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# Psychology at play: Empathy and character relatability

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<b>Abstract</b>		
<p>This thesis focuses on the psychology of empathy in character design. The objective is to open and discuss the way a player relates to and feels empathy towards playable and non-playable characters (NPC's) in video games, and why does the phenomenon exist.</p> <p>The purpose of this thesis is to understand and apply the scientific studies on human psychology of empathy to the process of creating relationships with fictional characters in a video game environment. The thesis aims to explore the foundation of empathy, how it works, and how it is developed in humans, as well as what enables players to get emotional about characters. While focusing on emotional responsiveness and communication, the thesis in addition briefly addresses some basics of visual character creation and development. Lastly, the thesis proceeds to examine results of a conducted survey in which participants were asked to describe their emotional experiences with a specific game character of their choosing.</p>		
<b>Keywords</b>		
video game, empathy, psychology, relating, fictional, survey		

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## 1 INTRODUCTION

This thesis was written in order to scope the psychological aspects of a player relating to a video game character in an empathetic state. The research scope of the thesis was largely theoretical studying and gathering of information in order to finally tie different aspects of emotional connection together, in order to determine what happens when a player meets a character and why.

Additional information from theory lessons during the degree were used as focal points when considering different approaches to the subject of character design.

Finally, a survey was conducted to ask players to discuss an emotionally memorable character of free choice.

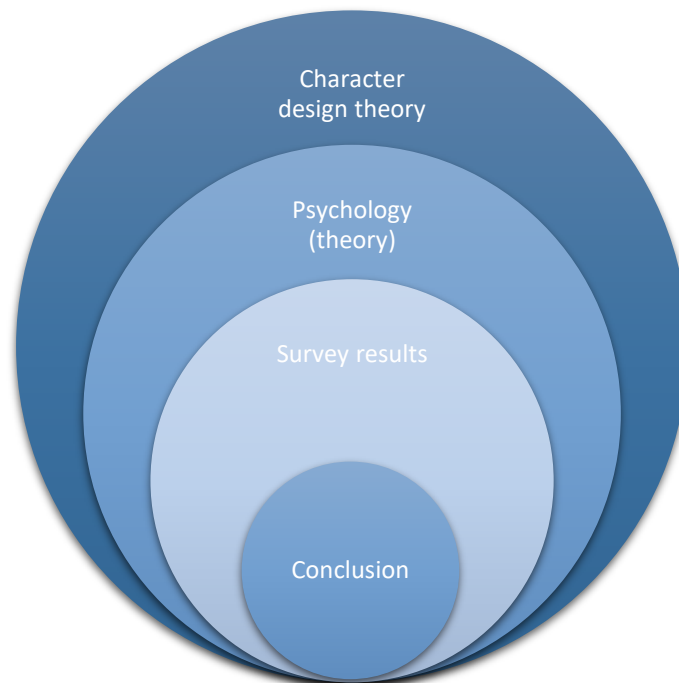


Figure 1. The thesis research scope. (Rönkkö 2020)

Seen in Figure 1 is the research scope of the thesis. The final conclusion was compiled by assessing the subject through psychological theories, with character design theories encompassing throughout the process of research.

Players of any type of video games may find themselves deeply emotionally attached to a character, sometimes even out of the context of playing the game. They may find themselves thinking imaginary scenarios of the character, how they would react in certain situations and so on. Artists and writers may take characters out of the game and create media of their own, build and stretch the characters in different environments, and band together and become a community of fans to share and discuss aspects of a character. Now more than ever with the opportunity that the worldwide web provides by linking people together in a way never seen before. While the phenomenon is hardly new, as before the era of video games people would, and by no means have ceased to, create art of and accept characters of books into their lives, the underlying reason for this behaviour is relatively the same; people form a special type of relationship with fictional characters as if they were real.

How is it possible that we are able to relate to characters that exist only either in our imaginative internal world while reading a book or as pixels on a screen?

It turns out that the audience that the characters are trying to please are not in fact all that difficult to manipulate. In fact, this audience is exceptionally gullible for it is collectively one of the most natural and unchanging pre-sets of the brain; the emotions.

## 2 THE SCIENCE: PSYCHOLOGY OF EMPATHY

### 2.1 Basics of empathy

First and foremost, *empathy and sympathy are considered separate emotions*. Although sometimes misunderstood as the same, the difference was defined by ThoughtCo. (2017) as follows:

“Sympathy is a feeling and expression of concern for someone,” “-- In general, sympathy implies a deeper, more personal level of concern than pity. Pity is really just a simple expression of sorrow. However, sympathy does not imply that someone’s feelings for another person are based on shared experiences or emotions. That is empathy.”

Empathy is generally defined as the ability to sense and recognize the emotions of another person, and additionally to be able to consciously imagine what the other person may be thinking (ThoughtCo. 2017). It is the very ability to relate to one another by *feeling what they are feeling*, or walking in another person’s shoes.

As an example, let us imagine someone has fallen in a deep hole and expresses sorrow for their misfortune. A sympathetic person would take a look from outside the aforementioned hole, see and recognize that the fallen has indeed been stricken with unmistakable misfortune, and feel concern for their sake. An empathetic person would instead accept a mental picture of descending down and joining in the sorrow of being in the hole.

The definition of empathy is a subject of constant controversy among researchers. Greater Good Magazine as well as Shamay-Tsoory et al. (2009) define two different types of empathy: affective and cognitive empathy.

What is known as affective empathy is the instinctual way to communicate emotions to others, and is learnt in early childhood when parents communicate emotions to their child. It is the sensation of feeling another person's feelings by detecting their emotional state (Greater Good Magazine).

In layman's terms, cognitive empathy means the ability to take the perspective of another. As children begin to comprehend others around them as separate beings with their own thoughts and emotions, they start to use cognitive empathy in collaboration with the instinctual, affective empathy. What this means is that the child is able to understand and consciously imagine what the other person is feeling and relate to their emotional state. (Shamay-Tsoory et al. 2009.)

Although affective and cognitive empathy could be interpreted as the sole forms of empathy, Frances R. Chen et al. introduce a third subcategory. The physical response in the body is what is known as somatic empathy, such as the tendency to mimic facial expressions and body movements of others when interacting. (Chen et al. 2019.)

In his book *Emotional Intelligence* (1995, 129-132), Daniel Goleman addresses the emotional connection between a mother and their children as "tuning in", or "*synchronizing*" with one another. It is understood as the way of entering the same emotional state as the other, mirroring their facial expressions and behavioral patterns in a conversation.

## **2.2 Empathy and the brain**

Numerous neurological studies have been conducted on the basis of understanding empathy. The overall conclusion so far has been that mirror neurons along with a number of areas in the brain including the supramarginal gyrus, the inferior frontal gyrus, the inferior parietal lobule, the amygdala, collectively known as the mirror system, does most of the work when recognizing

and responding to stimuli that indicate emotional reactions from other persons. Figure 2 displays highlighted areas that have been studied as the main areas of emotional and cognitive empathy. (Shamay-Tsoory 2015.)

