



The Psychology behind GAMING

IS YOUR PASSION SETTING YOU UP FOR SUCCESS?

“IT MAKES
PEOPLE
AGGRESSIVE!”

“IT’S A TOOL
FOR BATTLING
DEPRESSION!”

“IT MAKES
PEOPLE LESS
PRODUCTIVE!”

“IT MAKES
PEOPLE MORE
PRODUCTIVE!”

“IT HARMS
CHILDREN’S
DEVELOPMENT!”

“IT HELPS CHILDREN
DEVELOP COGNITIVE
SKILLS!”



Since the dawn of video games, debate has raged on about the psychological implications of this interactive digital world.

Can the mental stimulation of video games encourage productivity or demotivate us to develop in the real world? Can it cultivate positive thinking or does it stimulate depression and addiction? Are video games holding you back from achieving your full potential? We have reviewed numerous studies in the hope of clearing up uncertainty around the implications of video games.

With the release of games like *Uncharted 4: A Thief's End* and *Far Cry 5*,

we witness the virtual world continue to evolve testing new and untapped possibilities. As the line between reality and virtual reality becomes more blurred, this creates more uncertainty of the associations video games have on our cognitive processes. We also see a more enticing portal for fans to escape into, but what are the latest implications of this appealing new world?

In this article we have broken down some of the positive and negative implications of gaming with the intention of answering the question: what potential value and costs do video games hold for us?

“Video games foster the mindset that allows creativity to grow”

— Nolan Bushnell, Video Game Hall of Famer



GOOD TO GO

POSITIVE ASPECTS OF GAMING

PICKUP GROUP¹: SOCIAL BENEFITS

Gamers have formed their own subculture, consequently this has provided connection and socialisation for those who might otherwise be isolated. No longer bound by their location, they bond over a shared interest. This is evident for teenage boys where video games have been documented as having a significant impact on the development and maintenance of their friendships. 38% of teenage boys surveyed say they share their gaming handle as one of the first three pieces of information exchanged when they meet someone they would like to be friends with.²

"I personally think the best part about PUGs is the insane bantz and jokes you

can make with random strangers"
— **Wesley Hucker**, Streamer

EXTRA LIFE: POSITIVE AGEING

In Digital Media Australia's 2018 report they conducted a study to see how different levels of gaming impacted the players. At the end of the study 90% of participants stated that they felt playing video games may increase mental stimulation for ageing participants. The same report revealed that 43% of senior participants play video games for leisure and lead the charge as the largest demographic to take up gaming in the past six years. This rise in 65+ gamers suggests that seniors are finding an increased value in gaming.

GAMING LINGO & REFERENCE

- 1. Pickup Group (PUG)** is the process of picking up other gamers to make yourself a strong team to take on a mission or quest within the game. Usually the better the group dynamic, the better the group will perform.
- 2. "Teens, Technology and Friendships"** Pew Research Center, Washington, D.C. (6/8/15)
<http://www.pewinternet.org/2015/08/06/teens-technology-and-friendships/>

“I’ve learned over the years that if you start thinking about the race, it stresses you out a little bit. I just try to relax and think about video games, what I’m gonna do after the race, what I’m gonna do just to chill. Stuff like that to relax a little before the race.”

— **Usain Bolt**, Jamaican sprinter and world record holder”



REAL TIME STRATEGY³: COGNITIVE BENEFITS

Digital Report Australia found 84% of participants felt video games improved their thinking. This isn't surprising with strategy, concentration, decision-making and other cognitive skills constantly challenged through video games. One experiment documented that action video games significantly improved participants' perception, top-down attention, spatial cognition and cognitive flexibility (Bediou, B et al 2018). Video games testing players' cognitive skills is not a new inclusion; this is evident in the very first arcade game – *Pong*. *Pong* tested players' hand-eye and spatial coordination as they played. Different video games offer different forms of mental stimulation from fast-paced game, *Call of Duty*, testing strategy to *Game of Thrones: A Telltale Game Series* testing problem solving skills. Video games encourage you to overcome obstacles, concentrate, make decisions, collaborate and develop your skills to achieve your goals.

