Getting Gamers

We often hear that videogames can have a bad influence on children and people in general. They tend to make us addicted to games, they trigger violence, and so on. However, what we often do *not* hear is why this is actually the case. Therefore, I decided to do my deep dive into what psychological effect videogames have on us and why games are made this way. I stumbled upon *Getting Gamers: The Psychology of Video Games and Their Impact on the People who Play Them* by Jamie Madigan. I wrote a summary of two of the four parts of the book, which I would like to share with you.

Part 1: Those who play

Chapter 1: Antisocial Behaviour

A young psychology Ph.D Jeffrey Lin conducted several studies on, often negatively, changed behaviour of gamers, for example insults, sexism, homophobia, racism and other sorts of nasty behaviour. He soon discovered that most game developers treated player behaviour as an unsolvable problem. But he thought otherwise. He worked together with Riot games founders Brandon Beck and Mark Merrill and created the Player Behaviour Team to conduct several experiments. They first researched why toxic behaviour happens online. Why do regular people turn into savages when they play online games? Based on several studies on player identity, accountability and authority figures by for example Blizzard Entertainment in 2010, Edward Diener in 1976 and a study about stealing among halloween trick-or-treaters, one answer to that question is ‘deinviduation’.

Deinviduation is a mental state where one’s personal identity fades into the background. It is caused by reduced social accountability (“you can’t see me”) and reduced self-monitoring (“I can’t see me”). For many years psychologists have been trying to develop deinviduation theories to explain what goes on in people’s minds when they feel like they are anonymous, unaccountable for their actions and like a faceless part of a crowd.

Reduced social accountability means that players know that their social identity is not on the line when showing toxic behaviour in online games, because their identity is simply anonymous (“you can’t see me”). Reduced self-monitoring is when players do not feel responsible for their actions by for example blaming others, a designated authority figure, for their actions (“I can’t see me). Anonymous players basically act without the burden of consequences.

The Player Behaviour Team concluded that player behaviour is also shaped by the environment. Players pay close attention to the theme of the game and the behaviour of other players to determine what is expected from them and then alter their behaviour to fit those expectations. Therefore, deinviduation is not necessarily a bad thing. If the environment trigger positive behaviour like collaboration and helpfulness, players tend to act in a prosocial way. Finally, games, systems and community-management tools can help shape the effects of deinviduation by controlling social accountability, self-monitoring and assumptions about group norms.

Chapter 2: Cheating

This chapter dives into motivations for players to cheat. Behavioural economist Dan Ariely conducted an experiment in which subjects were given the opportunity to cheat with and without consequences. The results show that players are more likely to cheat if they think they are not being watched. Players are also more likely to cheat if they know for sure that someone else is also cheating.

Jeremy Blackburn from University of South Florida took a closer look at social networking among cheaters. He found out that cheaters most often come together. If they see other people do it, they often automatically think that it is acceptable behaviour even though they know it is actually wrong. At Steam, developed by Valve, gamers got a “CHEATER” flag and a Valve Anti-Cheat ban on their account if they cheated. This ‘flag’ was also visible to other players. As a result, cheaters are more likely to hide by putting their account on private, because cheaters do not like to admit that they cheat. Cheaters would also lose people on their friends list over time.

Another motivation to cheat is loss aversion. It is in people’s nature that we hate to lose rather than gaining something of equal value. We cheat to keep from losing. A study by researchers in the Netherlands in 2011 found that people are more likely to cheat on performance-related goals rather

than mastery goals. Especially when we have to play against other people. We then show performance-avoidance behaviour to try to avoid doing worse than a competitor. This happens for example in the motorcycle-driving game Trials Fusion, in which players' quickest time is compared to others and players can race against a 'ghost' of other player's best time. In another game called Starcraft II the same cheating behaviour is identified. Players are put in leagues and can move up to higher leagues by winning enough games. If you do not continue to keep winning games, you will drop back down. To prevent this from happening, players cheat the system by dropping out of matches when they are on the verge of losing. To conclude, loss aversion motivates players to maintain their number of wins and minimise their number of losses.

Impulses to cheat can be controlled by attacking one's identity as a cheater or non-cheater, even if they know there are no consequences. A small change in wording already makes a difference. People rather hear "do not cheat" over "don't be a cheater". The second is much more of a direct personal attack on one's self-image. We do not like to be labeled or accused of something. Though, most people cheat just a little bit, enough to gain some advantage but not enough to damage their self-concept and reputation.

