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The Significance of Cognitive Distortions and Risk Factors Due to Android Games Addictions for Adults

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Background:

The primary purpose of this study is to find out the Significance of Cognitive Distortions and Risk Factors due to Android Game Addiction for Adults.

Methods:

The research population includes three main parameters Physical Effects, Mental Effects, and, Cognitive Effects each part contains 10 questions. The sample comprises 200 school students (male=150, females=50) between the ages of 8 to 20 years recruited from schools in Lahore, Pakistan. A total of 200 copies of the Questionnaire are distributed among the students. Only 180 copies are received and filled so the total response rate of the data collection was 90%. The SPSS tool was used to analyze the results of the Questionnaire. It aims to investigate the impacts that Android Games have on adults. As most of the researchers have done Quantitative research in this area, so I decided to conduct both Quantitative and Qualitative research designs which can help us get a deeper understanding of Android Game Addiction.

Findings:

By going through the results, it is revealed that the all above-mentioned three main parameters are found positive in adults. According to the range of the frequency, it is concluded that all three factors are in the medium range not more harmful.

There was a strong positive association between the addictions of students to Android mobile games and their physical and mental well-being in terms of physical, mental, and cognitive health.

Keywords: Cognitive Distortions, Risk factors, Physical Effects, Mental Effects, Cognitive Effects, Indoor Games, Outdoor Games, Mobile Games.

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Introduction

The offspring of the 1980s and 1990s unavoidably grew up with our trusty Nintendo Game Boys and Sega Play Tricks. We spent endless hours helping Mario spare the sovereign, hitting the most noteworthy stage in Tetris, and speeding through the connection link to our Super RC Pro-Am mates. Our enthusiasm for games has made us need to make and impart to our companions our universes. Today, quick on. Cell phones and tablets, contending with old, committed handheld gadgets, for example, the Nintendo 3DS and the PlayStation Vita, have become the most current portable gaming stage in this period. Our advantage has been restored by this turn of events, and we have begun to investigate which versatile stages can suit our innovation needs. Two basic essential types of games [1].

Indoor Games

Indoor games sport is a variety of structured forms of play or competitive physical activity typically performed indoors or at home. Popular indoor games include Chess, Ludo, snakes, ladders, Table tennis, scrabble, Uno, Carrom, etc.

Outdoor Games

Outdoor games are usually any game that needs to be played outside or that includes a wide play area otherwise. Outdoor games are usually any game that needs to be played outside or that includes a wide play area otherwise. Examples of outdoor games are Cricket, badminton, horseshoes, etc.

Video Games

Computer game support is a little box that acknowledges games as nonexclusive tapes, DVDs, Blu-beam circles, or direct downloads over the Internet. Consoles are commonly intended to interface with a TV, aside from handheld frameworks, for example, the Game Boy, Nintendo DS, or PlayStation Portable. Since the business dispatch of the primary computer game consoles, for example, the Magnavox Odyssey in the mid-1970s, gaming on the two PCs and consoles has grown progressively [2].

Mobile Games

A mobile game is a game played on a mobile phone (a phone or a smartphone feature), a tablet, a smartwatch, a PDA, a portable media player, or a graphics calculator. Video games are usually downloaded from all app stores and websites, but in many cases, mobile games are often loaded into portable devices when they are purchased via an infrared, Bluetooth, or memory card or the side loaded into the phone via cable [3].

Game Addiction

In [4] chip away at computer game reliance, they characterize game compulsion as indicated by the definition utilized by the US-based Center for Dependency and Mental Health. The middle portrays habit as "a reliance on something mental or physical." By the utilization or abuse of PC and computer games, people with game reliance can be said to have a mental reliance on enormously multiplayer internet games. A few cases have been recorded where clients impulsively play web-based games, to separate themselves from social collaboration and spotlight only on in-game results as opposed to out-game life exercises, for example, schooling, associating with loved ones, or sports. Out-game life ought to invest energy in school, drawing in with individuals from the family and game, and so on, in any case, players discover the in-game life more important than the out-game life. This implies they invested nearly their whole energy playing internet games.

Mobile Game Addiction

A variety of personal computer applications have been shifted to electronic computers such as the iPad and the smartphone as a result of the rapid growth of new technology. Human or multiplayer games played on the Internet on mobile computers are referred to as online video games. These games are particularly popular because they are available at no cost (for example, "freemium games," in which consumers pay for additional features). According to the most recent CNIC report, the growth rate of mobile video games has been 9.6%, with young people being the primary

demographic consumer. Teenagers are more vulnerable to Internet addiction than the rest of society due to their social and developmental characteristics, rapid Internet connectivity through a portable phone, and positive expectation of electronic games. Game-wringers were seen to have worse emotional, cognitive, and interpersonal diseases as well as improved social insulation, such as depression and anxiety. Video game addicts used to be compelled to sit at home or go to arcades to feed their addiction. Today's dedicated gamers would gladly fuel their addiction on their handheld devices. Gamers would be issued licenses for use at work, college, and with friends and relatives. Rising computer technology, also known as gaming with increasing realities, helps to increase the reliance on video games. According to psychology, digital reality games provide a feeling of diversion for the spectator, leaving the physical world boring. This factor is driven in many situations by video game addiction as users are attracted to more intense and relaxing interactions that allow users to neglect unresolved issues such as tension, trauma, and depression in the real world. Young children are more likely to become addicted to mobile gaming, according to research, because both of these age ranges lack the self-sufficiency to restrict their time playing sports. In augmented reality, on the other hand, many teenagers are unable to distinguish between fact and fantasy. Bullying and aggressive behavior are encouraged in games. When children begin playing video games at a young age, they are more likely to become addicted and have other health issues later in life. Dependence on mobile gaming and video games in general puts a person at risk for a variety of physical and psychological issues, as well as issues that impair his overall well-being. The unemployment rate has risen in recent years considerably for men aged 21 to 30 in the United States, and these men choose to play computer games instead of searching for work. Furthermore, for the first time since the 1930s, American men aged 18 to 34 live with their parents outside of sexual matters, which researchers attribute in part to video game addiction. The long-term effect on the physical and mental well-being of video games will contribute to serious health concerns that need medical attention as well. Many that lose their sleep and eat video games, for example, will suffer from insomnia, become underfed, and become food.

