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# Gaming Addiction and Perceived Psychological Distress among Young Adults in Selected Areas of Pasig amidst COVID19 Pandemic: Basis for Psychological Intervention Program

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# **Abstract**

Online game addiction and psychological distress are two continuously developing problems in the Philippines with Filipinos aged 18 to 24 being the second largest age group to overuse interactive online related games. This sequential explanatory mixed method research aimed to assess the young adult's level of gaming addiction and perceived psychological distress during the Covid19 pandemic, as well as identifying the other factors contributing to the respondents' frequent engagement in online interactive games, which served as a basis for preventative intervention program. The researcher administered the survey questionnaire of GAS and DASS-21 to 399 young adults aged 18-24 and a semi-structured interview guide to 20 addicted and non-addicted gamers. Key results showed that a small percentage among the respondents' experience polythetic and serious monothetic addiction to interactive online games, whereas half of the respondents manifested mild to moderate symptoms of depression and anxiety during the Covid19 pandemic. Major findings also found no significant gender differences on the level of online game addiction and psychological distress during the Covid19 pandemic, and the association was substantiated with a moderate level of relationship. Further results revealed that the negative compensatory factors were associated to addicted gamers' frequent engagement to online games, whereas non-addicted gamers were associated with positive beneficial factors. Therefore, this study concluded that young adult male and female gamers experience similar levels of game addiction and psychological distress during the Covid19 pandemic with a moderate level of association and concluded that the gamer's motives behind playing influence how frequently they engage in online interactive games. This phenomenon has hardly ever been the focus of in-depth research and the results of this study can be used to further refine the conceptualization of the IGD as a mental disorder and develop a more comprehensive treatment method.

#### Introduction

Playing is a natural human drive that starts in childhood, and in today's culture it has been transferred from the physical world to the embodied online or virtual world (Wang, 2019). As computer and internet use becomes more prevalent in our daily lives, the risk of overuse or addiction increases. The rapid advancement of mobile technology greatly expanded younger generations use of online games and since many functions of desktop computers have been transferred to mobile devices, such as smartphones, it encourages heavy use of many game apps that can undoubtedly damage gamers' psychological wellbeing (Wang, 2019). Accordingly, Video Game Addiction Statistics (2021) showed that there are roughly 2.5 billion online gamers worldwide, including 150 million in the United States and as many as 29.9 million in the Philippines (Labana, et al., 2020). Online gaming is clearly a complex topic that dominates the media, despite receiving less attention from the medical or mental health professionals.

Subsequent to this, the imposed lockdown increases the society's dependence on internet gaming in which the internet use screen time or consumption had been multiplied (Wang, 2019). This suggests that nearly half of young people in 2021 (i.e., millennials and members of generation Z) were reported to engage in digital media for one to ten hours per day (Puyat, 2021). In addition to the demographics of gamers, US

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statistics revealed that most players were between the ages of 18 to 34 (Clement, 2021), coming out the second were teenagers between the ages of 10 to 20 (Labana, et al., 2018). With this, it is clearly observed that interactive online games are constantly emerging and mainly zoom among the younger generation. In the Philippines, many parents complain about their kids being glued to their mobile phones and getting addicted to some kind of games, so it is important to understand the underlying factors that motivate and engage this young people. As such, due to the increasingly clear evidence of people who play games with lack of control and who increasingly prioritize playing games over daily activities and other important life interests, this has prompted the American Psychiatric Association (APA, 2013) to include Internet Gaming Disorders (IGD) in the DSM-5 as a preliminary study requiring further research. This is in addition to the

World Health Organization's recent decision to officially classify "game addiction" (GD) as a mental

condition in the 11th edition of their international classifications of diseases (ICD11).

