

E-SPORTS, ANXIETY, AGGRESSION AND PSYCHOLOGICAL WELL-BEING- A CORRELATIONAL STUDY

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Abstract

Electronic sports or e-sports is also known as online gaming, professional gaming, computer gaming, nowadays eSports has gained a lot of popularity in the area of research. The people actively participate in it and most people even consider it as their career option, although this sports has both positive and negative effects on the life of an individual. In view to this the present study investigated the relationship between eSports, anxiety, aggression and psychological well-being among adolescents and young adults. Also, the gender difference in eSports, anxiety, aggression and psychological well-being was explored. The sample comprised of 102 participants within the age range of 16-27 years. The following questionnaire were used i.e. Problematic gaming questionnaire (POGQ-SF) by Papay et al., (2013); Hamilton Anxiety Scale (HAM-A), developed by Hamilton (1959); Buss-Perry Aggression Questionnaire (BPAQ) and Psychological Well-being Scale (PWS-SF), developed by psychologist Carol D. Ryff, in 1995. The analysis revealed that there was no significant relationship between eSports and anxiety, whereas a positive relationship was found between eSports and aggression, and a negative relationship was found between eSports and psychological well-being. The findings provide insights into eSports parameters and problematic gaming.

Keywords: E-Sports, Anxiety, Aggression, Psychological Wellbeing, Professional Gaming.

INTRODUCTION

A competitive gaming also termed as e sports is an team play that is done by interactive systems such as video game. Since, past few years the industry is in demand has taken place and is earning revenue in the millions. Viewing the demand of the e sports, the players has also been risen in last few years (Peterson, 2015) and this has raised revenues for players as well by winning from competition, sponsorships, earned income from their live broadcasts (online streaming) (Edge, 2013).

The people indulging in online games could be for enormous reasons which could include overcoming challenges, reducing stress, socializing with other people and entertainment (Wu et al. 2008).

As per Wagner (2006) eSports has been described as “a field of sports activity in which individuals develop and train psychological and physical skills in the use of information technologies”. Although the definition cannot be suitable for all the other aspects of eSports. This

has been corrected by recent definition of defining eSports as a type of sports where virtual networks promote the key aspects of the sport; the input of players and teams and the performance of the eSports system are facilitated by human and computer interacting components. Finally, computer games are perceived as competitive and organic approach to gaming.

CHALLENGES FOR ESPORTS IN INDIA

With popularity comes challenges and same is been faced by India's esports sector. The Indian gaming community is not very developed right now. There is really no other major publisher with a local presence in India, except Tencent, and that is just what it lacks. Esports will need to have educational institutions, much as every other sport, to support aspiring gamers improve their talents (Rathee, 2018). There is currently no specific esports academic institutions in India, but it is expected that some institution will be established in coming years.

Mental Health issues related to Esports

With the challenges comes different issues related to mental and physical both. As per researches it has been reflected that computer games are criticized for all manner of negative mental health consequences. Few research have suggested that gaming leads to people feeling nervous, frustrated, irritated, or even aggressive. Nevertheless, adaptive cognitive patterns, depressive thoughts and behaviours, low self-esteem, depression, and poor academic success are often correlated with inappropriate and intense video gaming (Kanojia, 2019).

E-SPORTS AND ANXIETY

Our brain has the power in the future to perceive possible concerns. That is what we call anxiety if this skill gets out of balance. Becoming addicted to online video games gives us discomfort, so we don't do the stuff that we feel we can do while we play these games. We are not worried, though, about ignoring them in the moment or not having already done them in the past. In reality, we are anxious about the repercussions of not discussing certain items. Video games do not actually induce fear, so sometimes it causes anxious feelings as they take control over an individual's life and they start neglecting more crucial things.

Those ramifications lies in the future. There is a strong relationship between anxiety and eSports. A study done by Tham, Ellithorpe & Meshi (2020) to examine the symptoms of anxiety and depression in problematic gamers showed an increase amount of anxiety among players. It was found that problematic gaming has been strongly correlated with diminished real-world social support and enhanced in-game social support. Also, problematic gaming has maintained a major direct impact on depression and anxiety.

E-SPORTS AND AGGRESSION

Aggressive behavior is one in which physical as well as emotional harm is done to other people. It may vary from the verbal violence to degradation of the property of the victim. Researchers have found that violent online games promotes aggressive ideas, behaviors patterns, and emotions, whether it is for long term or short term (Goldbeck, and Pew, 2018). Playing violent eSports also reduces the likelihood of prosocial behavior such as helping people in need and showing empathetic behavior towards people. Even though, men spend more time than women in playing eSports but the impact of violent games can be harmful to both male and females, which promotes aggressive behavior patterns.

