The Perceptions and Attitudes of Young Adults (Gamers and Non-Gamers) and Adults (aged 40-45) towards eSports: A Comparative Study

By Divit Bhargava

ABSTRACT: Esports is an industry that is growing rapidly worldwide with growing research exploring the different aspects of the industry. However, with the changing scenario around gaming, not all viewpoints are aligned. The aim of the present study was to compare the perceptions and attitudes of young adults (Gamers and Non-Gamers) alongside adults (aged 40-45) towards eSports. The study sample consisted of 10 participants, with 8 young adults ranging from 17-21 years of age and 2 mothers between 40-45 years. The thematic analysis of the data resulted in the formation of various themes, which provided a better understanding of their perceptions. Time was understood to be a critical factor as gaming often deviates one from their responsibilities, leading to issues in managing all the tasks in a given day. Peer pressure was also seen as one of the major reasons why an individual gets into gaming and continues to play them over a long period with the same interest. It was observed that individuals who game regularly often equate their gaming as a source of stress relief and escape from problems. More research is needed in this sector to wholly understand the world of gaming.

Keywords: Esports, Perceptions, Attitudes, Online gaming

INTRODUCTION

1.1. What is esports?
Electronic sport (Esports) is a form of sport where the primary aspects of the sport are facilitated by electronic systems; the input of players and teams, as well as the output of the eSports system, are mediated by human-computer interfaces," according to Hamari and Sjöblom (2017). It is also referred to as a virtual sport, competitive computer gaming, or cyber sport. Warr (2014) suggests that esports is a form of sports in which electronic systems serve as the primary method of facilitation.

In more concrete terms, eSports are competitive (pro and amateur) video games that are frequently organized by various leagues, ladders, and tournaments. Players typically participate in eSports as members of teams or other "sporting" organizations that are supported by different business organizations. In organized contests known as "eSports," players—often referred to as "athletes"—compete against one another in multiplayer video games. eSports have been in some form or another for as long as multiplayer video games. They have gained appeal, nevertheless, thanks to advancements in technology, internet access, and online streaming services.

Electronic Sports (esports) is one of the fastest growing forms of digital entertainment and its popularity has grown rapidly, driven largely by technological developments, such as the increased prevalence of online gaming (Hamari & Sjöblom, 2017), accessibility to technology and access to elite competition (Jenny et al., 2017).

In the past 50 years, video games have undergone significant changes and improvements. Millions of people can compete against in-game AI foes or one another in massively multiplayer online settings (Bányai, Griffiths, Király, & Demetrovics, 2019). eSports is a subgenre of competitive sports in which players use a combination of technology and sport utilizes information to grow and train one's mental or physical abilities (Wagner, 2006).

1.1. Past vs Current vs Future trends?

The word 'electronic sports' and 'eSports' has its roots in the late ‘90s. The first competition between 24 players for the game "Spacewar" at Stanford University, with the grand prize being a one-year membership to Rolling Stone, can be credited as the beginning and the foundation of electronic sports (Consolazio, 2019). After that, in 1980, Atari organized the largest-scale video game competition ever, the Space Invaders Championship, which drew more than 10,000 players from all across the country and helped popularize competitive gaming (Larch, 2019).

PC games like Counter-Strike became well-known in 1989 as a result of the introduction of the World Wide Web and advancements in the programmes, software, and hardware technologies that enabled network and multiplayer functionalities. This led to an increase in popularity and increased exposure for competitions in eSports (Jonasson & Thiborg, 2010). After then, significant eSports competitions for PC games began to occur, like the 132-player Cyberathlete Professional League and Nintendo World Championships (Consolazio, 2019). Multiplayer console gaming, Internet cafes, South Korea's broadband internet networks, and a high unemployment rate all contributed to the emergence of eSports in the 2000s (Larch, 2019).

