

Gender Differences in Gaming Behaviour, Online Social Interaction, and Academic Performance Among Youth Gamers: A Multi-Variable Analysis of Socio-Economic and Behavioural Factors

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This cross-sectional study investigates gender disparities in gaming behaviour, online social interactions, and academic performance among youth gamers in Kohima, Nagaland. Employing purposive sampling, 140 female and 160 male gamers were chosen. Chi-square analysis, T-tests, and logistic regression were performed to evaluate the impact of gender and socio-economic status on gaming and academic performance. Findings demonstrate that females excel academically compared to males ($p < 0.001$), while dedicating less time to gaming daily and fewer days weekly. Conversely, males participate more often in gaming and online social interactions ($p < 0.001$). Notwithstanding these disparities, socio-economic status exhibited no considerable gender-based variation, indicating that the differences in gaming and academics are not economically motivated. Regression analysis indicated that male gender adversely affects academic performance while positively correlating with online interactions and perceived superiority. These findings underscore the influence of gender on gaming behaviour and academic achievement, highlighting the necessity for equitable educational interventions.

Keywords: Gender differences, Gaming behaviour, Academic performance, online social interaction and Kohima town.

The rise of online gaming has resulted in significant changes in the recreational activities of young people all over the world, particularly with the increased availability of mobile and multiplayer games. Online gaming has progressed from a casual pastime to a highly immersive activity with significant effects on social behaviour, psychological well-being, and academic performance. Given the prevalence of gaming, understanding how factors, such as gender, socioeconomic status, and gaming behaviour, interact is critical for developing targeted interventions, particularly in educational settings. Gender differences in gaming behaviour have sparked interest, as men and women approach games with different motivations and levels of

engagement. Males are more likely to enjoy competitive and immersive multiplayer games, whereas females may prefer casual or single-player gaming experiences. These differences may extend beyond behavioural ones to include online social interactions and academic performance. Existing research indicates that excessive gaming can harm academic performance, particularly among males who spend more time gaming. However, the specific dynamics of these gender differences remain largely unknown, particularly in local contexts.

The study of gender differences in gaming behaviour, online social interactions, and academic performance among young gamers is an important area of research that has received increased attention in recent years.

The purpose of this study is to look into these differences among young gamers in Kohima, Nagaland, as well as the relationship between gender and socioeconomic factors. Understanding how these variables affect academic outcomes and gaming engagement is critical for creating targeted interventions and support systems for youth. According to research, gender influences gaming behaviours, with boys and girls having different preferences and engagement patterns. For example, studies have found that male gamers prefer action, sports, and shooter games, whereas female gamers prefer puzzle, adventure, and quiz games (Király et al., 2015). Broader socio-cultural factors and personal taste influence this difference in gaming preferences. The perception of gaming as a male-dominated space can lead to reluctance among females to participate fully, often resulting in them concealing their gender to avoid harassment (Leonhardt & Overå, 2021). The competitive nature of online games can lead to feelings of exclusion among female players, affecting their gaming experience and social interactions (Leonhardt & Overå, 2021; Lopez-Fernandez et al., 2019). In addition to gaming behaviour, the relationship between gender and academic performance is of great interest. Research from the past has revealed that girls with low life satisfaction tend to use gaming more frequently, while boys are more vulnerable to bullying in gaming environments (Brooks et al., 2015). This suggests that gaming motivations vary significantly by gender, with girls potentially using gaming as a coping mechanism for social and emotional challenges, whereas boys may use video games to assert dominance or social status (Zhu et al., 2021). These behavioural patterns have implications for academic performance, as excessive gaming can distract from study time and academic engagement, especially among those who

are already at risk due to socioeconomic factors (Singh & Misra, 2016). Furthermore, socioeconomic status can exacerbate these dynamics. Access to technology and gaming platforms varies significantly across socioeconomic groups, influencing both the quantity and quality of gaming experiences for youth. For example, youth from lower socioeconomic backgrounds may have limited access to gaming resources, affecting their engagement and social interactions within gaming communities (Singh & Misra, 2016; Buono et al., 2020). This disparity highlights the need for a more nuanced understanding of how socioeconomic factors interact with gender to influence gaming behaviours and academic outcomes. In conclusion, this study aims to provide a comprehensive analysis of gender differences in gaming behaviour, online social interactions, and academic performance among young gamers in Kohima, Nagaland. The study aims to understand how gender and socioeconomic factors influence gaming engagement and academic success, ultimately contributing to the development of effective strategies for assisting youth in navigating the complexities of the gaming landscape.

