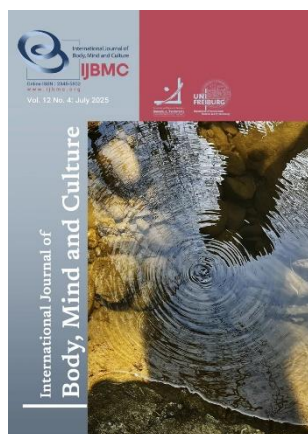1 MSc. Community Health Nursing, College of Nursing, University of Babylon.
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Prevalence and Demographic Correlates of Social Media Addiction among Secondary School Students

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ABSTRACT

Objective: The excessive use of social media has become a social habit in today's world, and social media addiction affects people worldwide. The use of social media platforms has increased dramatically in recent years, particularly among young people and teenagers. Social media usage is a global consumer phenomenon that has experienced exponential growth in the last few years. The goal of this study is to assess the prevalence of social media addiction among secondary school students and to examine the association between social media addiction and specific demographic characteristics, including age, gender, grade, residence, and family monthly income.

Methods and Materials: A Descriptive cross-sectional study design was employed to conduct this study, aiming to achieve the objectives. An assessment approach, using questionnaire items, was conducted to assess the prevalence of social media addiction among secondary school students. The study was conducted from December 18, 2024, to January 20, 2025. A probability sample of 10 schools was selected from a population of 384 secondary school students in Al-Diwaniyah city—probability of simple random sampling. Three hundred eighty-four samples of students were chosen from ten secondary schools in the General Directorate of Education in Al-Diwaniyah city.

Findings: The findings indicated that the majority of their age 114 (29.7%) were 18 years old. The results represent that most of the study sample 201(52.3%) were female, the majority of the study sample 145 (37.8%) in 5th grade, the highest percentage 301 (78.4%) were lived in urban areas, the majority of the study sample 124 (32.3%) were Family monthly income 300,000 to 600,000 Iraqi Dinars. Social media addiction indicated that 60.4% of students demonstrated moderate addiction.

Conclusion: Overall, a moderate prevalence of social media addiction was recorded among secondary school students. There is a significant association between social media addiction and demographic data such as sex, residence, grade, family monthly income, and no significant association between social media addiction and age.

Keywords: social media, social media addiction, secondary school students, demographic data.

Introduction

Social media addiction has emerged as a massive issue in recent years, drawing the attention of researchers across various disciplines. It is typically described as an excessive, uncontrollable use of social media platforms that interferes with a person's day-to-day life and functioning (Perumal, 2022). Baggio et al. (2018)

conceptualize social media dependency as a behavioral dependency characterized by a compulsive engagement with social networking websites, just like substance dependency (Baggio et al., 2018). This conduct is often observed by using mood alteration, withdrawal signs, and the forgetting of personal or professional obligations. Additionally, demographic variables,

alongside age and gender, also influence susceptibility to social media dependency, with younger individuals being particularly vulnerable due to their frequent exposure and reliance on virtual communication (Al-Samarraie et al., 2022). Social media use among young people has been a growing subject of interest in recent years. Studies affirm that social media is deeply entrenched in the everyday lives of younger humans, with platforms such as Instagram, Snapchat, Facebook, and TikTok dominating their online interactions (Meikle, 2024). Research indicates that social media dependency is intently connected to mental distress, consisting of pressure and despair. For instance, Nowland et al. (2018) found that excessive engagement in social media is associated with accelerated feelings of loneliness and a decreased quality of life (Nowland et al., 2018). Similarly, research by Loades et al. (2020) has validated that extended display time can exacerbate feelings of social isolation, specifically among young people and teenagers (Loades et al., 2020).

The objectives of this study are to investigate.

1. To assess the prevalence of social media addiction among secondary school students.
2. To assess the association between social media addiction and certain socio-demographic characteristic factors, including age, sex, grade, residence, and monthly family income.

The following research questions guide this study:

1. What is the prevalence of social media addiction among secondary-school students?
2. What is the distribution of social media addiction among secondary school students?
3. Is there a relationship between social media addiction and demographic characteristics among secondary school students?