“Some people say video games rot your brain, but I think they work different muscles

that maybe you don't normally use.”

— **Ezra Koenig**, American musician, screenwriter and radio personality

OUT OF CHARACTER⁴: FIGHTING DEPRESSION

There has been substantial evidence to support the claim that video games possess a therapeutic element. One study found that fast-paced action video games improved players' decisiveness and enhanced their cognitive ability. With cognitive deficiency linked to depression, this mental stimulation provided by video games can lead to a positive impact for gamers. Another study found casual video gaming can lift players' moods in different ways. So, if you're feeling glum why not consider swapping out some of your *Mortal Combat* game time with the more wacky *Rocket League*?

“A game is an opportunity to focus our energy, with relentless optimism, at something we're good at (or getting better at) and enjoy. In other words, gameplay is the direct emotional opposite of depression.”

— **Jane McGonigal**, American game designer and author

GAMING LINGO

3. Real Time Strategy (RTS) is for games that generally require particular elements of manoeuvring and strategy.

4. Out of Character (OOC) is usually used in role-playing games when players want to say something in real life rather than as their character.

DAMAGE PER SECOND

NEGATIVE ASPECTS OF GAMING

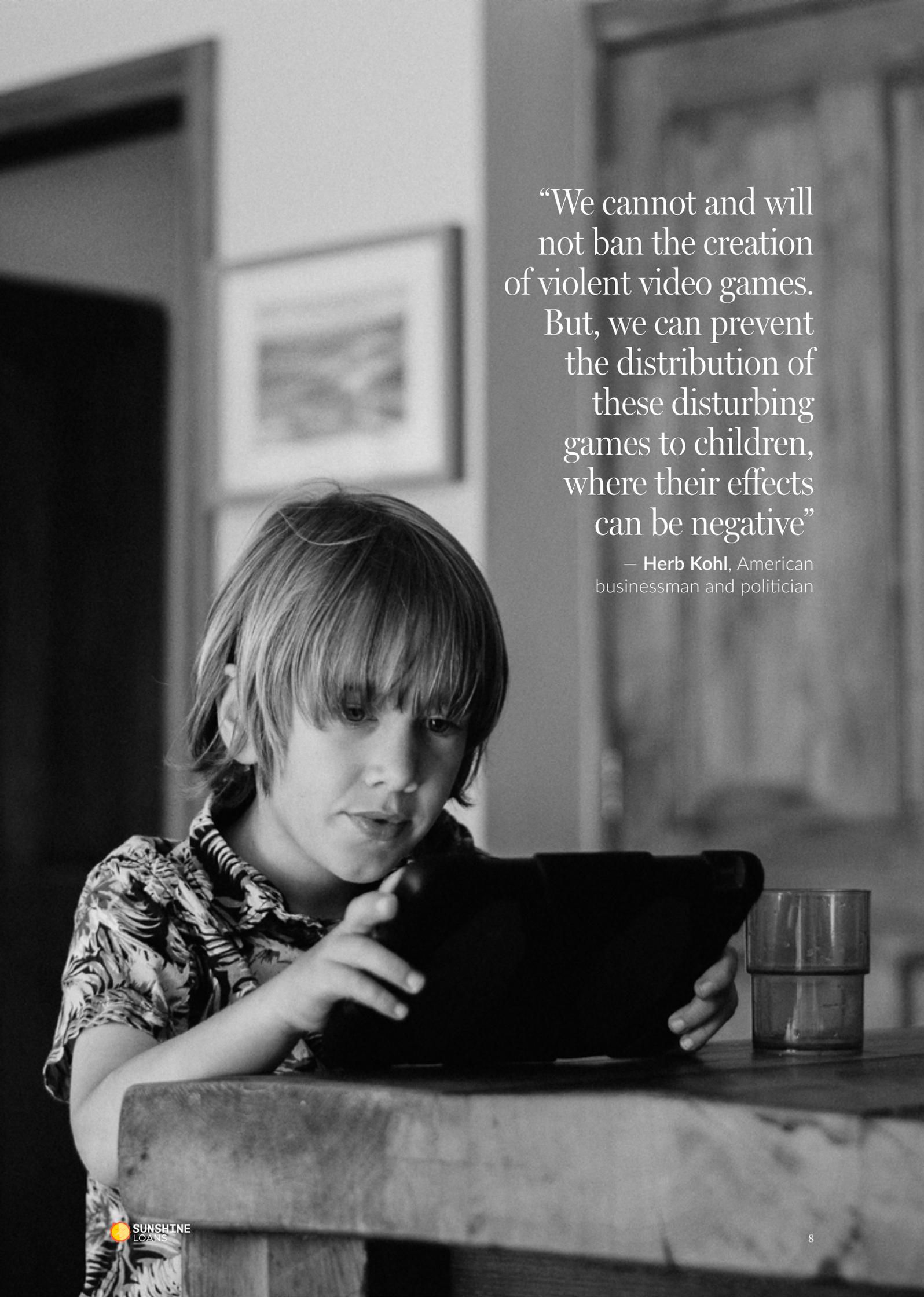
MONSTER OR BEAST⁵: AGGRESSION AND GAMING

