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GAME ADDICTION AND LOCUS OF CONTROL AMONG ADOLESCENTS

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ABSTRACT

In general adolescent period is known as the period of stress and storm. The individual undergo several changes physically, hormonally, psychologically, their interests and likes also varies. During this age they are curious to engage themselves in new games and activities. In this technology world, the use of smartphones and gadgets has increased tremendously among everyone irrespective of their age. Games are one of the applications that everyone enjoys while involved in it. When an individual is involved in games more than the required time, feel uncontrolled to play and compromises their regular activities for this it is called game addiction. Locus of control talks about two aspects which is internal and external locus of control. Having a control on their emotions, behaviours are internal and other having a control on an individual is external. In the current study the researchers try to study the association between Game addiction and Locus of Control among late adolescents. Since there are very limited studies on these variables, the study follows the exploratory research design to get new understandings and elaborations about game addiction and locus of control.A total of 100 adolescents of age 18 – 19years were selected randomly from 3 different schools using systematic random sampling technique. Game Addiction Scale byLemmens et al., (2011) and Levenson Multidimensional Locus of Control Scales (1981) are the tools used for data collection. Pearson product moment correlation and Independent Sample t test were computed for statistical analysis of the data. The

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results of the study indicate that game addiction was higher in boys than girls. The analysis also reveals a significant association between Game Addiction and Powerful others (i.e. External Locus of Control). Further implication and suggestions are discussed in the paper.

Keywords: *Internal Locus of Control, External Locus of Control and Game Addiction.*

INTRODUCTION

The games that adolescents play inside the play grounds and at the streets had been changed in current years with games played inside in the front of the computer, on the internet or in recreation arcades. This changing way of life has especially created the concept of "game addiction", a situation that stems from the regular growing passion for video games and their extreme and out of control usage among adolescents and young adults. Adolescents and teenagers spend an extensive time for playing videogames.

Gaming

A draft of the World Health Organization's (WHO) 2018 International Classification of Diseases incorporates "gaming issue." The new issue, in any case, would not recommend playing games is unpleasant but it qualifies as a mental illness on its own. The gaming disorder is incorporated into a segment on "disorders because of addictive practices." To warrant a diagnosis of the new disorder, unreasonable conduct ought to be clear for a time of no less than a year. In any case, playing excessive of computer games doesn't really mean a man has the disorder—the conduct needs to essentially impede individual, family, social, instructive, word related or different parts of your life.

Instead of dedicating energy to "real-world" activities and pursuits, a video game addict spends a large portion of his or her time playing games. A person who has developed a video game addiction prioritizes gaming achievements dominating all other activities such as spending time with family and friends, interpersonal relationship, school achievement, and work performance.Game addiction may also be known as a severe lack of control over playing games that leads to significant damage for the person in the real world.

Signs of Video Game Addiction

Initial efforts to define video game addiction were made by modifying the diagnostic criteria for known addictions such impulsive gambling. However, this informal technique has not been widely adopted and as such; psychologists, psychiatrists, and researchers have been forced to define video game addiction without standardized diagnostic criteria. Definitions of video game addiction often include the following symptoms:

- Serious negative influence on work performance, school achievement, and / or interpersonal relationships
- Spending most of one's free time playing video games
- Habitually playing video games for six to eight hours non-stop
- Loss of interest in social activities
- Avoiding of personal commitments and responsibilities so that games can be continued.

Often being awake late to play video games which would regularly lead to feeling very fatigued and tired the next day.

Locus of control

Locus is said as a point, position or place, or more particularly, a location where something occurs. An individual's locus of control may be internal or external.

Control is an easy word to recognize but a hard phrase without a doubt to deal with. People think that they control the whole thing, others that think they may be controlled by means of the world around them and pretty much everything in between. Control may be described as the strength to decide effects by way of directly influencing actions, people and activities.

Orientation in locus of control is a conviction about whether the consequences of our activities depend upon what we do (internal control orientation) or on situations outside our own control (external control orientation).Julian Rotter a psychologist stated that our behaviour is controlled through reinforcements and punishments and changes into the outcomes for our behaviour that is decided by our beliefs about the underlying reasons of those actions. The extent to which individuals trust they have control over occasions in their lives. A person with an internal locus

of control believes that he or she can influence events and their consequences, while any person with an external locus of manipulate blames outside powers for everything.

