (< 59 point)
- Fair from 50 to 75 (from 59 to 89 point)

- Good > 75 (from 90 to 119 point)

Tool (4): The Parent-Adolescent Communication Scale (PACS)

This scale was developed by **Barnes and Olson, (1982)**. The PACS evaluate the quality of parent–adolescent communication. The PACS has 2 sub-scales (Open Family Communication and Problems in Family Communication). The 10-item Open Family Communication subscale measures the amount of openness in communication among family members. The Problem subscale assesses the extent of problems within parent-child communication. This scale consists of 10 items. Participants are asked to what extent they agree or disagree with statements about family communication on a 5-point scale from 1 (strongly disagree) to 5 (strongly agree).

Scoring system:

- Good ≥75 (≥75 point)
- Moderate from 50 to <75 (from 50 to <75 point)
- Poor less than 50 (<50 point)
- Scale was reversed for these negative statements related to problematic communication scale.

-Reliability of the tool:

Test the reliability of the tools through Alpha Cronbach reliability analysis.

Tools	Alpha Cronbach
Bergens’ Facebook Addiction Scale (BFAS)	0.881
Instagram Addiction Scale (IAS)	0.891
Adolescent Relationship Scales Questionnaire	0.645
Parent-Adolescent Communication Scale	0.607

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Content Validity of tool:

Content validity of tools was done by jury of five experts (three assistant professors and two lecturers) in Psychiatric and Mental Health Nursing faculty of nursing, Benha University who checked the relevancy, comprehensiveness, clarity and applicability of the questions. According to their opinions, Modifications were done and final form was developed.

Ethical Consideration:

Before conduction of the study an official permission was obtained from the Dean of faculty of nursing, Benha University to obtain the official approval for data collection from the managers of Technical Nursing Institutes in Benha city. The aim and the nature of the study were explained to the administrative personnel and then it was possible to carry out the study without resistance. Before collecting the data, the researchers clarified the purpose and significance of the study to the studied student and assured them about confidentiality of the collected data. All the studied students were informed that the participation in the study was voluntary and the content of the tools was used for research purpose only and they informed that they had the right to withdraw from the study at any time of data collection without any consequences. Moreover, an informed oral consent for participation in the study was obtained from each student before conduction of data collection.

Pilot Study:

Before starting of data collection pilot study was conducted on (30%) which represent 170 students of the total sample (320) to ensure clarity and applicability of the study tools and identifying the time needed for each subject to fill each tool and to identify the problems and obstacles that may be encountered during conduction of the study. According to the

result of pilot study some modifications were done, therefore, the pilot study sample was excluded from the total sample.

Result of Pilot Study:

After conducting the pilot study, it was found that:

1. The tools were clear and applicable; however, few modifications were made in rephrasing of some sentences in Bergens' facebook addiction scale to be easier and more understandable.
2. Tools were relevant and valid.
3. No problem that interferes with the process of data collection was detected.
4. Following this pilot study, the tools were made ready for use.

Field work:

- Before starting data collection, an official permission was obtained from the Dean of faculty of nursing Benha University to obtain the official approval for data collection from the managers of Technical Nursing Institutes in Benha city which requesting this permission and cooperation to conduct the study.
- The researchers started data collection by introducing herself to the studied nursing students and provided a clear explanation of the aim, significance and types of tools needed to fill in the study to gain cooperation of the studied nursing student.
- An oral consent was obtained from each of studied student before data collection.
- Data was collected through written tool from the studied nursing student, technical nursing institutes in Benha city over a period of one month started from (November 15th, 2020 till December 10th, 2020).
- The researchers was attended to Benha Technical Nursing Institute for girls to

collect the data three days in the first week started Sunday (November 15th, 2020), Monday (November 16th, 2020) and Tuesday (November 17th, 2020) with the average of 19 students in every day. In addition to two days only in the second week included Monday (November 23rd, 2020), the data collected from 18 students and Wednesday (November 25th, 2020) was 20 students in the fifth day during the period of data collection.

