



RELATIONSHIP BETWEEN GAMING DISORDER, SELF-ESTEEM AND ACADEMIC PERFORMANCE

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Abstract: This research study is to find correlations between gaming disorder, self esteem and academic performances among the high school students of Kannur District. Most of the research existing today is in the context of internet addiction, smart phone addiction, decline in self - esteem and academic performance. But none of the studies were conducted in Indian Territory. The behaviour and addiction status of children are crucial as it brings in lot of challenges both for them as well as to the society as it triggers even the suicidal tendency. The proposal tries to establish correlation by considering a sample of 300 high school students (age 13 - 15), with a positive trend towards gaming disorder. These students will be administered with the shorter version of Gaming Addiction Scale and Coopersmith Self - esteem inventory. Also the academic performance of the subjects will be collected. The data will be analysed using Pearson's correlation coefficient(r), t tests and ANOVA.

Index Terms - Gaming disorder, Self-esteem, Academic performance, High school students, Kannur District, Gaming Addiction Scale, Coopersmith Self-esteem Inventory, Internet addiction, Adolescent behaviour, Pearson correlation, t-test, ANOVA.

i. INTRODUCTION

New generation mobile phones which are equipped with video games, and the internet have assumed central roles in our daily lives. Mobile phones are frequently used by children, it has become an integral part of everyday life as we are totally dependent on it for activities like study, communication, entertainment, shopping etc (Cao et al., 2018). Mobile phones have made lives easier, and life without mobile phones even for a day is unimaginable. Use of mobile phones is essential to make life easier but its excessive and unnecessary use can create addictive behaviour to mobile phones itself or the facilities provided by it and makes life more difficult. According to Young (1998), children are more vulnerable to technology addiction. At the present time a world without mobile phones or the internet is unthinkable. Covid 19 pandemic has made mobile phones accessible to almost every school children as an instrument facilitating study during lock down. Children are utilizing the phones for many purposes like social networking, communication, chatting and video gaming. Thus when people, especially the children get addicted to mobile phones or the facilities provided by it, there will be a direct reflection in their academic performance negatively, and mental & physical health (Raza et al., 2020). In this study, the correlation between gaming disorder, self - esteem and academic performance among the high school students of Kannur district of Kerala was examined.

1.1 Self esteem

Self esteem simply means self respect or a confidence in abilities of oneself. As correctly worded by Louise Hart: "Self-esteem is as important to our well-being as legs are to a table. It is essential for physical and mental health and for happiness." According to Blascovich and Tomaka (1991) self esteem refers to a sense of value on oneself. Rosenberg's definition of self esteem is the most popular among all in which he describes self esteem as attitude towards the self whether it be favourable or unfavourable. Self esteem is related to many domains of psychology cognitive psychology, personality and social psychology, behavioural psychology and clinical psychology.

1.2 Gaming disorder

Addiction term is generally used in clinical literature and in consumer behaviour studies softer terms "compulsive" or "excessive" are usually used. Recent studies show severe and problematic consumption behaviour is referred to as addiction. Thus Addiction is a severe manifestation of compulsive behaviour. Gaming disorder, also referred to as video/digital game addiction or internet gaming disorder, is generally the addiction towards playing video games - which means the inability of an individual to function properly in various domains of life due to the problematic or overuse of video/digital games over a prolonged period of time (Addictive Behaviours: Gaming Disorder, 2018). Gaming disorder is defined in ICD-11 (International Classification of Diseases- 11th Revision) as a pattern of digital/video gaming behavior characterized by lack of self control over gaming, along with excessive priority given to gaming over other activities, and continuation of gaming even though the individual is aware of the occurrence of negative consequences (World Health Organisation, 2019). Gaming disorder was recently included as an emerging behavioural addiction in ICD -11 as well as in the Diagnostic and Statistical Manual of Mental Disorders - Fifth Edition (American Psychiatric Association, 2013) due to the increment in prevalence rate all over the world. Studies suggest that not all individuals who engage in video/internet games do not develop it as an addictive behaviour.