Consolazio (2019) asserts that the emergence of Internet cafes around the world allowed gamers the chance to compete and play against one another on powerful PCs that they might not have otherwise been able to afford. Esports had exponential growth in the early 2000s as the number of spectators and organizations holding competitions/events increased. Esports was advanced in South Korea, where they were not only accepted but also incorporated into the country's popular culture. Through these continuous inclusive expansions all over the world, online streaming became the most popular/standard way to watch esports; in the year 2013, over 12 billion minutes were spent by users on Twitch alone to watch esports.
Electronic sports, or eSports, have experienced one of the fastest rates of growth in recent years thanks to the development of online gaming and broadcasting technologies. According to estimates from Warr (2014), more than 70 million people watched eSports in 2013 alone. 165 million avid viewers and 215 million casual viewers make up the anticipated 380 million worldwide eSports watchers in 2018, according to research, and the eSports market is expected to reach $1.4 billion by 2020. Many fans access the tournament coverage on highly polished online streaming platforms like Twitch and YouTube. But eSports has also recently become more popular, with broadcasting behemoth ESPN beginning to offer live coverage of significant events. eSports are popular among those outside of home audiences as well. Stadiums and arenas hosting the major events frequently sell out around the world. More than 400 million eSports enthusiasts in 152 countries watch these tournaments online on various streaming services like Twitch.tv and YouTube Gaming, making it a spectator sport today. eSports was a demonstration sport in Asian Games-2018, Esports will be a medal sport in Asian Games 2022, Hangzhou (China). The total revenue from eSports in 2019 was $950.6 million. The predicted increase in eSports viewers reached 495 million people. Last year, there were 885 significant events. Together, they generated purchases of tickets of $56.3 million. The primary distinction between eSports and sports is physical involvement, whereas sports require more of a person's physical effort. In the future, eSports may simply be recognised as a discipline of the traditional sport. A variety of factors are at play here, with the rise in inclusion in the form of scholastic eSports and the rise of women in the field of eSports to it now being considered on a level to be part of the Olympic games and the industry booming through covid-19, the trends show an upward trajectory. It is also estimated, the global eSports market combined with games streaming is expected to be worth $3.5 billion by 2025. This represents a 70% growth in the next four years as per(Juniper Research, 2021), where the growth factors point to numerous areas, starting with the social distancing measures, to the eventual growth of online streaming platforms and further investments by companies into the industry.

1.2. Advantages and Barriers to becoming an e-sports person?
Advantages in eSports include:
A) Cognitive & Social Development
   - Improved hand-eye coordination
   - Improved attention & visual acuity
   - Improved basic visual processing and executive function
   - Problem solving & strategy skill development
   - 71% of parent report gaming having net positive effects for children
   - Boosts self-confidence and player socialization
   - 54% of gamers say gaming helps them connect with friends
B) Problem Solving Skills: Research shows that children that play video games have a far much better chance of navigating through complex psychological issues compared to those that do not actively participate in video games.
C) Future Job Market: Playing video games can make students smarter and more employable across a wider spectrum of careers including medical field, engineering, aviation, remote flying, computer sciences, and etc.
D) Strategic Thinking: Esports can boost children's strategic thinking, teamwork, communication, leadership, performance skills and confidence building.

1.3. Motivation (Intrinsic and Extrinsic):
Motivational factors include:
A) Socialization motives- As humans, by their very nature are social beings, finding ways to be connected with others is always a priority. Due to COVID-19, the industry has seen an extreme spike in consumption of eSports.
B) Positive affective motives- It is seen that individuals are attached to a certain game as they play it, which further reinforces certain positive feelings within them. Doing well on a certain platform such as gaming itself, can in return boost self-esteem, confidence, happiness & satisfaction.
C) Competition motives- One of the main motivations to engage in gaming, is creating a career out of it, which often requires indulging in tournaments, wagers etc as it rakes in the monetary benefits.
D) Fantasy/escape motives- Often video games are used as a source to create a world of one’s preference, which in turn offers a break from the stresses and problems in life. This gives one a feeling of being whoever or whatever they want to be. Games are a viable escape to come from people and/or situations.
E) Passing/wasting time motives- More often than not gaming is used as a way of passing time, and as a source of entertainment.

