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DIGITAL GAMING ADDICTION AMONG ADOLOSCENSE IN BANGALORE A COMPARATIVE STUDY

Research Project Report submitted in Partial fulfilment of M.A. Course in Psychology

Counselling Psychology MPCE -026

Submitted by

ENROLLMENT NO: *******

Under the Guidance of Assistant Professor ********

REGIONAL CENTER: 13

STUDY CENTER: 1344

CMR INSTITUTE OF MANAGEMENT STUDIES

No.5, Bhuvanagiri, OMBR Layout, Banaswadi Main Road Bangalore - 560043



School of Social Sciences Indira Gandhi National Open University Maidan Garhi, New Delhi- 110068

ACKNOWLEDGEMENT

It is a great pleasure and privilege to be able to present the Project Report in Counselling psychology. The completion of the dissertation is a milestone in the life of a student. The project was carried out under the guidance of ************

I am grateful for her guidance, valuable suggestions and the constant encouragement, cooperation required to conduct the study.

I would also take this opportunity to extend a vote of thanks to the students who were involved in this study. Thank you all for being so helpful, giving your precious time and allowing me to conduct this research study.

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A special thanks to my dear family and friends for their constant support, patience and love that have helped me to complete this study successfully and satisfactorily.

Appendix III

CONSENT LETTER OF SUPERVISOR/GUIDE

This is to certify that the Project titled Digital Gaming Addiction Among Adolescents In Bangalore, a

<u>comparative study</u> for the partial fulfilment of **MAPC Programme** of IGNOU will be carried out by

Appendix IV

Appendix-V

Date of Visit	Time Duration		Place	Nature of	Name/Signature of	Remark
	From	То	- Visited	Work	Concerned Authority	
19-Oct-	3:30	4:00	Indian	Initial		
17	pm	pm	Academy	Discussion-		
				Project Selection		
23-Oct-	3:30	4:00	Indian	Synopsis		
17	pm	pm	Academy	Discussion		
24-Oct-	3:30	4:00	Indian	Synopsis		
17	pm	pm	Academy	Finalize		
15-Nov-	3:30	4:00	Indian	Questionnaire		
17	pm	pm	Academy	Discussion		
12-Dec-	10:30	4:00	Blue Nile	Data Collection		
17	am	pm	Counselling			
08-Jan-	3:30	4:00	Indian	Statistical		
18	pm	pm	Academy	Techniques		
				Discussion		
27-Feb-	3:30	4:00	Indian	Project		
18	pm	pm	Academy	Manuscript Discussion		
15-Mar-	3:30	4:00	Indian	Final Review		
18	pm	pm	Academy			
23-Mar-	3:30	4:00	Indian	Project Sign		
18	pm	pm	Academy	Off		

Signature of Learner

Signature of Supervisor

Appendix VII

CERTIFICATE OF ORIGINALITY

This is to certify that the Project titled "Digital Gaming Addiction Among Adolescents In

Bangalore", a comparative study submitted to Indira Gandhi Open University in partial fulfilment of the requirement for the award of Master of Arts Degree in Psychology(MAPC) is an original work carried out

by

********* (Enrolment Number:*******).

The matter embodied in this project is a genuine work done by the student and has not been submitted whether to this university or to any other university/institute for the fulfilment of the requirement of any course or study. The content of project report/dissertation has been checked for plagiarism.

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CERTIFICATION OF COMPLETION

This is to certify that ******** Enrolment No.******* has successfully completed Project in

MPCE - 026 titled "Digital Gaming Addiction Among Adolescents In Bangalore",

A comparative study under the guidance of *******

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ABSTRACT

The project was to do a survey on adolescents who are addicted to digital gaming in Bangalore, which has become a reason of concern for every parent. The aim of this research was to conduct a comparative study and examine the gender of the adolescents and mother's occupation that is, if the mother is working fulltime/part time or homemaker and how it influences the level of digital gaming addiction among adolescents without the supervision of the mother .

In this study the sample consists of 48 students which includes 24 boys and 24 girls who were randomly selected from the age of 13-19 years. The students selected for the survey belongs to various schools in Bangalore. The questionnaire used for data collection to identify the digital gaming addiction level of adolescents is "Game Addiction Scale For Adolescents by Jeroen S. Lemmens, Patti M. Valkenburg and JochenPeter(2009)".

Simple Percentage Analysis and t-test were used from a statistical perspective to analyse the levels of digital gaming addiction among adolescents. This study shows there is a difference between low addiction, borderline addiction and high addiction of digital gaming. It is found that the level of digital gaming among adolescents was influenced by the gender of the adolescents and mother's occupation. The review concludes with a summary of major research findings, as well as a consideration of future directions and implications for practice and policy.

Key words: digital addiction, gaming, mothers occupation

Chapter 1:

INTRODUCTION

Digital gaming addiction among adolescents has become a cause for serious concern in today's generation. In earlier times, adolescents used to play on streets and playgrounds along with their family and friends, being engaged in outdoor activities like cricket, basketball, running and catching etc but with the rapid growth of technology, games are seductively available at the click of a button, on the internet or in gaming arcades. So it's easy for a habit to form and for that habit to quickly escalate to the level of addiction. So it's understandable that a majority of parents are concerned about their children being addicted to digital gaming that would negatively affect their attention span and expose them to aggression, stress and various other negative factors. They are concerned about the time spent by their children playing games on computers, smart phones, iPad, console games, Xbox, PSP etc.

They worry that their children literally can't survive without their digital games and other forms of technology. In the last decade, video games have become the dominant form of entertainment worldwide – especially given the steady decrease in TV viewing habits. No longer confined to arcades or the home, video games can today be found almost everywhere. Portable systems, smart phones, and tablets make gaming an anywhere-anytime possibility. Of course, home consoles and computers still remain popular gaming gateways for children, teens, and adults. Parents understandably worry when video games become the number one priority in a child's life. They may neglect hobbies, sports, friends, argue frequently with family members who try to limit gaming, and put little or no effort into schoolwork.

