



From Fun to Fear: Unveiling the Nexus of Cyberbullying and Online Gaming

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Abstract: With the global reach of the internet, online gaming has also gained colossal popularity. Online games are alluring, thus attracting a wide audience to its virtual realm. People are widely attracted to different types of games available on the internet, these may include sports games, adventurous games, action games, board games, Massive Multiplayer Online Games, card games, etc. Online gaming has emerged as a source of amusement and recreation in the digital era. Problematic online gaming, especially among youth, may be associated with detrimental effects, such as physical, psychological, and emotional problems, issues with academic performance, and increased cyberbullying perpetration. Cyberbullying is a serious growing concern for society, particularly in the case of youth. This article aims to highlight the role of online gaming in facilitating cyberbullying. The sample for the study consisted of 151 individuals in the age range of 17 to 26. The results of the study indicated problematic online gaming was a significant

predictor of cyberbullying among youth. This paper presents the preventive methods to curb cyberbullying.

Keywords: *Online Gaming, Cyberbullying, Young Adults, Academic Performance*

1. Introduction

The Internet has provided countless options for personal fulfilment, value creation, and job progression. In the current world, technology has become indispensable for working, learning, getting basic services, and maintaining relationships with people across geographic borders. The use of the Internet has skyrocketed in the past few years. 54% of the world's population, or 4.1 billion people, accessed the Internet in 2019. Since then, the total number of users has ascended by 782 million, accounting for 63% of the global population in 2021 (International Telecommunication Union, 2021).

With the aggrandized global reach of the internet, online gaming has also gained colossal popularity. The online games are alluring, thus attracting a wide audience to its virtual unreal world. People are widely attracted to different types of games available on the internet, these may include sports games, adventurous games, action games, board games, Massive Multiplayer Online Games, card games, etc. (Guide, 2019). Worldwide, 1.75 billion people have been estimated to play digital games in 2022, from which 1.17 billion gamers have been found to download the games while approximately 1.07 billion people played games using online services (Clement, 2022). Indian Mobile Gaming Report 2022 released by Mobile Premier League (MPL) stated that Uttar Pradesh was found to be the top location for online gamers followed by Maharashtra, Rajasthan, Bihar and West Bengal (Seitz, 2023).

The online gaming industry has upsurge in the last decade at a very rapid pace and will continue to rise even more. Indistinguishable from age, people are fascinated with online gaming profoundly and there are considerable reasons which motivate online gamers to play games online. A study presented 6 prime dimensions which persuade online gamers to play social networking games, and these include escapism (to have leisure), social interaction, amusement (entertainment), self-presentation, competition/challenge and role-playing/fantasy (Lee et al., 2012).

According to research, playing online games might enhance critical thinking abilities among people in addition to increased problem-solving ability. Online gaming may also help in

creating awareness about the surrounding environment and elevate the attention span of an individual. increases the ability to respond (Sweetser et al., 2013). Besides, online gaming helps to learn the spirit of teamwork and collaboration and develops an understanding of behavior and peer-to-peer learning (Chan et al., 2020). The number of people play online games with their peers or end up making new peers while playing online games. Online gaming may enhance the social skills of people and help to develop an understanding behavior (Sweetser et al., 2013).

The Intersection of Online Gaming and Cyberbullying

Online gaming, especially when coupled with cyberbullying, is another rising problem that is associated with negative outcomes for individuals. Recently, with the development of technology, some online games have been equipped with chat features, and cyberbullying could happen. It is a direct-action form of harassment showing negative implications for everyone, but as a result, some privileged groups and age groups of child-like adolescents are bearing more harm. Two types of emerging phenomena happening during online games, trash-talking and cyberbullying differ in their characteristics and events.

Although there are studies on the relationship between cyberbullying and internet use disorder, there is a need for more research in this area, especially on social media and online gaming. Hate and rejection feelings on the internet are common, leading to many forms of cyberbullying, such as trolling and revenge porn. In general, online gaming and cyberbullying intersections require more knowledge and efficient prevention skills to protect individuals, particularly young gamers (Watts et al., 2017). Adolescents in China who are exposed to violent online games are more likely to engage in cyberbullying; the association is partially mediated by normative notions about aggression, and the impact is moderated by trait aggression (Zhu et al., 2018). Furthermore, Chinese college students are frequently the targets of cyberbullying on social media and in online games; contributing variables to the problem include sex, symptoms of anxiety, gaming time, Internet addiction, and violent game content (Huang et al., 2024). It has also been reported that adolescents who indulge in online gaming have a higher risk of falling prey to cyberbullying (Andrea & Yuliati, 2019).