This study employed a cross-sectional research design to investigate the relationship between gender and various socio-demographic and behavioural variables among youth participating in online gaming. We collected data from youth gamers residing in the municipal regions of Kohima town, Nagaland. The target population included individuals aged between 15 and 24.

Objective and Hypothesis

1. Investigating gender differences in gaming behaviour:
- H0: There is no significant difference in gaming behaviour between male and female gamers.

1. Examining the impact of gaming on academic performance between gender:
 - H1: Gaming behaviour has no significant impact on academic performance.
2. Understanding how socio-economic factors relate to gaming engagement among gender:
 - H2: Socio-economic factors do not significantly influence gaming engagement.

Method

Sampling Technique

The study used a snowball sampling method to collect data from 300 youth gamers, comprising 140 females and 160 males. This technique enabled the recruitment of a diverse sample, facilitating an in-depth analysis of gender dynamics and their impact on communication and social interactions in online gaming communities.

Measure

We assessed academic performance using the Academic Performance Scale, which consists of eight items rated on a 5-point Likert scale. The present study utilised the scale, originally developed by Carson Birchmeier et al., and found its internal consistency reliability to be 0.89. The study evaluated students' self-assessments regarding their academic performance. Zhiqi You et al. created the Preference for Online Social Interaction Scale, which the study used to examine preferences for online social interactions. This scale assesses three dimensions of online social interaction: perceived superiority, propensity for engagement, and frequency of interactions. The internal consistency reliabilities for these dimensions were 0.84, 0.83, and 0.73, respectively, with an overall scale reliability coefficient of 0.90 demonstrating high internal consistency.

Results

Table 1 analysis employs chi-square tests to explore associations between gender and various sociodemographic factors, educational performance, gaming genres, and gameplay styles, revealing significant gender differences across these domains. The occupation of the household head shows a notable difference ($\chi^2 = 17.022$, $df = 9$, $p = 0.048$), with female-headed households exhibiting a higher unemployment rate (33.60%) compared to male-headed households (31.30%). Males are predominantly found in roles such as "Craft & Related Trade Workers" (9.40%) and "Skilled Agricultural & Fishery Workers" (11.90%), while females are more likely to be "Skilled Workers and Shop & Market Sales Workers" (12.90%) and "Legislators, Senior Officials & Managers" (8.60%). This suggests a gender division in occupational roles influenced by societal norms. While no significant association exists regarding educational qualifications of household heads ($\chi^2 = 9.759$, $df = 6$, $p = 0.135$), trends indicate that a larger proportion of male heads are illiterate (13.10%) compared to females (5.00%).

Academic performance reveals significant gender differences ($X^2 = 120.383$, $df = 3$, $p < 0.001$), with females achieving "Excellent" performance at 50.40%, while only 8.10% of males reach this level. In gaming preferences, males favour MMORPGs (25.60%) and MOBA games (54.40%), while females prefer casual games (35.00%). These findings highlight the substantial influence of gender on educational outcomes, occupational roles, and gaming behaviours, indicating the need for further exploration into the long-term implications of these disparities.

Table 1. Chi-square tests showing the association between gender (female and male) and various sociodemographic variables.

