The Impact of Online Games on Children's Emotional Intelligence: An Observational Study

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Abstract: This research study, focusing on emotional regulation, empathy, social connections, and behavioural patterns, examines how online gaming affects children's emotional intelligence (EI). Particularly among children, the emotional and psychological effects of online gaming have been more under scrutiny and discussion as digital entertainment becomes more popular. This study, using an observational approach, tracked 52 student participants through a 30-day pre- and post-assessment along with a 50-person supporting parental survey. The results show that although online games might help with teamwork, patience, and some social skills, too much gaming may cause emotional disengagement and reduced empathy. The data points to a complex interaction between gaming and emotional intelligence in general, which supports a sensible approach to maximising advantages and limiting negative consequences.
Keywords: Emotional Intelligence, Online Gaming, Children, Social Development, Empathy, Emotional Regulation

I. INTRODUCTION

Online games have evolved into a necessary component of kids' leisure time in the digital era. Teachers, psychologists, and parents have all expressed worries about how this trend can affect social and emotional growth as it keeps expanding. Children's self-awareness, self-regulation, motivation, empathy, and social skills have a major impact on how they view and interact with others, and these qualities together comprise emotional intelligence (EI—Goleman, 1995). Early formative years often determine a child's capacity to control emotions, build relationships, and negotiate social situations; their daily experiences, including digital interactions, can have a major impact on this ability. Several studies point out that online games, especially those involving cooperation and strategy, may help develop several social-emotional skills, including problem-solving, patience, and teamwork (Lázaro et al., 2020; Flogie et al., 2020). Long-term exposure to violent or competitive content, however, has also been connected to higher aggressiveness, emotional disengagement, and lower empathy (Garaigordobil et al., 2022). These conflicting results draw attention to the need for more observational and empirical study to grasp how internet gaming affects children's EI in useful, real-world environments. Supported by parental comments, this study aims to close that void by examining children's behavioural patterns, emotional reactions, and social adaptations throughout a controlled, 30-day observation period.

II. SURVEY DESIGN

The study used a triangulated observational design combining pre-gaming and post-gaming surveys for students and a complementing parental viewpoint to fully evaluate the effect of internet gaming on children's emotional intelligence. There were 102 members in the target group: 50 parents or guardians who watched their children's emotional and behavioural changes over the study period and 52 students actively involved in online gaming. Three main survey instruments guided the investigation. The first consisted of pre-gaming emotional intelligence assessments given to students before the thirty-day observation period started. Designed to assess emotional control, empathy, social skills, and baseline gaming behaviour, this tool was The second post-gaming survey, designed to record changes in emotional and behavioural patterns, came after the observation window. At last, the parental survey gathered opinions from parents about the emotional growth, gaming practices, and social interactions of their children.

Combining subjective and behavior-based questions emphasising emotional awareness during gaming, control over annoyance, motivation to grow, ability to empathise with co-players, and effective communication in multiplayer contexts, the student assessments revealed Complementing those findings was the parent survey, which provided an outside view of socialising patterns, emotional reactions to wins and defeats, behavioural socialising patterns, emotional reactions to wins and defeats, behaviour changes, and gaming attitudes.

This multi-perspective design guarantees a whole assessment of children's EI affected by digital gaming environments, so providing insightful analysis from both parental comments and self-assessment.

III. METHODOLOGY

This study used an observational approach to evaluate, among adolescents between the ages of 10 and 16, how internet gaming affected emotional intelligence. 52 student participants were part of a 30-day observation session during which their emotional intelligence indicators and gaming conduct were under observation. Every participant answered an emotional intelligence pre-gaming and post-gaming survey. 50 parents, or guardians, were also asked to provide an outside view of their children's emotional and behavioural changes related to gaming. A pre-assessment examined baseline emotional intelligence. Students answered a series of E-based questions after reporting their average daily gaming hours and kinds of games they played: strategic, puzzle, action, or multiplayer. These questions evaluated social skills (e.g., teamwork and game communication), empathy (e.g., considering others' emotions), and emotional control (e.g., handling frustration).

