# ANALYSIS ON SIGNIFICANT EFFECT ON ADOLESCENTS MENTAL HEALTH AND **ONLINE GAMING**

<sup>2</sup>UDUTHALA KRISHNA, <sup>3</sup>MUDDU MANASA, <sup>4</sup>S.CHAITANYA <sup>1</sup>SUMAN CHINTHALA, <sup>1</sup>Professor, <sup>2,3</sup>Assistant Professor, <sup>4</sup>UG Student, <sup>1,2,3,4</sup>Department of Pharmacy, Brilliant Grammer School Educational Society Group of Institutions-Integrated Campus, Hyderabad, India.

#### Abstract

Our emotional and social well-being are all part of our mental health. It has an impact on how we think, feel, and act. It also affects our stress management, social connections, and decision-making. Mental health is a concern for people of all ages, from childhood to adulthood. If you have had mental health problems at any point in your life, your thinking, emotions, and behaviour may be altered. Mental health is defined as the absence of mental illness or a state of psychological well-being. The goal of this study was to see how internet gaming affects teen mental health, as well as how gender affects mental health. There were 80 participants in the study, who were split into two groups: addicted and non-addictive. There are 40 people in each group (20 Boys and 20 Girls). Arun Kumar Singh and AlpanaSen Gupta created the mental health battery, which was used to assess mental health. The results of the study show that online gaming has significant effect on mental health (F- value 74.64) but gender differences are not found significant (F - value 2.2). On the basis of the result of this study it can be said that online gaming has significant effect on mental health, but there is no significant effect of gender on mental health. Thus, on the basis of our finding we are permitted to say that finding of present research may be applied for furtherutilities.

**Keywords:** Social media, mental health, online gaming, gender

## Introduction Mental Health

Mental wellness entails more than the absence of mental illnesses. "Health is a condition of complete physical, mental, and social well-being, not only the absence of disease or infirmity," according to the World Health Organization's definition of health. "Concepts of mental health include subjective well-being, perceived self efficiency, autonomy, competence, intergenerational dependence and recognition of the ability to realize one's intellectual and emotional potential". It's also been defined as a state of well-being in which people recognise their own abilities, can cope with daily stress, work productively and fruitfully, and contribute significantly to their communities.

The mental health of individuals and communities is about enhancing their talents and assisting them in achieving their self-determined goals. Everyone, not just those who suffer from mental illness, should prioritise their mental health. (Mahnaz, 2017) looked on the social factors that influence stigma associated with mental illness in teenagers with mental illnesses. Mental disease is linked to schizophrenia, affective disorder, substance-induced psychosis, and obsessive-compulsive disorder, but not to sadness, anxiety, or hyperactivity, according to the data.

Mental health concerns have an impact on the entire society, not just a small segment of it. As a result, they constitute a serious threat to global progress. Mental illnesses impact everyone, but they are more prevalent among the poor, homeless, employed, unemployed, those with inadequate education, victims of violence, migrants and refugees, indigenous peoples, children and adolescents, abused women, and the elderly. The researchers looked at the link between reported discrimination, racial/ethnic identification, and emotional distress among newly homeless teenagers (Norweeta et al, 2010). When race and immigration status were taken into account, the findings revealed that young individuals with a greater sense of ethnic identification experienced less emotional pain.

Young people who had experienced racial/ethnic discrimination in the past were more emotionally distressed. (Thomas and Catherine 1981) also looked into the link between mental health and behaviour problems and poor academic performance. The findings show that the social repercussions of mental health issues are not always the result of a loss of functional capacity.

Mental health is a positive idea that includes personal, societal, and behavioural adjustments. Mental health is a state of well-being in which people feel, and how they cope with daily normal stress. The concept of mental health is culturally defined, but it generally refers to life satisfaction, ability to cope with stressful situations, sorrows, and so on. Mental health is an important aspect of individual life, and people can learn how to adjust to their surroundings and deal with everyday problems. Sankar, Mohammad, and Indumathi (2017) investigated the level of mental health among teenagers and found that boys have a higher degree of mental health than girls (Sankar, Mohammad, and Indumathi 2017). The findings also reveal that there is a considerable disparity in mental health scores between males and girls.

#### **Smartphone Addiction**

When you spend more time on Facebook, WhatsApp, Twitter, and playing video games than you do interacting with real-world people, or you find yourself unstoppable with your self-regularly checking notification, messages, mails, or apps even when it has a negative effect on your life, it may be a red flag about your technology usage.