| Variable | | Female | | Male | | Df | (X ²) | Sig |
|--------------------------------------|---|------------|--------|--------|--------|----|-------------------|----------|
| | | N | % | N | % | | | |
| Occupation of the head (parents) | Unemployed | 47 | 33.60% | 50 | 31.30% | 9 | 17.022 | 0.048* |
| | Elementary Occupation | 3 | 2.10% | 6 | 3.80% | | | |
| | Plant & Machine Operators and Assemblers | 9 | 6.40% | 3 | 1.90% | | | |
| | Craft & Related Trade Workers | 9 | 6.40% | 15 | 9.40% | | | |
| | Skilled Agricultural & Fishery Workers | 12 | 8.60% | 19 | 11.90% | | | |
| | Skilled Workers and Shop & Market Sales Workers | 18 | 12.90% | 13 | 8.10% | | | |
| | Clerks | 6 | 4.30% | 18 | 11.30% | | | |
| | Technicians and Associate Professionals | 13 | 9.30% | 11 | 6.90% | | | |
| | Professionals | 11 | 7.90% | 19 | 11.90% | | | |
| | Legislators, Senior Officials & Managers | 12 | 8.60% | 6 | 3.80% | | | |
| | education qualification of the Head (Parents) | Illiterate | 7 | 5.00% | 21 | | | |
| Primary school certificate | | 11 | 7.90% | 13 | 8.10% | | | |
| Middle school certificate | | 17 | 12.10% | 19 | 11.90% | | | |
| High school certificate | | 59 | 42.10% | 53 | 33.10% | | | |
| Intermediate or diploma | | 11 | 7.90% | 12 | 7.50% | | | |
| Graduate | | 28 | 20.00% | 39 | 24.40% | | | |
| monthly income of the head (parents) | Profession or Honours | 7 | 5.00% | 3 | 1.90% | 6 | 3.534 | 0.739 |
| | d" 6174 | 23 | 16.40% | 19 | 11.90% | | | |
| | 6,175-18,496 | 17 | 12.10% | 24 | 15.00% | | | |
| | 18,497-30,830 | 23 | 16.40% | 31 | 19.40% | | | |
| | 30,831-46,128 | 28 | 20.00% | 27 | 16.90% | | | |
| | 46129-61,662 | 23 | 16.40% | 23 | 14.40% | | | |
| | 61,663-123,321 | 16 | 11.40% | 19 | 11.90% | | | |
| e"123,322 | 10 | 7.10% | 17 | 10.60% | | | | |
| Socio-economic status of the family | Upper (I) | 10 | 7.10% | 9 | 5.60% | 4 | 0.863 | 0.93 |
| | Upper Middle (II) | 44 | 31.40% | 54 | 33.80% | | | |
| | Lower Middle (III) | 32 | 22.90% | 34 | 21.30% | | | |
| | Upper Lower (IV) | 45 | 32.10% | 55 | 34.40% | | | |
| | Lower (V) | 9 | 6.40% | 8 | 5.00% | | | |
| Educational | Matriculation | 10 | 7.10% | 14 | 8.80% | 3 | 20.502 | <0.001** |

| | | | | | | | | |
|---------------|-----------------------|-----|--------|-----|--------|---|---------|----------|
| qualification | Higher Secondary | 30 | 21.40% | 17 | 10.60% | | | |
| of the youth | Graduate | 82 | 58.60% | 76 | 47.50% | | | |
| gamer | Post Graduate | 18 | 12.90% | 53 | 33.10% | | | |
| Academic | Excellent Performance | 70 | 50.40% | 13 | 8.10% | 3 | 120.383 | <0.001** |
| performance | Good Performance | 69 | 49.60% | 65 | 40.60% | | | |
| Grade | Moderate Performance | 0 | 0.00% | 36 | 22.50% | | | |
| | Poor Performance | 0 | 0.00% | 46 | 46% | | | |
| Gaming | MOBA | 68 | 48.60% | 87 | 54.40% | 2 | 9.669 | 0.008* |
| Genre | Casual games | 49 | 35.00% | 32 | 20.00% | | | |
| | MMORPGs | 23 | 16.40% | 41 | 25.60% | | | |
| Types of | Singleplayer | 49 | 35.00% | 14 | 8.80% | 1 | 30.909 | <0.001** |
| Gameplays | Multiplayer | 91 | 65.00% | 146 | 91.30% | | | |
| Devices Use | P.C | 33 | 23.60% | 16 | 10.00% | 1 | 10.03 | <0.001** |
| for gaming | Mobile Phone | 107 | 76.40% | 144 | 90.00% | | | |

*and ** denote statistically significant at 0.05 and 0.001 at the level of 5% and 1 %.

Table 2. Showing the t-test analysis compares several gaming-related behaviours and their effects between female and male.