Adolescence

Adolescence is a period in development between the onset of puberty and adulthood. It normally starts among 11 and 13 years of age with the advent of secondary sex attributes and spans the teenage years, terminating at 18 to 20 years of age with the completion of the development of the adult form. During this period, the person undergoes huge bodily, psychological, emotional, and persona changes. Storm and pressure when it comes to youth may be stated to be the demanding situations confronted and treated at some point of this process of growth, these stress and storm may be related to the pressure and expectation from society, media and peers pressure, stress is not necessary caused by these procedure of growth however by the demand and responsibility that is typically connected to it.

This developmental period in adolescents have numerous impact on what form of distress they face and the way they are treated, the stressors that cause can either social, physical, emotional or intellectual.Adolescence is a crucial and exciting stage in life which are marred by many levels of development and challenge, it is period of time in which adolescent experiment many aspects that may either make or wreck their life and their future, a period of exposure, it is a very unstable, inconsistent and emotional state, there are numerous stress and storms attached with adolescents. Less than 10% of circle of family with adolescents experience conflicts even as only 15-30% of most adolescent experience stress and storm.Everybody does not experience this process of storm and stress. It happens and it affects most of the adolescent but not all as it is widely perceived and portrayed by the media, society and parents.

Need for Study

Game Addiction has got the attention of the psychologists and APA considers noting, game addiction in connection with mental illness. It is being associated with personalities, aggression, psychopathy and other mental disorders. Adolescencehave a greater tendency to show more symptoms of pathological gaming when compared with other age groupsIt has come to an extent where the newspapers and magazines report game addiction to be life threatening among

adolescent students.Hence the purpose of this study is to seek the reasons and situation for game addiction and to study the type of control an individual poses who is an addict.

REVIEW OF LITERATURE

Chak and Leung (2004) carried out an exploratory study to investigate the impact of variables, such as demographics, online experiences, locus of control, and shyness, on Internet addiction. Convenient sampling was used with a combination of online and offline methods to collect data. 722 Internet users participated in the study. The outcomes of the study revealed that the higher the tendency of an individual to internet addiction, the shyer the individual is, the less faith the person has, the firmer belief the person holds in the irresistible power of others, and the higher trust the person places on chance in determining his or her own course of life. Individuals who are addicted to the Internet make often and intense use of it both in terms of days in a week and in length of each time, particularly for online communication through chat rooms, e-mail, newsgroups, and online games. In addition to this, full-time students were more likely to have internet addiction, and were considered high-risk for problems due to unlimited access and free and flexible time schedules.

Grusser, Thalemann and Griffiths (2007) investigated on the addictive potential of gaming as well as the relationship between aggressive attitudes and behaviour and excessive gaming. 7069 gamers answered two questionnaires online. Results proved that 11.9% of 840 gamers fulfilled the criteria of addiction concerning their behaviour of gaming, while there were only weak evidence for the perception that aggressive behaviour is connected with excessive gaming. Research findings contribute to the hypothesis that playing games without monetary reward meets addiction criteria.

The present study described and illustrated five experiential motives such as social affiliation, enjoyment, concentration, escape, and epistemic curiosity as predictors of intention to online gaming. As a moderator, external locus of control was brought in with the connections between experiential motives and intention. 576 current online game players participated in online survey. Results confirmed that three experiential motives with the exception of concentration and epistemic curiosity have a positive effect on intention. $\chi 2$ difference test confirmed that the

coefficients linking experiential motives such as concentration, enjoyment, and escape to intention are higher for people with external locus of control than for people with internal locus of control. Implications are discussed in conclusion **(Moko 2009).**

The purpose of this study is to access excessive computer gaming in German adolescents as an addictive disorder and its potential negative consequences. Psychopathological gaming in computer was found by applying the diagnostic criteria of substance-related- addictions given by in ICD-10. Meanwhile state of clinical anxiety, demographic variables, and underlying cognitive mechanisms were analysed. 6.3 % of the 221 participants - mostly boys with a low educational background - fulfilled the criteria of the addiction behaviour. Clinically diagnosed adolescents exhibited limited cognitive flexibility and were identified to utilize computer gaming as a mood management strategy. These outcomes were interpreted as a first clue for a prevalence of psychopathological computer gaming in German adolescents. **(Wölfling, Thalemann , Sinopoli 2008).**

