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Contrasting the Impact of Online Games and Offline Games: A Comparative Analysis

*** Prabakaran Nanjundan, Chinnasami Sivaji, Vimala Saravanan, M. Ramachandran**

REST Labs, Kaveripattinam, Krishnagiri, Tamil Nadu, India.

*Corresponding Author Email: *prabakaranrsri@gmail.com*

Abstract: *Growing body of research high lighting the positive effects of computer games and serious games on various aspects of learning and skill enhancement. The reviewed literature suggests that playing computer games can have a significant impact on perceptual abilities. This could include improvements in visual attention, pattern recognition, spatial awareness, and hand-eye coordination. These perceptual enhancements can be valuable in a wide range of tasks, including driving, medical diagnosis, and scientific visualization. Cognitive benefits were also identified in the literature review. Computer games have the potential to improve problem-solving skills, critical thinking abilities, strategic planning, and decision-making processes. These cognitive enhancements can be particularly valuable in educational settings, where students can engage in game-based activities that require them to think critically and solve complex problems. Behavioral impacts were another prominent finding in the literature. Computer games can promote pro-social behaviors, such as cooperation, teamwork, and leadership skills. Additionally, they can facilitate the development of perseverance, resilience, and goal-setting abilities. These behavioral changes are crucial in real-life contexts, as they can contribute to personal and professional success. Affective and motivational outcomes were the most frequently reported effects in the reviewed literature Motivations for playing computer games were explored, encompassing factors such as entertainment, stress relief, social interaction, and skill development. Furthermore, the study delved into the reasons for playing computer games in higher education settings, highlighting potential educational benefits and challenges. Attitudes towards computer games were also examined, encompassing perceptions of game content, impact on well-being, and social stereotypes associated with gaming. Obtained results shed light on the differences in attitudes and preferences among players with distinct gaming preferences (single player vs. multiplayer) and gaming contexts (online vs. offline). These findings contribute to the existing body of research by providing a nuanced understanding of how these factors influence individuals' perceptions of computer games. The discussion section further explores the implications of the findings, emphasizing potential applications in educational settings and the need for further research to address emerging trends in computer gaming. Presents a comprehensive investigation of attitudes and preferences in computer game players, focusing on the distinctions between single player and multiplayer preferences, as well as online and offline gaming contexts. The results highlight the multifaceted nature of computer game preferences and provide valuable insights for researchers and practitioners alike. By recognizing the diverse motivations and attitudes held by players, the study contributes to a more comprehensive understanding of the gaming phenomenon. Future research should continue to explore these dynamics, considering emerging technologies and evolving player preference. This active engagement can lead to better retention and comprehension of the material It is important to note that not all studies included in the review were deemed to have used an appropriate methodology for making generalizations. Therefore, while the literature provides evidence for the positive impacts of gaming on learning and skill enhancement, further rigorous research is needed to strengthen these findings and establish a solid foundation for educational practices involving computer games. Overall, the reviewed literature suggests that computer games and serious games have the potential to positively impact learning by enhancing perceptual, cognitive, behavioral, affective, and motivational aspects. By harnessing the power of games, educators and researchers can leverage these benefits to create engaging and effective learning experiences. The authors of the paper acknowledged the parallel interests in games as both an entertainment medium and a tool for learning. They highlighted the lack of sufficient evidence regarding the use of computer games in education and entertainment, emphasizing the need for further research in this area. To contribute to the empirical evidence in the field of game-based learning, the authors conducted three surveys. The combined results of these surveys involved a total of [number of participants] participants. The objective of the study was to explore the differences in motivations and reasons between players who prefer single-player or multiplayer games, as well as those who engage in*

