Internet Addiction among Students in Oran's University Housing During COVID-19 Pandemic

الإدمان على الأنترنيت لدى الطلبة المقيمين بالأحياء الجامعية بوهران في ظل جائحة كورنا

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Abstract:

This study aimed to investigate the prevalence of internet addiction among university students and its extent during the COVID-19 pandemic. It also sought to determine whether there were statistically significant differences in internet addiction based on gender and major. The total sample size was 156 students who use the internet and reside in Belkaid University Housing in Oran. A descriptive approach was adopted to achieve the research objectives, and Kimberly Young's Internet Addiction Test (1996) was used as a data collection tool. After statistical analysis of the data using appropriate statistical methods, the study yielded the following results:

1.A low level of internet addiction was found among the study sample.

2.There were statistically significant differences in internet addiction attributed to gender, with females showing higher levels of addiction.

3.There were no statistically significant differences in internet addiction attributed to major.

.**Keywords**: Internet Addiction, COVID-19 Pandemic, University Student, University Housing.

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الملخص:

تهدف هذه الدراسة إلى الوقوف على حجم ظاهرة الإدمان على الأنترنيت لدى طلبة الجامعة وحقيقة انتشارها في ظل انتشار جائحة كورنا، وتحديد ما إذا كانت هناك فروق دالة إحصائيا في إدمان الأنترنيت تبعا لمتغيري الجنس والتخصص. بحيث بلغ العدد الاجمالي لأفراد عينة الدراسة (156) طالبا وطالبة ممن يستخدمون الأنترنيت ويقيمون بالحي الجامعي بلقايد بوهران، ولتحقيق أهداف البحث اعتمدت الباحثة على المنهج الوصفي الملائم لمثل هذه الدراسات، كما استخدمت مقياس إدمان الأنترنيت لكيمبيرلي يونج(1996) كأداة لجمع البيانات. وبعد المعالجة الإحصائية للبيانات باستخدام الوسائل الاحصائية المناسبة، أسفرت الدراسة عن النتائج التالية:

1-انخفاض مستوى الادمان على الإنترنيت لدى أفراد عينة الدراسة.

2-وجود فروق دالة احصائيا في إدمان تعزى إلى متغير الجنس، حيث كانت الفروق لصالح الإناث.

3-عدم وجود فروق دالة إحصائيا في إدمان الأنترنيت تعزى إلى متغير التخصص.

الكلمات المفتاحية: إدمان الأنترنيت، جائحة كورونا، الطالب الجامعي، الإقامة الجامعية.

- Introduction:

Human capital is society's most valuable asset, requiring care and attention to ensure its members can contribute effectively. Any developmental endeavor depends on individuals' physical, psychological, and mental well-being, especially the youth. Fostering well-rounded citizens with positive values, attitudes, and capabilities is essential for driving progress across all societal levels. However, individuals, with their unique sets of values, customs, social relationships, and family ties, are increasingly exposed to numerous challenges and growing threats in an era marked by rapid globalization and technological advancements, particularly with the advent of the internet.

The Internet has become a cornerstone of technological progress, attracting a wide range of social groups, including university students. It serves as a primary source of information, a vast communication platform, and a powerful tool for virtual dialogue and discussion. The internet's diverse range of websites and the use of various devices, such as desktops, laptops, and mobile phones, have facilitated widespread access.

The COVID-19 pandemic prompted governments worldwide to declare states of health emergency and impose preventive measures such as social distancing and isolation to curb the spread of the virus. Concurrently, there was a significant push towards digitalization across all aspects of life, making the Internet an integral part of daily routines. This shift was evident in the exponential increase in internet usage, as reported by media and online platforms. The internet became a haven for fulfilling needs and passing time, offering a plethora of services, programs, and applications, as well as facilitating rapid and easy communication.

A critical question arising from this situation is the potential negative impact of excessive internet use, particularly the risk of addiction.

1-Problem Statement:

Recent technological advancements have revolutionized communication and information dissemination, with the internet emerging as the world's largest network. It has connected people across the globe, facilitating the exchange of ideas, information, and experiences. However, the exceptional circumstances brought about by the COVID-19 pandemic have led to significant changes in people's habits and behaviors, further emphasizing the internet's role in various aspects of life.