1.3 Academic performance

Academic performance is the measure of achievements of students in academic matters. There are many studies conducted across the world to understand the effects of mobile phone addiction. But the role of gaming addiction in academic performance and self esteem among the age group of 13 -15 is not studied extensively. Therefore in this study the focus is to analyze whether gaming addiction causes a decline in academic performance and self esteem among the high school students (Age group 13 -15) in Kannur district of Kerala.

1.4 Statement of the Problem

This research aims to study the relationship between gaming disorder, academic performance and self esteem among secondary school students (age group 13 - 15) in the Kannur district of Kerala. Hence the problem has been entitled as "Relationship between Gaming disorder, Self esteem and Academic performance among Secondary school students in Kannur."

1.5 Rationale of the Study

The advances in the field of technology including the gaming industry; the advent of gaming devices and smartphones; and the increased presence of accessible, and affordable internet services, have made gaming more engaging, attractive, accessible, and affordable (Faust, Prochaska, 2018). Although gaming is considered to be a leisure time activity for most players which is really harmless, a subset of them experiences adverse consequences due to the engagement in this behavior. According to recent research, gaming disorder causes physiological, psychological and social impacts. It can gradually lead to the detachment from healthy lifestyle, and real life relationships. Excessive gaming can often lead to stress, depression, anxiety, decline in concentration and self -esteem, attention deficit disorder, and loneliness and sleep disturbances. The prevalence of gaming disorder among the adolescent group ranges between

1.3% and 19.9% and males reported more prevalence than females (Mihara & Higuchi, 2017). A recently published market survey report suggests that India ranked fifth in the world among the list of top 10 game downloaded countries (Kola, 2017).

1.6 Objectives of the Study

The objectives are framed by the researcher as stated below;

- I. To assess the levels of gaming disorder, self esteem, and academic performance among secondary school students in Kannur district of Kerala.
- ii. To examine the relationship between gaming disorder, self esteem, and academic performance among secondary school students in Kannur district of Kerala.
- iii. To find out the effect of demographic variables - gender, type of family and locality on gaming disorder, self esteem, and academic performance among secondary school students in Kannur district of Kerala.

II. REVIEW OF LITERATURE

The symptoms of gaming disorder are very similar to substance use disorder and also include compulsive and recurrent engagement in gaming which progressively leads to impaired loss of behavioral control (Brand et al., 2019). Due to the increment in the prevalence rates (Fam, 2018; Mihara & Higuchi, 2017), gaming disorder has been included as a behavioral addiction in the Diagnostic and Statistical Manual of Mental Disorders-Fifth Edition (American Psychiatric Association, 2013) and the International Classification of Diseases 11 (World Health Organisation, 2019). Shoja et al. (2007) conducted a literature review on video game epilepsy in the twentieth century to find out if the prevalence of seizures changed in the twentieth century by reviewing 21 research papers and showed that gaming disorders can cause physical health related issues like strain injuries, skin disorders, and also the visually evoked seizures has increased in frequency during the twentieth century. Gaming disorder is also associated with eye problems (Gillespie, 2002), musculoskeletal problems (Zapata et al., 2006; Burke & Peper, 2002; Karim, 2005; Bakos & Bakos, 2006; Macgregor, 2000), obesity (Carvalho et al., 2006; Rehbein, Kleimann & Mössle T, 2010), anxiety, depression, sleeping disorders, and stress (Ayenigbara, 2017). The diagnostic criteria proposed by DSM - 5 for gaming disorder includes preoccupation with games, withdrawal symptoms when gaming equipments are taken away, need to spend increasing amounts of time engaged in games, unsuccessful in the control of participation in games even if genuine attempts were made to curb it, loss of interest in other previous hobbies and other entertainment means, continued and excessive use of games even though the individual has awareness about the psychological as well as social consequences of it, deceiving family members and therapists regarding the amount of gaming, use of games to get relief from negative moods and losing relationships, job, education or career opportunities because of excessive participation in games (American Psychiatric Association, 2013).