online or offline gaming. Specifically, the study aimed to investigate the reasons why individuals play computer games and how these reasons differ based on their game preferences and gaming context (online or offline). By examining these factors, the researchers sought to gain insights into the motivations underlying gaming behavior and shed light on the potential impacts of different game types and gaming environments. The findings of this study have the potential to contribute valuable information to the existing literature on game-based learning. By understanding the diverse motivations and reasons behind gaming preferences, educators and researchers can develop targeted approaches to leverage the educational potential of computer games. Additionally, the study may uncover differences in motivations and reasons that could inform the design and development of more effective and engaging educational games. Age, Gender, Rural/urban, Family status, program. This can result in feelings of social isolation and loneliness, as well as a reduced availability of social support from offline friends and family members. Moreover, the immersive nature of online gaming can sometimes lead to a blurring of boundaries between the virtual and real world, causing individuals to prioritize their online relationships over their offline ones. It is important to note that individual differences and personal characteristics can play a role in how online game play impacts offline social circles. For example, individuals who already have a strong offline social support system may be less affected by the potential displacement of time and resources from offline to online interactions. Additionally, the motivations and reasons for engaging in online gaming can influence its impact on offline relationships.

Keywords: *Mean, Mode, Skewness, standard error of skewness.*

1. INTRODUCTION

Computer games have the potential to evoke strong emotions, such as enjoyment, excitement, and immersion. These emotional experiences can enhance motivation, engagement, and learning outcomes. By creating a positive and immersive learning environment, computer games can increase students' interest and willingness to learn. Furthermore, knowledge acquisition and content understanding were identified as important outcomes of gaming. Computer games can present educational content in an interactive and engaging manner, allowing players to actively participate in the learning process. Overall, this paper contributes to the body of empirical evidence in the field of game-based learning by analyzing survey results and investigating the motivations and factors influencing players' preferences for single-player or multiplayer games, as well as their selection of online or offline gaming. The findings have the potential to inform future research and educational practices involving computer games. Attitudes and Preferences in Computer Game Players A "Comparative Study of Single Player vs. Multiplayer and Online vs. Offline Preferences" investigates the differences in attitudes towards computer games among individuals with preferences for single player and multiplayer modes, as well as those who predominantly engage in online or offline game play. Building upon previous research in the field, we outline the data collection methods, including procedures, participants, and materials employed. Subsequently, we present the findings obtained from conducted surveys, encompassing aspects such as game playing habits, motivations for playing computer games, motivations for playing computer games in higher education settings, and attitudes towards computer games. Finally, we conclude by discussing the overall outcomes and suggesting potential avenues for future research. Computer games have become an increasingly prevalent form of entertainment and leisure activity in recent years. Within this context, various studies have examined the factors influencing game preferences and the attitudes held by individuals towards different types of game play. This research aims to contribute to the existing knowledge by investigating the disparities in attitudes and preferences between players who favor single player or multiplayer experiences, as well as those who predominantly engage in online or offline game play. gather relevant data, a comprehensive survey was administered to a diverse group of participants. The survey encompassed questions regarding game playing habits, motivations for playing computer games, motivations for playing computer games in higher education, and attitudes towards computer games. The procedure involved distributing the survey electronically, ensuring anonymity and voluntary participation. The participants comprised individuals from different demographics, including age, gender, and gaming experience. The survey materials were carefully designed to capture relevant information effectively. The analysis of the survey responses yielded valuable insights into various aspects related to computer game preferences and attitudes. The findings included patterns of game playing habits, such as frequency and duration of game play sessions, as well as the preferred genres among participants. These connections can lead to the formation of new friendships and social bonds that may not have been possible offline. Additionally, online gaming can provide a platform for individuals to maintain and strengthen existing offline friendships, as they can engage in shared gaming experiences and communicate with each other through in-game chat or voice chat features. On the other hand, research has also shown that excessive online gaming can have negative effects on offline social relationships. As individuals spend more time gaming online, they may have less time and energy to devote to offline social activities, leading to a decrease in the quantity and quality of their offline social circles. Online gaming and social play can indeed have negative effects on offline relationships and social interactions. One of the concerns is that spending too much time playing social games online may lead to a decrease in face-to-face interactions with friends and family. Research has shown that