Meanwhile, recent study of Omengan (2021) discovered that stress, anxiety, and depression are on the rise among young people as they face pressure to perform and be functional in the midst of the pandemic. This shows that majority of young people already experience high levels of stress related to the responsibilities on their lives, which were made worse by the Covid19 situation. Likewise, research indicated that most of young players use online interactive games to naturally deal with their mood swings and negative thoughts (Fernandez, 2020), unsatisfying life situation (Koban, 2020), escaping from responsibility and reality (Kem, 2012), and even relieving themselves from stress (Nordby, 2019). In view of the facts presented, the Philippines is currently hampered by the lack of research in this area. To the knowledge of the researcher, the increasing trend of gaming addiction and associated psychological distress has not yet been researched or explored. Owing to this, it is crucial to expand studies and improve existing treatment intervention programs for people who exhibit mental health issues in connection with unhealthy gaming behaviour.

In the present period, the researcher observed the growing population of online gaming problems and psychological distress particularly among young adults. The continued emergence of online games made them one of the most addicting internet activities to date (Kiraly, et al. 2015). Undeniably, there are arising controversies when it comes to recognizing the behavioural gaming problems. Accordingly, APA (2013) argues that many people with problematic gaming habit indeed exhibit precipitating symptoms of depression. While studies of Wang (2019) explain how a gamer's addiction might affect their psychological wellbeing leading to depression. However, the lack of extensive research vaguely introduces the association between gaming addiction and depression.

Correspondingly, online gaming addiction and psychological distress are two continuously developing problems in the Philippines, and this study was conducted to fully understand the emerging IGD in order to establish future evidence-based research and intervention treatments in the field of mental health. Given the body of existing research, this study used a mixed-method approach to measure the young adults' levels of gaming addiction (i.e., monothetic and polythetic addiction) and the perceived psychological distress (i.e., depression, anxiety, and stress), followed by determining the correlation, and identifying the other factors contributing to young adults' frequent engagement in online games, which served as a basis for psychological intervention program. Therefore, this research would contribute to the relatively limited body of knowledge about gaming addiction and psychological distress among young adults during the Covid19 pandemic.

# **Statement of the Problem**

This study aimed to assess the young adult's level of gaming addiction and the perceived psychological distress during the Covid19 pandemic. This study specifically sought to answer the following research questions:

- 1. What are the characteristics of the respondents in terms of:
  - 1.1 gender,
  - 1.2 educational status,
  - 1.3 employment status, and
  - 1.4 socioeconomic status?

- 2. What is the respondents' level of gaming addiction and psychological distress during the Covid19 pandemic?
- 3. How does the level of gaming addiction between male and female respondents differ during the Covid19 pandemic?
- 4. How does the level of perceived psychological distress between male and female respondents differ in terms of the following domain?
  - 4.1 Depression
  - 4.2 Anxiety
  - 4.3 Stress
- 5. How does psychological distress in young adults relate to their level of gaming addiction?
- 6. What are the other factors contributing to young adults' frequent engagement in online interactive games?
- 7. What specific psychological intervention program can be proposed based on the accumulated findings of the study?

## **Materials and Methods**

### Research Design

This study employed a Sequential Explanatory Mixed-Method Approach. Correspondingly, the researcher first gathered and analysed quantitative (numeric) data, and then qualitative (text) data were collected and analysed (Ivankova, 2009). The primary focus of this study largely depended on the quantitative information as it provides broad understanding of the research problem.

#### Instruments

The researcher utilized three research instruments to collect the data. In the first quantitative phase, Gaming Addiction Scale (GAS) and Depression, Anxiety, and Stress Scale-21 (DASS21) were utilized. In the second qualitative phase of the study a Focus Group Discussion Guide (FGD) was used by the researcher. The 21-item scale dimension of GAS showed good construct and concurrent validity among adolescent to adult gamers (Lemmens, 2009) and the DASS21 subscales demonstrate a good Cronbach's alpha scores of 0.78, 0.89, and 0.81, respectively (Lovibond, 1995). Furthermore, the FGD guide was reviewed and validated by two clinical psychologist and one psychometrician experts to confirm the correctness of the interview questions.

