From Pixels to Pain: A Systematic Literature Review on Cyberbullying in Online Gaming by Richa Yadav

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ARTICLE INFO	ABSTRACT
	The online gaming community is increasing day by day with more and more players joining the league. However, the problem of cyberbullying is found to be consistent even in the present times. The research here is interested in investigating more about the topic of cyberbullying but in context of the online gaming aspect. A total of 51 articles have been reviewed using the PRISMA framework. There are three aspects mainly investigated in the study – 1) factors impacting cyberbullying 2) forms and manifestations of cyberbullying and 3) impact on the players. The factors which are dominant include anonymity and lack of accountability, the presence of a competitive environment, peer influence and gender based biases. The most common form of bullying is verbal abuse followed by harassment which include sexual forms for female players, identity theft and exclusion. The impact caused is mostly psychological in nature with anxiety and depressive symptoms shown by the players and leads to behavioural impact as well that include being socially excluded and lowered self-esteem and confidence levels. The study has also provided a number of measures that can be used to lower down the levels of cyberbullying in online gaming. **Keywords –** Gaming; Online; Abusive; Internet; Players

1. Introduction

The emergence of the internet has made a number of changes in the daily lives of the individuals. It undertakes different mediums of engaging oneself while being connected to others located across the world. From the use of social media platforms to get access to various information and entertainment to being involved in online gaming sessions, there are a number of ways to engage oneself in the present times. The online gaming world as facilitated by the usage of the internet is widely used across the globe (J. Huang et al., 2021). Interestingly, it is not confined to only a certain age group or gender but is equally liked by everyone. The concept of online gaming can be defined as the act of playing games over a computer network mostly using the internet (Sardone et al., 2009). It involves a series of designs which range from being very simple text based games to constructing complex virtual worlds for the players to dive into. In the past years, there is an increase in the use of both computers or mobile phones and the internet which has led to the increase in the number of online gamers (Ferretti et al., 2008).

As it has been mentioned earlier that the users are not confined to a definite section of individuals, with the diversity of users in the online gaming zone, there are a number of concerns that arise. With the increase of screen time, individuals are found to often lose track of time or get involved in the virtual reality more than the real world. This can have a different range of impact across individuals based on their age groups and other demographic characteristics. Along with these challenges, there is another challenge that is quite essential to address in the present times is that of cyberbullying. The amount of cyberbullying that occurs in the online gaming arena is massive and it has affected many users. The definition of cyberbullying can be stated as making use of electronic communication technology such as phones, computers etc. to harm others (Beran et al., 2012; Kowalski & Limber, 2007). Different forms of cyberbullying may include making fun of others on the internet, spreading rumours about others and also through these practices isolating someone (J. Huang et al., 2021). As the online space restricts the individuals to have face to face interactions, the level of cyberbullying is believed to be higher.

The research here is interested in investigating more about the topic of cyberbullying but in context of the online gaming aspect. While there is much research that has delved into understanding cyberbullying in social media platforms, this study would generate a detailed idea about its role in the online gaming community and the consequences that it can lead to. However, before moving into the study, a section below is provided to understand more about cyberbullying in online gaming.

2. Prevalence of Cyberbullying in Online Gaming

The impact of cyberbullying can be very serious as individuals tend to suffer from numerous issues due to it. According to the studies by (Doane et al., 2016; Elipe et al., 2015), the victimisation rates of cyberbullying ranged from 2.7 to 84.9%. The factors that are associated with cyberbullying include gender, anxiety, addiction to the internet and self-esteem issues to name a few (J. Huang et al., 2021). The consequences of cyberbullying can result in depression, anxiety and even suicidal tendencies (Hinduja & Patchin, 2008).

In terms of cyberbullying especially in the online gaming zone, it is found that in a survey conducted among online gamers in the United States of America, 76% of them agreed to have been called by offensive names while playing games online (Clement, 2023a). It is 86% of the gamers that have agreed to have faced some kind of online harassment when they are involved in playing video games online. In a similar report with respect to cyberbullying in online gaming in Australia, it was established that around 17% of the players in the multiplayer video game category have experienced in-game bullying (Government of Australia, 2018). It has been found that cyberbullying is not only impacting the individuals alone but is also causing concern to the entire online gaming industry as well. In 2020, during the period of Covid-19 lockdown, the harassment during these games were on a rise. Among different forms of cyberbullying during the time, 37% of the instances revolved around offensive name calling during the game (Vibha, 2023). In another study conducted by (Clement, 2023b), it is found that online gamers and especially women often are victims of cyberbullying. It is due to the anonymous nature of the users that such instances are taking place at massive levels. It was reported by 47% of the female gamers in the survey that they have experienced abuse while gaming because of their gender.

Overall looking into the cyberbullying levels in the online gaming space, it can be established that it is continually occurring and it is observed that it happens to every gamer whether it is based on their individual personality, performance, age group or gender (Kaye et al., 2022; Prasetyaningtyas & Prayogo, 2021). This problem needs to be understood further in a detailed manner. In order to do so, the study here would be providing a holistic overview of the situation and point out the main areas of concern while suggesting methods of overcoming them in the future.