1.4. Health issues associated with the field of eSports

Physical Inactivity
Much of eSports health-related research focuses on physical activity. This may be due to eSports being largely a sedentary activity. Lack of physical activity can increase the risk of developing metabolic disorders as compared to non-esports players, esports players suffer from having less bone mineral content, more body fat, and less lean body mass (DiFrancisco-Donoghue et al., 2020; Yin et al., 2020). A university team's players' heart rates were also examined by Andre et al. (2020) before, during, and after an eSports competition. They discovered that while participating in eSports, the mean heart rate dramatically increased, reaching a mean peak heart rate of 188 33 bpm. This finding could pose a concern for eSports athletes because playing video games is likely to increase heart rate solely due to psychological stress, and video games may not offer any of the metabolic advantages of regular exercise (i.e., elevated energy expenditure combined with an adequate cardiovascular response). Psychological stress triggers the sympathetic nervous system, but without enough exercise to alleviate the "flight or fight" symptoms, this state can eventually result in various stress-related diseases such as hypertension and insulin resistance (Lambert & Lambert, 2011). Due to the several areas of interest in these games at any given time, which frequently occur in short intervals of time in fast succession, eSports are highly visual hobbies. Early research has demonstrated that using a computer significantly reduces blink...
rates from rest by a factor of 3 to 5. (Patel, 1991; Tsubota, 1993). While it has been discovered that playing video games increases overall eye motions to a target (Mack et al., 2014), playing too closely to the screen or for extended periods of time without breaks is linked to eye injury. Eye fatigue was discovered to be the most often reported non-musculoskeletal medical condition among collegiate esports players by DiFrancisco-Donoghue et al. (2019). (56 %). Unsurprisingly, excessive exposure to blue light from computer screens, irregular sleep habits, and sustained visual focus can cause aberrant sleep patterns and general eye strain (Bonnar et al., 2019; Yin et al., 2020). Digital eye strain, sometimes known as computer vision sickness, has been discussed for more than 30 years (Alvarez & Ayas, 2007; Copenhaver & Diamond, 2017). Additionally, it raises the possibility of abusing performance-enhancing drugs or ingesting excessive amounts of coffee (Bonnar et al., 2019), which can exacerbate the health issues linked to insufficient sleep. However, because there is no research that particularly focuses on esports, these conclusions are based on the larger body of sleep literature.

Mental and Emotional Health

The Diagnostic and Statistical Manual of Mental Disorders was updated in 2013 to include "Internet Gaming Disorder," according to the American Psychiatric Association (APA) (APA, 2013). More recently, in 2017, the World Health Organization (WHO) added “Gaming Disorder” (GD) to the International Classification of Diseases (WHO, 2018). It is significant to remember that gaming behavior ranges from normal to GD. Only a small percentage of gamers are thought to be affected by addictive illnesses like GD, which is thought to impact no more than 1% of the general population (Przybylski et al., 2017). Despite the low number, Chung et al. (2019) emphasize that it is still a public health concern because roughly 2.2 billion individuals, or 30% of the world's population, are active gamers. 2.73 billion people are anticipated by the end of 2021. By the end of 2021, 273 million individuals worldwide may have GD, according to estimates. It's vital to keep in mind that while these statistics don't specifically refer to esports, they do pertain to video games played for leisure. The comorbidity of problematic gaming with other mental health conditions like anxiety disorders, substance abuse, obsessive-compulsive disorder, and suicidal ideation makes these findings even more concerning (Chung et al., 2019).

Performance Enhancement Drugs

Esports have grown in popularity along with the emergence of issues akin to those in regular sports, such as the use of performance-enhancing drugs, match-fixing, and unrestricted gambling (Holden et al., 2017). The problem arises from the lack of empirical evidence, as the anecdotal evidence and individual reports indicate the usage of PED’s, specifically nootropics, to boost cognitive functioning like concentration and reaction time. The World Anti-Doping Agency (WADA)’s banned substance lists may not be suited for esports, according to Park et al. (2020), which could possibly impede the industry's growth. For example: cognition-enhancing drugs are often prescribed for individuals with ADHD, but are easily obtained with prescription, thus complicating this particular regulation. As they almost entirely de

METHODOLOGY AND PROCEDURE

1. To find out the perceptions and attitudes of young adults (Gamers and Non-Gamers) and Adults (aged 40-45) towards eSports a total of 10 participants were chosen for the study, out of which 4 were gamers and 4 non-gamers ranging between 17-21 years and 2 mothers, through purposive sampling. Primary data was collected through an interview and it was analyzed using thematic analysis. A secondary method of data collection was also used and 25 papers were reviewed to obtain empirical evidence for the formulated themes.