Chapter 3: Superfans and Memberships

Psychologists Robert Knox and James Inkster did research on voting behaviour of patrons at horse races, also called gamblers. They found that the gamblers' perception of how good a horse is could change in a matter of seconds. Between standing in line for the betting window and placing the bet, the gamblers' confidence would increase. They concluded that cognitive dissonance was the reason. We don't want to believe that we made the wrong decision, because that would cause a lot of stress and mental taxation due to second-guessing. Instead what happens is that when there is a mismatch between our actions and beliefs, a cognitive tension is created. We try to release that by either changing our behaviour or our belief.

Choice-supportive bias is the main example of biases that lead to irrational and weird behaviour of people. For example, gamers don't have all the time and money to buy and play all videogame systems and games. Choosing between a Sony, Microsoft or Nintendo console is basically a big bet they have to do. Due to choice-supportive bias we choose to only select and remember the information that would support that we have made the right decision. In other words, we remember the pros of our decisions more than the cons. This is also why superfans, fangirls and fanboys, stick together with people who share the same opinion. This kind of behaviour is very well displayed in the 'war' between Xbox One versus Playstation 4.

Another term that is also known in psychology is the self-categorisation theory. People naturally tend to construct social identities based on identification with and membership in different groups. In simpler terms this theory can be called group membership.

Choice-supportive bias and group membership come together when someone criticises a product, like a game or game console, that we like and/or have and base our identities on. Firstly, we find it hard to have multiple opinions about the same thing. Secondly, it is like an attack on our personality. It is in human nature to react poorly to the source of criticism. Especially when that source is outside of the group that we are member of and identify with.

Chapter 4: Nostalgia

Getting nostalgic about games from back in the good old days fulfils important psychological roles, such as coping with stress and melancholy. Researchers also found out that nostalgia acts as an antidote to feelings of sadness, loss and loneliness. It elevates our mood and self-esteem and we find it easier to trust others. Often when we reminisce about the past, we remember the good times we had with friends and fun holidays, but games as well. Older generations nowadays, can remember getting the original Desert Combat mod for Battlefield 1942, while the younger generations probably do not even know what a mod is (neither did I). When we get nostalgic we enjoy connecting our current selves to bigger accomplishments in the past. Overall, we tend to get nostalgic about the positive experiences that shaped our character.

An item's history has a lot of psychological weight attached to it. People overvalue items that they own in contrast to people that want to buy the same item. For example, the author of the book, Jamie Madigan, wanted to sell his old videogames. The games that he had barely played were sold for a

rather low price. However, the games he played that started some of his friendships were not sold, because buyers found them too expensive. Madigan had overpriced them. This is called the endowment effect. Similar results were found in an experiment with children who were made to believe that they could duplicate their favourite blankets and stuffed pillows. Of course, it wasn't an actual duplicate, but rather the same item. None of them would give away the 'original' item easily and they barely cared for the duplicate.

We unconsciously remember things that make us happy over things that don't make us happy. This kind of bias is also known as the 'rose-tinted glasses' phenomenon. For gamers it is more like a rose-tinted heads-up display. Another bias, similar to the previous one, is the 'fading affect bias'. This means that positive memories fade away significantly slower than negatives memories. Severely traumatic experiences are not included.

Part 2: Those who make

Chapter 5: Ranking

Scores are just numbers unless they are put into context. That is why game developers add leaderboards, achievements, scores and other in-game features to trigger us compare our achievements to others'. These so called social comparisons drive us to play longer and more often. It definitely matters who we are comparing ourselves to. We don't hold much value to comparing ourselves to complete strangers, but we do to friends, people we know and people who we have things in common with. So we have better reference points to compare us to them. Take Candy Crush for example. In that game we can compare our scores to friends and people who we already compare other aspects of our lives to all the time. It's these kind of features that constantly motivate us to play one more match instead of shutting down our computer or phone and go to bed.

