

# Identification with Game Characters

## Effects of visual attributes on the identification process between players and characters

Av: Alexander Gast

Handledare: Henrik Warpefelt  
Södertörns högskola | Institutionen för naturvetenskap, miljö och teknik  
Kandidatuppsats 30 hp  
Medieteknik | HT2016/VT2017  
Spelprogrammet



# Identifiering med spelkaraktärer

**Effekter av visuella attribut på identifierings  
-processen mellan spelare och karaktärer**

## Abstract

Concept of identity within digital games is believed to be a prominent subject as the bond between the player and the character could potentially enhance the gameplay experience. There is as yet a lack of studies addressing the visual identification of predefined game characters. Therefore, this study aims to examine how the identification is established through visual attributes of a game character. To this end, a qualitative online survey was undertaken, gathering responses from 350 respondents. The responses were analysed using thematic analysis, and the elicited themes indicate that the identification has in fact been established, where visual attributes such as hair, weapons, outfits and even abilities had an influence on how the participants perceived and identified themselves with the character.

**Keywords:** identification, visual attributes, characters, digital games

## Sammanfattning

Begreppet identitet inom digitala spel tros vara ett betydande ämne när det kommer till spelforskning då samhörigheten mellan en spelare och en karaktär potentiellt kan förstärka spelupplevelsen. Eftersom en liten mängd studier använder termen identifiering inom visuella studier av fördefinierade spelkaraktärer, syftar denna studie till att undersöka hur identifiering etableras genom spelkaraktärens visuella attribut. Totalt har 350 respondenter besvarat ett kvalitativt online-frågeformulär. Svaren har analyserats med hjälp av tematisk analys, och de uppfunna teman indikerar på att identifiering har fastställts, där visuella attribut såsom hår, vapen, kläder men även förmågor har inverkat på hur deltagarna uppfattade och identifierade sig med en karaktär.

**Nyckelord:** identifiering, visuella attribut, karaktärer, digitala spel

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# 1 Introduction

We are deeply driven by a sense of identity, which we constantly explore and change throughout our lifetimes (Dunkel, 2000). Identity itself is a prevalent topic in game research as numerous studies aim to find a relation between players and how they identify themselves with a game character (Bessièrè, Seay, and Kiesler, 2007; Hefner, Klimmt, and Vorderer, 2007; Klimmt et al., 2010). Although, the major interest in the term identity as a research topic, there seems to be a gap within the gaming research field since few studies seem to have taken the opportunity to adopt the visual approach in their identification analysis of predefined<sup>1</sup> game characters. Many studies base their analysis on *Massive Multiplayer Online Games* (MMOGs) such as *World of Warcraft* (Blizzard Entertainment, 2005) by focusing on how the players reflect themselves by customizing their character to be like the ideal self (Bessièrè, Seay, and Kiesler, 2007; Jenson et al., 2015), or seek to understand the answer of identity as an integral factor by exploring game mechanics and motivations within the game environment (Van Looy et al., 2012; McCreery et al., 2013).

A study conducted by Waggoner (2009) implies that a complex connection has been observed as the players (referred to by their real-world identities) immersed themselves in a game character, despite their diegetic identification and their level of gaming experience. According to Manninen and Kujanpää (2007) it is of a significant matter for a game that include playable character to create immersion through identification. Thus, it is to be believed that despite being an experienced or non-experienced player, a character may play a significant role in creating more immersive games and enhance the overall gaming experience as according to Solarski (2012), by manipulating the visual components one can create an infinite number of expressive possibilities for a character. Therefore, by gathering data on predefined game characters, this study will investigate how the players identify themselves with the character and how does the visual attributes impacts on that connection. By

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<sup>1</sup> A predefined game character refers to the inability to customize the characters' visual attributes on the same level as within MMOGs.

studying visual influences of the game character on the identification process, this study might provide researchers with the necessary tools and inspiration to continue studies covering purely visual concepts of various predefined game characters, as well as provide developers with the knowledge of how to design their character concepts in order to create a more immersive game and enhance the overall gaming experience for their players.

## **1.1 Research Question**

In order to analyse if the visual attributes of a game character might influence the identification between the player and the character, this study adopts a question of which it will strive to answer.

**Question:** In which ways does a player identify themselves with a game character?

## **1.2 Essay Structure**

This study begins with presenting the theoretical framework that this study is based on covering topics such as psychological identification, wishful identification vs. desires, and the definition of visual attributes. Followed by the methods chapter which provide a detailed overview on the crucial for this study course of actions and the thematic analysis method. In the following chapters, the study will reveal the results that elicited from the gathered data. A reflection on the methodology will be discussed together with the results and possible further research. In the end, a conclusion with the final statement will be given.

## 2 Background

Although this study takes the visual approach of the identification analysis, it is important to obtain the knowledge on how psychological identification has been studied in other game studies. By studying previous research, this study will be able to re-apply the theories of when the identification actually occurs, and therefore also analyse if the visual attributes affect that process.

### 2.1 Psychological Identification

Identity as we know it might be perceived differently depending on the context. In psychological science, the concept of identity occurs in the two most important for human relationships: relation to yourself and relation to other people (Erikson and Erikson, 1998). These relationships indicate the type of connection which connects the body with itself, where one is a psycho-physical and moral condition that is the self-identity, and the other that defines our relations with other people. A *personal identity* as described by Wenger (2008) is a continuous process of exploring the self meanwhile Fearon (1999) defines *personal identity* as:

[...] a set of attributes, beliefs, desires, or principles of action that a person thinks distinguish her in socially relevant ways and that (a) the person takes a special pride in; (b) the person takes no special pride in, but which so orient her behavior that she would be at a loss about how to act and what to do without them; or (c) the person feels she could not change even if she wanted to.

Based on Fearon's definition the identification between players and game characters may occur in various ways, despite the fact that this study focuses on a fictional environment. A player might feel immersed with the character if being exposed to experiencing character's feelings and cognitions (Lankoski, 2004; Van Looy et al., 2012). Meaning that the player adopts character's goals and experiences its emotions in the different events that occur during gameplay. Van Looy, et al. (2012) outline that a game is slightly different from other media as the players can be a part of the character they are playing which the author describes as a temporary shift in self-perception as the players apply the character's attributes on to themselves,

which creates a mental bridge between the concept of a player's self and the ideal self. Likewise, in a study of Hefner, Klimmt and Vorderer (2007) where the study let players adjust attributes of their character to self-concept which resulted in more enjoyable game as the player saw their self-concept in the character. Van Looy, et al. (2012) also mentions that this kind of a mental connection leads to potential relations and social bonds both in and outside the game through seeing the character as a part of network relations. The identification might even be established through the role the player is assigned, such a case has occurred in a study of Klimmt, et al. (2010) where players who were unable to see the actual driver in *Need for Speed: Carbon* (EA Canada, 2006) felt as a part of it. Lankoski (2011) states that the character is the key that bridges the fictional environment, and as well as Van Looy, et al. (2012) refers to the identification as an "I"-experience where the players strive to reach their goals. Lankoski (2011) also define a term called *empathic engagement* as a definition of a player that instead of personal goals reacts to character's actions.