### Respondents

The total sample size for the quantitative approach comprised of 399 young adult gamers gathered using the snowball sampling technique, whereas the qualitative method had a group size of 20 addicted and non-addicted gamers recruited through the use of purposive sampling technique. In the first phase of the study, the inclusion criteria were as follows: the respondents must be (1) within the age bracket of 18 to 24 years of age; (2) a Filipino citizen (3) residing within the selected community areas of Pasig City; (4) playing any form of online interactive gaming on a regular basis. In the second qualitative phase of the study, inclusion criteria for ten (10) addicted gamers or high scorers includes the following: respondents (1) who had either a monothetic or polythetic addiction to online games and (2) were experiencing moderate to severe psychological distress. Furthermore, the second group was comprised of non-addicted gamers (1) who met less than three of the criteria identified by the GAS questionnaire; and (2) exhibited normal-mild signs of psychological distress verified by the DASS21. The consenting respondents must presently experience the abovementioned criteria in not less than six months.

#### **Data Tools and Procedures**

Prior to the conduct of the study, the researcher requested approval from Centro Escolar University's Institutional Ethics Review Board (IERB) to assure that the research is transparent, respectful, and ethically protects human participants. After receiving approval from the CEU International Ethics Review Board and completing the other procedures required for data collection, the researcher administered an online survey questionnaire to 399 prospective male and female young adult gamers who regularly play online interactive games. The URL survey link was circulated across Facebook informal gaming groups of Pasig in particular to the communities of Rosario, Bambang, San Miguel, and Sagad. Hence, the standardized instrument was

administered in a one-week scheme (June - June 2022). Correspondingly, in the second qualitative phase of the study, the researcher evaluated the data gathered from the quantitative section of the survey and tallied the top ten (10) and bottom ten (10) scorers. Target respondents were invited to participate in the focus group discussion, and the researcher then used the semi-structured FGD guide to collect information and data. The focus group discussion took place over the course of two days that lasted around two hours each (June 15-16. 2022).

# Data Analysis

The data collected from the field for both the quantitative and qualitative phases were analysed using the following methods:

In the first quantitative phase, descriptive and inferential statistics including the mean, frequencies, percentages, standard deviation, chi-square, and Cramer's v was used in this study. The researcher employed frequency and percentages to determine the respondents' gender, educational status, employment status, and socioeconomic status, therefore addressing the SOP (1). Furthermore, the chi-square was used to differentiate young adults' levels of gaming addiction and psychological distress in terms of gender, and the results were used to address the SOP (2) and SOP (3). Moreover, chi-square and Cramer's v were employed to determine the relationship between the two variables, as well as the strength of association, thereby addressing the SOP (4).

In the second phase of the study, the researcher followed the study of Kiger and Varpio's qualitative thematic analysis procedure (Kiger, et al., 2020). The information and data acquired during the qualitative phase of the investigation were evaluated and coded using thematic analysis. The researcher recorded the focus group session using an online voice recorder after which it is transcribed, in order to identify the primary themes and subthemes. To become acquainted with the data from the semi-structured interview guide, the researcher reviewed and analysed it several times. Following that, the generated codes were created based on the FGD session's content. After the initial coding, the codes were interconnectedly grouped in which the researcher searched for patterns across the transcribed data. Afterwards, the researcher reviewed and refined the themes that had been extracted, and constructed the final report aligned with the overall research interest (Mortensen, 2021). Hence, the outcome was used to address the SOP (5) of the research study and proposed a preventive intervention program that sought to address the SOP (6).

# **Results and Discussion**

**Problem Statement 1:** Sociodemographic Characteristics of the Respondents

Table 1. Gender of the Respondents

	f	%
Female	115	28.82
Male	284	71.18
Total	399	100.00

Table 1 presents the gender distribution of young adult gamers which comprised of 284 (71.18%) male respondents and 115 (28.82%) female respondents. The findings reveal that male young adult gamers outnumbered female young adult gamers in the selected areas of Pasig.