The Forms, Impact, and Challenges of Cyberbullying

One of the most prominent risks of the digital age is the emergence of cyberbullying, which takes on many forms and is present on various online platforms. Cyberbullying ranges from hateful comments and offensive messages to the malicious spread of rumors about its target and the

creation of fake online personas (Bottino et al., 2015). The anonymity and universality of the internet and smartphones often make cyberbullying all the more distressing for children and teenagers who are its targets. Like conventional bullying, cyberbullying involves utilizing technology, such as mobile phones, emails, or text messaging, with the intention of hurting other people (Chibbaro, 2007; Aricak et al., 2008). Harmful exposure may affect its targets profoundly, contributing to emotional distress, intense anxiety, depression and, sometimes, self-harming behavior or suicidal ideation. Additionally, the online world is ubiquitous, and victims of cyberbullying may find it difficult to escape their tormentors as they spill beyond the bounds of traditional social spaces.

Indeed, cyberbullying is challenging to address, given the anonymized character of bullies, the ephemerality of digital traces, and the difficult legal regulations of online conduct due to geographical barriers. However, the collaborative work of various stakeholders such as educators, parents, policymakers, and technology businesses can achieve better results in reducing incidents of cyberbullying and creating more secure digital spaces. The relationship between online gaming and cyberbullying has been discovered. Cyberbullying in online games is linked to the abuse of the games' communication functions. Many victims of young gamers are cyberbullied (Li & Pustaka, 2017). Nevertheless, nothing has changed in this area because there is a lack of emphasis on cyberbullying and internet use disorder in social media and online gaming. In addition, cyber-sexism is another form of cyberbullying that occurs in online gaming communities. It has seriously negative impacts on gamer women.

Motivations and Effects in Online Gaming and Cyberbullying

Cyberbullying through games has grown into a serious problem that has a severe impact on the mental state of the victim. The danger of this phenomenon is that malefactors call it how they feel about the victims, which can lead to disastrous consequences, including psychiatric (disturbances in mental health) and ideational (suicidal thoughts). Cyberbullying is a multi-dimensional and contextual phenomenon that is perceived from a multiple perspective. Society distributes online hate and negativity by way of social media, among other outlets, causing a multiplicity of cyberbullying forms. Cyberbullying and, in particular, virtual harassment, have long-term devastating effects on teenagers' psychological well-being, such as increased suicidal ideation, substance abuse, anxiety, and depression (Kwan et al., 2020; Ali & Shahbuddin, 2022). Cyberbullying is widespread among school children. Cyberbullying has been associated with

presumptions regarding gender, anxiety symptoms, internet addiction, gaming time, and violent game components.

Rights, Responsibilities, and Regulation in Online Gaming Environments

Ethical considerations in online gaming environments relate to the issues of rights, responsibilities and regulation (Aronovitz, 2002). Establishing clear ethical standards is essential to protect users' privacy and enforce accountability for ethical conduct. Due to the multi-dimensional and globalized aspects of virtual environments, as well as the convergence of media, numerous ethical dilemmas arise, that include but are not limited to personal data and intellectual property protection, information security, credibility, and trust in virtual worlds. Thus, the issue of ethics in online gaming implies a special code of conduct and appropriate regulation for MMORPGs (Barker, 2012). In another aspect, a specific set of technological features of this digital phenomenon also characterizes its ethical challenges. As a result, all of the above is related to the phenomenon of ethics in online gaming and based on ethical inalienable rights and duties and a union of law and regulatory frameworks.

Toward a Safer and More Inclusive Online Gaming Landscape

Several aspects are also involved in the future directions towards altogether safer and more inclusive online gaming. The most significant would be the transparently regulated social media platforms, including online game companies, to combat hate speech, extremism, and overall toxicity in the gaming industry. Moreover, certain information professionals, especially librarians, could significantly influence inclusive gaming by understanding socially distinctive and technically inventive combinations in hybrid communities. Moreover, it is crucial to enable people through topics such as providing flexible, individual-based control over the interaction with online spaces, to be able to fight online harassment and make digital spaces safer for those who are more vulnerable and marginalized. If these points are explored, the online gaming environment can be safer and more inviting to new players.

2. Methodology

2.1 Participants

The young adults between the age range of 18 to 26 years from the different schools of the Haridwar district of Uttarakhand were selected through a purposive sampling technique. Informed consent of students was obtained. 151 respondents' responses (Mean age = 19.18, SD age = 1.76,

age range = 18–26; 61 males & 92 females) were included in the remaining dataset. Individuals between the ages of 18 and 26 are commonly referred to as young adults (Bonnie & Breiner, 2014).