Methods and Materials

Study Design and Participants

This study employed a descriptive cross-sectional design, chosen to explore social media addiction among secondary school students and the association between social media addiction and demographic data in Al-Diwaniyah City. The descriptive correlational design is suitable for this research because it allows for the identification of patterns and relationships between variables in a naturalistic setting without manipulating the study environment. This approach is beneficial when studying complex, real-world issues, such as social media addiction, where experimental manipulation is neither ethical nor feasible. The study was conducted over eight months, from October 1, 2024, to June 7, 2025, with ten secondary school students at the General Directorate of Education in Al-Diwaniyah city.

The study sample consisted of 384 students in secondary school students at General Directorate of Education in Al-Diwaniyah city. probability simple radom sampling 384 sample of students were selected out (4,317) in ten secondary schools in at General Directorate of Education in Al-Diwaniyah city. a simple random sampling technique was utilized for selecting individual participants from the chosen schools. This approach provided every student within the target population an equal chance of being included in the study, minimizing selection bias and enhancing the generalizability of the findings.

Instruments

The data was gathered by using a questionnaire and interviews with participants. Comprising:

Part I: socio-demographic data. The demographic datasheet consists of (5 items) and is categorized as Socio-demographic data, students' age, gender, Education Grade, Residence, and Monthly family income.

Part II: Social Media Addiction Scale Student Form scale (SMAS-SF). This part consists of (28) items that are used to determine the social media addiction of secondary school students. The questionnaire was closed-ended. An instrument was constructed using a three-level Likert scale (Disagree, Neutral, Agree) for assessment. The rating score of the information was (1,2,3). Content validity was obtained for the questionnaire, which was prepared to assess domestic social media addiction of the secondary school students and the relationship between socio-demographic data and social media addiction through the expert panel to determine the questionnaire's validity and competence to clarify these phenomena—a preliminary Arabic and English version of the questionnaire distributed among (18) experts.

Data Analysis

Data were analyzed using both descriptive and inferential statistical methods. Descriptive statistics, including means, standard deviations (SDs), and frequencies, were used to summarize the socio-demographic characteristics of the participants and the prevalence of social media addiction. Inferential statistics were also used. The choice of Pearson's correlation was appropriate due to the continuous nature of the variables and the aim of the study to explore linear relationships between them. Statistical significance was set at P ≤ 0.05. Data analysis was conducted using SPSS software (SPSS-23 and Microsoft Excel (2010) programs).

Findings and Results

As can be seen in Table 1, the findings indicated that the majority of the participants (114, 29.7%) were 18 years old. The results represent that most of the study sample 201(52.3%) were female, the majority of the study sample 145 (37.8%) in 5th grade, the highest percentage 301 (78.4%) were lived in urban areas; the majority of the study sample 124 (32.3%) were Family monthly income 300,000 to 600,000 Iraqi Dinars.

Table 1

Socio-demographic characteristics

SDVs	Classification	No.	%
Age /years	15	14	3.6
	16	111	28.9
	17	111	28.9
	18	114	29.7
	19	24	6.3
	20	10	2.6
	Total	384	100
	M ± SD	17.14±1.095	
Sex	Male	183	47.7
	Female	201	52.3
	Total	384	100
Grade	4th	116	30.2
	5th	145	37.8
	6th	123	32.0
	Total	384	100
Residents	Urban	301	78.4
	Rural	83	21.6
	Total	384	100
Family monthly income	< 300,000 Iraqi Dinars	113	29.4
	300,000 to 600,000 Iraqi Dinars	124	32.3
	601,000 to 900,000 Iraqi Dinars	78	20.3
	>900,000 and above Iraqi Dinars	69	18.0
	Total	384	100