Digital games have become an ever-increasing part of many students' day-to-day lives not only in India but also across the globe. Excessive digital game playing has been denominated as "computer/video game addiction" and in recent times has received increased attention not only from the media, but also from psychologists, psychiatrists, mental health organizations, and gamers themselves.

Students are especially vulnerable to developing dependence on the internet, more than other segments of the society. This can be attributed to several factors such as availability of time; ease of use; unlimited access; the psychological and developmental characteristics of young adulthood; limited or no parental supervision; an expectation of internet/computer use implicitly, if not explicitly, to complete academic activities from assignments and projects to communication with peers and mentors; the internet offering an escape route from exam stress.

Since the early 2000s, there has been a significant increase in the number of empirical studies examining various problematic aspects of online gaming. There is a lack of consensus as to whether video game addiction exists and/or whether the term "addiction" is the most appropriate to use. Some researchers use terminology such as "excessive" or "problematic" to denote the harmful use of video games. Terminology for what appears to be the same disorder and/or its consequences includes problem video game playing, problematic online game use, video game addiction, online gaming addiction, internet gaming addiction, and compulsive internet use.

This entry uses the term "gaming addiction" to describe the phenomenon of excessive problematic gaming since there is demonstrable empirical evidence that such behaviour can include all the core components of addiction including salience, mood modification, tolerance, withdrawal and conflict. Due to the growth in technology and internet usage in the last few years, digital gaming disorder has manifested as a rapidly growing mental health problem affecting adolescents in their academic achievement, personal life and social life.

iPad, Xbox, PSP and other gadgets trigger the reward centre in the brain that releases more dopamine, opiates, and neurochemicals, which over time can produce a stimulation tolerance and/or need to increase stimulation to achieve a "high" and thereby prevent withdrawal. Students use mobile phones while walking to class, riding on a bus or waiting for an elevator. These micro time slots in which people can engage in a mind-boggling array of online activities that were not previously available. These obsessive smart phone checking can also interfere with face-to-face relationships and academic performance. It also leads to feelings of anger, tension or depression when the game is inaccessible.

Adolescents are especially susceptible because they have low tolerance and exhibit negative behaviours like arguments, lying, poor achievement, social isolation and fatigue .The games that adolescents and young people used to play in the play grounds and on the streets have been replaced in recent years by cyber games played in front of the computer on the internet or in gaming arcades.

This changing culture has brought up a niche concept of "digital game addiction", a condition that stems from the steadily growing passion for digital games and their excessive and uncontrolled usage among adolescents and other young people.

The adolescents being the most vulnerable group, have become consumers of such digital gaming devices ,which in turn makes them addicted to them at some point of time. Addiction is the continued repetition of a behaviour or an activity 2 independent upon the adverse or negative consequences of the same (Angres & Angres, 2008) or it can be a neurological impairments which leads to such behaviours (American Society for Addiction Medicine, 2012).

There is no such limitation of the use of the term addiction to some specific behaviour such as drug addiction, food addiction etc. Psychological control over substance and behaviour, preoccupation with the subject and the continuation of activities despite consequences are generally the symptoms of addiction (Morse & Flavin, 1992).

Actually the term addiction means the high degree of likeness towards a particular thing or subject. So if somebody is addicted towards something then he loses control over his own mind and faces difficulties to get rid of the claws of that object. Most of the teens today spend too much of their time with their faces buried in technological gadgets.

According to Kimberly Young (1998), addiction to digital gaming which is a habitual compulsion to engage in using technology instead of using it to address life's problems. They use technology as a coping mechanism to avoid conflict. Long term compulsions can lead to psychological problems such as insomnia, irritability and depression.

For example, When the adolescents face stress, they often chose what is comforting to them, usually something easy to focus on such as digital gaming. compulsion use of digital gaming at parties or vacations might signify addiction. Attitude changes in adolescent, sudden depression, loss of self-esteem, and problems in paying attention to study, are often symptoms of Internet addiction (Young, 1998).

According to Young, teens are particularly vulnerable to technology addiction. Adolescents have poor coping mechanism. This changing culture has particularly brought up the concept of "digital game addiction", a condition that stems from the steadily growing passion for digital games and their excessive and uncontrolled usage among adolescents and young people.

Game addiction in the psychiatry literature has been described as an impulse control disorder characterized by the symptoms such as "the inability to control the time spent on game-playing", "a loss of interest in other activities", "continuing to play despite the adverse effects" and "feeling psychologically deprived when not being able to play".

Game addiction in psychiatry literature has been described as an impulse control disorder characterized by symptoms such as "the inability to control the time spent on game-playing", "a loss of interest in other activities", "continuing to play despite the adverse effects" and "feeling psychologically deprived when not being able to play".

Many violent games like "BLUE WHALE" and other fighting and war games have led to destruction and self harm. It has left a negative impact upon the physical, psychological, social, and occupational functioning of adolescents who are addicted to such games, often leading to severe consequences. The use of excessive digital gaming and obsessive usage of and preoccupation with technology results in undesirable behaviours such as stress, reduced creativity, anxiety, frustration, and disconnection from physical activities .Since technology and online connectivity are important characteristics of our quality of life, their addictive use may result in a less sustainable and connected society.

Although the use of tech-gadgets and services has many positive impacts, they are short lived. In long run it has negative impacts on the individuals. The digital activities make the youth strong in technical skills but make them weak in real life practical skills. It takes the young mass away from the reality helping them to live in their imaginary world.

Due to the time spent on the devices the youth are refrained from some outdoor activities with friends and family. The indulgence in violent games may create more violence in their mind. The more they use the gadgets, the more they are crazy about it which may distract them from study.

During the time of playing games when they can't achieve the set target, it may raise their anxious level higher. After all addiction to the devices may develop unhealthy lifestyle, poor time management and poor eating habits among the youth.

1.1: Definition of Digital Gaming Addiction:

Is an behavioral addiction characterized by excessive or compulsive use of computer or video games, which interferes with a person's everyday life. Video game addiction may present itself as compulsive gaming, social isolation, mood swings, diminished imagination, and hyper-focus on in-game achievements, to the exclusion of other events in life.