Cognitive Science

Cognitive Science ability is the interdisciplinary, logical glance at the contemplations and their procedures. It analyzes the nature, the assignments, and the highlights of perception (from a tremendous perspective). Mental universities of trouble to intellectual researchers incorporate language, discernment, memory, consideration, thinking, and feeling; to perceive those schools, psychological researchers acquire from fields, for example, phonetics, brain science, engineered insight, theory, neuroscience, and human studies [5]. The ordinary assessment of intellectual mechanical ability traverses numerous phases of the association, from picking up information and choice to good judgment and arranging; from neural hardware to particular psyche association. The psychological sciences started as a highbrow movement in the Nineteen Fifties normally known as the cognitive [6].

Cognitive Distortions and Their Types

A cognitive distortion is a distorted or unreasonable manner in which disease disorders, particularly those most influenced by psychosocial factors such as depression and anxiety, are formed or perpetuated. Psychiatrist Aaron T. Beck laid the groundwork for the study of such distortions, and his student David D. Burns continued work on the subject. Burns described personal and clinical experiences relating to cognitive illusions and their removal in Feeling Good, the new Mood Therapy. The definitions and examples of various common cognitive distortions are given by Judith S. Beck (2011) and Burns (1999). Examples of delusions include thinking all-or-nothing, tragic reading of the mind, excessive generalization, and disqualifying or discounting the positive. All-or-nothing thought happens when a person interprets information or a dichotomous situation (a static interpretation of information and its meaning) rather than on a continuum (a more fluid interpretation and meaning of the information). The failure is revealed by a person's effort to prove the outcome, without taking full account of the potential range of actual outcomes. Therapeutic interventions to change cognitive

distortions are an important component and appear effective in cognitive therapy [7]. Some types of Cognitive Distortions are given below.

Literature Review

Role of Cognitive Distortions in video game addiction

The objective of the study was to investigate the role of cognitive distortions in the growth of online game addiction among Chinese adults [8]. This research is based on two types, study1 and study 2. Study1 consists of 495 adolescents aged 12 to 19 years selected from two middle schools in Guangzhou. Framework factors, the IAS, the cognitive distortion (CDS), and the online cognitive addictive game scale (OGCAS), were applied and the study consists of 28 adolescents selected from a local mental hospital with uncontrolled online gameplay. These adolescents were divided into two groups one CBT (N=14) and the other clinical control group (N=14).

Mental failures and Cognitive

Distortions among adults several studies conducted in the last decade looked at the relationship between cognitive distortion and emotional control in young players and found that alcohol intake exacerbates the impact of gambling issues when they occur together. Metalizing (the ability to reflect on one's mental state and another) is a vital idea that has gained little exposure to this day. The research [9] aimed to see how metallization, emotional disorders, cognitive deformations, or alcohol consumption were all involved in adolescent gambling. 396 high school students in southern Italy (69.2 percent female) were between 14 and 19 years of age.

Impacts of Game Addiction on Children's health

Life experiences that affect a person's personality and attitudes have a significant impact on mental health. Examples of such incidents include domestic violence, neglect of children, and long-term stress. If your mental health is adversely affected, mental conditions or depression will develop. This research investigates the effect of video games on children's mental health. Children's video gambling addiction manifests itself in a lack of concentration on other everyday tasks, classroom inaccuracy, and overly sporting thoughts. Video game addiction is now known as a mental disorder by the World Health Organization (WHO). Other mental illnesses, such as stress, depression, and anxiety, may occur alongside gambling addiction. In the most recent version of the International Statistical Classification of Diseases, the WHO classified online gambling addiction or gambling disorder as a pathological disorder (ICD). Children's online addiction is one of the most common health issues among children and teenagers who play too many online video games. The obsession with spending too much time playing video games to alcohol and substance addiction has been linked in a variety of clinical trials. Some mental conditions, such as fatigue, depression, and anxiety disorders, may be addressed in the context of online gambling addiction.

Relationship between video Game Addiction and Depression

Although the relationships between the use of video games and negative consequences are being discussed, the relationships between addiction to video games and negative consequences are relatively well known. Nonetheless, previous studies suffer from methodological limitations which may have produced skewed tests. Further research is required which benefits from the use of methods that prevent omitted variable bias. A study was conducted to find out the relationship between video game addiction and depression also academic achievements. The current research is also consistent with previous studies in that addiction to video games was linked to other negative results, but it made the additional observation that the associations are unaffected by time-invariant individual effects. Future work will therefore seek to determine the temporal order of the alleged causal effects. Spending time playing video games does not have harmful effects, but teenagers experiencing video game-related issues are more likely to encounter difficulties in other aspects of life.

Psychological Distress due to Video Game Addiction

Video games are a common entertainment outlet for children and teenagers alike. Video games and the related consequences have become ever more common in cultures around the world.