| Variables | Gender | N | Mean | Std. Deviation | t-value | Mean Difference | Sig |
|--|--------|-----|---------|----------------|---------|-----------------|----------|
| No of days in gaming | Female | 140 | 2.925 | 2.0098 | -6.816 | -1.6063 | <0.001** |
| | Male | 160 | 4.531 | 2.0594 | | | |
| hours per session in a day | Female | 140 | 115.71 | 91.22 | -7.96 | -95.598 | <0.001** |
| | Male | 160 | 211.31 | 113.62 | | | |
| Total time spent hours per day in a week | Female | 140 | 436.07 | 612.23 | -7.438 | -641.491 | <0.001** |
| | Male | 160 | 1077.56 | 844.456 | | | |
| Academic performance | Female | 140 | 32.39 | 2.76 | 13.522 | 9.123 | <0.001** |
| | Male | 160 | 23.26 | 7.552 | | | |
| Frequency of online social interaction | Female | 140 | 6.49 | 1.391 | 14.741 | -3.627 | <0.001** |
| | Male | 160 | 10.11 | 2.604 | | | |
| Propensity of online social interaction | Female | 140 | 12.41 | 4.307 | 13.922 | -6.711 | <0.001** |
| | Male | 160 | 19.13 | 4.037 | | | |
| Superiority of online social interaction | Female | 140 | 17.61 | 5.415 | 15.722 | -10.205 | <0.001** |
| | Male | 160 | 27.81 | 5.774 | | | |
| Online social interaction | Female | 140 | 36.51 | 9.429 | 17.362 | -20.543 | <0.001** |
| | Male | 160 | 57.05 | 10.871 | | | |

*and ** denote statistically significant at 0.05 and 0.001 at the level of 5% and 1 %.

Table 2 t-test analysis investigates gaming-related behaviours and their effects between female and male participants, focusing on gaming frequency, time spent gaming, academic performance, and online social interaction. The findings reveal significant gender differences across these dimensions. Males engage in gaming more frequently, with an average of 4.531 days per week compared to 2.925 days for females (t-value: -6.816, $p < 0.001$), indicating that male participants are more immersed in gaming activities. This aligns with existing literature, suggesting that males often derive greater gratification from gaming, potentially influenced by their social networks. When examining the duration of gaming sessions, males spend an average of 211.31 minutes per session, significantly more than females' 115.71 minutes (t-value: -7.96, $p < 0.001$). This substantial mean difference of -95.598 minutes reflects males' propensity for longer gaming sessions, which may relate to their motivations for competition and achievement. In terms of total weekly gaming time, males

average 1,077.56 minutes compared to females' 436.07 minutes (t-value: -7.438, $p < 0.001$), highlighting a considerable engagement gap of -641.491 minutes. This suggests that males prioritize gaming over other activities, whereas females may balance their gaming with other social responsibilities.

Conversely, females demonstrate significantly better academic performance, with a mean score of 32.39 compared to males' 23.26 (t-value: 13.522, $p < 0.001$), indicating an inverse relationship between gaming time and academic success. Furthermore, males report higher frequencies and propensities for online social interaction (t-values: -14.741 and -13.922, $p < 0.001$), suggesting that gaming serves as a primary medium for social connectivity for them. Overall, these findings underscore the gendered dynamics of gaming behaviours, revealing how they influence academic performance and social interactions within gaming contexts.

Table 3. Logistic regression model, gender is examined in relation with other Variables.

| Gender | Coef. | Std. Err. | z | P> z |
|--|--------|-----------|-------|----------|
| Academic performance | -0.456 | 0.083 | -5.51 | <0.001** |
| Frequency of online social interaction | 0.735 | 0.152 | 4.85 | <0.001** |
| Propensity of online social interaction | 0.094 | 0.103 | 0.91 | 0.361 |
| SUPERIORITY of online social interaction | 0.124 | 0.069 | 1.78 | 0.074 |
| _cons | 3.732 | 2.176 | 1.72 | 0.086 |
| R2 | 0.697 | | | |
| LR chi ² test | 288.79 | <0.001** | | |

*and ** denote statistically significant at 0.05 and 0.001 at the level of 5% and 1 %.

The regression analysis highlights key predictors that influence gendered behaviours within online gaming contexts. Academic performance shows a significant negative association with the dependent variable (Coef. = -0.456, $p < 0.001$), suggesting that higher academic

achievement correlates with reduced online engagement. This may imply that academic success plays a moderating role in how youth engage in online spaces, potentially due to time constraints or prioritization of academic responsibilities. Frequency of online social interaction has a significant positive effect

(Coef. = 0.735, $p < 0.001$), indicating that frequent social engagement online is strongly associated with an increase in the outcome variable. This suggests that higher interaction frequency may foster more involvement and visibility within online communities, reinforcing the role of consistent engagement in shaping online behaviours.

