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# **Relationship with a character in video games and the video game experience**

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## Abstract

Finding a clear definition of what a user-character relationship in the context of video games is has proven to be difficult. Different theories have emerged from media psychology and some may even share a certain degree of similarity. To some degree, the same problem exists with the definition of the positive gaming experience. Different approaches towards a definition have been made though they all differentiate. A comprehensive overview of the two subjects and their influence on each other seems to be missing. The goal of this thesis is to provide a comprehensive overview of the user-character relationship as well as the current stand on the positive gaming experience and their effect on each other. This includes newer theories concerning the user-character relationship and the gaming experience such as character identification of GameFlow and how they may influence each other. Media research has found multiple reasons as to how and why the relationship between the character and the user can influence the gaming experience. The most relevant reason is the reduction of self-discrepancy through identification.

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**Declaration of scientific integrity**

The author hereby declares that she has read and fully adhered the Code for Good Practice in Research of the University of Basel.

## Introduction

In media psychology, the optimal experience, as well as different user-character relationships, have been researched and theorized. However, a common approach towards a definition in both the experience as well as the user-character relationship has been difficult to find. Nonetheless, the continuing popularity of video games suggests that a more unified approach is beneficial (Klimmt, Hefner, & Vorderer, 2009; Nacke & Drachen, 2011; Vorderer, Hartmann, & Klimmt, 2003). The concept of a positive experience is often understood by many different people but finding a precise definition has still been proven to be hard (Nakamura & Csikszentmihalyi, 2014). The same is the case in the field of the user-character relationship. Different approaches have been theorized with different definitions of what this relationship is and how it affects the user as well as the player (Nacke & Drachen, 2011).

The goal of this bachelor thesis is to provide a theoretical background on the player-character relationship concepts and identify their effect on the gaming experience. Due to the continuing popularity of video games, the combination of existing theories, approaches, and definitions to clarify the subject of user-character relationship and its effect on the gaming experience seems to be worthwhile and is the main aspect of this thesis (Prot, McDonald, Anderson, & Gentile, 2012).

In media psychology, the relationship between the player and the character in video games has prompted the creation of many theories. It started with the concept of para-social interaction in the 1960s (Horton & Wohl, 1956); however, this theory addresses relationships in non-interactive (books, tv shows, movies, etc.) media and was further developed to better fit interactive (video games) media. This adaption is what is called character attachment (Lewis, Weber, & Bowman, 2008). A theory similar to the identification aspect of character attachment is the concept of identification with a video game character. There are three constructs that attempt to define character identification: a short-term identification called character identification, a long-term identification called wishful identification, and avatar identification (Hefner, Klimmt, & Vorderer, 2007; Hoffner & Buchanan, 2005; Van Looy, Courtois, De Vocht, & De Marez,

2012). Another part of this thesis builds upon the concept of a positive gaming experience. However, finding a general definition for this is difficult since the field of entertainment research has not yet found one (Raney, 2004).

Many researchers simply refer to a positive experience as positive arousal, or feeling good while playing (Raney, 2004), the positive feeling which results from reducing self-discrepancy (Klimmt et al., 2009), the fulfillment of intrinsic needs (Tamborini, Bowman, Eden, Grizzard, & Organ, 2010), gameflow (Sweetser & Wyeth, 2005)) and separation of a positive experience into two different parts: enjoyment and appreciation (Oliver & Raney, 2011). As of now, studies have researched different types of relationships between the player and the character. However, a compact overview on all these concepts in one paper seems to be lacking and further variables such as gaming mechanics are only taken into account in separate research papers. This thesis aims to give an overview of these concepts and connect them to each other.

## Theoretical background

The relationship between the media consumer and the subject in the media (TV Show host, video game character, TV show character, film character, etc) has been greatly researched with many theories emerging from it (Cohen, 2001; Horton & Wohl, 1956). Many of the theories have been built upon non interactive media such as TV shows but efforts were made to apply these theories to interactive media like video games (Bowman, Schultheiss, & Schumann, 2012; Lewis et al., 2008). All of the discussed theories in this thesis try to explain a felt connection between a person and a character in their own ways (Hefner et al., 2007; Horton & Wohl, 1956; Klimmt et al., 2009; Lewis et al., 2008).

