What Is the Post-Game Depression? A Narrative Inquiry

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Abstract

Despite the fact that video games and gaming are one of the main focuses of scholars in the field of cyberpsychology, there are a lot of phenomena that hardly get any scientific cover. One of them is post-game depression, a term coined in the gamers community to express a specific state that some of them experience after playing certain video games. However, as to the authors' knowledge, there has been no research focusing on understanding that state. Based on the findings of narrative psychology, a narrative inquiry approach was chosen for the presented qualitative, exploratory study. Using guidelines from the interpretative phenomenological analysis, the final sample of 35 given narratives of players were analysed, of which 22 described post-game depression and 13 of narrators described reasons why they did not experience it. After comparing the results between the two groups, the general conclusion is that post-game depression is a state of media anhedonia and reminiscing about the game that gave a visceral, insightful, thought-provoking and emotionally driven experience where players had parasocial relationships with in-game characters and/or their avatars/protagonists. Possible buffer factors can be personal growth from the experience and a fulfilling ending for the player. It is important to further understand what other factors, for example, personal traits of the players and specific game mechanics, contribute to that state since it can be a possible cause of serious psychological distress on the one hand, on the other a possible phase of being personally enriched by the experience of playing certain video games.

Introduction

A review of publications in the field of cyberpsychology by Ancis (2020) shows that one of the main subjects of interest by researchers is video games and gaming. This is in line with a previous review made by Ogonowska (2018). But it seems that the focus is not on the experience itself but rather on the possibility to correlate variables relating to video games (such as game genre, overall hours spent daily and so on) and variables relating to, for example, mental health. Such academic pursuit is important, but it cannot give a broader understanding of what that experience actually is and how it can impact players in various ways that are hard or impossible to identify using quantitative approaches. The presented paper presents results of research that focused on the experience that popularly is called *post-game depression*.

Post-game depression is a term coined by gamers to express a certain feeling of emptiness after completing a game that they were strongly engaged in (Minor, 2021). If one wants to learn something about post-game depression, *Google* web search gives around 151,000,000 results after typing *post-game depression*. There are

articles on media sites, video essays on *YouTube,* and many posts on social media sites, like *Reddit,* about it. Yet using *Google Scholar,* to find any scientific take on this phenomenon, brings no real results. This seems like a huge gap in knowledge, but as S. L. Bowman and Lieberoth (2018) argue, academic psychology is not really interested in studying game-playing experience (in authors' case the RPG genre). And as this statement might be an exaggeration from a point of view of the quantitative paradigm, there are comparably fewer studies made in the qualitative paradigm. But comparing video games studies with, for example, personality psychology or social psychology, that quote may be partially true. Another important thing is to distinguish between the experience of playing video games and the activity of playing video games. First being an introspective phenomenon, and second, being a behavior that can be observed and described using variables (like game genre, hours of playtime, etc.). The latter seems to fit more into quantitative research.

There are studies regarding video games and their influence on aggression (e.g., Howe & Cionea, 2021), health benefits (e.g., Kaczmarek et al., 2017; Russoniello et al., 2019; see Wilkinson, 2016), problematic video gameplay (e.g., King et al., 2011), education (Ninaus & Nebel, 2021; Ritterfeld & Weber, 2006) or identity exploration (e.g., Bessiere et al., 2007; Klimczyk, 2021). But it seems that post-game depression is not noticed in any major research. In fact, post-series depression is quite similar to that which gamers describe as post-game depression on a conceptual level, and is also a niche subject, despite being a part of an experience that is quite common (see Kottasz et al., 2019).

The goal of the presented study was to explore what it means for gamers to experience post-game depression, how to define it, using the data, and what constitutes that state, i.e., certain feelings, thoughts, or behaviours. Since it's an introspective experience the narrative inquiry has been chosen as a theoretical background to identify the individual meanings that gamers attach to that state. It is well established notion in narrative psychology that narrative can be a valid way to approximate in what emotional state the narrator (person telling a story about the experience) is (Pennebaker et al., 2003), what personal meanings someone wants to convey (Baumeister & Newman, 1994), that it is a natural way to cognitively construct the reality (Bruner, 1991; Murray, 2007) and that it is an externalization of introspective phenomena (Squire et al., 2008). Materials from which they are constructed are memories stored in autobiographical memory (Nelson & Fivush, 2004), which are partialy personal since they are constructed in social interactions and compared to sociocultural norms (Dudai & Edelson, 2016; Fivush et al., 2011). Autobiographical memories are socially shared (Rimé et al., 1998) which in the days of social media and video game culture can be easier to do.

There are several reasons why this phenomenon should be studied. First of all, the term implies an experience that might be harmful to the psychological well-being and it is important to find if people who experience post-game depression share any parallels with people that suffer from depression or are experiencing subclinical depression symptoms (see Ji, 2012; Parker & Paterson, 2015). In the public eye's view, there is a concern that video games could be harmful to mental health, yet works on serious games (see Wilkinson, 2016) and the therapeutic effects of playing video games show benefits and contradict the common misconception about gaming. But on the other hand, there is a growing amount of literature regarding the possible link between video games and depression (e.g., Tortolero et al., 2014) with emphasise on addiction problems (e.g., Brunborg et al., 2014; Stavropoulos et al., 2020; see Ostinelli et al., 2021), yet some argue that there is no relationship between violent video games (which tend to be treated as the most problematic video games) and depression (Valadez & Ferguson, 2012) or that video games can actually help in dealing with symptoms of it (Kowal et al., 2021; Martinez et al., 2021; Pine et al., 2020; Poppelaars et al., 2021; Russoniello et al., 2013). Problematic video games use is an undebatable matter, yet some concerns are related to the criteria that are being used to diagnose someone with an addiction to video games (Billieux et al., 2019; Hellman et al., 2013; Weinstein, 2010; Wood, 2008). Some scholars argue that video games playing activity is being pathologised based on biases and unclear criteria (Bean et al., 2017). The takeaway from this is that video games and mental health is a relationship that should be studied further since there are still aspects of it that are unclear. Since post-game depression is the term coined by players themselves, research on it could be a way of understanding those unclear areas using qualitative methods to get an insider's perspective.

Since the experience could be influenced by the mechanics and narrative plot of the game it could be useful for the designers aiming to make the player feel negative emotions (see Denisova et al., 2021), which studies have shown could make the player feel satisfied after completing the game (e.g., Bopp et al., 2016) but on the other hand, make them reconsider some choices if the experience could be harmful afterwards. Lastly, research on post-game depression can be a valuable contribution to the growing number of research focusing on factors other

than fun and hedonistic enjoyment from the game (e.g., Bopp et al., 2015, 2016, 2018; Boyle et al., 2012; Daneels, Malliet et al., 2021; Elson et al., 2014; Jennet et al., 2008; Kim et al., 2015; Mekler et al., 2014, 2018).

Since statements about post-game depression implies some more profound, eudaimonic character of mentioned experience (see Daneels, Bowman et al., 2021), therefore next part of this paper will consider how video games playing experience can have an impact on a player beyond just the hedonistic aspect.