A study was constructed on adolescents in Arabia to find out their psychological distress. The study was performed in 2016 at the International Schools in Buraidah, Al-Qassim amongst 276 students enrolled in ninth and twelfth grades. Students who returned signed consent forms from their parents completed a self-administered questionnaire that included validated measures of video game addiction, general health, and lifestyle addiction. It is revealed that the proportion was nearly equal between the sexes and the classes. Overweight or obese is about 32 percent, screen time was around 2 h / day at 75 percent, and 20 percent slept < 5 h / night. Sixteen percent (16 percent) had video games addiction and 54 percent had psychological distress. Psychological distress was highly associated with addiction to video games (OR = 4.1, CI 95 percent = 1.80, 9.47). Many important factors were the female gender, greater screen time, and shorter hours of sleep. The proportion of mentally depressed students had been high. Future research will explore certain possible associations of depression such as personal traits, family relationships, and academic achievement.

Using video games to boost decision-making abilities

Video games can help people develop their cognitive abilities. Games come in several genres, each affecting a specific neurological subcategory. The findings show that video games enhance thought and decision-making capabilities. Thought capabilities such as viewing, management of concentration, and decision-making increase because of video games. RTS players have superior computational stability to first-person shooter (FPS) players, while FPS players have lower switching costs at work. About video game mode, they have less. For example, after intensive simulation matches, nurses and doctors demonstrated enhanced decision-making and risk-taking. For behaviors that are close to cognitive abilities, high school and college students who had played video games had better outcomes than students who had not played video games. We encourage further studies to be able to align with our findings. Video game research can be divided into two categories between literature reviews and experimental work. Recent empirical findings are compared to conclude a literature review.

Why video Games are good a review:

Video games are a common platform and have a variety of psychological consequences for a broad spectrum of people. The purpose of this article is to carry out a detailed study of the game to determine the factors contributing to such varying degrees of well-being and to explain the possible benefits. We conclude that the impact of games on well-being, based on recent studies, is moderated in other areas such as gaming intentions and video gaming. The inclusion of social engagement will promote pro-social behavior and minimize the connection between violent video games and aggression which has been discovered in many studies. Furthermore, regarding violent video games and aggression, the beyond play thesis is heavily focused on human and socio-contextual factors. Physical activity in sports has been shown to improve physical well-being and satisfaction levels.

Video Game Addiction Scale for Children's

A study is conducted to develop a video game addiction scale for children. The point of the current investigation was to build up a legitimate and solid Videogame Compulsion Scale for Children (VASC). The information was gotten from 780 kids who finished the Videogame Addiction Scale (405 young ladies and 375 young men; 48.1% extending in age from 9 to 12 years). The example was arbitrarily part into two diverse sub-tests (test 1, n = 400; example 2, n = 380). Test 1 was utilized to perform an exploratory factor examination (EFA) to characterize the factorial structure of VASC. Because of EFA, a four-factor structure containing 21 things was gotten and clarified 55% of the absolute change (the four variables being self-control, reward/reinforcement, problems, and involvement^). The inward consistency unwavering quality of VASC has been discovered at 0.89. Corroborative factor investigation (CFA) was performed to affirm the factorial structure got by EFA in the staying half of the example (n = 390). The acquired fit lists from the CFA affirmed the structure of the EFA. The 21-thing VASC has great psychometric properties that can be utilized among Turkish schoolchildren populaces. The results of the rankings of boys at the VASC changed into notably better than that of girls. The look isn't always without its limitations.

The pattern changed into self-deciding and changed into the use of records accrued from Turkish youngsters.

Effects of Mobile Games on Youth during Covid break

Training is an essential component of human capital production and economic growth. As a link between primary, intermediate, and post-secondary education and the labor market, secondary education is critical for producing social and economic benefits. In pursuit of fun, a group of teenagers threw a dance. If you're committed to online gaming anywhere in the world from the provincial lockdown triggered by Pandemic Corvid-19, which forced locals to stay and study online, you can see young people and adults looking for hobbies, leisure opportunities, and online games. Dr. Greenfield discusses how sporting excellence will provide a feeling of superiority and integrity to young people who feel like social outcasts in their daily lives. "When you become one of the best players in a World of Warcraft game, tens of thousands of players are essentially your own, so you become a virtual god," a character says. It shows that even online mobile gamers have a small but significant effect on their social behavior. The findings show that the majority of those polled who play online mobile games earned 20 out of 25 ratings, with 80 percent rating "good" and receiving 5 to 20%. The only respondents who visited a vast number of teenage internet players were young people who only played mobile video games, so pure sampling was used to determine the sampling techniques used in the article. In total, 25 people responded to an online interview via Twitter and Facebook, and they all completed a survey questionnaire, which was the primary form of data collection. Individuals whose linguistic knowledge of all indicator teachers was seen by 7-14 young people, who all agreed on the advancement of these indicators, earned a time-honored weight of 80 percent, and arrays of individuals whose linguistic awareness of all indicator teachers was seen by 7-14 young people, who all agreed on the advancement of these indicators. Previously, data statistics are based on percentages. The following wise conclusions were reached based on the report's findings: The pandemic's effects could encourage reckless behavior, with negative consequences. Individuals' psychosocial conditions can be explained by psychologists, counselors, ergo therapists, and social workers for psychosocial care to continue to be offered where and wherever they are. In the last decade, literature has exploded, based mostly on a variety of facts concerning the requisite results of neuroimaging research, according to an upgraded report on contemporary views on gambling addiction.

Impacts of internet parenting style on Game Addiction

A descriptive study was conducted which is based on co relational survey method. The study consists of 1336 students which are selected from different high schools using a simple sampling method in Edirne City Centre to find out the impacts of internet parenting style on online game addiction. To gather the data in the study online game addiction scale, a personal information questionnaire, and the internet parental style scale was used. From the collected data ÖZGÜR discloses that 14.22% of adults encounter an extreme level of disturbance due to online game addiction. It is revealed that male adults have more chances to indulge in online game addiction than that girls as they want to earn from those games, or they have a higher sense of winning than girls. The adults who lived in the family circle and whose internet parental style is considered open-minded are extremely indulged in online game addiction than the adults whose parenting style is authorization based and has some restrictions upon them. A study, also found that there is a difference between online game addiction and the earnings of the parents. As the earnings are high the level of gaming is also high. This study has some limitations as this need to verify through mutual evaluation as it is performed on a single group.