Research on enjoyment in entertainment media has been split on the clear definition of what it consists of and there are many ways to define it. Different studies concerning the relationship between the character and the viewer use a different definition of enjoyment (flow, general positive feeling, appreciation, enjoyment, fulfillment of intrinsic needs) yet entertainment research has not found a comprehensive definition of enjoyment (Tamborini et al., 2011). For instance, Hefner et al. (2007) refer to enjoyment simply as a positive feeling which occurs due to the gaming experience or through the fulfillment of their proposed components of character identification.

In this section, I will introduce the theoretical background concerning the character-player relationship that emerged from media psychology. Furthermore, I will try to establish a theoretical background according to enjoyment research with regard to the relevance to this thesis. The concepts that are of interest in this thesis are ones that analyze the relationship between the player (or in theories that regard non interactive media: viewers/readers) and the character in the media. In the context of this thesis, a relationship means that the player and the character influence each other and a sort of connection is established between them. The concepts introduced in this thesis are all either built upon each other (as a sort of expansion or advancement) or share another link.

### **Para-social Interaction**

Horton and Wohl (1956) discussed the relationship between a media character, such as a TV show host, and the viewers. It was clear that a connection could be established between them which could just be as important as a relationship or interaction between real life people such as friends. To explain this phenomenon, as well as how viewers can feel strong feelings toward media characters, they coined the term para-social interaction (Horton & Wohl, 1956). Isbister (2016) describes a para-social interaction as a powerful attachment to media characters, which can be cultivated through strategic design elements. An illustration of this is when a film director chooses to shoot a closeup of a movie character to produce a feeling of closeness and relatedness between the viewer and the character (Isbister, 2016). A para-social interaction in media research is often characterized as a sense of intimacy with a distal, fictional character in media (Lewis et al., 2008). Studies have shown that breaking up with a TV show character (e.g. the character leaving the show) can be just as hard on people as a breakup with a real life person (Cohen, 2004). They further argue that a para-social relationship should not be seen as a compensation for the lack of social relationship but more as an expansion of such.

However, while a para-social interaction has traditionally been attributed to the relationship between the viewer and the characters in media such as a TV shows (Horton & Wohl, 1956), Lewis et al. (2008) argue that the concept of para-social interaction does not apply to video games. This is due to the nature of the relationship in video games. In video games, the player and the media character the relationship between them, is not simply a felt connection per se but an "actual, tangible connection between the gamer and a fully functional, completely controllable avatar"(Lewis et al., 2008, p.1). Since a para-social interaction should therefore not be applied to the concept of video games, it is possible to see especially character attachment as an expansion of para-social interaction that can then be applied to video games and the characters within the game (Bowman et al., 2012). Because of this, Lewis et al. (2008) propose another way to define the relationship between the character and the user,



which is character attachment.

### **Character Attachment**

A new concept has been derived on the basis of para-social interaction that is more catered to interactive media such as video games. As mentioned above, character attachment has been proposed as an alternative to, or an expansion of, the concept of para-social interaction. In contrast to a para-social relationship, where the relationship is one sided, character attachment concerns a relationship which is not just formed by the character's impact on the user, but also the user's impact on the character (Bowman et al., 2012; Horton & Wohl, 1956; Jin & Park, 2009; Lewis et al., 2008). Character attachment was first introduced by Lewis et al. (2008) and they define it as the following:

Thus, we define CA [Character Attachment] as an individual's feelings of (a) friendship and (b) identification with a video game character when an individual (c) is willing to suspend disbelief, (d) feels responsible for the game character, and (e) feels in control of the game character's actions.

[p.516]

Bowman et al. (2012) describe the relationship between a video game character and the video game player not just as a para-social one but as an experimental one, which means that the player does not just observe the video game characters actions, but controls them. The main difference between traditional non interactive media and interactive media is that the audience or player does not just bear witness to the character's actions but they instead have nearly full control over the character's actions. Bowman et al. (2012) argue that this direct link between the player and the character creates a more in depth connection. According to them, previous research has regarded the relationship between the audience and the character to be one sided and research concentrated on how a passive viewer could identify with a media character but in video games, the audience member and the character are not two separate individuals. They state that in video games the player and the character should be seen as the same

individual. Because of that difference, the concept of character attachment is better suited for video games. Video games are more an interactive experience than other media and one can not apply non interactive media techniques to interactive media, because the former do not take the unique attributes of video games into account (Bowman et al., 2012; Elson, Breuer, Ivory, & Quandt, 2014; Lewis et al., 2008).