No. Number; %= Percentage; M= mean; SD= Standard Deviation

In Table 2, the given distribution of social media addiction among secondary school students presents the social media addiction among secondary school students. The table presents the distribution of social media dependency among secondary college students based at the suggest scores (M.S) of various behaviors Low [L]=1-1.66; Moderate [M]=1.67-2.33; High [H]=2.34-3) likert scale (Disagree, Neutral, Agree) The rating score of the information was (1,2,3)Disagree=1, Neutral=2, Agree=3. High stages of social media addiction (M.S ≥ 2.34) are determined for being eager customers (2.34) and who prefer social media when on their own (2.43). Most items, which include using social media as a breakout (2.20) and expressing oneself better online (1), fall in the slight range (1.67–2.33). A few gadgets, such as neglecting schoolwork (1.66) and the use of social media even if it exacerbates one's family troubles (1.Sixty three), are categorized as low dependency. These rankings suggest that students typically exhibit mild degrees of social media

dependency, with a few behaviors reaching excessive
levels of engagement.

Table 2

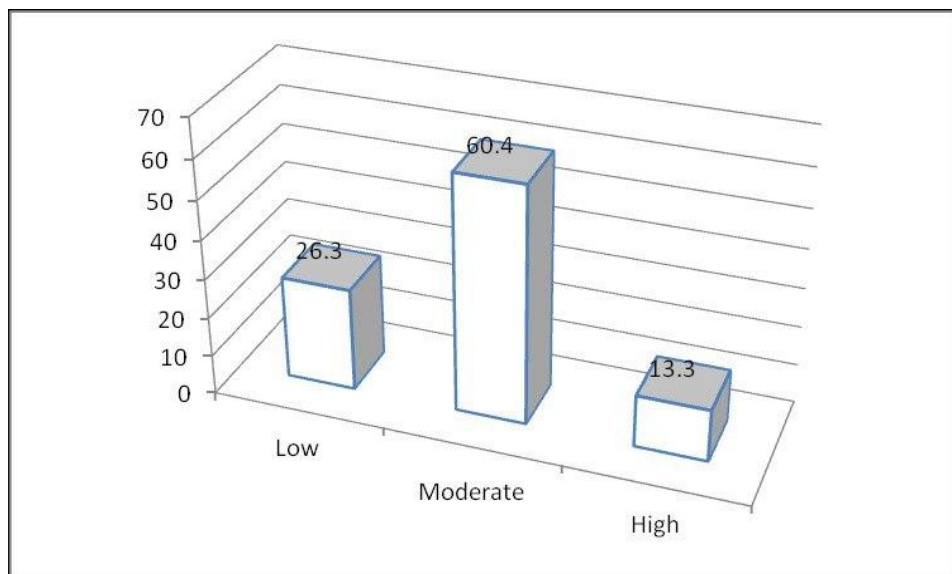*Distribution of Social Media Addiction among Secondary School Students.*