Relationship between Game Addiction and Depression

A study was conducted on the students of seventh, eighth, and 9th grade (n=578 exact participants) recruited from a junior school in Guizhou Province to establish the relationship between mobile game addiction and depression, social anxiety, and loneliness. The study is based on a questionnaire that is sent to parents at home. Four types are scales are used i.e. Mobile Game

Addiction Scale, Depression scale, Social Anxiety Scale, and Child Loneliness Scale. The results showed extreme self-reported depression, loneliness, and social anxiety among adults due to mobile game addiction. It is also found that male students have more relation with mobile game addiction and also with social anxiety. As shown in earlier literature mobile game addiction has a positive association with social anxiety, depression, and loneliness. The group of students is homogeneous while the study becomes less effective when participants are selected from the normal public or a heterogeneous environment. In some studies, enough attention is not given to male video game addicts as they may suffer from more social anxiety.

Psychological Factors due to Mobile game Addiction

An online survey was constructed to find out the psychological factors of mobile social game addiction, are you addicted to candy crush saga? This study is based on an online survey and the data is gathered using the snowball data gathering technique. 14 university students are recruited who were the regular player of Candy Crush Saga. The online Game Questionnaire (MPOGQ) is used to find out the results. Different scales are used in this study such as the 20-item UCLA Loneliness Scale, Leisure Boredom Scale (LBS), and the Brief Self Control Scale. It is reported that loneliness was closely linked to mobile social game addiction, but it is not related to different levels of mobile social games. One cause is found that the excessive use of mobile social games causes loneliness. The long time spent online isolates people from the physical world and takes away from players the sense of belonging and contact with real people. Mobile social game addiction was found the most important predictor in terms of predicting the degree of mobile social games. Generalization of the results is reduced due to the non-probability sample recruited from Facebook and Douban is the main limitation of this study. The cross-sectional design is used in this study which did not address casually so other research designs are preferable like longitudinal research and qualitative studies are more vulnerable.

Mobile Game Addiction, cyberbullying and its effects on Academic performance

Mobile gambling is becoming more prevalent, putting people at risk for physical and mental health problems. Gaming dependency is a subset of Internet Gaming Disorder (IGD) that is close to video game dependence. IGD is blamed by students of educational institutions for poor academic performance in general. Nonetheless, according to a study by Samaha and Hawi, there is no correlation between smartphone addiction and academic achievement (2016). There was no research done in this study to see how online game harassment and cyberbullying affect students' academic performance. This research aims to see if any of these aspects affect students' academic performance. This study used a quantitative approach to see how students' academic achievement is linked to their mobile gaming and cyberbullying addictions. Eighty-five (85) respondents from the Philippine National University filled out two Google Forms questionnaires: the Game Dependence Questionnaire and the Cyber Bullying Questionnaire. Obtainable the two questionnaire respondents were chosen for sampling. Cyberbullying and mobile gambling abuse are two possible causes of low academic performance among students (building). On the other hand, many victims of cyberbullying are more likely to commit or cause cyberbullying. Other observations are discussed in greater depth in the paper. Though recent research has provided students with insights into the situation of mobile gambling, cyberbullying, violence, and their academic effects, mobile sports are addictive or cyberbullying. The study cannot say the games are the most addictive due to the lack of gambling by students. Alternative modes of gaming concerning electronic dependency and cyberbullying may also be investigated.

Use of Cell Phones and Mental Health

The ways that we communicate, talk, search for information, ride, work and take time in a few decades have revolutionized the mobile phone. The increase in mobile telephone spending on tablets has increased such that the phone is used nearly all over the place because of its various features, enhanced memory and speed, and constant Internet access. The purpose of this study was to examine the observations of the observatory in the context of psychological or compartmental

relations between mobile phones and mental health. For systematic paper scans written before 2017, PubMed and PsycINFO were included. Both documents concerned with RF, attention, defense, connection, sexual conduct, cyberbullying, evaluation, observational analysis, and case studies or trials are exempt. All of them are excluded. A total of 4,738 texts, titles, and abstracts were used, with 404 being collected in full and 290 included. Just 5% of the data are longitudinal. Self-reporting was the most popular way of calculation. One-third of the participants were babies or young adults. Graduate students and/or self-selected members made up the rest of the adults. The study's key findings show associations between the daily use of cell phones and mental well-being outcomes such as sleep and depression. Before going to bed, using a phone has been connected to less sleep time and worse sleep efficiency. The word "problematic usage" has had a host of unfavorable effects (dependence). Studies that take a clinical or behavioral approach to exposure can often reveal a connection between cell phone use and mental illness. However, to draw specific conclusions about interaction mechanisms and causes, higher-quality research is needed. Studies that look at clinical or behavioral exposure have shown a connection between mobile phone use and negative mental health consequences. To draw relevant conclusions about the processes and causal directions of interaction, a more reliable analysis with experimental designs, systematic observations, and well-defined participant populations is needed.

Risk factors associated with Video Game Addiction

A study was constructed to find out the risk factors which are associated with video game addiction. For this purpose, he established a comparative study between two parties' i.e. patients with game addiction and healthy people. 255 males and 8 females participated in the study to test the effects of video game addiction and to find the risk factors, which are based on a questionnaire. The sample comprises (N=263) video game-addicted patients and (N=118) healthy people who have participated in the research. Four factors were estimated to find out the risk factors. For individual factors code, '1' is set for males, and code '0' is set for males to check out the hierarchical difference between both sexes. To find out the cognitive factors Korean-Wechsler Adult Intelligent Scale was used. T-Test and Chi-Square were used for the Risk factors of both samples of video game addiction. In conclusion, it is found that patients with online video game addiction signify less responsive as they think simultaneously as compared to healthy people. Psychological conditions of the patients are also affected because they cannot pay full attention which because of ADHD (Attention Defect Hyperactivity Disorder). Other major disorders that are seen in the patients are MDD (Major Depressive Disorder), apprehension, and hasty.

