The Silent Distractor: Phubbing's Impact on Aggressive Behavior and Academic Performance among Nursing Students: A Descriptive Correlational Study

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ABSTRACT

Background: Smartphone overuse has changed social interactions, leading to "phubbing," where devices are prioritized over personal connections. Online exposure to hostile content can harm emotional well-being and increase aggression, while excessive use also contributes to distraction and lower academic performance. **Aim of the study:** This study aimed to assess the effects of the phubbing phenomenon on aggressive behavior and academic performance among nursing faculty students. **Subjects and methods: Research design:** A descriptive correlational design was conducted in the current study. **Setting:** The study was conducted at the Faculty of Nursing, Zagazig University, Zagazig City, Sharkia governorate, Egypt. **Subject**: A cluster sampling approach was used. The study subjects included a multistage sample of 356 participants of nursing students. **Tools of data collection:** a socio-demographic questionnaire, the Generic Phubbing Scale, the Buss-Perry Aggression Questionnaire, and the Academic Performance Scale. **Results:** The findings revealed a significant relation between phubbing and the key study variables. Increased smartphone and social media use were positively associated with higher levels of physical and verbal aggression, anger, hostility, and overall aggression. Conversely, phubbing was negatively correlated with academic performance, as indicated by students' recent grades and scores on the Academic Performance Scale. Students with lower academic performance exhibited significantly higher levels of phubbing. **Conclusion:** This study highlights a significant association between phubbing, increased aggression, and decreased academic performance among nursing students. **Recommendations:** Implementing digital well-being workshops that promote responsible smartphone use, time management, and digital detox strategies.

Keywords: Academic performance, Aggressive behavior, Nursing students, Phubbing phenomenon.

Introduction

Phubbing, a term that combines the words "phone" and "snubbing," describes the act of focusing on a smartphone rather than making eye contact during a conversation **(Al-Saggaf and O'Donnell, 2019).** This behavior, which prioritizes digital engagement over face-to-face communication, can lead to feelings of being ignored or snubbed, resulting in a disruption of social harmony **(Kaczmarek, Behnke and Dżon, 2019).**

The consequences of phubbing extend beyond immediate social discomfort; when individuals engage in phubbing, they often consume various forms of online content, some of which can be aggressive in nature. Exposure to such aggressive content, whether through violent games, social media conflicts, or other forms of online interaction, can influence the phubber's behavior, potentially leading to aggression **(Geoffrion et al., 2022).** The impact of phubbing and the overuse of smartphones is particularly alarming for nursing students, who must remain vigilant and focused during clinical training. Constant interruptions from smartphones can lead to reduced productivity and effectiveness, which, in turn, may adversely affect their academic performance, often assessed through standardized test scores, graduation rates, and classroom achievements **(Çelik and Anderson, 2021; Tanil and Yong, 2020).**

Additionally, the characteristics of the internet, including anonymity, can exacerbate these issues by fostering negative thoughts, emotions, and behaviors, further contributing to aggressive conduct and other detrimental effects on both social interactions and academic achievements **(Zhang et al., 2022).**

Significance of the study

The problematic use of smartphones, characterized by phubbing, can lead to various adverse outcomes, including disruptions to sleep, heightened aggression, diminished academic performance, and the experience of negative emotions **(Zarei, 2021).** Notably, research has shown a statistically significant correlation between smartphone addiction and the manifestation of aggressive behaviors **(Karaoglan Yilmaz, Avci and Yilmaz, 2023).** Moreover, university students grappling with problematic smartphone use often exhibit antisocial behaviors, face difficulties in peer relations, and show poorer academic performance, potentially leading to involvement in cyberbullying and other negative activities **(Zarei, 2021; Achangwa et al., 2023).** For instance, research conducted in Egypt identified a smartphone addiction rate of 59.57% among university students **(Okasha et al., 2022).**

Given the widespread prevalence of smartphone addiction and its associated consequences, this study aimed to explore the relationship between phubbing, aggressive behavior, and academic performance among nursing faculty students by examining the sociodemographic factors associated with phubbing behavior and assessing whether there is a correlation between phubbing behavior, aggression, and academic performance in this population.