Adapting these definitions of identity allows this study to distinguish when the actual identification between the player and the character occurs. This by analysing players' emotions and how players distinguish themselves through their experience with the character among themselves and their acquaintances in both physical as well as the fictional world.

## **2.2 Wishful Identification vs. Desires**

Similarly, to seeing the self-concept in a video game character is the *wishful identification* of which adults experienced in a study conducted by Hoffner and Buchanan (2005). Their study, being dependent upon the identification with television cartoons, indicate that the identity between the viewer and the character occurred in a *wishful factor*. This term although being developed on the study of television cartoons, can also be applicable on game characters as it is not only bound to one type of media due to the similarity of Fearons (1999) definition of *personal identity* that is a part of a human in general. Seen in a study of Van Looy, et al (2012) where the *wishful identification* occurred as the players scouted for similarities in game character's traits that were their own as well as the desires to be like the perceived character. A factor of concern that Hoffner and Buchanan (2005) mentions is that

humour factor, which as seen as an attribute viewers were attracted to in others, did not seem as a trait that they would like to develop in themselves.

In a study of Kennedy (2002) where the players identified themselves with other genders based on affection for the character being successful and determined creates a discussion point for this study, as it implicates a potential concern for the author in differing between the actual identification in form of *wishful factors* of which Kennedy defines as *transgendering*, and the desire for the character in other ways. *Transgendering*, as defined by Kennedy is when a male player is fused with female game character in a kind of queer embodiment. Similarly, in a study of MacCallum-Stewart (2008), heterosexual men expressed an appreciation for the female form while playing the character. Likewise, in a study of Jenson, et al. (2015) where the players chose the opposite gender in order to experiment with identity change. However, in Jenson, et al. (2015), the opposite gender pick seemed to occur due to favour in gameplay choices instead of identity experimentation.

### **2.3 Visual Attributes**

Warpefelt in a study focusing on Non-Player Characters (NPC) states that the visuals of the characters, should be “[...] designed in such a way that they look, feel, sound, and behave in accordance with what is signaled to the player.” (Warpefelt, 2015, p.1). This statement originating from a study of NPCs could also be applicable on Playable Characters (PC) as the signal that the player could perceive might focus on creating identification, which has been considered as determinant of enjoyment (Hefner, Klimmt & Vorderer, 2007), and even immersion or enhanced gameplay experience. Visuals of the character is what a player perceives through own sight on the screen. SolarSKI (2012), and Block (2013) defined the term *visual* as *visual elements* which consists of lines, shapes, volumes, values, colours, space, tones, movement and rhythm. According to Block (2013) those *visual elements* can also communicate mood and emotions which are essential for this study in relation to the psychological identification. This study will adopt the *visual elements* as *visual attributes*, and the theory presented will be merged into a single definition that: Visual attributes are pure visual components that together create the structure of the object (game character) that the player perceives, with the ability to communicate mood and emotions.

### **3 Methods**

This study uses a custom-made online questionnaire to gather data on the identification process and the visual attributes that may affect it. Characters used for this study are the main protagonists from *Assassin's Creed II* (Ubisoft Montreal, 2009), *Bayonetta* (Platinum Games, 2009), *God of War III* (SCE Studios Santa Monica, 2010) and *Tomb Raider* (Crystal Dynamics, 2013). Collected data has been analysed with *inductive thematic analysis* (Braun and Clarke, 2006) in order to find the first patterns for a predefined character which makes this study a bit explorative. Alternative methods and their implications such as personal interviews and the quantitative data collection are later discussed in this chapter.

#### **3.1 Method Selection**

Most of the theoretical framework that this study has presented is directed towards the more psychological aspect of the identification, where the characters that has been used in these theories originate from MMOGs. As the subject of predefined video game characters in the visual analysis has been vague, this study aims to create a better foundation for developers and possible further research within this area. There is a reason to believe that by analysing the identification through the visual aspects, might create a more immersive game and enhance the overall gaming experience. In order to achieve a solid foundation for this study, a large collection of data from various groups and demographics was necessary to strengthen the results and gave the ability to generalise the conclusion. Thus, this study uses the qualitative methodology as the in-depth data that has been collected, provides a better starting position and understanding of which patterns do occur in this type of analysis. By allowing the participants to answer freely, the data that has been collected is not being bound to the visual analysis only, but also within the psychological, genus and equality studies.

#### **3.2 Implementation**

In order to gather the qualitative data a custom-made online questionnaire (See Appendix: Questionnaire) was created and opened for the public. Questionnaire itself focused on open questions with small hints that pointed the participants towards including the visual aspects of the identification process that could occur. Questions

in the form were inspired by the theoretical framework previously presented in this study, where the questions were adjusted to cover topics such as: players' feelings and emotions towards the character, seeing ourselves in the character, sympathy, players' goals and motivation. The questionnaire itself was built in accordance to the feeling of having a conversation with a person based on true and false answers. By taking this extra step, the participant could focus on one question at a time and avoided to be distracted by the list of questions that otherwise would be displayed in a normal form.

Web link with a short summary of the questionnaire was published on Playfire (2007) and game related threads on Reddit (2005), in order for the questionnaire to reach the groups that it was primarily designed for. Once the participant was redirected to dedicated website where the form was stationed, a repeat of the information was displayed. The questionnaire firstly displayed the Terms & Conditions that the participant had to agree to in order to proceed. A set of demographic questions were asked and followed by a game selection screen where the logotypes (See Appendix: Game Logotypes) of the four games their respective titles were displayed. After picking one game, the participant was presented with a collage of the main protagonist character in order to refresh their memory of how the character appeared in that specific game. When the participant felt ready, a set of further study related questions were displayed. At the end, a thank you message was displayed with a personal reference id of which the participant could use to later resign from the study if they no longer wanted to participate.

### **3.3 Participants**

A set of requirements had to be fulfilled in order to participate in the study. Participants had to be at least 18 years old and have played at least 3 hours in one of the games used in this study. In order to avoid bias results it was of the outmost importance that no personal contact between the researcher and the participant would occur. If there was a suspicion of a participant having an impact on researcher's judgement, such as personal contact or if the participants' anonymity was at risk for being revealed, then the answers were excluded from the study. A total of 350 participants filled out a questionnaire, of which 275 were eligible for the analysis. Out of the 275 participants that made it into the study, 30% were female, 68% were male and 2% identified themselves as other genders. Total age range of these participants

varied between 18 – 53 years and originated from various continents, leading by North America on the first place by 58%, secondly Europe by 33%, followed by Australia by 3%, South America by 2%, Oceania by 2%, Asia by 1% and Africa by 1%. Selection of the games that the participants chose were relatively equally distributed, 30% picked *Assassin's Creed II*, 20% picked *Bayonetta*, 20% picked *God of War III*, and 30% picked *Tomb Raider*.