The purpose of this research is to examine the relationship of internet addiction, academic locus of control and social self-efficacy. The Academic Locus of Control Scale, the Online Cognition Scale and the Perceived Social Self-efficacy were administered to 311 university students. The hypothesis model of the study was analysed using structural equation modelling. According to results internal academic locus of control was predicted positively by social self-efficacy. Also internet addiction was elaborated positively by external academic locus of control and negatively by social self- efficacy and internal academic locus of control. **(Iskender 2010)**

Peukert, Sleslack, Barth and Batra (2010) gave an overview about the current scientific discussion of the addiction and overuse of internet and computer game playing. Pubmed method was used for a systematic literature research.Recent epidemiological data from Germany suggest that 1.5-3.5 % of adolescent computer and internet users show signs of an overuse or addictive use of computer and video games. Moreover there is evidence that the disorder is associated with higher rates of depression, anxiety, as well as lower achievements e. g. at school. Although the nosological assignment still remains unclear there is some evidence from neurobiological data that the disorder can be conceptualized as behavioural addiction. As treatment strategy CBT-

techniques have been proposed, but there is still a lack of controlled clinical trials concerning their efficacy. Since the addicted persons often show little motivation for a behavioural change we consider it a promising approach to treat and train their relatives with the aim of increasing the motivation for a behavioural change of the addicted person.

Internet addiction has become a critical problem on adolescents in Taiwan, and its negative effects on various dimensions of adolescent development caught the attention of educational and psychological experts. The research investigated the association between cognitive, locus of control and emotion venting strategies factors on internet addiction among adolescents in Taiwan. Making use of the Emotion Venting Strategy scales and the Compulsive Internet Use, a survey was carried out among 215 students ranging from12 to14 years old. The results were as follows: 1. Severity of Internet addiction has significant gender differences; boys were at a higher risk than girls in becoming addicted to the internet. 2. Emotion venting, locus of control and internet addiction had a positive relationship with one another. 3. As the control variable setting locus of control, emotion venting strategies showed to have a significant impact to internet addiction. **(Li, Wang, and Lin 2012).**

Agaj (2016) has given an overview about the phenomenon of internet addiction in adolescents in Albania and also to investigate the impact of the components of the locus of control in internet addiction. 1156 adolescents, aged 15-18, in the city of Tirana participated in the study. The data was collected using the Internet Addiction Scale, Kimberly Young, which was composed of 20 items, and The Levenson locus of Control Scale, which is composed by 24 items. SPSS software was used to analyse the data. Results indicate that a large number of adolescents in Albania have a high risk to develop internet addiction in the nearest future and adolescents with internal locus of control have 35% less probability to develop internet addition than those with external locus of control.

METHOD OF INVESTIGATION

Objectives

- To assess game addiction locus of control
- To find the association between game addiction and dimensions of locus of control

- To identify the gender differences in dimensions of locus of control

Hypotheses

1. There will be significant association between game addiction and internal locus of control
2. There will be no significant association between game addiction and external locus of control
3. There will be no significant association between game addiction and chances
4. There will bea significant gender difference in game addiction among adolescents
5. There will be no significant gender difference in dimensions of locus of control among adolescents

Research design

This study was carried out using the exploratory research design. Since the concept of game addiction is slowly emerging very less investigation in this area. The current study throws limelight on the relationship between game addiction and locus control.

Sample

The samples of 100 adolescents are selected using systematic random sampling technique. From the roll call every student with multiples of three were chosen from 4 different schools in Chennai. From every school 20 – 25 students were selected and later the invalid data was eliminated and finally arrived at 100. The sample includes both male and female students in the age range 13 – 15 years.

Tools

The following tools were used for the study; both are psychological tools that are standardised:

- **Game Addiction Scale** byLemmens et al., (2011) was used to measure the game addiction of the students. It consists of 7 items with 5 alternatives which are 1- Never, 2- Rarely, 3- Sometimes, 4- Often, 5- Very often. If the score is 3 and above for all 7 items, the subject has pathological (high) game addiction and if the score is 3 and above for more than half of the items, then the subject has excessive (medium) game addiction. High reliabilities for the Game addiction scale with Cronbach alpha of .82 to .87. the scale also has a good concurrent validity.