Participants in the 30-day gaming observation were urged to keep up their regular gaming schedules while researchers monitored changes in emotional responses and degree of involvement. Following this period, researchers administered the same EI questionnaire to compare responses and identify any development, stasis, or regression in emotional abilities. Similarly, the parents offered observations of their children's online gaming patterns, behavioural changes, emotional reactions to gaming results, progress in social skills, and empathy. By means of this dual-source data, the researchers could cross-verify and improve the validity of the conclusions. Using percentage-based distributions and theme clustering, the study examined the data to find trends in emotional development over three main areas: emotional regulation, empathy, and social skills. Gaming hours were defined by four bands—less than one hour, 1–2 hours, 3–4 hours, and more than 4 hours; emotional reactions were assessed for variations across time using both quantitative and qualitative responses.

IV. RESULTS

A. Pre-Gaming Survey Findings

The pre-gaming survey provided a foundational understanding of the students' emotional intelligence before the 30-day observational period. It revealed that a significant number of participants played online games for less than 1 hour per day. A moderate group played for 1–2 hours, while fewer students reported 3–4 hours or more than 4 hours of daily gaming. In terms of game preference, students commonly engaged in strategy/puzzle games, followed by sports/racing and multiplayer online battle arenas (MOBAs).

Regarding emotional intelligence attributes:

1) Self-awareness: A majority (over 60%) reported being aware of their emotions during gameplay, while a smaller group answered, "Sometimes."
2) Self-Regulation: While 40% reported controlling frustration "somewhat well", 35% claimed they could manage it "very well", and 25% admitted struggling with emotional regulation.
3) Motivation: Over 50% identified as "highly motivated" to improve gaming skills, suggesting a driven and competitive mindset.
4) Empathy: Only 15% consistently considered others' feelings; 60% did so occasionally, and 25% rarely empathised during gaming.
5) Social Skills: Pre-assessment indicated a mixed result—only about 35% communicated effectively with teammates, while 40% interacted "sometimes", and 25% rarely or never did.

These results suggest a baseline profile characterised by moderate emotional regulation and motivation but limited empathy and collaborative communication during gameplay.

B. Post-Gaming Survey Findings

After 30 days of gameplay, there was a noticeable shift in player behaviour and emotional intelligence. The number of students playing less than 1 hour decreased, while those playing for 1–2 hours and 3–4 hours increased. A small but measurable group also reported gaming for more than 4 hours daily, indicating increased engagement during the observation period.

Emotionally, the post-assessment revealed several trends:

1) Emotional Response to Win/Loss: Over 60% of participants noted they became more emotionally invested in gaming outcomes. A sense of thrill, frustration, and pride was more commonly expressed.

2) Patience: Approximately 45% reported significantly improved patience, while another 35% noticed slight improvements. Conflict Handling: A majority (over 60%) reported avoiding conflicts in multiplayer games, indicating a rise in emotional maturity and conflict resolution.

3) Social Skills: Nearly 40% stated their interactions with teammates improved. However, about 45% still preferred solo play, showing a division in social adaptability.

4) Emotional intelligence perception: Around 65% of participants acknowledged positive changes in their emotional behaviour, such as improved teamwork, emotional regulation, and tolerance for failure.

These changes suggest that moderate exposure to cooperative and strategic gaming may lead to enhanced EI indicators, particularly in patience and emotional regulation.

C. Parental Survey Findings

Insights gathered from 50 parents provided a supportive external lens on the students' emotional development. According to the parents:

1) Gaming Habits: Most children played online games for less than 1 hour to 2 hours per day. Game genres ranged from educational games to action/adventure and multiplayer online games.

2) Solo vs Group Play: Approximately 70% of parents indicated that their children preferred playing alone, aligning with the student self-assessment data.

3) Emotional Responses: Children reported feeling mostly pleased and excited when they won; their reactions ranged from neutral to frustrated when they lost.

4) Behavioural Changes: Over 60% of parents observed positive behavioural changes—especially increased patience and emotional awareness—attributed to gaming. A small number noticed negative signs such as reduced physical activity or emotional withdrawal.

5) Teamwork and Communication: Around 50% of parents acknowledged improvements in their child's teamwork or communication skills.

6) Parental Control: Most parents monitored their children's gaming habits and set time limits, demonstrating active engagement in digital well-being.