Table 2. Educational Status of the Respondents

	f	%
	2	0.50
Bachelor's	155	38.85
Master's	4	1.00
No Schooling	35	8.77
Senior High	70	17.54
Technical Vocational	19	4.76
Undergraduate Student	114	28.57
Total	399	100.00

Table 2 clearly shows the educational status of the young adult gamers. According to the findings, a large number of young adult gamers in the selected communities of Pasig have earned a bachelor's degree, while some are still obtaining their undergraduate studies. The data show that a slight majority of the respondents are bachelor's degree holders comprising 155 (38.85%) young adults, while more than a quarter, 114 (28.57%), are currently pursuing their undergraduate studies. Further, (17.54%) of the respondents had completed their senior or secondary education, while a substantial percentage of 35 (8.77%) had not attended any school at all.

Table 3. Employment Status of the Respondents

	f	%
	2	0.50
Employed	154	38.60
Freelance worker	15	3.76
Part-time worker	31	7.77
Self-employed	38	9.52
Unemployed	159	39.85
Total	399	100.00

Table 3 demonstrates the employment status of young adult gamers. The outcomes of this survey indicate that the majority of young adult gamers aged 18 to 24 are working (employed) and non-working (unemployed). To discuss, a large proportion of the respondents are employed consisting of 154 (38.60%) and unemployed comprising of 159 (39.85%). A small proportion respectively consists of self-employed 38 (9.52%), part-time worker 31 (7.77%) and a freelance worker 15 (3.76).

Table 4. Socioeconomic Status of the Respondents

	f	%
	3	0.75
Lower Income	70	17.54
Lower Middle Income	95	23.81
Middle Income	201	50.38
Upper Income	13	3.26
Upper Middle Income	17	4.26
Total	399	100.00

Table 4 presents the socioeconomic status of the respondents. According to the findings of the study, majority of the young adult gamers in Pasig are from lower-income to middle-income families. This means that a large scale of young adult gamers come from the middle-income household, 201 (50.38%), while only less than a quarter, 95 (23.81%), are under lower middle-income household. The remaining 100 (25.06%) are categorized under lower income, upper income, and upper middle-income household. Ozgur's (2019) study showed that there is a substantial difference between online gaming addiction and family income level. Therefore, it can be said that the gaming level varies negatively depending on family income (Kim, 2018).

**Problem Statement 2:** What is the Respondents' Level of Gaming Addiction and Psychological Distress during the Covid19 Pandemic?

Table 5. Shows the respondents' level of gaming addiction in the contextual situation of COVID19 pandemic.

	M	ale	Fen	nale	То	tal
	f	%	f	%	f	%
Monothetic	61	21.48	21	18.26	82	20.55
Polythetic	114	40.14	44	38.26	158	39.60
Non-Addicted	109	38.38	50	43.48	159	39.85
Total	284	100.00	115	100.00	399	100.00

Data indicate that majority of the young adult gamers exhibit polythetic addiction to online interactive games, while some of the respondents have severe symptoms of addiction to online interactive games (monothetic addiction). Non-addicted gamers who frequently play online interactive games are outnumbered among all, but nearly equal with polythetic addiction. To clearly demonstrate, a small proportion of monothetic gamers are male, 61 (21.48%), while nearly 21 (18.26%) are female young adult gamers. Results further indicate a total of 82 (20.55%) monothetic gamers among the research respondents. This evidently shows that monothetic gamers fulfilled all of the criteria endorsed for gaming addiction including salience, tolerance, mood modification, relapse, withdrawal, conflict and problems. Moreover, a high proportion of polythetic gamers are males comprising 114 (40.14%), whereas females are 44 (38.26%). This implies that polythetic gamers met at least four of the seven criteria endorsed in the DSM-5. Correspondingly, the non-addicted male gamers comprise 109 (38.38%), whereas there are 50 (43.48%) female non-addicted individuals. As observed, results indicate a total of 159 (39.85%) non-addicted gamers. This means that 159 (39.85%) of the non-addicted gamers among the respondents meet only three (3) of the seven underlying criteria.