- **Levenson Multidimensional Locus of Control Scales (1981)** was developed by Levenson H. Each of the subscales of Internality, Powerful Others, and Chance is scored on a six-point Likert format from minus 3 to plus 3. A person who has strong agreement with all eight items would score a plus score; strong disagreement, a minus score. After adding and subtracting the item scores, add 24 to the total score to eliminate negative scores. Scores for Powerful Others and Chance are similarly derived.

Statistical Analysis

The data was analysed using SPSS 20.

- Coefficient of correlation - Pearson product Moment Correlation between game addiction and locus of control.
- Independent Sample t test - males and females on game addiction and Locus of control

RESULTS AND DISCUSSION

Table 1

Correlation between Game Addiction and Locus of Control

Variables	Internality	Powerful Others	Chances
Game Addiction	$.006^{NS}$	$.273^{**}$	$.162^{NS}$

**** p > 0.01 level**

Pearson product moment correlation was computed to find the relationship between game addiction and locusof control. The analysis revealed a significant positive correlation between the variables, in other words game addiction and powerful other (External Locus of Control) increases and decreases simultaneously. The coefficient of correlation is significant at 0.01 level. And also it is found that Internality and Chances are not significantly related to game addiction.

In a study by MoKoo (2009) on 576 online gamers, $\chi 2$ difference test confirmed that the coefficients connecting experiential motives like enjoyment, concentration, and escape to intention were high for individuals with external locus of control than for individuals with internal locus of control.

Kim, Namkoong, Ku and Kim (2008) from their study on 1471 online game users notified that aggression and narcissistic personality traits are associated positively with online game

addiction, and self-control is associated negatively with online game addiction. They also added that from, a multiple regression analysis the extent of online game addiction could be anticipated based on the individual's narcissistic personality traits, self-control, occupation, interpersonal relationship, and aggression.

In addition to these reviews that support the findings of the present study, there are several studies on internet addiction and locus of control. Those studies state that persons who are high in external locus of control are more vulnerable to addiction than others. When a person is able to control his/her emotions and behaviours they are less likely to engage in any risky or maladaptive behaviour. They know their limits and boundaries in any activity that they engage. Individual who fail or who have less internality are easily influenced by other. They are more dependent on others for their actions, in other words they are controlled by the external people. Thus many times these individuals are not guided in the correct way, thus they engage in risky behaviours.

Thus the hypothesis stating that "There will be significant association between game addiction and internal locus of control" is accepted. And the other two hypotheses stating "There will be no significant association between game addiction and external locus of control" and "There will be no significant association between game addiction and chances" are not accepted.

Table – 2

Mean scores and the level of significance of the variables on the basis of gender

Variables	Gender	N	Mean	SD	t value
Game Addiction	**Male**	55	18.13	6.002	2.132^{**}
	Female	45	15.68	4.758	
Internality	**Male**	55	5.82	3.306	1.124^{NS}
	Female	45	5.09	3.132	
Powerful Others	**Male**	55	3.78	3.143	0.880^{NS}
	Female	45	4.40	3.887	
Chances	**Male**	55	4.76	3.925	1.145^{NS}
	Female	45	3.96	2.923	

**** p > 0.01 level**

NS - Not Significant

Parametric test, independent sample t test was computed to find the gender differences among the sample in game addiction and dimensions of locus of control. From the results is revealed that game addiction has a significant gender difference. And from the mean scores it is evident that boys have a high level of game addiction than girls. While Internality, Powerful others and Chances did not have any significant gender differences.

Rohilla (2018) tried to examine the Gender Difference in Gaming Addiction among 350 Adolescents in Chandigarh. Finally they stated that there was a significant gender difference in gaming addiction among the sample. The researcher also added that boys had high level of gaming addiction then girls.

Ko, Yen, Chen, Chen, and Yen (2005)in their study on 395 Taiwanese adolescents have found a significant gender difference in online gaming. Boys were found to spend more time in online gaming more than girls in a day. Older age, low self-esteem, and low daily life satisfaction were related with severe online gaming addiction in boys. However, in girls none of the five variables was correlated significantly with online gamingaddiction.

These are the few studies that support the findings of the present study.In general playing is more in boys than girls. After a period girls are not allowed to play to the extent of boys, they are engaged in household works and helping the mother. And also boys are now a day not allowed outside to play due to several issues, in that way they are at home playing more video games. They find it very interesting and the competent to reach different stages.