Together, these findings complement student responses and highlight the dual perspective of observed emotional growth and ongoing challenges.

V. OBSERVATION-BASED INSIGHTS

Based on the students' gaming experiences and related thoughts, clear emotional and behavioural patterns emerged during the 30-day monitoring period. Students showed modest degrees of emotional intelligence at the beginning of the study; they had relative shortcomings in social interaction and empathy but strengths in drive and awareness. A slow increase in emotional control was watched during the observation phase, especially among those involved in multiplayer cooperative games, which by nature call for communication, teamwork, and adaptive decision-making. By the end of the trial, children who were first bored or easily frustrated during solitary games showed better self-control. Students who switched to more involved games particularly showed this since the necessity to coordinate with others inspired emotional restraint and patience. Likewise, numerous students who said they were "rarely empathetic" in the pre-survey afterward said they thought about the emotions of colleagues and changed their multiplayer communication approach. Interestingly, even with excellent social contacts, many students continued to prefer solitary gaming. Such behaviour suggests that, while playing multiplayer games can enhance social and emotional skills, natural personality traits or comfort with solitary play still have a significant influence. Parents also confirmed this duality: some children's emotional balance and teamwork clearly improved, while others stayed emotionally quiet or passive even with more gaming.
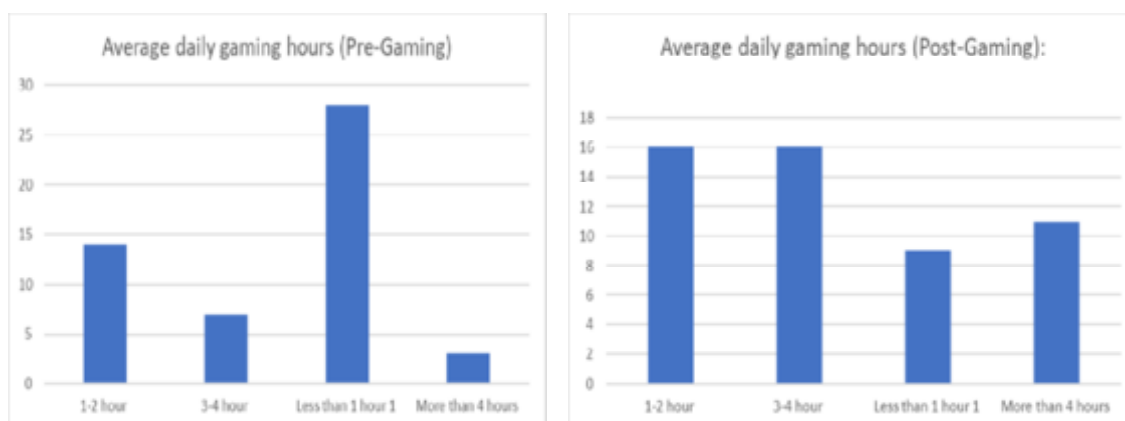
These findings together show that emotional intelligence is influenced by how games are played competitively or collaboratively, individually or in groups, and with or without strategic elements, not only by the number of hours spent gaming. Given appropriate involvement, the mix of gaming dynamics and persistent exposure seems to foster adaptive emotional responses in youngsters.

VI. DISCUSSION

The findings of this study support already published research and provide a complex analysis of the changing link between children and online gaming. Previous studies (Lázaro et al., 2020) have confirmed that gamified learning settings can help youngsters identify emotions and respond socially, therefore validating the use of digital tools to evaluate and even improve social-emotional capability. Likewise, especially when the games call for cooperation, communication, and real-time decision-making, this study validates that strategic and cooperative online games can help to increase emotional control, patience, and even empathy.