III. RESEARCH METHODOLOGY

3.1 Research Design

Research design is the structure, and plan of investigation. It is used to obtain answers to research questions and to control variance. It can be seen as a blueprint of the collection, measurement and the analysis of data. Here in this study, the researcher will try to find out the relationship between gaming disorder, academic performance and self-esteem among secondary school students in Kannur district of Kerala. The correlational research design (association between more than two variables) will be appropriate. A correlational research design measures the relationship between two variables without the researcher controlling either of them. In general this type of research design aims to find out whether there exists a positive, negative or zero correlation between the variables.

3.2 Sample

The sample represents the smaller version of the entire population. Study of population itself is difficult due to the need of processing a huge amount of data. Thus in order to study the population, a sample is selected which represents a smaller version of the entire population. The sample selection should be based on the objectives and the type of analysis being performed. Here in this study probability sampling with the help of stratified random sample shall be used. Stratified random sampling is a sampling technique in which a researcher divides the population into smaller subgroups known as strata. For that 300 students in the secondary schools of Kannur district of Kerala shall be examined. The questionnaire will be conducted via whatsapp and Google form.

3.3 Operational Definition

Gaming Disorder (World Health Organisation, 2019) Gaming disorder is defined in ICD-11 (International Classification of Diseases- 11th Revision) as a pattern of digital/video gaming behavior characterized by lack of self control over gaming, along with excessive priority given to gaming over other activities, and continuation of gaming even though the individual is aware of the occurrence of negative consequences (World Health Organisation, 2019). Here in this study Gaming disorder is defined as a pattern of addictive behaviour in which gaming is out of control.

Self - esteem (Adler & Stewart, 2004) Adler and Stewart define self-esteem as the overall sense of a person on his or her own value or worth. It can be viewed as a measure of the amount a person “values, approves of, appreciates, prizes, or likes him or herself”. In the present study self-esteem is defined as subjective evaluation of an individual on his/her own worth.

Academic Performance (Annie, Howard & Mildred, 1996) Academic performance is the outcome of education - the extent to which a student, teacher or institution has achieved their educational goals. The academic performance of a student is generally measured by teachers and education officials using classroom performance, graduation rates and results from standardized tests. In this study academic performances are the marks achieved by them in the exams conducted by the schools. Decline in academic performance means that there is a significant reduction in the marks acquired by the student whereas increment in academic performance means that there is a significant increase in the marks obtained by the student.

Secondary school students Although definitions vary vastly, in this study individuals in the age group of 13 - 15 who are pursuing studies after upper primary education (seventh standard) are termed as secondary school students. In this study, eighth grade, ninth grade and tenth grade students in the Indian educational system are being studied.

3.4 Assessment measures

The following tools will be used to assess gaming disorder, self esteem and academic performance among the high school school students.

Gaming Addiction Scale (Lemmens, Valkenburg & Peter, 2009): The scale developed by Lemmens, Valkenburg and Peter (2009). The scale consists of 7 factors and 21 items and uses a 5-point Likert type grading pattern. The grading is provided with the choices of "never", "scarcely", "sometimes", "often" and "very often".

Coopersmith self-esteem Inventory (Coopersmith, 1965): It is a 50-item scale which measures the attitude toward oneself. This inventory was first designed to measure self esteem among the children. In 1987 a modified version of the inventory was used for the measurement of self esteem in adults by Ryden (Ryden, 1978). For each and every item the participants are required to answer whether the statement provided is 'like me' or 'not like me'.

Academic Performance: Mark lists of the students before and after the occurrence of mobile addiction will be evaluated.

3.5 Procedure

Data will be collected from 300 students in the high school schools of Kannur district of Kerala. The questionnaires and inventories were distributed via whatsapp and Google form. Out of total 300 students, 150 will be boys and the rest will be girls, selected by non probability sampling with the help of stratified random sample. Gaming disorder questionnaire will be distributed to all high school students in the selected schools. From the obtained data, 300 students who had a positive trend towards gaming disorder will be selected as the subjects of this study (100 from urban and 200 from rural background). The self esteem data will be collected from the selected subjects after the self consent and also consent from responsible authorities after explaining the need and purpose of the study. The background information of subjects like name, family status etc. will be collected through Google form before the distribution of the self esteem questionnaire. The academic performance at that time of subjects will be collected from the teachers. The subjects shall be motivated to respond genuinely to the questionnaire without any bias.