E-SPORTS AND PSYCHOLOGICAL WELL-BEING

Spending most of your day on computer screen has a lot of negative effects on a person which can be physical, psychological or emotional. Research done by Kocadağ, (2020) on eSports and well-being. The research sample comprised of 368 individuals from all over the world. The web-based questionnaire and the psychological well-being scale were used to gather data obtained across the Steam Community and Facebook. In this research, adolescents' psychological well-beings were contrasted with facets of their job status and everyday playtime. In line with the findings, professional Esports athletes had slightly poorer psychological well-being than that of the other two working classes. And, the group of two who play over than 6 hours a day has slightly poorer psychological well-being than that of the group of two who play fewer than 6 hours a day.

RATIONALE OF THE STUDY

E-Sports means electronic support, which is also known as online gaming, professional gaming, computer gaming and many more. Today, eSports has gained a lot of popularity as people are actively participating in it and some even consider it as their career option, although this sports has both positive and negative effects on the life of an individual. Moreover, as we know that overuse of anything can have a huge impact on our lives, similarly, eSports can have a profound effect on our mental and physical health due to overuse or playing it excessively. Also, it has been found that esports also affect our mental health in many ways, few researches have noted that eSports are more likely to negatively affect adolescents and young adult as compared to general population. Various studies have concluded that eSports has an impact of an individual's mental health such as anxiety, depression, self-esteem, psychological well-being etc. Viewing the above literature and there are less researches which has considered the effects of eSports on psychological factors in the Indian population. Thus, the present research is intended to provide ample solid evidence and scientific basis to encourage new research projects on the relatively unexplored effects of eSports in terms of mental health.

METHOD

Aim: the aim of the present study is to explore the relationship between eSports, anxiety, aggression and psychological well-being among youth.

Objectives:

The following objectives has been developed for the study-

- To explore the relationship between eSports and anxiety among youth.
- To explore the relationship between eSports and aggression among youth.
- To explore the relationship between eSports and psychological well-being among youth.

HYPOTHESES

On the basis of above-mentioned review of literature, the following hypotheses has been developed for the study-

H1- there would be no significant relationship between eSports and anxiety among youth

H2- there would be no significant relationship between eSports and aggression among youth

H3- there would be no significant relationship between eSports and psychological well-being among youth

SAMPLE

The sample of the study comprised of 102 participants both male and female. The participants were youth between the age group of 16 to 27 years. The participants were randomly selected and most of the participants were in the age range of 18-26 years ($n= 97$). Lastly, purposive sampling technique was used for the selection of sample.

TEST AND TOOLS

The following tools were used in the study:

1. Problematic Online Gaming Questionnaire (Papay, et al, 2013)
2. Hamilton Anxiety Scale (Hamilton, 1959)
3. Bussy-Perry Aggression Questionnaire (Buss & Perry, 1992)
4. Psychological well-being scale (Ryff, 1995)

RESULTS

Table 1.1: Mean, Median, and Standard deviation of eSports

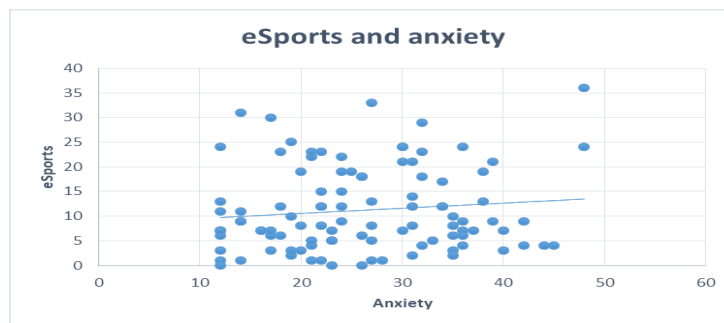
Descriptive Statistics	E sports	Anxiety	Aggression.	PWB
Mean	26.02	11.23	77.51	82.21
Median	24.50	8.50	77	80
Standard deviation	9.318	8.506	19.37	12.08
Skewness	.286	.850.	.375	.411

CORRELATIONAL ANALYSIS

Table 2.1: Correlation table for eSports, anxiety, aggression and psychological well-being

S. No.	Variables	1	2	3	4
1.	E-Sports	1			
2.	Anxiety	.112	1		
3.	Aggression	.377**	.520**	1	
4.	Psychological well-being	-.259**	-.204*	-.329**	1

Figure 1: scatter graph showing the relationship between eSports and anxiety.