### **Identification with the game character**

Another aspect of player-character relationship is the identification with the character. In the definition of character attachment the "identification with a video game character" (Lewis et al., 2008, p.516) is mentioned and therefore establishes a link between character attachment and character identification which will be discussed in this section. However, there are three different ways to approach the matter of identification. The first concept is called character identification and describes a short-term identification with a character. The second concept is called wishful identification and is described as being more long-term. The third concept is avatar identification and is in itself more a combination of the first two concepts with the goal of a more unified approach towards character identification (Hefner et al., 2007; Hoffner & Buchanan, 2005; Van Looy et al., 2012)

**Character identification.** Hefner et al. (2007) introduce identification with a game character as a mechanism of video game enjoyment and they define character identification as a 'feeling like' or "as creating the illusion to 'become' a key person within a computer's game universe" (Hefner et al., 2007, p. 1+2). They based a monadic identification (a "relationship in the sense that players do not perceive the game character as a social entity distinct from themselves, but experience a merging of their own self and the game protagonist"; Klimmt et al. (2009, p.354) ) with a media character on the definition by Cohen (2001). The definition of Cohen (2001) is the following:

While identifying with a character, an audience member imagines him- or herself being that character and replaces his or her personal identity and

role as an audience member with the identity and role of the character within the text. While strongly identifying, the audience member ceases to be aware of his or her social role as an audience member and temporarily (but usually repeatedly) adopts the perspective of the character with whom he or she identifies [p. 251]

Hefner et al. (2007) argue that in the moment of media exposure, the user takes on (parts) of the identification of the media character and this alters the user's self-concept into the direction of the video game character. It is possible for users to only alter certain parts of their self-concept. They also state that this identification is only short term (Hefner et al., 2007). Furthermore, Hefner et al. (2007) lay down three ground rules or requirements that have to be met in order for character identification to be happening. These three are a) the need to reduce self-discrepancy, b) the video game character's role needs to be appealing to the user and c) the competitive aspect (Hefner et al., 2007). In the following sections, I will further explain the three requirements for character identification to be happening.

***The need to reduce self-discrepancy.*** Identifying with a video game character can help the user to reduce self-discrepancy (Hefner et al., 2007; Klimmt et al., 2009). Self-discrepancy is a theory that states that self perception is divided into different domains, one being the self-guide (idealized perception of how one should be), and the conflict between the different domains and the self-guide being considered a self-discrepancy. Self-discrepancy is thus a difference between what one thinks they should ideally be and what they really are (Higgins, 1987). For instance, self-discrepancy might emerge when a player wishes to be more courageous and fails to be so. This could reduce self-discrepancy by taking on the role of a courageous soldier in the video game and could, therefore, create a more positive self-perception, albeit temporarily. The user's self-perception is altered towards the characteristics of the game character, in this case, a soldier. This reduction of self-discrepancy would lead to a positive experience and thus to a better game experience (Hefner et al., 2007; Klimmt et al., 2009).

***Appeal of the player character's role.*** In order for this identification to be happening, the role of the video game character should have a certain appeal for the user. A person sickened by war environments may not like or want to identify with a soldier. The role suggested to the user has to have a certain personal desirability to facilitate a monadic identification (Hefner et al., 2007).

***Competitive aspect.*** Besides the need to reduce self-discrepancy and the personal appeal of the game character, Hefner et al. (2007) introduce a third requirement, which is the competitive aspect of the role. A user may not identify with a game character when they are unsuccessful in fulfilling the role, because that may lead to lower self-esteem (Hefner et al., 2007). By correctly carrying out a soldier's mission in a video game, however, the user may feel a certain feeling of competence and thus video games may enable the feeling of self-efficacy.

To summarize, the three requirements for character identification to happen are a) the need to reduce self-discrepancy, b) the video game character's role needs to be appealing to the user and c) the competitive aspect (Hefner et al., 2007).

***Wishful identification.*** A further way to define an identification with the game character is the concept of wishful identification by Hoffner and Buchanan (2005). It is generally defined as the desire to be or to become the character and refers to an experience that is long-term and is not just contained to the duration of exposure to the media or character (Hoffner & Buchanan, 2005). Wishful identification concerns a feeling that is long-term and extends beyond the moment in which the viewer is exposed to the media (Hoffner & Buchanan, 2005). An example of wishful identification given by Hoffner and Buchanan (2005) is the sort of attachment young adults have to celebrities since the most common form of attachment is "identificatory attachment" (Hoffner & Buchanan, 2005, p.327) and refers to the desire to be like the celebrity or to even be the celebrity. This feeling appears to be long-term and can even make young adults change their behavior, attitudes, values etc. in favor of characteristics that are closer to those of the desired celebrity (Hoffner & Buchanan, 2005). Originally, wishful identification was aimed towards non interactive media but

has later been used as a defining factor in avatar identification which itself is aimed at video games (Hoffner & Buchanan, 2005; Van Looy et al., 2012).