The argument that video games increase aggression in players is a popular one, and not completely unfounded. However, context is required, as these accusations are mainly focused on violent video games. Various studies have found an association with playing violent video games and an increase in physical aggression. A meta-analysis conducted in 2018 reviewed 24 studies and confirmed violent video games increased physical aggression in children over time (T. Prescott, D. Sargent & G. Hull 2018). However, they also found that even violent video games relieved stress, improved problem solving and hand-eye coordination. With most video games requiring little to no verbal cognition

to play, it is not really a surprise that children who played violent video games regularly would turn to physical aggression when they can't communicate their frustrations. Some video games teach that an action brings a certain reaction, for example in *Grand Theft Auto V* you can steal a car and be rewarded with cash. The National Centre for Health Research reported that long term, video games can desensitise people to seeing aggressive behaviour, and even decrease prosocial behaviours such as the ability to feel empathy. These studies are mainly focused on children, whose brains have not finished developing. That is why ensuring the player's maturity, cognitive skills, ability to process emotions and distinguish realities should be taken into consideration when their guardian or parent allows them to play violent video games.

GAMING LINGO

5. Monster or Beast (MOB) is used to refer to non-player characters whose purpose is usually to be killed for plot continuation in the game. They are usually the bad guys and therefore aggressive.



“We cannot and will not ban the creation of violent video games. But, we can prevent the distribution of these disturbing games to children, where their effects can be negative”

— **Herb Kohl**, American businessman and politician

GRINDING⁶: ADDICTION AND GAMING DISORDER

Classified by the World Health Organization as “impaired control over gaming”, gaming disorders see sufferers prioritising gaming over other activities despite any negative consequences that may occur. This disorder is usually quite severe and can cause personal, social, educational and professional impairments for those diagnosed. Many Asian countries record a significant number of sufferers (most

aged 10-19), claiming 10-15% of young people are sufferers, compared to 1-10% recorded in the West. China, Japan and South Korea have explored options to help ween their young citizens from internet use, with a focus on video games. Japan did this by shutting off young players’ access to online games late at night. Again, we are seeing an issue with some young players struggling to find the balance between their gaming and other elements of their lives.

GAMING LINGO

6. Grinding is the process of playing for an unprecedented amount of time in order to increase the player’s strength or power within a particular game.