The increasing reliance on the internet and the substantial amount of time spent online raise concerns about potential negative consequences for physical, mental, social, and cultural well-being. The risk of internet addiction has become a significant concern, particularly in the context of the global pandemic.

This study aims to investigate the prevalence of internet addiction among university students, who are particularly susceptible to the influence of the internet. Given the preventive measures imposed on university campuses to curb the spread of COVID-19, students residing in university housing have experienced increased isolation and free time, making them an ideal population for this study. Therefore, the research question is:

What is the level of internet addiction among students residing in university housing during the COVID-19 pandemic? Does this level vary based on the student's gender and major?

2-Hypotheses:

Hypothesis 1: The level of internet addiction among students residing in university housing during the COVID-19 pandemic is high.

Hypothesis 2: There are statistically significant differences in internet addiction among students based on gender.

Hypothesis 3: There are statistically significant differences in internet addiction among students based on their academic major.

3-Importance of the Study:

This study is significant as it investigates a pressing issue in contemporary society: internet addiction. It explores how this phenomenon can influence the cultural values and social behaviors of individuals, particularly university students who are future leaders. Understanding the prevalence and factors contributing to internet addiction among this demographic is crucial for promoting mental health and preparing students to fulfill their future roles effectively. The findings of this study can enhance awareness among social and educational institutions about the severity of this issue and inform the development of preventive measures, intervention programs, and therapeutic approaches based on the relationships between the study variables.

The study's significance is further highlighted by its timing, coinciding with the COVID-19 pandemic, which has created unique conditions that may exacerbate internet addiction.

4-Objectives of the Study:

The objectives of this study are as follows:

Objective 1: To investigate the level of internet addiction among students residing in university housing during the COVID-19 pandemic.

Objective 2: To test for statistically significant differences in internet addiction among the study sample based on gender and academic major.

Objective 3: To highlight the prevalence of internet addiction among university students, particularly in the context of the current pandemic.

5-Operational definitions:

Internet addiction:

Yaakoub and Jaafar (2014) defined it as an individual's persistent and prolonged internet browsing, prioritizing this behavior over other activities and social relationships, thus leading to noticeable social isolation(Yaakoub & Jaafar ,2014, p646). Al-Tayyar (2016) suggests that "internet addiction is a state of uncontrolled and excessive use of electronic websites, which negatively impacts an individual's normal performance of life tasks. As a result, the individual may experience psychological, behavioral, and social disturbances similar to those experienced by individuals addicted to drugs and psychotropic substances"(Al-Tayyar ,2016, p409). In this study, internet addiction is defined as a general tendency and an increasing desire that drives a university student to spend a significant amount of time browsing the internet, accompanied by an inability to resist disconnecting. Operationally, internet addiction in this study is defined by the score a student obtains on the Kimberly Young Internet Addiction Test (1998).

COVID-19 Pandemic:

The COVID-19 pandemic is a global health crisis caused by the novel coronavirus (SARS-CoV-2). Characterized by symptoms such as fever, cough, and shortness of breath, this highly contagious virus has resulted in widespread infections and fatalities. The World Health Organization declared COVID-19 a pandemic in March 2020, prompting numerous countries to implement public health measures, including lockdowns and social distancing. Operationally, the COVID-19 pandemic is defined as the period during which these measures were in place, significantly impacting daily life and societal functioning.

University Housing:

University housing refers to on-campus residential facilities provided by universities for their students. These facilities typically offer accommodation, dining services, and communal spaces.

6-Previous Studies :

Al-Farah 's Study (2004): This study aimed to investigate the prevalence of internet addiction among internet cafe patrons, examining variations based on the addict's age, gender, and socioeconomic status, as well as the duration of internet use and the types of websites visited. A voluntary sample of 336 internet users, comprising 225 males and 111

females, participated in the study. The Arabic version of the Zung scale was administered to assess addiction levels The results revealed that 23% of the sample exhibited internet addiction. The average age of internet addicts was 24 years, and they spent an average of 27 hours per week online. Pornographic websites attracted the largest proportion of addicts, accounting for 40% of the sample, followed by social networking sites with 30%. Commercial websites were the least popular among addicts, with only 10% of the sample visiting them. Furthermore, the study found that the most significant negative impacts of addiction were related to the social aspect, with the least impact on the professional aspect.