Based on Centre for Internet Addiction Recovery, internet addiction is when an individual is having a compulsive behavior involving the internet interferes with normal functioning, and causes stress on the addicts, as well as their family, friends, and loved ones (Padwa& Cunningham, 2010). According to Wolfe (2000), internet addiction is a creation of the media. While, Bidgoli (2004) stated that, internet addiction is a dysfunctional internet use pattern. This phenomenon occurs when people spend much time online to the detriment of their social and financial well-being.

It turns out that there is a "pleasure pathway" in the brain that lights up when we experience pleasure. The body releases a combination of neurochemicals, including dopamine and the opiates, which are picked up by receptors in the brain and elsewhere in the body. These chemicals make us feel good. When we enjoy playing video games we experience a similar euphoria. These highs are not something to be worried about, in moderation.

The addiction begins to take hold, however, when we do it too much. Then the brain is forced to withdraw neuro-receptors in an effort to restore balance. This is what we call tolerance, and we no longer get the high from the same level of activity or drug use. Now, we need more. And if we go without, we go into withdrawal. In the case of behavioral addictions, that withdrawal involves primarily psychological symptoms (irritability, restlessness, poor concentration, increased anxiety_and depression, etc).

Once an addiction takes hold, the addict is either chasing another high or trying to avoid withdrawal. This, in turn, leads to obsession and engaging in the behavior in spite of negative consequences. The pleasure pathway, now overused, has become highly sensitive and responsive to cues that trigger a craving for the drug or behavior. So, for instance, if you've become addicted to Farmville or World of War craft, then merely sitting down in front of your computer, or merely opening up the internet on your smart phone, can trigger the release of neurochemicals that make us crave engagement in those games.

These cravings are very strong and tend to override the executive functioning of the brain, that is, the part of the brain that makes rational decisions. Thus, even though you may have recognized that your video game play or other internet use is harming your life in some way, it can be very difficult to resist the urge to engage anyway. Afterwards, the addict feels remorse, shame, regret, etc, because the rational mind is now functioning again.

1.2: Digital games

Digital games includes, the games that are played using software running on PCs, consoles, or portable devices. It not only encompasses a wide range of cultural and media practices, including those designed specifically to be played, but also comprises other practices that provide pleasures derived from playful tinkering with **digital** technologies. Some of the digital gaming devises are

1.2.1: Smart phone

A **smart phone** is a handheld personal computer with a mobile operating system and an <u>integrated</u> mobile broadband cellular network connection for voice, SMS, and Internet data communication; most, if not all, smart phones also support Wi-Fi. Smart phones are typically pocket-sized, as opposed to tablet computers, which are much larger. They are able to run a variety of software components, known as "apps". Most basic apps (e.g. event calendar, camera, web browser) come pre-installed with the system, while others are available for download from official sources like the Google Play Store or Apple App Store).

1.2.2: Laptop

A laptop, is called a notebook computer that is a small, portable personal computer and easily carried as it is small size and battery support for energy, required to run it. The laptops are generally used for making programs, storing data, entertainment (music, videos), playing games accessing net etc

1.2.3: Tablet Computer

A tablet computer, commonly shortened to tablet, is a portable personal computer, typically with a mobile operating system and LCD touch screen display processing circuitry, and a rechargeable battery in a single thin, flat package. Tablets, being computers, do what other personal computers

1.3: Addiction:

Addiction is a condition in which a person engages in use of a substance or in a behaviour for which the rewarding effects provide a compelling incentive to repeatedly pursue the behaviour despite detrimental consequences. Addiction may involve the use of substances such alcohol, drugs, and others behaviours such as gambling and gaming. Scientific evidence shows that addictive substances and behaviours intensely activate brain pathways of reward and reinforcement, which involve the neurotransmitter dopamine.

1.4: Adolescent's Gender

The two biological sexes (male and female), especially when considered with reference to social and cultural differences .Both boys and girls have be taken as sample for the digital gaming addiction.

1.5: Adolescent's Age

Adolescence/Teenager/Teens begins with the onset of physiologically normal puberty, and ends when an adult identity and behaviour are accepted. A teenager, or teen, is a young person whose age falls within the range from **13-19**. They are called teenagers because their age number ends with "teen"

1.6: Mother's Occupation

Mother's occupation refers to if the mother is working fulltime/part time or homemaker and how it influences the level of digital gaming addiction among adolescents with/without the supervision of the mother .

1.7: Mental Health

Mental health is a level of psychological well-being, or an absence of mental illness. It is the "psychological state of someone who is functioning at a satisfactory level of emotional and behavioral adjustment . It is about how we feel about ourselves and others, and how we are able to manage the stress in our life. According to the WHO (World Health Organization), mental health is: "... a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community." The WHO stresses that mental health "is not just the absence of mental disorder."

1.3: NEED FOR THE STUDY

The present research focuses on the components of digital addiction and the impact of mother's occupation on the digital gaming addiction in adolescence (boys and girls). The present study is being studied between boys and girls considering socio economic status, mother's occupation and cultural group etc. With the conceptualization of the importance of digital gaming addiction on which the study has been undertaken. It is to understand the effect of digital gaming addiction level among adolescents.

1.4: SCOPE FOR THE STUDY

The present study focused on studying the association between the use of digital gaming and addiction among adolescence (boys and girls) which shows how excessive gaming and obsessive usage and preoccupation about technology are associated with undesirable behaviours such as stress, decrease in creativity, anxiety, frustration, and disconnection from physical activities. Since technology and online connectivity are important characteristics of our quality of life, their addictive use may result in a less sustainable and connected society. The sample used for this study are adolescence of age group of 13- 19 years

The areas covered under digital gaming addiction include addiction to computer and video games.

