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PROBLEMATIC INTERNET USE AMONG SECONDARY SCHOOLS, BAGHDAD (2025)

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Abstract

Objective: Problematic Internet use (PIU) is an increasing prevalent health problem among adolescents and is often comorbid with other psychopathologies. This work was carried out to explore the prevalence of PIU and its link with generalized anxiety disorder (GAD) among adolescents in Baghdad.

Methods: A cross section study with analytic element was conducted among secondary schools students of Baghdad/ Al- Karkh-the First education directorate in 2025. Multistage stratified sampling included 415 students.

Tools used were: Young's Internet Addiction Test (IAT), and GAD-7 scale. Statistical analysis was performed by chi square.

Results: The prevalence of PIU was 66.3%. Two significant associations were identified: between female group with PIU ($p = 0.007$), and GAD with PIU ($p = 0.00001$).

Conclusion: More than half of students suffered from a PIU indicating that PIU is a critical challenge for both health system and education sector. Two key factors found to be more linked with PIU: being female, and GAD.

Keywords: Baghdad, Problematic internet use, generalized anxiety disorder, adolescence, students

INTRODUCTION

The dominant force behind globalized communication is the internet. According to the Cisco Annual Internet Report on global digital transformation, the number of internet users worldwide reached 5.3 billion (66% of the population) in 2023. The majority of daily users are teenagers and young adults[1, 2] Substantial evidence shows that internet addiction (IA) places a significant burden on individuals' mental wellbeing, especially adolescents (12–19 years), whom are at a particular risk of developing PIU. [3] Problematic internet use (PIU) defined as internet use that does not well controlled, causes negative impact on daily functioning, and sometimes called internet addiction. [4] Recently, mental health of adolescents was a subject of interest in Iraq.[5] Literature showed that prevalence of anxiety [6] and internet addiction [7] are high. This study was carried out to report on PIU among adolescents in Baghdad, Iraq.

MATERIALS AND METHODS:

A total of 415 students were included in the study. They were selected by multistage random sample (Al-Karkh side was selected randomly from the 2 sides of Baghdad, 1st education directorate was selected randomly from 3 education directorates in Al-Karkh, schools was selected from the districts: Center of Al-Karkh, Al-Mansour, Abi-Ghareeb and Al-Salam. Population of district, age, sex, and branch type of study were considered in selection of students.

PIU was measured by Young's Internet Addiction test (IAT). It measures several domains (salience (preoccupation with internet), excessive use (time spent online), neglect of school/ daily routine), anticipation (thinking about going online), and lack of control (inability to cut down), neglect of social life/ relationship). Generalized Anxiety Disorder (GAD) was measured by GAD-7. Statistical analysis was tested by chi square to identified the impact of independent variable (demographic variables, and GAD) on dependent variable (PIU). $P < 0.05$ is considered as significant.

RESULTS:

PIU was noticed in 266 from 401 responded students (66.3%). Impact of age, sex and GAD on PIU are shown in table 1. Of the students age, 66 (64.1%), 74 (61.2%), and 125 (70.6%) of the ages 15, 16. and ≥ 17, respectively, were with PIU. No statistical significant association between age and PIU ($\chi^2 = 2.7$, d.f.=2, $p = 0.25$). Of males, 168 (65.6%), and of female 98 (67.6%) were with PIU. Females showed significant higher prevalence of PIU than male (($\chi^2 = 7.1$,

d.f.=1, p = 0.007). Among those with minimum, mild, moderate, and severe GAD, 41 (35.6%), 52 (61.2%), 77 (88.5%) and 96 (84.2%), respectively, were with PIU. The PIU was increasing significantly with increasing degree of GAD ((χ^2 =84.9, d.f.=3, p = 0.00001).

Table 1. Associations between main independent variables and PIU*

Variable			PIU	
		Total	No.	%
Age				
	15	103	66	64.1
	16	121	74	61.2
	≥ 17	177	125	70.6
			χ^2= 2.7, d.f.=1, p = 0.25	
Sex				
	Male	256	168	65.6
	Female	145	98	67.6
			χ^2= 7.1, d.f.=1, p = 0.007	
GAD				
	Minimum	115	41	35.6
	Mild	85	52	61.2
	Moderate	87	77	88.5
	Severe	114	96	84.2
			χ^2= 84.9, d.f.=3, p = 0.00001	

*Problematic Internet Use

DISCUSSION:

This study showed that 66.3% of students were with PIU. It is not an official diagnosis in DSM-5. However, it is a part of gaming disorder in ICD-11. IAT is a screening test. The observed rate (66.3%) is much lower than reported in Kurdistan region among secondary school students (17.4%) [8] and lower than that reported in Baghdad previously (45.8%). [7] The rate 66.3% is much more than that reported in Gulf Cooperation Countries (GCC) (33%)[9], Saudi Arabia (42.5%)[10], Egypt (13%).[11] It is similar than that reported in Jedda, Saudi Arabia (68%). [12] Differences in rates might be attributed to differences in measurement, using different scales, different cutoffs and different definitions. Literature reported that PIU in Middle East especially Eastern Mediterranean Region was much higher than the global prevalence. [13] Prevalence of PIU depend on population (adolescent, university students and general population) and time (pre COVID, during COVID and post COVID). [14] The high rate observed in this study might reflect the easily availability of digital instrument and internet services in Iraq. Recently, Iraq witness internet penetration, mobile connectivity and social media usage. In the line of a previous study in Baghdad, Iraq, PIU rate was higher among females than that among males.

Rate of PIU was significantly increasing with the severity of GAD (p=0.00001). The relationship between PIU and GAD are bidirectional rather than simply dependent and independent. PIU can increase stress, uncertainty and worry (core symptoms of GAD). The pre-existing GAD lead to internet use as a coping strategy. Online activities (social networking, gaming, browsing) may provide temporary relief from anxious thought and in turn lead to reinforce excessive use.[15, 16]

CONCLUSION:

High rate of PIU was observed. Social and collective activities may moderate and reduce PIU through replacement of screen time, improved social connection and increase psychological resilience.

Conflict of Interest : None.

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