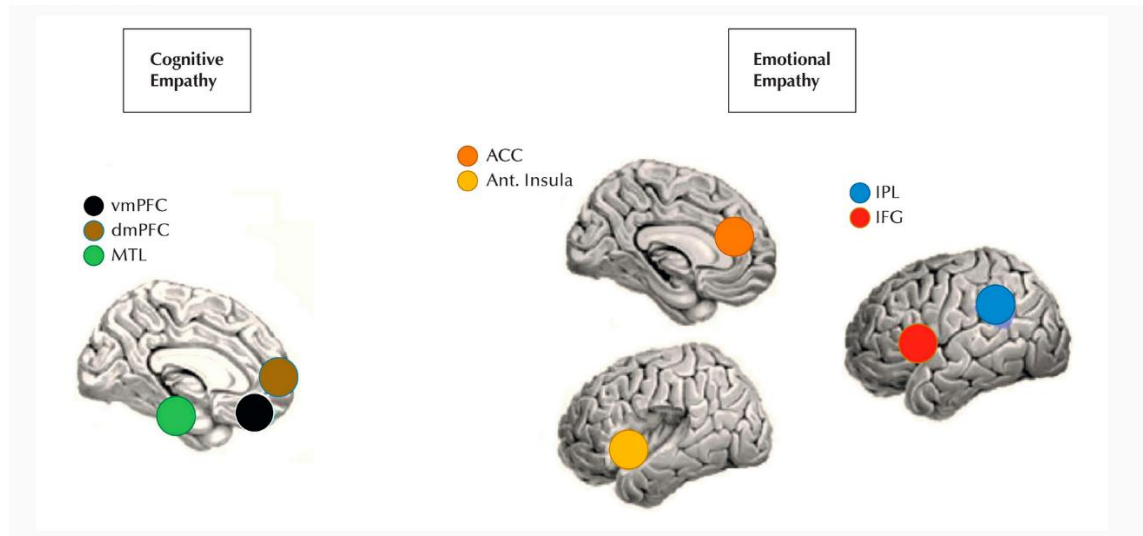


Figure 2. The components of cognitive and emotional empathy (Shamay-Tsoory 2015)

It has even been proposed that the amygdala can work and recognize emotions, even if other parts of the brain, for example the part that recognizes visual stimuli, do not function. As an example, Daniel Goleman (2006, 23) tells a curious story about a man nicknamed “Mr. X”, who had suffered two strokes the results of which were that the neural pathways between the eyes and the visual cortex had been severed. Even though his eyes were functional to accept and send visual stimuli to the brain, the brain was not able to recognize them. However, when shown pictures of faces expressing sadness or anger, he was able to recognize the emotion the faces in the pictures were exhibiting. The brain images taken during the experiments revealed that there was another neural path in the brain that was still functional to receive information from the eyes. Normally, the eye sends information to the thalamus from which it then journeys to other areas such as the visual cortex. However, from the thalamus another, faster signal is sent to the amygdala, a cluster of nuclei responsible for receiving and interpreting information quickly. The amygdala is then able to send signals to the rest of the brain in accordance: if seen object is threatening, it launches a flight or fight-response. It also signals the brain and body of perceived emotions and as a



result the emotion is imitated. Although the man was not able to see, he could *feel* the emotions that the faces in the pictures were showing.

The brain, however, is by no means omniscient. In fact the very strategy of creating empathy in the player for a video game character lies in a system of deception, or rather a trick of the mind, since the brain does not always know what it is emoting for.

In the early days of movies, a film was shown to an audience who were experiencing moving pictures for a first time. At the beginning of the movie, a train was approaching the camera. The audience screamed and tried to run away in fear, because in their minds they were all about to be crushed by a train. Their brains were deceived into thinking the train was real, because they could not have known better. (Goleman 2006 27.)

Today, we are constantly surrounded by screens with pictures and moving images, and we never mistake these images as physical objects or beings that are able to harm us. One could argue we no longer run away from moving pictures on a screen because we are used to them and know the difference between a lion on a phone screen and a beast approaching us in real life. However, we are still able to have an emotional impact of them. This is thought to be the result of the mirror system in the brain, and even though we can consciously remind ourselves that a face on a screen is not next to us, the brain goes through the process of emotional response nevertheless. (Morris et al. 1998.)

The evolution of empathy and compassion to one another likely started from relationships of mutual dependence, later evolving into a relationship of trust.

### **2.3 Trust**

Henry Honkanen (2016, 203-204) introduces the base types of interaction relationships – or types of trust.

1. Communal relationship: participants experience responsibility in each others' well being, and do not expect repayment of their actions
2. Exchange-based relationship: participants offer favours expecting repayment of their actions. (Honkanen 2016.)

To describe trust, some people would say one thing and some another. However, in general trust is understood to be a fundamental bond between a being and another, where the participants experience the benefits and disadvantages that the relationship provides. The basis of trust is to believe that another person behaves in good will, in honesty and fairness, and even if given the opportunity, would not act in order to hurt mentally or physically. (Honkanen 2016.)

It could be said that trust has evolved from a purely selfish form of relationship: two early humans would act in favour of each other in order to gain something from the relationship later on. Harshly, some relationships in today's world could also be described this way.

Trust requires time and experiences together in order to form and strengthen.

It can be argued that trust is present whenever a player encounters and interacts with a game character. Trust functions as it normally would outside of the game world, when the player forms a bond with a character, be it the playable character or an NPC.

### **2.3.1 EXAMPLE: JOURNEY**

A brilliant example of transitioning trust is in Journey, a video game by Thatgamecompany, launched in March 2012. The game can be played in both single-player mode and with another, random person. The point is that along the journey through the game you form a bond with the other person, whom you know nothing about and can only communicate with through arbitrary symbols and sounds you can both emit in order to get the other's attention or warn them of impending danger. The game is also quite short, it takes only about two to three

hours to complete, and the author would wager this is because the developers wanted to make sure both players have that time to complete the journey on one go.

The game in all is very uncommunicative. There is no text anywhere, not in the cutscenes or the UI, so it would make sense that there is no way to verbally communicate with one another anyway. The only thing the player is able to do is figure out what the game wants you to do through sheer attempts and trying alone. When you do find the other person in the game world, you stroll through together and figure out the puzzles in co-operation. The game is entirely focused on your trust and co-operation, although non-verbal beings in the game are there to guide you.

These beings are also a notion of their own. They are living, flying beings made out of carpet and fuelled by mysterious light the players can emit upon them to activate them. They are very playful in character, and one can feel gratitude from their vocalization and movement as they are released and activated. There is another trust forming element, whether you play alone or not, you are encouraged to help these carpet creatures, and after you do so, they help you in return. Despite it being the only way to progress in the game, the player needlessly feels like they “want” to help. The expression of gratitude and returned help is the very basis of how human beings form trust between each other, so it makes sense that we form a bond with them.

The aforementioned carpet beings are seen to the player as communicative and expressive beings, although they do not possess so much as facial features to interpret emotions from. This brings us to projection, a form of reflecting emotions of our own towards other people or animals, or as in the previous case, on flying carpets.

## **2.4 Projection**

In some situations we sometimes project our own feelings onto the other person or persons, expecting them to feel in a certain way and then act upon it. This can

happen most often in confrontational situations, where an agitated person expects the other person to feel as agitated or fearful as they are, and this may either calm their agitation or most likely build on it. (Psychology Today.)

The way we expect each other to act and feel is what is called a defence mechanism, which aims to foresee other people's actions ahead of time and to prepare for a possible punch or a bite.

Projection also works in other beings. We might communicate falsely with our pets, expecting them to feel remorse or anger after we bonk our toes on the leg of a coffee table.

This method of interpretation can also be carried to fictional characters which we expect to feel in certain ways. This brings us to video game characters and our ability to project our feelings towards them.



Figure 3. The Traveler, Journey (2012)

The following is an example of faceless or visibly emotionless characters: when in game something happens to the playable character and we feel enraged or happy, we unconsciously expect our playable character to feel the same way. This creates a feeling of relatability and “being” the playable character. In NPC cases, we relate to them all the same, and feel like we are “being” their friend in a situation of crisis or happiness.

## 2.5 Types of communication

In their article, Prof. Anne Converse Willkomm (2018) defines five types of communication; verbal, nonverbal, written, listening and visual, although one could argue there are only two main divisions: verbal and nonverbal, under which the other categories subside.