As the mobile or cell phone has become the 21st Century Icon, (Richaard et.al 2012) did a study on mobile phone addiction. It is used as a mobile phone, an internet portal, a social networking platform organiser, and even a mobile bank in today's society. The study's findings suggest that mobile phone usage is not simply habit-forming. It's also addictive, and it's possible that it's the biggest non-drug addiction of the twenty-first century. Another study (Kuss, 2017) looked into smartphone addiction among students, with the goal of determining whether it was a predictor of interpersonal relationships and loneliness among university students. Smartphone addiction was found to be adversely associated to interpersonal relationships and positively related to loneliness among university students. The finding also shows that women have a higher level of Smartphone addiction than man.

Excessive Smartphone use can lead to feelings of isolation, antisocial behaviour, and even worry. It's rarely the phone or tablet that causes the compulsion, but rather the video games, WhatsApp, and online chatting that binds us to Smartphone addiction. (Stavrau, 2018) focused on a 14-year-old teen in his research who struggled with video game addiction and related difficulties of violence and social disengagement. The relationship between addiction and low self-esteem and poor mental representation was also explored, as well as the efficiency of psychodynamic psychotherapy in treating addiction, which revealed higher levels of selfesteem and lessening behaviours. The findings are presented in relation to the patient's development during the therapy.

The impact of social media on academic performance has been studied in the past. In this study, (Enekiel et al. 2013) looked at the impact of social media on the academic performance of undergraduate students at Kogi State University. The findings suggest that students' exposure to social media has an impact on them, and that the impact is unfavourable. The findings also suggest that undergraduate students at Kogi State University use Facebook the most, which has a negative impact on their academic performance. (Deniz 2017) investigated the impact of mobile internet ownership, daily mobile internet use, and monthly mobile internet quota variables on homophobia among university students.

# **Causes and Effects of Smartphone and Internet Addiction**

"Dopamine", a chemical released by our brain make us feel good, happy and a surge of 'high'. Dopamine plays a critical role in forming reward seeking behavior, which later on may result in addictive habit formations, Dopamine is released during instant pleasure giving activities such as alcoholism, drugs intake, food, sex and some cases, the internet. This dopamine release then instigates and motivates a person to do these activities repeatedly which produce addictive behaviorconsequently.

Thereby, excessive use of smartphones might cause addiction which impairs mental health functions and physical health too subsequently.

Addictive behavior like fix on screen or to check notifications obsessively create mental problems such as stress, anxiety, depression or loneliness identity crisis etc., some of the times, it can also exacerbate these problems, whensmartphones are used as "security blanket" to relieve of anxiety, loneliness or awkwardness in social situations around, these behaviors cut oneself off further from people around in real world, and a habit to remain fix to phone stops face to face interaction that establishes a meaning full connection among people which later on alleviate anxiety and boost happiness at real, but fixing on screens just illusions one to live virtual world as realworld.

## What is Gaming Disorder

Gaming disorder also defined as Internet gaming disorder includes repetitive thoughts and compulsive use of online games to play despite knowing its negative effects or facing it negative consequences. According to DSM-5,2013 and ICD-11,2018) Gaming Disorder (GD) is defined as a pattern of repetitive or persistent gaming behavior.

#### **Need of The Study**

Present paper is an effort to explore the mental health status of the students who tend to indulge in addictive online gaming apps, as well as the games which are non-addictive in nature. Findings will bring a new insight to the scholars of psychology; they can use findings of present study for further researches related to mental health. Sustaining mental health is one of the best serve towards humanity at large, only a mentally healthy individual can fulfill theneedofthesociety. Suchaperson canthink positively and cherishes in any situation .sample of the study is students and contribution of mentally healthy students in developing the society and nation is very helpful. To achieve good education, one should have good mental health. The students need balance environment in homes, schools, society or in the whole world at large. Therefore, purpose of the study is to bring out some meaningful conclusions about the excessive use of online gaming and its impact on mental health among adolescents.

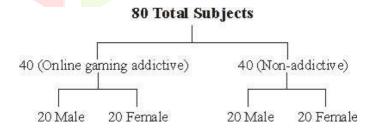
# **Objectives**

- To find out the effect of online gaming on mental health among adolescents.
- To find out the effect of gender on mentalhealth.

