The Impact Of Video Game Engagement On Social Connection And Well-Being: A Comparison Of Gamers And Non-Gamers

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ABSTRACT

This study investigates the relationship between gaming engagement, social connectedness, and psychological well-being among gamers and non-gamers. The sample consisted of 75 gamers and 75 non-gamers. T-tests were conducted to compare mean values between gamers and non-gamers, and correlation analyses were used to explore the relationships between these variables. The results revealed that gamers reported significantly higher levels of game engagement than non-gamers. However, there was no significant difference in social connectedness between the two groups. Interestingly, there was also no significant difference in psychological well-being between gamers and non-gamers. These findings highlight the importance of a balanced approach to gaming and leisure activities, as well as promoting positive well-being among gamers.

Keywords: *Game engagement, social connectedness, psychological well-being, gamers and non-gamers*

INTRODUCTION

Video games have become a pervasive kind of entertainment, influencing cultures and demographics all around the world. Beyond its intense entertainment value, however, there is a complicated interaction between social connection and well-being. This study looks into this complex relationship, investigating how video game play affects social relationships and general mental health.

Video games may provide a welcome break from the daily grind, providing a source of relaxation and stress alleviation. Engaging games can cause the production of dopamine, a neurotransmitter linked to pleasure and reward (Gentile, 2009). This dopamine spike can provide a good emotional state, momentarily reducing tension and anxiety. Certain games, particularly those with puzzle-solving or strategic features, can improve cognitive abilities such as memory, concentration, and problem-solving (Boot et al., 2008). These cognitive tasks can create a sense of success and mastery, enhancing self-esteem and overall well-being (Ryan et al., 2006).

Individuals suffering from anxiety or depression may find that video games provide a secure atmosphere in which to unwind and de-stress. The virtual environment can give a sense of control and regularity, which can be especially helpful for people dealing with mental health issues (Gentile, 2009). However, it is critical to remember that this "escape" should not become a crutch. While video games might provide momentary reprieve, good coping methods for handling stress in the real world remain crucial.

Multiplayer video games, with their inherent need for communication and collaboration, are ideal environments for social interaction. Players form connections via shared objectives and difficulties, strategize as a group, and build a sense of belonging within online guilds or local gaming communities (Lenhardt et al., 2010). These encounters go beyond basic games and become social events that improve communication skills and confidence. For people who are socially anxious, online interactions can provide a secure environment for connection (Przybylski et al., 2017).

Flow Theory (Csikszentmihalyi):

The flow hypothesis, developed by psychologist Mihaly Csikszentmihalyi, defines a state of total immersion and participation in an activity. Flow occurs when the amount of difficulty provided by an activity is appropriate for the individual's skill level, resulting in a state of profound focus and enjoyment. Video games are meant to create flow by balancing the player's skill level with the game's difficulty level. Games frequently provide clear goals, fast feedback, and a sensation of control, all of which contribute to the flow state. In gaming, flow is defined as losing track of time, focusing completely on the job at hand, and feeling in control of the game world. Flow theory explains why consumers find video games fascinating and engrossing. Understanding the variables that allow for flow can help game designers develop more engaging gaming experiences.

Social Identity Theory

According to Tajfel and Turner's Social Identity Theory, individuals form their sense of self depending on their group affiliations. People divide themselves and others into social groups, and their self-esteem is influenced by the status of the groups to which they belong. In multiplayer video games, participants develop social

identities based on their in-game associations. Their participation in the game is determined by their feeling of belonging and social identity, which stems from these groupings.

Self-Determination Theory (Deci and Ryan):

Self-Determination Theory (SDT) holds that humans are inherently predisposed towards growth and development. According to SDT, humans are driven by three basic psychological needs: autonomy, competence, and relatedness. Satisfying these three requirements improves psychological well-being. Autonomy is the sensation of power and choice in one's life. Competence entails feeling effective in one's relationships with the environment. Relatedness refers to the desire to feel linked to people and have a sense of belonging.

METHODOLOGY

Aim:

The aim of the research, "The Impact of Video Games on Social Connection and Well-Being: A Comparison of Gamers and Non-Gamers," is to investigate and understand the potential influence of video game engagement on two key aspects of individuals' lives: social connection and overall well-being.

Objectives:

1. To study the difference in Game engagement between gamers and non gamers.

2. To study the difference in Social Connectedness between gamers and non gamers.

3. To study the difference in Psychological Well Being between gamers and non gamers.

Hypotheses:

Hypothesis 1 : There will be significant difference in Video Game Engagement between Gamers and Non Gamers.