Therefore the hypothesis stating “There will be a significant gender difference in game addiction among adolescents” is accepted. And the hypothesis stating “There will be no significant gender difference in dimensions of locus of control among adolescents” is not accepted.

Significance of the study

Playing is a healthy practice for any person irrespective of their age and gender. Games keep our mind active and body energetic. But in the present era outdoor games are not encouraged by parents or in schools. Due to many threats and issues children are advised or forced by parents to stay at home. In such cases that spend their leisure time and holidays with smartphones, gadgets playing video games or in social media. Gradually the children tend to become more involved in these game and they get addicted. They are compelled internally to play and achieve points or reach next stages. This is very unhealthy for an individual. This kind of addiction makes them more aggressive and sluggish, several studies support the same. Therefore for this situation to change parents and the child must do a lot of changes in them. Practising to have a self – control and control of their actions is very important on a child's part.

Limitations and Recommendations

- A larger sample size must be taken for better and reliability.
- A wide representation from different parts of the country or state can be chosen for generalization.
- An intervention program can be done for all the children for how to use their leisure time effectively rather than video games and social media.
- Parents need to take care of the time that their children spend on video game. Also thetype of games they play must be monitored.
- Numerical ability and reasoning games can be introduced to children, which would enhance their intelligence.
- Engaging in group activities and games within the house premises and monitor of parents would be a better and effective way to desensitise game addiction.

REFERENCES

Shilpa Singh Rohilla (2018). "Gender Difference in Gaming Addiction among Adolescents", International Journal of Emerging Technologies and Innovative Research, ISSN:2349-5162, Vol.5, Issue 1, page no. pp460-463, http://www.jetir.org/JETIR1801088

Chih-Hung Ko, Ju-Yu Yen, Cheng-Chung Chen, Sue-Huei Chen, and Cheng-Fang Yen (2005). Gender Differences and Related Factors Affecting Online Gaming Addiction among

Taiwanese Adolescents. The Journal of Nervous and Mental Disease, Volume 193, Number 4, Page No. 273 – 277. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.953.2853&rep=rep1&type=pdf

Desera Agaj (2016) The impacts of components of locus of control in internet addiction. American Scientific Research Journal for Engineering, Technology, and Sciences. ISSN (Print) 2313-4410, ISSN (Online) 2313-4402http://asrjetsjournal.org/

Dong MoKoo (2009) The moderating role of locus of control on the links between experiential motives and intention to play online games. Computers in human behaviour, 25(2), 466-474 https://www.sciencedirect.com/science/article/pii/S074756320800201X

Grüsser, Thalemann R and Griffiths MD (2007) Excessive computer game playing: evidence for addiction and aggression. Cyber psychology Behaviour, 10(2), 290-292 https://www.ncbi.nlm.nih.gov/pubmed/17474848

Jia-Ru Li, Chih-Hung Wang, and Ching-Wen Lin (2012) Locus of Control, Emotion Venting Strategy and Internet Addiction. International Journal of Psychological and Behavioral Sciences, 6(12). https://waset.org/publications/14547/locus-of-control-emotion-venting-strategy-and-internet-addiction

Katherine Chak and Louis Leung (2004) Shyness and Locus of Control as Predictors of Internet Addiction and Internet Use. Cyber psychology and Behaviour, 7(5), 559-70 http://www.encognitive.com/files/Shyness%20and%20Locus%20of%20Control%20as%20Predictors%20of%20Internet%20Addiction%20and%20Internet%20Use.pdf

Murat İskender (2010) Social self-efficacy, academic locus of control, and internet addiction. Computers and education, 54(4), 1101-1106. https://doi.org/10.1016/j.compedu.2009.10.014 https://www.sciencedirect.com/science/article/pii/S0360131509003042

Peukert P , Sieslack S, Barth G, and Batra A. (2010) Internet- and computer game addiction: phenomenology, comorbidity, etiology, diagnostics and therapeutic implications for the addictives and their relatives. Psychiatr Prax, 37(5), 219-54. DOI:10.1055/s-0030- 1248442 https://www.ncbi.nlm.nih.gov/pubmed/20597036

Wölfling K1, Thalemann R and Grüsser-Sinopoli SM.(2008) Computer game addiction: a psychopathological symptom complex in adolescence. Psychiatr Prax,35(5), 226-32. DOI: 10.1055/s-2007- 986238 https://www.ncbi.nlm.nih.gov/pubmed/18027346