The following research questions would be attempted to be answered in the study here –

RQ1: What are the factors that contribute towards cyberbullying in online gaming?
RQ2: What are the different forms and manifestations of cyberbullying in online gaming?
RQ3: How does cyberbullying in online gaming impact on the players?
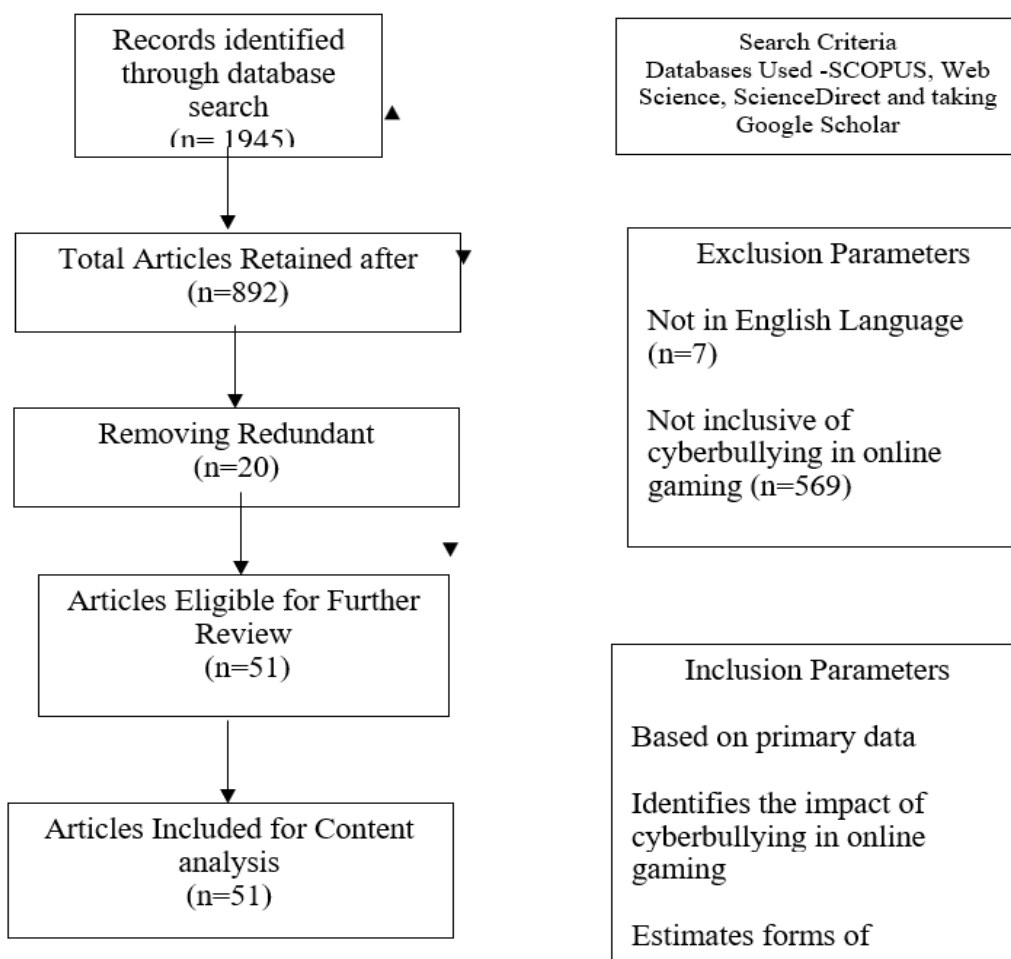In the next section, the methodological approach to answer these questions is put forward.

3. Research on Cyberbullying in online gaming

The study here would be based on a systematic literature review where an overview on the different aspects of cyberbullying in online gaming would be established. The use of a systematic literature review format allows the researcher to put forward the findings in an organised manner while pointing out the major themes of concern in the area. In this case, cyberbullying in online gaming has different points where the concern needs to be diverted. Hereby, the use of this method of study would help in focusing the same and put forward a thematic analysis. The method to be followed makes use of the PRISMA framework for selecting the papers for review. While designing the framework, the study would undertake the process suggested by (Moher et al., 2009) where a four step approach is taken to arrive at the desired results. These four stages include – identifying, screening, eligibility and inclusion.

The first stage is that of identification and the process begins with searching in the relevant databases for articles in the domain of cyberbullying in online gaming. The review process described above involves a comprehensive understanding of the existing literature in the field of online gaming. The databases to be considered when undergoing the extensive search for relevant research articles include SCOPUS, Web Science, ScienceDirect and taking Google Scholar databases for sources. As the Web of Science database is a part of the SCOPUS database, it would be here that the majority of the articles would be taken. The prime idea behind considering only these sources for the study is the inclusion of articles which are of high quality. The identification of the required literature within these databases is done with the use of specific keywords like "Cyberbullying," " Online Gaming," "Gender Based Cyberbullying," and "Verbal Abuse." The subsequent section outlines the detailed process followed to select the research papers under consideration. The period of searching of the articles is for a duration of 10 years which is from 2013 to 2023. A total of 1945 articles have been located under the stage.