Hypothesis 2 : There will be significant difference in Social Connectedness between Gamers and Non Gamers.

Hypothesis 3 : There will be significant difference in Psychological Well Being between Gamers and Non Gamers.

Sample and Selection:

The research will employ a Convenience sampling method. Participants will be selected based on accessibility and ease of availability.

Sample size: 150 (75 gamers and 75 non- gamers)

Target Population: Individuals aged 19 to 35

Participants will be asked to complete a battery of surveys encompassing the mentioned scales.

Inclusion Criteria:

- Age 19 - 35 years.
- Gamers: Regular engagement with video games (at least 5 hours per week).
- Non-Gamers: Less than 3 hours of play time in a week.
- Willingness to participate in the study.

Exclusion Criteria:

- Significant mental health disorders.
- Inability to comprehend study instructions.

Research Design:

-Correlational Study to understand the relationship between Video Game Engagement, Social Connection and Well Being.

-This will reflect the strength and/or direction of the relationship between the variables.

Variables:

1. Independent Variable (IV): Video game engagement .

2. Dependent Variables (DV): Social Connectedness, Psychological well-being .

Description of The Tools:

Game Engagement Questionnaire (JH Brockmeyer): The Game Engagement Questionnaire (GEQ), developed by Brockmyer et al. in 2009, is a valuable psychometric instrument designed to measure an individual's level of engagement while playing video games. The GEQ focuses on an individual's tendency to be drawn into a game in an engaging, immersive way. It was initially designed to identify risk factors for video game violence but has broader applications. Researchers use it to explore various aspects of game engagement and its impact

on players' experiences. Game developers also employ the GEQ to assess playability, attractiveness, and subjective experiences during game testing, helping evaluate and improve game design .

Revised Social Connectedness Scale (Lee, R. M., & Robbins, S. B., 1995): The Revised Social Connectedness Scale (SCS-R), developed by Lee and Robbins in 1995, is a self-report questionnaire designed to measure an individual's sense of social connectedness. Comprising 20 items, the SCS-R assesses perceptions of enduring interpersonal closeness with the social world. Participants rate each item on a Likert scale from 1 (strongly disagree) to 6 (strongly agree). Higher total scores indicate greater connectedness to others. The scale demonstrates good internal consistency reliability (typically with an alpha value above 0.80) and has been widely used to explore social connectedness and its impact on well-being. Researchers and practitioners utilize the SCS-R to tailor interventions, assess social connectedness levels, and understand its influence on psychological distress.

Psychological Well Being (PWB) Scale (Ryff): The Psychological Well-Being (PWB) Scale, developed by psychologist Carol D. Ryff, is a comprehensive self-report questionnaire that measures six essential aspects of psychological well-being and happiness. These dimensions include self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth. The scale demonstrates good internal consistency reliability (with alpha coefficients ranging from 0.86 to 0.93) and test-retest reliability (coefficients ranging from 0.81 to 0.88 over six weeks). Researchers use this scale to explore personality correlates, predictors of well-being, and engagement in daily activities among older adults. It remains a valuable tool for assessing psychological well-being across various contexts.

Procedure:

The study included three core instruments: the Game Engagement Questionnaire, the Psychological Well-Being Scale developed by Ryff and Keyes (1995), and the Revised Social Connectedness Scale developed by Lee, R. M., and Robbins, S. B. A number of precautions were made to ensure a methodical and reliable approach when performing the research study. The data was collected using a convenience sample approach. Because of its usability and accessibility, the results came via offline surveys done on college campuses, as well as employing the snowball approach to collect more responses via paper-based questionnaires. The obtained data was then assessed, and the appropriate statistics were calculated with SPSS. Throughout the study method, ethical issues were paramount, ensuring the protection of participants' privacy and confidentiality, as well as the gathering of informed consent.

Statistical Method: The data was analysed using Independent Sample t-test, which looked at the difference between gaming engagement, social connectedness, social connectedness and psychological well-being, gaming engagement and psychological well-being among gamers and non-gamers aged 19 to 35.

Ethical Considerations:

- Ensure participant confidentiality and informed consent.
- Avoid stigmatising either group (gamers or non-gamers).

RESULT AND DISCUSSION

Table 01. Showing comparison and group statistics for Gamers and Non Gamers.