- The researchers was attended to Benha Technical Nursing Institute of health insurance for girls to collect the data two days in the third week started on Sunday (November 29th, 2020) from 18 students in the sixth day and Wednesday (December 2nd, 2020) the data collected from 20 students in the seventh day. In addition to another two days in the fourth week, the eighth day was Monday (December 7th, 2020) with the number of 19 students and last day was Thursday (December 10th, 2020) with the number of 18 students during the period of data collection.
- The average number of interviewed students was between 18-20 students per day as the researchers interviewed students as a group interview.
- The studied students filled in the study tools independently and each student needed about 20 minutes to complete the study tools and revised to check their completeness to avoid any missing data.

Statistical analysis

The collected data were organized, coded, computerized, tabulated, and analyzed by using Statistical Package for Social Science (SPSS) program (version 22). Data were presented using descriptive statistics in the form of frequencies and percentage for categorical data: the arithmetic mean (\bar{x}) and standard deviation (SD) for quantitative data.

While the qualitative variables were compared using person correlation coefficient (r) was used for correlation analysis. The degree of significance was identified. A statistical significant result was considered if P-value < 0.05. A statistical highly significant result was considered if P-value < 0.001. A statistical non-significant result was considered if P-value \geq 0.05.

Results

Table (1) shows that, more than half (50.6 %) of the studied students aged from 15 < 17 years old with Mean \pm SD 16.86 \pm 1.35, all 100% of them are female, less than half (47.1%) of them are the first in the ranking in the family. Also, all (100%) of them are successful at the previous years and more than half (59.4%) of them have using social media as a hobby and his interest.

Table (2) illustrates that most (88.8%) of the studied students fathers have working, majority (77.6 %) of the studied students' mothers are housewives, majority (93.5%) of the studied students have stable family climate, most (89.4%) of the studied students' parents are married and most (81.2%) of them have enough family income.

Figure (1) reveals that, minority (5.3%) of the studied students have severe facebook addiction level, while more than half (50.6%) of them have moderate level of facebook addiction and more than two fifths (44.1%) of them have mild level of facebook addiction.

Figure (2) reveals that, minority (1.8%) of the studied students have severe instagram addiction level and less than one fifth (17.1%) of them have moderate level of instagram addiction. On other hand, more than three quarters (78.2%) of them have mild level of instagram addiction.

Figure (3) shows that, less than three quarters (71.8%) of the studied students have fair level of the total adolescent relationship, while less than one quarter (23.5%) of them have good

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level of the total adolescent relationship and minority (4.7%) of them have poor level of the total adolescent relationship.

Figure (4) illustrates that, more than two thirds (68.2%) of the studied students have moderate level total parent-adolescent communication scale, while more than one fifth (20.6%) of them have poor level of total parent-adolescent communication and minority (11.2%) of them have good level of total parent-adolescent communication.

Table (3) illustrates that, there is high statistically significant positive correlation between Facebook Addiction and Instagram addiction. There is no statistically significant correlation between Facebook Addiction, adolescent relationship also, between Facebook Addiction and parent-adolescent communication. Furthermore, there is no statistically significant correlation between adolescent relationship and parent-adolescent communication. In addition, there is no statistically significant correlation between parent-adolescent communication and Instagram addiction, as well as there is no statistically significant correlation between adolescent relationship and Instagram addiction.

Table (1): Frequency distribution of the studied students regarding to their personal characteristics (n=170).

Personal characteristics	No	%
Age		
15 < 17 years old	86	50.6
17 < 19 years old	73	42.9
19: 21 years old	11	6.5
Mean \pm SD	Mean \pmSD 16.86\pm1.35	
Student ranking in the family		
The first	80	47.1
The second	51	30.0
The Third	24	14.1
The fourth	8	4.7
Another	7	4.1
Student's rating previous years		
Successful	170	100.0
Student hobbies and his interests		
Reading	50	29.4
Playing sports	13	7.6
Using social media	101	59.4
Another (watching TV)	6	3.5

Table (2): Frequency distribution of the studied students regarding to their family characteristics (n=170).