In his book *Vaikuttamisen psykologia* (2016, 213), Honkanen studies non-verbal communication in depth and describes it as such:

- **Kinetic** which consists of limb movement, limb gesturing and body language
- **Facial** as facial expressions and facial gestures
- **Eye** as eye movement, direction of gaze, eye contact or lack thereof, movement of pupils
- **Haptic** as in touching, shaking hands, hugging, kissing, and touching of one's own body
- **Paralinguistic** in the tone, speed and volume of speech, laughter and silence
- **Physical appearance** in aesthetic appearance
- **Use of space** in the use and invasion of personal space and moving around in a space
- **Relation to time** as being accurate, hectic or slow
- **Sense of smell** in hygiene, scent of one's body and general cleanness. (Honkanen 2016.)

Communication with one another is an essential tactic for survival, and an evolutionary benefit which separates us from being one to being many.

### 2.5.1 Verbal

Verbal communication consists of three main categories: the language, intonation or tone and pressure, and written communication. The final category has become more and more emphasized as the world has been connected through the

internet and social media in particular, wherein the written word is the most used form of communication.

### 2.5.2 Non-verbal

The way we communicate with our bodies, especially with our hands, is an instinctive non-verbal unique form specifically in the case of human beings. Our ability to convey feelings, exaggerate our spoken words, express surprise and excitedness, and even crouch and cower in fear or clench our fists in anger.

One could argue that body language includes facial expressions. We use our faces in order to convey our feelings particularly with spoken communication in a way no words could describe. We are exceptionally skilled with reading and understanding facial expressions, we are even able to somewhat understand the feelings of animals, especially those with direct messages to us, for example we easily perceive anger or hostility in predator animals. Figure 4 presents an expressive image of the main protagonist Aloy, from Horizon: Zero Dawn, a game by Guerrilla Games, launched in February 2017.



Figure 4. Aloy from Horizon: Zero Dawn (2017)



Figure 5. Solas from Dragon Age: Inquisition (2014)

Figure 5 presents an equally expressive image of Solas, a character in the Dragon Age franchise by BioWare. The character debuted in 2014, in Dragon Age: Inquisition.

## 2.6 Colors and shapes in the mind

Color and shape theories are the very basics of character design. Shapes and colors evoke emotional responses whether a player is conscious of it occurring or not. Our emotions associated with colors are largely defined by culture and linguistics.

Broadly, warm colors such as red, yellow, and orange are perceived as passionate, energetic and/or aggressive, whereas cold colors such as blue, green and purple are perceived as serene, soothing, indifferent or sad. It has been theorized that the association comes from the physiological effects of the body; associated warm colors occur on the skin if a person is agitated, excited or happy, colder skin color indicates emotional indifference, slow metabolism in a calm body or depressive state. The luminosity, hue and saturation of the colors affect the mind too. Bright colors may induce energy while dark cool colors slow down metabolism and induce tiredness, much like a sunny day vitalizes and the

dark of an evening slows us down and prepares us for a night of rest. (Mayer & Bhikha 2014.)

The colors of nature are likely to be reasons for the association of colors. Red as a passionate face or a warning as a color of blood, yellow as the sun shining and heat bursting out of a flame, all link with the association of aggression, energy, passion and heat. Green signals freshness and life, blue is a calm lake on a clear day. In an essence, all colors can be traced to the corresponding phenomena or object in nature, and manipulated in character design as their representing characteristic.

Unlike color, the emotions associated with shapes are universal. To put it briefly, a sharp shape indicates danger or possibility of getting oneself cut. The shape of a predator's tooth, a sharp thorn on a plant, a rough edgy rock on the bottom of a cliff are warnings to be careful or fight back in order to protect ourselves from getting hurt. On the contrary, soft and round shapes do not pose a direct threat and are considered safe and soothing, such as an animal's fur and a soft pillow. (Naghdi 2020.)

According to these signals, characters can easily be shaped and colored in the desired representation.



### 3 IMMERSION

A segue from the science to the world of video games, immersion can be described as the phenomenon of *sinking into the world of fiction and the characters within*. To make a play experience immersive, developers may use a wide range of audio-visual stimuli for the purpose of pulling the player in. Such are, for example, environment design, sound and music design, character design and most of all, interaction with the game world. Figure 6 displays a view of the largest city in Horizon: Zero Dawn (Guerrilla games, 2017).



Figure 6. Views of Horizon: Zero Dawn (2017).

In their thesis, Selja Tanskanen (2018) considered immersion a valuable aspect in any video game, as it insures the player will experience engagement in the events of the game, feel dedication and responsibility, and will likely return to the game later on.

Salen and Zimmerman (2004) conducted a study on the ‘state of play’, or a “magic circle” when children would enter into a game of any kind. In the environment of video games, it means that since the world is interactive and

audio-visual, it provides the player a 'safe space' to act in any way they please without affecting the real world, and it allows them to behave freely without heavy real life consequences. Immersion also allows the player to feel the events of the game, as they have entered a stage as the game protagonist in an empathetic state.

## **4 EMPATHY IN VIDEO GAMES**

### **4.1 The most empathetic character traits**

Arguably the most empathetic traits in video game characters are the traits we feel relatable when communicating with one another in real life. Conflict, loss and joy can be considered universal experiences in the human life. As previously stated, the brain does not automatically know whether the subject of empathy is a real living thing or not.

The first empathetic trait would be the survival of conflict. The brain tends to remember negative situations and emotions easier than positive ones. Long gone events may still come up in our minds as clear as if they were yesterday, and so can the emotional impact they awoke. Everyone can recall a conflict they once had to face or are facing today, and more conflicts are to come as life goes on. We are hard-wired in order to learn from previous negative experiences, thus it is easier for us to recall when about to face a situation which somehow reminds of past experiences. With that, it is easy to understand why conflict would be the most relatable trait on a fictional character, be it a small inconvenience or a world-ending disaster.

Most people would also consider themselves to have experienced loss in some way. A death of a friend or a family member, failure of a relationship or employment, the emotional impact of losing one's pet.

Nevertheless, events of joy and pleasure are something we all crave and treasure. It is understandably easy to recall terrible events in our lives, but it is equally easy to recall a situation that made us feel positively giggly. We are naturally prone to feeling like happy or joyful people are nice to hang around with, because joy as well as other emotions, is easily transferred.

## 4.2 Their stories

The background of a character likely resonates with an empathetic player. The emphasis lies in how the character itself reacts to their previous experiences or a conflict; a negative reaction to a memory that had resulted in an emotional wound is more relatable than a mirthful laugh and a shrug. A character that seems to mask or hide its emotions well is relatable, even if concerning. In this example, the said character could be interpreted as carefree, emotionally detached or wounded and guarded. That all depends on the player's perspective, worldview and previous experiences in real life, but also on the player's experiences of said character as a whole. It could be argued that people, as well as characters, who tend to react happily or nonchalantly to serious events may raise doubtful emotions in the player. Since people are multi-layered, it would make sense that fictional people demonstrate more traits than one. We expect a range of emotions and reactions from others, be it human, animal or an imaginary character. The main thing is that we are forming an emotional bond with another being, so we expect them to have some sort of understanding of emotions and bonds. Otherwise they appear flat, boring or just plain and unapproachable.

## 5 THE SURVEY

For this thesis, a qualitative survey was conducted. The survey was sent to communities and friend groups most likely to be interested in the topic on a personal level. The very experience of empathy and relatability during gameplay is subjective and personal. Sometimes the experience touches the player deeply. At such a level it might mirror their own experiences in real life. It may even highlight their behavior in a positive or negative manner, thus encouraging the player to self-reflect in a relatively safe environment. With this, a gaming experience has the ability to change the player's real life, outlook or personal views of others. When it comes to personal experiences such as this, it is possible the player feels invaded if questioned on these experiences. With this in mind, the survey was assembled to focus on the character the participant wants to discuss, but open in a way that even if encouraged to go into detail, the participant does not have to open up too much. Additional care was taken to make the participants feel comfortable while taking the survey, and when published, complete anonymity was assured to all participant.