### **3.4 Character Selection**

This study consists of iconic characters that originate from four popular games available on various gaming devices (Kennedy, 2002; Glixel, 2016). It was important for this study that the selected characters were iconic, meaning that they were sticking out in form of appearance, background and the overall rumours that surrounded the characters, as a wider variety of opinions could be collected on a variety of characters. Besides being a popular game character, the character presented for the participants had to originate from a game with a Third-Person angle, where the character was always visible for the player during the gameplay. There is a reason to believe that by being able to perceive a character from the visual perspective, might have an impact on how the appearance affect players' identification process. This through outfits that resemble character's role in the game.

*Transgendering*, a term that has been brought up previously in this study by Kennedy (2002), is considered in the character selection as there might be interesting opinions from the players on playing as the opposite gender. Therefore, based on this term and with the aim to raise gender equality awareness in gaming industry, the characters were both female and male. Based on the criteria above the four characters were also selected from games that the researcher had experience of, as it is important for a study that the researcher is well familiar with the material used (Gustafsson, Hermerén and Pettersson, 2011).

#### **3.4.1 Ezio Auditore da Firenze**

Ezio (See Appendix: Game Characters) is a character that appears in *Assassin's Creed II* (Ubisoft Montreal, 2009) who was a nobleman born on 24<sup>th</sup> of June 1459 in Republic of Florence. Being a second son to Giovanni and Maria with three other siblings. Ezio in his early years enjoyed a youth and carefree life. His life has changed

when their family fell a victim of a conspiracy where Ezio witnessed his father and two brothers being executed. During the game, Ezio advances to be an assassin going in his father footsteps while creating allies and advancing as an assassin to avenge his family. Ezio is well known for his distinguishing parkour-like abilities of which he constantly uses to hide from enemies by hiding and climbing different buildings and rooftops. He uses a various set of weapons such as swords, knives or even hidden blades to get rid of his enemies while staying unnoticed, and the robe that Ezio wears creates his mysterious assassin look. (Ubisoft Montreal, 2011; Glixel, 2016; Wikia, 2017)

### **3.4.2 Cereza**

Although being called *Bayonetta* within the game, the real name of this character is Cereza (See Appendix: Game Characters) and appear in the game also called *Bayonetta* (Platinum Games, 2009). Cereza was born on 19<sup>th</sup> of December 1411 and her primary distinguishing factor is that she is a witch. During the past five hundred she spent her time in a coffin on a bottom of a lake, to be later awoken by Antonio Redgrave and his son Luka. Cereza's aim is to discover the truth behind her past and why she was at the bottom of the lake in the first place. In order to reach her goal, Cereza receives help from her informant specialist Enzo and a shopkeeper / weapon smith literally from hell Rodin. Cereza's most distinguishing attributes are her personality, strength and overall sexual appearance. Being rather a peaceful character is someone to avoid when angered. Her abilities, that are integrated with her hair, consist of turning into animals and summoning beasts. (Platinum Games, 2009; Glixel, 2016; Wikia, 2017)

### **3.4.3 Kratos**

Called by many names, Kratos (See Appendix: Game Characters) is a half god who is a son to the god Zeus and a mortal Callisto. Kratos yet again makes his appearance in *God of War III* (SCE Studios Santa Monica, 2010) who to begin with is a Spartan soldier. Kratos is a vengeful warrior who feel guilt over inadvertently killing his own family of which he now blames the gods for letting it happen. Throughout the game, motivated by revenge he sets on a journey to kill the gods and avenge his family. Although the history of Kratos is fully developed throughout the

series, his character does not change much, except the fact that he seems older in every game. Attributes that make Kratos a memorable character is his pale white skin that are the ashes of his family, and the red tattoos that reassembly his brothers scars. Kratos uses a set of weapons that are not to be seen in resemblance in other games as the shape and movement create a bit different gaming experience. (SCE Studios Santa Monica, 2010; Glixel, 2016; Wikia, 2017)

#### **3.4.4 Lara Croft**

Lara (See Appendix: Game Characters) has been the main protagonist in multiple universes of the *Tomb raider* franchise. Lara used in this study appear in the second reboot timeline of *Tomb Raider* (Crystal Dynamics, 2013) where she explores the secrets of the island Yamatai. Lara is an English archaeologist, where unlike the other timelines, she is unskilled and vulnerable to all of the threats that appear during the gameplay. As Lara meets the obstacles, the events within the game shape up Lara to be a heroine that players have known her from previous publications. Lara appears as a little noisy and without control character as she is unexperienced, although she is still a powerful character known for her bravery. Lara uses a set of weapons such as climbing axe and a bow that create the archaeological and hunting look of hers. (Kennedy, 2002; Crystal Dynamics, 2013; Wikia, 2017)

### **3.5 Data Analysis**

Due to the large amount of data that was collected, it was necessary to filter and categorise the answers in order to validate if they were eligible for this study. Data that has been collected were assigned to integer, boolean and text variables dependent on the input type. By adopting the variable system, it was easy to automatically exclude participants that did not fulfil the age criteria, entered invalid demographic data and/or consisted of answers which contained only a No (false) answer without any explanation. When the data was filtered, it was later on categorized to their respective character to get a better overview of the quality, amount, and distribution of data between the characters. A total of 350 participants answered the survey of which 275 were eligible for the analysis when the filtering phase was completed.

An *inductive thematic analysis* has been used in this study as it has been proven to be an efficient way for analysing a large amount of qualitative data (Braun and

Clarke, 2006). By adopting the *inductive thematic analysis* methodology on the qualitative data, this study was able to find the first patterns that might occur in the visual analysis of predefined video game characters, but also inspire to further research in other game related fields of studies.

### **3.6 Alternative Methods**

Other data gathering methods have been considered, such as semi-structured interviews and group interviews. Thus, allowing to ask follow up questions if needed, and provide an explanation to a question if the participant would not entirely understand it. As the aim of this study was to collect a large amount of data from various demographics for the ability to apply the conclusion in a wider variety of groups, the online questionnaire was used. The timeframe and geographical constraints had the biggest influence on the method selection as it was necessary to collect a large amount of data in a short period of time, which by selecting the interview or group method would restrict this study to a set of participants from a small local area and provide much less amount of data for the analysis. As the term, *personal identity* has been adopted throughout this study, the group interviews were not appropriate for this type of study. This due the fact that *personal identity*, as the name implies, is perceived on individual level (Wenger, 2008), which means that this study had to focus on the individual self and not gather the data from a group session where it might be impossible to retrieve personal opinions.

Mixed methods were also considered for this study. This due to the functionalities that the questionnaire had, the true and false statements that could be used to project the statistical data and then supported by the qualitative data. There was however not enough of time to execute mixed methods as the researcher had no previous experience in the quantitative data analysis. Furthermore, as discussed, this study aimed for the qualitative data in order to find the first patterns that might occur in visual studies of identification between players and the characters.