Table 6. Displays the frequency and percentage of the respondents who experienced psychological distress in the domains of Depression, Anxiety, and Stress during the Covid19 pandemic. *Level of Depression of the Respondents* 

Level of Depression of the Respo	ondents						
	M	ale	Female	Female		Total	
	f	%	f	Perc%	f	Per%	
Severe	8	2.82	2	1.74	10	2.51	
Moderate	62	21.83	31	26.96	93	23.31	
Mild	54	19.01	24	20.87	78	19.55	
Normal	160	56.34	58	50.43	218	54.64	
Total	284	100.00	115	100.00	399	100.00	
Level of Anxiety of the Responde	ents						
	M	ale	Female		Total		
	f	%	f	Perc%	f	Perc%	
Extremely Severe	7	2.46	3	2.61	10	2.51	
Severe	30	10.56	17	14.78	47	11.78	
Moderate	78	27.46	38	33.04	116	29.07	
Mild	33	11.62	17	14.78	50	12.53	
Normal	136	47.89	40	34.78	176	44.11	
Total	284	100.00	115	100.00	399	100.00	
Level of Stress of the Responden	ts						
	M	ale	Female		Total		
	f	%	f	%	f	%	
Moderate	12	4.23	3	2.61	15	3.76	
Mild	28	9.86	16	13.91	44	11.03	
Normal	244	85.92	96	83.48	340	85.21	
Total	284	100.00	115	100.00	399	100.00	

In general, the findings show that there is a high proportion among the young adult gamers from the selected areas of Pasig who manifest moderate levels of depression and anxiety during the Covid19 pandemic; however, lower levels of stress are evident. This implies that in the depression subscale, over half or 160 (56.34%) of the male respondents and 58 (50.43%) of the female respondents showed no signs nor symptoms of depression. Results further indicate a total of 218 (54.64%). Moreover, less than a quarter among male respondents exhibit mild and moderate 54 (19.01%) 62 (21.83%) symptoms of depression. Merely 24 (20.87%) of female respondents indicate mild symptoms of depression and more than a quarter, 31 (26.96%), exhibit moderate signs of depression. As observed, results further indicate an average of 78 (19.55%) and 93 (23.31%) for both mild and moderate symptoms of anxiety. The smallest fraction among male young adult gamers are eight (8) (2.82%) who show the manifestation of severe symptoms of

depression while there is a percentage of 1.74% or 2 of the female respondents who experience severe symptoms of depression, and a total of 10 (2.51%) among young adult gamers. Accordingly, Liu, et. al. (2018) pointed out that over 26 percent of the video gamers had depression, similar study of Peterson (2021) concluded that depression occur together in over a quarter of all people with gaming disorder (Peterson, 2021).

In the anxiety subscale, 136 (47.89%) among male and 40 (34.78%) female young adult gamers show no signs or symptoms of anxiety, thus, getting an average of 176 (44.11%). However, a slight majority of the respondents, i.e., 33 (11.62%) of the male respondents experience mild symptoms, while 17 (14.78%) for female; for moderate symptoms of anxiety, 78 (27.46%) males and 38 (33.04%) females, thus, comprising a total of 116 (41.06%) respondents. Alongside, there are some male and female respondents who exhibit severe symptoms, 30 males (10.56), and 17 females (14.78%); and those who exhibit extremely severe symptoms are seven males (2.46%) and three female respondents (2.61%), indicating a total percentage (14.29%). This affirms the conclusion drawn from the research of Quitters (2021) stating that 92% of all cases of gaming disorder presents symptoms of anxiety.