While propensity for online interaction is also positively related, it does not show statistical significance (Coef. = 0.094, $p = 0.361$). This finding implies that a mere inclination to engage online does not predict engagement in these spaces unless accompanied by actual interaction frequency. The perceived superiority of online social interaction shows a marginally significant positive association (Coef. = 0.124, $p = 0.074$). This suggests that some perception of dominance might contribute to engagement, though this effect is weaker.

The model has a high explanatory power ($R^2 = 0.697$), suggesting that the predictors explain 69.7% of the variance. Overall, the model offers a robust framework for understanding factors that shape gendered experiences in online gaming.

Discussion

Based on the findings from the above results, several key themes emerge regarding gender differences in gaming behaviours, academic performance, and sociodemographic factors. Below is a discussion structured around these themes:

Gender Differences in Academic Performance

The present study reveals a significant disparity in academic performance between genders. Female respondents achieve higher academic outcomes, with a notable percentage attaining "Excellent" ratings compared to their male counterparts. The t-test results further reinforce this finding, indicating an inverse relationship between

gaming time and academic performance, particularly for males, who exhibit lower academic outcomes correlating with their increased gaming frequency. This highlights the importance of understanding how gaming habits may affect educational attainment and suggests a need for interventions that balance gaming with academic responsibilities. This aligns with existing literature suggesting that females tend to outperform males academically.

The investigation into gender differences in academic performance reveals a consistent trend where female students tend to outperform their male counterparts across various educational settings. This finding is supported by multiple studies that highlight the superior academic outcomes of females, particularly in secondary and higher education contexts. For instance, Sultana et al. (2018) found that female students had significantly higher GPAs compared to males, reinforcing the notion that gender disparities exist in academic achievement. Similarly, a study by Unity and Igbudu (2015) corroborated these findings, indicating that female students achieved higher cumulative grade point averages (CGPA) than their male peers in public secondary schools. Moreover, the relationship between academic self-concept and performance also varies by gender. Jaiswal and Choudhuri (2017) emphasized that the academic self-concept of students is influenced by social comparisons, which can differ significantly between genders. This suggests that while females may possess a stronger academic self-concept, which contributes to their higher performance, males may struggle with self-belief, thereby affecting their academic outcomes. Pirmohamed et al. (2017) further elucidate that self-efficacy is a predictor of academic achievement regardless of gender, yet the factors influencing this self-efficacy can differ, suggesting a nuanced understanding of how gender impacts

academic performance. In addition to academic self-concept, external factors such as gaming habits have been shown to correlate with academic performance, particularly among males. The present study indicates that increased gaming time is inversely related to academic outcomes for male students, highlighting a potential area for intervention. This aligns with findings from Bibi et al. (2020) which noted that various studies consistently report superior academic performance among female students compared to males, suggesting that lifestyle choices, including gaming, may disproportionately affect male academic success. Furthermore, the implications of these findings extend to educational practices and policies. The need for targeted interventions that address the unique challenges faced by male students, such as fostering a positive academic self-concept and managing gaming habits, is critical. As noted by Cokley et al. (2015) understanding the roles of stigma consciousness and impostor phenomenon can also provide insights into the academic outcomes of both genders, emphasizing the importance of psychological factors in educational achievement. In conclusion, the evidence strongly supports the assertion that female students generally achieve higher academic outcomes than their male counterparts, influenced by factors such as academic self-concept, lifestyle choices, and psychological constructs. Addressing these disparities through informed educational strategies could enhance academic performance across genders.

Gaming Preferences and Behaviours

The analysis also highlights significant gender differences in gaming preferences and behaviours. Males exhibit a strong inclination towards competitive gaming genres like MMORPGs and MOBAs, whereas females prefer casual games. This divergence may stem from broader

socialization processes, where males are encouraged to engage in competitive and multiplayer environments while females gravitate toward more narrative-driven, relaxed gaming experiences. The t-test results further indicate that males not only engage more frequently in gaming but also perceive their online interactions as superior. This sense of superiority may enhance their gaming experiences but also raises concerns about the impact of these attitudes on social relationships outside of gaming contexts.