## **Participants**

The sample for the study comprised of two groups, which is; online gaming addictive group and online gaming non-addictive group. Online gaming addictive refers the participants who were playing addictive games like role playing games and candy crush game for more than 5 hours a day. Non- addictive group refers the participants who were playing non-addictive games like Limbo, Trine-2, Doodles etc., each group comprised of 40 subjects, divided into two levels that are 20 males and 20 females. Therefore, the total sample was of 80 subjects. Age range of the subjects was 13 to 15 years. All the subjects were literate above 7<sup>th</sup>class.

## **Description of the Sample**



#### Instrument

To know the status of mental health, mental health measure (MHB Singh & Gupta, 1983) was used. The scale consists of 130 items, Subdivided into six parts named as: emotional stability, over all-adjustment, autonomy, security- insecurity, self-concept, and intelligence. The test retest reliability for each part is calculated respectively.876, .821, .767,

.826,.786, and .823. Norms of the scale are formed for 13 to 22 years of age.

#### **Procedure**

The researcher had selected a total No. of 80 subjects (40 males and 40 females) out of 430 with the process of randomization. Sample was selected from different school of Meerut City.

To assess the status of mental health among these subjects, they were given the mental health battery test,

before distribution of the test each participant was cleared all the instruction of the test in very simple language. Scoring of the test filled by all the participants was done by using, the manual of Mental Health Battery.

## **Statistical Analysis**

To calculate the results keeping in view the difference of mental health between two groups, Mean and Two way ANOVA (analysis of variance) was used.

#### Results

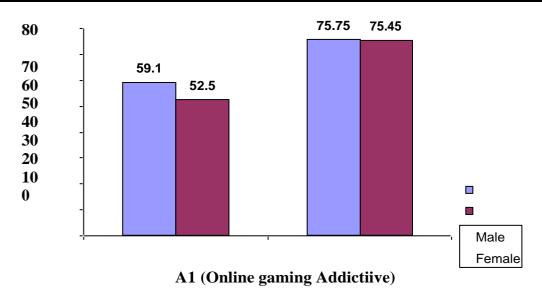
Table-1: Analysis of Variance Showing Significance difference between Online Gaming Addictive group and Non-addictive group.

Source of variance	SS	Df	MS	F
A (Mobile)	7840.80	1	7840.80	74.64
B (Gender)	238.05	1	2338.05	2.26
$A \times B$	198.20	1	198.20	1.88
Within treatment (Error)	7983.50	76	105.04	
Total		79		p> 74.64

Table-1 indicates that there is a significant difference on the status of mental health between online game addictive group and online gaming non-addictive group. In other words, the subjects who play addictive online game significantly differ (p<74.64) from those who play non- addictive online game. Table of analysis of variance further indicates that gender is creating no significant effect on mental health.

Table-2: Description of Mean Values for Online Gaming and Gender

Table 2. Besenption of Mean values for Caming and					
<b>Online Games</b>			Gender		
		B1 (Male)	B2 (Female)		
A1 (Online Gam	ni <mark>ng Addictive)</mark>	59.10	52.50		
A2 Non-addictiv	ve)	75.75	75.45		
Total		134.84	127.95		



A2 (Non-addictive)
A Graphical Presentation of Mean Score

#### Discussion

Results of the study clearly indicate that the groups of participants who play addictive online game have a poor mental health as compare that does not play addictive online game.

The study's next discovery reveals that there is no substantial difference in mental health between men and women.

In concerning with the first finding of the study there are various evidential researches which explore the negative effects of online gaming on health and mental health? A study done by (Eshart, Malineh&Nasim 2009) investigates the effect of computer games addiction on physical and mental health of students. The result clearly show how addiction to computer games affects various dimension of health and increase physical problems, anxiety and depression, while decrease social functioning disorder.

In another remarkable study conducted by (Enekiel et al. 2013) also show the negative influence of social media on the academic performance of the under graduate student of Kogi State University. Other studies done by (Grusser et.al 2007, Kuss et.al 2012) reveal that gaming or compulsive urge to play for seeking pleasure may lead to neglect normal relations in real world, school performance and duties and work-related duties as well as basic physical needs as a continuum from enjoyable activity to the extent of addictive use. (Andreasson et al., 2016) also explored the relationship between psychiatric disorders such as depression, anxiety and gaming addiction. (Messias et al., 2007, 2009) concluded a higher risk of suicidal ideation, planning, among the people who use online gaming more than 5 hours a day. According to (King.d.l., et a.,l 2014) internet gaming addiction is also related with certain somatic problems like enuresis, encopresis, auditory hallucinations, wrist, neck and elbow pain, obesity, skin blisters etc.

