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Eng 102

Psychological effects of video gaming

Ever since I was child growing up I have always played video games and loved

Solving puzzles like being in a room and trying to get outside it by solving the its mystery

And following a storyline with each progress a new piece of the story is discovered

There is no doubt that video games have psychological effect in our mind and social

Behavior but a lot of scholars argued weather its positive effects or negative in this

Paper I will explore both the effects and how it’s affecting our daily life and brain.

History of video games

Over the past decades 30-40 video games became crucial part of our culture and

Our daily life. it all started in 1958 when William Higginbotham created the

First video game ever “tennis for two’’ which is a simple “2D” two demission video game the

Two players can only move one stick up and down tow bounce the ball between each other

Since it was the first digital video game It sparked a huge attention among people even though

how simple it is , but people are interested in new things in their nature , this huge attention

made Programmers to invest more time in developing in that area of computer and software

engineering. At the beginning of video games people and researcher were not paying attention

to psychological Effects of video gaming in human behavior, because in the old days video

game were Too simple to have effect our behavior and there is no bond between the game and

the Player , as computer hardware and software develop, video games are developing at the

Same rate. RPG and FPS First person shooter games started to come out. RPG or role playing

games., in which Players take an identity of fictional character , and set to adventure in its

fantasy world. Avatars are what players create to represent themselves in virtual worlds to others.

World of Warcraft is one of the most popular MMORPG games, which stands for massively

multiplayer online role playing, it had more than 10 million player In its world. Players pick a

race and class, in which they identify with weather its human paladin A warrior of light or a orc

warlock a dark sources that can summon demons. A study conducted by Nick Yee and Jeremy

Bailenson form Standard University, on avatars and self-representation, the study shows there is

a link between how the player behave with its avatar that he created. Also they point out, the

mismatch of self-representation on avatars and how others perceive us participants with

attractive avatars showed intimate and friendly behaviors. ‘’a target’s false self-concept causes

them to interact with the perceiver in a way such that the perceiver behaves in a way that

confirms the target’s false self-concept—can occur’’(Yee). Avatars makes players,

change their social behavior with its avatar accordingly, and this is important because we

are not ourselves in a virtual world some players might lose their sense of self due to a long

exposure interacting with other players in a virtual world. Nowadays, some players

identify their social life in a MMORG virtual world and they have lost control of their real

world social life.

Modern video games are becoming more emotionally touching and have a deep

Bondage between the character of the game and player himself with the modrenaztiation of

computer’s . it allowed video games to become more sophticated And have genres either you

like to play action video games or strategy games According to Dr.Shwan Green and Aaron R

from the the federation of associations in behavioral And brain science “action video games-

games that feature quickly moving targets that come in and out of view, include large amounts

of clutter, and that require the user to make rapid, accurate decisions - have particularly

positive cognitive impacts, even when compared to "brain games," which are created

specifically to improve cognitive function”. Being able to make a fast decision on a given

situation and more importantly accurate decision is a sign of intelligence . action video

games such as “Call of duty” and “Team fortress 2” lets the players encounter many

different situation that Dr .Green pointed out that require the player to choose quickly and act

, weather shooting targets that are moving fast or moving away from danger fast , doing this

constantly for a period of time it would improve the player general awareness and decision

making process , all this can be implanted in real life situations . a good example of this is when

a person encounter a life threating situation could effect his decision making like having a cold

feet not being able to move when danger is a head , also Action games have been known to

improve attention and maintaining focus for a long period of time, this is not necessarily about

all Action video games but the majority of them require huge amount of consternation and

attention . on the other that and many scholars and educators have argued that a lot

action video games allow the player the engage in a wide range of immoral activates and

promote violence and aggression .