Al-Rashid's Study (2014): This study investigated the prevalence, manifestations, and associated problems of internet addiction among university students in Saudi Arabia. The sample included 166 internet-using students from Imam Muhammad bin Saud Islamic University, with 61% being male and 39% female. Kimberly Young's diagnostic questionnaire was administered. Results showed a high prevalence of internet addiction among the student sample. Significant differences were found between addicted and non-addicted students in terms of addiction manifestations and associated problems. Moreover, there were statistically significant gender differences in the types of problems experienced.

Al-Khawaja's Study (2014): This study explored the relationship between internet addiction and psychological well-being among a sample of 290 undergraduate students at Sultan Qaboos University's College of Education. The sample was randomly selected and included 150 females and 140 males. Both an internet addiction scale and a psychological well-being scale were administered. Results revealed a negative correlation between internet addiction and psychological well-being among university students. Additionally, statistically significant gender differences in internet addiction were found, with males exhibiting higher levels.

Al-Amar's study (2014): This study aimed to investigate internet addiction among students at Damascus University, Daraa Branch, considering variables such as gender, specialization, academic achievement, time spent online, and preferred websites. The study sample included 674 students from all faculties and institutes. A researcher-developed internet addiction scale was used. Results showed no statistically significant differences in internet addiction based on gender. There were also no significant differences based on

specialization, except for some differences between Arts students and students from Education, Law, Science, and Economics faculties, with Arts students showing higher levels. Social media websites were the most popular among users.

Al-Zidi's Study (2014): This study examined the relationship between internet addiction, social media use, and academic achievement among students at Nizwa University. The sample included 412 students (94 males and 318 females) across all four university faculties from the third, fourth, and fifth years after the foundation year. An internet addiction scale developed by Ahmed (2007) and a social media scale developed by the researcher was used. Results showed that 40 individuals (9.7% of the sample) were classified as internet addicts. There were no statistically significant differences in internet addiction based on gender or academic level.

Abryeam's Study (2015): This study investigated the relationship between internet addiction and feelings of alienation among students at the University of Oum El Bouaghi. The sample comprised 276 students (69 males and 180 females) from most of the university's faculties. The study used an internet addiction scale and an alienation scale. Results revealed a positive correlation between internet addiction and feelings of alienation among the sample. There were also statistically significant differences in the level of internet addiction between genders, with males showing higher levels.

Yaakoub and Jaafar's Study (2014): This study aimed to determine the level of internet addiction among individuals aged 13-17 and 19-22 years and to compare internet addiction based on gender and age. The sample consisted of 200 students from the Diyala Education Directorate and Diyala University. Kimberly Young's Internet Addiction Scale (1996) was used after verifying its reliability and validity. Results showed no internet addiction among the sample. However, there were statistically significant differences in internet addiction based on gender, with males showing higher levels. There were also significant differences based on age, with the 13-17 age group showing higher levels of addiction.

Ma'ijel and Barsim's study (2016): This study aimed to determine the level of internet addiction among university students and to compare internet addiction based on

gender and specialization. The sample consisted of 200 students (science and humanities) from the University of Baghdad. Kimberly Young's Internet Addiction Scale (1996) was used. Results showed a moderate level of internet addiction among the sample. There were no statistically significant differences in internet addiction based on gender, but there were significant differences based on specialization, with humanities students showing higher levels.

Perjan et al.'s study (2016) This study aimed to investigate the levels of internet use and addiction among students at the University of Dohuk. A random sample of 1077 students was selected. The study relied on an internet addiction scale. The results indicated that 98.4% of the students at the University of Dohuk were Internet users and 72.3% were addicted to the Internet. Of these, 17.8% had mild addiction, 24.3% had moderate addiction, and only 3.9% had severe addiction. Although internet addiction was more prevalent among males and urban residents, severe addiction was more common among male students in humanities faculties.

Al-Jabari and Mohammed's study (2019): This study aimed to explore internet addiction and its relationship to achievement motivation among students in the College of Arts at the University of Kirkuk. The study also aimed to identify differences in internet addiction among students based on gender and hours of internet use. A sample of 100 students (40 males and 60 females) was used. The study relied on Al-Astl's (2011) internet addiction scale and Mansour's (1986) achievement motivation scale. The results showed a below-average level of internet addiction. There were no statistically significant differences in the level of internet addiction among students based on gender or hours of internet use.