The present study has been conducted in Urban Indian Social context and the study focused on studying digital gaming addiction among adolescence

CHAPTER 2

REVIEW OF LITERATURE

A literature review is a body of text that aims to review the critical points of current knowledge and or methodological approaches on a particular topic. A literature review can be just a simple summary of the sources, but it usually has an organizational pattern and combines both summary and synthesis. A summary is a recap of the important information of the source, but a synthesis is a re-organization, or a reshuffling, of that information. It might give a new interpretation of old material or combine new with old interpretations. Or it might trace the intellectual progression of the field, including major debates. And depending on the situation, the literature review may evaluate the sources and advise the reader on the most pertinent or relevant.

2.1: Reviews related to digital gaming addiction, gender and mothers occupation

According to Young (1996), addiction to the internet is the same as addiction to gambling, drugs and alcohol. Widyanto&McMurran (2004) have explained that the concept of addiction is quite hard to define because it depends on a substance or activity. The characteristic of dependence are overindulgence, tolerance, withdrawal, craving and loss of control. Behavioural addictions have grown along with the rise of the machines, including machines that allow us to seek amusement and/or information. Behavioural addictions do not rely heavily on physiological mechanisms; instead, they are explained by psychological explanations of addiction.

Pallanti, Bernardi and Quercioli (2006), the prevalence of internet gaming addiction can be found at any age and in any social condition, but most of the research major attention has focused on adolescents because they seem to be especially vulnerable. The research of Van Rooij and Van den Eijinden (2007) had reported that using the internet has become one of the most popular leisure-time activities.

Based on research by Pallanti, Bernardi and Quercioli (2006), 5.4% of the sample was addicted to the internet. This sample included 275 students with the average of 16.67 +/- 1.85 years and consisted of 52.4% males and 47.6% females. This research also shown that in Italy, internet usage had a slower diffusion rate than in other countries.

Wartella, Lee &Caplovitz (2002) stated that numerous studies have shown gender differences in the use of digital media and the preference of services. Besides that, based on Subrahmanyam et al. (2001); Bickham, Vandewater,Huston, Lee, Caplovitz, & Wright (2003), in early teens, girls use the computer longer than boys, but the trend gets reversed in the late-teens (as cited in Park 2009). Gender differences in internet addiction can be explained by the types of content that interest men and women. Interactive online games characterized by power, dominance, control, and violence attract more men than women. As an example, Young (1998) observed that men tend to seek out dominant activities. Women, on the other hand, seek out close friendships and prefer anonymous communication in which they can hide their identity.

Van Schie&Wiegman (1997) have another study which showed that boys enjoy online games more than girls. Thispreference makes boys heavy users of the internet (as cited in Park, 2009).

Following studies highlight some of the negative effects of the tech-devices and services. 10 It would have been a lot better if the drawbacks or the negative impacts of the use of the digital services would have been known before some years. As the use of the digital services has negative impacts students should minimise the use of these tools and should aware about its use (Walsh, 2012).

According to Erickson, 2012The voracious use of tech services has negative impacts on the youth. Due to these effects youth want to do things faster, easier and cheaply. Everybody wants to do things according to their own schedule and pace, failing in which they become anxious. Face to face communication is avoided by the young mass, which is not good for the society .

The addiction causes intra-psychic conflicts such as intolerance and relapse among the youth (Cabral, 2011). Internet gaming and shopping is causing depressive symptoms among the college students. Implementation of programmes is needed to detect and decrease these activities among them (Cotton, 2001).

Shapira et al., 2003 states that addictive internet use has negative impacts on mental health. There is a positive relationship between Internet addiction and psychiatric disorders like depression, bipolar disorder, obsessive-compulsive disorder, attention deficit disorder, etc. So the addictive internet use should need clinical help (Young, 1998). Excessive internet use not only generates disorders but it can sometimes be distressing and disabling

Kuss& Griffiths, 2012a suggests that excessive online gaming may in extreme cases lead to symptoms commonly experienced by substance addicts, namely salience, mood modification, craving, and tolerance Particularly excessive engagement with both online and offline games appear to lead to addiction in a small minority of players. Since video gaming is particularly appealing to children and adolescents, it appears reasonable to suggest that these groups may be particularly at risk i.e., more vulnerable and susceptible to developing gaming addiction.

Griffiths, 2009 has argued that because of the 24/7 nature and almost mandatory excessive play required in playing online games (such as World of War craft and Ever quest), online gaming may be more problematic for 'at risk' individuals than offline gaming.

According to Griffiths, 2011 Assessing online gaming addiction in children and adolescents is relevant for several reasons. With regards to developmental psychopathological findings, it appears that addictions tend to have precursors during adolescence and most dependencies develop in early adulthood Therefore, prevention efforts must be established that target adolescents who have their first experiences with addictive substances and behaviours during puberty.

Wölfling& Müller, 2009 states that parental influence is diminished whereas the peer group gains more importance. Peer pressure may lead to a variety of problems that may result in the development of pathological behaviours, such as chemical and behavioural addictions

Griffiths et al. (2012) reviewed the prevalent studies examining problematic gaming and gaming addiction from 1994 to 2012. The studies they selected were based on samples of at least 300 participants and used a screening instrument to assess problematic gaming (rather than self-diagnosis). They reported that prevalence rates of problematic gaming ranged from 1.7% to over 10% among general samples. Prevalence rates among gamers were, in some cases, much higher (some as high as 17% to 34%). These studies indicated that, in general, males are significantly more likely than females to report problems relating to their gaming.

According to King et al, <u>2012</u>, overall, there are some generalizations that can be made with regard to the demographic characteristics of gamers and problem gamers. The literature suggests that adolescent males and young male adults appear to be at greater risk of experiencing problematic video gameplay. However, the course and severity of these problems are not well known and the finding that this group is more at risk may be a consequence of sampling bias and the fact that this group plays online video games more frequently than other sociodemographic groups. It has also been suggested that university students may be especially vulnerable to developing problematic online gaming.