As for the questionnaire, this study has chosen to display a collage of the pictures of the specified characters and then presented participants with questions. A suitable method would also be to record the participant while playing the game in order to analyse the reactions and then ask semi-structured questions. However due to time

and geographical constraints as stated above, this method was not suitable for this study.

An *Empirical, Phenomenological Psychology (EPP) –analysis* method (Pitkänen, 2015, pp.123-125) has been considered for this study due to the ability to analyse a participant's experience or perception of an object on an individual level, which then compared to all answers build up an overview of the answer. Such a method seems to fit perfectly in the analysis of *personal identification*. However, due to a large amount of data and the timeframe restrictions this analysis method has not been used.

## 4 Results

Results that elicited out of the *thematic analysis* have been divided into eight main themes based on the pattern occurrence (see the list below). Other minor patterns that also occurred in this study, are presented in the eighth theme. Data that is most pertinent for the majority of answers received, will be presented in form of quotes to get an overview of what quality of data the participants have provided. Themes presented, focus not only on the physiological identification, but also on the visual attributes that affected the identification process. The themes presented goes as follows:

- **Emotional Attachment**  
Covers the identification process that occurred through perception of character's emotions such as sympathy and compassion.
- **Projection**  
This theme describes how participants reflected character's attributes on to themselves and perceived characters as role models.
- **Personality**  
Characters' personality traits that enhanced immersion thus creating identification are being covered in this theme.
- **Competence**  
Patterns such as strength and abilities are being covered in this theme, as they affect player's motivation on a psychological and visual level.
- **Clothing and Gear**  
Personal traits of the characters were reflected through the visual attributes of clothing and accessories which affected the identification.
- **Sexual Appeal**  
Realism and overly sexualized characteristics of the character played a big part in this analysis and are presented in this theme.
- **Gameplay Integration**  
The patterns in all previous themes indicated that integrated elements in the game itself seemed to attract the most interest of the participants, and are presented in this theme.

- **Other Patterns**

Patterns that occurred in a much less amount, and patterns that this study was unable to connect theoretically are presented in this theme.

#### **4.1 Emotional Attachment**

This theme represents the identification between the player and the character, which occurred through perception of characters' emotions. Participants, mostly fully aware of it, identified themselves with the characters through sympathy. This based on character's experiences within the game, where the character was mentally challenged or experienced a difficult obstacle. Such pattern in Ezio Auditore da Firenze occurred already at the beginning of the game where his family was executed.

**Participant #92:** I felt upset for him when his family was hung in front of him; also, felt a sense of vengeance on his behalf.

**Participant #106:** I wanted to avenge Ezio's father and brothers. I wanted to explore everything. I wanted my first platinum trophy for the game.

Participants by sharing the feeling of vengeance with Ezio, struggled with thinking of how the character would respond in this type of situation. Thus, creating a temporary shift in self-perception as defined by Van Looy, et al. (2012) where player's applied character's attributes on to themselves. In this case the attribute of anger and sense of vengeance.

**Participant #27:** I constantly tried to think about how the character would respond to the situations he was put in, while also feeling like I was in it with him.

Likewise, the pattern of sympathy has occurred while playing with Kratos. The emotional attachment in this character did not differ from Ezio, as the obstacles that this character had to encounter also triggered a sense of sympathy.

**Participant #200:** I felt mission-minded while playing. He was so singularly focused, and I could relate. Everything was an obstacle to where he wanted to get, and I wanted to see him through.

Other emotional factor compassion, has been noticed in the analysis of Lara Croft. Together with sympathy, the compassion for the character indicated a will to strive further and explore how the character would develop. Lara has been considered as someone the participants knew, which created the emotional bridge.

**Participant #54:** As Lara became more and more downtrodden, bloodied and beaten, I became more determined to complete the game and see her story through.

**Participant #141:** Every time Lara fell or struggled in the newer games it was emotional because it was like watching someone you knew having pains.

The theories of Lankoski (2004) and Van Looy, et al. (2012) seems to be practical for this type of analysis as the patterns of players' exposure to character's feelings occurs in this case. This represented by the connection of emotion through sympathy with the character, which creates immersion and therefore establishes the identification in a pure psychological form. Similar patterns were noticed in a few answers in the Cereza character, however not enough data was collected on this specific theme, and therefore not presented with quotations.

## 4.2 Projection

The projection theme indicates the patterns of where the participants reflected character's attributes on themselves. Meaning that the participants often described the character as someone they would like to be, or character's personal traits that they wish to aim for in their personal lives. Despite being fantasy characters with supernatural abilities, patterns that occurred indicated strength as an attribute that participants would like to achieve.

**Participant #198:** Not to sound juvenile, but Kratos is pretty much a complete badass. He very much plays into a sort of power fantasy - this very macho, tattoo-covered, god-slaughtering antiheroic badass.

Strength is indicated by the power in both physical form as well as the mental form, where participants reflected on the ability to overcome obstacles in their lives in order to achieve a goal.

**Participant #120:** I felt more powerful, opposite of how I feel in everyday life.

**Participant #242:** The more you play the more you find yourself reflecting on Kratos' feats. The more you think about training yourself to overcome things in your own life.

These patterns that occurred were mostly applicable on the male characters, such as Ezio and Kratos. As for the female characters, strength was not the only ability that participants would like to obtain in themselves. Courage and confidence has shown to be the most attractive attributes of the female characters, which were not only appreciated by the female players but also by the male players.

**Participant #167:** Admiration. Her strength and courage throughout the game and composure makes me aspire to be like her.

**Participant #230:** Powerful, strong – I always identify with strong female characters, and prefer to play them when possible.

Confidence of Cereza had a major effect on some of the male participants, as it triggered a wishful identification of her personal traits despite being the opposite gender. This leading to a conclusion that the *wishful identification* as described by Kennedy (2002) was established due to characters' being perceived as successful and determined and not through a sexual desire.

**Participant #74:** While her design probably prompts a lot of men to want to bed Bayonetta, I wanted to BE Bayonetta. The misstep with her hair aside, she's powerful and in control, graceful, clever and oftentimes sexy for her own sake, rather than for others [...].

**Participant #51:** Made me want to send nudes to my ex-boyfriend and be more sexually confident in myself with how confident she was.

As **Participant #51** believed that his sexual orientation had an effect on his reasoning of the character. None of the codes however, indicated that the sexual identity had an effect on this reasoning in other players during this study. As both male and female participants described Cereza's successfulness and determination in a way that reflected the wish to have attributes despite the sexual orientation.

**Participant #36:** Powerful, sexy and magical. Her design choice is incredible, with very consistent motifs from a design view.

Everything down to her walk cycle reflects her empowering strength and confidence.

Sense of pride and the confidence of Lara Croft was the factor that the participants appreciated, much alike Cereza, however not on the sexual confidence. In case of Lara, the factors were signaled through the visual appearance and obstacles that developed Lara into a feminine and caring character.