Another way games make you more satisfied with yourself and your performance is by using the "big fish in a small pond" effect. People feel better about themselves if they are at the top of a badly performing group than at the bottom of a well-performing group. This phenomenon was proven in a study by Ethan Zell, Mark Alicke and Dorian Bloom at Ohio University. A group of 10 students were split into two groups of 5. They got an assignment to watch videotaped statements and had to distinguish liars from truth tellers. Students who were ranked 5th of the 5 felt worse than knowing they were 5th out of 10. The first ranking meant they were the worst performing student. The second ranking is more like a mediocre score. This relates back to the social comparison theory. It either makes you feel bad about yourself or motivates you to step up your games and get into the top score. Therefore, game developers implement a system that provide comparisons to friends. Some game developers take this to another level and put gamers in comparison groups that hit closer to home (literally). Instead of global rankings, they let you compare to people from the same country, town or even neighbourhood. By using GPS information they compare you to people who have visited the same location. By narrowing down the comparison group, you can become the big fish in the small pond, and that makes you feel better about yourself and motivate you to play harder. This does not only happen with game scores, but also with accomplishments. For example, "You've scored 1000 headshots - something only 10 percent of other players have done", would make gamers feel like they are part of the upper rank.

Psychologically the difference between 1st and 2nd place is much larger than between 78th and 79th. In addition, concluded from a study during the 1992 Summer Olympics, bronze medalists look much happier than silver medal winners. This is because bronze medal winners compare themselves to ranks below them. They were very close to winning no medal at all. Where as silver medal winners think about how close they were to being the best of all.

The Dunning-Kruger effect, named after a 1999 article by Cornell University professor of psychology David Dunning and his student Justin Kruger, is difficult to avoid for new players. It describes how people who are bad at something overestimate their skills and performance and experts underestimate themselves. The reason for this is because the more skilled you are at something, the more you understand that there are complexities and possibilities you don't know they exist.

Ch 6: Motivators

This chapter is about psychological mechanisms behind progress-related game elements. Researchers Andrew Przybylski, Scott Rigby and Richard Ryan proposed and tested a model of why

people play video games. It is called the self determination theory (SDT), in which is argued that people engage in voluntary behaviour to connect to three psychological motivators: competence, autonomy and relatedness. The next paragraphs will elaborate on this. The researchers also claim that people will play games longer and enjoy them more based on the extend to which the motivators are met. Progress-related game elements have a direct connection to these motivators and help to achieve satisfaction of those.

The competence motivator of the SDT is the need to feel competent at what you are doing, doing it effectively and developing new skills. In video games, SDT involves getting higher scores, becoming more powerful, winning, and getting feedback of how well you are doing. For example, completing a quest gives you the feeling of accomplishment, or earning a badge for getting 100 headshots in a competitive shooter. It could also be seeing your character level up in a progress bar.

In the SDT, autonomy stands for the fact that we are more satisfied with and activity when we have meaningful choices. This is seen in when we are able to choose which side quest we want to complete and how to complete it. This happens for example in the role-playing game *Skyrim* where players can choose whether they ally with rebels or the ruling class in order to complete part of the storyline. In addition, psychologist Jack Brehm introduced his theory of psychological reactance. According to his theory, we tend to feel threatened when we lose options and freedom. In BioWare, gamers are confronted with a dilemma where they have to choose which character they have to pursue a romantic relationship with. This would mean that the door to other characters would be closed. Gamers would avoid completing quests up until the point where they have to make a final choice.

Relatedness is the final motivator of the SDT. This motivator is the need to feel a meaningful connection with other (fictional) players in a videogame. Some games have team-oriented goals that require gamers to cooperate. Each player has a specific role and set of tasks to complete, and the players are relying on one another to be able to complete their tasks. In other games, players have to band in alliances to protect each other and share resources. So, this makes you feel like you matter to people, and it gives you a nice feeling when you do what is expected of you.

So far my summary. I really liked to read it, because I can recognize myself in some of the points that are discussed and I am not even a gamer. What I can conclude from this is that the human brain is easily deceived. The psychology of videogames has been studied for decades already and does not only apply to videogames, but also to every day acts. Game developers are smart enough to play in on these studies on the human psychology, to make their game even more addictive and successful.

The third part of the book is about the psychology behind marketing and sales of videogames. The fourth and final part of the book is about whether we shape in-game avatars or they shape us, why people like violent games so much, and whether games can make us smarter. So, if you are interested, I would definitely recommend this book. Have fun reading!

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