

Internet Gaming Disorder among Secondary School Students in Panchthar, Nepal: A Cross-Sectional Study

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ABSTRACT

Introduction: Internet addiction is characterized by excessive or impaired control over internet gaming leading to impairment or distress among the users. In the present context, internet gaming has been massively gaining its popularity among youngsters. The World Health Organization (WHO) has also included “gaming disorder” in the 11th revision of the International Classification of Diseases as a mental health disorder. Thus, the main aim of this study was to assess internet gaming disorder in secondary level students of Phidim municipality, Panchthar, Nepal.

Methods: We conducted a descriptive cross-sectional study among 216 secondary level students Schools in Panchthar. Simple random sampling method was used for the selection of schools and systematic sampling was opted for selection of students. Ethical approval was taken from the Institutional Review Board (IRC) and written consent was taken from participants and their guardians. Internet Gaming Disorder Scale-short-form was used as a tool for determining Internet Gaming Disorder (IGD) which was self-administered among participants. All the raw data was managed in Microsoft-excel and analyzed using SPSS version 20.

Results: We found out that a total of 5.4% of participants who played online games were disordered gamers.

Conclusions: The rate of internet gaming disorder is quite low compared to other countries. However, immediate attention is needed to avoid possible future consequences of reliance on online gaming.

Keywords: IGA; Nepal; Secondary level students.

INTRODUCTION

The Internet has evolved into an essential media channel for personal communication, academic research, information sharing, and entertainment. The positive aspects are well known, but concerns about problematic Internet usage patterns continue to grow.¹ Moreover, the acclaim of online gaming among the younger generation is also in the increasing trend which has induced obsession of the younger generation towards internet gaming.²

Online gaming is one of the factors that drive more antisocial behavior among gamers, affecting relationships with parents, teachers, friends, relatives

and other acquaintances, and indirectly affecting student achievement.³ Studies related to gaming disorders have not yet been conducted in Nepal.

Thus, the main aim of this study was to assess internet gaming disorder in secondary level students of Phidim municipality, Panchthar, Nepal.

METHODS

A descriptive cross-sectional study was carried out among students of secondary level of Phidim Municipality, Panchthar, Nepal. Data was collected from 5th January, 2021 to 14th January, 2021. Ethical approval was taken from the Institutional Review Committee (IRC) (Ref no.

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EPYIRC343/2021). The approval for data collection was taken from respective schools and a written consent was taken from participants and their guardians. Students from secondary level were included whereas those students who were not interested to participate and the pretested students were excluded from the study.

The sample size was calculated by using formula:

$$n = Z^2 pq / d^2$$

Where, n=sample size

Z=confidence level=1.96

p=0.15 (National survey of various Asian countries⁴)

d= allowable error=0.05

q= (1-p) = 0.85

$$n = 1.96^2 * 0.15 * 0.85 / 0.05^2$$

i.e. n= 196 with 10% of non-respondent n=216

Therefore, sample size was 216. Schools were selected through a simple random sampling method (lottery) and students were selected systematically. 4 schools were selected and 446 secondary level students were retrieved according to the list of each school. Systematic sampling of students was done with the formula,

$$k (\text{interval}) = N/n$$

$$= 446/216$$

$$= \approx 2$$

Therefore, the interval was nearly 2 & the random starting point was 2.

Out of 216 participants 2 of them were non respondents so 214 were recruited in the study. The standard question of Internet Gaming Disorder-Short Form was self-administered among the participants for data collection. It consists of nine questions with Likert scale. The choices range from never to always. Disordered gamers were represented by total scoring ranging from 36-45 and below 35 were represented as non-disordered gamers.⁵ All the raw data was managed in Microsoft-excel and analyzed using SPSS version 20. The descriptive and categorical variable was described using frequency and percentage.

RESULTS

Out of the total 214 participants, more than two-third respondents 149(69.6%) played internet games.

Table 1. Gaming characteristics (n=214)

Respondents who played internet games	n (%)
Yes	149(69.6)
No	65(30.4)

Prevalence of Internet gaming disorder

Figure 1 represents that 5.4% of the participants who played online games were disordered gamers.

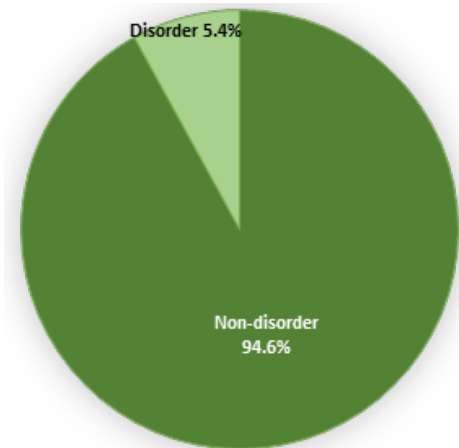


Figure 1. Internet Gaming Disorder (n=149)

Out of total respondents, female respondents constituted a major proportion (51.4%) in this study with the majority of them (59.8%) belonging to the Janajati ethnic group. More than half of the respondents (58.4%) were of age group 14-16 years and studied in grade 10 (55.6%). About two-third of participants (65.9%) had Hinduism as their religion. Data on family type revealed, the majority of the respondents (55.1%) belonging to the nuclear family. Likewise, respondents having family income above NPR. 20,000 made up a total of 82.7%.

Table 2. Socio-demographic characteristics (n=214)

Characteristics	n (%)
Gender	
Male	102 (47.7)
Female	110 (51.4)
Others	2 (0.9)
Ethnicity	
Brahmin	47 (22.0)
Chhetri	22 (10.3)
Janajati	128 (59.8)
Dalit	17 (7.9)
Age (in years)	
14-16	125 (58.4)
17-19	89 (41.6)
Grade	
9	95 (44.4)
10	119 (55.6)
Religion	
Hinduism	141 (65.9)
Buddhism	21 (9.8)
Christian	12 (5.6)

Characteristics	n (%)
Kirat	40 (18.7)
Types of family	
Nuclear	118 (55.1)
Joint	96 (44.9)
Income of family (NPR)	
Up to 20,000	37 (17.3)
Above 20,000	177 (82.7)

DISCUSSION

Gaming disorder was listed in the latest edition of International Classification of Diseases (11th. Ed.). Globally, estimates of the prevalence of gaming disorders vary considerably and often appear to be very high.⁶ Thus we aimed to find out the status of gaming disorder among secondary level students of Phidim Municipality, Panchthar. Our study revealed that more than two-thirds of participants (69.9%) played internet games, while among them 5.6% of participants were disordered gamers and 94.6% of players were non-disordered gamers.

The majority of our study participants were female, representing a total of 51.4%, in contrast to the results indicated by studies conducted in Germany, China, Pakistan and Iran.^{7,8,9,10} Contrary to our research result, a study conducted in China reported that about 27.6% of adolescents played internet games.¹¹ Likewise, Internet gaming had gained massive popularity among adolescents residing in Hong Kong, making up a total of 94% of participants involved in online gaming.¹²

A study done in Germany reported that a total of 1.1% of respondents had gaming disorder, which is quite low compared to our study results¹³, but countries like Korea and Iran show that the rate of Internet gaming disorder is relatively high with 13.8% and 17.1% respectively.^{14,10} This difference may be due to the difference in sample sizes of the present and reference studies. However, a study done in India showed a similar result to our findings where IGD was among 3.5% of school-going children.¹⁵

CONCLUSIONS

The prevalence of internet gaming disorder is quite low while comparing with other countries. However, immediate attention is needed to avoid possible future consequences of reliance on online gaming.

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CONFLICT OF INTEREST

None

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