3. Results

The table below describes the themes that I have collated with the help of 10 participants as well as empirical evidence collected from 25 papers.

<table>
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<th>Theme</th>
<th>Definition</th>
<th>Empirical Data 1</th>
<th>Empirical Data 2</th>
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| Time Management | "Participant 1 (Mother1) stated that children these days play games like an obsession, which leads to excessive wastage of time"  
"Participant 3 (non-gamer4) stated that gaming for 3-4 hours is a waste of time and energy"  
"Participant 4(gamer3) stated that playing games for a couple hours as leisure time is alright, more than that is a waste of time"  
"Participant 4(gamer3) stated that it gets hard to manage the sleep schedule, as he sleeps at 4-5am, and wakes up in the afternoon".  
"Participant 5(gamer1) stated that his parents are adamant about him maintaining time, and balancing between his studies and gaming, and only in his free time is he openly permitted to game".  
"Participant 6(non-gamer1) stated that if not being pursued professionally, playing esports for long hours is a waste of time".  
"Participant 8(non-game r2) stated that she now does not have spare time, which is why gaming is not part of her life".  
"Participant 10(Mother2) stated that gaming must be done keeping in mind the time constraints/proper scheduling" |
| Health Problems | "Participant 3(non-gamer 4) stated that too much gaming harms the eye-sight, which is one of the major reasons to keep him away from gaming".  
"Participant 4(gamer3) stated that playing for long hours has a negative impact on eyesight".  
"Participant 1(Mother 1) stated that since her child spends so much time on games/devices there are high chances of eye-sight damage".  
"Participant 5(gamer 1) stated that gaming has impacted his eyes negatively  
"Participant 7(gamer2) stated that after spending long hours on these games his head was bursting".  
"Participant 7(gamer2) stated eye-sight problems as one of the disadvantages of gaming".  
"Participant 3(non-gamer4) also stated how he requires sleep after playing video games for a couple hours" |
| | 1. The paper called "Associations Between Esports Participation and Health: A Scoping Review by Ana Monteiro Pereira et al in 2022 aimed to provide an overview of findings from studies regarding health and well-being in adult esports players. 2. The paper called "Influence of Esports on stress: A Systematic Review" by Thamilselvan Palanichamy et al in 2020 aimed to investigate 3 major domains: a) Esports and physical issues, b) Esports and psychological distress, and c) Esports and addiction." |
### Peer Pressure

Peer pressure is the influential/motivating factors in indulging in e-sports because of one's friend circle

- Participant 3 (non gamer4) stated that the peer group of which he was a part of was the reason he used to play games heavily.
- Participant 1 (Mother1) stated that peers can easily influence other group members to buy similar equipment and indulge in the same level/time of gaming as them.
- Participant 5 (gamer1) stated that it was one of his friends who recommended him to gaming, and now he regularly plays with him.
- Participant 8 (non-gamer2) stated that she was influenced to get into gaming by her peers.
- Participant 9 (non-gamer3) stated that her friends and cousins used to play esports, and it was the major reason for her gaming.
- Participant 4 (gamer3) stated that the maximum amount of time spent gaming is with friends who also game.

1. The paper called "Why do esports players consume esports?: A case study of an esports platform" by Henrik Hasselberg aimed to explore why esports players play esports games and what they want to do on an esports platform. 2. The paper called "The motivations of eSports players" by David P Hedlund in 2019 focused on those that may have a role in the development and growth of the modern industry to understand why people play esports. 3. The paper called "Social issues in esports: Current and emerging trends in research" by Anne Tjomndal et al in 2022 examined the current and emerging trends in research on social issues in esports.