Video Games as an Impactful Experience

For the past decades, video games have become a major part of research in social sciences (for systematic review, see Boyle et al., 2012). As technology develops the range of video game genres and game platforms widens and with it the scope of scientific research. Since the days of the first video games (such as *Bertie The Brain*; see Rokošný, 2018) up until today video games have become a worldwide phenomenon – from the prosperous video games industry and entertainment to global cultural events (i.e., *Pokemon GO*; see Kaczmarek et al., 2017). They have also become the source and medium for narratives for the scholars to research (Ostenson, 2013; Thon, 2009).

People, in general, play games to feel the enjoyment of that experience (Mekler et al., 2014). Video games are mostly associated with fun and it is a common concept that this is the factor that makes people gravitate towards them, and motivates them to play. They became the staple of entertainment that was mostly addressed to children. But as generations of players became older it seems that the need for something more than just the fun aspect of play developed in them – the recent works on eudaimonic experience show the possibility of that need (e.g., Daneels, Bowman et al., 2021). And for some, video games have become a source of nostalgia that induces many psychological and behavioural acts (see N. D. Bowman et al., 2022; Heineman, 2014; Robinson & N. D. Bowman, 2021; Wulf et al., 2018).

Some scholars (e.g., Christy & Fox, 2016) argue that there is not a sufficient amount of research made to know how the narrativity of modern video games can influence the experience of the players. While this statement might be partially true, since video games studies are a fairly new field of research, there have been many recent findings describing different game experiences that show the possible outcomes of mentioned influence. The narrative of the game plays a vital role in the process of the player's identification with the game's avatar (Hefner et al., 2007). The process itself is complex and many factors contribute to it, modify it or enable it (see Downs et al., 2019). The narrative plot of the game can put players in front of choices that would not be possible in real-life (Ferchaud & Oliver, 2019; Guegan et al., 2020) giving them the possibility to explore their values and identity (Bessiere et al., 2007). Some scholars (e.g., Mekler et al., 2018) argue that video games are, in particular, well suited for reflection. Not only related to logical puzzles (planning and experimenting) but also on a more personal level (like mentioned identity exploration). Even such aspects as giving the players ability to make customizations in the game are related to their sense of identity (Kim et al., 2015).

As Hefner et al. (2007) state the relationship between the player and his virtual counterpart (the avatar) can not be studied with an approach similar to that of movies and literature studies, since here the player can influence the behaviour and appearance of the said avatar. This allows the player to not only observe, in virtual settings, situations that they have never before been in but also to take part in them using video game characters. That can, as was previously mentioned, be a possibility to tackle moral dilemmas that could never happen in real life (Ferchaud & Oliver, 2019; Guegan et al., 2020). Such experience evokes strong emotions (de Mul, 2015). That emotional factor is important in creating autobiographical memories (Nelson & Fivush, 2004).

Mentioned avatar plays a key role in the video game playing experience. It is not only part of the game mechanic but rather a phenomenological entity (Banks & Bowman, 2021) created by the player – when players attach different meanings and fantasies about, for example, the adventures of the avatar but also their moral judgments, values and how they develop relationships with them, in their mind, it makes the avatar something more than just pixels on the screen. The relationship between the player and his avatar influence the degree of enjoyment from the game and constitutes applying important meaning to that experience (N. D. Bowman et al., 2016). Banks (2015; Banks & Bowman, 2021; Downs et al., 2019) presented four types of relationship between the player and avatar: avatar as object, avatar as me, avatar as symbiote and avatar as other. That typology is social in its' approach, meaning that player and avatar can have no social relation (the avatar as object, that is treated as a tool), a one that is defined as being an extension of the player into the virtual world (avatar as me), a one in which the avatar and player are intertwined (avatar as symbiote, this type emphasis identities negotiation and sense-making), and

lastly treating avatar as a distinct social agent having own life story, values and exists independently within the game world.

In summary, video game playing experience can have a profound effect on the player and can be a meaningful and personal, introspective experience that can manifest itself in different forms. It seems that post-game depression, named by the players themselves, is such an experience but it is unknown what actually it is and what factors evoke such a state. Introspectiveness of that experience implies using a narrative approach. Therefore the research questions have been imposed:

RQ1: How do players describe post-game depression?

RQ2: What are the specific themes reoccurring in narratives about that experience?

RQ3: Are there any qualities of video game that evokes such a state?

Methods

Procedure

The research process, adapted for this study, was made using guidelines from Adler and associates (Adler et al., 2017). The authors emphasized that their proposition is made for a quantitative model of research. Therefore, some alteration has been made for the presented research. Since the main goal of the study was to explore unknown phenomena, statistical methods have been replaced with qualitative narrative inquiry methods. Therefore, research questions and qualitative method of analysis have been choosen rather than testable hypotheses.

The Interpretative Phenomenological Analysis Procedure

Guidelines proposed by Pietkiewicz and Smith (2014) were used to analyze acquired narratives.

The authors point out that IPA provides a set of flexible guidelines that can be adapted according to the research and its objectives. They propose the following steps for using it:

1. multiple reading and notes making – researcher has to read the transcript of narratives a couple of times to immerse themselves in the data. Each reading often provides new insights. At this stage, the authors advice is to make notes about observations, reflections, and initial interpretative comments (for example about used language, use of metaphors, contexts).

2. transforming notes into emerging themes – at this step researcher should work on notes. Results of the first step should provide enough source material to work on. The aim here is to transform notes into more abstract phrases that may refer to psychological conceptualization. Even though the researcher is not working with transcription alone, notes were made based on it, it still influences the conclusions. This, in a way, resembles the hermeneutic circle.

3. seeking relationships and clustering themes – based on conceptual similarities, the researcher cluster discovered themes together to form groups. In practice, it means compiling themes for the whole transcript before looking for connections. Some of the themes could be dropped from the analysis (they do not fit the criteria or the data quality is too low). The final list may include themes and subthemes.

Inclusion criteria for answers, based on the literature, were as follows:

- the narrator addresses emotional states that he experienced,

- there is a narrative cohesion, i.e., narrator uses examples from playing the game to explain their emotional state,

- the narrator gives narratives that are about their experience or about characters in the game that influenced the way they felt,

- besides emotional states, the narrator is describing if that experience changed the way they perceive something in their life, i.e., made them feel a certain way towards other things or changed their behaviour in any way, etc.

Answers that did not fall into that criteria were excluded from analysis (i.e., review of game mechanisms, short or incohesive answers).

Questionnaire

The introduction of the questionnaire had information about the research purpose, contact information, disclaimer about consent to participate in the study, possibility of quitting at any point and that the study is fully anonymous.