**Participant #39:** The character itself brings happiness on looks alone as she has an admirable appearance and design. However, there is also a strange sense of pride as her character resembles feminine confidence and who's influence is enough to boost a woman's confidence likewise.

### 4.3 Personality

Patterns that focus on character's personalities of which participants immersed themselves in, are being presented in this theme. Most of the patterns focus towards the personality issues that the players encountered within these characters. In question of Ezio Auditore da Firenze, the participants seemed to dislike his immature behaviour as it did not match the heroic image they perceived by the role he was presented with.

**Participant #8:** He didn't mature as thoroughly in that game as I would have liked. (I didn't know they had 2 more games planned for him). [...] I forgave his immaturities early on, but he made the same mistakes at the end even though he was supposed to have grown up a bit.

In Ezio's case, his immaturities are being justified when players experience the obstacles that Ezio is going through, which also changes his behaviour to match the more heroic appearance of an assassin.

**Participant #81:** His personality in the beginning, as I mentioned he struck me as a player. [...] He became an assassin and his actions became more heroic.

**Participant #143:** At first, in the game, he was kind of a douche, which made him unlikeable. That changed, however, as you continued to play. [...] As you got to know him, and followed him through his experiences, his personality changed. It was a natural change, and it made sense.

Likeable patterns have been noted in Kratos character where his vengeance for his family and reckless actions were considered as an issue in the beginning. Those have however been justified as players progressed with the character and discovered the character of the gods.

**Participant #242:** He was selfish person transfixed by a single goal of vengeance. He killed innocents that blocked his way. He only bothered to reason with those my(sic) powerful than him, and solved the trials of the gods. Mortals he ended if they interfered. Saw himself as liberating mankind, but payed no heed to individual humans. (Though I actually liked these aspects in some regards.) [...] A lot of his rage was justified. I disagree with many people's take on him as a character. He is certainly a flawed person but Kratos felt he couldn't leave his vengeance to chance. I think his back story is fantastic. Especially when first killing Ares he was ready to end his life and find peace. But when the gods denied him both death nor calmed his mind they created the unstoppable rage that we see in 2 and 3. By 3 it's clear that the ancient Greek world is miserable because of the Gods and Kratos is fully justified in fighting for the liberation of mortals regardless of what world is created next. Considering all of this it's hard not to cheer for him.

Unlike Ezio and Kratos, the character of Cereza is considered very likable from the start due to her personality traits. Cereza's sense of control, confidence and power are the factors that indicates this type of identification as it also creates the motivation to accomplish objectives in the game.

**Participant #87:** Bayonetta has a very sexy way of dressing and moving, without being the 'damsel in distress'-character, which was very refreshing. She's a lady who is in such control of her own sexuality that it made myself also feel very in control and gave me the feeling that I could beat anything in the game with Bayonetta by my side.

Lara on the other hand that has been considered as a likeable character, was often criticized for the development of her personal attributes. According to participants, there were no notable transition between the innocent Lara and the heroic Lara.

**Participant #218:** My biggest problem with Lara Croft on both are their personalities and how they play out. In the old one, she is basically an action-hero. And while it's not completely bad, it's very boring and outdated and never feels like something else. In the reboot my biggest problem with Lara is that is the lack of confident. Not in the actions during her progress in the game but more personality wise. She always feels out of control of things and never feels like a protagonist and just a pawn for decent exploration and a bit bland combat. Don't get me wrong, I understand the progress for Lara's 'fish out of water' from Timid, the path of progress and Confident and it works only during the first half of the first game. But through the first game, her personality is only mixed between the first and second stage. Nothing in the game makes me feel, that 'she does because she does'. Everything 'she do' is more that 'she has to do it'. Like she is always being forced to take action and never does something because she wants to or feel like it. Also, the voice acting with all the gasping and 'out-of-breath' really doesn't help much either.

Even if the participants experienced the characters as dislikeable because of their personal traits, many of these traits were justified. This due to participants noted connection between the characters' traits and the characters' story.

#### **4.4 Competence**

This theme present the patterns of character's strength and abilities that the participants experienced through visual attributes. The participants described the overall character design as a motivation factor to execute a task within the game. A theory of Warpefelt (2015) is applicable in this theme as character's design signals a picture and character's role and abilities.

**Participant #21:** Looking at the cool character design made me believe in that character's strengths and abilities, so thinking that I can escape guards or take out an entire building full of enemies became more plausible.

**Participant #261:** The design of the character seemed to fit perfectly to the profile of an angry man driven to the point of insanity, someone ruthless and also capable of the deeds he's done.

In case of Cereza, her movement of which she performed certain abilities was a motivation factor to continue the game and unlock further abilities. This due to the fact that the participants showed an interest in the execution of animations that this character used in her abilities.

**Participant #85:** She could do cool combos and summon demons while still keeping cool. That was my motivation to keep playing.

**Participant #74:** Because Bayonetta has a dancer-like aspect to her combat, I was motivated to unlock as many skills and weapon types as I could to see the dance moves she performed when using them. One of the late game weapons is a pair of ice skates, and they're as glorious to use as you'd expect.

The abilities that Cereza uses, are also described as identification on emotional level due to the satisfaction that the participants experienced while executing them. It is unclear however how the execution of these abilities affected the identification

process in more detail besides the satisfaction factor that some of the players experienced.

**Participant #109:** Every movement and attack feels so incredibly satisfying. It feels like I, the player, am the one throwing the punches. It feels like I'm there, like I am Bayonetta. Every attack is addicting, and makes you want to keep going.

This pattern mostly occurred in Kratos and Cereza as the participants were impressed by the unnatural abilities. As for the other characters a more suitable pattern were clothes and weapons as described upcoming themes.

#### **4.5 Clothing and Gear**

Outfits and accessories seem to be an important factor in the visual perception of the character which this theme is presenting. Depending on the character, different visual attributes had a different meaning for the participants. In Ezio Auditore da Firenze, the objects of interest were his assassin white robe and his cloak, which he inherited from his father.

**Participant #258:** Italian assassin. Wore a white robe with a peaked hood. Wielded a sword and a hidden blade on the wrist. I believe this was the game that they introduced the wrist handgun as well. Moved very fluidly, climbing buildings, jumping across rooftops, etc. Was a suave gentleman.

**Participant #90:** Primarily curiosity. Why was his cloak so elaborate? Why did he appear as 'grizzled' as he did? Also, just got me in the mood for some stealthin.

An interesting pattern was that the visual attributes of Ezio's outfit seemed to influence the perception of character's strength and abilities, that lead the players to believe that they could accomplish something that the character was designed for, in this case to behave like a real assassin.

**Participant #187:** His assassin appearance made me sort of roleplay as a sneaky assassin. Instead of running headstrong into fights I utilized stealth.

The visual attributes and especially clothes, were a motivation factor for the participants where they could upgrade and change the armour and gear which motivated them to experience the game on a deeper level. Meaning that they wanted to explore the game world, play side quests and unlock secrets of the story.