Methodology

A study attempts to offer guidelines for video games that play a position in converting the mind function of youngsters and additionally offers answers to youngsters who're hooked on video games. Based on the outcomes obtained, it could be visible that instructional video games teach extra and keep away from addictions. Game dependency takes place in video games which can be entertainment. This recreation can cause youngsters to have awful behavior. Educational video games play a position in coaching youngsters to be better. , The author finds out some effects of game addiction among Childs. He found that game addiction can improve brain intelligence. Author reviews various studies which are conducted on game addiction among adolescents before concluding, the researchers concerned 27 Action Video Game (AVG) professionals who had participated in the League of Legends and Dota 2 countrywide championships. Besides, they additionally labored with 30 beginner gamers who have been uncommon and not very gifted in the game. Using an MRI scanner, the scientists took targeted images of the participants' insular cortex. As a result, expert game enthusiasts have increased useful connectivity and the mind extent of their insular sub-regions. Also finds brain-changing effects while playing games. Games can influence the mind and additionally reason adjustments in certain elements of the mind. Also gives some solutions for children who are affected by game addiction.

Sampling

School students are recruited from two schools in Lahore (Pakistan); the first one is Lahore Grammar School (LGS) (Gulberg campus) and the second is Allied School (Gulberg campus) and Divisional Public School (DPS) (DPS school road).

Sample Size

A total number of 200 participants are recruited (Male=160) and (Female=40). (N=60) are selected from Lahore Grammar School, (N=65) selected from Divisional Public School, and (N=70 are selected from Allied School.

Limitations of the Study

During the information-gathering procedure researcher confronted numerous issues are given as underneath:

- Due to the absence of assets and time unfit to direct inquire at the more extensive level.
- Some respondents were demonstrating a non-genuine frame of mind.
- Data is collected only from the two schools in Lahore due to a shortage of time.
- Only adults between the ages of 8 to 20 years are recruited for the selection of the data.
- It is also difficult to trace out the gaming adductors adults because the participants are adults of the ages above mentioned.

Data Analysis and Findings

The data analysis comprises the contingency tables downgrading the categories, frequency, and percentages of the variables. Moreover, the chi-square tests are applied to check impacts and associations between the variables.

Table 1: Biodata of the Students

Response	Frequency	Percentage	Valid %	Cumulative %
Male	150	83.3	83.3	83.3
Female	30	16.7	16.7	100.0
Total	180	100.0	100.0	

Mean=1.1667 SD=.37372

This table talks about the distribution of the participants with regard to their gender group. 83.3 % percent of participants are males and 16.7% are females.

Table 2: Age of the participants

Response	Frequency	Percentage	Valid %	Cumulative %
8-12	50	27.8	27.8	27.8
12-16	77	42.8	42.8	70.6
16-20	53	29.4	28.8	100.0
Total	180	100.0	100.0	

Mean= 2.2778 SD=.71735

The above table talks about the age differences of the participants. Participants between the ages 8-12 years are 27.8%, participants between the ages 12-16 years are 42.8% and the participants between the ages 16-20 years are 29.4%.

Table 3: Is playing excessive mobile games cause' headache/ pain in your fingers and hands?

Responses	Frequency	Percentage	Valid %	Cumulative %
All the time	16	8.9	8.9	8.9
Frequently	50	27.8	27.8	36.7
Often	52	28.9	28.9	65.6
Hardly	39	21.7	21.7	87.2
Never	23	12.8	12.8	100.0
Total	180	100.0	100.0	

Mean=3.0167 SD=1.16980

The above table describes how much excessive playing of mobile games causes headaches and pain in the fingers. It is revealed that the percentage of adults who feels pain all the time is 16%. Similarly, adults who feel pain frequently while playing mobile games 27.8%. Likewise, adults who feel pain are often 28.9%. And the percentage of adults who feels pain hardly is 21.7%. Adults which feel pain never are 12.8%.

Table 4: My muscles get stretched due to continuous playing of mobile games!

Responses	Frequency	Percentage	Valid %	Cumulative %
All the time	27	15.0	15.0	15.0
Frequently	38	21.1	21.1	36.1
Often	48	26.7	26.7	62.8
Hardly	46	25.6	25.6	88.3
Never	21	11.7	11.7	100
Total	180	100.0	100.0	

Mean=2.9778 SD=1.24153

This table classifies the views of the participants on whether their muscles get stretched during the excessive playing of mobile games. It is revealed that 15% of the participant felt muscle stretchiness all the time, 21.1% frequently, 26.7% often, 25.6% p hardly and 11.7% feels muscle stretchiness never.

Table 5: I feel fatigued while playing excessively playing of mobile games!

Responses	Frequency	Percentage	Valid %	Cumulative %
All the time	31	17.2	17.2	17.2
Frequently	36	20.0	20.0	37.2
Often	42	23.3	23.3	60.6
Hardly	42	23.3	23.3	83.9
Never	29	16.1	16.1	100.0
Total	180	100.0	100.0	

Mean= 3.0111 SD=1.33282

This table classifies the views of the participants who feel how much fatigue due to excessive mobile phone gaming. It is calculated that 17.2% of participants feel fatigued all the time. Where 20% of participants feel fatigued frequently and 23.3% of participants feel fatigued often, also 23.3% feel hard. Similarly, 16.1% of participants never feel any fatigue.

Table 6: Is your sleep time been disturbed due to mobile game addiction?