individuals who engage in heavy online gaming tend to spend less time in offline social activities, which can result in a decline in the quality and quantity of their offline relationships. This displacement of time from offline to online interactions can lead to a sense of social isolation and disconnection from the real world. Furthermore, excessive online gaming can lead to addictive behaviors and dependency on virtual social interactions. Some individuals may become so engrossed in their online gaming communities that they neglect their offline relationships, including family, friends, and romantic partners. This neglect can strain relationships and lead to feelings of neglect and dissatisfaction among those who are not involved in the gaming activities. This can result in a disconnect between how individuals interact online versus offline, potentially leading to difficulties in navigating real-world social situations. While social games and online gaming communities can provide a sense of belonging and social support for some individuals, it is crucial to maintain a balance between online and offline interactions. Practicing moderation and setting boundaries for gaming activities can help mitigate any potential negative impact on offline relationships. It is also crucial for individuals to actively maintain and nurture their offline relationships to ensure a healthy balance between virtual and real-world social connections., the rise in popularity of social games and online gaming has raised concerns about the potential social consequences. Research suggests that excessive online gaming can displace time from offline social activities, strain offline relationships, and potentially lead to social skill deficits. Striking a balance between online and offline interactions is important for maintaining healthy relationships and overall well-being. such a perspective, the findings are mixed. Some studies have found that online gaming can enhance social connections and provide a sense of social support. Online gaming communities can offer opportunities for individuals to meet and interact with like-minded people who share common interests and hobbies.

2. SPSS METHOD

SPSS, which stands for Statistical Package for the Social Sciences, is a widely used software program for statistical analysis in various fields, including social sciences, health sciences, and market research. Developed by IBM, SPSS offers a comprehensive set of tools and features for data manipulation, analysis, and visualization. Here are some key features and capabilities of SPSS Data Management. SPSS allows you to import, manipulate, and clean data from various sources, including spreadsheets, databases, and text files. You can merge datasets, recode variables, handle missing values, and create derived variables. Descriptive Statistics: SPSS provides a comprehensive set of tools for calculating and exploring descriptive statistics of your data. It enables you to compute measures such as mean, median, mode, standard deviation, variance, and percentiles for continuous variables. For categorical variables, SPSS allows you to generate frequencies, percentages, and cross-tabulations to analyze the distribution and relationships between variables.. Inferential Statistics: SPSS offers a wide range of inferential statistical techniques to test hypotheses and draw inferences about populations based on sample data. It encompasses both parametric tests, which make assumptions about the population parameters, and non-parametric tests, which do not rely on specific distributional assumptions. SPSS provides a variety of commonly used tests, such as t-tests, analysis of variance (ANOVA), chi-square tests, correlation analysis, and regression analysis, among others, to assist researchers in drawing meaningful conclusions from their data. Data Visualization: SPSS offers a wide range of tools for effectively visualizing data. It includes features such as histograms, bar charts, line charts, scatter plots, and more. Users can customize the appearance of these visualizations, adding labels, titles, and other annotations to enhance clarity and understanding. Additionally, SPSS allows users to export the visualizations for use in reports, presentations, or other documentation. These visualization capabilities help researchers and analysts communicate their findings and insights in a visually appealing and informative manner. Advanced Analytics: SPSS offers advanced analytic techniques such as factor analysis, cluster analysis, dis criminant analysis, logistic regression, and survival analysis. These techniques help you identify underlying patterns, groupings, and relationships in your data. Syntax and Automation: SPSS allows you to automate repetitive tasks and perform complex analyses using syntax. By writing syntax commands, you can create reproducible workflows, save time, and easily replicate analyses. Output and Reporting: SPSS generates output tables, charts, and reports that summarize the results of your analyses. You can export the output to various formats, including Excel, Word, PDF, and HTML. SPSS has a user-friendly interface that makes it accessible to both novice and advanced users. It is widely used in academia, research institutions, government agencies, and businesses for data analysis and decision-making purposes. Certainly! Here is some additional information about SPSS. Versions: SPSS Statistics is the most widely used version of the software. The latest version as of my knowledge cutoff in September 2021 was SPSS Statistics 28. However, please note that software versions may have been updated since then. IBM periodically releases new versions with added features, bug fixes, and performance improvements. Availability: SPSS is a commercial software package developed and distributed by IBM. It is available for purchase as a standalone product or as part of the IBM SPSS Modeler suite, which includes additional data mining and predictive analytics capabilities. platforms: SPSS is compatible with multiple operating systems, including Windows, and Linux. This allows users to work with SPSS on their preferred platform. Data File Types: SPSS supports various file formats for importing and exporting data. The native file format is . which is used to save SPSS data files.