Aim of the study:

This study aimed to assess the effects of the phubbing phenomenon on aggressive behavior and academic performance among nursing students.

Research questions:

- What is the effect of the phubbing phenomenon on aggressive behavior among nursing students?
- What is the effect of the phubbing phenomenon on academic performance among nursing students?

Subjects and methods:

Research design

A descriptive correlational design was conducted. A descriptive correlational design is a quantitative research method that aims to describe the relationship between two or more variables without manipulating them or establishing cause-and-effect connections. In this design, researchers observe and measure variables as they naturally occur to understand how they are associated or co-vary, typically using statistical tools like correlation coefficients to quantify the strength and direction of these relationships **(Devi et al., 2022).**

Research setting

The study was conducted at the Faculty of Nursing, Zagazig University, known for its comprehensive academic programs designed to cultivate skilled nursing professionals. The faculty offers a diverse array of specialized programs aimed at meeting the educational requirements of a substantial student population. These programs encompass various nursing specialties, providing students with theoretical knowledge and practical training essential for their professional development. With a total student enrollment of 4,507, the faculty caters to a significant number of aspiring nursing practitioners, providing them with state-of-the-art facilities for both theoretical instruction and practical training.

Subjects

The study sample comprised undergraduate students from the first through fourth academic levels at the Faculty of Nursing, Zagazig University, aged between 18 and 25 years.

Sample technique

A cluster sampling approach was utilized, wherein the population is divided into groups or clusters, typically based on geographic or organizational boundaries. A random selection of entire clusters is then made, and all individuals within the selected clusters are included in the sample. This method is often employed when conducting a simple random sample across the entire population is impractical or cost prohibitive.

Inclusion criteria:

The participants in the study were required to meet the following criteria: Willingly consented to participate in the research, aged between 18 and 25 years, encompassing both males and females, having access to a smartphone, and the duration of using a smartphone per day.

Exclusion criteria:

Students suffer from psychological disorders, epileptic seizures, and aggressive behavior.

Sample size

The total population for this study consisted of 4,507 students. Using Stephen Thompson's

$$n = \frac{N \times p(1-p)}{\left[\left[N-1 \times \left(d^2 \div z^2\right)\right] + p(1-p)\right]}$$

equation, the sample size was calculated as follows:

N represents the size of the population.

Z stands for the standard score, and for a significance level of 95%, it is set at 1.96.

d indicates a 5% error margin.

P signifies the presence of the phenomenon in the population at a rate of 50%.

Based on these parameters, the required sample size was calculated to be 356 students.

Tool for data collection:

To gather the main sample for the study, questionnaires were used during the break between classes. The study's data were gathered using four different tools. These included a Socio-demographic data sheet, Generic Phubbing Scale, Academic Performance Scale, and Buss-Perry Aggression Questionnaire.

Tool I: Socio-demographic data questionnaire

Part I: Close-ended questions:

This section of the questionnaire included questions about age, gender, academic year,

residence, marital status, parents' level of education, birth order, and academic performance.

Part II: Mobile use:

It includes smartphone use time per day/hour, social media use time/day, 1st thing to do in the morning, type of internet access, the purpose of using a smartphone, can you abstain from using your mobile phone and fulfill your duties for one day, and mobile use attitude.

Tool II: Generic Phubbing Scale:

Chotpitayasunondh and Douglas (2018) developed this scale as a measurement tool to evaluate phubbing behavior. The scale includes 15 items, rated on a 7-point Likert scale ranging from 1 (Never) to 7 (Always). It consists of four subscales: Nomophobia (NP), Interpersonal Conflict (IC), Self-Isolation (SI), and Problem Acknowledgment (PA). This entails that they frequently use their smartphones or other mobile gadgets in an arrogant or inconsiderate manner toward others. Low Generic Phubbing Scale ratings, on the other hand, would indicate that phubbing behavior is less frequent or intense. This indicates that people with low scores are more focused and less prone to engage in phubbing.