### Violence

Violence is the aggressive behavior and language displayed by those consuming e-gaming

- Participant 1 (Mother1) stated that these games are of aggressive nature and nothing is calm.
- Participant 8 (non-gamer2) stated that she used to indulge in violent/aggressive games such as WWE and PUBG which on losing impacted her self esteem negatively.
- Participant 10 (Mother2) stated that games played by children are aggressive in nature and lead to usage of foul language by her children.

1. The paper called "Beyond hours of video gameplay: Connections between verbal aggressiveness, genre preference, and technology used" by William T Howe, Ioana A Cionea in 2021 examined how multiple factors (i.e., hours of gameplay, types of gameplay, preferred genre of video games, technology used to play games, and biological sex) were associated with both trait and situational verbal aggressiveness. 2. The paper called "Violent Video Games Do Contribute to Aggression" by Erica Scharrer et al in 2018 aimed to provide a brief review on the connection between playing violent games and aggression.

### Mental Health

Mental health here is defined as the impact e-sports/e-gaming have on those consuming these games based on their anxiety levels, stress etc

- Participant 9 (non-gamer3) stated how gaming leads to overthinking habits, which further causes anxiety.
- Participant 10 (Mother2) stated that excessive gaming can also have a negative impact on mental health.

1. The paper called "Disordered gaming in esports: Comparing professional and nonprofessional gamers" by Laura Maldonado-Murciano et al in 2022 aimed to investigate the feasibility of APA and WHO frameworks for disordered gaming among professional and non-professional gamers. 2. The paper called "The impact of eSports and online video gaming on lifestyle behaviors in youth: A systematic review" by Gary Chan et al in 2022 aimed to summarize the impact of eSports and online video gaming on lifestyle outcomes. 3. The paper called "Influence of Esports on stress: A Systematic Review" by Thamilselvan Palanichamy et al in 2020 aimed to investigate 3 major domains: a) Esports and physical issues, b) Esports and psychological distress, and c)
### Esports and addiction.

<table>
<thead>
<tr>
<th>Social Platform</th>
<th>It refers to the platform provided on engaging with others on e-games, forming new connections, nourishing old ones through teaming on games</th>
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<tr>
<td>Participant 2(gamer4) stated that the time spent on gaming was one of the major ways of being connected to his friends”.</td>
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<tr>
<td>Participant 5(gamer1) stated that gaming is also a way to interact with new people”.</td>
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<tr>
<td>Participant 7(gamer2) stated that these competitions provide a valuable network”.</td>
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<tr>
<td>1. The paper called &quot;Psychosocial Factors Affecting Intention to Play Esports&quot; by Soojung Park in 2022 aimed to analyze the psychosocial factors that influence the intention to play esports from a quantitative perspective”.</td>
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<tr>
<th>Source of Income</th>
<th>It is the money earned/generated through various ways while indulging in gaming, such as tournaments/wagers, buying-selling games etc</th>
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<tr>
<td>Participant 2(gamer4) stated that he uses gaming as a way to earn some money ”</td>
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<td>Participant 4(gamer3) stated that he will be taking part in tournaments which will bring in monetary benefits.”</td>
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<tr>
<td>Participant 7(gamer2) stated that he plays esports competitively, which helps him get monetary benefits, further turning into added motivation”.</td>
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<tr>
<td>1. The paper called &quot;Pwning Noobs for Fun and Profit: eSports and Entrepreneurship by Timothy B Michael, Melissa A Williams in 2021 aimed to discuss practical considerations for a business around game streaming,sponsorship and competition.</td>
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<tr>
<th>Way out of problems/ stress buster/Escapism</th>
<th>This refers to escaping problems being faced in real life/ or forgetting them for the time being through gaming</th>
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<tr>
<td>Participant 2(gamer4) stated that many times gaming has been a way out/away from his problems”.</td>
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<tr>
<td>Participant 1(Mother1) stated that when her child is gaming he’s completely disconnected from this world”</td>
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<tr>
<td>Participant 5(gamer1) stated that playing the game alongside the many things he does, is a stress buster.”</td>
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<tr>
<td>Participant 7 (gamer2) stated that of course gaming is a way to get away from his problems, as he ends up forgetting other things when he puts on the game.”</td>
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<tr>
<td>Participant 8(non-gamer2) stated that gaming was a peaceful way out from her family conditions”.</td>
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<tr>
<td>Participant 10(Mother2) stated that gaming if done within a time limit can give some energy and also relieve some mental stress”.</td>
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<tr>
<td>Participant 4(gamer3) stated that gaming is a way to burst stress”</td>
<td></td>
</tr>
<tr>
<td>1. The paper called &quot; Are there two types of escapism? Exploring a dualistic model of escapism in digital gaming and online streaming” by Frode Stenseng in 2021 aimed to test a dualistic approach to escapism in relation to gaming and online streaming.</td>
<td></td>
</tr>
<tr>
<td>2. The paper called &quot; Gaming when things get tough? Examining how emotion regulation and coping self-efficacy influence gaming during difficult life situations&quot; by Camila Caro, Maša Popovac in 2021 aimed to explore the role of emotion regulation and coping self-efficacy as predictors of this behavior.</td>
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DISCUSSION