** . Correlation is significant at the 0.01 level (2-tailed).

Figure 2: scatter graph showing the relationship between eSports and aggression

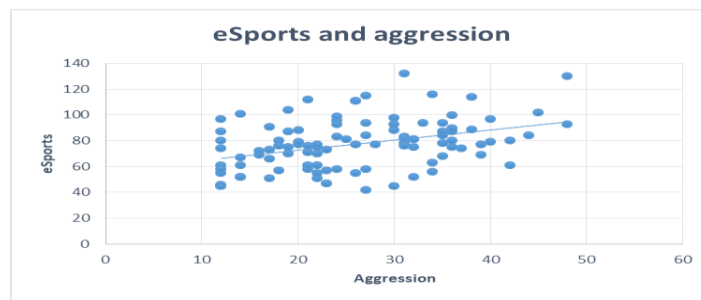
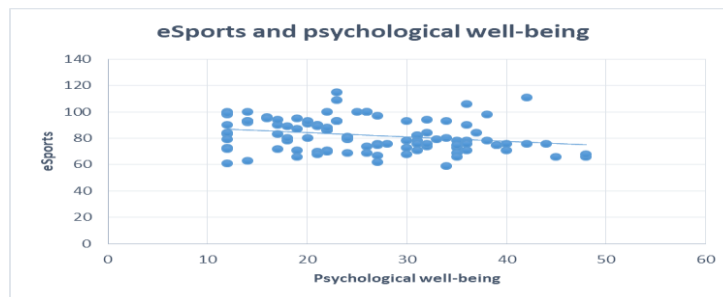


Figure 3: scatter graph showing the relationship between eSports and psychological well-being.



*. Correlation is significant at the 0.05 level (2-tailed).

DISCUSSION

The present study aimed to explore the relationship between eSports, anxiety, aggression and psychological well-being among youth. The sample of the study comprised of 102 participants both male and female. The participants were youth between the age group of 16 to 27 years.

The first Hypothesis of the study stated that that there would be no significant relationship between eSports and anxiety among youth. The findings revealed that eSports was not significantly related with anxiety ($r = .112, p > .05$). Hence, the hypothesis is accepted.

On similar lines with present findings a research by Wang, Sheng & Wang (2019) studied mobile game addiction. The study aimed to identify the correlation between mobile game addiction, depression, loneliness and social anxiety among teenagers. Data was collected from 600 students of senior secondary school. It was found that there was a positive correlation between mobile game addiction, depression, loneliness and social anxiety.

Another, Hypothesis stated that there would be no significant relationship between eSports and aggression among youth. According to the results obtained from a correlational analysis, aggression ($r = .377, p < .05$) was found to be significantly and positively related to eSports. Thus, a positive relationship was found between the scores of eSports and aggression among the participants, which indicates that as the problematic gaming habits increases, the level of aggression also increases. Hence, on the basis of the results obtained the null hypothesis was rejected and the alternate hypothesis was accepted. In line with the present findings a study done by Kim, Namkoong, Ku & Kim (2007) revealed the similar findings which investigated the relationship between eSports addiction, aggression, self-control and narcissistic personality traits. It was found that there was a positive relationship between online gaming addiction and aggression. Furthermore, in a research done by Dowsett & Jackson (2019) on violent/competitive gaming and aggression. The aim of this study was to identify the effect of playing violent and competitive video games on aggression. A sample of 64 participants were taken and they were asked to play both violent and competitive online games. Further, the finding showed that

competitive games leads to more aggressive behaviour as compared to violent games.

Furthermore, third Hypothesis stated that there would no significant relationship between eSports and psychological well-being among youth. The present findings revealed that psychological well-being ($r = -.259, p < .05$) was found to be significantly and negatively related to eSports. It was found that there was a negative relationship between eSports and psychological well-being, which indicates that as the problematic gaming habits increases, the psychological well-being of an individual decreases. Thus, Hence, the hypothesis was rejected. On similar lines, a research by Goh, Jones & Capello (2019) studied eSports and psychological well-being. The aim of this study was to examine the effect of online gaming on psychological well-being. Further, the findings found that there was a strong correlation between more playing time and lower psychological well-being.

LIMITATIONS

No study is complete without some limitations, in view to the present findings the limitations would be small sample size effecting the generalizations of results. The participants of the study were mainly from Delhi NCR, hence the sample was again restricted to the location. Further, the biasness of the respondents, as in all other researches, may have affected the responses.

RECOMMENDATIONS

For further studies, the present research can be useful as a theoretical base for future researchers in this field as there are only limited studies in India and the esport field is the area to be explored in near future. In a country like India, this present research also represent eSports parameters and gender disparities in problematic gaming. According to the results, problematic gaming should be investigated in the Indian community in order to take the requisite measures to prevent its harmful effects.

Furthermore, the age group comparison can give us more generalized results. Lastly, the research further shows that the attributes of males and females, as well as problematic and non-problematic gamers, vary. As a result, more advanced and oriented research for each sub-group will be expected in the future.

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