In the following stage, it is where the screening of the articles begins. The articles have been investigated through the reading of its title and working upon the presence of the inclusion criteria. The criteria being considered include the presence of cyberbullying with respect to online gaming. In the screening stage by including the criteria, a total of 51 articles have been found relevant. The articles which are found redundant have been removed along with those which do not fulfil all the required criteria for the study. Next in the eligibility stage, the presence of the inclusion criteria is reassured and the final list of articles to be reviewed have been scrutinized. Finally, through a detailed content analysis, the 51 articles in the study are being reviewed to get the answers to the set research questions.

This method for review is being depicted using a PRISMA framework below. The use of PRISMA allows the careful shortlisting of these articles based on its screening at different levels of the review. A graphical representation of the steps involved in this process is provided below.

Records identified through database search (n= 1945)		Search Criteria Databases Used -SCOPUS, Web Science, ScienceDirect and taking Google Scholar
Total Articles Retained after (n=892)		Exclusion Parameters Not in English Language (n=7) Not inclusive of cyberbullying in online gaming (n=569)
Removing Redundant (n=20)		
Articles Eligible for Further Review (n=51)		Inclusion Parameters Based on primary data Identifies the impact of cyberbullying in online gaming Estimates forms of
Articles Included for Content analysis (n=51)		

As the research questions in the study have been established according to the three motives that have been set up for the study to fulfil, in the review process, it would be considered separately. The 51 articles have been subdivided into three sections based on the research questions. Now, to present the papers fulfilling each of the research questions, their representations are provided in three different tables.
A bibliometric analysis of the SCOPUS database has been done to locate the pattern in the number of articles for the past ten years.

Number of Articles on Cyberbullying in Online Gaming
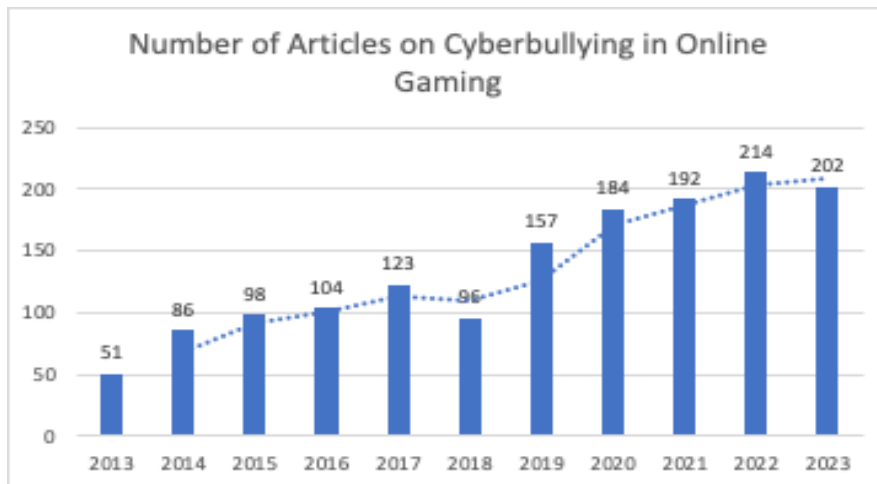
The number of papers are seen to be overall increasing during the ten years. Each of the tables with the papers being reviewed are presented below in a serial manner.

3.1 RQ1 - Factors Contributing to Cyberbullying

The first research question attempts to understand the factors that contribute towards the cyberbullying occurring in the online gaming industry. The idea is to point out the factors which are found to be mentioned repetitively by the researchers and generate a conclusive idea about it at the end of the study.