The opening prompt was constructed to elicit narrative thinking in participants (see Bruner, 1986). After the opening prompt second one was specifically focused on the video game playing experience and it was the first prompt in the questionnaire. This way of constructing the prompt (see Appendix) has two reasons behind it: it is still quite open, therefore it might elicit a broader narrative (mainly through pointed dichotomies), on the other hand, it focuses the participant's attention on the memorable experience of playing the game. After that, prompt about in-game characters was presented to further expand on the previous, more open prompt. After that, the prompt was used to find out if the experience was sometimes recalled during the post-completion period. Next, the participant had to answer a short question for brief summary of the experience. The next prompt considered the influence and activity of other people in social media. The final prompt was used to narrow down the narrative to key aspects that were crucial for research questions, mainly pointing out at this point the post-game depression.

After the prompts, the metric part was presented.

The structure of the questionnaire was set to prevent the participants from trying to fit into the researcher's expectations artificially. The idea behind it was to make the participants reminisce about the playing experience, bring it to mind, dwell on it, describe and reexperience it and after that try to answer the question – is the term post-game depression capturing that experience well or not. That way the description would be more organic and not forced by the prompt that could be too narrow and suggestive.

Participants

Participants have been recruited from social media groups, discord channels and internet forums. Data was collected in the period of 19th of January till 18th of February 2022. The link to the google forms narrative questionnaire and request to participate was posted on groups related to video games in general and two regarding specific video games, namely Disco Elysium (ZA/UM, 2019), and Telltale's The Walking Dead (Telltale/Skybound Games, first season released in 2012). Since posts about post-game depression can be found in topics regarding mentioned games it was the reason to recruit the participants that played these two specific video games.

44 participants filled out the questionnaire. After deleting empty and/or incomplete answers, 42 participants left. The age of participants ranged from 13 to 42 (μ = 22.85 years old, M = 21, σ = 8.85). 31 participants were male (73,8%), 7 female (16,7%), 2 choose not to specify (4,8%) and 2 were nonbinary (4,8%). 19 participants gave narratives about the experience of playing Disco Elysium (45,2%), 20 about Telltale's The Walking Dead (47,6%), 1 about Assassins Creed Unity (2,4%), 1 about Red Embrace: Mezzanine (2,4%), 1 about World's End Club (2,4%).

Results

From the 42 given narratives, 7 did not fit into the acceptance criteria and were excluded from the final sample.

Results have been divided into two groups for narrative analysis. The first group are narratives given by the narrator that acknowledged on his own or thanks to the narrative prompt that he experienced post-game depression. The second group consisted of narratives given by the narrator that did not experience that state. This will enable comparison between two groups to see if there were some qualities that might constitute post-game depression, for example, emotional involvement, certain in-game moments, game mechanics, that are intrinsic to the game itself and qualities of the narrator themself, such as being an emotional person.

It was decided to aggregate topics and present them in tables. This will provide an overlook on all the robust data that was acquired. Sample quotes were added as exemplifications of identified topics and themes.

Narratives About Post-Game Depression

From 35 narratives, that fit into the final sample of data, 22 were given by narrators that claimed they experienced or are experiencing post-game depression.

Tables 1, 2, 3, 4, 5 and 6 shows final themes and subthemes that were left after excluding subthemes that had too little presence in the data. To illustrate them better samples of narratives were given as exemplifications.

Table 1. *Theme of Video Game as a Meaningful Experience.*

Subtheme	Sample of narrative
Reminiscence of the events	"Every waking moment of every day for a week after finishing the game. And still, I think about it and feel a weird emotional twinge." – 17. M. Telltale's The Walking Dead. 2 weeks ago.
Visceral experience	"Constant awe. The highest highs and the lowest lows, I've never laughed more at (or with?) a game, but at the same time playing the game put me in a real bad funk for weeks that I'm still kind of reeling from even now." – 27. Nonbinary. Disco Elysium. December 2021.
Personal growth	"It made me realize that life is not about survival, it's about the legacy you leave behind, your loved ones and the impact you had on them, how you shape and change them to become better." – 20. M. Telltale's The Walking Dead. 1 week ago.
Profound insights	"In fact it made me realize I was wasting time with inferior pieces of art, this thought obscured by guilt in doing something not productive irl and the flattening notion that all media is a distraction anyway, just escapism." – 36. M. Disco Elysium. Two days ago.

Note. Pattern of narrators encoding: a, b, c, d, where a = age, b = gender, c = video game, d = approximation of time when narrator finished mentioned game.

Video Game as Meaningful Experience

Narrators stated that they often reminisce about the events that transpired in the game. For many of them, these memories have a high emotional intensity either focusing on sad, happy or intense events from the game. Often they become a catalyst for wondering about possible futures of the in-game characters. For some players, such recollections happen often, which is reflected in the language and metaphors they use to describe that ("every waking moment of every day"). It is sometimes puzzling for narrators since they feel it's not typical to reminisce about something that was so intense in a nongraphic sense, as one of the Disco Elysium players stated, "slow text based game feel so high tension". They often reminisce about characters that were important for them in any way, and the players feel they had an influence on how that characters developed. They imagine spending, in a way, time again with them, and after the recollection of events from the game, they start to play it again. Others remember the ending scene from the game that makes them emotional and construct what-if scenarios about characters, for example, if certain events didn't transpire what would the ending look like. Some of the narrators reminisced about the events to better understand what actually happened, for example, trying to analyse the events again to better understand them or to find the deeper significance of the in-game conversation that they failed to understand. Some narrators recollected memories from the game to remind themselves about or nurture further insights and new thought perspectives that they developed thanks to the game.

The second identified subtheme was the visceral experience that narrators had. This term stands for the level of intensity both emotional and cognitive for the player. As the narrators explained the game that they described was like nothing they ever played or that the experience was so profound that it changed their outlook not only on videogames but their own life and values they uphold. They felt the realness of the universe that the game was in, the reality of the events based on the high level of emotions that they never felt before or were feeling for the first time, for example, being genuinely afraid about the faith of a character they tried to protect in the game. The level of relating with the protagonist was also something they never experienced. This feeling was strongly felt for players that saw some similarities between them and the protagonist of the game, for example, personal traits that they share, choices that they would also make or dealing with similar real-life problems, like alcohol abuse. Just as in the previously described subtheme, language that was used was also reflecting the visceral nature of the experience ("cathartic"; "constant awe").

The two last subthemes are similar since both are connected to individual benefits gained from the experience. It was decided to make them separate on the basis of different quality of it. First, personal growth is more general and seems universal for almost all of the narrators. Second, profound insights, were more personal and seem to

be of a higher personal quality. In general, narrators claimed they learned something from the experience that made them a better person. One of the players wrote that because of the game he is now having a more rational outlook on his life and it's easier for him to talk with other people, presumably, choosing the right words to express what they want to say. The possibility to try out different routes and choices was like a safe playground for some narrators, to find out how that choice would affect them. After such an experience, they learned something about themselves. For some narrators the overall messages of the played game gave them comfort and a more positive attitude towards life obstacles, making them more resilient.