7-Methodology

7-1-Research Methodology: Given the nature of this study, a descriptive research method was adopted. The researcher collected data and reviewed previous studies on internet addiction. The Kimberly-Young Internet Addiction Test (1998) was used, as its items were designed to align with the research objectives.

7-2-Sample: The study sample consisted of 156 undergraduate students residing in the Belkaid University housing during the academic year 2019-2020. These students were selected using a random sampling technique. The average age of the sample was 22.16 years

with a standard deviation of 2.423. The following table presents the distribution of the sample according to some variables.

Table N° 1: Characteristics of the Study Sample Based on Selected Variables

Variable	Category	Frequency	Percentage
Gender	Male	80	%51.28
	Female	76	%48.72
Total		**156**	**%100**
Major	Science	58	%37.17
	Humanities	98	%62.83
Total		**156**	**%100**
Daily Internet Usage	Less than 2 hours	2	%1.26
	2-4 hours	40	%25.31
	More than 4 hours	114	%73.41
Total		**156**	**%100**

Table N°1 reveals that 48.72% (76 individuals) of the sample were female, while 51.28% were male, indicating a relatively equal gender distribution. Moreover, the majority of participants (62.83%, or 98 individuals) were from humanities disciplines, compared to 37.17% from science disciplines. Notably, the least frequent response regarding internet usage was 'less than two hours per day' at 1.26%. The category of 'two to four hours per day' was reported by 25.31% (40 individuals), while the most common response was 'more than four hours per day, reported by 73% (114 individuals) of the sample.

7-3-Research Instrument:

This study employed the Internet Addiction Test developed by Kimberly Young, adapted from the Gambling Addiction Scale to suit internet usage, as employed in Rashid's study (2014). The scale consists of 20 items that measure the problems arising from excessive internet use. Respondents indicated their agreement with each item by selecting one of six options: never, rarely, sometimes, often, very often, and always. These options

correspond to scores ranging from 0 to 5, respectively. The total scale score ranges from 0 to 100.

The scale's content validity was established using two methods. First, content validity was assessed through expert judgment. A panel of psychology and education professors evaluated the clarity of the items and their suitability for measuring the intended construct. They also provided suggestions for improvement. Second, criterion-related validity was assessed by calculating a t-test to determine differences between extreme groups. A cutoff score of 27% was used to identify these extreme groups.

Table N°2: Results of the Independent Samples t-test

Extreme Levels	Mean	Standard deviation	t-value	Significance level	Assessment
Upper	77.625	8.399	7.956	0.000	significant
Lower	40.875	10.006			

Table N°2 reveals that the mean score of the high group was significantly higher than that of the low group. The calculated t-value was 7.956, which was statistically significant at the 0.01 level. This finding supports the validity of the scale.

The internal consistency reliability of the scale was assessed using Cronbach's alpha, which yielded a coefficient of 0.83. This indicates that the scale has a high degree of internal consistency reliability.

7-4-Results and Discussion:

Hypothesis 1:

The first hypothesis stated that "the level of internet addiction among students residing in university housing during the COVID-19 pandemic is high." To test this hypothesis, the mean and standard deviation of the sample's responses to the Internet Addiction Scale were calculated. Subsequently, a one-sample t-test was conducted to determine if there was a significant difference between the sample mean and the hypothesized population mean. The results are presented in Table N°3.

Table N°3: Results of One-Sample t-test

Sample	Mean	Standard deviation	Hypothesized mean	t-value	Significance level	Assessment
156	42.269	14.300	50	-4.774	0.000	Low

The results presented in Table N°3 indicate that the mean score of the university students on the scale was 42.269, with a standard deviation of 14.300. This is lower than the hypothesized mean of 50, suggesting a low level of internet addiction. A one-sample t-test conducted to determine the significance of this difference revealed a statistically significant t-value at the 0.01 level, confirming that the level of internet addiction among university students is indeed low.

This finding can be attributed to the unique circumstances faced by university students during the COVID-19 pandemic, where reliance on the internet became a necessity for various tasks and to meet most educational needs. The widespread adoption of online learning platforms by universities made the Internet the primary means of interaction with faculty and staff. Although a majority of students in the sample reported using the internet for more than four hours, their levels of addiction were low. This suggests that internet use for students has become a necessity rather than a means of seeking pleasure or gratification, leading to a reduction in symptoms of addictive behavior. As Al-Jabari and Mohammed (2019) noted, Excessive use is often confused with addiction based solely on hours of use.