Serial Number	Author	Objective	Methodology	Factors contributing to Cyberbullying
1	(Gan et al., 2023)	To determine the sequential role of cyberbullying with the help of 669 middle school Chinese adolescents involved in online gaming.	Quantitative	Internet Gaming Disorder Parental Neglect
2	(Kordyaka et al., 2023)	To investigate the toxicity existing in the online battle games especially with respect to e Sports involving multiplayers.	Quantitative	Competitive and Intense Environment Group Dynamics and Peer Influence
3	(Tintori et al., 2023)	To determine the predictive factors in case of cyberbullying and propagating online safety for children .	Quantitative	Parental Neglect Emotional Discomfort Group dynamics
4	(BEKİR et al., 2022)	To understand the association between cyberbullying in context to emotional intelligence aspect.	Quantitative	Internet Gaming Disorder Gender Emotional Quotient
5	(Hidayat et al., 2022)	To know more about violence and addiction towards the online gaming activities through a phenomenological study	Qualitative	Anonymity and Lack of Accountability Competitive and Intense Environment Group Dynamics and Peer Influence
6	(Nwanosike et al., 2022)	To understand about the social bullying taking place in the online gaming arena especially among the players who are undergraduates.	Quantitative	Internet Gaming Disorder Risk-taking behaviour
7	(Xiang et al., 2022)	To understand about the cyberbullying and gaming disorder taking place among the youth in China who are actively involved in online gaming	Quantitative	Internet Gaming Disorder
8	(Li et al., 2021)	To understand about cyberbullying perpetration in school children across 41 countries with respect to the routine activity theory	Quantitative	Peer Influence Lack of Accountability
9	(Pratiwi & Karneli, 2020)	To determine the contribution of online gaming and provision of peer conformity with respect to the student bullying behaviour	Quantitative	Peer Conformity
10	(Zhu et al., 2020)	To understand about the relationship between normative beliefs and cyberbullying with respect to online violence that occurs in the gaming aspect	Quantitative	Beliefs about Aggression Trait Aggressiveness Game Violence
11	(McLean & Griffiths, 2019)	To investigate about the experience of female gamers in the context of cyberbullying through a qualitative based analysis	Qualitative	Gender based bias Anonymity and Lack of Accountability
12	(Weber et al., 2019)	To talk about the stereotypical perceptions about the cyberbullying incidents in the online gaming space.	Qualitative	Gender based bias Group Dynamics and Peer Influence
13	(Zsila et al., 2019)	To understand in detail about the gender differences occurring in cyberbullying context of online gaming through an in detailed analysis using 1500 Hungarian gamers	Quantitative	Gender based bias
14	(Adinolf & Turkay, 2018)	To determine the perspective of the players during cyberbullying in Esports and the coping strategies considered along with it.	Qualitative	Group Dynamics Competitive and Intense Environment
15	(Garaigordobil & Martínez-Valderrey, 2018)	To determine how technological resources can be used to prevent online bullying in the gaming domain. The study focuses on adolescents as they are more prone to cyberbullying.	Quantitative	Competitive and Intense Environment Anonymity and Lack of Accountability Aggressiveness
16	(Murnion et al., 2018)	To analyse in-game cyberbullying using machine learning and semantic analysis. The study uses chat data for conducting a holistic overview	Qualitative	Competitive and Intense Environment Toxic Behaviour
17	(Autrey, 2017)	To understand the interaction among the virtual and real world gaming while considering the essential elements	Quantitative	Competitive and Intense Environment

18	(Fox & Tang, 2017)	To understand cyberbullying in the case of women gamers and the concerns that guide them. Women face a number of challenges and cyberbullying which have caught the eyes of many researchers and are investigated here	Quantitative	Gender based bias Group Dynamics and Peer Influence
19	(Saarinen, 2017)	To investigate the toxic behaviour displayed in the online gaming scenario. The study realises the cyberbullying levels among the majority of gamers and identifies the problems.	Qualitative	Competitive and Intense Environment Toxic behaviour trait
20	(Sanders, 2016)	To investigate the opportunities and risks that are arising out of the online gaming environment in the era of highly dynamic gaming scenarios.	Quantitative	Competitive and Intense Environment Group Dynamics and Peer Influence
21	(Barlett, 2015)	To understand the influence of anonymity of the users on creating a bullying environment for the online gaming situation.	Quantitative	Anonymity and Lack of Accountability
22	(Chui, 2014)	To examine the relationship between anonymity and executing the anti-social behaviour for allowing cyberbullying in the online gaming space	Qualitative	Anonymity and Lack of Accountability
23	(Keipi & Oksanen, 2014)	To investigate 14 to 18 year old gamers based on their anonymity narratives with respect to cyberbullying	Quantitative	Anonymity and Lack of Accountability
24	(Hughes & Louw, 2013)	To talk about the playing online games and the cyberbullying activities that rise out of it through social cues and group dynamics	Quantitative	Group Dynamics and Peer Influence Anonymity and Lack of Accountability
25	(Wright, 2013)	To understand the young adults perceptions towards anonymity and it giving rise to cyber aggression which eventually contributes towards the cyberbullying levels	Quantitative	Anonymity and Lack of Accountability Cyberaggression

As seen above, out of the total 51 articles there are 25 articles that have been included to identify the factors causing cyberbullying in the online gaming industry. it reflects on the categorisation of the factors especially in terms of the anonymity and its provisions for cyberbullying, the peers forcing into its generation in the online space, gender based biases and the presence of a highly competitive environment. In case of children and adolescents, the neglect from the end of the parents are also highlighted and the occurrence of internet gaming disorder among such players further complicate the situation. The factors would be discussed in the upcoming sections in detail.

3.2   RQ2 - Forms and Manifestations of Cyberbullying
The second research question points out to the forms of cyberbullying found predominantly in the online gaming aspect. It relates to the forms of abuse that are constantly faced by the gamers and would provide suggestive measures to focus on them.