No.	Family Relationship Items	Disagree		Neutral		Agree		Total		M.s	Ass.
		No.	%	No.	%	No.	%	No.	%		
1	I am eager to go on social media.	53	13.8	148	38.5	183	47.7	384	100	2.34	H
2	I look for internet connectivity wherever I am so I can use social media.	117	30.5	89	23.2	178	46.4	384	100	2.16	M
3	I use social media right after I wake up in the morning.	125	32.6	97	25.3	162	42.2	384	100	2.10	M
4	I see social media as an escape from the real world.	113	29.4	81	21.1	190	49.5	384	100	2.20	M
5	A life without social media becomes meaningless for me.	140	36.5	108	28.1	136	35.4	384	100	1.99	M
6	I prefer to use social media even there are somebody around me.	162	42.2	115	29.9	107	27.9	384	100	1.86	M
7	I prefer the friendships on social media to the friendships in the real life.	229	59.6	93	24.2	62	16.1	384	100	1.57	L
8	I express myself better to the people with whom I get in contact on social media.	135	35.2	122	31.8	127	33.1	384	100	1.98	M
9	I am as I want to seem on social media.	117	30.5	119	31.0	148	38.5	384	100	2.08	M
10	Even if my family frown upon, I cannot give up using social media.	197	51.3	91	23.7	96	25.0	384	100	1.74	M
11	I want to spend time on social media when I am alone.	64	16.7	90	23.4	230	59.9	384	100	2.43	H
12	I prefer to use social media instead of Leaving house.	164	42.7	106	27.6	114	29.7	384	100	1.87	M
13	Social media activities lay hold on my everyday life.	156	40.6	123	32.0	105	27.3	384	100	1.87	M
14	I pass over my homework because I spend much time on social media.	206	53.6	104	27.1	74	19.3	384	100	1.66	L
15	I feel bad if I am obliged to decrease the time I spend on social media.	175	45.6	123	32.0	86	22.4	384	100	1.77	M
16	I fell unhappy when Iam not on social media	166	43.2	123	32.0	95	24.7	384	100	1.82	M
17	Being on social media excites me.	87	22.7	141	36.7	156	40.6	384	100	2.18	M
18	I use social media so frequently that I full afoul of my family.	226	58.9	76	19.8	82	21.4	384	100	1.63	L
19	The mysterious world of social media always captivates me.	170	44.3	123	32.0	91	23.7	384	100	1.79	M
20	I do not feel Iam hungry and thirsty when I am on social media.	196	51.0	87	22.7	101	26.3	384	100	1.75	M
21	I notice that my activities has diminished due to social media.	171	44.5	108	28.1	105	27.3	384	100	1.83	M
22	I have physical problems because of social media use.	215	56.0	80	20.8	89	23.2	384	100	1.67	M
23	I use social media even when walking on the road in order to be instantly informed about developments.	213	55.5	101	26.3	70	18.2	384	100	1.63	L
24	I like using social media to keep informed about what happens.	77	20.1	127	33.1	180	46.9	384	100	2.27	M
25	I surf on social media to keep informed about what social media groups share.	101	26.3	131	34.1	152	39.6	384	100	2.13	M
26	I spend more time on social media to see some special announcements (e.g. birthdays).	182	47.4	115	29.9	87	22.7	384	100	1.75	M

| 27 | I stay informed about the things related to homework, activities makes me always stay on social media. | 104 | 27.1 | 140 | 36.5 | 140 | 36.5 | 384 | 100 | 2.09 | M |
| 28 | I am always active on social media to be instantly informed about what my kith and kin share. | 160 | 41.7 | 129 | 33.6 | 95 | 24.7 | 384 | 100 | 1.83 | M |

No. Number; %= Percentage, M.s= Mean of scores; Ass.= Assessment Level of Responses (Low [L]=1-1.66; Moderate [M]=1.67-2.33; High [H]=2.34-3).
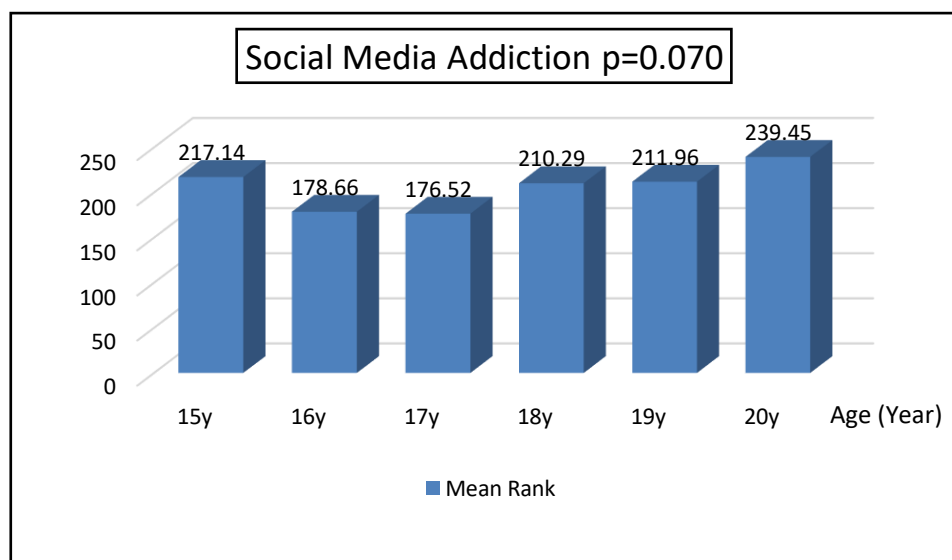
Figure 1

Prevalence of social media addiction among secondary school students.