“many situational factors can increase arousal and anger, even certain nonviolent video

games. For instance, race driving video games, sports video games, and even perceptual/motor

skills games that require intense concentration and rapid responses (e.g., Tetris, Bejeweled) can

increase heart rate and blood pressure. Similarly, video games that are too fast paced or too

difficult for the player are likely to increase frustration and anger, which in turn might activate

aggressive thoughts”(Craig A. Anderson)

Many video games have a really challenging levels to beat in order to keep

The player hooked to the game if the game is not challenging and anyone can beat it

Easily can be boring and make the player less likely to continue playing . we only

Experience leisure when the challenge that we are faced with meet our skill even

No violent video game can make a player frustrated and angry its also will known in the gaming

community as “rage quit” being stuck at a Level or stage in a game for a long period of time or

losing right before of completing the level and having to redo it again form the start

can be agonizing and make the player leave the game in a bad state of mind and high blood

pressure due to the frustration . video games production company noticed this and

didn’t want the players to leave with frustration or rage quit the game . at end games

were deigned to be fun and give the player an enjoyable experience . so many

companies started to offer difficulties mood in order to let the player have the flexibility

to change difficulties level so player with different skills can play the same game

and have fun. It seemed that Craig A. Anderson and Dr. Green were looking

at action video games from different prospective Anderson saying that playing

fast pace games that require a huge amount of attention and conctration would

Increase the anger and frustration of the player and that might lead to aggression

Behavior. in the other hand Dr. Green says that . action video games would improve

Our ability descion making process . all these claims are legitimate and don’t contradict

Each other . but it rose a key question , is it more important to improve our ability

In a descion making or should we fear the side effects anger and aggression ?

aggressive behavior

people like Craig A. Anderson and many scholars have linked anger and aggression

too video games, however a new study by Andrew Przyblski at Oxford University and co-author

Richard Ryan disagrees with Anderson. The study fouced more in the psychological player

experience rather then solely on video games content . the experience of frustration and

anger is not unique to gamers Ryan says. He argues that players in sports may

lose a game as result of a bad call and face the same anger and frustration “When people feel

they have no control over the outcome of a game, that leads to aggression,” he explains. “We

saw that in our experiments. If you press someone’s competencies, they’ll become more

aggressive, and our effects held up whether the games were violent or not.”(Richard Ryan)

this is a really interesting argument if sports can lead the player sometimes toward anger and

frustration , can we say that they promote violence and aggression ? the answer is no,

frustration and anger comes from being not able to perform in a certain given challenge

weather it’s a video game or not ‘’ The researchers also surveyed 300 avid gamers to identify

how real world gamers might experience the same phenomena. When asked about pre- and

post-game feelings, gamers reported that their inability to master a game or its controls caused

feelings of frustration and affected their sense of enjoyment in the experience’’. (Andrew

Przyblski) I myself could relate to this, I have always wanted to learn how to play chess,

so I gave it a shot at first I was trying to learn the basic rules how chess pieces move

but when I played against players who have more experience then I do made me frustrated

and angry for not being able to preform , but with time and patience my experience rose

and I started enjoying playing it

The American Medical Association don’t recognize video games as psychiatric disorder ,

though lots of educators and scholars have curtsied video games for being mostly violent and

Addictive Have bad psychological effects on us , especially children . Dougles Gentile the

director of psychological department at Iowa state university wrote that “there are now scores of

studies showing that the pattern of problems pathological gamers face are very similar to the

problems people with substance abuse or gambling addictions have”. Which makes sense video

games are like any game, it can be abused by the person but in video games addiction is not as

bad as gambling or drugs addiction in gambling addication a person would keep playing until he

runs out of money and thinking the next time he plays he is going return his losses and this

could lead him into terrible a state of life even with drugs wasting money into something that

directly effects negatively on your health , most of the severe addiction cases are from gambling

and drugs , video game have a much lighter form of addiction trying to beat a level that the

player have been stuck in for a while refusing to leave the game until you have beaten it and or

getting hooked to the storyline of the video game and wanting to how its going to end , these are

all light from of addiction and can’t be treated medical unlike the other substance addiction.

Another study show on video game addiction that excessive use of video game might

have bad social consequences , Dr. Michael M. Merzenich the director of the scientific learning

Corporation points out in his research that the time spent away from school or work and social

Activity on gaming have serious consequences in our social behavior and academic success

Also he mentioned that ‘’ The increasingly heavy use of video games and related virtual reality

simulation environments for training combat military personnel provides clear testimony of

their effectiveness for inuring the ‘player’ against the social challenges and stresses associated

with observing or voluntarily initiating aggressive and violent behaviors’’(Dr.Merzenich) .

simulation games are becoming really important genre of video games, its cores idea is to try to

create games that have similar real life experience . some have heavy educational content

that we could benefit from and have fun experience in improving some specific skills within us

without encountering it in real life and having bad Consequences if we didn’t get it right