As a hypothesis, it was predicted that the survey would collect around 5-20 responses, with detailed descriptions of events and emotions composed in approximately half of them. The initial version of the survey was sent to close friends as a test and to the thesis supervisor. After testing and supervisor feedback, the survey was corrected and published on several Discord channels, some of which consisted of personal friends, and one large channel of more than a hundred game designer students.

In 9 days, 53 responses were gathered, exceeding the initial expectation, and more than 75% of the responses included detailed information of the character, the experiences and emotions, wildly exceeding the initial expectation. The survey was kept public for 9 days for solely the purpose of time management and to retain enough time to carefully study each of the responses.

Considering the nature of the results, the final examining of the data needed a certain strategy. At first all answered surveys were individually read through. Finally it was concluded that the data is more valuable when each answer is examined among its peers, rather than as separate entities. To compare the emotions the participants reported was of greater importance than the differences between the characters themselves. In the end all answers were considered in a neutral setting, and the results as a whole were examined question by question, not participant by participant.

The full survey can be found in the appendices (Appendix 2).

## **5.1 Overview**

The lack of overlap in chosen characters by the participants was a considerable surprise. Of all the responses, only two focused in the same character. Other characters from the same game or game series occurred, but only in three responses. Furthermore, since taking the survey was thoroughly anonymous, it is impossible to know for sure who wrote which answers.

The participants were asked to state their age and gender identity. Most of the participants were young adults, roughly 51%, entered their age as between 15-25 years of age, and 40% entered as 26-35 years of age. Four participants (7,5%) reported being 36-45 years of age and only one (1,8%) stated their age as over 45 years of age.

## **5.2 Results**

The participants were provided with a small list of main game genres and asked to select the genres they enjoy playing the most. The highest selected answers were Adventure (77%), then RPG (75%) and finally Action (66%) (Figure 7).

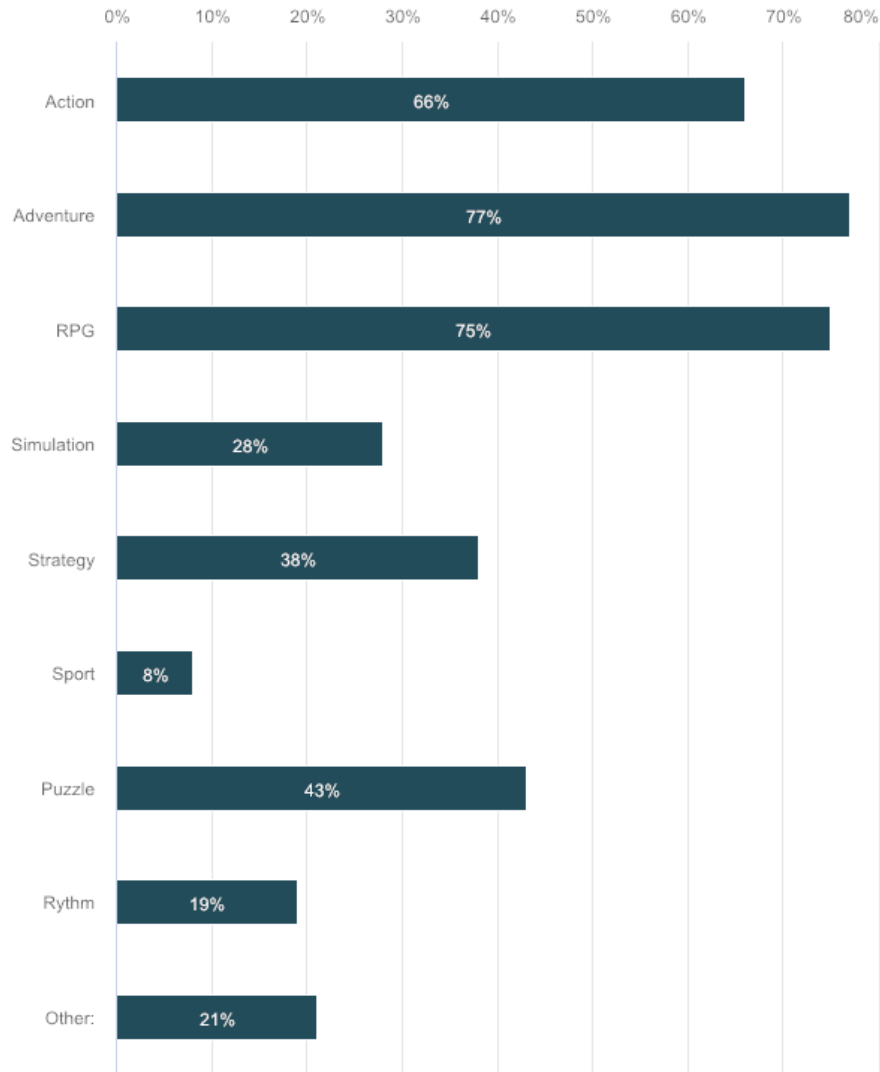


Figure 7. Survey question 3 (Rönkkö 2021)

The participants were asked to select a character they either liked, disliked, felt especially emotional towards, or would simply wish to discuss. Afterwards they were asked to name the game the character was from. Each of the participants chose a different character from one another (except for Solas from *Dragon Age: Inquisition*, who was chosen by two different participants).

Some selected answers can be found in the appendices (Appendix 1).

Then the participants were asked to broadly define the character by using a list of adjectives they could select in accordance (Figure 8).