Concerning the stress subscale, it indicates that a significantly higher proportion of male, 244 (85.92%), and female, 96 (83.48%) young adult gamers experience normal or no symptoms of stress, indicating a total of 340 (85.21%) among the respondents. Meanwhile, a small percentage of male 28 (9.86%) and female 16 (13.91%) young adult gamers undergo mild symptoms of stress, obtaining a total percentage of 44 (11.03%). A percentage of (4.23%) among male respondents and (2.61%) among female young adult gamers exhibit moderate symptoms of stress, achieving (3.76%). Contrastingly, the cross-sectional survey of Rahab, et al. (2020) revealed that gaming addiction was strongly associated with moderate to high-levels of stress among adolescents (moderate OR = 6.7, 95% CI = 2.9-15.5; high OR = 11.9, 95% CI = 4.7-30.1).

**Problem Statement 3:** How does the Level of Gaming Addiction between Male and Female Respondents Differ during the COVID19 Pandemic?

Table 7. Shows the Comparison of the Gaming Addiction between Male and Female Young Adults

		Female	Male	Total	Chi Square	p-value	Sig
Gaming	Monothetic	21	61	82	$1.019^{a}$	P = 0.601	NS
Addiction	Non-Addicted	50	109	159		> 0.05	
	Polythetic	44	114	158			
	Total	115	284	399			

As shown in Table 7, the difference among the level of gaming addiction between male and female young adults during the COVID19 pandemic was tested. Through the utilization of Chi Square, findings revealed no significant difference on the level of gaming addiction in terms of gender  $\chi 2$  1.019a, P = 0.601 > 0.05. Therefore, the researcher failed to reject the null hypothesis.

To discuss, data reveal that both males and females between the ages 18-24 equally manifest monothetic and polythetic addiction to online interactive games. Accordingly, this reflects the data of Video Game Controversies (2022) in which the study concluded that the gender ratio of gaming associated problems is closer to equal (Canada 49:51, US 47:53, Germany 49:51, and France 52:48). Given that women now make up half of the gaming population, it is likely that the number of female online gamers has increased over the past two decades, making them more susceptible in developing online gaming addiction (Video Game Controversies, 2022). Contrarily, a number of research studies show that men are genetically three times more likely than women to become video game addicts (Gupta, 2018); however, in-depth research by Rochlin (2020) also showed an interesting standpoint in gender demographic and gaming addiction. It was discovered that female gamers are more likely to become addicted on online games due to one characteristic trait of being emotionally driven (Rochlin, 2020).

**Problem Statement 4:** How does the Level of Perceived Psychological Distress between Male and Female Respondents Differ?

Table 8. Comparison of the Level of Psychological Distress of Male and Female Respondents
Chi Square p-value Sig

Depression	1.968 <sup>a</sup>	P = 0.579 > 0.05	NS
Anxiety	5.960 <sup>a</sup>	P = 0.202 > 0.05	NS
Stress	1.846 <sup>a</sup>	P = 0.397 > 0.05	NS

As seen in Table 8 the comparison of the level of psychological distress of the young adult gamers during the COVID19 pandemic was tested using chi-square. Based on the obtained data, this study found no differences on the level of psychological distress in terms of gender  $\chi 2$  1.968a P = 0.579, 5.960a P = 0.202, 1.846a P = 0.397. Therefore, the researcher also failed to reject the null hypothesis. Findings show that both male and female young adult gamers from the selected areas of Pasig manifest similar levels of moderate symptoms of depression and anxiety during the Covid19 pandemic, but lower level of stress were also evident on the counterpart. Related studies support that depression and anxiety is a common comorbidity with addicted gamers (Quitters, 2021). Results show that up to 92% of addicted male gamers have existing depression comorbidities, thus when these disorders interact, they often affect each other (Quitters, 2021).