“Looking at virtual reality through computer screens, video game screens, and above all television screens is a denial of personality development. It’s a denial of socialization, of expansion of vocabulary, of interaction with real human beings”

— **Ralph Nader**, American political activist, author, lecturer and attorney

GOOD LUCK HAVE FUN⁷

FINAL ARGUMENTS

After reviewing both arguments for and against gaming, we can acknowledge that gaming can be a positive activity when played responsibly. If played excessively, without balance or the content is of a maturity level beyond the player's psychological development, there can be negative consequences. But with games like *Tetris* improving spatial cognition to the latest virtual

reality being adopted by psychologists to diagnose and treat patients, we can see endless potential of this constantly evolving technology. The value of video games is difficult to quantify, but from our findings we can conclude that (if played responsibly) video games have the potential to enhance various cognitive skills that could set you up for success.

GAMING LINGO

7. Good Luck Have Fun (GLHF) is usually adopted in multi-player games and said as a sign of good will at the start of a game.

“To make an embarrassing admission,
I like video games. That’s what got me into
software engineering when I was a kid.
I wanted to make money so I could buy a
better computer to play better video games
– nothing like saving the world.”

– **Elon Musk**, entrepreneur and investor

WHAT'S NEW IN 2019?

UPCOMING GAME RELEASES

2019's shaping up to be a big year for gaming enthusiasts with a big collection due in the New Year.

If you're a Super Mario fan, there's a host of new games to look forward to with your favourite characters making an appearance.

A third instalment of *Luigi's Mansion* is expected on the Switch platform. He makes a second appearance, teaming up with Mario in *Bowser's Inside Story* for the 3DS console. Beloved dinosaur Yoshi has the spotlight with his very own *Crafted World* game. How will it compare to the classic *Yoshi's Island*?

Final Fantasy lovers are in for a busy year in 2019 with not just one but four re-releases scheduled. Fans should look out for *Final Fantasy VII, IX, X and XII: Zodiac Edition* which is being ported to Switch and Xbox One.

For those of you anticipating the upcoming *Anthem* game from EA, you won't have long to wait as it's due for release on February 22nd.

Kingdom Hearts 3 is scheduled for release in late January. After several delays, this highly anticipated game will

offer new areas from Disney films *Frozen* and *Tangled*. Whether you're on a PS4 or Xbox One, this new game has been released on both platforms for every gamer's convenience.

Jedi: Fallen Order will be a welcome addition to the 2019 game release line up for Star Wars fans and action-adventure gamers. Although there's little information so far about the game, we know it's set after the events of Episode III: *Revenge of the Sith* and you'll play as a Padawan.

Fast forward to a post-apocalyptic future in *Metro Exodus* and fight for survival as you battle a hostile environment and discover your weapons arsenal.

Race from hundreds of zombies in PS4 game *Days Gone*, due for release on 26th April. Face unique challenges and use your initiative to escape alive.

In keeping with the zombie narrative, *World War Z* offers yet more creatures of the undead to do battle with. Based on the original story, it's set to offer multi-player options so you can team up with your mates to defeat the zombie crowds. Play on PS4, PC and Xbox One.



TOP TIPS TO MAKE GAMING ECONOMICAL

Let's not lie, video games are expensive (especially the latest releases), but there are affordable options so you can have your game and play it too.

1 SHARING IS CARING

Split the cost of your game and share the fun with your mates. Whether you split it with housemates, workmates or your mate Greg from primary school, this is one way to cut costs on video game expenses.

2 TRY BEFORE YOU BUY

Rather than blowing your birthday cash on the latest console, why not rent it to get your fill until the day you can afford it? You can do this with the latest games as well. If renting is too pricey you can split that with your mates as well and have them all round for games and pizza.

3 SUBSCRIPTION SERVICES

Various companies offer subscription services that allow you to download games to play on your PC at home. Humble Bundle is one of these subscription services. What makes Humble Bundle special is that you get to decide where your cash goes; whether you want it to go to charity, game developers or to tip the Humble Bundle team, the power is in your hands. Just be careful, sometimes subscriptions can end up costlier in the long run, so do your maths before subscribing.

4 GO RETRO OR GO HOME

The latest games can be pricey, so why not consider going for an older and cheaper alternative? Be transported back in a nostalgic haze with the Nintendo Classic Gaming console that you can purchase with a collection of some of the best old school games ready to play.