Responses	Frequency	Percentage	Valid %	Cumulative %
All the time	16	8.9	8.9	8.9
Frequently	63	35.0	35.0	43.9
Often	35	19.4	19.4	63.3
Hardly	45	25.0	25.0	88.3
Never	21	11.7	11.7	100.0
Total		100.0	100.0	

Mean= 2.9556 SD=1.19507

The above-displayed table mentioned the responses of the participants about mobile game addiction whether they feel or notice that their sleep time is disturbed due to excessive play of android mobile games. It is calculated that 8.9% of participants faced disturbance in their sleep all the time, 35% of participants frequently, similarly 19.4% of participants faced often, where 25.0% faced hardly and 21 % of participants faced sleep disturbance never.

Table 7: Does playing excessive mobile gaming cause eyesight problems/eye pain?

Responses	Frequency	Percentage	Valid %	Cumulative %
All the time	16	8.9	8.9	8.9
Frequently	50	27.8	27.8	36.3

Often	52	28.9	28.9	65.6
Hardly	39	21.7	21.7	87.2
Never	23	12.8	12.8	100.0
Total	180	100.0	100.0	

Mean=3.0167 SD=1.16980

The above-drawn table mentioned the responses of the participants. It is calculated that 8.9% of participants have eyesight problems all the problem, 27.8% of participants have eyesight problems frequently, and 28.9% have eyesight problems often. Similarly, 21.7% of participants faced hardly, and 12.8% of participants faced never.

Table 8: Is playing excessive mobile games bring obesity?

Responses	Frequency	Percentage	Valid %	Cumulative %
All the time	31	17.2	17.2	17.2
Frequently	36	20.0	20.0	37.2
Often	42	23.3	23.3	60.6
Hardly	42	23.3	23.3	83.9
Never	29	16.1	16.1	100.0
Total	180	100.0	100.0	

Mean= 3.0111 SD=1.33282

The above table describes the information about the participants about mobile game addiction and whether it brings obesity. It is revealed that 17.2% mentioned that it brings obesity all the time, and 20% of participants concluded that it brings obesity frequently. Where 23.3% of participants concluded it brings obesity often and 23.3% also faced hardly and 16.1% of participants mentioned that it never brings obesity.

Table 9: I feel restless when I am unable to play mobile games!

Responses	Frequency	Percentage	Valid %	Cumulative %
All the time	23	12.8	12.8	12.8
Frequently	44	24.4	24.4	37.2
Often	57	31.7	31.7	68.2
Hardly	33	18.3	18.3	87.2
Never	23	12.8	12.8	100.0
Total	180	100.0	100.0	

Mean=2.9389 SD=1.20596

The table represents the participants who express their experiences while they are playing android mobile games. 12.8% of participants declared that they feel all the time restless when they are unable to play android mobile games. 24.4% revealed that they feel restless frequently, 31.7 feels often, 18.3% feel hard and 12.8 % feel never.

Table 10: Is continuous sitting while playing mobile games causes posture disturbance?

Responses	Frequency	Percentage	Valid %	Cumulative %
All the time	25	13.9	13.9	13.9
Frequently	39	21.7	21.7	35.6
Often	54	30.0	30.0	65.6
Hardly	40	22.2	22.2	87.8
Never	22	12.2	12.2	100.0
Total	180	100.0	100.0	

Mean= 2.9722 SD=1.22100

The above table shows the percentage of the participants who faced posture disturbance while playing android mobile games. 13.9% of participants declared that they suffered posture disturbance all the time due to android game playing. Where 21.7 participants claimed that they

faced posture disturbance frequently, 30% feels often, 22.2 % feels hard and 12.2 % of participants revealed that they never feel any posture disturbance due to android mobile gameplay.

Table 11: Is it indulging you in depression when you are unable to play mobile games? Mean= 3.0111 SD=1.23718

Responses	Frequency	Percentage	Valid %	Cumulative %
All the time	24	13.3	13.3	13.3
Frequently	42	23.3	23.3	36.7
Often	44	24.4	24.4	61.1
Hardly	48	26.7	26.7	87.8
Never	22	12.2	12.2	100.0
Total	180	100.0	100.0	

The above-mentioned table shows the view of the participants regarding their playing of android mobile games. It is declared 13.3% of participants that they indulge in depression all the time when are unable to play android mobile games. 23.3% of participants revealed that they frequently indulge in depression, 24.4% indulge often, 26.7% indulge hardly and 12.2% participants never indulge in depression.

Table 12: Is playing excessive mobile games make you impulsive?

Responses	Frequency	Percentage	Valid %	Cumulative %
All the time	17	9.4	9.4	9.4
Frequently	40	22.2	22.2	31.7
Often	42	23.3	23.3	55.0
Hardly	48	26.7	26.7	81.7
Never	33	18.3	18.3	100.0
Total	180	100.0	100.0	

Mean=3.2278 SD=1.24546

The above table classifies the views of the participants about mobile game addiction making them impulsive. 9.4% of participants declared that it makes them impulsive all the time. 22.2% of participants revealed that it makes them impulsive frequently, 23.3% declared that it makes them impulsive often and 26.7% mentioned that it never makes them impulsive.

Table 13: Do you become aggressive while playing shooting games?

Responses	Frequency	Percentage	Valid %	Cumulative %
All the time	23	12.8	12.8	12.8
Frequently	47	26.1	26.1	38.9
Often	53	29.4	29.4	68.3
Hardly	37	20.6	20.6	88.9
Never	20	11.1	11.1	100.0
Total	180	100.0	100.0	

Mean=2.9056 SD=1.18979

The above table shows the frequency of the responses of the participants while playing shooting games they become aggressive. It calculated that 12.8 participants mentioned that become aggressive all the time while playing shooting mobile games. 26.1% of participants declared that they become aggressive frequently, 29.4% become often, where 20.6% become hard and 11.1% participants become never aggressive.