Personal insights revolved mostly around the personal struggles that the narrator had. Dealing with addiction and seeing it transpire in the game (Disco Elysium) so vividly was an uneasy experience for one of the narrators, in his words – "(…) nothing changed…unfortunately. Even with a mirror held to my face". For some narrators being involved in the game around many political notions, ideas and real-life implications of them made them more aware of political theory and how it connects many aspects of society. They claim that these insights changed some of their behaviours. One of them stated that he became more emotional during movies and cried during scenes from the already seen shows. Sometimes not an event but only a quote heard in the game became important for the narrators, influencing their view on some aspects of their lives.

Table 2. *Theme of Felt Emotions.*

Subtheme	Sample of narrative
Sadness	"I experienced a level of sadness that I thought was never possible." – 24. M. Telltale's The Walking Dead. 1,5 years ago.
Emotional attachment	"I had to say goodbye to something that was very important to me at the end (the character) like saying goodbye to a loved one, it's hard." – 20. M. Telltale's The Walking Dead. 1 week ago.

Note. Pattern of narrators encoding: a, b, c, d, where a = age, b = gender, c = video game, d = approximation of time when narrator finished mentioned game.

Felt Emotions

Second major theme was emotions that players felt. Most of them felt sadness, especially those that played Telltale's The Walking Dead. At this point, it would be redundant to extrapolate on that subtheme, since it is also mentioned in previous descriptions. It is important, however, to emphasise the emotional attachment that players had not only to the game itself but mostly to the characters and/or protagonist of played games. Some narrators linked their emotional attachment with the post-game depression state that they felt. After the experience ended they still felt they were emotionally connected to the game, and that connection made them numb for any other activities. It was being upheld by those narrators that, after finishing the game, browsed the internet for additional content about the game or for the game. They also stated that they felt as if they were saying goodbye to a person they love, and to something that was very important for them that won't have an impact on their life anymore – in a sense that the journey is over. For some of the narrators' intensity of that attachment is so extreme that they cry every time on the same scenes after replaying the game time, after time. They describe that connection to be similar to the relationship with another human, genuine fear and care for characters they met in the game.

Table 3. *Theme of Characters.*

Subtheme	Sample of narrative
Memorable supporting characters	"Even Cuno broke my heart when he talked about his father. Kim was a warm voice of reason, and I loved getting to know his own quirks and passions beneath that stoic facade." – 26. M. Disco Elysium. Two days ago.
Parasocial relationship with characters	"So much so that I—without realizing at first—started making decisions not based on what I would do, but how I assumed it would affect Clementine. Like she was my own daughter. I was doing my best to care for her as if Lee had given her in my care." – 24. M. Telltale's The Walking Dead. 1,5 years ago.
Fleshed out protagonist	"Lee was only in one season of the walking dead but he was done so well that his weight is carried throughout the whole story. Even if we are responsible for deciding what Lee does he still feels like he has his own personality and I have no idea how telltale managed to do that." – 19. M. Telltale's The Walking Dead. April 2012.

Note. Pattern of narrators encoding: a, b, c, d, where a = age, b = gender, c = video game, d = approximation of time when narrator finished mentioned game.

Characters

It seems that the way developers portraited and wrote characters in the game had a major influence on the quality of the playing experience. For players, they felt as if they were real people, with their own agendas, values, past and problems that they were dealing with. They tried to analyse their behaviour to see if there is something that could explain subtle changes, like one of the narrators wrote about Kim Kitsuargi (Disco Elysium) – "I love getting to know his own quirks and passions beneath that stoic façade". Some couldn't explain shortly how much the characters were complex. The *realness* of these characters was made by not creating them, for the most part, as one dimensional – having simple goals, simple reasons behind their actions, which narrators appreciated and wanted to explore further. The same could be told, and was by the narrators, about protagonists of games that were avatars for players.

It seems these qualities made it possible for narrators to have parasocial relationships with in-game characters, a subtheme that was present in many narratives. In-game choices that they made were not based, as one narrator wrote, on what he wanted to do, but on a basis of affecting the character that was being protected by the protagonist. Narrators felt like they were taking care of or being worried about real friends, daughters – real people. They also stated directly that they felt emotional attachments to the characters, for example crying while witnessing harm being done to them in the game. For some narrators, it was the first time that they were so much invested in and cared for the fate of fictional characters. They used emotionally tinged language to show their care like "made me even more proud of her as well as sadden me further". This attachment revolved around fear of losing or seeing characters being harmed for The Walking Dead player mostly. This fuelled that relationship but wasn't the only factor. Since The Walking Dead game seasons were released in the period of 9 years some players, as they wrote, grew along with one of the protagonists which made them feel, again, like a real person. Disco Elysium players were not worried to such an extent about their character, but they too were attached to them in a similar way.

Table 4. *Theme of Player-Avatar Relationship.*

Subtheme	Sample of narrative
Avatar as other	"Her asking that question after overcoming everything, showing that she still felt inadequate at the end made me even more proud of her as well as sadden me further." – 24. M. Telltale's The Walking Dead. 1,5 years ago.
Avatar as symbiote	"When I was Lee, I felt like I would legit do anything to protect this girl. When I was Javi, I tried to be the best friend I could to her, when I was her, damn I loved it." – 17. M. Telltale's The Walking Dead. 2 weeks ago.

Note. Pattern of narrators encoding: a, b, c, d, where a = age, b = gender, c = video game, d = approximation of time when narrator finished mentioned game.

Player-Avatar Relationship

The narrators with avatar as other type of relationship had a deep bond with characters and their avatars. That perceived realness, complexity and human-like traits seem to make players treat avatars as some other, in a way, alive entity with their own values that they try to uphold, past that shaped these values, and circumstances that put these values to the test. They also felt pity or compassion towards them during in-game events. Some players felt the obligation to act as their former avatar after it was replaced in later parts of the series. After the time skip in the story one narrator felt amazed and proud seeing the avatar doing things it wasn't able to do in previous parts, like driving a car or teaching another character how to read. In general, the emphasis on the personality of the avatar was present for those narrators that had this type of relationship.

The emotional attachment was also present in narratives of those that had avatar as symbiote type of relationship, but the quality and its influence on the player was different. For these players, the avatar and events in the game were a safe space to explore and experiment with ones' identity, morals and values. As one of the narrators wrote, depending on different protagonists he had a different goal in the game from feeling protective of others or a best friend to supporting character. Another narrator claimed that thanks to the avatar he was able to feel as if he was in the apocalypse. Depending on their own past some narrators found different outlets for their own traits that they were not happy with, felt empathy towards the avatar but at the same time had the opportunity to fix the avatar's problem and, in a way, finds a way to cope with own unhappiness.

Table 5. *Theme of Social Plane and Community Seeking.*

Subtheme	Sample of narrative
Reaching out to friends	"I talked about the game so much while in the process of playing it, I ended up getting at least two other people to play the game and I still am discussing it with other fans months after completing it for the first time." – 27. Nonbinary. Disco Elysium. December 2021.
Sharing the experience online	"Yeah. It's emotionally racking enough that the first order of business is to head to social media and have a discussion with someone and then find surveys such as this that I *actually* do because everyone needs to know about this game." – 36. M. Disco Elysium. January 2022.