Sl. No.	Author	Objective	Methodology	Forms and Manifestations of Cyberbullying
1	(Hassan, 2023)	To look into the multiplayer online gaming scenarios and identify their association with cyberbullying. It provides an idea about the different situations arising due to cyberbullying.	Quantitative	Harassment, Identity Theft and Impersonation
2	(Yıldırım, 2022)	To look into the texts of online game chats to detect the forms of cyberbullying that takes place. The study have used the help of text mining and identified the main cases of concern	Quantitative	Verbal Abuse and harassment
3	(Eden & Roberto, 2021)	To understand about the forms of cyberbullying in online gaming among the players who are middle school students. The study focused on cyberbullying victimisation and perpetration to identify its forms of occurrence	Quantitative	Verbal Abuse
4	(Mikka-Muntuumo & Peters, 2021)	To address the concern of online abuse in gaming by looking into the situation in Namibia. 84 different stakeholders to the process are being used for the purpose of the study and identified the forms dominating cyberbullying in the space.	Quantitative	Verbal Abuse
5	(Stepanova et al., 2021)	To talk about cyberbullying in the online gaming arena by using the methods of sentiment analysis and natural language processing. The study has been done to use these programs to understand the different forms of cyberbullying experienced	Quantitative	Verbal Abuse
6	(Vo et al., 2021)	To enable a system detecting the cyberbullying based comments generated during online gaming sessions. The study has identified it as one of the main forms of cyberbullying in online gaming.	Quantitative	Verbal Abuse
7	(Hilvert-Bruce & Neill, 2020)	To investigate the normative beliefs of trollers leading to cyberbullying in online gaming. The social cognitive approach to such bullying is considered in this form of the study.	Quantitative	Cyberaggression harassment
8	(Peurala, 2020)	To investigate cyberbullying in gaming with respect to a multiplayer perspective. The study focused on understanding about the prevalence of such instances and the effect it causes on the experience of the players	Quantitative	Verbal Abuse
9	(Valanne, 2020)	To understand the world of online gaming from the perspective of Finnish gamers by considering the cyberbullying aspect into it.	Quantitative	Harassment, Identity Theft and Impersonation
10	(Jones, 2019)	To conduct a comprehensive study about the dark aspect of online gaming with respect to the anti-social behaviour exhibited by the players.	Quantitative	Exclusion and manipulation
11	(Birk et al., 2016)	To analyse the digital game space with respect to the different cyberbullying activities displayed by the players. It is based on a cognition analysis and include multiple players	Qualitative	Social Exclusion and manipulation
12	(Tang & Fox, 2016)	To specifically understand the forms of cyberbullying behaviour exhibited by men in the online gaming space. A total of 425 male who are involved in playing video games have participated in the survey	Quantitative	General and Sexual Harassment

| 13 | (Balci & Salah, 2015) | To conduct a method of identifying the cyberbullying activities taking place in the online gaming situation. With a data collected from around 1 lakh gamers, the study provides insights into the most common form of bullying occurring in the space | Quantitative | Verbal Abuse and harassment through aggression |
| 14 | (Kwak & Blackburn, 2015) | To be able to provide a linguistic analysis of the toxic behaviour exhibited in the online gaming platforms. The data crowdsourced from a huge database provides interesting insights | Qualitative | Verbal Abuse |

A total of 14 articles out of 51 talks about the different forms of cyberbullying found. There are notably the most common forms highlighted in the table above which includes verbal abuse as the primary form. It is followed by different forms of harassment, manipulation, exclusion along with identity theft. Further discussions would be conducted below.

3.3 RQ3 - Impact of Cyberbullying on Players

The last question is interesting to know how the cyberbullying occurring at such a massive level is impacting on the players of online gaming. As it is highly prevalent in the present times, the impact that it is eventually causing needs to be investigated in detail.