Scoring system of Generic Phubbing Scale (GPS):

The total score for phubbing is derived by summing the responses to all items on the Generic Phubbing Scale, with a possible range from 15 to 105. Higher scores indicate more frequent or intense phubbing behavior, whereas lower scores suggest minimal or infrequent engagement in such behavior.

In the current study, participants were categorized based on their total GSP scores as follows:

- Low phubbing behavior: score ≤ 40
- High phubbing behavior: score > 40

Although the theoretical midpoint of the scale is 60 (given that it comprises 15 items rated on a 7-point Likert scale), the cutoff score of 40 was determined based on the median score of the actual sample responses. This data-driven threshold was used to more accurately reflect the distribution of phubbing behaviors within the studied population.

Tool III: Academic Performance Scale:

Academic Performance: Student academic performance was evaluated using this subscale, which was created by **El-ezazy, (2014).** This category consists of nine sub-items that assess behaviors such as diligently studying to gain a deep understanding of the material, achieving high grades, spacing out study sessions rather than cramming, and applying theoretical content in practical settings etc.

Key answer: In the current study, the scoring is categorized as zero = very little efficacy, 1= little, 2=moderate, 3= a lot, and 4= quite a lot.

The scoring system of the Academic Performance Scale:

0 - >60 Lower academic performance.

60 - > 120 Moderate academic performance.

120 - 180 Higher academic performance.

Tool IV: (Buss-Perry Aggression Questionnaire):

This scale, developed by Buss and Perry (1992), is a 29-item self-report questionnaire that requires respondents to rate their answers on a Likert scale ranging from 1 (Very uncharacteristic of me) to 5 (Highly characteristic of me). The BPAQ evaluates four dimensions of aggression: (1) Physical Aggression (nine items), (2) Verbal Aggression (five items), (3) Anger (seven items), and (4) Hostility (eight items). The sum of these scale scores represents the aggression rating overall. Higher scores reflect more aggressive behavior.

The scoring system of the Buss-Perry Aggression Questionnaire:

From (1) to (2.53) score indicates lower aggressive behavior

From (2.54) to (3.18) score indicates moderate aggressive behavior

From (3.15) to (5) score indicates higher aggressive behavior.

Validity and reliability:

To ensure their unique validity, the tools were translated into Arabic using a translation and reverse translation methodology. Five academic staff members from the faculty of nursing at Zagazig University (specializing in psychiatric nursing) were consulted to assess the content validity of the instruments. They thoroughly reviewed the instruments for clarity, relevance, comprehensiveness, comprehensibility, and ease of use. Their suggestions and guidance were taken into consideration.

Tools	Items	Cronbach's Alpha
Generic phubbing scale	15 items	0.899
Academic Performance	9 items	0.766
Buss- Perry Aggression Questionnaire	29 items	0.869

Regarding reliability, the instruments' reliability was assessed using Cronbach's alpha test within the Statistical Package for Social Science (SPSS), version 23. The results demonstrated a strong level of reliability, as follows:

Field work

The preparatory phase

When the study was permitted to proceed, the researchers gathered data on the population sizes of each sample being examined. After that, a meeting with the vice deans in charge of student affairs and education at the nursing faculty was scheduled. The researchers gave a thorough explanation of the study's goals, methods, and data collection forms at the meeting. The four tools used in the study were evaluated and updated by a group of five specialists to verify content validity. The tools, a cover letter, and an information sheet outlining the goals of the study were given to the experts along with the tools.