**Avatar identification.** Van Looy et al. (2012) argue that entertainment research would greatly benefit from a unified approach towards identification in video games since previous researchers have been using different scales and different approaches.

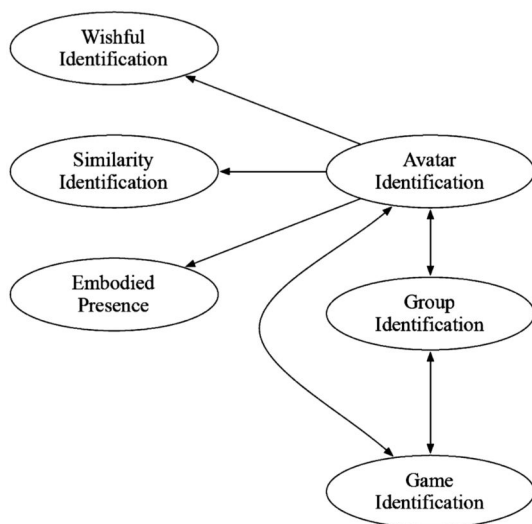


Figure 1. Identification in MMOGs(Van Looy et al., 2012)

In their research, identification in MMOGs (massively multiplayer online games) consists of three factors: avatar identification, group identification and game identification. Avatar identification itself has three more subtypes: similarity identification, wishful identification and embodied presence. Avatar identification is, through its three subcomponents, concerned with a shift in self-perception in favor of the game character (Van Looy et al., 2012).

Van Looy et al. (2012) add two more dimensions: group identification (identification with in-game peers) and game identification (identification with the game itself). However, the authors created this three-factorial structure of identification mainly for MMOGs . Van Looy et al. (2012) argue that identification helps the player to temporarily escape from their real life, a hypothesis first proposed by Hefner et al. (2007). Furthermore, they state that their theory lends more credibility to the reduction of self-discrepancy which is discussed as a way to create a positive gaming experience by Hefner et al. (2007) and also as a core element of character identification Hefner et al. (2007) and Higgins (1987).

## Defining a positive player experience in digital games

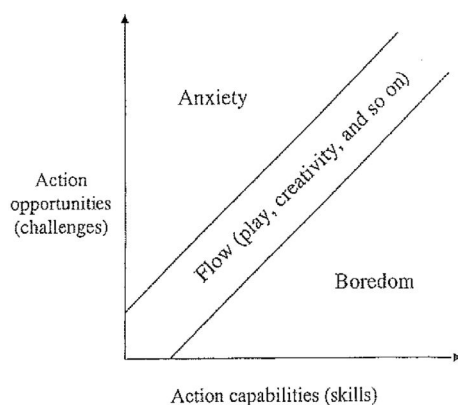
There are many ways to define a positive player experience, since the concept has no commonly accepted definition and because there are many different approaches towards a definition (Mekler, Bopp, Tuch, & Opwis, 2014; Nacke & Drachen, 2011). In video games, one approach that is often made is to analyze the positive feelings such as pure fun, enjoyment or other hedonic aspects of an experience. Such concepts that are mentioned in this study are flow or GameFlow. However, negative feelings such as sadness can attribute to a positive gaming experience as well even though they are in itself not hedonic (Bopp, Mekler, & Opwis, 2016). Further studies emphasize that not just hedonic gratification is important in video games, but eudaimonic gratification is as well and negative emotions can contribute to such an experience (Bartsch, 2012; Bowman et al., 2016; Oliver & Bartsch, 2011; Oliver & Raney, 2011).

**Flow.** One of the most studied concepts of video game enjoyment or media enjoyment, in general, is the concept of flow (Komulainen, Takatalo, Lehtonen, & Nyman, 2008). Nakamura and Csikszentmihalyi (2014) describe flow as the feeling of being completely immersed into the action that is currently carried out and can also be described as a sort of enjoyment or positive experience in which people invest a great amount of time and energy for the sole purpose of being able to experience it. In this state, people often forget the world around them, including time and the need to eat or drink (Sweetser & Wyeth, 2005).