Serial Number	Author	Objective	Methodology	Impact of Cyberbullying on Players
1	(AlJaffer et al., 2021)	To understand the relation of cyberbullying among young Saudi online gamers with that of depression. A total of 143 caregivers of such gamers are being approached with a questionnaire to understand the same	Quantitative	Psychological impact - depression and suicidality
2	(Alhujailli et al., 2020)	To know about the affective as well as stress consequences of cyberbullying. The study based on volunteering system saw participation from 29 victims of cyberbullying in social media and online gaming	Quantitative	Psychological & behavioural impact- negative emotional state, increased worry and social exclusion
3	(Collantes et al., 2020)	To learn about the impact caused by cyberbullying on the mental health of the victims. The study is based on documentary and descriptive analysis focusing on the young victims	Qualitative	Psychological & behavioural impact- depression and losing self-confidence
4	(C. L. Huang et al., 2019)	To learn about the behaviour of Taiwanese online gamers to cyberbullying. The study included a total of 1112 responses from such gamers and is investigated using statistical tools	Quantitative	Behavioural impact- Exclusion and impact on gameplay
5	(Cornel et al., 2019)	To use a deep learning method for detecting cyberbullying in online gaming through chats. The study focused on a convolutional neural network and promoted a system to detect cyberbullying through the chats of the gamers.	Quantitative	Psychological & behavioural impact- depression and impact on gameplay
6	(Hu et al., 2019)	To learn about cyberbullying victimisation among the adolescents who fall in the high functioning autism spectrum disorder. Considering 219 such adolescents, the study focused on the psychological impact that takes place	Quantitative	Psychological impact – depression, anxiety and suicidality
7	(Ildırım et al., 2017)	To correlate the psychological aspects with cyberbullying and the victimisation that it causes. The study included 198 students from university levels who are exposed to cyberbullying through different mediums	Quantitative	Psychological & behavioural impact- depression , anxiety and suicidality, negative self-concept, and
8	(Rehman, 2017)	To investigate more about cyberbullying occurring across the gaming community. As cyberbullying are mostly addressed with terms to social media, this study investigates about the impacts caused by it in terms of online gaming	Quantitative	Psychological & behavioural impact- depression and impact on gameplay
9	(Fahy et al., 2016)	To conduct a longitudinal study for associating cyberbullying with mental health issues among the adolescents. Considering a total of 2480 teenagers for the study who are exposed to cyberbullying	Quantitative	Psychological impact – depression, social anxiety and mental well-being
10	(Martinez-Lanz, 2016)	To understand the antecedents and consequences of depression occurring as a result of cyberbullying. The study occurs among adolescents who are facing cyberbullying from different mediums on the internet including gaming	Quantitative	Psychological & behavioural impact- depression low self-esteem
11	(Selkie et al., 2015)	To understand the results of cyberbullying among female students across different online domains. The study attempts to understand what effect cyberbullying causes on the psychological aspects of these students.	Quantitative	Psychological & behavioural impact- depression and alcohol consumption
12	(Olenik-Shemesh et al., 2014)	To talk about cyberbullying victimisation occurring among adolescents. The sample includes 242 adolescents belonging to Israel within the age group of 13 to 16 years.	Qualitative	Psychological & behavioural impact- depression and loneliness

There are 12 articles that have been reviewed to highlight the form of impact that is caused on the players as a result of cyberbullying. The impact ranges from psychological, behavioural to gameplay impacts. The impact of cyberbullying in the form of depression and anxiety is quite evident. It also leads to behavioral changes such as excluding oneself, losing confidence level and even having an impact on their gameplay levels.
Further discussions from it are provided below.

4. Risk Factors for Cyberbullying in Online Gaming

The first research question generated enquired about the factors that have been established in the literature as critical in establishing cyberbullying in the online gaming space. There are several key insights developed during the review conducted here and have been able to provide different factors which are concerning in this case.

Out of the factors identified, one of the most influential factors that leads to cyberbullying in online gaming is the anonymity of the players (Keipi & Oksanen, 2014). The internet provides a virtual reality scenario to the users and it allows them to be anonymous and still be able to actively participate in it. Contrary to face-to-face interactions in the real world, where it is mandatory that individuals would be held accountable for their actions, online gaming environments provide the players the opportunity to conceal their true identities behind their usernames (McLean & Griffiths, 2019). This anonymity provides an added layer of protection for these bullies, and provides them a chance to engage in abusive behavior without having to fear its repercussions. It is also noteworthy that the absence of any visual cues leads to misunderstandings which have the ability to escalate conflicts as the medium of interaction is mostly non-verbal (Hidayat et al., 2022). This also acts as a catapult to the cyberbullying situation in online gaming. The other factor which is associated with anonymity is the lack of accountability within online gaming communities (Li et al., 2021). This contributes to the perpetuation of cyberbullying. In traditional social settings, individuals are bound by social norms and expectations, which they need to adhere to by any means (Garaigordobil & Martínez-Valderrey, 2018). However in online gaming platforms, the lack of clear mechanisms to result in consequences for abusive behavior leads to cyberbullies not worrying about the situation. As a result, they may feel empowered to target and victimize other players after knowing that their actions are unlikely to be met with any harsh consequences. It makes it difficult to track the bullies unless any data mining tools are used due to the anonymity of the players. It is one of the prime risk factors that acts as a hindrance to the players in the online gaming space.

The next set of factors that have been also identified as risky include the presence of a competitive and intense environment that often leads the players to engage in cyberbullying (Kordyaka et al., 2023). The games that are played are often multiplayer based and due to the competitive nature of them, there are verbal abuses found during the playing sessions (Hidayat et al., 2022). While these may be considered as a part of the process but for many players this might lead to different outcomes. There are possibilities of humiliation which leads to an impact not only in their gameplay but also with respect to their personal lives (Adinolf & Turkay, 2018). The impact caused is majorly seen among teenagers and adolescents who suffer from depression and anxiety due to the cyberbullying they face in the gaming environment (Tintori et al., 2023). It is crucial that although such abuses occur out of the competing nature of the situation, it must be regulated to prevent such consequences.