Family characteristics	No	%
Father's job		
Working	151	88.8
Not working	5	2.9
Died	14	8.2
Mother's job		
Working	38	22.4
House wife	132	77.6
Family climate		
Stable	159	93.5
Not stable	11	6.5
Parent social status		
Married	152	89.4
Divorced	3	1.8
Widow	15	8.8
Family economic status		
Not enough	32	18.8
Enough	138	81.2

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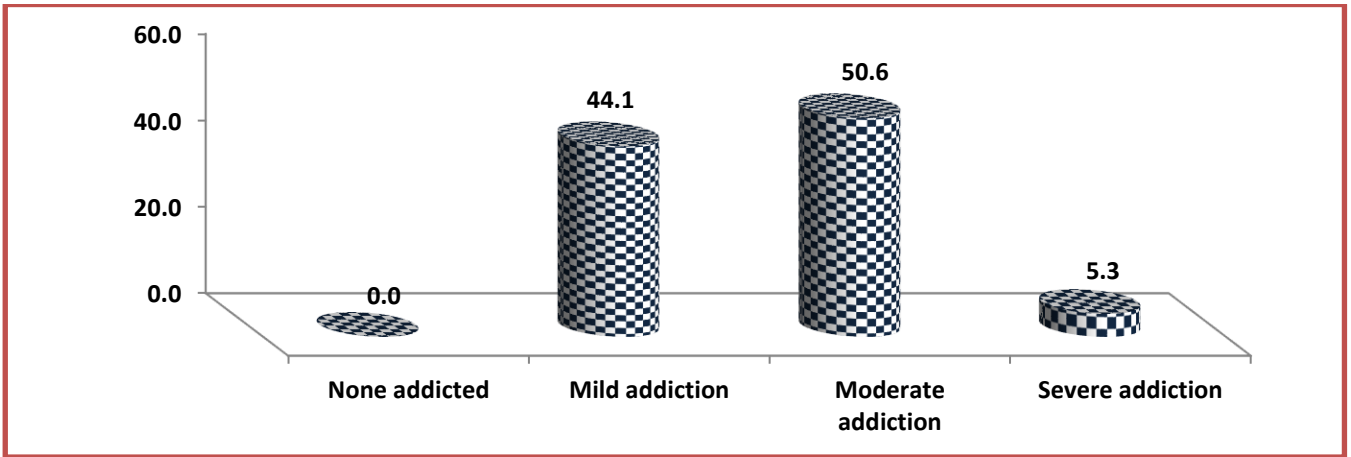


Figure (1): Percentage distribution of the studied students regarding to their total levels of Bergen's Facebook Addiction scale (n=170).

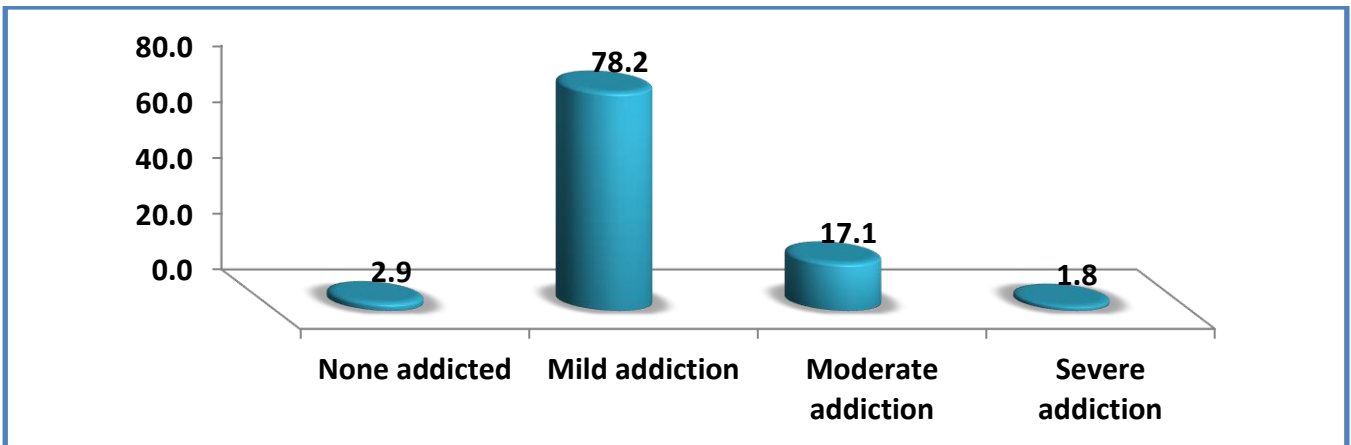


Figure (2): Percentage distribution of the total level of Instagram addiction among the studied students (n=170).