Nakamura and Csikszentmihalyi (2014) stated eight elements of enjoyment that are not just limited to media experience but are meant for a general conception of happiness or enjoyment. They argue that people from several countries including different cultures stated, that when they talk about their feelings of enjoyment, the answers were mostly consistent and that enjoyment seems to be the same despite class, age, or cultural difference. According to Nakamura and Csikszentmihalyi (2014), the flow experience consists of the following eight elements:

1. The challenges have to be neither too hard nor too difficult but need to be challenging at the right level.

2. One needs clear goals and immediate feedback concerning one's progress.
3. The user should show intense and focused concentration on the task
4. Both awareness and action have to be completely aligned
5. The user loses self-consciousness
6. The user needs to be able to control the action
7. The feeling of time having abruptly passed needs to occur
8. The experience needs to be intrinsically rewarding.



*Figure 2.* Equilibrium between Anxiety and Boredom (Nakamura & Csikszentmihalyi, 2014)

However, not all of these eight elements are required to experience flow. According to Nakamura and Csikszentmihalyi (2014) flow is the equilibrium between anxiety and boredom and is experienced when a challenge is manageable but at the same time above the persons skill-set. This is similar to the concept of motivation that is used in a study by (Vorderer et al., 2003) that states that the competitive aspect in a video game can be an important factor of enjoyment. When a video game is too easy it can get boring, if it is too hard it won't be enjoyed by the player (Vorderer et al., 2003).

**GameFlow.** Research by Sweetser and Wyeth (2005) has adapted the general concept of flow to the video game experience; a concept they call GameFlow. They transform the eight elements of flow to video games and call them concentration, challenge, player skills, players (the amount of control a player has in changing certain aspects of the game (Sweetser & Wyeth, 2005, p.21)), clear goals, feedback, immersion, social interaction. However, they also state that not all of these eight elements are important for all of the different genres. An example given is that of the strategy games

where the control criterion seems to be of more importance than in role-playing games (Sweetser & Wyeth, 2005). They also state that a criteria such as immersion would need to be observed through a third person, rather than through self report made by the players.

### **The dichotomy of the experience.**

*Enjoyment and appreciation.* A further classification of the concept of enjoyment in video games was made by Oliver and Raney (2011). They argue that the concept of enjoyment should not be conceptualized as one single dimension but should be split into two dimensions. Based on Waterman (1993), who proposed two types of happiness with the first being the hedonic happiness (pleasure) and the second being the eudaimonic happiness (personal expressiveness, self-realization, and personal development), Oliver and Raney (2011) suggest applying this distinction to media entertainment. In this case, enjoyment/pleasure is the hedonic happiness and appreciation/meaningfulness the eudaimonic happiness. Furthermore, Oliver and Raney (2011) argue that enjoyment stems from the fulfillment of pure hedonic needs but to successfully reach meaningfulness one must also fulfill non hedonic (eudaimonic) needs such as insight into human morale. Bowman et al. (2016) argue that the distinction between enjoyment and appreciation is especially suited to interactive media variables such as the relationship between the video game character and the player than to non interactive variables. They also state that most studies have focused on the pure hedonic aspect of enjoyment, such as pleasure seeking, and have therefore been neglecting the eudaimonic elements of enjoyment.

*Immediate or long-term.* Research by Bartsch (2012) and Oliver and Bartsch (2011) argues that gratification in media can work in two ways: immediately or more long-term through emotional wellbeing. Bartsch (2012) argues that the concept of hedonic and eudaimonic happiness in the context of the media as introduced by Oliver and Raney (2011) is similar to their idea of gratification.

The first way is the immediate gratification, which argues that the experience of emotion can in itself be gratifying. An experience can be gratifying purely because of



its hedonic aspects, which means that the viewer or player is having a good time, is positively aroused and feels pleasure or sentimentality (Bartsch, 2012). Bartsch (2012) introduces three factors of this kind of gratification and calls it fun, thrill and empathic sadness. These three factors are related by their appeal of emotion and define gratification as a direct response to an emotion. Out of these factors especially fun seems to be similar to enjoyment.