Table 14: Did losing competitive games make you disappointed?

Responses	Frequency	Percentage	Valid %	Cumulative %
All the time	24	13.3	13.3	13.3
Frequently	40	22.2	22.2	35.6
Often	47	26.1	26.1	61.7
Hardly	49	27.2	27.2	88.9

Never	20	11.1	11.1	100.0
Total	180	100.0	100.0	

Mean=3.0000 SD=1.22360

The data in the above table revealed that 13.3% of participants become disappointed when they lose competitive mobile games. 22.2% of participants mentioned that they become disappointed frequently, 26.1% of participants they become often, 27.2 they become hard, and 11.1% of participants declared that they never become disappointed.

Table 15: Is excessive playing of mobile games makes you anxious?

Responses	Frequency	Percentage	Valid %	Cumulative %
All the time	27	15.0	15.0	15.0
Frequently	37	20.6	20.6	35.6
Often	47	26.1	26.1	61.7
Hardly	47	26.1	26.1	87.8
Never	22	12.2	12.2	100.0
Total	180	100.0	100.0	

Mean= 3.0056 SD=1.24845

The data in the above table shows that excessive mobile games playing makes the participants anxious. Results revealed that 15% of participants become anxious all the time while playing excessive mobile games. 20.6% declared that they become anxious frequently, 26.1% of participants become anxious often, similarly 26.1% also hardly and 12.2% never become anxious.

Table 16: Are you feel detached from your family while playing mobile games?

Responses	Frequency	Percentage	Valid %	Cumulative %
All the time	21	11.7	11.7	11.7
Frequently	43	23.9	23.9	35.6
Often	41	22.8	22.8	58.3
Hardly	43	23.9	23.9	82.2
Never	32	17.8	17.8	100.0
Total	180	100.0	100.0	

Mean=3.1222 SD=1.28444

The above table shows that 11.7% of participants said that they detached from their family while playing mobile games and 23.9% of participants feel frequently that they detached from their family, 22.8% often, 23.9% hardly and 17.8% participants said that they never feel.

Table 17: Is the continuous playing of mobile games disturbed you emotionally?

Responses	Frequency	Percentage	Valid %	Cumulative %
All the time	27	15.0	15.0	15.0
Frequently	37	20.6	20.6	35.6
Often	47	26.1	26.1	61.7
Hardly	47	26.1	26.1	87.8
Never	22	12.2	12.2	100.0
Total	180	100.0	100.0	

Mean=3.0056 SD=1.24845

This table shows the percentage of the participants facing emotional problems due to android mobile games addiction. It is revealed that 15% of participants mentioned that by the continuous playing of mobile games they become emotional all the time. 20.6% of participants mentioned that they become emotional frequently. And 26.1% of participants often also 26.1 hardly and 12.2% participants declared they never become emotional.

The above-drawn table drawn describes the information about the participants that excessive android mobile gaming distracts their attention. 13.3% of participants think all the time

that their level of communication is affected. 25.6% think frequently, while 27.8% often, 22.8% hardly and 10.6% of participants think they never feel this.

Table 18: Do you think extremists while playing shooting games?

Responses	Frequency	Percentage	Valid %	Cumulative %
All the time	31	17.2	17.2	17.2
Frequently	36	20.0	20.0	37.2
Often	43	23.9	23.9	61.4
Hardly	42	23.3	23.3	84.4
Never	28	15.6	15.6	100.0
Total	180	100.0	100.0	

Mean=3.0222 SD=1.32427

Data in this table revealed that 17.12% of participants think extremist all the time while playing shooting games, whereas 20% of participants mentioned that they think extremist frequently, 23.9% often, 23.3% hardly and 15.6% never.

Table 19: Is playing excessive mobile gaming produce distortions in your thoughts?

Responses	Frequency	Percentage	Valid %	Cumulative %
All the time	14	7.8	7.8	7.8
Frequently	51	28.3	28.3	36.1
Often	41	22.8	22.8	58.8
Hardly	49	27.2	27.2	86.1
Never	25	13.9	13.9	100.0
Total	180	100.0	100.0	

Mean= 3.1111 SD=1.19069

The table classifies the participants based on their views about excessive mobile gaming. It is calculated that 7.8% of participants mentioned that excessive mobile gaming produces distortions in thoughts all the time and 28.3% of participants declared that it produces distortions in thoughts frequently. Similarly, 22.8% mentioned that it produces often, 27.2% declares hardly and 13.9% mentioned it never produces distortions in thoughts.

Table 20: Is the ratio of positivity in your thoughts decreased due to mobile game addiction?

Responses	Frequency	Percentage	Valid %	Cumulative %
All the time	16	5.9	5.9	5.9
Frequently	36	20.0	20.0	28.9
Often	57	31.7	31.7	60.6
Hardly	48	26.7	26.7	87.2
Never	23	12.8	12.8	100.0
Total	180	100.0	100.0	

Mean= 3.1444 SD=1.14883

The above data shows the percentage of the participants about excessive mobile gaming decreases the ratio of positivity in their thoughts. 5.9% of participants mentioned it decreases our positivity ratio all the time when they play excessive mobile gaming, whereas 20.0% of participants declared it decreases frequently and 31.7% declares it decreases often. Similarly, 26.7% mentioned it decreases hardly and 12.8% of participants declare it never decreases.

Table 21: Is playing excessive mobile games distract your attention?

Responses	Frequency	Percentage	Valid %	Cumulative %
All the time	24	13.3	13.3	13.3
Frequently	46	25.6	25.6	38.9
Often	50	27.8	27.8	66.7
Hardly	41	22.8	22.8	89.4
Never	19	10.6	10.6	100.0

Total	180	100.0	100.0	

Mean=2.9167 SD=1.19998

Table 22: Is your memory faded due to excessive mobile gaming?