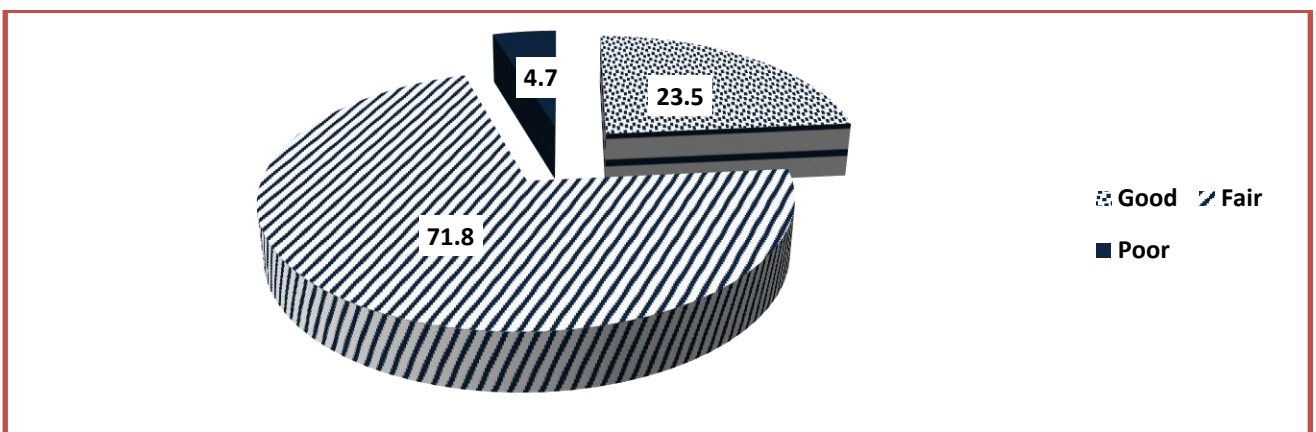


Figure (3): Percentage distribution of the studied students regarding to their total level of adolescent relationship scale (n=170).

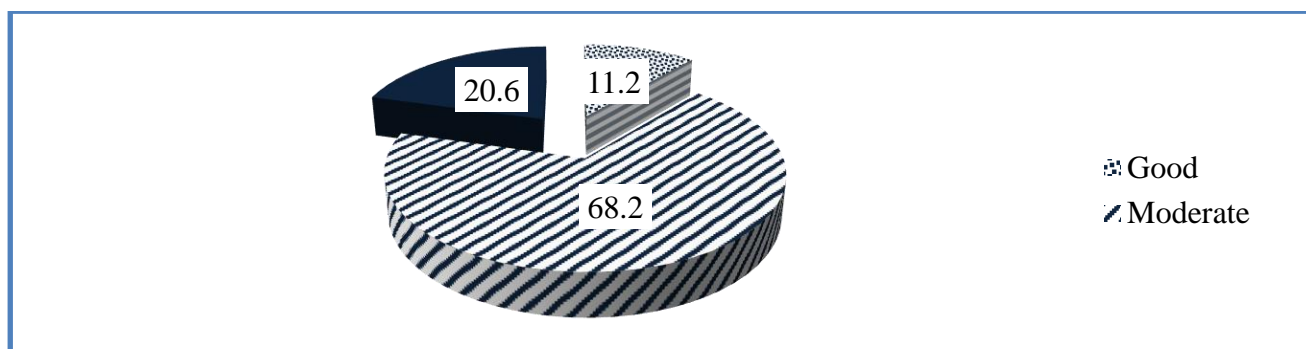


Figure (4): Percentage distribution of the studied students regarding to their total level of the parent-adolescent communication scale (n=170).