2.3: CRITICAL REVIEW OF THE STUDY

A critical analysis of the above reviews indicate the progress of knowledge on the effect of digital gaming addiction on adolescents The earlier studies have more understanding of excessive use of internet games and online games The present study has considered normal population who are adolescence age between 13-19 years with a sample size of 24 each in understanding the gender differences and the impact on mothers occupation on gaming and digital addiction. The test used in determining the gaming addiction is Game Addiction Scale for Adolescents by Jeroen S. Lemmens, Patti M. Valkenburg&Jochen Peter (2009) and has computed using SPSS 22. The present study varies from the earlier studies in aspect of variable and the sample that is considered.

CHAPTER 3

METHOD

3.1: PREAMBLE

The study of digital gaming addiction level among Adolescence and the impact of mothers occupation on digital gaming addiction is important in modern days as various problems interferes in everyday life such as compulsive gaming, social isolation, mood swings, diminished imagination, and hyper-focus on in-game achievements, to the exclusion of other events in life. So keeping in all these problems in views present study aimed at finding out the state of level of addiction among adolescence.

3.2: STATEMENT OF THE PROBLEM

A **problem statement** is a clear concise description of the issue(s) that need(s) to be addressed by a **problem** solving team. It is used to centre and focus the team at the beginning, keep the team on track during the effort, and is used to validate that the effort delivered an outcome that solves the **problem statement**.

The following statement is the problem used for the present study

- Is there any effect of digital gaming addiction level among adolescents
- Does the digital gaming addiction level differs among the genders
- there any impact of mothers occupation on the digital gaming addiction
- •

3.3: OBJECTIVE OF THE STUDY

• To study the effect of digital gaming addiction level among adolescents

To investigate the gender differences in the digital gaming addiction among adolescents

• To investigate the impact of mother's occupation on the digital gaming addiction

3.4: HYPOTHESIS

A **hypothesis** is a tentative and testable statement about the relationship between two or more variables. It is a specific prediction about what you expect to happen in a study. It is a brief summary of the prediction of the study's findings, which may be supported or not by the outcome.

The Hypothesis is framed for the present study are as follows -

- There will be no significant difference on digital gaming addiction level with respect to the gender of adolescents
- There will be no significant difference on digital gaming addiction level with respect to the occupation of mother of adolescents

3.5: RESEARCH DESIGN

The researcher proposes to use the following tool to identify the digital gaming addiction level of adolescents.

Game Addiction Scale for Adolescents by Jeroen S. Lemmens, Patti M. Valkenburg&Jochen Peter (2009)

The present scale is developed to study the factors suitable for measuring measure game addiction. This 21item scale measures adolescents' degree of addiction to computer- and videogames.

The items were randomly distributed over the scale. According to Young (1998), addiction is present when a person meets the specified criteria during a period of six months. In accordance with this semi annual every item in this scale was preceded by the statement: "How often during the last six months : : : ?"

Players rated all game addiction items on a 5-point continuum scale:

1 (never) 2 (rarely) 3 (sometimes) 4 (often) 5(very often)

And the interpretation of the score is given below :

21-48 Low Addiction

49-77 Borderline Addiction

78-105 High Addiction

According to Comrey (1988), such a 5-point rating scale offers sufficient distribution of responses.

The total score was the summation of all responses of 21 items. The minimum score that could be obtained was 21 and the maximum was 105. Higher the score indicates the high level of addiction. The 21-item scale showed high reliabilities with a Cronbach's alpha of .94 in the first sample and .92 in the second sample.

3.6: VARIABLES :

In research science, variable refers to factors or conditions that can change during the course of experiment . Researcher attempt to change only one of these variables at a time so that there is no confusion about what caused a change

Independent Variable: Researcher attempt to change only one oif these variables at a time so that there is no confusion about what caused a change

In the present study Independent variable is Gender and Mother's Occupation

Dependent Variable: The dependent variable is a variable that change as the result of changing the independent variable.

In the present study the dependent variable is the scores obtained on Digital Gaming Addiction scale

Operational Definition of Variable

Digital Gaming Addiction – is a hypothetical behavioral addiction characterized by excessive or compulsive use of computer or video games, which interferes with a person's everyday life. Video game addiction may present itself as compulsive gaming, social isolation, mood swings, diminished imagination, and hyper-focus on in-game achievements, to the exclusion of other events in life. Based on Center for Internet Addiction Recovery, internet addiction is when an individual is having a compulsive behavior involving the internet interferes with normal functioning, and causes stress on the addicts, as well as their family, friends, and loved ones (Padwa & Cunningham, 2010). According to Wolfe (2000), internet addiction is a creation of the media. While, Bidgoli (2004) stated that, internet addiction is a dysfunctional internet use pattern. This phenomenon occurs when people spend much time online to the detriment of their social and financial well-being.

3.7: Sample

Sample is the small portion of the population. It is not possible for any behaviour researchers to cover the whole population so a portion which represents the whole population is selected for research investigation. By making keen observation of the appropriate sample, it is possible to draw reliable inferences or make generalizations of the possible information as a whole from where the sample is drawn.

The present research aims to study the infinite population of adolescents who are studying in Bangalore, Karnataka India. Both boys and girls will be into consideration. Due to time constraint researcher decided to study the representative sample selected randomly with the below mentioned criteria. The sample size of approximately 48 adolescents will be considered for this research study.

	ADOLSCENTS			
Sample	Boys	Girls		
	N= 24	N= 24		
Age	13-19 years	13-19 years		
Geographic location	Urban	Urban		

Table 1 socio demographic description of sample in digital gaming addiction

Inclusion Criteria :

- Adolescents aged between 13-19 years were taken
- Adolescents belonging to urban areas were included

Exclusion Criteria :

- Adolescents of rural area were not taken in the study
- Adolescents belonging to different socio economic status were not taken

3.8: Test

The primary data which will be collected will be sorted, classified, edited, tabulated in a proper format and analyzed by utilizing appropriate statistical tools. The researcher will use Windows Excel Spreadsheet for recording and classification of samples.

The following statistical tools will be used for analyzing the data procured from the respondents selected for the study.