Conversely, the data also supports worries expressed by academics such as Garaigordobil et al. (2022), who noted that unstructured or too high digital exposure can cause emotional detachment and reduced interpersonal sensitivity. In our results, despite general progress, a small number of children showed signs of more frustration or an inclination for isolation. This implies that inappropriate control of gaming might have negative effects even if it can be a beneficial developmental tool.
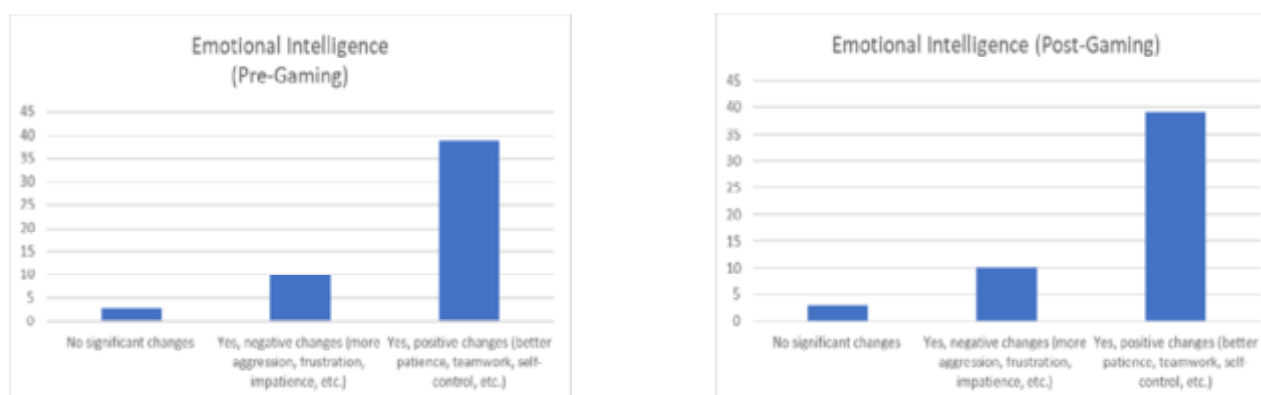
The parental survey significantly helped contextualise the students' responses. As indirect viewers, parents offered insightful analyses of behaviour improvements, including more patience, better communication, and negative consequences, such as less physical activity. Their impressions matched the self-reported emotional development of the children, confirming the dependability of the observational methodology applied. It is also noteworthy that for every individual, emotional adjustments were not straightforward. While some showed development just towards the end, others experienced the change early in the observing period. The evidence suggests that emotional intelligence is a dynamic quality impacted by peer interaction, changing self-perception, and recurrent experiences. One important realisation is the difference between passive gaming (solo, repetitive) and active gaming (cooperative, strategic). One important realisation is the difference between passive gaming solo, repetitive and active gaming cooperative, strategic. Aligning with Flogie et al. (2020), who underlined the teaching potential of intelligent serious games, games that involve the player's social and cognitive capabilities seem to produce the biggest emotional advantages.

VII. CONCLUSION

Particularly in areas like emotional regulation, social interaction, and empathy, this study demonstrated over a controlled 30-day observational period that online gaming significantly influences children's emotional intelligence (EI). In gaming scenarios, most participants clearly showed growth in their capacity to control frustration, work with others, and communicate effectively. These encouraging advancements were particularly noticeable among kids who played cooperative or strategic multiplayer games, where gameplay depends on communication and flexibility.

Although the general trend was good, a small percentage of participants showed symptoms of emotional detachment, ongoing annoyance, or a continuous inclination for solo play. These variances draw attention to the emotional impact of gaming and imply that outcomes are shaped by individual personality traits, gaming content, and play patterns as well as by their complexity. Parents' comments matched these results, offering outside validation for the behavioural and emotional improvements noted during the study.

Most importantly, the research indicates that, especially when combined with parental monitoring and time restrictions, balanced and conscious participation with online games might help children's emotional development. If carefully chosen and used, online games can be contemporary tools for developing in kids resilience, patience, empathy, and social skills.

Stakeholder parents, teachers, and developers should thus concentrate on including emotionally intelligent game design and promoting positive gaming practices instead of completely rejecting online gaming. Longer-term effects and how various kinds of gaming content educational, competitive, violent, or story-driven differentially affect emotional intelligence across many age groups could be topics of future research.

Conflict of Interest

The authors declare that there is no conflict of interest related to this study. All participants voluntarily provided survey responses, and data collection was conducted ethically with respect to privacy and confidentiality.

Ethical Approval

The study was approved by the Review Committee of the UNS Research Council.

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