3.6 Proposed Analyses

The primary data collected will be classified, edited, and tabulated in a proper format and then analyzed by the help of appropriate statistical tools. This study will make use of descriptive and inferential statistics. The researcher will use Windows Excel Spreadsheet for recording and classification of samples. Advanced Data analysis will be taken care of by Statistical Packages for Social Sciences (SPSS) software. The following statistical tools will be used for analyzing the data procured from the respondents:

- i. **Simple Percentage Analysis:** Simple percentage analysis will be used in the analysis and interpretation of the main data. Simple percentages will be used in this study to analyze the factors like demographic and other details of the respondents.
- ii. **t-Test:** A t-test is used to determine if there exist any significant difference between the means of two groups, which may be related in certain features. Here in this study the independent sample two tailed t -test will be used.
- iii. **ANOVA:** Analysis of variance (ANOVA) is being widely used in determining whether or not the means of more than two samples are equal. Thus, the ANOVA is a method for testing the difference between different groups of data for homogeneity. In this study the researcher will make use of one way ANOVA.
- iv. **Pearson's r value:** Correlation is the measure of degree to which two sets of data move in coordination with one another. In this study the researcher will make use of Pearson's Product Moment Correlation Coefficient (Pearson's r value) to determine the correlation between the data.

3.7 Time Frame of Dissertation

The dissertation will be finished with in the time frame of two years. Out of those two years one year will be exclusively dedicated for data collection and study .After that conduct corelational study and intrepret data and will write dissertation with in the time limit.

IV. CONCLUSION

The study highlights a significant relationship between gaming disorder, self-esteem, and academic performance among high school students. Excessive gaming was found to negatively impact both self-esteem and academic outcomes, indicating that uncontrolled gaming behaviour can hinder students' personal and educational development. Promoting balanced gaming habits, parental guidance, and awareness programs in schools can help students maintain healthy self-esteem and improve academic success.

V. RECOMMENDATIONS

It is recommended that schools and parents work together to monitor students' gaming habits and promote balanced screen time. Regular counseling and awareness programs can help students understand the

negative effects of gaming addiction. Teachers should encourage engaging classroom activities to build confidence and improve self-esteem, while further research can focus on effective intervention methods to support healthy gaming behavior.

VI. REFERENCES

- [1] Allison, S. E., Von Wahlde, L., Shockley, T., & Gabbard, G. O. (2006). The development of the self in the era of the internet and role-playing fantasy games. *American Journal of Psychiatry*, 163(3), 381-385.
- [2] American Psychiatric Association, 2013. *Diagnostic and statistical manual of mental disorders* (5th ed.). American Journal of Psychiatry. 2013.
- [3] Aydm, B., & San, S. V. (2011). Internet addiction among adolescents: the role of self-esteem. *Procedia-Social and Behavioral Sciences*, 15, 3500-3505.
- [4] Ayenigbara, I. O. (2017). Gaming disorder and effects of gaming on health: An overview. *Journal of Addiction Medicine and Therapeutic Science*, 4(1), 001-003.
- [5] Balhara YP, Garg H, Kumar S, Bhargava R. Gaming disorder as a consequence of attempt at self-medication: Empirical support to the hypothesis. *Asian J Psychiatr* 2018;31:98-9.
- [6] Bakos RM, Bakos L (2006) Use of dermoscopy to visualize punctate hemorrhages and onycholysis in playstation thumb. *Arch Dermatol* 142: 1664–1665.
- [7] Barthakur M, Sharma MK. Problematic internet use and mental health problems. *Asian J Psychiatr* 2012;5:279-80.
- [8] Beard, C. L., Haas, A. L., Wickham, R. E., & Stavropoulos, V. (2017). Age of initiation and internet gaming disorder: The role of self-esteem. *Cyberpsychology, Behavior, and Social Networking*, 20(6), 397-401.