Dr.merzenich argues how could simulation games can be very effective but also he points out

how could they be effective not only in improving our technical skills but also they have

a serious psychological impacts . Soldiers around the world face a lots of psychological stress

due to wars and the use of military combat training simulation games, would

improve their technical skills , but also makes the soldiers look at his job and mission

Objectively rather than what morally sensible and it would have the same psychological effects

On normal civilian. But that doesn’t mean all simulation games have a negative psychological

Effects, Dr.Merzenich explains

‘’As more true game developers turn their attention to educational and/or clinical

applications, new fields are emerging in which educational and medical practitioners are

collaborating with game designers to develop fun and attractive activities that will guarantee

time on task and at the same time have the educational or rehabilitation impact that experts in

the field are seeking.’’ (Dr. Michael M. Merzenich).

Dr.Merzenich, wants developers to invest more in games that promote learn and play, which is

really important, because some player lost their sense of achievement through school work

and replaced it video game achievements .

Virtual heroes Division of applied research association have developed a video game

more specifically a surgical simulation software “HumanSim” that is available for the public but

it was created for the US army, its purpose is to provide training for new students and doctors

for a first time experience just to let them feel how a real life situation would be "It was an

honor to create this medical training application for the U.S. Army, in support of their pre-

deployment training for Soldiers returning to the field. Combining our Unreal-Engine-based

virtual training systems with a real-time physiology engine created a significantly challenging

sedation and airway trainer applicable to the military and commercial medical spaces. Our hope

is by releasing this application that more patients can be saved in the real world through our

virtual training." Said by the Davison manager Randy Brown . People from

millennial generation have been known for their multitasking Ability to be better than other

previous generation and this all thanks to technology also in video games multitasking

is a important skill to have or develop in some video games the player have to

interact with different objects try to connect and match  Them in the same time the player

needs to avoid threats being thrown at him .

Conclusion

Society have been ignorant toward video games by generalizing it being bad for

Us and media has the tendency to produce breathless headlines about video games

effects described it as Dr.Green ‘’it is worth noting that the term ‘video games’ is far from a

single construct and thus, has almost no scientific predictive power. One can no more say what

the effects of video games are, than one can say what the effects of food are’’(Dr.green) there

are many kinds and types of games and not taking the consideration that there is many Video

games which has a lot positive effects on our brain. Especially in the modern Age, video games

are becoming much bigger and more sophisticated so generalizing It would biased look. Show

an example how dose youe idea connect to this .

https://vhil.stanford.edu/pubs/2007/yee-proteus-effect.pdf

Reference

**Gentile, Douglas. "Gentile Cites Positive, Negative Effects of Video Games on the Brain in Nature Reviews Article."*Gentile Cites Positive, Negative Effects of Video Games on the Brain in Nature Reviews Article*. Medical Express, 2011. Web. 7 Nov. 2015.**

**Brown, Randy Brown. "Virtual Heroes Releases 3D Medical Trainer HumanSim: Sedation and Airway." *GlobeNewswire News Room*. 2015. Web. 4 Nov. 2015.**

<http://www.academia.edu/3755202/McLean_L._and_Griffiths_M.D._2013_._The_psychological_effects_of_videogames_on_>

**McLean, Lavinia. "McLean, L. & Griffiths, M.D. (2013). The Psychological Effects of Videogames on Young People. Aloma: Revista De Psicologia, Ciències De L'Educació I De L'Esport, 31 (1), 119-133." *McLean, L. & Griffiths, M.D. (2013).* Web. 8 Nov. 2015.**

<http://www.rochester.edu/newscenter/frustration-in-mastering-video-games-linked-to-aggression/>

**Przyblski, Andrew. "Video Gamers’ Aggression Linked to Frustration, Not Violent Content." *NewsCenter*. Rochester University. Web. 15 Nov. 2015.**

<https://public.psych.iastate.edu/caa/abstracts/2010-2014/10asisbsrs.pdf>

**Anderson, Craig. "Violent Video Game Effects on Aggression, Empathy, and Prosocial Behavior in Eastern and Western Countries: A Meta-Analytic Review."*Public Psychology*. Iowa State University Department of Psychology, 2010. Web. 16 Nov. 2015.**

http://www.drdouglas.org/drdpdfs/Nature\_Reviews\_Neuroscience\_2011.pdf