- Simple Percentage Analysis: Simple percentage analysis is one of the basic statistical tools which is widely used in the analysis and interpretation of the main data. It deals with the number of respondents' response to a particular question in percentage arrived at the total. Simple percentages will be used in the study to analyze the factors like demographic and other details of the respondents.
- **t-Test**: The independent samples t-test will be used when two separate sets of independent and identically distributed samples are obtained, one from each of the two populations being compared.

3.9: Procedure:

The sample of the study was adolescents. The data were collected from the adolescents after explaining the need and purpose of the study. After selecting the desire number of adolescents the purpose of the study was briefed and the rapport was established for the subjects to be a part of the study. Before presenting the main sets of questionnaires, participants were asked to provide background information about their name, class, gender, age and occupation of their mother.

After demographic data collection the main questionnaire were provided to the students with the oral instructions and are asked to read the instructions given along with the questionnaire and motivate to respond genuinely to answer all the items, acceding to the standard directions in the manual and data was collected. The subject were thanked for their co-operative participation

Chapter 4

Results and Discussion

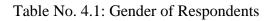
The research methodology exercised by the researcher to achieve the objectives of this research study was discussed in the preceding chapter. This chapter deals with the analysis and interpretation of the data collected based on the frame of reference of this thesis.

This research study is about Digital Gaming Addiction Among Adolescences. The data collected from all the respondents were edited, coded and analyzed using SPSS 22. This chapter presents the results of the questionnaire, the patterns of the results and analysis of their relevance to this research questions.

4.1 Gender of Respondents

In the present study, a sample of 48 students was selected from Bangalore. Due to paucity of time and limited scope of the study, the sample was selected on the basis of convenience.

The details of the same are depicted in the table no. 4.1



	Frequency	Percent	Cumulative Percent
Boys	24	50	50
Girls	24	50	100.0
Total	48	100.0	

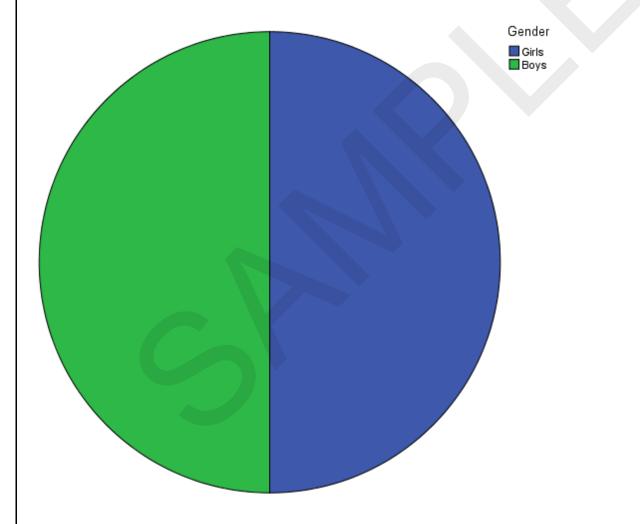


Figure No. 4.1: Gender of Respondents

4.2 Age of Respondents

Table No. 4.2: Age

	Frequency	Percent	Cumulative Percent
13-14 Years	19	39.6	39.6
15-16 Years	22	45.8	45.8
17-18 Years	7	14.6	14.6
Total	48	100.0	

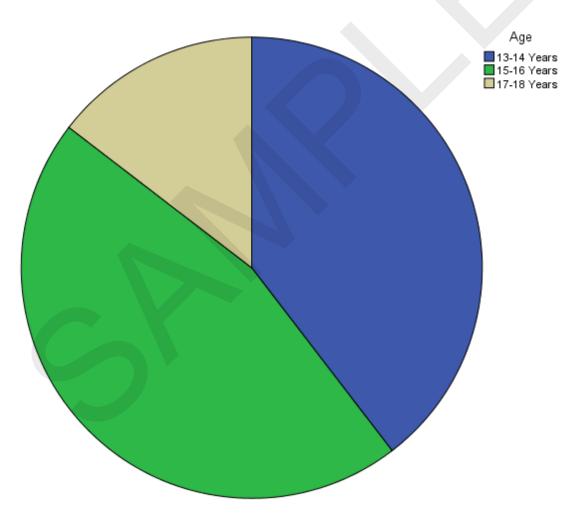


Figure No. 4.2: Age of Respondents

4.3: Mother's Occupation

Table No. 4.3: Mother's Occupation

	Frequency	Percent	Cumulative Percent
Housewife	29	60.4	60.4
Working Mother	19	39.6	100
Total	48	100.0	

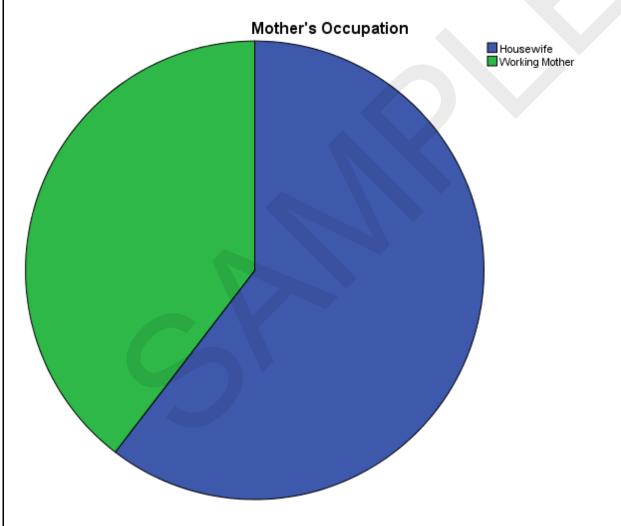


Figure No. 4.3: Mother's Occupation

4.4 Digital Addiction Score

Table No. 4.4 Digital Addiction Score

	Frequency	Percent	Cumulative Percent
Low Addiction	15	31.3	31.3
Borderline Addiction	27	56.3	87.5
High Addiction	6	12.5	100.0
Total	48	100.0	