**Participant #56:** I got cooler and better functioning gear the more I did, which as a bonus altered his appearance.

**Participant #81:** His clothes look bad ass and the fact that you could see his armour change as they got upgraded really motivated me to kick some ass.

**Participant #199:** Well, some of his garbs, some of which could be unlocked as you progressed through the game, looked especially good, so there was some motivation to play certain side-quests and DLC to un-lock clothes and armour and weapons.

Similar to perception of Ezio's strength and abilities, the same have been seen in the analysis of Kratos. The main characteristic of his strength was that he is a Spartan soldier and a half god to begin with, which is clearly presented in the game. Participants often mentioned his pale-white skin that are the ashes of his family, the red tattoos and the muscular body shape as the visual attributes that create the overall feeling of the character being strong.

**Participant #34:** He's a muscular man covered in ashes with a bright red tattoo that wraps around his torso and ends over his eye. He wears a red kilt, tactical sandals with damaged shin guards. He also has chains wrapped around his forearms that are connected to two blades that he carries on his back.

**Participant #242:** Tall, ash covered, scar over right eye, tattoo on left side of face, going down to left arm left shoulder and across left chest. Carries two blades with chains that wrap around forearms.  
[...] Their ashes affix his body [...].

The clothing and gear of Cereza is discussed in 4.7 Sexual Appeal and 4.8 Gameplay Integration due to being a perfect example of the patterns that occur within these categories. As for Lara, the participants appreciated the transition of her clothes

being adjustable to the environment that she was placed in. Thus, creating a more explorative, heroic and archaeological look of hers.

**Participant #24:** Young archaeologist searching for the secrets of Yamatai. Slender, brown hair pulled back in a ponytail, brown eyes and fair complexion. Begins the game fresh and innocent, by the end she has the rugged and dirty look of a survivor, along with a hardness to her features that wasn't there before. Bright, inquisitive, loyal and brave.

**Participant #126:** As Lara progressed through the game her appearance changed to be more hardened. Her clothes and appearance became more weathered. Upgrading her gear gave them a more impressive and intimidating look which also motivated me to continue.

In the participants description of Lara her personal traits, bravery and loyalty, being implicated through the clothes were also mentioned.

## **4.6 Sexual Appeal**

This theme covers the patterns that occurred where participants expressed character's sexual appeal to be a factor that affected their perception of the character. Both male and female participants showed the interest of the sexual appeal in opposite gender characters. Ezio Auditore da Firenze was perceived as a womanizer and the visual look of his body structure and face has shown to be intriguing for some female participants.

**Participant #91:** When I started playing I really just did glyphs and a bit of collecting but I slowly got more interested in the main story, especially the cut scenes, so I wanted to finish it because I wanted to see even more of the handsome character. Eventually my motivation became finishing the story and all side quests, to fully complete the game.

Cereza on the other hand, was perceived as an overly sexualized character created, as described by participants, to represent an image of what men possibly perceive as sexual instead of a feminine sexuality perspective.

**Participant #46:** Her character design was clearly a male fantasy. Even though she used her sexuality as a personify trait her design didn't show women's sexuality. It showed what men see sexuality as. [...] I rolled my eyes when her clothes came off during regular attacks. I liked her personality, but her appearance was overly sexualized.

The overly sexualized character of Cereza seemed to be a factor of enchantment for her personality, as well as a motivation for players to advance and spend more time within the game. The visual attributes of her abilities have been a motivational factor for completing boss fights.

**Participant #132:** Stylish action - very stylish character with a lot of personality, feel like a badass when playing, helped to drive through harder difficulties.

**Participant #109:** Only very slightly, character's appearance doesn't matter much. However, I do find her more attractive than most game protagonists, which helps me spend more time with the game.

**Participant #263:** I liked Bayonetta. She struck me as vivid, it was enjoyable to watch her interact with the other characters. And I'd be a liar to say that her sexual charisma had no appeal to me. [...] In a certain sense, I think the fact that I found Bayonetta sexy made it easier to push through some very difficult boss fights. It was frustrating losing, but as crass as it may be to say, at least there was a good show.

The main personal traits of admiration and inspiration in Lara Croft was the visual description of her being less provocative and more realistic. Thus, allowing a wider variety of players, to recognize themselves in the character.

**Participant #254:** The fact that Lara's costume had changed from previous iterations to be less provocative and more practical played a part in my writing.

**Participant #265:** She looks more like a human than she did on previous games and moves more like one so yeah it was much more fun to play with such a character.

Being less provocative, the visual structure of her clothing and body structure seemed to be a factor that many players identified themselves with. Although male participants showed an interest of Lara's body, as a sexual factor, in the long run they began to appreciate her design in accordance to the environment and the gameplay mechanics.

#### **4.7 Gameplay Integration**

The results chapter has covered themes such as clothes, gear and abilities. By the pattern occurrence within these three themes, there has been another theme found. This theme refers to how these three themes are integrated in gameplay, as the participants have shown to be most interested in the visual attributes that are in a way integrated with the game mechanics or the story.

As seen in Ezio Auditore da Firenze the outfit that reassembles his assassins look and the personal traits that he is expected to have, was the gameplay integrated instrument that the participants appreciated and noted the most. In Kratos, the visual appearance has shown to be his body colour, tattoos and some parts of the clothing that resemble his Spartan look.

**Participant #34:** He's a muscular man covered in ashes with a bright red tattoo that wraps around his torso and ends over his eye. He wears a red kilt, tactical sandals with damaged shin guards. He also has chains wrapped around his forearms that are connected to two blades that he carries on his back.

Also, weapons he uses have been also considered as they are integrated with his body and the game story. The integration of Cereza's hair to be a part of her clothing

and her abilities, as she summons the beasts, was the point of interest in this theme. Participants seemed to notice the exposure of her body when executing the abilities and was one of the sexual appearance factors that are placed within this theme.

**Participant #44:** Sexualized, walked with swaying hips, her hair turns into very tight-fitting clothes, very confident and powerful, wears glasses, moans a lot. Her shoes are guns. She's Caucasian, hair in a strict ponytail that turns into her clothes. For some reason, I think she's blond even though I know the clothes are black. I think she has a beauty-mark on her upper lip.

**Participant #74:** A tall, modern and fashionable reinterpretation of a classic witch. Her outfit evokes tropes of witch-designs (for example her tall hairdo looks like a pointy witch hat) but the outfit is also her enchanted hair, which she uses to fight things with. Strewn among her hair outfit are a number of charms and ribbons intertwined.

In case of Lara Croft, there has been a notable factor of her clothes being adjusted to the environment in form of a weariness' factor.

**Participant #126:** As Lara progressed through the game her appearance changed to be more hardened. Her clothes and appearance became more weathered. Upgrading her gear gave them a more impressive and intimidating look which also motivated me to continue.

**Participant #181:** I enjoyed see the different models that the characters used. It's always a bit dull when something major happens to the character but it doesn't affect the skin. Lara had plenty of mud and blood to go around

Participants highly appreciated functionality as it created more realism in the gameplay and an overall feeling of a more pleasant character to play with.