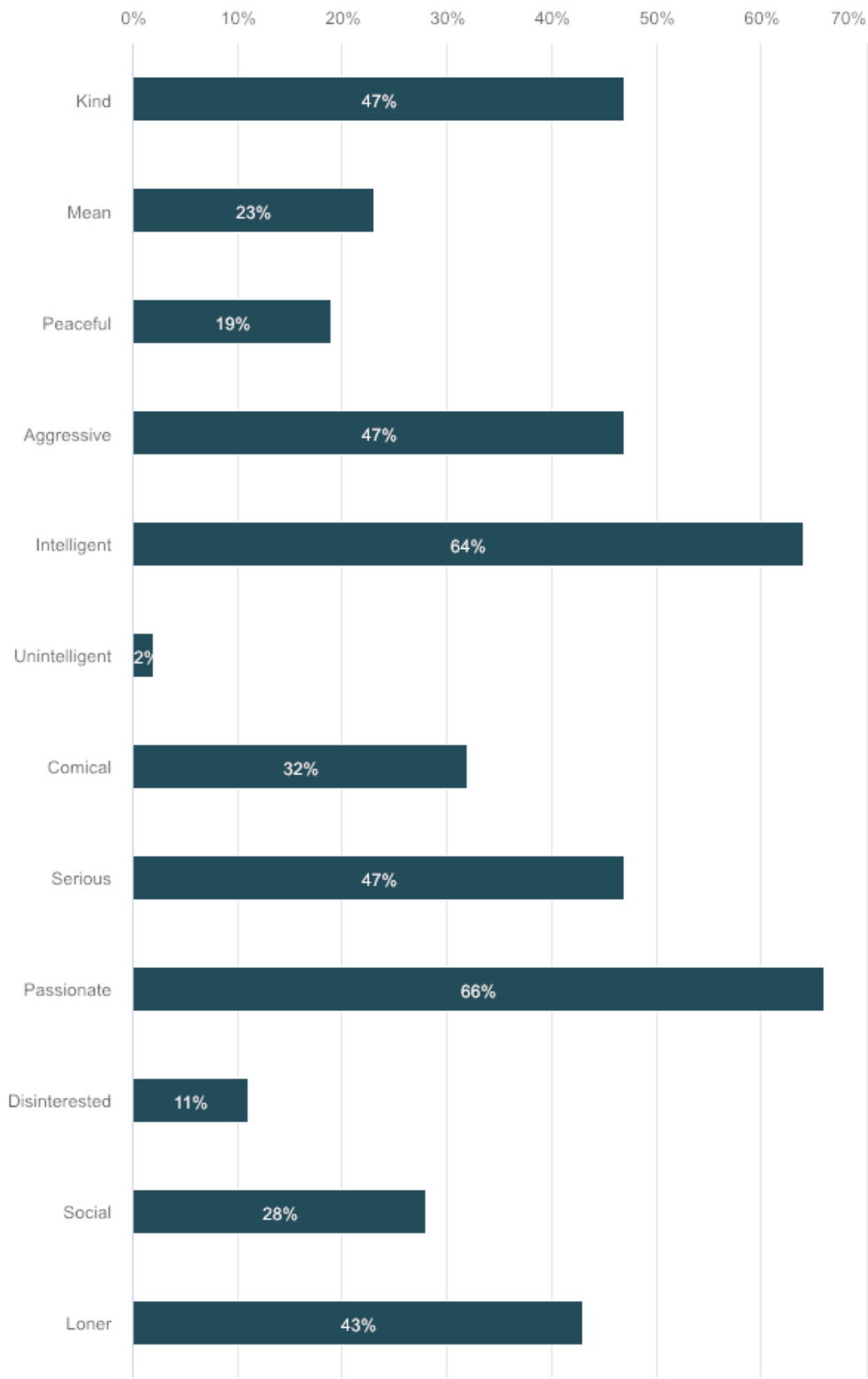


Figure 8. Survey question 6 (Rönkkö 2021)



They were then encouraged to describe the character in more detail, which most of them did. In fact, 45 of all participants went ahead and wrote down a detailed description of their character. Some were a few words in length, some filled an entire page (Appendix 1).

In order to examine if the characters chosen were modifiable, or somewhat changed during gameplay, the participants were asked if the character was playable and could their experience be made a difference through character personality changes such as dialogue options.

**8. Is the character a playable character?**

Vastaaajien määrä: 53

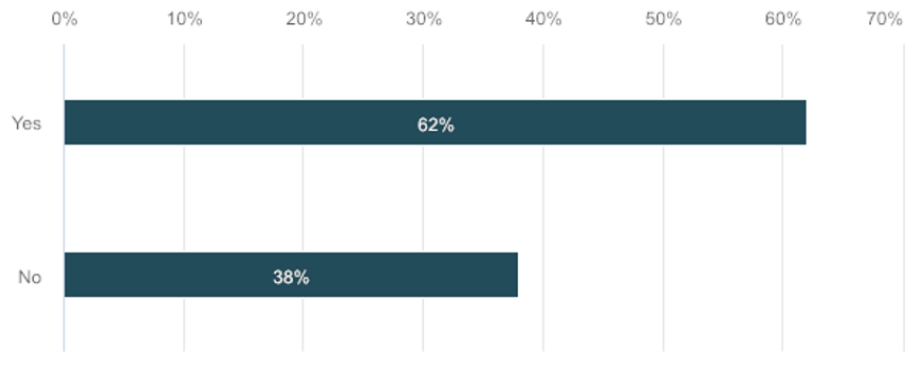


Figure 9. Survey question 8 (Rönkkö 2021)

Although 33 (62%) answered their character to be a playable character, only 13 (41%) of these characters could be modified by such means. The remaining 19 (59%) reported the character to be set in their personality, and the player can not modify their choices with dialogue options or such mechanisms.

**9. Can you affect the character's personality in the game? (For example: dialogue options)**

Vastaaajien määrä: 32

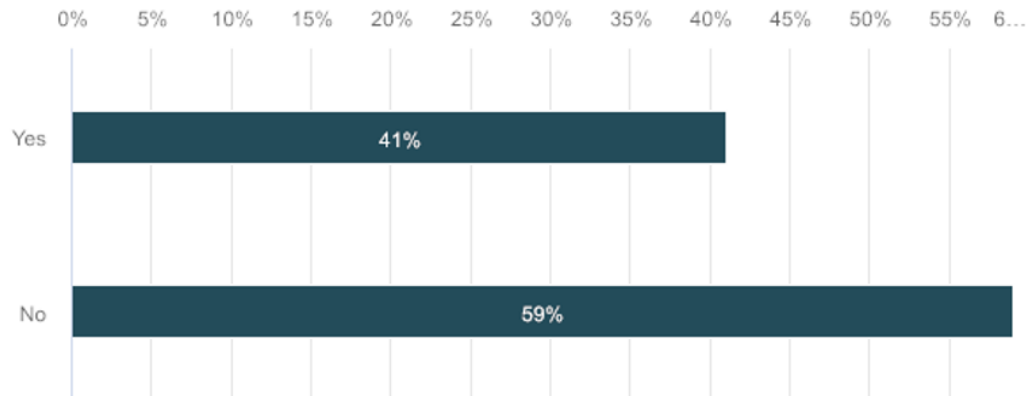


Figure 10. Survey question 9 (Rönkkö 2021)

One could conclude that most characters chosen for this survey were and still are emotionally captivating by simply being themselves, without the player having any power over their personalities.

At this point it was time for the participants to look inward and consider the similarities and differences in personality traits between themselves and their chosen characters. Out of the 40 responses, 29 answered in the positive, and of these, 7 also highlighted some differences between themselves and the character (Appendix 1).

The next question was for measurement of the character's moral alignment in the game world. The options available were that the character was either good, evil, complex or none.

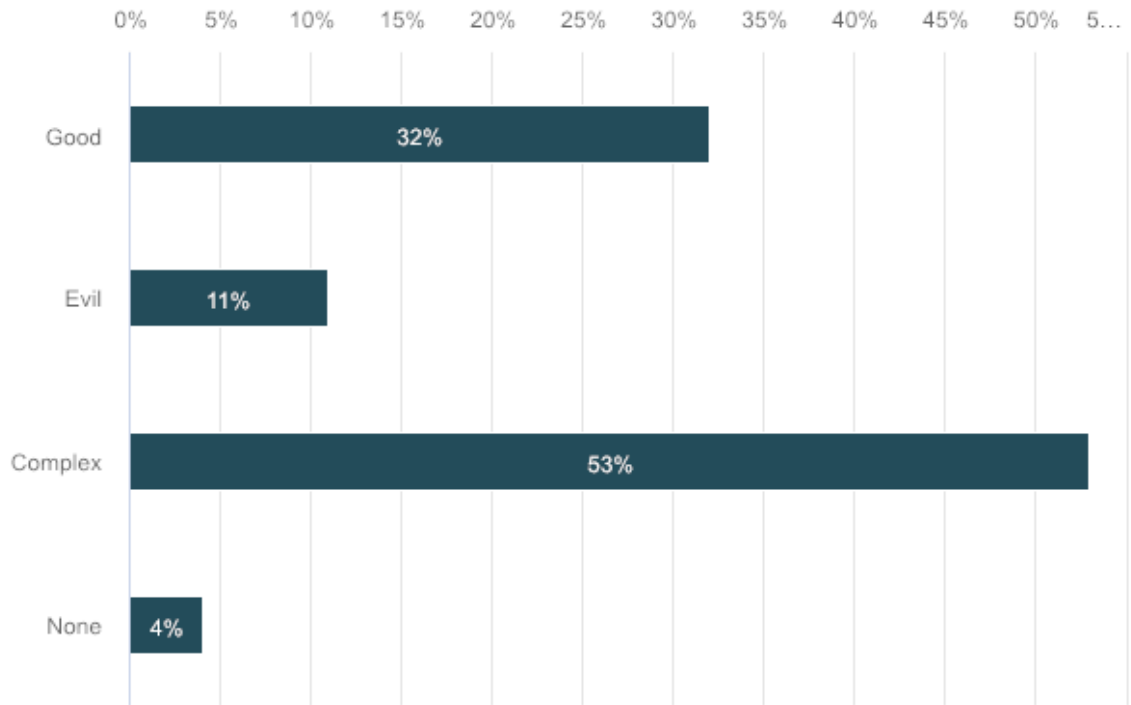


Figure 11. Survey question 11 (Rönkkö 2021)

Against the reviewer's initial expectation, 28 (53%) participants reported the complex option. The second highest was the option for good, with 17 (32%) answers. 6 (17%) participants answered evil and the final 2 (4%) answered none. The point of this question was to have the participants examine the relationship of the character with its world.