The current study aimed to understand the perceptions and attitudes of young adults (Gamers and Non-Gamers) and Adults (aged 40-45) towards eSports in a comparative form. A group of 10 participants was chosen using purposive sampling out of which 4 were gamers playing video games for at least 3-5 hours daily and 4 non-gamers along with 2 mothers. The data was collected through a qualitative interview and analyzed using thematic analysis, through which certain themes were formulated.

The time management theme states that time is one of the most important assets, and its mismanagement is troublesome. Video games might provide immediate gratification, but in the long run, playing video games for many hours as leisure time is a ruin for one's attainment of their best potential. The obtained data have reported the inability to manage time as one of the biggest issues/concerns and often leads to arguments/disagreements with important others in one’s life.

The theme around health problems states that playing video games for long hours has negative associations with health. As is seen in the immediate gratification obtained from gaming, it takes over other important things, including their health. The data obtained suggest that there is neglect towards one’s eyesight with long hours of gaming and requiring sleep after the time spent gaming along with some physical problems such as back pain.

In addition, the theme peer pressure substantiates how the peer group has maximum influence on an individual especially during adolescence. However, this pressure is not always negative, it can often sway one easily, in order to fit in. The data also suggests that friends were one of the primary sources for being introduced to gaming in the first place and a reason why time is spent without any track.

The theme about violence states how it is not a necessity that individuals involved in gaming resort to violence and the responses obtained indicate the same, as to how there is no direct link between violence and gaming. It all varies from person to person and the ability to keep the real separated from the virtual. Only the mothers in the study were seen to believe that games lead to violence inevitably. However, empirical evidence obtained was of contradictory nature, more research is required to be affirmative about the stand.

The theme of mental health states that the negative impact of games depends on the type of game played, making it a chance factor. Playing these video games does bring about a change in the bodily physiological levels, but all of these do not amount up to a significant cause for a fight-or-flight response. Thus, the field requires further in-depth research to draw on certainty about the relation between gaming and mental health.

The theme source of income talks about how gaming is also a platform to connect with one’s friends, get an opportunity to make new friends and indulge in conversations at a faster and higher rate. It has also been listed as one of the primary advantages/ reason for individuals being into it.

The theme brings forward the fact that the eSports industry is on a growth of about 21.9% (CAGR) and is becoming a valuable platform for individuals who are looking to make money from playing video games. In the highly developing technologies, the...
accessibility to devices/gadgets is relatively easy and those who are interested can devote the hours to reap benefits from this industry.

The theme of escapism states that eSports is engaging and a source of enjoyment. It is used by more than half the people to get relief from stress and seen as a way to forget about the troubles going on in real life. However, a distinction between gaming as a way to relieve stress and escapism has been drawn. While the former is sustainable, the latter is a maladaptive way of dealing with the situation present and could end the career for someone aspiring to become an eSportsman. Most of the respondents admitted of using video gaming as a source of forgetting their problems.

The next theme addiction elaborates on how gaming is a go to for many in the current generation. It provides a certain level of comfort, and makes it difficult for one to be able to withdraw from gaming as it becomes part of one’s everyday life. With the COVID pandemic striking in, gaming has seen a massive splurge in usage and gaming addiction has increased significantly as well.

References