2.2 Tool

The Problematic Online Gaming Questionnaire (POGQ) developed by Kazuya Inoue, Kengo Yokomitsu, Tomonari Irie, Makoto Matsuyama, and Masanori Tanaka. It contains 18 items with CFI = .95. It is based on a five-point Likert scale, which rates as 1 (Never) and 5 (Always).

The study employed the *Cyber Bullying Victimization (CBV)* Scale developed by Jungup Lee, Neil Abell, and Jennifer L. Holmes. For CBV, the stratified α was .95. The five-point Likert scale, which goes as follows: 1 (Not at all) and 5 (Very often), served as the basis for the scale.

3. Results and Discussion

Table 1: Correlations, means and standard deviations for key variables (age, gender academic performance, daily internet usage, online gaming and cyberbullying)

	Mean	SD	1	2	3	4	5	6
Age	19.18	1.75	—					
Gender	1.6	0.49	-0.003	—				
AP	2.28	0.59	0.039	.412**	—			
DIU	1.19	0.46	-0.05	-.155	0.02	—		
OG	31.1	12.87	-0.027	-.256**	-0.065	.421**	—	
CB	26.1	9.59	0.123	-.281**	-.222**	.216**	.553**	—

* $p < 0.05$ level (2-tailed).

The result shows that moderate positive correlation was found between academic performance and gender $r(149) = .41, p < .05$. Weak negative correlation was found between online gaming and gender $r(149) = -.256, p < .05$. Weak negative correlation was found between gender and cyberbullying $r(149) = -.281, p < .05$. A weak negative correlation was found between academic performance (AP) and cyberbullying $r(149) = -.222, p < .05$. Daily internet usage (DIU) was found to have a positive moderate association with online gaming $r(149) = .421, p < .05$, and a positive weak association with cyberbullying $r(149) = .216, p < .05$. Online gaming was found to have a positive moderate relation with cyberbullying $r(149) = .553, p < .05$.

The Durbin-Watson statistic ($d = 2.27$) suggested that the independence of errors could be assumed. The values of variance inflation factor (VIF) and tolerance suggested that

multicollinearity was not a concern (VIF average = 0.99, tolerance average = 0.99). Collinearity diagnostics also indicated no multicollinearity.

Table 2: *Linear regression model summary for online gaming and cyberbullying among young adults*

R	R²	Adjusted R²	SE	F	p
.55	0.31	0.30	8.02	66.46	.001

** $p < .01$ level.

Table 2. shows that the overall model presented a statistically significant fit to the data $F(4,295) = 66.46, p < .01, R^2 = 0.31, R^2_{Adjusted} = 0.30$. The squared multiple coefficient (R^2) indicates that all the independent variables namely online gaming and cyberbullying contribute to 31% of variance on the dependent variable cyberbullying.

Table 3: *Linear regression model for online gaming and cyberbullying among young adults*

	B	SE B	β	t	p
Constant	13.281	1.701		7.809	.001
OG	0.412	0.051	0.553	8.153	.001

The values of the unstandardized beta coefficient (B), the standardized beta coefficient (β), the standard error of the unstandardized beta coefficient (SE B), and the t and p of constant, knowledge of online gaming and cyberbullying are displayed in Table 3.

Cyberbullying would increase by 0.412 for every unit increase in online gaming. This shows that cyberbullying was significantly predicted by online gaming. The research conducted by Cotler et al. (2017) found that the cyberbullying associated with online gaming is caused by several factors namely anonymity and no fear of punishment.

4. Conclusion

India constitutes 40-50% of women play games online, thus, to maintain the gaming ecosystem guarded and safe, the Ministry of Electronics and IT (MeitY) of India has emancipated Draft Rules for Online Gaming, introduced as an amendment to the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021. The Draft rules have been introduced as an amendment to the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021 (Barik, 2023).

Examining the complex connection between online harassment and online gaming helps to clarify a major problem in the modern digital world. It is becoming more and more clear that the line separating enjoyment from dread is frequently blurred as we traverse the constantly changing world of virtual encounters. The substantial effects of cyberbullying in online gaming communities have been brought to light by our research, underscoring the necessity of coordinated efforts from a range of stakeholders, including parents, educators, legislators, and game producers, to address this widespread issue. We can work to create safer and more welcoming online spaces where people may play games without fear of harassment or intimidation by promoting an atmosphere of kindness, compassion, and constructive digital citizenship.

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