A related question, only revealed if the participant chose the "good" or "evil" option, was to ask the participant if they agreed with the relationship alignment. 21 (91%) answered yes, for the better or worse.

**12. Do you agree?**

Vastaajien määrä: 23

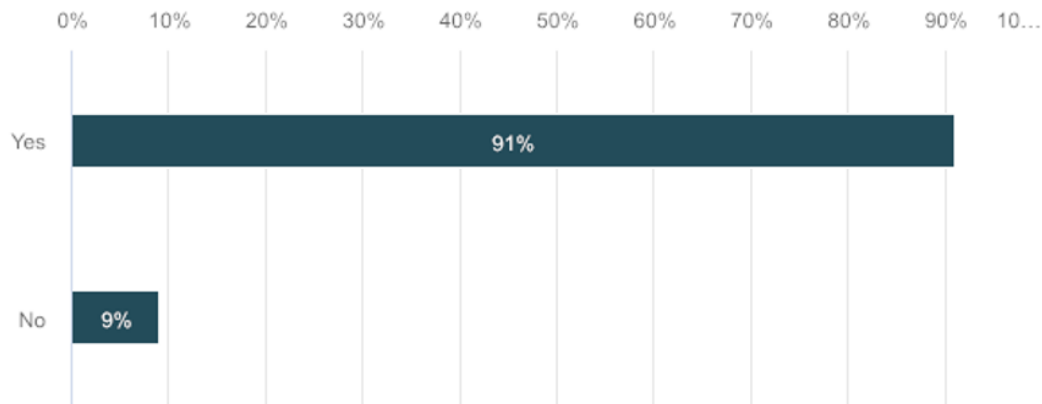


Figure 12. Survey question 12 (Rönkkö 2021)

Next, the participants were given a brief explanation of empathy; “the ability to place oneself in another’s shoes and experience the same feeling as someone else.” The following question asked if they had experienced empathy for the character while playing. 47 (89%) participants answered yes.

**13. Empathy is described as the "ability to place oneself in another's position", and experience the same feeling as someone else. Do you think you have experienced empathy towards this character at any point in the game?**

Vastaajien määrä: 53

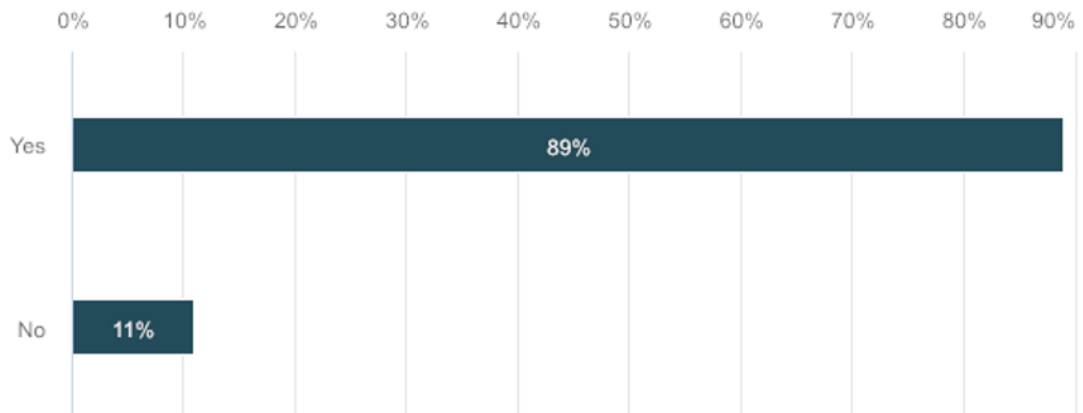


Figure 13. Survey question 13 (Rönkkö 2021)

Participants were provided with some space where they could describe any occurrence of the experience (Appendix 1).

Many of the situations seemed to describe an event when the character demonstrated vulnerability, emotional conflict or expressed passionate emotions such as rage, devotion or determination to protect their loved ones.

The participants were then asked about the emotions the character made them feel throughout the game (Figure 14).

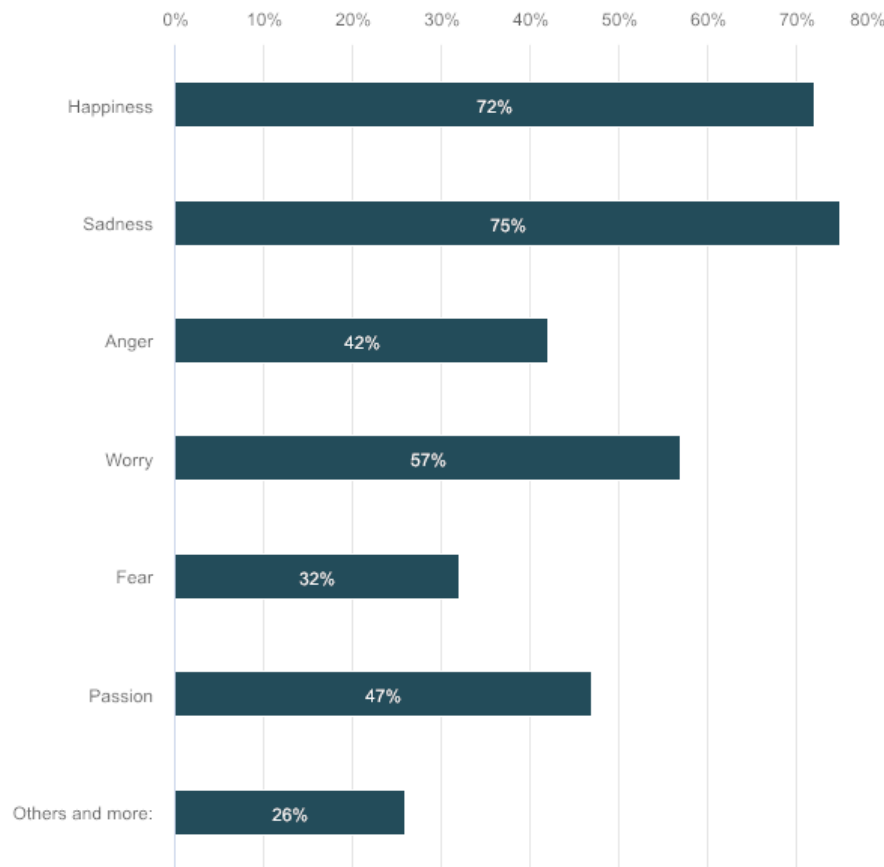


Figure 14. Survey question 15 (Rönkkö 2021)

Remarkably, happiness and sadness share a near equal first place.

In the “Others and more”-section, 14 participants took the initiative to provide additional emotions (Figure 15).

## Avoimeen tekstikenttään annetut vastaukset

Vastausvaihtoehdot	Teksti
Others and more:	Yes
Others and more:	betrayal
Others and more:	Horniness, joy
Others and more:	fondness, respect
Others and more:	DETERMINATION!
Others and more:	I think Life is Strange does a great job of getting the player through a proper <u>emotial</u> rollercoaster.
Others and more:	Excitement / positive anticipation
Others and more:	I totally fall in love with him every time I play the game
Others and more:	Pity, familiarity, compassion
Others and more:	Exhaustion and loads of anxiety
Others and more:	Annoyance, compassion, amusement
Others and more:	Responsibility
Others and more:	Joy
Others and more:	Pride, shame, regret

Figure 15. Survey optional answer slate for question 15 (Rönkkö 2021)

A hypothesis was made on the effect of the relationship between the player and the character; the depth or impact of the emotional experience could directly affect a player's life, outside of play. To measure the depth of the emotional connection, the participants were asked if they felt the chosen character had had any effect on their life (Figure 16).