Responses	Frequency	Percentage	Valid %	Cumulative %
All the time	12	6.7	6.7	6.7
Frequently	50	27.8	27.8	34.4
Often	40	22.2	22.2	56.7
Hardly	56	31.1	31.1	87.8
Never	22	12.2	12.2	100.0
Total	180	100.0	100.0	

Mean=3.1444 SD=1.15368

The above table shows that 11.7% of participants said that their memory fades while playing mobile games and 23.9% of participants feel frequently that they are detached from their family, and 22.8% often, 23.9% hardly and 17.8% of participants said that they never feel.

Table 23: Do you think vaguely while playing mobile games?

Responses	Frequency	Percentage	Valid %	Cumulative %
All the time	21	11.7	11.7	11.7
Frequently	51	28.3	28.3	40.0
Often	53	29.4	29.4	69.4
Hardly	38	21.1	21.1	90.6
Never	17	9.4	9.4	100.0
Total	180	100.0	100.0	

Mean= 2.8833 SD=1.15442

The above data shows the percentage of the participants that due to excessive mobile gaming think vaguely. 11.7% of participants mentioned it happens all the time when they play excessive mobile gaming, whereas 28.3% of participants declared it happens frequently and 29.4% declares it happens often. Similarly, 21.1% mentioned hardly and 9.4% of participants declare they never think.

Table 24: Do you think irrationally due to excessive mobile gaming?

Responses	Frequency	Percentage	Valid %	Cumulative %
All the time	14	7.8	7.8	7.8
Frequently	46	25.6	25.6	33.3
Often	32	17.8	17.8	51.1
Hardly	50	27.8	27.8	78.9
Never	38	21.1	21.1	100.0
Total	180	100.0	100.0	

Mean=3.2889 SD=1.27059

The table classifies the participants based on their views about excessive mobile gaming. It is calculated that 7.8% of participants mentioned that excessive mobile gaming them think irrationally all the time and 25.6% of participants declared that it happens frequently. Similarly, 17.8% mentioned that it produces often, 27.8% declares hardly and 12.1% mentioned it never happens.

Table 25: Do you perceive things negatively due to excessive mobile game addiction?

Responses	Frequency	Percentage	Valid %	Cumulative %
All the time	18	10.0	10.0	10.0
Frequently	55	30.6	30.6	40.6
Often	55	30.6	30.6	71.1
Hardly	36	20.0	20.0	91.1

Never	16	8.9	8.9	100.0
Total	180	100.0	100.0	

Mean= 2.8722 SD=1.11881

This table shows the percentage of the participants who perceived things negatively due to excessive android mobile games addiction. It is revealed that 10.0% of participants mentioned that the continuous playing of mobile games happens all the time. 30.6% of participants mentioned that they perceived things negatively frequently. And 30.6% of participants often also 20.0 hard and 8.9% of participants declared it never happens.

Conclusion

The foremost purpose of this thesis is to find out the cognitive distortions and risk factors due to Android Game Addiction in Adults. Addiction of some sort adversely impacts the individual's bio-psycho-social functioning. The number of technology addictions in today's world is on a drastic rise, and not even children are spared the ill effects of such addictions. Mobile Games Addiction has caused more damage than good, as is clearly shown by the people and users affected. The goal of this research was also to recognize and concentrate on the heavy use of Android Mobile Games. And to develop an assessment of cognitive distortions for adults. For this purpose, I developed a scale comprising 3 parts, each part including 10 questions. I did a survey by distributing a questionnaire in Schools in Pakistan. Three main parts of the scale were Physical Effects, Cognitive Effects, and Mental Effects. This scale is developed to find out the Cognitive Distortions in adults. As result, Cronbach's reliability test is also done and it is revealed that the scale is reliable. By going through the results, it is concluded that Physical effects are found in the adults but are moderate (range=33&frequency=21) not more effective. Mental Effects are also found positive in adults but these are also midrange because the maximum number of frequencies occurs in the range of 30 (range=32 & Frequency=18). Similarly, Cognitive Effects are also found positive in the participants but the ratio is also moderate (ranges=30, 31 & frequencies = 17, 15 accordingly. So finally, I concluded that Cognitive Distortions are found positive in the participants. The ratio of cognitive errors is not too high but mediocre.

Recommendations:

- Games should have completed the code of conduct for every religion.
- Reduction of signs when gaming is taken away or not available like sadness, anxiety, and irritability.
- In video games, the videogame industry should have respect for human self-respect.
- Aware the Adults that what amount of time spends on other activities.
- Parents should spend time with their kids to avoid playing video games from taking more time.
- Instead of video games, parents, teachers, and the community play a part in making children conscious of physical games.
- Speak about the dangers of mobile games with your kids. Make sure that they understand that gaming is supposed to be a fun activity (at an age-appropriate level), but it should not be all-consuming.
- Many mobile games are classified, but don't presume the expectations are up to the ratings. Check each game extensively, and you might even want your child to play a game.
- For instance, if your son comes home with a report card with all 'A's, you can encourage him to play an extra hour or two of a favorite video game.
- Kids who want to play video games will sneak around sometimes. Make it a rule to routinely search the technical facilities of your child for signs of using mobile games.
- Other than video games, make your child aware of things to do.

This research was conducted only on adults or students. It can be implemented in the adult population outside of schools too. In this research, the data were collected from a limited area. It can be collected from a large group of people or it should be taken from other areas of Pakistan as well.

The population of males is high more than that of females, only females or only males can also be taken for this study. Additional work should be done to fill the gap of the study on a large sample taken from different cities of Pakistan, so divergence across different cities should be acknowledged.

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