Additionally, SPSS can import data from formats such as Excel CSV, text files, and ODBC-compliant databases. Syntax Language: SPSS has its own syntax language that allows users to perform data manipulation and analysis through command-based programming. By using syntax, you can automate tasks, customize analyses, and replicate procedures easily. Extensions and Customization: SPSS offers extension capabilities through Python and R integration. Users can leverage the power of these programming languages to extend SPSS's functionality, create custom procedures, and perform advanced analytics. Support and Resources: IBM provides technical support for SPSS through its website, including documentation, tutorials, and user forums. Additionally, there are numerous online resources, books, and training courses available to learn SPSS and enhance your skills. It is important to note that since my knowledge cutoff is in September 2021, there may have been updates and changes to SPSS since then. To obtain the most current and accurate information about SPSS, I recommend visiting the official IBM SPSS website or reaching out to IBM directly. They can provide you with the most up-to-date details on the software's features, capabilities, and any recent updates or changes that may have occurred.. There is also the concern that the nature of online social interactions in gaming communities may differ from offline interactions, leading to potential social skill deficits. Online gaming environments often provide anonymity and the ability to create avatars or personas, which can lead to adoption of different social norms and behaviors

3. RESULT AND DISCUSSION

TABLE 1: Descriptive Statistics Values

statistics							
	x1	x2	x3	x4	x5	x6	x7
Valid	104	104	102	104	104	104	104
Missing	0	0	2	0	0	0	0
Mean	4.57	4.58	4.58	4.67	4.70	4.77	4.73
Median	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Mode	5	5	5	5	5	5	5
Skewness	-2.279	-2.248	-2.227	-2.351	-2.630	-2.694	-3.062
Std. Error of Skewness	.237	.237	.239	.237	.237	.237	.237
Sum	475	476	467	486	489	496	492

Table 1 shows the descriptive statistics values for analysis N, range, minimum, maximum, mean, standard deviation Impact of online game and offline game.x1 is programs impact on social media, x2 is online games impact social interaction, x3 is hours per day do you typically spend playing online games versus offline games,x4 is negative effects on your personal relationships due to excessive online gaming or offline gaming, x5 is online games or offline games have a greater impact on your cognitive abilities and problem solving skills,x6 is faced issues with internet connectivity and x7 is engage in physical activity or exercise while playing offline games compared to online games.

TABLE 2: Frequencies Statistics

statistics							
	x1	x2	x3	x4	x5	x6	x7
Valid	104	104	102	104	104	104	104
Missing	0	0	2	0	0	0	0
Mean	4.57	4.58	4.58	4.67	4.70	4.77	4.73
Median	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Mode	5	5	5	5	5	5	5
Skewness	-2.279	-2.248	-2.227	-2.351	-2.630	-2.694	-3.062
Std. Error of Skewness	.237	.237	.239	.237	.237	.237	.237
Sum	475	476	467	486	489	496	492

Table 2 Show the Frequency Statistics in Globalization, Knowledge economy, Diversity and Technology curve values are given. Impact of online game and offline game. x1 is programs impact on social media, x2 is online

games impact social interaction, x3 is hours per day do you typically spend playing online games versus offline games,x4 is negative effects on your personal relationships due to excessive online gaming or offline gaming, x5 is online games or offline games have a greater impact on your cognitive abilities and problem solving skills,x6 is faced issues with internet connectivity and x7 is engage in physical activity or exercise while playing offline games compared to online games.

TABLE 3. Reliability Statistics

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No of Items
.898	.902	7

Table 3 shows the reliability statistics for individual parameters, specifically the Cronbach's Alpha reliability results. The 4th parameter, "Impact of online game and offline game," indicates that all the parameters can be considered for analysis.