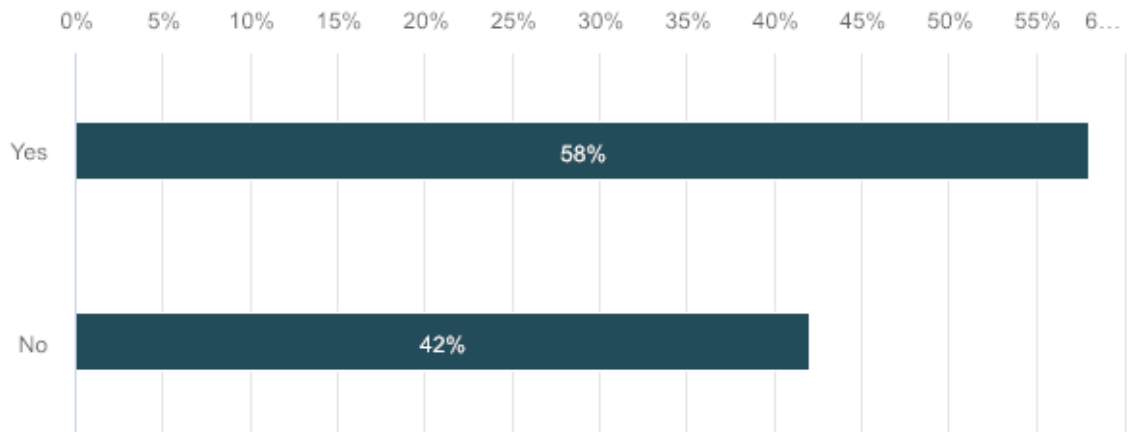


Figure 16. Survey question 16 (Rönkkö 2021)

The division was not as high in contrast as initially expected. 31 (58%) participants answered positively whereas 22 (42%) answered in the negative.

The participants were then asked to elaborate their answer, and 32 participants did (Appendix 1).

Although it is possible that the characters have affected the participants and their lives subconsciously, the results on the matter remain inconclusive.

To further press on with the topic of relationship depth in and outside of game, the participants were asked if they would befriend their chosen character in real life (Figure 17).

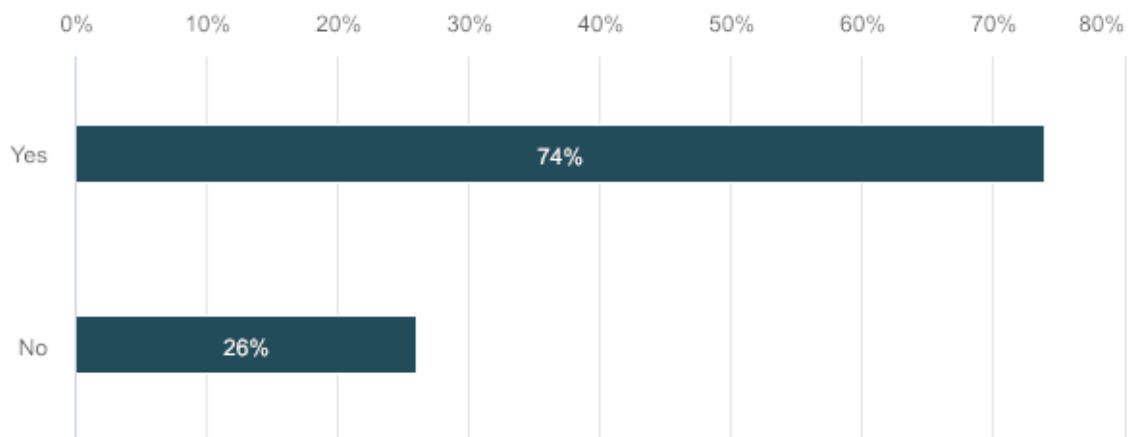


Figure 17. Survey question 18 (Rönkkö 2021)

Of all answers, 39 (74%) answered in the positive, and remaining 14 (26%) did in the negative.

The following question (Figure 18) would only appear if the participant responded “no.”

**19. Would you like this character in real life at all?**

Vastaajien määrä: 14

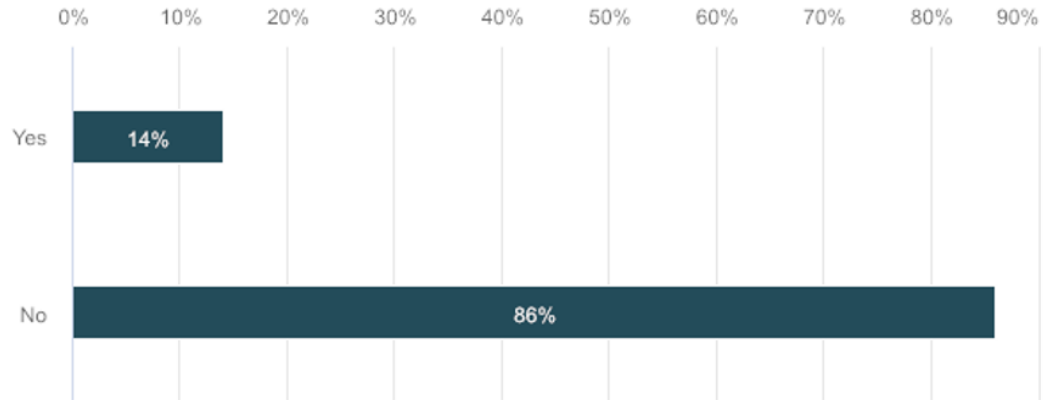


Figure 18. Survey question 19 (Rönkkö 2021)

The final question was an open slate and the participants were encouraged to add any additional information on the character. As the question was broad and the participants could answer anything they wanted, the results varied from a few joking lines to serious final thoughts (Appendix 1).

It all begs to question the reasons the participants chose their characters. They were not asked to choose their favorite character, but one they had felt emotional about. Yet many described the character freely as one of their favorites, and even if that makes sense, it is also important to note not all characters are emotionally relatable, but all the favorites always are. We bond to characters, real or fictional, by emotional connection.



## 6 CONCLUSION

The thesis succeeded in answering the initial question of why empathy can be felt towards fictional characters. The different sources ranging from simply compiled articles to complex neurological research papers provided a broad understanding of the mechanics of empathy, its subdivisions and how it develops in the minds of humans throughout their life.

Due to the time frame the thesis was conducted in, numerous new, unanswered research questions were raised. As an example, more research could be made on the subject of age or gender identity in relation to the level of empathy the players experienced.

As a relatively young science, psychology is in a constant state of change and development, and the mechanics we understand today may be completely different in the future. This includes, of course, our current understanding of neuroscience and by extension, empathy.

The survey data was exceptionally valuable. Participants were interested, open, and wordy in their responses, and the results gave a deeper understanding to the sensitivity of emotional experiences between players and characters. The emotions the participants reported are real, and the research of the thesis supported the legitimacy of their experiences. Empathy, along with the emotions and the memories it creates, is real to the human mind, no matter the object of it.

To understand the relationship between the player and a character, it is of utmost importance to respect the subjectivity and intimacy of the experiences. To each player every game is different, and to each mind every character is a person to relate to, experience safety and to engage in conflict with. Each situation in which a player experiences kinship, compassion or sorrow is a story of great emotion, intimacy and subjectivity that has managed to grasp the heart of the player through the screen of the game. It is a success story for the game developers, and for the player it is a touching moment of being understood. It allows a safe

environment to explore and criticize oneself, to learn from, to accept difficult emotions and even offer emotional support. The ability of the human mind to experience compassion towards any living or fictional being is to be treasured and valued. Instead of undermining the empathy that players experience during play, it should be carefully studied and the stories listened to.