**Problem Statement 5:** How does psychological distress in young adults relate to their level of gaming addiction?

7	Table 9. Shows the Relationship between the Young Adults Gaming Addiction and Psychological Distress								
		Monothetic	Non-Addicted	Polythetic	Tota	l Chi-Squa	re Cramer's	s V p-value	Sig
D	Mild	16	26	36	78	53.088 <sup>a</sup>	.258	P = 0.000 < 0.05	S
	Moderate	38	18	37	93				
	Normal	24	114	80	218				
	Severe	4	1	5	10				
	Total	82	159	158	399				
		Monothetic	Non-Addicted	Polythetic	Total	Chi Square	Cramer's	V p-value	Sig
A	Extremely Severe		1	4	10	46.4 3 <sup>a</sup>	.241	P = 0.000 <	S
	Mild	1 12	16	22	50			0.05	
	Moderate	2 31	37	48	116				
	Normal	18	98	60	176				
	Severe	e 16	7	24	47				
	Total	1   82	159	158	399				
		Monothetic	Non-Addicted	Polythetic	Total	Chi Square	Cramer's V	p-value	Sig
S	Mild	18	7	19	44	29.849 <sup>a</sup>	.193	P = 0.000 <	S
	Moderate	e 6	0	9	15			0.05	
	Normal	1 58	152	130	340				
	Total	1 82	159	158	399				

Table 9 presents the relationship of gaming addiction and psychological distress among young adults amidst Covid19 pandemic. Through the utilization of Chi-Square, the researcher determined a significant relationship between gaming addiction and depression level  $\chi$ 2 53.088a  $\varphi$ .258 P = 0.000 < 0.05 signifying a moderate level of relationship. There is also a significant relationship between gaming addiction and the level of anxiety  $\chi 2$  46.463 a  $\phi$ .241 P = 0.000 < 0.05 showing a moderate relationship. Moreover, the data reveal a significant relationship between gaming addiction and stress level, indicating a weak relationship.

Based on the result, it shows that there is a significant relationship between the young adults' game addiction and the perceived psychological distress, and the association was substantiated with a moderate level of relationship. As such supporting literature of Rujataronjai and Varma's (2018) suggested that the greater the amount of depression, anxiety, and stress, the greater the level of addiction to online games.

**Problem Statement 6**: What are the Other Factors Contributing to Male and Female Young Adults Persistent Engagement in Online Interactive Games?

A qualitative focus group discussion was conducted to gain an in-depth understanding of the respondent's subjective experiences that contribute to their frequent engagement in online interactive games, since there are other factors that cannot be obtained by the use of standardized questionnaire.

Table 10. Other Factors that Contribute to Frequent Engagement to Online Games among Addicted Gamers

Themes	Subthemes	f
Coping Mechanism or Coping	Relief from stress	4
in Challenging times		
Using Online Games to	Alleviates existing feelings of sadness, loneliness	3
Manage Moods	(isolation), and mood swings.	
Dependency on the Positive	Feelings of happiness, euphoria, and excitement,	6
Emotional Effects	self-fulfillment	
Familial Environment	Family conflict / unmet emotional needs at home	4
Social Functioning & Peer	Influence of friends and schoolmates	7
Conformity	Seeking social interaction	3
	Social status (rank in games)	3
	Engaging themselves to online games to match	3
	with others because of social pressure	
Form of Fantasy and Escapism	Escaping reality	4
	Escaping boredom	5

Thematic analysis revealed that male and female young adult gamers' frequent engagement in online interactive games has been their coping mechanism when the root problem is not unaddressed. The pleasure and enjoyment the participants gain from gaming helped them cope with the stresses of the day (i., e. academic and work-related stress). Furthermore, nearly half of the respondents used online games to manage moods. This explains that some participants were unable to regulate or control their emotions that is why they turned to online gaming to distract themselves from their existing negative emotional problems. Likewise, most of the respondents play online games due to its dependency on the positive emotional effects provided by the game itself. Similarly, some of the respondents experienced family conflict and unmet emotional needs at home leading to forcing them to divert to the online gaming world. Accordingly, results also revealed that majority of the respondents frequently played online interactive games seek social interaction, match with others because of social pressure, (they want to be fit and feel accepted by the group) and play games to gain social status. In addition, most of participants compulsively play to escape reality and alleviate their day-to-day intense boredom.