Note. Pattern of narrators encoding: a, b, c, d, where a = age, b = gender, c = video game, d = approximation of time when narrator finished mentioned game.

Social Plane and Community Seeking

Almost every narrator felt the need to share their experience with friends and/or seek out online community to be a part of and share their own experience with other players. Some stated that after finishing the game they felt so emotionally racked that they had to share with anybody what they felt, discuss issues related to the game but also, and for most of the players mainly, they wanted to tell others about the game because they felt they have to play it. It has become such an important experience for them that they wanted other people to have it also.

Table 6. *Theme of Post-Game Depression.*

Subtheme	Sample of narrative
Media anhedonia	"You now feel as if you have a void that can't be filled because nothing you found has yet to compare to the way the game made you feel. You can get close, but it is as if you're trying to fill a circle shaped hole with a multitude of different half circles." – 19. M. Telltale's The Walking Dead. April 2012.
Uniqueness of the game	"Absolutely. I can think of only a fistful, maybe a maximum of 5 pieces of media that rock me as hard as this one does when it's finished." – 36. M. Disco Elysium. January 2022.
Impossibility of another first playthrough	"I've felt the feeling before. I usually call it wistfulness more than depression, though. It's never possible to play a game for the first time again. And it can often be hard to really get into a new game soon after a finishing a game as impactful as Disco Elysium." – 29. M. Disco Elysium. 1 year ago.
End of the experience	"I think a big cause of that is the sudden departure you have from that experience back to a time when you have to think about other things." – 19. M. Disco Elysium. October 2021.

Note. Pattern of narrators encoding: a, b, c, d, where a = age, b = gender, c = video game, d = approximation of time when narrator finished mentioned game.

Post-Game Depression

Last major theme identified was the one about post-game depression. All of the narrators from that group stated that they felt or are feeling that state and many of them elaborated on how that state affects them, but mostly they focused on what made them feel that way. Perhaps saying yes to the term depression was enough for them to express that state and they felt it was more important to present what made them feel that way.

Those narrators that did elaborate on that stated that they felt media anhedonia (the inability to feel pleasure in normally pleasurable activities, relating to media – not feeling pleasure from consuming media and/or video games), which for some lasted full months. Nothing story-driven was as good as the game, so they felt as it was inadequate, empty or too shallow. Any way of trying to feel the void after the game was unproductive. They tried to fill that hole to re-experience what they felt but nothing was able to fill it, as one narrator wrote "trying to fill a circle shaped hole with multitude of different circles". At that stated they often reminisced about game events, characters, recalling scenes and constructing hypotheses. If they did browse the Internet it was focused on looking for something connected to the game, as if they couldn't let it go.

Factors, according to the narrators, that made them experience post-game depression focused around the game were the uniqueness of the game, the impossibility of another first playthrough and the end of the experience. For some narrators described video game as something that was one of the kind, and this made them invest in it

even more. From the writing of the story to choices, they had to make and up to the characters that were designed as if they were real human beings, the game felt like something that never came before and, probably, won't come anytime soon again. These game traits made them anxious to learn more bits of the story, get provoked to feel something new or be faced with a difficult choice.

Some narrators wrote that the reason they feel like that is made by constatation that they won't ever be able to play the game for the first time ever again. One of the players even stated that it's like missing a childhood. It seems that it is linked directly to media anhedonia, that thought that nothing will be as good as this game and one can never experience it again makes one numb for other media and games.

The abrupt end of the experience, which some narrators called a journey, was also a factor contributing to post-game depression feeling. Some players had a routine of being excited before the release of the new episode, constructing theories about unfolding stories, coming back from school and feeling excited to finally play the game. But suddenly everything came to an end, and it left them empty. One narrator mentioned the feeling after finishing a long-running show, he did not elaborate on it more, only claimed that after finishing the game that feeling was more intense. It seems that for one narrator video game was a way of escaping the real world, getting immersed in a fictional one, and after a sudden end, he have to come back to the old routine of thinking about other things.

For an overall summary, Table 7 presents all the themes and subthemes in the narratives of the players that claimed that they experienced post-game depression.

Table 7. *Summary of Themes and Subthemes Relating to the Experience of Playing Video Game That Evokes the State of Post-Game Depression.*

Theme	Subthemes
Video game as meaningful experience	Reminiscence of the events
	Visceral experience
	Personal growth
	Profound insights
Felt emotions	Sadness
	Emotional attachment
Characters	Memorable supporting characters
	Parasocial relationship with characters
	Fleshed out protagonist
Player-Avatar relationship	Avatar as other
	Avatar as symbiote
Social plane and community seeking	Reaching out to friends
	Sharing the experience online
Post-game depression	Media anhedonia
	Uniqueness of the game
	Impossibility of another first playthrough
	End of the experience

Narratives of Players Without Post-Game Depression Experience

Since the main focus of this study revolves around post-game depression, insights from analysing narratives of players claiming not feeling it after finishing the game will not be present fully. The point of this group is to compare and emphasise differences. Therefore results will present mostly different themes, not present in post-game depression group. Similarities will be mentioned briefly. Table 8 shows final themes and subthemes that were left after excluding subthemes that had too little presence in the data. To illustrate them better samples of narratives were given as exemplifications.

Table 8. *Final Themes and Subthemes Discovered in the Narratives of Players That Did Not Experience Post-Game Depression.*

Theme: Video game as meaningful experience	
Subtheme	Sample of narrative
Personal growth	"As dramatic as it sounds, I dont think I would be the same if I hadn't played the game when I did." – 17. M. Telltale's Walking Dead. Around 2012–2013.
Visceral experience	"That timing turned out to be my chance to try Disco Elysium for longer and the more I played that more I lost myself in the town of Revachol. it made me feel like I was a officer who had fallen from grace." – 18. M. Disco Elysium. October 16, 2021.
Reminiscence of the events	"Yes – whenever I look at a police officer now I think about Kim and Harry." – 21. Bigender. Disco Elysium. Two weeks ago.

Theme: Felt emotions	
Subtheme	Sample of narrative
Emotional attachment	"So I did I loaded an autosave and tried and tried again. I tried for an hour to save her and reached the moment where the only other option was to let her run… I couldn't let the death of a woman be because of me." – 18. M. Disco Elysium. October 16, 2021.
Content	"Disco I think left me feeling more content than depressed by a long shot." – 26. F. Disco Elysium. July 29, 2020.

Theme: Characters	
Subtheme	Sample of narrative
Parasocial relationship with characters	"Kim my BELOVED Kim my beloved. What do I need to say about Mr. Kitsuragi, really. I don't think I've ever met someone who doesn't like him. I did want to impress him – there was a NEED to do so, honestly. I wanted to see him smile so very badly." – 26. F. Disco Elysium. July 29, 2020.
Memorable supporting characters	"Kim Kitsuragi is the best character in any piece of literature or any other form of media. He is understanding and has flaws like a human unlike the protag who is all a washed up mess who becomes better." – 18. M. Disco Elysium. October 16, 2021.
Fleshed out protagonist	"I thought you play as a random no name detective. then i discovered my identity in the game with details and details of my life. In his younger time he was a gang member who grew to love the "Art of Disco" and even became a gym teacher.." – 18. M. Disco Elysium. October 16, 2021.