The second way is through a cognitive or social experience that can contribute to the viewers personal well being and is in itself more complex than the pure hedonic gratification (Bartsch, 2012). Bartsch (2012) defines four factors as the gratification of social and cognitive needs: contemplative emotional experiences, emotional engagement with characters, social sharing of emotions, and vicarious release of emotions. In their study, the authors were specifically interested in this way of gratification as it has been researched to a lesser extent. Bartsch (2012) argues that these types of gratification share a similarity which they describe as "sense of meaning and social connectedness that individuals seem to seek in entertainment"[p.29]. These four factors all share a certain similarity to appreciation and eudaimonic happiness because they are not simply rewarding through emotions but challenge the user on a higher cognitive level (Bartsch, 2012; Oliver & Raney, 2011).

In summary, it is safe to say that the ideal definition of enjoyment, fun, or a general positive experience in entertainment and video games is hard to find (Nacke & Drachen, 2011). Over the years, researchers have tried to find ways to a general definition though many have come up with different ways to approach this. Several theories have emerged from entertainment research whereas several have been discussed in this thesis.

## Discussion

Based on the theoretical background set out above I will now try to answer the question if a relationship between the player and the character (para-social interaction, character attachment, character identification) may help to generate a more positive gaming experience or if it changes the experience at all. I will also try to find out if variables such as video game genre or game mechanics (such as avatar or character creation) play a part in this process.

### **A positive experience through the reduction of self-discrepancy**

Character identification is often argued to influence the video game experience in a positive way (Hefner et al., 2007; Klimmt et al., 2009; Klimmt, Hefner, Vorderer, Roth, & Blake, 2010). As mentioned before, the three requirements for character identification to happen are a) the need to reduce self-discrepancy, b) the video game character's role needs to be appealing to the user and c) the competitive aspect (Hefner et al., 2007). Klimmt et al. (2010) argue that the link between character identification and a positive gaming experience is mostly through the reduction of self-discrepancy. To clarify this, we can look at the example given before. When someone considers themselves to be a coward even though they do not wish to be, they may be able to feel better through identifying with a video game character who is seen as courageous, for example, a soldier (Hefner et al., 2007).

However, in the study conducted by Klimmt et al. (2010), they did not find a correlation between character identification and video game enjoyment. The authors argue that they did however not test whether or not the shift of self-perception actually lead to a reduced self-discrepancy. Since the self-discrepancy criterion is for them the most important factor in generating a positive experience, they argue that in their study, the requirements to achieve character identification had not been met. According to the authors, this is may be one of the reasons for the missing correlation.

Contrary evidence has been found by Hefner et al. (2007), since in their study identification with the video game character correlated strongly with video game

enjoyment. To explain their findings, they argue that through fulfilling the requirements for character identification by Hefner et al. (2007) it is possible for them to overcome possible self-discrepancies and to consequently feel better about themselves. Hefner et al. (2007) suggest that by identifying with someone (here a video game character) who has attributes one finds attractive, and also if those attributes are thought to be lacking in one self, the own self image could be improved and lead to a more positive experience. Even though Klimmt et al. (2010) found no correlation between identification and the positive experience, it is safe to conclude that character identification can have an effect on the gaming experience. The missing correlation in the study by Klimmt et al. (2010) is explained by the authors with the uncertainty if a reduced self-discrepancy was achieved. A more positive gaming experience through character identification can be achieved by making the player feel better about themselves and through the reduction of self-doubt or self-discrepancy.

### **Character Identification and flow**

One aspect of the flow theory is that of immersion. Studies have shown that immersion is often negatively impacted by the lack of connection to the video game character (Birk, Atkins, Bowey, & Mandryk, 2016). Birk et al. (2016) postulated that higher character identification increases immersion and therefore flow. Increased flow is linked to higher levels of enjoyment and more identification with the character should, therefore, lead to a more positive gaming experience (Sweetser & Wyeth, 2005). A study by Sweetser and Wyeth (2005) has also shown how the lack of immersion can negatively influence the flow experience. Sweetser and Wyeth (2005) mention in their study one flaw of the examined video game which concerns the element of immersion: the lack of the felt connection to the character. This would again give credit to the theory that identification to a character in a video game would be beneficial to the enjoyment. Newer research aims to analyze the relationship between character identification and the flow state within video games, stating also that identification with the avatar could increase the felt immersion in the video game world (Soutter &

Hitchens, 2016). In their study, Soutter and Hitchens (2016) found that greater character identification correlates with higher levels of flow.