Figure 2

Statistical Differences in Social Media Addiction among Secondary School Students between Groups of Age

The figure indicates no vast variations in social media dependency among secondary college students based on age (χ^2 = 10.185; p = 0.070). However, those differences do not attain statistical importance, suggesting that age does not appreciably affect social media addiction degrees in this pattern.

In Table 3, the Mann-Whitney test shows extensive variations in social media dependency among male and female secondary college students (U = 12800.000; p = zero.001). Males have a higher implied rank (223.05) compared to women (164.68), indicating that men exhibit a better level of social media addiction than women in this sample.

Table 3

Statistical Differences in Social Media Addiction among Secondary School Students between Groups of Sex

Variables	Sex	No.	Mean Rank	cz	Sig.
Social media addiction	Male	183	223.05	12800.000	.001

c= Mann-Whitney Test; n= number,; sig.= significant level at 0.05.

Table 4 shows significant differences in social media dependency among secondary faculty students based on grade (χ^2 = 6.911; p = 0.032). The 4th-grade college

students have the highest mean rank (213.43), while the 6th-grade college students have the lowest mean rank (178.44).

Table 4

Statistical Differences in Social Media Addiction among Secondary School Students between Groups of Grade

Variables	Ranks			$b\chi^2$	Sig.
	Grade	No.	Mean Rank		
Social Media Addiction	4th	116	213.43	6.911	.032
	5th	145	187.88		
	6th	123	178.44		

b= Kruskal Wallis Test; n= number,; sig.= significant level at 0.05.

Table 5 shows significant differences in social media addiction among secondary school students residing in urban and rural regions (U = 4905.000; p = 0.001). Urban students have a better social media score (217.70)

compared to rural college students (101.10), indicating that urban students exhibit a higher level of social media dependency than their rural counterparts.

Table 5

Statistical Differences in Social Media Addiction among Secondary School Students between Groups of Residents.

Variables	Residents	No.	Mean Rank	cz	Sig.
Social media addiction	Urban	301	217.70	4905.000	.001
	Rural	83	101.10		

c= Mann-Whitney Test; n= number,; sig.= significant level at 0.05.

Table 6 shows significant variations in social media addiction among secondary faculty students, primarily based on their family income (χ^2 = 13.244; p = 0.004). Students from households earning more than 900,000 Iraqi Dinars have the highest suggested rank (232.39),

followed by those with incomes between 601,000 and 900,000 Dinars (199.10). The lowest mean rank is determined within the organization, with family income under 300,000 Dinars (174.03).

Table 6

Statistical Differences in Social Media Addiction among Secondary School Students between Groups of Family Income.

Variables	Ranks			$^b\chi^2$	Sig.
	Income/ Iraqi Dinars	No.	Mean Rank		
Social Media Addiction	< 300,000	113	174.03	13.244	.004
	300,000 to 600,000	124	182.99		
	601,000 to 900,000	78	199.10		
	>900,000 and above	69	232.39		

^{b}= Kruskal Wallis Test; n= number,; sig.= significant level at 0.05.

Discussion and Conclusion

The study sample regarding the demographic characteristics of the studied group in the current study indicates, as shown in Table 1, that 114 students (18 years old) were recorded, with the highest percentage (29.7%). These results support those of a study by Lin et al. (2023), which found that the majority of study samples were aged 18 years (39.9%). In our opinion, Cognitive maturity, academic interest, time availability, and the desire for social influence, in addition to the use of technology, are the primary reasons why survey participation is higher among 18-year-old students.

According to the sex of the study sample, more of the participants were female (201), recording the highest percentage, which was more than half (52.3%). Moreover, these findings are in agreement with the results by (Dalvi-Esfahani et al., 2021), which found that the highest percentage (57.9). However, those studies conducted by Yayman & Bilgin (2020) disagree, resulting in a finding that more of the study sample are male, with a gender ratio of 50.3%. In our opinion, based on psychological, social, and cultural factors, females' greater engagement in questionnaire collection than males may be due to several complex reasons, such as social openness, social and cultural pressures, academic interest, as well as intrinsic and extrinsic motivations that encourage females to participate in research activities.