Table 11. Other Factors that Contribute to Frequent Engagement to Online Games among Non-Addicted Gamers

Themes	Subthemes	Participants
Self-Interest	Hobby (in moderation)	7
Distraction	Stress reduction activity	4
Socialization	Build friendships and a way of communication	3
Boost Self-Esteem	To improve, build confidence and skills	6

Thematic results further suggested that the majority of participants played online interactive games for self-interest or as a pastime hobby. This demonstrates that the majority of players viewed it as a healthy, enjoyable gaming hobby since it offers continuous enjoyment outside of work or school hours. Nearly half the participants regularly played online games for distraction and stress reduction from patterns of daily stress and a way to build positive feelings. As stated, gaming helped them to relax and recover from stress just like taking a fresh air. Analysis also revealed that most of the gamers were interested in playing online interactive games on a regular basis to build friendships and a way of communication with existing friends. Likewise, more than half of the participants further said they played online games regularly to improve themselves, gain confidence, and enhance skills accumulated in gaming.

**Problem Statement 7:** What Specific Psychological Intervention Program can be Proposed?

Based on the accumulated findings of the study, a preventive intervention program was developed by the researcher. Young people who are at risk of developing Internet Gaming Disorder were the target population of the suggested preventative intervention program. The program also intends to strengthen the unique goals stated, as well as helped the participants achieve greater levels of wellbeing. Through this, the intervention can help minimize, eliminate, or reduce possible occurrences of mental health issues in relation to problematic gaming behaviour. Additionally, the preventative intervention can be combined with other therapeutic modalities for better results and applicable to various settings.

#### **Conclusions**

Despite the continued emergence of gaming addiction and psychological distress, the phenomenon has hardly ever been the focus of in-depth research.

With this, the current study aimed to assess the young adult's level of gaming addiction and perceived psychological distress during the Covid19 pandemic, as well as identifying the other factors contributing to the respondents' frequent engagement in online interactive games, basis for preventative intervention program.

Based on the study findings, the following conclusions were drawn:

- 1. The young adult male and female gamers experience similar levels of game addiction and psychological distress during the Covid19 pandemic, which is substantiated by a moderate level of relationship.
- 2. The gamer's motives behind playing influence how frequently they engage in online interactive games. Addicted gamers attempt to compensate for what they lack leading to negative associated factor whereas gamers who are not addicted are associated with positive beneficial factors.

# **Recommendations**

In view of the study findings, the following recommendations are offered:

For Gamers - For them to learn and assess their engagement in interactive online games they should proactively deal with their problems and enhance their self-control whenever they encounter unfavourable or unpleasant life situations rather than turning to online games. Also, they can engage in beneficial activities such as practicing mindfulness, exercising, and socializing to help them feel better.

For Parents and Extended Family Members. Parents should encourage, support, and satisfy the needs of their children to minimize or prevent their engagement in online games in order to compensate for what they lack. They should also motivate their children to divert their energy to a more valuable hobby or interest like sports, music, or arts, and foster a family environment that are responsive, nurturing, and supportive to one another.

For Mental Health Professionals. They organize and conduct more webinars/seminars on the ill effects of online game addiction, counselling programs and individual therapy sessions for those experiencing psychological distress due to online game addiction. Likewise, to use the findings of the present to further refine the conceptualization of the IGD as a mental disorder and develop a more comprehensive treatment method.

For Future Researchers. For them to replicate and continue the study since the Philippines is hampered by the lack of research in this area. Since the researcher was not able to cover the other extraneous variables, there should be a further investigation about game addiction and associated psychological distress including its patterns, course and development of the disorder, vulnerability factors, and affective behavioural and cognitive consequences. Further studies about the prevalence and magnitude of game addiction are also recommended, as well as the conduct of experimental design to be conclusive about the directionality of causation.

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