All of this gives further credit to the possibility that character identification is not only important to the gaming experience through the reduction of self-discrepancy, but also through the flow experience. Character identification can help increase one criterion of GameFlow since it is important to immersion (Birk et al., 2016; Soutter & Hitchens, 2016; Sweetser & Wyeth, 2005).

### **Character identification and time spent playing a video game**

Jung, Park, and Lee (2015) found a mediating effect of "identification between time spent on video games and game experience" [p.716]. They argue that the more an individual plays video games, the more likely they are to identify with a video game character which would then, in turn, lead to a more positive gaming experience (Jung et al., 2015). Other research by Klimmt et al. (2010) argues as well that identification may emerge due to the time spent playing the video game. Perhaps, the more time is spent playing the video game, the higher are the chances of character identification and therefore a more positive gaming experience.

Taking this additional evidence into account, character identification can be increased by a higher amount of time spent playing a video game. Considering this, identification with a character through the reduction of self-discrepancy can lead to a better self image and therefore to an enjoyable experience. Playing a video game can be seen as a boost of self-esteem, though only short term and only during the exposure to the video game since the concept of character identification is only seen as temporary.

### **Character attachment and appreciation and enjoyment**

In a study by Bowman et al. (2016) the authors sought to research the interaction with the on-screen characters and a video game player. Using the two dimensions enjoyment and appreciation as validated by Oliver and Bartsch (2011) the authors analyzed the effect of character attachment, and its subcomponents, on the gaming experience. As mentioned before, character attachment uses character identification as

one part of its definition (Lewis et al., 2008). Bowman et al. (2016) found that women, as well as men, ranked a game higher on an appreciation scale when they expressed higher attachment to the video game character. They state that players who appreciated the game to a higher extent scored higher on the questionnaires regarding identification with a character and the felt responsibility for the character. Appreciation is by definition not only a short-term way of gratification but more indirect and long-term (Oliver & Bartsch, 2010). Character identification does therefore also have an influence on the cognitive experience through stimulating thoughts of a video game.

A study by Bowman et al. (2016) analyzed the identification subfactor of character attachment and its relationship with enjoyment and appreciation. The fact that the subfactor identification only correlates with appreciation and not enjoyment is interesting when we take previous research into account. As mentioned above, identification helps to reduce self-discrepancy and appreciation is regarded as a more long-term gratification of cognitive needs. One could argue that the reduction of self-discrepancy, therefore, appeals to the player on a higher level than simply through hedonic gratification. However, it is important to note that Bowman et al. (2016) use the definition of identification as postulated by Lewis et al. (2008), which only consists of one item their character attachment questionnaire whereas the definition by Hefner et al. (2007) uses a different eight scale questionnaire. The connection between character identification appreciation and the reduction of self-discrepancy should, therefore, be more closely analyzed.

### **Wishful identification**

Wishful identification correlated to both appreciation as well as enjoyment in a study conducted by Eden, Daalmans, and Johnson (2017). According to this, wishful identification is not just important to the enjoyment of the moment but also to cognitive stimulation through appreciation. A study conducted by Birk et al. (2016) showed as well, that wishful identification significantly predicted positive affect as well as enjoyment. The fact that wishful identification does not only predict enjoyment but

also appreciation could be interesting for future research. An example is the subject of morality because Eden et al. (2017) argue that morality predicts appreciation in video games. This means that video games that feature characters who are high in morality give the player a higher sense of appreciation. This could be used to make games like these more appealing and therefore played more often. If such a game was especially aimed towards young adults or possibly even children, one could use this, and also the aspect that wishful identification correlates with appreciation, as a learning effect in a sense that the players would strive to be more like the character which is in this case moral. Wishful identification is per definition a wish to be more like the character and wanting to be like a moral character could provide possible long-term benefits.

The concept of wishful identification has only been scarcely researched in the context of video games but research by Eden et al. (2017) provides an interesting foundation for additional research. Wishful identification can increase the gaming experience at the moment through enjoyment while also increasing game appreciation as shown by Eden et al. (2017).

### **Differences between video game genres and game mechanisms**

In many video games, the creation of an avatar is a form of creating an identity within a game and is a common practice for many players (Lin & Wang, 2014). The creation of an avatar can be quite enhanced (like in more modern games such as *Fallout4*) and the player is presented with a wide array of possibilities to change the appearance of the avatar. For instance, users can change the color and shapes of the avatars eyes, hair, skin, eyebrows and facial features (Lin & Wang, 2014). Lin and Wang (2014) aimed to investigate motivations for avatar creations and found that while people enjoy making avatars, they do not always have to be strict representations of the human player.