Theme: Player-Avatar relationship	
Subtheme	Sample of narrative
Avatar as symbiote	"The roleplaying choice you're confronted with time and time again is how to respond to failure. How should you, as the player, own up for a mistake you never made? (…) It forced me as a player to ask every time I played how I'd like to own up to 'my' mistakes. And in doing so, it made me confront my own mistakes. And how I should own up to them. And I did." – 25. M. Disco Elysium. December 1, 2020.
Avatar as other	"Just this once. No, Mr. Du Bois, you'll get a second chance. Just this time, I'll nudge you along. And then you'll go off into the next thing, and I won't be there – so please, even if you don't realize it, I hope you can feel a bit of mercy in how I've treated you." – 26. F. Disco Elysium. July 29, 2020.

Theme: Social plane and community seeking	
Subtheme	Sample of narrative
Reaching out to friends	"I immediately went to a friend of mine and was like "hey, you'll love this". I even bought it for another friend." – 26. F. Disco Elysium. July 29, 2020.
Sharing the experience online	"Yeah I talked about it a lot on facebook groups and generally proselytized the game to all my friends." – 22. M. Disco Elysium. Beginning of 2021.

Theme: Post-game depression buffer factors	
Subtheme	Sample of narrative
Personal growth	"By the end of the game, I was hit with an epiphany that I wanted to 'feel' again. And

from the experience	from that point onward, I quit drinking and pushed myself to be a more emotionally honest person. I had realised I had alienated someone very close to me because I was emotionally numb (...) it was a life changing moment which happened because of my experience playing Disco Elysium." – 25. M. Disco Elysium. December 1, 2020.
Fulfilling ending	"With Disco Elysium, though, I felt quite fulfilled. Emotionally drained, but not depressed, armed with a lot of new ideas and outlooks on life in general. I was also excited to start a new playthrough." – 23. X. Disco Elysium. Summer 2021.

Note. Pattern of narrators encoding: a, b, c, d, where a = age, b = gender, c = video game, d = approximation of time when narrator finished mentioned game.

Post-Game Depression Buffer Factors

Key differences between post-game depression and none post-game depression narratives can be reduced to a feeling of content, regarding the theme of felt emotions, and factors that, in the words of narrators, prevented them from getting the post-game depression. Other than that for them the experience of playing the described game was also meaningful, they were fully engaged, had a relationship with their avatar/game's protagonist that was more personal, and they also had a strong need to tell friends about it.

It is important to mention here (and it will be expanded upon in the discussion section of this paper) that mostly Disco Elysium players did not feel the post-game depression. That fact implies differences between games that were crucial in developing studied state. For these players what help them not feel post-game depression was the personal growth that they gained from finishing the game. In a way, it seems like a trade-off made from having emotionally driven and insight inducing elements of unfolding in-game story, that felt like something that can be beneficial for the player as a human being. For one of the narrators that whole experience was like a therapy session. Made it possible for him to see his own deficiencies in his own emotional awareness, he quit drinking and tried to develop more healthy habits and self-care, to the point he even reached out to people that he wronged in some way. Not every player elaborated in what way the game made them grow, but the language that they used implies that this effect had a place, for example, "changed me indelibly".

It seems that a fulfilling ending was a sort of closure for these players. A journey has gone to its end, which many narrators described as perfect. Even after being emotionally drained, as one narrator stated, the positive changes and outlooks that they got from that experience made them content with the idea that everything has to come to an end.

Discussion

A Present study aimed to understand what psychological factors lie behind the term post-game depression that is often mentioned in social media sites by gamers. Since no studies, according to the authors' knowledge, have focused on that post-game period state, a qualitative approach has been chosen to better understand and explore that phenomenon.

It seems that post-game depression is a psychological state that can occur after playing a meaningful, story-driven game, that the player heavily invests in – both timewise and emotionally wise. Playing such a game is an experience that the player describes as important for them, emotional investments seem to be a crucial factor that constitutes, probably, other psychological components. Players felt they were connected to the world, characters and protagonist/avatar in the game. For many players that emotional investment took the form of having genuine concern about the health and life of the characters, especially players of Telltale's The Walking Dead since many characters could die and players did not want to lose them. They knew it wasn't real but felt like they would lose their best friend, daughter or, in the case of Disco Elysium players, they did not want to upset supporting character Kim Kitsuragi and even if they wanted to choose otherwise they made choices in the game that would make Kim happy and not think bad about the protagonist (or for many players "think of me"). That's why many players did not choose the fascistic dialogue options in the game, even when they wanted to try it out. Perceived realness of disdain from Kim Kitsuragi prevented them from experimenting with the game's content. A similar feeling of guilt was also reported in studies about committing immoral deeds in video games (Ahn et al., 2021; see also Ferchaud & Oliver, 2019). Concern for Clementine, The Walking Dead game character, was present in another study by Bopp and others (2019) in which players were also worried and felt the need to protect the vulnerable little girl but also guide her to become a good person.

As Bopp and others found (Bopp et al., 2016), the feeling of loss is quite common for players that are attached to the game's characters. Feeling sad or empathising with a character's fate was also described in the mentioned study. The results of Bopp and others resonate with the presented one, where the players also narrated similar feelings. Especially the theme of character attachment shares many similarities, solidifying the idea that these are components of a meaningful game-playing experience not reserved only for *The Walking Dead* or *Disco Elysium*.

Emotions made that experience visceral and that feeling was enforced by personal gains and insights that players got from the game. This elevated the importance of that game in their mind, and for some, it was a driving factor of thoughts during the day. They couldn't wait to get back home, feeling excited before opening the game again. As the results show video games are able to evoke such strong emotional states and, probably, adventure games and role-playing games might be especially suited for this type of emotional involvement (e.g., Arbeau et al., 2020; Butt & Dunne, 2019; Dechering & Bakkes, 2018; Koenitz et al., 2018; see S. L. Bowman & Lieberoth, 2018). For some players, sadness evoked by the game is experienced as a reward, an appreciation of a thought-provoking experience (Bopp et al., 2016). Paradoxically, the commonly labelled bad emotions or a spectrum of sad emotions can be, for some players, a source of fun and enjoyment.

In general, players find an emotional challenge from the game more meaningful, while the felt emotions are rather negative than positive at that state (Bopp et al., 2018). Players' actions and in-game decisions are often the sources of that emotional challenge, especially when they feel attached to the characters in the game which corresponds with the results of the presented study. The results of Bopp and others (2018) showed that players felt the burden of these decisions, which made them experience negative emotions such as guilt or remorse and the post-game depression might be one of the states that occur after a player is experiencing mentioned emotional turmoils.