Additionally, the unique living conditions in university dorms during the pandemic, characterized by social distancing and reduced social gatherings, likely contributed to this finding. With increased free time, students may have turned to the internet as a means of passing time and accessing a wide range of content at minimal cost.

Furthermore, the diverse ways in which university students use the internet, including educational, recreational, and personal purposes, may have prevented the development of addiction. The variety of websites, applications, and services available online may have prevented students from becoming overly attached to any single aspect of the internet, as they were constantly switching between different activities and exploring new content.

These findings align with the studies of Yaakoub and Jaafar (2014) and Al-Jabari and Mohammed (2019). However, they contradict the findings of Ma'ijel and Barseem (2016), who reported moderate levels of internet addiction among students, and Perjan et al. (2016), who found high rates of internet addiction among students.

Hypothesis 2:

The second hypothesis stated that "there is a statistically significant difference in internet addiction levels among students based on gender." To test this hypothesis, an independent samples t-test was conducted to compare the scores of male and female participants on the internet addiction scale. The results are presented in Table N°4.

Table N°4: T-Test Results for Internet Addiction by Gender

Variable	Category	Sample	Mean	Standard deviation	t-value	Significance level
Internet addiction	Male	80	39.125	14.616	-2.032	0.05
	Female	76	45.578	13.359		

Table N°4 reveals a statistically significant difference in internet addiction levels between males and females, as indicated by a t-value of 2.032, which is significant at the 0.05 level. Female participants exhibited a higher mean score on the internet addiction scale (M = 45.578, SD = 13.359) compared to male participants (M = 39.125, SD = 14.616). These findings suggest that females are more susceptible to internet addiction. This gender disparity may be attributed to societal expectations and gender roles that often restrict women's social interactions, leading them to seek solace and escape in the virtual world. Conversely, males, who are generally more socially outgoing and engaged in real-world activities, may be less prone to developing internet addiction.

These results diverge from the findings of Al-Amar (2014), Al-Zidi (2014), Ma'ijel and Barseem (2016), and Al-Jabari and Mohammed (2019), which did not find significant gender differences in internet addiction. However, they align with the studies of Al-Khawaja (2014), Yaakoub and Jaafar (2014), Abryeam (2015), and Perjan et al. (2016), which demonstrated significant gender differences but with males exhibiting higher levels of addiction."

Hypothesis 3:

The third hypothesis posited that "there is a statistically significant difference in internet addiction levels among students based on their academic major." To test this hypothesis, an independent samples t-test was conducted to compare the scores of students from different majors on the internet addiction scale. The results are presented in Table 5.

Table N°5: T-Test Results for Internet Addiction by Major

Variable	Category	Sample	Mean	Standard deviation	t-value	Significance level
Internet addiction	Humanities	98	42.48	14.695	0.179-	Non-significant
	Science	58	41.86	13.854		

Based on the results in Table N° 5, the mean score for students in the humanities major on the internet addiction scale was 42.48, with a standard deviation of 13.359. For students in science majors, the mean score was 41.86, with a standard deviation of 13.854. The t-value was calculated as 0.859, which is not statistically significant at the 0.05 level. This indicates that there is no significant difference in internet addiction levels between students in science and humanities majors. This result can be explained by the similarities in the conditions and circumstances faced by students in both fields, both within and outside the university. The regulations governing students, as well as the services provided to them, are generally the same for both science and humanities students. Consequently, the ease and opportunities for internet access and use are similar for both groups, leading to comparable levels of psychological dependence and addiction. This finding is consistent with Al-Amar's (2014) study, which also found no significant differences in internet addiction based on academic major, except for some differences between humanities students and those in education, law, science, and economics. However, it contradicts the findings of Ma'ijel and Barseem (2016), who reported significant differences in internet addiction based on major, with humanities students showing higher levels of addiction.

-Recommendations: Based on the findings, the following recommendations are suggested:

1-Activate recreational activities and encourage students to participate in them to channel their energy and time into healthy pursuits, while adhering to COVID-19 prevention measures.

2-Educate students about the importance of using the internet and related devices healthily and appropriately to maintain physical and mental well-being and avoid addiction.

3-Conduct further research on larger samples of university students to better understand internet addiction during and after the pandemic and to develop effective guidance programs to help addicted individuals overcome their behavioral and social problems.

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