Table (3): Correlation matrix between total the Bergens' Facebook Addiction Scale ,total Instagram addiction scale, total adolescent relationship scales, and total parent-adolescent communication scale(n=170).

		the Bergens' Facebook Addiction Scale	Instagram addiction scale	adolescent relationship scales	parent-adolescent communication scale
the Bergens' Facebook Addiction Scale	R	1	.348	.023	-.042
	p-value	--	.000**	.763	.591
Instagram addiction scale	R	.348	1	-.007	-.027
	p-value	.000**	--	.925	.723
adolescent relationship scales	R	.023	-.007	1	.056
	p-value	.763	.925	---	.469
parent-adolescent communication scale	R	-.042	-.027	.056	1
	p-value	.591	.723	.469	----

(*) Statistically significant at $p < 0.05$.

(**) highly statistically significant at $p < 0.001$

Discussion

Adolescents' use of social media has evolved into a way of life. The widespread usage of social media, which is mostly available in the bedroom, raises many concerns about teenagers' dependence on it to meet their emotional needs. Users of heavy media, in particular, may change sleeping and waking habits, undermining school success. Furthermore, social media has caused multiple adolescent depression and insomnia (Wang et al., 2018). The data portability of Social Media through smartphones is making its users more dependent on it and the unchecked usage of

Social Media by the users is making them more addicted to it which impacts the human communication and relationships. Therefore, compulsive Internet use and its effects on daily life, work and relationships cannot be ignored (Nguyen et al., 2022). Therefore, the current study aimed to assess relationship between internet social media addiction and communication patterns among adolescents.

Regarding frequency distribution of the studied students regarding to their personal characteristics the current study showed that, more than half of the studied students aged from

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15 < 17 years old, less than half of them were the first in the ranking in the family. Also, all of them are successful at the previous years and more than half of them have using social media as a hobby and his interest. This may be explained by the fact that the study was conducted at technical nursing institutes for girls who have the same age group at the same time nowadays most of students' communication and studying are conducted through social media applications (Facebook and Instagram).

This result was supported by **Masoed et al., (2021)**, they studied Social media addiction among adolescents: Its relationship to sleep quality and life satisfaction, and showed that three-quarters of the studied adolescent aged between 15 - 17 years, two-third of them were females and one third of them were the first child in their family. This result was in contrast with **Jiyan et al., (2022)**, they studied Investigation of the Relationship between Social Media Addiction and Optimism/Pessimism in Adolescents, and revealed that more than half of students participating in the study were males and between the ages 16-18 years old.

As regard to frequency distribution of the studied students regarding to their family characteristics the present study revealed that most of the studied students fathers had working, majority of the studied students' mothers are housewives, majority of the studied students have stable family climate, most of the studied students' parents had enough family income. This may be due to in our society the guardianship is for man and he is the responsible for supporting the family and fulfilling all their family needs. Therefore, they must have work, beside. The family life of their societies is characterized by stability because it is based on affection, mercy and respect for the role of each family member.

This result was in the same line with **Kanyinga et al., (2020)**, they studied Social

media use and parent-child relationship: A cross-sectional study of adolescents, and reported that about three-quarter of students were from high socio economic status families. This result was in compatible with **Wang et al., (2022)**, they studied The Relationship between Parent-Adolescent Communication and Depressive Symptoms: The Roles of School Life Experience, Learning Difficulties and Confidence in the Future and reported that the perceived household economic status was average for more than three quarters of participants.

Concerning percentage distribution of the studied students regarding to their total levels of Bergens' Facebook Addiction scale the present study revealed that, minority of the studied students have severe facebook addiction level, while more than half of them have moderate level of facebook addiction and more than two fifths of them have mild level of facebook addiction. This may be due the use of social networks has become an integral part of the lives of many students, because they introduce them to a world of different possibilities, especially in their field of study. This may be due to students' nature of study and time spent on schools that prevent them from being on facebook for long time.

This result was in the same line with **Samaha et al., (2018)**, they studied Assessing the Psychometric Properties of the Internet Addiction Test (IAT) Among Lebanese College Students, and revealed that more than one third of the participants score signifying normal use of the internet. About two fifth of the participants scored mild addiction level. About one third scored a moderate level of internet addiction, while the minority of the participants scored severe dependence upon the internet. This result was in contrast with **Masoed et al., (2021)**, they illustrated that more than half of the

studied adolescents had extremely social media addiction, more than one-third of them had moderate social media addiction, and the minority of them had mild social media addiction.