In context of another finding of present study gender does not differ significantly though mean difference is there slightly. But there are studies show a significant gender difference in context of effects of online gaming addiction.

#### Conclusion

On the basis of the discussion of this study it can be said that group of addictive online gaming have a poor mental health as compared to those who do not play addictive online games but there is no significant difference on mental health of male and female. Findings of the study are further recommended to investigate more researches, to see the precise impact of 'how online gaming addiction is affecting our youth and the entire population as a whole, especially in terms of mental health and related issues. Study may also support for parental education, policy makers concern and for the sensitive watch of educators.

## Reference

- 1. American Psychiatric Association.(2013).Diagnostic and Statistical Manual of Mental Disorder (DSM-5) American Psychiatric Publishing; Arlington, VA, USA.
- 2. American Psychiatric Association (2013). Diagnostic Statistical Manual of Mental Disorders.5<sup>th</sup>edn.Arlington,VA;American Psychiatric Publishing.
- 3. AndreassenCS,Billieux J, Griffithsm MD, et al.(2013). The relationship between addictive Use of social media and video games and symptoms of psychiatric disorders: a Large-scale Cross-sectional study. Psychol Addict Behav; 30:252-62.
- 4. Deniz, M.G., (2017). Exploring the influence of the patterns of mobile internet use on university students, Homophobia Levels, Vol. 3, 6, ISSB-L-2501-1111.
- 5. Eshrat, Z., and Nasim, H., (2009). Effect of addiction to computer games on physical And mental health of female and male students of Guidance School in City of Isfhan, Addict Health, Vol.1, 2.
- 6. Ezekiel, S., Asemah, Ruth, A., Okpanachi, Leo O.N., Edegoh, (2013). Influence of Social Media on the Academic Performance of the undergraduate students of Kogi State University, Anyigba, Nigeria, Vol. 3, ISSN 2222-1719.
- 7. Grusser SM, Thalemann R, Griffiths MD. (2007). Excessive computer game playing: evidence for addiction and aggression? CyberpsycholBehav; 10: 290-2.
- 8. HoeftF, Watson CL, Kesler SR, Bettinger KE, Reiss AL.(2008). Gender differences in the mesocorticolimbic system during computer game play. J Psychiatr Res;42:253-8.
- 9. Kuss DJ, Griffiths MD.(2012). Internet gaming addiction: a systematic review of empirical research .Int J Ment Health Addict; 10: 278-96
- 10. Kuss, D., (2017). Mobile phone addiction Evidence from empirical research. European Psychiatry, Vol. 41, 526-527
- 11. King DL, DelfabbroPH,Zwaans T, Kaptsis D.(2014). Sleep interference effect of pathological electronic media use during adolescence. Int J Ment Health Addict;12-35.
- 12. Messias E, Castro J, Saini A, UsmanM ,PeepD.Sadness,(2007 & 2009). Suicide, and their association with video game and Internet overuse among teens: results from the Youth Risk BehaviourSurvey . Suicide Life Threat Behav 2011;41: 307-15
- 13. Mahnaz, F., Somayeh, S., Elahe, A., Mahbuobe, G., Amir, Z., (2017). Exploring Social factors of Mental Illness Stigmatization In Adolescents With Disorder. Journal of clinical And diagnostic research, 2017 Nov., Vol-11(11)
- 14. Noeweeta, G., Milburn, Philip B., Rosa, S., Kate, D., (2010). Discrimination and Mental Health Problems Among Homeless Minority Young People, public health report, Vol. 125
- 15. Richard, S., Robert, R., and Takesure, Z., (2012). Are mobile phones the 21<sup>st</sup>century addiction. Africana Journal of Business Management, Vol. 6 (2), 573-577, ISSN: 1993-8233.
- 16. Stavrau (2018). Addiction to video games a case study on the effectiveness of psychodynamic psychotherapy on a teenage addict struggling with low self-esteem and aggression issues. Psychology, 9, 2436-2456.
- 17. Singh, A.K., and Gupta A.S., (1983). Mental Health Battery, Dept. of Psychology, Patna University &Magadh University, Patna.
- 18. Sankar, R., Mohammad, A., W., & Indumathi, R., (2017). Mental Health Among Adolescents, International Journal of Indian Psychology, Vol. 4, Issue. 3, DIP;18.01.102/20170403
- 19. World Health Organization.(2018). The ICD-11 Classification of Mental and Behavioral Disorders:Diagnostic Criteria for research . World Health Organization ; Geneva ,Switzerland.