Descriptive statistics

	Gamers			Non Gamers		
	Mean	SD	Std. Error	Mean	SD	Std. Error
Game Engagement	37.59	6.81	.787	34.95	8.725	1.01
Social Connectedness	66.47	8.43	.974	67.37	9.76	1.13
Well Being	78.58	13.401	1.55	76.29	10.324	1.19

For Game Engagement gamers have a mean score of 37.59 with a standard deviation of 6.81 and a standard error of 0.787. Non Gamers, on the other hand, have a slightly lower mean score of 34.95, but with a higher standard deviation of 8.725 and a standard error of 1.01.

When it comes to Social Connectedness, the mean score for Gamers is 66.47 with a standard deviation of 8.43 and a standard error of 0.974. Non Gamers show a slightly higher mean score of 67.37, along with a standard deviation of 9.76 and a standard error of 1.13.

Lastly, for Well Being, Gamers have a mean score of 78.58, a standard deviation of 13.401, and a standard error of 1.55. Non Gamers have a mean score of 76.29, a standard deviation of 10.324, and a standard error of 1.19.

Table 02. Showing independent sample t-test between all variables.

Game Engagement

	Levene's test for equality of variances		t-test for equality of means						
								95% Confidence Interval of Difference	
	F	Sig.	t	df	Two sided p	Mean Difference	Std. Error difference	Lower	Upper
With equal variances	4.71	.032	2.062	148	.041	2.64	1.28	.110	5.169
Without equal variances			2.062	139.637	.041	2.64	1.28	.109	5.170

Social Connectedness

	Levene's test for equality of variances		t-test for equality of means						
								95% Confidence Interval of Difference	
	F	Sig.	t	df	Two sided p	Mean Difference	Std. Error difference	Lower	Upper
With equal variances	.021	.886	-.663	148	.509	-.986	1.489	-3.929	1.955
Without equal variances			-.663	144.947	.509	-.986	1.489	-3.929	1.956

Psychological Well- Being

	Levene's test for equality of variances		t-test for equality of means						
								95% Confidence Interval of Difference	
	F	Sig.	t	df	Two sided p	Mean Difference	Std. Error difference	Lower	Upper
With equal variances	7.866	.006	1.056	148	.293	2.066	1.956	-1.799	5.933
Without equal variances			1.056	139.232	.293	2.066	1.956	-1.801	5.935

For Game Engagement, the two-tailed p-value is 0.04, which is less than 0.05, suggesting a statistically significant difference between the two groups. The mean difference is 2.64, indicating the average game engagement score is 2.64 units higher in one group compared to the other. The 95% confidence interval of the difference is from 0.11 to 5.17, meaning we are 95% confident that the true mean difference lies within this

range. The t-value is 2.06, which is the calculated statistic for this test. The degrees of freedom (df) is 148, which is related to the sample size of the groups. The standard error is 1.280, which is a measure of the variability in the estimate of the mean.

For Social Connectedness, the two-tailed p-value is 0.5, which is greater than 0.05, suggesting no statistically significant difference between the two groups. The mean difference is -0.99, indicating the average social connectedness score is 0.99 units lower in one group compared to the other. The 95% confidence interval of the difference is from -3.93 to 1.96, meaning we are 95% confident that the true mean difference lies within this range. The t-value is 0.67, which is the calculated statistic for this test. The degrees of freedom (df) is 148, which is related to the sample size of the groups. The standard error is 1.489, which is a measure of the variability in the estimate of the mean.

For Well Being, the two-tailed p-value is 0.3, which is greater than 0.05, suggesting no statistically significant difference between the two groups. The mean difference is 2.07, indicating the average well-being score is 2.07 units higher in one group compared to the other.

The 95% confidence interval of the difference is from -1.80 to 5.93, meaning we are 95% confident that the true mean difference lies within this range. The t-value is 1.0563, which is the calculated statistic for this test. The degrees of freedom (df) is 148, which is related to the sample size of the groups. The standard error is 1.957, which is a measure of the variability in the estimate of the mean.

CONCLUSION

The findings shed light on the relationship between gaming behaviours, social connectedness and well-being. Gamers showed much higher levels of game involvement than non-gamers. The lack of a significant difference in psychological well-being between gamers and non-gamers suggests that gaming does not necessarily have a negative impact on psychological well-being. There was no discernable difference in social connectivity between gamers and non-gamers. Both gamers and non-gamers had comparable degrees of social connectivity. The research emphasises the necessity of creating games that encourage good well-being and healthy gaming behaviours. Mental health practitioners should incorporate gaming behaviours into their examinations and therapies. To enhance general well-being, both gamers and non-gamers should seek a balanced approach to leisure activities, such as gaming and offline social connections.

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