## 4.8 Other Patterns

A set of other patterns have occurred while analysing the data. Those however have been not included as the main themes due to the inconsistency in the data that could give a better overview of the conclusion. They are however interesting points to be considered during further research.

In accordance to Van Looy, et al. (2012) where he mentions potential relations that elicit from the mental connection of the character. Similar patterns have been found in this analysis, as some participants mentioned their relations with others as a motivational factor to play the game.

**Participant #27:** I was playing it with my ex and I wanted to finish the story then 100% it before her.

**Participant #35:** Finishing the game, not having to ask my boyfriend for assistance.

There is however no direct indication of character affecting those social relations, however are interesting as the game as a whole entity enables people to interact with each other in form of competition or encourage to manage a personal goal on individual level. Another interesting pattern that occurred is the prejudice that players might have that intrigue them to play the game.

**Participant #229:** I first played the game with a friend just for the hell of it. Due to prejudice of it being a shallow game we decided to give it a play through for irony's sake, since the game was slightly infamous for its bold portrayal of main character by that time.

Such a practice, if executed with caution could lead new players to play the game and experience a character from a different point of view if presented differently on marketing material respective in game.

A potential for another theme called Completion, has been found. This because participants often mentioned completing a game, or achievement collection as their personal goal. They are however not included as a theme of their own, since the inability to connect this theme with the theoretical part gathered for this study. Another theme that was found, is progression. Seen in some of the previous answers,

the participants mentioned progressing through the game based on some visual attributes as in case of Ezio and Lara. There is however not enough data to include this theme as a theme of its own. However, the motivation to continue a game through psychical and visual attributes has been presented in the existing themes.

## 5 Discussion

### 5.1 Research Question

**Question:** In which ways does a player identify themselves with a game character?

The identification process occurs in various ways. From the psychological point of view the player identifies with the character by sympathising with character's feelings based on the events within the game. Comparing character's personal traits and actions to player's own has also been defined as identification. From the visual point of view, the biggest influence on identification are the outfits, gear and character's abilities that are integrated within the gameplay and which represents and deepens character's personal traits.

### 5.2 Findings

By following the definition of identity developed by Fearon (1999) the results have shown that the identification process between the characters and participants has occurred. The identification process has been indicated as mentioned by Lankoski (2004) and Van Looy, et al (2012), through experiencing character's feelings and cognitions, thus creating the temporary shift in self-perception. In this study the participants felt sympathy for the characters and applied character's goals as a motivation for themselves within the game. Furthermore, they also searched for personal traits in the characters that they wish to obtain in themselves which created the character as a sort of role model. Lankoski (2011) refers to this type of identification as an "I"-experience, as seen in this study, occurred on purely psychological level. A similar pattern has been seen in Klimmt, et al. (2010) where players identified themselves by a role they were assigned without seeing the character.

In this study, the visual attributes played a significant role in strengthening how the role of the character was perceived, and enhanced character's personal traits that the players identified themselves with. These visual enchantments are being well grounded on Warpefelt's (2015) definition that the characters should be designed depending on what the player should perceive. Clothes, weapons and abilities

resembled characters' roles and the participants could easily identify themselves with the characters. A major pattern occurrence has been seen across all answers, as the participants showed most interest in the visual attributes that were integrated with the game, such as hair converting to clothes or clothes being wearied out depending on the environment and situation. Thus, proving that the gameplay integrated visual attribute play a big part in the character design.

This study covered within the theories humour factor as an attribute that players would be attracted to in others (Hoffner and Buchanan, 2005). The results have indicated that although the humour occurred in various characters, it did not have any greater impact on their identification with the character. Instead, the major attributes were the strength in both psychological and physical form, confidentiality and heroism that players described as wishful. A notable factor is however the term transgenering defined by Kennedy (2002). This study covered many participants which played as opposite genders. Even though both male, respective female participants showed appreciation for the sexual appearance of the characters, their opinion might not have changed much but they began to notice other positive attributes within the gameplay that the character has brought. Although being a study about predefined video game characters, experimentation in favour of gameplay choices has been noticed as described above. It might not be a direct implication of Jenson, et al. (2015) theory, however as seen the perception of the character does change when the player spends more time with the character.

### **5.3 Methodology**

Usage of a custom-made questionnaire has proven to be a very useful solution to collect a large amount of data from various demographics in a short period of time. This method allowed a set of functionalities that might have resulted in the quantity of data that was collected. The questionnaire provided the ability to resign if the participant no longer wanted to participate, and was optimized for mobile and tablet devices which lead to 65% of the answers being filled out on a mobile or a tablet device. Also, it was highly appreciated by the participants in the feedback field at the end of the form. Being hosted on a private website made it possible to monitor traffic round-the-clock and store the data on a frequently backed up database. By applying this functionality, the questionnaire was prevented from going offline and the data by

being secured, was prevented from accidental removal or being compromised in any way. The privacy concerns that have been taken into account, were also solved by this questionnaire as the researcher had neither direct contact with the participant nor the ability to track down the answers to a specific individual.

The questionnaire that was implemented also allowed participants to provide open minded data, as it was anonymous and could be answered privately. By receiving the data in a text format, provided more time for the data analysis, as there was no need for a transcription. However, the inability to ask follow up questions, a less contextual data has been gathered. The participants often replied by word combinations or by a simple sentence which may not have been the most suitable instrument made for the questionnaire or for this type of study. As there was no ability to explain questions, some of the participants had difficulties to see the difference between in-game motivation and personal goals, which lead to data being placed across various questions. This complicated the data filtering and analysis which possibly led to data being lost.

Some participants experienced confusion as they were unsure in the beginning of which *Tomb Raider* (Crystal Dynamics, 2013) game the study refers to, however that mostly was solved when being presented by a logo. In question of *Assassin's Creed II* (Ubisoft Montreal, 2009) a player actually plays as Desmond Miles who enters memories of his ancestor Ezio Auditore da Firenze which was used in this study due to more playtime with this character. Although it could create a potential confusion, the participants did not seem to care, some even described Desmond Miles as well.

One of the bigger issues that arose was that the questionnaire asked the participant about the change in motivation. However, it likely is a change in the challenge presented during the gameplay rather than a change in the characters' appearance. There might be a problematic issue within the data gathering due to the concept of asking participants to report their self-influences on their character. As seen in other studies (Hoffner and Buchanan, 2005; Van Looy, et al. 2012), the theories of media consumption wouldn't presume their fully awareness of those influences. Leading to a conclusion that individual game sessions followed by personalized semi-structured interviews would be a more suitable method for this type of study.