The present findings highlight significant gender differences in gaming preferences and behaviours, with males showing a strong inclination towards competitive gaming genres such as MMORPGs and MOBAs, while females tend to prefer casual games. This divergence can be attributed to broader socialization processes, where males are often encouraged to engage in competitive and multiplayer environments, whereas females gravitate towards more narrative-driven and relaxed gaming experiences. Research indicates that males are more likely to engage in gaming for competition and escapism, while females often seek gaming for social interaction and intimacy building (Li et al., 2023; Phan et al., 2012). This aligns with the findings of Graham and Gosling, who noted that gender differences in motivations for playing MMORPGs persist even when controlling for gender, suggesting that these preferences are deeply rooted in socialization rather than merely individual choice (Graham & Gosling, 2013). The t-test results further reveal that males not only engage more frequently in gaming but also perceive their online interactions as superior compared to females. This sense of superiority may enhance their gaming experiences, as they often derive enjoyment from competitive elements inherent in games like MMORPGs and MOBAs (Bonny & Castaneda, 2022; Kneer et al., 2019).

However, this perception raises concerns about the potential negative impact of such attitudes on social relationships outside of gaming contexts. For instance, Bonnaire and Baptista found that males are more inclined to play action-oriented games, which may foster a competitive mindset that could translate into real-world interactions (Bonnaire & Baptista, 2019). Additionally, the findings from López-Fernández et al. (2019) suggest that the perception of skill and competence in gaming is often gendered, with males receiving more recognition for their achievements in competitive gaming environments. Moreover, the literature suggests that these gender differences in gaming preferences and behaviours are not merely anecdotal but are supported by empirical evidence. For example, studies have shown that males tend to spend more hours playing video games and have a longer history of gaming compared to females (Elshaikh, 2023; Gupta et al., 2022). This trend is consistent across various studies, indicating that the gaming landscape is still predominantly male-oriented, particularly in competitive genres (Biolcati et al., 2021). However, it is important to note that the gap in gaming participation between genders may be narrowing, as more females engage with gaming, particularly in genres that emphasize social interaction and narrative (Stevens et al., 2020; Dauriat et al., 2011). In conclusion, the significant gender differences in gaming preferences and behaviours reflect broader socialization patterns that influence how males and females engage with video games. Males are drawn to competitive environments and perceive their online interactions as superior, while females prefer more casual and narrative-driven experiences. These findings underscore the importance of understanding gender dynamics in gaming to address potential social implications and foster a more inclusive gaming culture.

Online Social Interaction Dynamics

The logistic regression analysis reveals that while males engage more frequently in online social interactions, the gender differences in the propensity for such interactions are not statistically significant. This indicates that both males and females participate in online social activities at similar rates, despite males' higher engagement levels. Cultural dynamics within gaming communities may explain this pattern, as males often report a sense of superiority, which could drive their increased participation. Gaming serves as a key platform for social connectivity, raising important questions about its influence on relationships both online and offline. Research highlights the complexity of gendered online interactions. Armentor-Cota (2011) found that while male teenagers use more emoticons and active language, females do not necessarily exhibit more passive communication styles. Similarly, Terlecki et al. (2010) noted that men often play alone, whereas women prefer social gaming, demonstrating how social contexts shape gaming behaviours. Additionally, gaming environments can normalize certain behaviours, including harassment. Tang and Fox (2016) reported that increased gaming time correlates with a higher likelihood of engaging in harassment, reflecting broader social dynamics in gaming communities.

Beyond the online space, Buono et al. (2020) argue that gaming duration does not predict problematic behaviours, suggesting that both genders can engage in gaming to foster social connections. Ultimately, while males show higher gaming engagement, both genders demonstrate similar tendencies for online social interactions. These findings highlight the importance of understanding gender dynamics in gaming communities and their broader social implications.

Conclusion

This study highlights the intricate relationships among gender, academic performance, occupational roles, and gaming behaviour, revealing distinct disparities influenced by societal norms and gender expectations. Males, despite higher engagement in online gaming and social interactions, tend to exhibit lower academic performance compared to females, underscoring potential academic risks associated with frequent gaming, especially in competitive, multiplayer environments. Such patterns call attention to the need for balanced gaming habits that do not undermine educational pursuits. The findings suggest that fostering equitable and inclusive gaming environments tailored to diverse preferences could promote positive social interactions and reduce negative academic impacts. By understanding the motivations behind gender-specific gaming choices, targeted interventions may be developed to cultivate healthier gaming habits that harmonize with academic responsibilities. Future research should delve deeper into how gendered norms shape experiences in both education and gaming, providing a foundation for initiatives aimed at bridging these disparities. This research offers a path for both academic and practical strategies that not only support equitable academic outcomes but also nurture a balanced and inclusive digital culture, supporting the well-being and growth of all individuals in educational and gaming contexts.

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