As regard to percentage distribution of the total level of Instagram addiction among the studied students the current study revealed that, minority of the studied students had severe instagram addiction level and less than one fifth of them had moderate level of instagram addiction. On other hand, more than three quarters of them had mild level of Instagram addiction. This may be due females are less interested in instegram use compared to males in addition to their responsibilities at home which make them have few time for Instagram use. Besides, it is also less used as an entertainment tool than Facebook.

This result was incompatible with **Rogowska & Libera, (2022)**, they studied Life Satisfaction and Instagram Addiction among University Students during the COVID-19 Pandemic: The Bidirectional Mediating Role of Loneliness, and found that less than one fifth of studied students had excessive Instagram addiction. This result also was in contrast with **Ardiana & Tumanggor, (2020)**, who studied Social media Instagram addiction and self-esteem in high school students, and revealed that high school students had a high level of Instagram social media addiction. This result was supported by **Kircaburun & Griffiths (2018)**, they studied Instagram addiction and the Big Five of personality: The mediating role of self-liking, and showed minority of the participants had severe instagram addiction, while, more than two thirds of participants had no instagram addiction.

Concerning percentage distribution of the studied students regarding to their total level of adolescent relationship scale the present study showed that, less than three quarters of the

studied students have fair level of the total adolescent relationship, while less than one quarter of them have good level of the total adolescent relationship and minority of them have poor level of the total adolescent relationship. This may be due to students' fear of being less appreciated and fear of being not accepted from others. This result agreed with **Nguyen et al., (2022)**, they studied Parent-child relationship quality and internet use in a developing country: Adolescents' perspectives, and reported that the majority of participants reported having either constant relationship with their parents.

Concerning percentage distribution of the studied students regarding to their total level of the parent-adolescent communication pattern the current study illustrated that, more than two thirds of the studied students had moderate level total parent-adolescent communication scale, while more than one fifth of them had poor level of total parent-adolescent communication and minority of them had good level of total parent-adolescent communication. This may be due to the good family environment and positive support for adolescents. Also, this may be due to the nature of the relationship between students and their parents and the family social culture.

This result was incompatible with **Liu et al., (2019)**, they studied perceived Parent-adolescent communication and pathological internet use among Chinese adolescents: A moderate mediation model, and found that about two thirds of the students reported no communication with parents. This result was different with **Nguyen et al., (2022)**, they found that the majority of participants had a good relationship with parents and high level of communication about all topics, except for pocket money issues.

Regarding correlation matrix between total the Bergens' Facebook Addiction Scale ,total Instagram addiction scale, total adolescent relationship scales, and total

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parent-adolescent communication scale the present study illustrated that, there was high statistically significant positive correlation between Facebook Addiction and Instagram addiction. There was no statistically significant correlation between Facebook Addiction, adolescent relationship also, between Facebook Addiction and parent-adolescent communication. Furthermore, there was no statistically significant correlation between adolescent relationship and parent-adolescent communication. In addition, there was no statistically significant correlation between parent-adolescent communication and Instagram addiction, as well as there was no statistically significant correlation between adolescent relationship and Instagram addiction. This may be due to stable family climate, parents respect and setting certain times to browse Facebook and Instagram.

This result was incompatible with **Azizi et al., (2019)**, they studied the relationship between social networking addiction and academic performance in Iranian students of medical sciences: a cross-sectional study, and showed that the overuse of social networks affects the social life of individuals. This result also disagreed with and found that adolescents with **Li et al., (2021)**, they studied Parent-adolescent communication, school engagement, and internet addiction among Chinese adolescents: The moderating effect of rejection sensitivity, and showed that positive parent-adolescent communication showed more school engagement, which in turn relates to less Internet addiction.