Despite different conceptualisations of what eudaimonic experience actually is (for scoping review of the concept see Daneels, Bowman et al., 2021), common factors of that state are often presented as an appreciation of the experience, meaningful and emotionally moving and/or challenging, self-reflective. Social connections, nostalgia, elevation and self-transcendence are also mentioned as possible facets. It is possible that for *The Walking Dead* and *Disco Elysium* players the experience of playing mentioned games was of eudaimonic nature and for some players it gives a sad, yet meaningful experience (as mentioned in a study by Bopp and others, 2018) that gave them closure, and to some it leads to emotional drain and/or media anhedonia which seems to be a part of post-game depression. Such traits were present in narratives from the players that felt that state which aligns with claims by Elson and others (2014) about how not only narrative and audiovisual aspects of the game elicit meaningful experience but the interactivity makes it so. This applies to the hard decision that players had to make in both games (arguably more complex for The Walking Dead players since these decisions were of life or death situations). Studies of post-game depression could be regarded as a follow-up to the question posed by Bopp and others (2016) about how the player's agency, autonomy, and responsibility are involved in triggering certain emotional responses (e.g., guilt or helplessness). It is possible that these factors could contribute to the depression-like state of post-game depression.

Eudaimonic experience is, in general, regarded as something positive, yet some scholars have shown (e.g., Frischlich, 2021) that it can also lead to negative outcomes. The post-game depression state, assuming it derives from eudaimonic experience, could be seen as negative and potentially harmful to the person (since there are some parallels between real-life depression and the post-game one).

While there is an ongoing debate relating to the clear definition of symptoms of depression (e.g., Parker & Paterson, 2015) the dominant paradigm of described symptoms can be found in DSM-5 (APA, 2013). Comparing them with narratives from the participants there seems to not be a lot of common factors between them. The term was coined by the players who are, most likely, laymen and used the term depression colloquially. Although some similarities could be found, namely feeling sad and empty (which for some participants lasted more than the 2-week period mentioned in DSM) and losing interest (in other media) and pleasure (nothing felt as good). As the criteria state, responses to a significant loss may include feelings of intense sadness and rumination about the loss, although these might be normal responses or a part of a major depressive episode. Nevertheless, participants often reminisced about the game and stated that they felt as if they lost someone dear, someone, that felt like a real person. This might give a premise to not abandon the depression part of the post-game depression term completely, yet further studies should focus on the exact experience since, for many narrators, the given narratives were not in-depth statements about that state (which can be natural, given the exploratory nature of the study). Perhaps narratives about other symptoms like loss of energy or diminished ability to concentrate would be present in such research.

Participants mostly focused on the causes of post-game depression state, which they linked with the uniqueness of the game (which could be intertwined with emotional investment. On the one hand, original game mechanics and story objectively could be used to describe mentioned games as unique, on the other hand, emotion could elevate ordinary elements that are viewed as a part of the emotionally driven experience), the impossibility of another playthrough and end of the experience which both can be interpreted as reaching a threshold of eudaimonic experience uplifted to the point no other media, at present moment, could reach the same amount of emotional investment, joy and meaningfulness. The realization that another playthrough won't be as impactful left players with unmet need that they have no means to satisfy, further causing emotional distress and mentioned anhedonia.

It is possible that the term depression can be enough for narrators to explain how they feel and that's the reason why they focused more on what constitutes that feeling. On the other hand, some narrators could have perceived that term as more clinical therefore not describing feelings that they had as symptoms of depression, even though they might have felt the same intensity of emotions and similar thoughts about that post-game period. Such limitations should be noticed in future studies, trying to replicate the findings using non-clinical terms. But on the other hand, this could make ecological validity, since this term was coined not by the authors of this paper, but by the players in social media.

Additionally, it is important to emphasize the consensus in neuroscience that stimuli present in virtual reality engage the same or similar structures in the brain as if that stimulus was present in the physical plane (S. L. Bowman & Lieberoth, 2018). Therefore post-game depression could be a valid research pursuit for clinical psychologists as it could be a factor contributing to *regular* depression – especially that players wrote about anhedonia and feeling of a loss of someone that was perceived as a real person for them. The fact that more and more kids, teenagers and young adults spend the majority of their time with video games it should be noted that certain video games could be a potential source of psychological distress that is not revolving around losing the game but losing something important for them.

It seems that personal factors, the player's traits and qualities might be important in being less likely to develop post-game depression and the other way around. For those that did not feel post-game depression, the playing experience was also meaningful, emotional (sometimes draining, as one narrator claimed), and important. Both groups wanted other people they know to experience the game for themselves as they claimed it was important for them to show others how this experience changed them in any way. Both groups wanted to share their experience with other players in social media – sometimes to see different outcomes of in-game choices, sometimes to manifest how they felt and to find out if other people had similar, meaningful experiences. It is possible that this was a form of group therapy, the community was a way of coping with emotions left after finishing the game. Such instances, of seeking comfort online, are not uncommon (Stone et al., 2022; see also Petko et al., 2015; Raith et al., 2021). The second group made the personal growth from the game a reason for being happy after finishing it. They felt down and sad, but not to the point it crippled their ability to enjoy other media or get fixated mentally on in-game events. They were able to move on, especially when they felt that the ending was satisfying. After having the ending that they wanted, or felt the protagonist/avatar deserved, there was no reason to dwell mentally on what-if scenarios.

It is possible that post-game depression, hypothetically assuming it is a more general phenomenon (which should be a subject of future research), is not binary but rather a spectrum of low or high saturation of emotions. It is still not sure if there are other non-emotional factors here. Some narrators described behavioural change when feeling post-game depression, such as not being able to engage with other activities, or being cognitively wrapped around themes from the game. Assuming post-game depression is a spectrum, depending on the intensity of it some behaviours would be noticed and some would not.

As mentioned in the introduction, post-series depression shares some similarities with post-game depression. As Kottasz and others (2019) stated, it has not been a subject of academic research and simultaneously there is extensive grey literature on the topic (mostly online), which resembles the post-game depression state of knowledge. Therefore it is hard to build parallels between the two since knowledge of both phenomena is underdeveloped. Based on the findings of mentioned authors, post-series depression is a state where one craves additional involvement with events and characters, feels disconnected from a highlt-valued part of one's life, melancholy, and wistful emptiness. Feelings of loneliness, sadness and feeling of relationship with screen characters can also be present. These are similar to post-game depression, so this brings the question of how the two differ besides the interactivity of the two (passive watching vs active playing).

Additional conclusions could be drawn from the results. As some scholars suggest (e.g., Adachi & Willoughby, 2017; Ferguson, 2010) there's a disproportion in studies regarding video games as a mostly harmful influence on players, and the pro-growth factors are less present in research. This study shows that not only serious games (see Wilkinson, 2016) can be used for therapeutic effect or personal growth, but also off the shelf commercial video games (see Kowal et al., 2021; Pallavicini et al., 2021; Poppelaars et al., 2021). The narrators clearly stated that both games changed them significantly, whether these changes are permanent could be a subject of additional research projects.