Assessment phase

Before interacting with the participants, the researchers introduced themselves, obtained verbal consent, and clearly explained the study's purpose, key aspects, and importance. They highlighted the confidentiality and security of all collected information, assuring participants it would be used solely for valid scientific research. Additionally, the researchers provided a detailed explanation of the data collection process, noting that it would involve the use of four distinct instruments.

The first set of tools contained sociodemographic data sheets with information on age, sex, grades, parental education, and individual occurrences of the phubbing phenomenon. The second was a generic phubbing scale, the third tool examined academic performance. The fourth tool measured aggression levels using the Buss-Berry aggression scale.

The study's participants were advised to carefully read each item and choose the appropriate response by checking the box (√) next to the category that is related to them.

Participants in the pilot study completed all the assessment items in an average of 25 to 30 minutes. The socio-demographic characteristics sheet took five minutes to complete, the generic phubbing scale took ten minutes, the academic performance scale took five minutes, and the Buss Berry aggression questionnaire took ten more minutes.

Following the completion of data collection, the researchers and a statistics expert carried out comprehensive checks to ensure data completeness before beginning to score the participants' responses.

Pilot study

A pilot study was conducted on 10% of the students in the study (36 participants). This preliminary phase aimed to evaluate the feasibility of the research design, methodologies, and procedures before implementing the study on a larger scale. Participants were asked to complete the questionnaire and provide feedback on any unclear or challenging items, allowing researchers to identify potential issues and refine the study accordingly. To enhance clarity and comprehension, necessary modifications were made by rephrasing and simplifying the language. The students involved in the pilot study were not included in the final sample for the main study.

Administration and ethical considerations

The study proposal was accepted by the Zagazig University Faculty of Nursing's Post Graduate Committee (REC) with the code of **(ZU.Nur.REC#:0009)**. Written informed consent was secured from all participants after a thorough explanation of the study's purpose. Participants were assured of their right to decline participation or withdraw at any time without any negative consequences. Additionally, confidentiality and anonymity of their information were strictly maintained throughout the study.

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Statistical analysis

The collected data were analyzed **statistically using SPSS (Statistical Package for Social Sciences) version 27.0 (IBM, 2020)**. Qualitative data were presented as frequencies and percentages, while quantitative data were expressed as mean ± standard deviation (SD), median, and range. Statistical analyses included the Mann-Whitney (MW) test, Kruskal-Wallis test, and Spearman's correlation coefficient. The significance threshold for all statistical tests was set as follows: a p-value of <0.05 was considered statistically significant, while a p-value of <0.001 was regarded as highly significant **(Kirkwood and Sterne, 2003).**

Results

Table 1 indicates that the students had an average age of 20.5 years, with ages ranging between 18 and 25. Females made up most of the participants at 73.6%. The largest portion of students (33.1%) was in their third year of study. Most of the students (93.8%) were single. Regarding parental education, 43% of mothers were literate at the basic level (able to read and write), while 52.5% of fathers held a university degree. In terms of birth order, 49.7% of students were middle children in their families. As for academic performance in the previous year, 42.4% achieved a "very good" grade.

Table 2 reveals that the students used their smartphones an average of seven times a day, spending approximately six hours daily on their devices, and accessed social media about four times per day. Additionally, 36.2% reported that checking their phones was the first thing they did each day. Regarding internet access, 80.3% used landline connections. Notably, 46.6% indicated they were unable to go a full day without using their phones. Furthermore, 77.5% cited social media as the primary reason for their smartphone use.

Table 3 demonstrates that the studied students' median score on the Generic Phubbing Scale, which ranged from 15 to 105, was 45. The whole Buss-Perry Aggression Questionnaire varied from 32 to 140.

Table 4 revealed a statistically significant positive association between Phubbing and smartphone use time, hours, social media use time, physical aggressiveness, verbal aggression, rage, hostility, and overall, the Buss-Perry questionnaire on aggression. Additionally, there was a statistically significant negative association between Academic Performance and Phubbing.