According to the study sample of Educational grade, most of the study sample, which is fifth grade (145), recorded the highest percentage, two-fifths (37.8%). Moreover, Abdullah et al. (2024) found that this finding is in agreement with (146), which found that the highest percentage was related to the educational grade of fifth grade, with a percentage of 38.0. In our opinion, the greater response rate of fifth-grade middle school students to surveys compared to high school students stems from several scientific factors, including mental maturity, academic readiness, psychological stability, and effective time management. These factors make fifth-grade middle school students more prepared to participate in research activities, making them more likely to respond to survey requests than students in other high schools.

According to the Residence study sample, the participants who resided in urban areas recorded the highest percentage, more than three-quarters (78.4%). This result aligns with the findings of Masoed et al. (2021), which found that study participants, specifically those from the study sample who lived in urban areas, recorded the highest percentage (53.4%). In our opinion, several reasons can be attributed to the higher percentage of urban students in a city center survey, including historical and ongoing trends of urbanization, better access to education, increased economic and social opportunities, and superior infrastructure in cities. These factors collectively create an environment where urban populations, including high school students, tend to be higher than those in rural areas. Additionally, most of the students reside in the center and have easy access to schools.

Regarding the family's monthly income of the study sample (n = 124), the highest percentage, one-third (32.3%), had a monthly income of 300,000 to 600,000, as more parents were unemployed. This result aligns with the findings of Alkahazraji & Yasir (2024), which found that the study participants, specifically from the study sample, recorded the highest percentage (41.8%) regarding the monthly income of 301,000-600,000 ID. The researcher concludes that due to Educational Attainment, Families with higher educational levels tend to have better-paying jobs. In contrast, those with lower educational attainment may have limited access to higher-paying employment opportunities, and a higher proportion of parent participants are unemployed.

Regarding the distribution of social media addiction in Table 2, the findings of the study reveal a significant prevalence of social media addiction among secondary school students. The table presents the distribution of

social media dependency among secondary college students based at the suggest scores (M.S) of various behaviors *Low [L]=1-1.66; Moderate [M]=1.67-2.33; High [H]=2.34-3)* likert scale (Disagree, Neutral, Agree), with the majority falling into the moderate addiction category. Specifically, 60.4% of students demonstrated moderate addiction, with a mean score of 53.99±10.651. A proportion of students, 26.3%, had low levels of social media addiction, and 13.3% of students were found to have high levels of social media addiction Figure 1. This level of addiction is higher than findings from a study conducted in Iran, where students were classified as having moderate social media addiction (Azizi et al., 2019). In our opinion, overall, the differences and similarities in social media addiction levels underscore the importance of contextual factors such as culture, technology use, and measurement approaches in interpreting and comparing addiction prevalence across populations. Future studies should consider these variables to provide a more comprehensive understanding of social media addiction trends globally.

According to the Figure, there are no statistically significant differences (p = 0.070) (p>.05) in Social Media Addiction among Secondary School Students between Groups of Age. The present study is apply with the study by (Afacan & Ozbek, 2019) it is seen that there was no statistically significant difference in the social media addiction status of the students according to the age variable (p>.05). Status of students' social media addiction did not differ in terms of age p=.333.

According to Statistical Differences in with Social Media Addiction among Secondary School Students regards their sex (n=201) in table 3, The study found that there have been significantly different in social media addiction among secondary school students with regards sex(p= 0.001) indicating that males exhibit a higher level of social media addiction than females in this sample. These results agree with those of a Study by Turel & Toraman (2015), a significant difference was found in the Internet addiction level of students in terms of sex (p<0.05). The total average Internet addiction levels of male students were X=41.98 and of females X=37.57. This indicates that the averages for male students were higher than those for female students. However, both groups displayed an average Internet addiction level. Based on these results, it can be concluded that Internet usage of male students in particular should be kept

under control. Another study disagreement findings conducted by Gezgin (2024), the social media addiction levels of high school students differed according to sex. As a result of the analysis, it was seen that the level of social media addiction among female students was significantly higher than that of male students (p<.01). In our opinion, the greater prevalence of social media addiction among males than females in high school may be due to several societal, psychological, and biological factors. Males often have a greater drive for social exposure and group interaction, which aligns with their increased use of social media. Additionally, their behavior is influenced by social pressure, adolescent curiosity, and the digital interactions they find most appealing.