Emotional engagement is an important factor in constructing autobiographical memories (see Bluck & Habermas, 2000; Fivush et al., 2019; Singer et al., 2013). Based on these memories a life story is constructed which constitutes the narrative identity of a person (McAdams 1995, 2001; McAdams & Guo, 2015; McAdams & McLean, 2013), a construct used to assign meanings, schemas about external events, thoughts and opinions about oneself and others, in short – it is an answer to the question "Who am I?". It is possible that video games could be a part of personal identities, as the results suggest, having a part in constructing narrative identity. It is all the more possible, since personal narratives are partially socially co-constructed, and having in mind that players shared their experience online, with friends, and that term was first coined in social media, it is more likely that video games playing experience can be a part of narrative identity. A major contribution to this would be relationships with the avatar that was identified to be an avatar as symbiote or an avatar as other. The first is a way to explore one's own identity, the latter would be a possibility to interact and take care of someone that *feels* like a real person (Banks, 2015).

To summarise this section and presented study – because of the focus of participants on what constitutes the experience, rather than how it is experienced it is hard to answer the RQ1 thoroughly, but for the majority of players, it is a state of feeling as if something important has been taken away from them, feeling of media anhedonia meaning losing the ability to feel fun and joy from other games – at least to the same threshold as from the game that evoked the post-game depression state and hard to describe the sensation that the person will not be able to play that game again for the first time. The specific themes reoccurring in the narratives about the post-game experience and the general experience with that game that evokes it shows the Table 7 (RQ2). As for the specific qualities of the video games that might evoke post-game depression (RQ3), it seems that the design of the characters plays a valid role in it. If the protagonist and in-game characters are made into believable human-like characters players can form parasocial relationships with them and identify, in some way, with the protagonist/avatar. This constitutes the emotional part of the experience, for example being genuinely afraid of losing a character. The latter point corresponds with the narrative of the story and game mechanics presented in the game. Being involved in the rich story and being responsible for the way the story unfolds (crucial choices that players have to take that have an in-game effect) for players in the presented study was what made the game unique and important. The hard choices that the game presented for them, the story that tackled serious themes, and the feeling of being responsible for the characters on the screen made the players feel as if the game had a profound effect on them, that it helped them grow as a person in some way. It was also a reason why they did not want the experience to end and when it did it made them feel post-game depression.

Limitations

Limitations of the study have to be addressed. As it is with the majority of qualitatively approached research projects, the number of participants is rather low, therefore, on the results of one such study, it is not possible to make assumptions about the general population. It does, however, present foundations for a quantitative approach in the future. It is also possible that in larger qualitative projects themes and subthemes that were excluded from analysis, on the basis of small grounding in data, would be more present and robust, therefore being a major part of the results.

Two specific video games were chosen for the presented study which brings the same limitations as a small sample size. Therefore results of the findings should be generalized with caution. Even for the players that do experience post-game depression after playing a very different game, it is possible that some parallels would be present but also that other factors could have a major part that was not present in the results of the shown study. Regarding the game qualities, it is also unclear how the eudaimonic experience for one player could lead to post-game depression and for others create a buffer from it. As in general, eudaimonic game experiences is a concept fairly new so this adds to the limitations on the one side, but on the other opens up a possibility for future studies.

In this study time after completing the game and numbers of playthroughs were not controlled in any way. On the one hand, it can give a general idea of how some symptoms might be decreased in time, on the other it most likely made the quality of narratives different in regard to how many months ago someone finished the described game. The retrospective aspect of data plays similar limitations, data were not gathered right after finishing the game.

Narrators gave descriptions of the experience based on two different games. Some similarities have been found but it is definitively possible that the fact that in one game characters could be killed in a matter of few scenes, and in another, there was no such threat played a major role in emotional attachment and negative feelings after their death, impacting post-game depression further. In future studies that factor should be more controlled to make sure that this specific game mechanic contributed to post-game depression.

Participants were not interviewed, which is not uncommon in narrative inquiry. Possible benefits are not trying to meet the researcher's expectations, having a safe space and own chosen time to take part in the study, a more intimate atmosphere can prompt participants to confide more personal details (Braun et al., 2021). The drawback here is that there is no possibility to ask the narrator to elaborate more on topics that they choose to present. It is possible that there could be more similarities between given narratives but some narrators needed additional questions to elaborate on what they said. Another important variable that was not controlled is the age of the participants. Since narrative thinking is a process intertwined with further developing nervous system, along different life periods the closer the age of the participant is to fully developed prefrontal cortex age (around 25 years old) the more possible that their narrative is higher in quality – assuming that goal of the researcher is to get a perspective of mostly grown-up participants, and not the way how developing brain perceive that experience.

Conflict of Interest

The author has no conflicts of interest to declare.

Author's Contribution

This study was devised and conducted by Piotr Klimczyk.

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Appendix

Questionnaire

The Experience of Playing a Video Game—Psychological Study

I would like to invite you to take part in psychological research regarding the experience of playing video games.

Choosing to answer the questions below you are giving consent to participate in the research.

The study is fully anonymous and you can quit at any point. Please read the introduction and follow the questions.

Are you giving consent to take part in the study?

- o   Yes
- o   No

Introduction:

We all tell stories. It is hard to think about human life without any story that one could tell. We often reminisce or have family moments to reflect on our past, share stories from times that we were little and we tell how we would like our life to be. Stories are also around us, in every book, every movie, or every play we have seen. Video games are not very different. They also present a story that we can enjoy, be engaged in, or shape in many ways.

I would like you to tell me a story about Your experience with the game. About how it made you feel. Maybe changed something in you that you could share with me? Or maybe it made you feel like nothing ever made you feel. Excited and joyful or maybe shallow and empty? Be as detailed as you can. The longer Your story will be the more I will be able to understand your experience.

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 (no limit on word count)

Now please tell me about the characters in the game and the protagonist. How did you feel about them? Do you remember key scenes from the game that made you feel certain feelings towards them or maybe some crucial aspects of the plot changed your view on them?

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 (no limit on word count)

After finishing the game were there any moments later on when you reminisced on the experience or got random recollection of scenes from the game during your day? If so, please tell me about it.

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(no limit on word count)

If you had to describe that whole experience with the game in a short phrase, term, or few words, what would that be?

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(no limit on word count)

After you finished the game did you have a need to talk about it with someone? Share the experience with somebody that, maybe, had a similar experience like you? If so please tell me about it and how did you do it.

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 (no limit on word count)

Some players use the term "post-game depression" to describe the way they feel after completing certain video games. Did you use that term in the past or does it resonate with your experience? If so, tell me about it.

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 (no limit on word count)

Metrics

Age

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Gender

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- o   F

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Title of described video game

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When did you complete that game? Give an approximation.

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About Author

Piotr Klimczyk is an assistant at Stefan Batory Academy of Applied Sciences, master's in psychology, PhD candidate. His PhD research centres around the construction of an identity based on the experiences from video games. The main fields of academic interest are cyberpsychology in general, narrative psychology and educational psychology. Besides academic work, he is a psychologist working at Primary School No. 4 in Skierniewice, Poland.

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