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Figure 3. The Traveler from Journey. Thatgamecompany, 2012. Copyright Thatgamecompany, 2012. Original image available: [https://journey-archive.fandom.com/wiki/The\\_Traveler](https://journey-archive.fandom.com/wiki/The_Traveler) [Accessed 24 of March 2021]

Figure 4. Aloy from Horizon: Zero Dawn. Guerrilla Games, 2017. Image taken by fan in game. Original image available: <https://www.resetera.com/threads/horizon-zero-dawn-photography-thread.3988/page-8> [Accessed 24 of March 2021]

Figure 5. Solas from Dragon Age: Inquisition. BioWare, 2014. Copyright Bioware, 2014. Original image available at: <https://dragonage.fandom.com/wiki/Solas> [Accessed 24 of March 2021]

Figure 6. Views of Horizon: Zero Dawn. Guerrilla Games, 2017. Image taken by fan in game. Original image available at: [https://www.reddit.com/r/horizon/comments/6noxr5/the\\_view\\_distance\\_in\\_this\\_game\\_is\\_incredible/](https://www.reddit.com/r/horizon/comments/6noxr5/the_view_distance_in_this_game_is_incredible/) [Accessed 19 of March]

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## 9 APPENDICES

The survey: Question 7 (Rönkkö, A. 2021)

7. If you'd like, please describe the character in detail.

*Solas is an aloof loner with a burning passion inside of him. He feels like he doesn't belong to the world as it is (and he doesn't) and carries a lot of regret inside of him. He can be kind but is also extremely ruthless when it comes to reaching his goals.*

*He's a middle-aged man who is a leader of an outlaw gang situated in North America at the end of the 19th-century. He is a charismatic leader, arrogant, kind and a father figure to the main protag in RDR2 Arthur Morgan. He cares deeply of his gang which is more like a family and wants for them all to retire the outlaw business after "one last big gig" so they can have enough money to travel away from NA to Tahiti or Australia. As their latest heist went wrong, they are being tracked by "bounty hunters" called the Pinkertons and they lost a few members. Dutch keeps going on about doing one big heist to get enough money and how he has a plan to fix everything (he doesn't) even though everything is slowly going badly for them. He slowly becomes more paranoid of his own gang as he is sure someone there is a mole for the Pinkertons. They move camp multiple times and with each move, Dutch becomes more and more paranoid and more violent and volatile. The man who once cared deeply for his gang is now ready to abandon anyone who gets into trouble or doesn't agree with him. His paranoia leads the gang being divided into two and Dutch blames Arthur and another character for this. Dutch ends up shooting his now girlfriend and his ex-wife as he is sure his GF is the mole and his ex-wife accuses Dutch of being paranoid and gets in his way. The gang then falls apart and Dutch escapes to the mountains with the actual Pinkerton mole.*

*The likeable father figure-ish character who wants nothing but the best for his family turns into a paranoid man who cares about nothing but himself and money and lies and manipulates people to get what he wants.*

The survey: Question 10. (Rönkkö, A. 2021)

10. Do you think you share personality traits with the character? If so, could you describe some of the similarities between you and the character? If you do not, could you specify the differences between you and this character?

*The immense need to keep everyone safe and happy is definitely something we have in common. Also being misunderstood for being someone who you aren't because of the stigma from society.*

*similarities: a bit arrogant, wants best for their friends/family and is willingly help them (Dutch in the beginning)*

*differences: selfish, a liar, manipulative, ready to abandon an activity/person immediately when times get rough or difficult (all the traits I hate in a person)*

The survey: Question 14. (Rönkkö, A. 2021)

14. Could you briefly describe the situation this happened?

*During the end of the game where the character turned out to be a villain, I could empathise with his motivations and reasons for acting as he did and does.*

*It is revealed in the game that he is forced to wear his power armor and that someone could terminate his life functions with a press of a button. Despite all he is he really is on a tight leash and still doesnt get moody about it and accepts his situation. Ending of the game made me feel sad about him cuz he was such a fun companion to have in the game.*



The survey: Question 17. (Rönkkö, A. 2021)

17. If so, how?

*I think I try to understand people's motivations more before judging.*

*I felt happier in general for a while. Makes me feel like trusting others might not be too bad. I'm older now and can weed out who is a good friend, I can trust my judgment and give people a chance.*

*If anything, the game and Max Caulfield made me reflect upon my own life and personal growth. It made me think more about how important other people are in life and that how difficult it is to sit down and listen to one another's worries and to offer to help them.*

*If anything, it made me think about how can I keep on growing as a person and how to appreciate the life we find ourselves in.*

*He has helped me cope with my own anxiety and fears, and to get better at recognizing when I need outside help to deal with them. He's also helped me accept my issues better. He has also made me talk more openly about anger problems - he has issues with anger management with tragic results, which he doesn't admit, and it has given me courage to understand this is something people struggle with, and that in real life you don't have to be alone with such problems. His story is very tragic and he's not a good person, but feeling empathy and sympathy for him has made me be more forgiving towards myself as well - to put it simply, if someone like him can be worthy of the player's compassion, then a normal person like me can too.*

The survey: Question 20. (Rönkkö, A. 2021)

20. Finally, what else would you like to say about the character? Go nuts!

*His leather thongs are neat.*

*To the character itself, I would say what doesn't kill you, hurts you a lot but it makes you stronger. Life is not easy.*

*honestly, fuck Dutch.*


*He is a wonderfully well-written complex character who shows the process of slowly falling into paranoia. He starts off as a very likeable character and as the game progresses you slowly start to hate his guts without really even noticing it. I loved the character in the beginning bc he's so charismatic and cares for people and he ends up being a paranoid goblin who kills his own family members and I wanted to see him dead at the end of the game.*

*~ Character development but make it negative ~*

*I think it's interesting to have a character that does things you can't relate to. That said I think a lot of people thought his actions were justified so it's really a matter of opinion*

*I don't have the time to write a long text but she is a DEEP character with full of personality and very well executed. She is not in the game just for the GIRL CHARACTER prop.*

## Relating to video game characters

 Pakolliset kentät merkitään asteriskilla (\*) ja ne tulee täyttää lomakkeen viimeistelemiseksi.

### 1. Please select your age: \*

- 15 - 25
- 26 - 35
- 36 - 45
- 45 +

### 2. Please select your gender: \*

- Female
- Male
- Other
- Prefer not to say

### 3. What kinds of games do you usually play? \*

- Action
- Adventure
- RPG
- Simulation
- Strategy
- Sport
- Puzzle
- Rythm

Other:

**4. Now then. Pick a character you especially like, dislike, have felt emotional towards or would just like to talk about. Who are they? \***

**5. What game are they from? \***

**6. Please pick a few traits that would describe your character. \***

- Kind
- Mean
- Peaceful
- Aggressive
- Intelligent
- Unintelligent
- Comical
- Serious
- Passionate
- Disinterested
- Social
- Loner

**7. If you'd like, please describe the character in detail.**

**8. Is the character a playable character?**

- Yes
- No

**10. Do you think you share personality traits with the character? If so, could you describe some of the similarities between you and the character? If you do not, could you specify the differences between you and this character?**


**11. Is the character considered good or evil in the game universe? \***

- Good
- Evil
- Complex
- None

**13. Empathy is described as the "ability to place oneself in another's position", and experience the same feeling as someone else. Do you think you have experienced empathy towards this character at any point in the game? \***

- Yes
- No

**15. What emotions has the character made you feel during the game? \***

- Happiness
- Sadness
- Anger
- Worry
- Fear
- Passion
- Others and more:

**16. Do you think the character has affected your life after playing the game? \***

- Yes
- No

**17. If so, how?**


**18. Would you befriend this character in real life? \***

- Yes
- No

**20. Finally, what else would you like to say about the character? Go nuts!**