Lin and Wang (2014) state that they have found four major motivations for avatar creation in virtual worlds: (1) virtual exploration, (2) social navigation, (3) contextual adaption and (4) identity representation. In this thesis especially the element seems to

bear more importance since Lin and Wang (2014) describe it further as a "portraying either the actual self or the ideal self," which is a similar concept as the self-discrepancy elements in character identification (Hefner et al., 2007). In their research, Van Looy et al. (2012) argue that in avatar creation, players often create characters that are similar not to their actual self but more to their ideal self which could help them to reduce self-discrepancy as well.

Trepte and Reinecke (2010) state that the positive correlation between media enjoyment and avatar-player similarity as stated by Hwa Hsu, Lee, and Wu (2005) is needed to be further investigated. In their study, they state that the avatar seems to be crucial for experience entertainment but is not necessarily tied to the similarity. However, they did find that higher similarity between the avatar and the player led to increased identification with the avatar or character. They also found that character identification was positively correlated to enjoyment in competitive as well as in non competitive game (Trepte & Reinecke, 2010). Nonetheless, they also state that competitiveness should be a focus in video games since players preferred avatars that resembled themselves in non competitive games. Players preferred avatars that were dissimilar to themselves in competitive video games. When this is taken into account one should also note if the player is competitive. If someone is very competitive (and may play video games for that reason) the similarity of the avatar to oneself may be less important than the avatar's ability to perform well in the game (Trepte & Reinecke, 2010).

In conclusion, the importance of avatar creation is dependent on the genre of the played video game. In video games that are non competitive, avatars that resemble the player are preferred. Players often create avatars that are similar to oneself but also present the ideal image the player has of themselves. As stated above, identification with the avatar can increase the enjoyment of the video game in non competitive games, so one could, therefore, argue that high avatar customization is of preference in video games that are non competitive. In non competitive games, avatar creation is less important and the players' ability to perform better becomes more important.

### **Difference in gender**

In video games, the main characters are predominantly white men (Jansz & Martis, 2007). Jansz and Martis (2007) found that out of the 22 games they analyzed, 13 had male characters and 15 out of 22 were white. Out of the six male leading characters, only two were non-white (Asian or African). The supporting characters were a little more diverse (7 were male whereas 2 were not white and 3 were female with only one being white; Jansz & Martis, 2007 ).

Since video game characters seem to be mostly white, a thorough analysis of gender differences concerning character identification and enjoyment seems to be rather difficult. Hefner et al. (2007) note that identification needs characters that are appealing to the player, and physical similarity heightens the chance of that. They note that the video game industry predominantly creates male characters, hence provide less possibilities for females to identify with a character. Hefner et al. (2007) state as well that character identification may be helpful in creating game concepts that are intended to maximize enjoyment for specific player groups, including females. Even though the gender may seem important to character identification, Bowman et al. (2016) found no gender or age differences in their study. They state that both genders experience more appreciation towards a video game when they identified with a character. The further study of gender differences seems promising in creating video games that are appealing to all different kinds of player bases; however, research in this field has been scarce and more research could prove interesting.

### **Possibilities of further studies**

A further research point could be how successful wishful identification with a video game character could influence the individual's opinion of the experience either after the game is complete or even while they are still playing. Is there a possibility that identifying with a character (and its positive attributes) can actively influence the experience even when the game is not played anymore? Much of the research concerning character identification or character attachment in interactive media is



concentrated on genres such as MMORPGs (massively multiplayer online role playing games), MMOGS (massively multiplayer online playing games) and researching concerning other genres or the difference between genres has been lacking (Bowman et al., 2012; Lewis et al., 2008; Van Looy et al., 2012).

Further research into the difference concerning the relationship between character identification/attachment and enjoyment in interactive media could be of interest for entertainment research. Such a prospect could give developers an incentive to create characters whose qualities are appealing to the players. Research by Trepte and Reinecke (2010) that suggests different methods for players who aim to be competitive (or games that aim to be competitive) create a different player-character relationship than players who do not aim to be competitive (or games) could be taken into considerations. This could be of further importance to video games that are primarily single player games and may lack a competitive aspect (in the sense of competition between different players) and focus more on immersion into the game world. Since immersion is linked to a better game experience or higher enjoyment (Sweetser & Wyeth, 2005) this could be a beneficial factor as well.

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