Conclusion

Nearly half of the studied students have moderate level of facebook addiction and more than three quarters of the studied students have mild level of instagram addiction and less than three quarters of them have fair level of the total adolescent relationship, while more than

two thirds of the studied students have moderate level of total parent-adolescent communication scale. Also, it is observed that, there was high statistically significant positive correlation between Facebook Addiction and Instagram addiction. There was no statistically significant correlation between Facebook Addiction, adolescent relationship also, between Facebook Addiction and parent-adolescent communication. Also, In addition, there was no statistically significant correlation between parent-adolescent communication and Instagram addiction, as well as there was no statistically significant correlation between adolescent relationship and Instagram addiction.

Recommendations

Recommendations for students:

- Early detection of social media internet addiction for preventing health hazards of internet social media addiction and early treatment if needed.
- Hold workshops to increase awareness and improve healthy practice of the internet social media use among students and its negative impact.
- Brochures should be printed to increase awareness about the negative effect of internet social media addiction and distribute it to schools and institutes.

Recommendations for families:

- Advertise the role of family's counseling centers through the media to assist parents and teach them how to build successful relationships with their children.
- Improving a safe and secure family environment to maintain intimate communication.
- Brochures should be printed to increase parents' awareness about the danger of poor communication with their children.

Recommendations for society:

- Provide media programs to educate society about the risks of social media addiction on students particularly.
- Adequate social and peer support may be an important factor for decreasing the risks of social media addiction and improving quality of practicing internet social media usage.
- Providing counseling centers or psychiatric clinics in the schools and institutes for early detection of students with any psychological problems.

Recommendations for further research:

- Replication of the current study on a larger probability sample and on both sexes, male and female is highly recommended to achieve generalizable results.
- More studies should be conducted on the same subject in more schools, institutes and universities, to find out the general common factors that cause internet social media addiction and find the propitiate solutions to reduce these causes.
- Further research to study the effect of gender on the internet social media addiction is also recommended.

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العلاقة بين إدمان وسائل التواصل الاجتماعي عن طريق الإنترنت وأنماط الإتصال بين المراهقين

نورا فيصل يوسف- منى حسن عبدالعال - فتحية سعيد سيد

في السنوات الماضية إعتد الناس على التواصل المباشر وجهًا لوجه ولكن حديثًا تأثر التواصل بشكل كبير بمنصات التواصل المختلفة عبر الإنترنت وأصبحت عامل رئيسي في إعادة بناء العلاقات الإنسانية. لذلك هدفت هذه الدراسة إلى تقييم العلاقة بين إدمان وسائل التواصل الاجتماعي عبر الإنترنت وأنماط التواصل بين المراهقين. وتم استخدام تصميم وصفي إرتباطي لتحقيق هدف الدراسة. أجريت هذه الدراسة في المعاهد الفنية للتمريض بمدينة بنها. وتم استخدام عينة ملائمة من طالبات المعهد الفني للتمريض ببنها للإناث ومعهد التأمين الصحي الفني للتمريض إناث ببنها وشارك في هذه الدراسة ١٧٠ طالبة من إجمالي ٣٢٠ طالبة. وقد ظهرت النتائج أن حوالي ٥٠,٦٪ من الطالبات الذين شملتهم الدراسة لديهم مستوى معتدل من إدمان الفيسبوك، ٧٨,٢٪ منهم لديهم مستوى بسيط من إدمان الإنستجرام، ٧١,٨٪ لديهم مستوى معتدل في علاقات المراهقين بينما ٦٨,٢٪ لديهم مستوى متوسط في التواصل مع الوالدين. الإستنتاج: كشفت الدراسة الحالية أنه لا توجد علاقة ذات دلالة إحصائية بين إدمان الفيسبوك وعلاقة المراهقين وأيضًا بين إدمان الفيسبوك والتواصل بين الوالدين والمراهقين. كما أنه لا توجد علاقة ذات دلالة إحصائية بين التواصل بين الوالدين والمراهقين وإدمان الإنستجرام ، فضلاً عن عدم وجود علاقة ذات دلالة إحصائية بين علاقة المراهقين وإدمان الإنستجرام. وأوصت الدراسة بتقديم برامج إعلامية لتوعية المجتمع بمخاطر إدمان وسائل التواصل الاجتماعي على الطلاب بشكل خاص.