Table 5 demonstrates that when comparing students who passed and failed to other students, there was a statistically significant rise in Phubbing. Additionally, compared to other students, there was a statistically significant rise in Phubbing among students with lower academic Performance.

Table 6 shows that the total Buss-Perry Aggression questionnaire, total academic score, and total time spent on social media were all significant predictors of phubbing.

Figure 1 shows that 39.90 had low phubbing and 60.10 had high phubbing.

Figure 2 shows that 70% of respondents on the Academic Performance Scale were intermediate.

Discussion

Over two-thirds of the participants in the study had average or below-average academic performance. This may be because the act of phubbing can lead to distractions and reduced focus; so, if students are frequently engaged in phubbing, they might find it challenging to concentrate on their studies, resulting in reduced focus and lower academic performance.

In the same line, the amount of phubbing among students and their judgments of academic success, according to **(Baranova, Kobicheva and Tokareva, 2023),** who investigated "the impact of phubbing on students' performance", are negatively and strongly associated. As a result, it is proven that such a phenomenon has a detrimental effect on academic performance, drawing attention to the issue.

In the current study, there is a significant association between phubbing and the Total Puss Perry Aggressiveness Scale, physical aggressiveness, verbal aggression, rage, and hostility. There is also a positive correlation between phubbing and social media use. This may be interpreted as the person's mental and internal stability being compromised by extended excessive use of smartphones and exposure to content containing violent scenes for long periods, as happened in the recent period of bloody conflicts in Gaza, which alters his mood and manifests in his behavior and outer appearance, whether verbally or physically. This results in the person's natural curiosity for exploring and learning about the world around them. Additionally, mood swings and a loss of self-control make the person gradually hostile, making it harder to comprehend him, especially when he exhibits angry outbursts.

According to the same study **(Parmaksız and Kılıçarslan, 2021),** physical aggression had a mean of approximately more than one-tenth and a standard deviation of approximately five points fifty-nine, while verbal aggression had a mean of approximately less than one-tenth and a standard deviation of three points seventy-four. This starts a phone addiction loop.

Similarly, **(Rachman, 2021),** who investigated "the effect of social media addiction on student phubbing behavior", found that there is a positive relationship between Phubbing and addiction to social media. The constant availability and allure of social media content may contribute to individuals feeling the need to check their phones frequently, further exacerbating phubbing behaviors.

Furthermore, it has been shown by researchers **(Parmaksız and Kılıçarslan, 2021),** who examined "aggression and emotional intelligence as predictors of phubbing", that the aggressiveness of adults affected their phubbing behavior. The regression study revealed that the aggression sub-

dimensions of physical aggression, verbal aggression, hostility, and rage were moderately favorable predictors of phubbing behavior.

Comparing students who do not pass/pass to the other students, there was a statistically significant rise in the Generic Phubbing Scale in the current study. This can be because not pass/pass students and other students have different study and time management practices, which affects how they use their smartphones. In a similar vein, **(Baranova, Kobicheva and Tokareva, 2023),** corroborated the detrimental impact of phubbing on students' performance by finding that there was a rather high degree of phubbing among students.

Comparing students with lower academic performance to other students, there was a statistically significant rise in the Generic Phubbing Scale in the current study. This might be because utilizing smartphones or other electronic devices excessively during study time causes distractions from academic duties.

Similarly, researchers **(Abramova et al., 2017),** who examined "To phub or not to phub: Understanding off-task smartphone usage and its effects in the academic environment" discovered that the number of times a student looks down at a smartphone during a lecture is negatively related to their visual attention, while the overall amount of time spent using a smartphone worsens their auditory attention. As a result, it influences how well kids do.

Additionally, **(Elbilgahy et al., 2021)** found that Internet Addiction Test (IAT) and Mobile Phone Involvement Questionnaire (MPIQ) scores were correlated with Epworth Sleepiness Scale (ESS) results and that Internet Addiction was specifically linked to subpar academic performance.