## **5.4 Future Research**

Since this study has followed an explorative approach, it might be worthwhile to continue studying the visual analysis of predefined game characters in order to get a more valid answer. A similar study on other characters in other games could provide even more efficient data. In this study, the games covered contained a character which a player could see before them, it might however be interesting to also apply a similar theory of this study on to a character that the player does not see at all as in Klimmt, et al. (2010) study where the players identified themselves with the driver of a car even though they did not see the driver. Another interesting study subject could be the gender-swapping question that also occurred in Jenson, et al. (2015) where the players choose opposite sex in favour of gameplay choices. As this study mentioned a participant believed his sexuality affected how he perceived the character. It might be interesting to study if sexual orientation does in fact play a role on psychological and visual identification with opposite gender characters.

## **5.5 Conclusion**

The aim of this study was to investigate how players identify themselves with a predefined game character, and how does the visual attributes affect this identification. Results that elicited, indicate that the visual attributes can be used as a complementary solution to strengthen the psychological identification by designing the character appearance in accordance to its personality, as well as integrating visual design elements of the character within the gameplay.

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## 6 Appendices

### 6.1 Questionnaire

A total of 27 semi-structured questions were implemented into the questionnaire, of which 6 were demographic and 21 were study related. Below is the structure of order and logic map of the questions asked that are placed in logical order and the conditions are indicated by [true = #] and [false = #] statements. Depending on what the participant answered to the yes and no questions, the condition of true/false was applied and directed participant to the next question followed in the numerical order or indicated by a number (#). A few of the questions also included a short description of what type of data the participant was expected to enter.

#### Disclaimer Screen

This section was the first screen the participant faced after pressing the start button. Information here contained some facts about the study, how the data was processed, what privacy rules applied and the resignation possibility. While accepting these Terms & Conditions the participant was directed to Demographic Questions.

#### Demographic Questions

**1. What is your age?**

[number box] [required] [range of values 1 to 100]

**2. What is your gender?**

[multiple choice] [required] [choices: Male, Female, Prefer not to say, Other]

**3. Which continent do you live on?**

[dropdown] [required] [choices: Africa, Antarctica, Asia, Australia, Oceania, Europe, North America, South America]

**4. What is your employment status?**

[multiple choice] [required] [choices: Working, Self-employed, Homemaker, Student, Retired, Unemployed, Prefer not to say, Other]

**5. Which platforms do you use to play games?**

[multiple choice] [required] [choices: PC, Max, Xbox, PlayStation, PSP / PS Vita, Nintendo DS, Nintendo Wii / Wii U, Mobile / Tablet, TV / TV Box, Other]

**6. Approximately how many hours per week do you play games?**

[textbox] [required]

### **Game Selection**

In this section, the four games were displayed represented by their respective logotype and the game name underneath the image. A description for the participant has been provided, which stated: *Pick a game that you have completed or played for at least 3+ hours.*

### **Refresh Your Mind**

After the game selection screen, the participant was presented with a collage of the character for the game they have selected. Description stated: *Before proceeding, take your time to examine the character before you. When you're ready, please continue in order to answer a set of questions regarding this character.*

### **Character Questions**

**1. When was the last time you played the selected game?**

[multiple choice] [required] [choices: This week, This month, Past 3 months, Past 6 months, Past 12 months, Past 24+ months]

**2. Did you complete the whole game?**

[yes/no] [required] [true = 4 | false = 3]

**3. Select approximal progress you made in the game**

[scale] [required] [range of values 0 to 10]

**4. What was the name of the character that you did play with?**

[textbox] [description: Do not google it, simply continue if you don't remember the name.]

**5. Describe the character that you were playing**

[textbox] [required] [description: You can describe anything, ethnicity, clothing, personality, movement and other both graphical and non-graphical attributes of this character.]

**6. Was there anything you disliked about the character?**

[yes/no] [required] [true = 7 | false = 8] [description: Examples: personality, clothing style, political views, gameplay difficulties or damage stats.]

**7. What did you dislike in the character?**

[textbox] [required] [description: Please specify an explanation if possible.]

**8. Did your dislikes for the character change during the gameplay?**

[yes/no] [required] [true = 9 | false = 10] [description: By change means if you began to dislike the character, disliked the character even more or maybe began to accept his/her flaws as you saw some positive aspects of it.]

**9. What has changed and what affected it?**

[textbox] [required]

**10. Did the character affect your mood in any way?**

[yes/no] [required] [true = 11 | false = 12] [description: Did you feel any emotion such as happiness or curiosity by simply looking at the character?]

**11. What kind of feeling did you experience and what affected it?**

[textbox] [required]

**12. Did you have any personal goals when you first launched the game?**

[yes/no] [required] [true = 13 | false = 16] [description: A personal goal can be for e.g. beating your friend's statistics, finishing the game, finishing the whole game series, finishing game on the hardest mode, collecting trophies/achievements, playing because someone recommended it, or even due to more personal reasons.]

**13. Describe the personal goals that you had**

[textbox] [required]

**14. Did the character's appearance had any impact on your personal goal?**

[yes/no] [required] [true = 15 | false = 16]

**15. In which way did the character's appearance impact your personal goal?**

[textbox] [required] [description: Please also specify the specific appearance attributes that affected your personal goal.]

**16. Did the character's appearance affect your motivation?**

[yes/no] [required] [true = 17 | false = 18] [description: Motivation refers to the feeling that you could accomplish something within the game, maybe completing a certain quest, advancing character's skills or maybe even beating a boss?]

**17. What was the motivation and how did the character affect it?**

[textbox] [required]

**18. Did your motivation change during the game as you advanced more with the character?**

[yes/no] [required] [true = 19 | false = 20]

**19. What was the motivation now and what changed it?**

[textbox] [required]

**20. Is there anything else you would like to add?**

[yes/no] [required] [true = 21 | false = Ending Screen] [description: Things such as feedback of any kind, other comments you would like to give beyond the asked questions, or just simply sending me a greeting.]

**21. Write your comments here**

[textbox] [required]

**Ending Screen**

At the end of the questionnaire, the participant was presented with a thank you message as well as the individual reference id that was meant in case the participant would like to resign from the study. Message said: *Thank you for your participation!*  
*Reference ID: #####.*

## 6.2 Game Logotypes

Below are the four logotypes that were displayed in the questionnaire during the game selection screen. This in order to make it easier for the participant to recognize the game in question.



Figure 6.2.1 Logotype from Assassin's Creed II.



Figure 6.2.2 Logotype from Bayonetta.



Figure 6.2.3 Logotype from God of War III.



Figure 6.2.4 Logotype from Tomb Raider.

### 6.3 Game Characters

Below are the custom-made collages of the characters that were used in the questionnaire during the refresh your mind section. The original images have been modified to match with the style of the questionnaire where white background was deleted, lights level were raised and badly edited parts that arose in the original image were retouched to match the original concept of this character.



**Figure 6.3.1** This image represents a custom-made collage of Ezio Auditore da Firenze from Assassin's Creed II.



**Figure 6.3.2** This image represents a custom-made collage of Cereza from Bayonetta.



**Figure 6.3.3** This image represents a custom-made collage of Kratos from God of War III.



**Figure 6.3.4** This image represents a custom-made collage of Lara Croft from Tomb Raider.