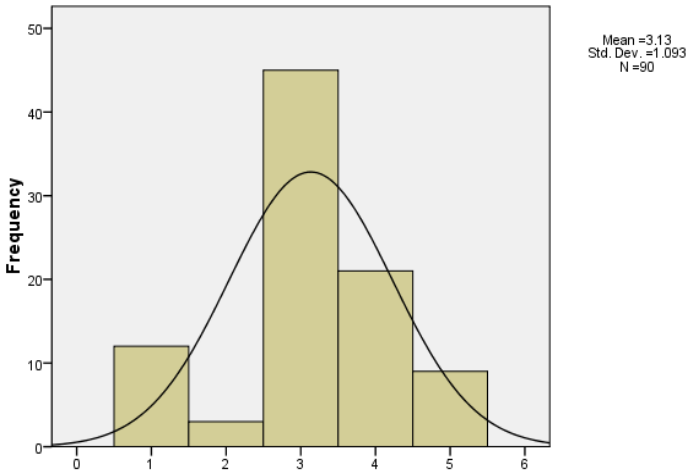

FIGURE 1. Future of human resource management

Figure 1 displays the histogram plot for the "Future of Human Resource Management." From the figure, it is evident that the data are slightly left-skewed, primarily due to a higher number of respondents selecting the value 3 for the future of human resource management. However, all other values fall within the normal curve, indicating that the model significantly follows a normal distribution.

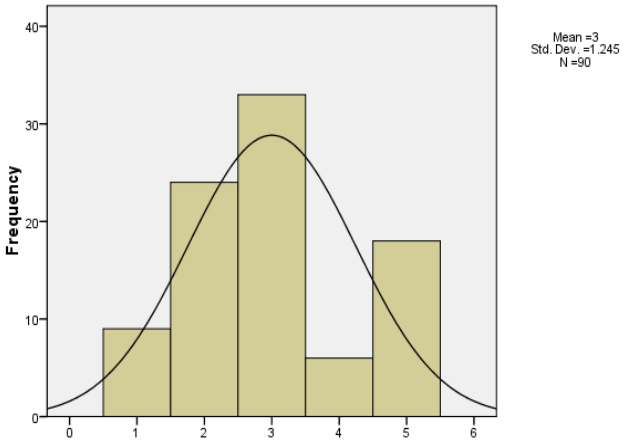

FIGURE 2. Globalization

Figure 2 displays the histogram plot for "Globalization." From the figure, it is evident that the data are slightly left-skewed, primarily because a higher number of respondents chose the value 3 for Globalization. However,

all other values fall within the normal curve, indicating that the model significantly follows a normal distribution.

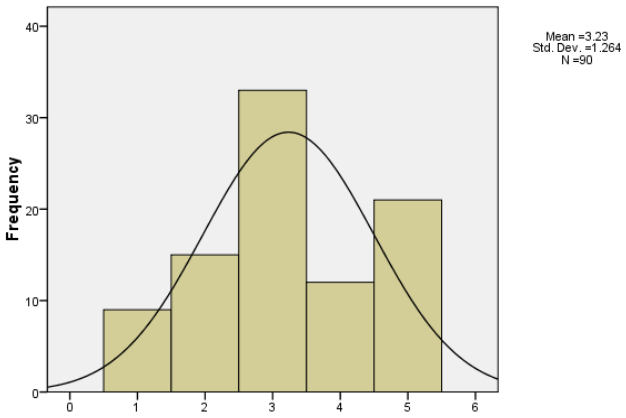

FIGURE 3. Knowledge economy

Figure 3 displays the histogram plot for "Knowledge Economy." From the figure, it is evident that the data are slightly left-skewed, primarily because a higher number of respondents chose the value 3 for Knowledge Economy. However, all other values fall within the normal curve, indicating that the model significantly follows a normal distribution.

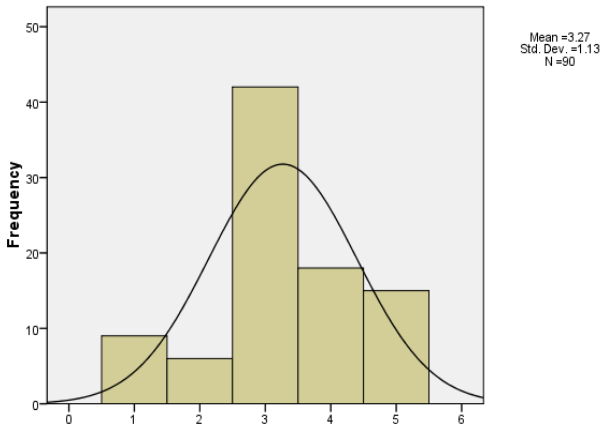

FIGURE 4. Diversity

Figure 4 displays the histogram plot for "Diversity." From the figure, it is evident that the data are slightly left-skewed, primarily because a higher number of respondents chose the value 3 for Diversity. However, all other values fall within the normal curve, indicating that the model significantly follows a normal distribution.