The next factor is closely associated with the factors of cyberbullying ranging out of a competitive and intense environment – the impact of group dynamics and peer influence (Kordyaka et al., 2023). As discussed above, the online gaming environment leads to the formation of certain social groups or clans, in which the players collaborate and interact with one another. Within these groups, there are different dynamics observed such as the presence of hierarchy. It can influence individual behavior and attitudes towards cyberbullying as they might attain a position superior to others (Sanders, 2016). The factors of group norms and peer pressure have been cited within gaming communities as an important medium encouraging cyberbullying. It can again be associated with the anonymity factors that can further amplify the situation (Hidayat et al., 2022). Peer influence plays a crucial role in shaping attitudes and behaviors related to cyberbullying in online gaming contexts. It is established in earlier social theories as well that it is the nature of individuals to observe and replicate the behaviour of their peers. Hence, in the online gaming situation, such cyberbullying behaviors may be normalised due to the trend being followed. Another essential consideration here is that the desire of a player for social validation and acceptance from peers in the gaming community can drive them to participate in cyberbullying activities in order to fit in or gain status within their peer groups (Weber et al., 2019). As a result, peer influence can promote a reinforcing cycle of cyberbullying behavior, which is backed by the desire for social approval and belongingness among these players.

The next factor which is a state of concern among the online gaming community is the gender biasness that occurs. It is observed that the female players are often subjected to cyberbullying based on their gender which can cause several negative impacts on their lives. It is evident that the online gaming spaces are mostly male-dominated (Weber et al., 2019; Zsila et al., 2019). This has created a number of critical stereotypes and biases that time and again reinforces the traditional gender norms and expectations. As per the review conducted here, it is seen that female gamers frequently encounter gender-based discrimination, including sexist remarks, use of abusive language, and sexual harassment. The harassments faced include both general and sexual nature (McLean & Griffiths, 2019). This contributes to an unfavourable atmosphere within gaming communities that discourages female gamers. Moreover, the reviews also indicate that female players are often subjected to unfair treatment and practices that impact on their gaming and marginalize their presence in the gaming community. Female gamers are exclusively targeted for cyberbullying and harassment within online gaming spaces, with the bullies often using gender-based language, giving threats, and opt for several intimidation tactics to exert dominance and control over them (Fox & Tang, 2017). This form of cyberbullying can have various effects on the mental health and psychological well-being of the female players. It often leads to generating recurring feelings of anxiety, undergoing depression, and falling into social isolation (Tang & Fox, 2016). Additionally, the concurrent occurrence of such gender-based bias and cyberbullying make the female gamers detached and do not prefer to fully participate in the online gaming communities (Yıldırım, 2022). This trend of making the female players undergo marginalization within the gaming industry has led

to the significant implications for female players that impact on their sense of safety, belonging, and enjoyment within the gaming communities. Female gamers may experience high levels of stress and anxiety when indulging in online interactions, with a constant fear of harassment or discrimination based on their gender (Kaye et al., 2022). Moreover, it is quite concerning to see the normalization of gender-based bias within gaming culture which has created a very risky and unpleasant situation for the female gamers.

The factors above have been found to have the maximum impact on the online gaming cyberbullying generation. The toxic traits and aggressiveness of the players often lead to creating a difficult situation for the players. In order to prevent cyberbullying in the space, these factors need to be minimised and regulated effectively.

5. Cyberbullying Prevention and Intervention Strategies

The issue of cyberbullying is prime in the online community in the present times. However, it can be prevented and minimised to a considerable level with the help of various intervention strategies. The online space poses a number of threats in different aspects. Whether it includes the scams in the online banking sector or the online shopping systems, these have been tackled in the previous times using a set of prevention strategies. In the similar manner, for the cyberbullying occurring in the online gaming community, the design of appropriate measures can effectively control the situation. Here are some of the prevention and intervention strategies that are provided with respect to the findings highlighted in the review.

Game Design: The online game designs are quite creatively and critically executed. These see updates within a certain interval of time that facilitate its users with the latest trends. It can also serve as a medium to control cyberbullying in space. The game design with the aid of technology and artificial intelligence can be used for incorporating cyberbullying prevention features directly. The inclusion of such features into game design can help detect negative behaviours and accordingly take measures against such players. This can be a step towards promoting positive interactions among the players and creating a safe environment for the community. Such strategies may include using chat filters to block offensive language and designing gameplay mechanics which discourage harassment completely. It can act as a measure of cyberbullying prevention strategies.

Community Management: Along with including game design for preventing cyberbullying, the next step that can be taken is the community management aspect. Introducing effective community management is essential for delivering a positive and supportive gaming environment. The community moderators who are designated with the job of looking into the different aspects can be beneficial. They can actively monitor player interactions, enforce community guidelines, and intervene in instances of cyberbullying or harassment. Their job roles can be assigned based on the requirement of the situation and can be selected based on their approach. Additionally, encouraging a culture of inclusivity and empathy through community events, forums, and social media engagement with the help of such moderators can promote respectful behavior among players.