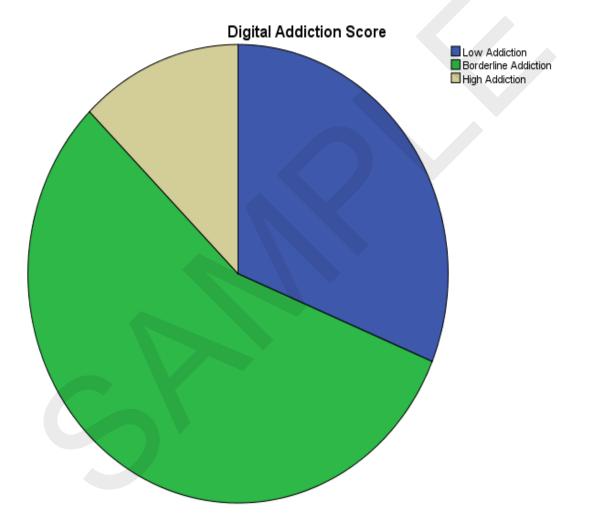


Figure No. 4.4 Digital Addiction Score

4.5 Digital Addiction Scores Gender

Null Hypothesis: There is no significant difference in the Digital Addiction Score of different Gender.

All the selected subjects, were administered on "Game Addiction Scale For Adolescents by Jeroen S. Lemmens,

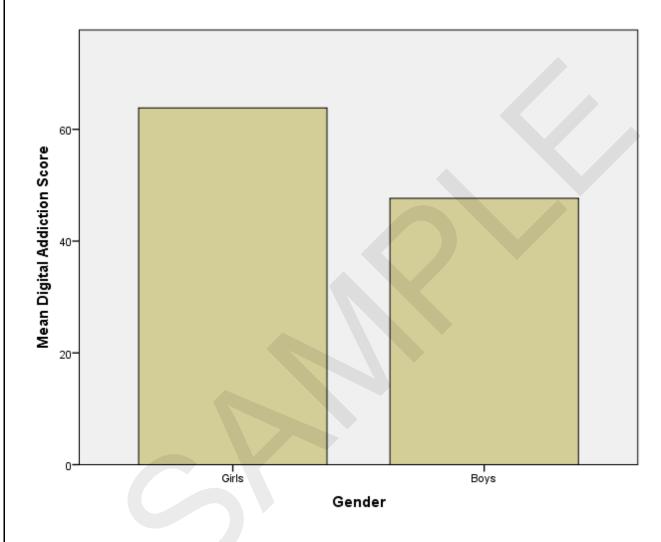
Patti M. Valkenburg and JochenPeter(2009)".

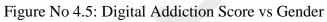
Table 4.5t-test for Digital Addiction by Gender

		N	Mean	Std. Deviation	t-test
Digital Addiction	Girls	24	63.83	14.517	A O C T stastastasta
Score	Boys	24	47.67	12.997	4.065****

*p < 0.05, **p < 0.01, ***p < 0.005, ****p < 0.001 Note: All tests two-tailed

As per table 4.5, results of independent samples t-test shows that mean score about digital additction differs between girls (M = 63.83, SD = 14.157, n = 24) and boys (M = 47.67, SD = 12.997, n = 24) at the .05 level of significance (t = 4.065, df = 46, p < .05). This research study found that there is statistically significant mean difference, at the .05 level of significance, in digital addiction score between girls and boys, hence, the null hypothesis is rejected. There is sufficient evidence to state that girls and boys are having a different level of digital gaming addiction. The results shows that girls are more addicted to digital gadgets as compare to boys.





4.6 Digital Addiction Score vs Age

Null Hypothesis: There is no significant difference in the Digital Addiction Score of different Age group.

		Ν	Mean	Std. Deviation	F
D' '/ 1 A 11' /	13-14 Years	19	54.00	18.562	
Digital Addiction	15-16 Years	22	57.68	13.937	0.293
Score	17-18 Years	7	54.43	15.469	

Table 4.6a ANOVA for Digital Addiction by Age

*p < 0.05, **p < 0.01, ***p < 0.005, ****p < 0.001 Note: All tests two-tailed

Table 4.6b

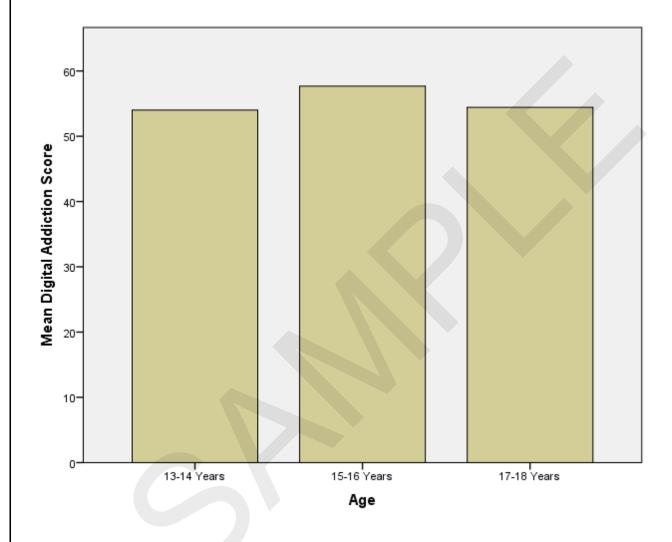
ANOVA for Digital Addiction by Age

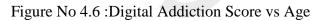
		Sum of Squares	Df	Mean Square	F	Sig.
Digital	Between	152.513	2	76.256	.293	.748
Addiction	Within	11716.487	45	260.366		
Score	Total	11869.000	47			

Note $p \le 0.05$, $p \le 0.01$

A one-way between subjects ANOVA was conducted to compare the effect of age on the digital addiction and results of the same are shown in the Table 4.6a and 4.6b

There was a statistically no significant difference between the age on the digital addiction by one-way ANOVA, F (2,45) = 0.293, p =.748, hence, the hypothesis saying that "Digital Addiction Score of different Age group is same" is accepted. Taken together, these results suggest that adolescents of all age groups were having the same score of digital addiction.