Conclusion

The study concluded that nearly two-thirds of nursing students exhibited high levels of phubbing. It also identified a strong negative relationship between phubbing and academic performance, along with positive associations with hostility and smartphone usage. Students with lower academic achievement or those who had failed showed significantly higher phubbing scores.

Recommendations

- Educational institutions should develop awareness programs to educate students on the negative impacts of excessive smartphone use and phubbing on academic performance and social relationships.
- Implementing digital well-being workshops that promote responsible smartphone use, time management, and digital detox strategies.
- Providing counseling services to support students in managing aggressive behavior and improving emotional well-being.
- Encouraging faculty members to foster interactive and engaging classroom environments that minimize smartphone distractions.
- Conducting further research to explore potential mediators and moderators in the relationship between phubbing, aggression, and academic performance.
- Developing policies that limit smartphone use in academic settings to enhance students' focus and participation.
- Promoting peer support groups and activities that strengthen face-to-face communication and social skills among students.

Authors' contributions

N.A., N.T., Y.M., M.A., and H.H. collaborated in conceptualizing the research idea and objectives, as well as in devising the research plan. N.A., Y.M., M.A., S.A., M.S.,

M.M., and N.R. participated in the data collection. N.T., H.H., and N.A. contributed to providing the scientific background for the research, while N.A., B.A., M.A., Y.M., S.A., M.S., N.R., and MM were involved in data analysis, results presentation, discussion, and comparing the findings with existing literature in the research field. They played a role in formulating research recommendations, summarizing the research, and compiling the reference list. Furthermore, they actively contributed to writing and organizing the research manuscript. All authors critically reviewed the manuscript and contributed to its finalization.

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Table (1): Frequency distribution of socio-demographic characteristics among nursing students (n=356)

Socio-demographic characteristics	**(*n*=356)**	
Age: (years) *Mean ± SD* *Range*	20.5±1.27 18-25	
Demographic characteristics	**No**	**%**
Gender:		
Female	262	73.6
Male	94	26.4
Academic Year:		
1st year (Credit hours system)	76	21.3
2nd year (Traditional system)	95	26.7
3rd year (Traditional system)	118	33.1
4th year (Traditional system)	67	18.8
Residence:		
Rural	285	80.1
Urban	71	19.9
Marital status:		
Single	334	93.8
Married	22	6.2
Mother education:		
Illiterate	39	11
Read & write	153	43
University	157	44.1
Postgraduate	7	1.9
Father education:		
Illiterate	22	6.2

Read & write	134	37.6
University	187	52.5
Postgraduate	13	3.7
Birth order:		
First	122	34.3
Middle	177	49.7
Last	57	16
Academic performance last year		
Fall	9	2.5
Pass	7	2
Good	47	13.2
Very good	151	42.4
Excellent	142	39.9

Table (2): Mean Mobile use among nursing students (n=356)

Variable	**(*n*=356)**	
Smartphone usage time/day:		
Mean ± SD	8.6±5.1	
Median (Range)	7 (1-25)	
Smartphone usage hours/day:		
Mean ± SD	6.92±3.46	
Median (Range)	6 (1-24)	
Social media usage time/day:		
Mean ± Sd	5.18±3.64	
Median (Range)	4 (0-24)	
Variable	**No**	**%**
1st thing to do in the morning:		
Using bathroom	119	33.4
Eating breakfast	4	1.1
Pray	102	28.7
Checking smartphone	131	36.8
Type of internet:		
Landline	286	80.3
Mobile data	70	19.7
Can you spend a day phone-free and stay productive?		
No	166	46.6
Yes	190	53.4
Cause of use:		
Social media	276	77.5
Learning	255	71.6
Games	69	19.4
Movies & books	7	2

SD: Standard deviation

Table (3): Mean and standard deviation of Phubbing Subscale, performance, and aggression among nursing students (n=356)