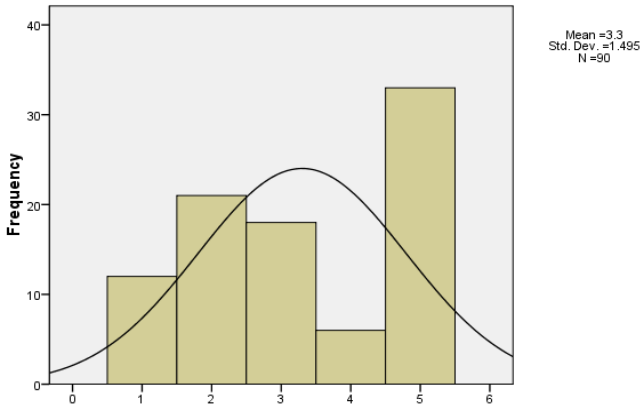

FIGURE 5. Technology

Figure 5 displays the histogram plot for "Technology." From the figure, it is clearly seen that the data are slightly right-skewed, primarily because a higher number of respondents chose the value 5 for Technology. However, all other values fall within the normal curve, indicating that the model significantly follows a normal distribution.

4. CONCLUSION

This can result in feelings of social isolation and loneliness, as well as a reduced availability of social support from offline friends and family members. Moreover, the immersive nature of online gaming can sometimes lead to a blurring of boundaries between the virtual and real world, causing individuals to prioritize their online relationships over their offline ones It is important to note that individual differences and personal characteristics can play a significant role in determining how online game play impacts offline social circles. For example, individuals who already have a strong offline social support system may be less affected by the potential displacement of time and resources from offline to online interactions. Additionally, the motivations and reasons for engaging in online gaming can influence its impact on offline relationships. Those who use online gaming primarily as a means of escapism or avoidance may be more prone to experiencing negative effects on their offline social circles In conclusion, it can be stated that the impact of online game play on the quality and quantity of one's offline social circles is a complex and multifaceted issue. While online gaming can provide opportunities for social connections and support, excessive gaming can potentially disrupt offline relationships and lead to feelings of social isolation. Finding a balance between online and offline interactions and prioritizing the maintenance of offline relationships is crucial for overall well-being and social health. Further research, particularly longitudinal studies, is indeed necessary to gain a deeper understanding of the long-term effects of online game play on offline social circles. The present study aims to address these gaps in existing research by employing a longitudinal approach and utilizing a representative sample of social online game players. By doing so, we hope to contribute valuable insights into the dynamic relationship between online gaming and offline social interactions over an extended period of time. By doing so, the study aims to provide a more comprehensive understanding of how video game play impacts the quality and quantity of friendship circles.. To achieve this, the study will track participants' social relationships and social support over an extended period of time. It will assess both the online and offline components of participants' friendship circles, taking into account the different types of relationships formed online. This differentiation is crucial as different types of online relationships may have varying effects on offline social circles and social support. By enlisting a representative sample, the study aims to ensure that the findings can be generalized to a broader population of social online game players .This approach enhances the external validity of the results and contributes to a broader understanding of the impact of video game play on social relationships. The study will likely utilize various measures to assess relationship quality and quantity, such as evaluating social support, emotional connection, and satisfaction with friendships. Participants may be surveyed at multiple time points to gather data on changes in their social circles and social support over time. Additionally, the study may explore potential moderators and mediators of the relationship between video game play and friendship circles, such as individual characteristics, motivations for gaming, and offline social support systems. By adopting a longitudinal analysis and utilizing a representative sample, this study aims to contribute significantly to our understanding of how social online game play influences the quality and quantity of friendship circles. The findings can have implications for individuals, game developers, and policymakers in promoting healthy social interactions within gaming communities and maintaining a balance between online and offline relationships.

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