Reporting and Moderation Systems: The role of the community moderator is established in the previous point, however, a role in the form of systems involved can be another effective way of preventing cyberbullying. Implementing robust reporting and moderation systems allows players to report instances of cyberbullying or harassment quickly and easily. Game developers need to provide clear and specific guidelines on how to report abusive behavior. It must also be ensured that such reports are promptly addressed by trained moderators. Apart from the community moderators who are individuals, the introduction of automated moderation tools, such as keyword filters and behavior tracking algorithms, can also help identify and address cyberbullying in real-time.

Educational Programs and Awareness Campaigns: It has been found in the previous research that the programs designed to raise awareness can substantially change the minds of individuals.. Such educational programs are highly used in the technology world to spread awareness about the malpractices. In case of cyberbullying as well, educational programs and awareness campaigns can play a crucial role in promoting the side effects of cyberbullying and encouraging positive online behaviours. The need for game developers to integrate educational content into gameplay, such as tutorials on respectful communication and conflict resolution skills must be made mandatory to access the game by the players. It can also be done across a diverse range of platforms such as designing YouTube videos on cyberbullying prevention, posting on social media and introducing them in the form of disclaimers in the beginning of the games. These can be delivered by partnering with schools, youth organizations, and mental health professionals in the form of workshops and seminars on cyberbullying prevention. It can make the process more interesting, insightful and can empower players with the knowledge and skills to navigate online interactions safely and responsibly.

These prevention strategies can be used by game developers to raise concern about cyberbullying and create a space which is free of such concerns.

6. Legal and Ethical Considerations

The cyberbullying issue is considered as a crime in the eyes of law and there are several legal and ethical ways that are guiding the individuals against it. However, there are certain requirements in order to make it more functional and act in order to make the lives of the players better. Addressing cyberbullying in online gaming raises several complex legal, ethical, and privacy considerations that must be carefully navigated to ensure the protection of players' rights and well-being. The first aspect to be considered are the jurisdictional issues which can arise when cyberbullying incidents involve players from different countries or regions with differing legal frameworks. In the present online gaming situation, such an occurrence is quite common as players across geographical boundaries are involved in games. This can complicate efforts to enforce regulations and hold perpetrators accountable, especially in cases where laws regarding online harassment are not well-defined or consistently enforced across jurisdictions. Hereby, the necessity to design a common set of guidelines to prevent such complex situations is necessary.

The importance of privacy and data protection have been discussed quite seriously with the emergence of the internet and its facilities. In case of online gaming, concerns arise when implementing monitoring and surveillance measures to fight cyberbullying. While it may be necessary to collect and analyze data related to player interactions to identify and address instances of harassment, this must be done in a manner that respects players' privacy rights and adheres to applicable data protection regulations. Safeguards such as obtaining informed consent, anonymizing personal information, and implementing strict access controls can help mitigate privacy risks and ensure that data is handled responsibly. Similarly, ethical considerations also come into play when implementing monitoring and surveillance measures in online gaming environments. While monitoring tools can help detect and prevent cyberbullying, they may also act on players' autonomy and freedom of expression if implemented in an intrusive manner. Game developers and platform operators must keep a balance between protecting players from harm and respecting their rights to privacy and free speech. The need to include transparency and accountability in ensuring the effective monitoring and surveillance activities ethically must be done in accordance with established guidelines and standards.

In conclusion, addressing cyberbullying in online gaming requires careful consideration of jurisdictional issues, privacy and data protection concerns, and ethical considerations related to monitoring and surveillance. By taking a holistic approach that prioritizes the rights and well-being of players while also respecting legal and ethical boundaries, game developers and platform operators can create safer and more inclusive gaming environments for everyone.

7. Conclusion & Future Perspectives

The issue of cyberbullying in the online gaming community is quite widespread. It has been found that majority players have experienced cyberbullying in some form or the other. The amount of verbal abuse that is undertaken in such an intense and competitive environment causes stress among the players and impacts on their gameplay as well as their personal lives. Cyberbullying activities often impact on players by generating anxiety and depressive symptoms. The anonymity and lack of accountability often give rise to more of such situations. There are high levels of gender based harassment observed in the space. This shows that the online gaming forum is not able to provide a safe environment for its players which in the coming time can impact the entire community. The prevention strategies can be designed using technological aid by making use of data mining and other tools to filter out negative comments. The need to make the guidelines stricter and more standardised is the necessity of the hour. As gaming in the present time is not only a source of entertainment but has also emerged as a way of earning, the need to make it legally and ethically secure is colossal. This study can help in generating insights into the ways of making the online gaming environment free from cyberbullying.

In the future course of study, the detailed investigation of the legal and ethical considerations in online gaming can be done. Moreover, the need to understand the gender based biases in gaming towards females needs to be addressed to understand its various implications. The designing of effective awareness campaigns for cyberbullying especially in online gaming and its propagation mediums needs to be specified and investigated in detail.

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