According to Statistical Differences in Social Media Addiction among Secondary School Students, regarding their grade, Table 4 shows significant differences in social media addiction among secondary school students based on grade (n = 116) (p = 0.032). The 4th-grade students have the highest rate of social media addiction. These results disagree with those of a study conducted by Gezgin (2024), which examined whether high school students differed in terms of social media addiction levels according to their grade levels. According to the results of the analysis, no statistically significant difference was found between the social media addiction levels of high school students according to their grade level (p >.05), p=0.15. In our opinion, Social media addiction among fourth-grade middle school students is due to a combination of psychological, social, and physiological factors. At this stage, students are at a sensitive point in their psychological and social development, making them more susceptible to external influences, such as social pressure and the instant rewards offered by social media.

According to Statistical Differences in Social Media Addiction among Secondary School Students, regarding their Residents in Table 5, significant differences in social media addiction were found between secondary school students living in urban and rural areas (n = 301) (p = 0.001). This indicates that urban students exhibit a higher level of social media addiction than their rural counterparts among secondary school students. These findings agree with the study by Al-musawi (2024). The significant difference in social media usage between urban (62.3%) and rural (37.7%) secondary school

students highlights potential disparities in internet access and digital literacy. In our opinion, Social media addiction among urban high school students is the result of several interconnected factors, including social pressure, easy access to the internet, cognitive psychological influences, and a sociocultural environment that promotes intensive technology use. While urban life provides more digital opportunities, it also fosters an over-reliance on technology, increasing the likelihood of students becoming addicted to social media.

According Differences in Social Media Addiction among Secondary School Students between Groups of Family Income in table 6, The findings of this study indicate significant statistical differences in social media addiction among secondary school students based on family income levels (p = 0.004) .these result apply study conducted by Kircaburun et al. (2018), found that adolescents from higher-income families were more likely to experience problematic social media use due to increased access to smartphones, tablets, and computers, which facilitate continuous online interactions (Kircaburun et al., 2018). Moreover, the influence of socio-economic status on adolescent internet behaviors has been linked to parental monitoring and digital literacy. Studies suggest that higher-income families may provide children with more autonomy in technology use, potentially leading to less parental supervision over online activities (Müller et al., 2022). In our opinion, the addiction of high school students from high-income families to social media can be explained by several interrelated factors, including better access to technology, social pressure related to social status, free time, cultural influences, and positive online reinforcement. Although low-income students may face economic challenges that limit their ability to use these platforms excessively, economic, psychological, and social factors drive students from higher-income families to use social media platforms more frequently, sometimes to an excessive extent.

In conclusion, most secondary school students were female and lived in urban areas. Most of the secondary school students were aged 18 years and had a family monthly income ranging from 300,000 ID to 600,000 ID. There are significant relationships between social media addiction and specific demographic data, sex, grade, residence, and family monthly income. Most secondary school students ' social media addiction levels were moderate.

Acknowledgments

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

The study protocol adhered to the principles outlined in the Declaration of Helsinki, which provides guidelines for ethical research involving human participants. Ethical considerations in this study were that participation was entirely optional. Ethical approval for the study was obtained from the General Directorate of Education in Al-Diwaniyah to collect samples from students. Ethical Considerations are essential to protect the rights of persons regarding the collected data confidentiality and promote the professional study conducted; the following ethical issues are applied depending on:

 -Voluntary Agreement of the participants, Respect the exclusiveness of the participants, and phrasing the questions is accessible and understandable according to the educational level of participants and their cultural background.

The students were told that their participation in the study was non-obligatory. The researcher explained the purpose and the benefits of the study. After they were approved to participate in the study, participants received an anonymous questionnaire to ensure complete confidentiality.

Transparency of Data

Following the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

Funding

Authors' Contributions

All authors equally contribute to this study.

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