Variable	(*n*=356)
Nomophobia (NP) *Mean ± SD* *Median (Range)*	 16.34±5.44 16(4-28)
Interpersonal Conflict (IC) *Mean ± SD* *Median (Range)*	 10.56±5.53 9(4-28)
Self-isolation (SI) *Mean ± SD* *Median (Range)*	 10.36±6.09 9(4-28)
Problem Acknowledgement (PA) *Mean ± SD* *Median (Range)*	 9.95±4.51 9(3-21)
Phubbing: *Mean ± SD* *Median (Range)*	 47.21±17.48 45 (15-105)
Academic performance *Mean ± SD* *Median (Range)*	 19.33±5.67 19(0-34)
Physical Aggression *Mean ± SD* *Median (Range)*	 *22*.05±5.24 22 (9-45)
Verbal Aggression *Mean ± SD* *Median (Range)*	 10.74±3.83 10.5(5-25)
Anger *Mean ± SD* *Median (Range)*	 20.38±5.54 20(7-35)
Hostility *Mean ± SD* *Median (Range)*	 19.12±5.42 19(7-35)
Total Buss-Perry Aggression Questionnaire *Mean ± SD* *Median (Range)*	 72.29±15.82 71(32-140)

SD: Standard deviation

Table (4): Aggressive behavior and performance among nursing students (n=356)

Variable	Phubbing (n=356)	
	r	P
Age:	-0.05	0.31 NS
Degree last year:	-0.39	<0.001**
Smartphone usage time/day:	0.62	<0.001**
Smartphone usage hours/day:	0.49	<0.001**
Social media usage time/day:	0.60	<0.001**
Academic Performance Scale:	-0.35	0.004*
Physical Aggression	0.48	<0.001**
Verbal Aggression	0.47	<0.001**
Anger	0.56	<0.001**
Hostility	0.58	<0.001**
Total Buss-Perry Aggression Questionnaire	0.64	<0.001**

r: Spearman's correlation coefficient test NS: Non-significant (P>0.05)
** Significant (p<0.05) ** Highly significant (P<0.001)*

Table (5): Relation between Phubbing and demographic data of the studied group

Variable		No	Phubbing		Test	P
			Median	Range		
Sex:	*Female*	262	45	15-105	MW	0.42
	Male	94	47	19-105	0.81	NS
Year:	*1*	76	45.5	16-105	KW	
	2	95	45	15-104		
	3	118	45	19-105	1.55	0.67
	4	67	44	15-99		NS
Residence:	*Rural*	285	45	15-105	MW	0.93
	Urban	71	46	15-105	0.09	NS
Marital status:	*Single*	334	45	15-105	MW	0.24
	Married	22	50	27-99	1.18	NS
Degree last year:	*Not pass*	9	**54***	27-105		
	Pass	7	**61***	30-74	**KW**	
	Good	47	52	25-105		
	Very good	151	47	15-105	**14.39**	**0.006***
	Excellent	142	40	15-89		
Academic Performance Scale:	*Lower*	29	**58***	28-105	**KW**	
	Moderate	249	44	15-105	**9.30**	**0.01***
	High	78	44	19-105		

MW: Mann-Whitney test -KW: Kruskal-Wallis test - Significant (p<0.05) ** Highly significant (P<0.001)*

Table (6): Multivariate linear regression analysis for significant factors correlated with the Phubbing Scale among the studied group