4.7 Digital Addiction Score vs Mother's Occupation

Null Hypothesis: There is no significant difference in the digital addiction score of adolescents having mother's different occupation.

Table 4.7t-test for Digital Addiction Score by Mother's Occupation

		Ν	Mean	Std. Deviation	t-test
Digital	Housewife	29	51.31	16.345	-2.254*
Addiction Score	Working Mother	19	62.53	12.790	2.23

p < 0.05, p < 0.01, p < 0.001, p < 0.005, p < 0.001

Note: All tests two-tailed

As per table 4.7, results of independent samples t-test shows that mean score of digital addiction for adolescent whose mother is working (M = 62.53, SD = 12.79, n = 19) and housewife (M = 51.31, SD = 16.345, n = 29) at the .05 level of significance (t = -2.254, df = 46, p < .05). This research study found that there is statistically significant mean difference, at the .05 level of significance, in digital addiction Score between adolescents of working and non-working mothers, hence, the null hypothesis is rejected. There is sufficient evidence to state that adolescents of working mothers and housewife are having a different level of digital addiction score. The digital addiction score for the adolescents whose mothers are working is more as compare to the adolescents whose mother is housewife.



Figure No 4.7: Digital Addiction Score vs Mother's Occupation

CHAPTER 5

SUMMARY AND CONCLUSION

This research study is about Digital Gaming Addiction Among Adolescences. The data collected from all the respondents were edited, coded and analyzed using SPSS 22. This chapter presents the results of the questionnaire, the patterns of the results and analysis of their relevance to this research questions.

In the present study, a sample of 48 students was selected from Bangalore due to paucity of time and limited scope of the study.

This research study found that there is statistically significant mean difference, at the .05 level of significance, in digital addiction score between girls and boys, hence, the null hypothesis is rejected. There is sufficient evidence to state that girls and boys are having a different level of digital gaming addiction. The results shows that girls are more addicted to digital gadgets as compare to boys.

This research study found that there is statistically significant mean difference, at the .05 level of significance, in digital addiction Score between adolescents of working and non-working mothers, hence, the null hypothesis is rejected. There is sufficient evidence to state that adolescents of working mothers and housewife are having a different level of digital addiction score. The digital addiction score for the adolescents whose mothers are working is more as compare to the adolescents whose mother is housewife.

5.1 IMPLICATION OF THE STUDY

- The findings of the study has added a new knowledge to the existing understanding of digital gaming addiction and the mothers occupation.
- The study can be used to find out the level of addiction among different age groups among and find out at which level the individual is operating.
- The adolescents can be taught as to how he/she can have a better and healthy life style.

5.2 SCOPE FOR FURTHER STUDY

- The study can be further extended by taking into consideration the other age groups
- The study can be further expanded by taking different socio economic groups
- The study can also be done by considering cultural group
- A relationship study can be done on digital addiction on different variables
- The study can be done on the working population of different age groups

5.3 LIMITATION OF THE STUDY

- The study was limited to age group of 13-19 years
- The study was limited to urban population
- The Present study focuses on only the use of digital devices by means of digital gaming

CHAPTER 6

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CHAPTER 7

APPENDICES

APPENDIX -A

SOCIO DEMOGRAPHIC DETAILS

NAME

AGE

SEX

EDUCATION

SCHOOL NAME

MOTHER'S OCCUPATION

GEOGRAPHIC LOCATION

APPENDIX: B

Confidential Questionnaire

- Game Addiction Scale for Adolescents by Jeroen S. Lemmens, Patti M. Valkenburg&Jochen Peter (2009)
- On Digital Addiction among Adolescents in Bangalore

Name :

Age :

Gender :

Mothers occupation : Working Fulltime/Parttime/Homemaker

Sr No.	Particulars	Never	Rarely	Sometimes	Often	Very Often
	How often during the last six	Never	Rarely	Sometimes	Often	Very
	months					Often
1	Did you think about playing a	Never	Rarely	Sometimes	Often	Very
	game all day long?					Often
2	Did you spend much free time	Never	Rarely	Sometimes	Often	Very
	on games?					Often
3	Have you felt addicted to a	Never	Rarely	Sometimes	Often	Very
	game?					Often
4	Did you play longer than	Never	Rarely	Sometimes	Often	Very
	intended?					Often
5	Did you spend increasing	Never	Rarely	Sometimes	Often	Very
	amount of time on games?					Often
6	Have you unable to reduce your	Never	Rarely	Sometimes	Often	Very
	game use?					Often
7	Did you play games to forget	Never	Rarely	Sometimes	Often	Very
	about real life?					Often

9Have you played games to feel better?NeverRarelySometimesOftenVac Often10Where you unable to reduce your game time?NeverRarelySometimesOftenVac Often11Have others unsuccessfully tried to reduce your game use?NeverRarelySometimesOftenVac Often12Have you failed when trying to reduce game time?NeverRarelySometimesOftenVac Often13Have you felt bad when you were unable to play?NeverRarelySometimesOftenVac Often14Have you become angry when unable to play?NeverRarelySometimesOftenVac Offen16Did you have fights with others (family, friends) over Your time spent on games?NeverRarelySometimesOftenVac Offen17Have you lied about time spent on games?NeverRarelySometimesOftenVac Offen18Have you time on games on games causedNeverRarelySometimesOftenVac Offen19Has your time on games on gamesNeverRarelySometimesOftenVac Offen	8	Have you played games to	Never	Rarely	Sometimes	Often	Very
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games caused sleep Never Rarely Sometimes Often Offen	18	Have you lied about time spent	Never	Rarely	Sometimes	Often	Very Often
deprivation /	19		Never	Rarely	Sometimes	Often	Very Often
20 Have you neglected other important activities (school Never Barely Sometimes Often Ve	20	Have you neglected other	Never	Rarely	Sometimes	Often	Very
work, sports) to play games?	21						Often Very
Never Rarely Sometimes Utten	41		Never	Rarely	Sometimes	Often	Often