Variables	Unstandardized Coefficients		Standardized Coefficients	t	P	95.0% CI for B	
	B	SE	Beta				
Smartphone use h/day	0.380	0.292	0.125	**2.641**	**0.04***	-0.095	1.054
Smartphone use time/day	0.500	0.163	0.146	**3.061**	**0.002***	0.179	0.821
Social media use/day	0.930	0.270	0.194	**3.439**	**0.001***	0.398	1.462
Degree in the last year	-1.365	0.908	-0.071	-1.503	0.134	-3.152	0.421
Total Academic	-0.485	0.146	-0.106	**-3.267**	**0.003***	-0.472	1.202
Physical	-0.004	0.296	-0.001	-0.013	0.990	-0.585	0.578
Anger	-0.002	0.214	-0.032	-1.926	0.075	-0.436	0.512
Verbal	-0.070	0.312	-0.015	-0.224	0.823	-0.684	0.544
Hostility	0.214	0.308	0.066	0.695	0.488	-0.392	0.821
Total aggressive	**0.394**	0.174	**0.357**	**2.266**	**0.024***	**0.052**	**0.737**

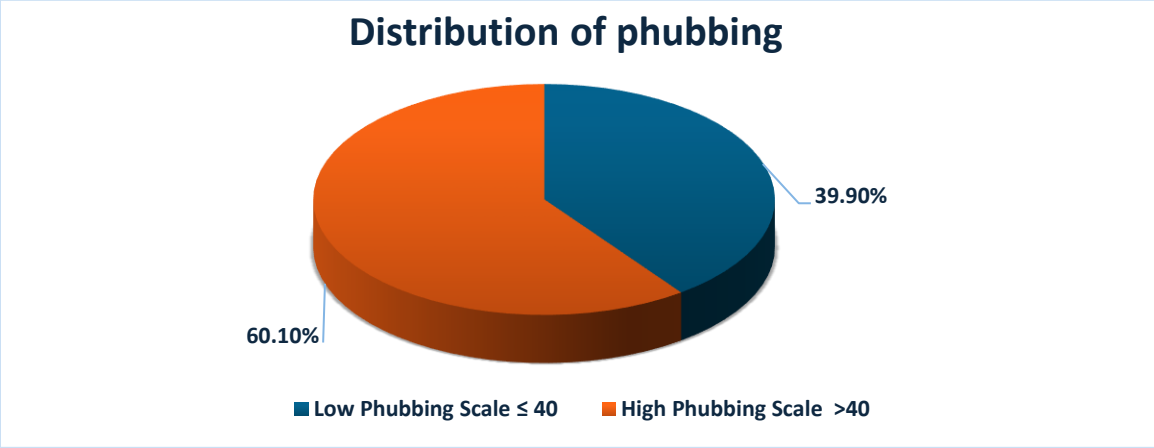

Figure (1): Distribution of phubbing among the studied sample (n=356)

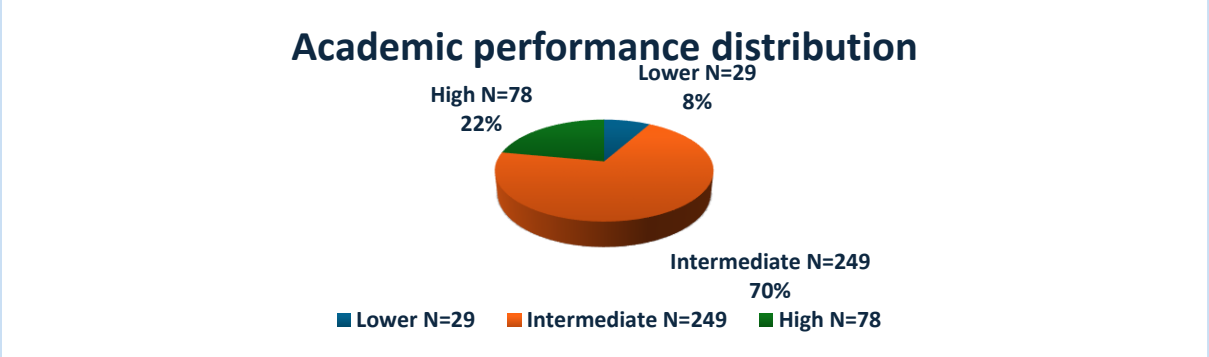

Figure (2): Distribution of academic performance among the studied sample(n=356)

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