"Identifying with a character" but "embodying an avatar": Differentiating relationships between players and their on-screen representations in video games

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ABSTRACT

It is problematic to conflate ”characters” and ”avatars” by using them as synonyms for a player’s on-screen representation, which can cause theoretical ambiguities and lead to inaccurate assessments of player experiences. This paper delineates these concepts, so that we can measure player experiences more accurately as either ”character identification” or ”avatar embodiment.” We provide a theoretical analysis that establishes a clear and meaningful distinction between ”characters” (parts of a game’s narrative with predefined emotions and motives) and ”avatars” (player representations that are manipulated, controlled, and customizable when brought into the gameworld). From this distinction, identification is understood as a player-character relationship (based on mental processes measured through the character’s emotions, motives, and other story features); embodiment is a player-avatar relationship (i.e., the player’s control or agency over this representation). We provide a theoretical framework (conceptualization) and vocabulary (operationalization) to more accurately understand, assess, and design player experiences.

Keywords

player experience, avatar, character, identification, embodiment, explication

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INTRODUCTION

Theory development and application is invaluable to any scholarly domain, including games studies or human-computer interaction. However, in some areas of research, the application of the established frameworks appears shallow (Hornbæk 2024; Tyack and Mekler 2024). The concepts we operate with imply certain frameworks and evidence, and scholarship is greatly hindered when underlying constructs lack clear explication (Chaffee 1991). Clearly defined constructs are essential at anchoring an artifact of study to an underlying theoretical and operational position, and a key aspect of defining a construct is that it specifies *what is* and *what is not* part of the construct. Thus, treating two separate constructs as *isomorphic* conflates and confuses essential differences between the artifacts or experiences being studied. Alternatively, adopting consistent and specific constructs facilitates comparison of studies and the ability to build on existing knowledge by (a) ensuring theoretical and operational cohesion between studies of the same construct, while also (b) providing essential points of comparison and departure between theoretically and practically different constructs.

For the study of video games, the concepts of 'character' and 'avatar' are as fundamental to game studies as characters and avatars are to gaming experiences themselves. In its essence, the avatar should be seen "as the point of control of the player, and the character as a representation of an other within a fictional world" or a narrative (Willumsen 2018, 3). More specifically, in the context of any narrative, including a video game, a character is a predetermined, scripted figure within the said narrative. It is a character that has been created by the game/narrative's designer and is inherently one of the key aspects of the game's plot. The plot and the characters are ultimately predetermined by the game's design - this is not so different from characters existing in non-interactive media such as film and books (Busselle and Bilandzic 2008; Schröter and Thon 2014) and indeed, transmediated texts often incorporate characters from other popular media into video games (Blom 2023). In contrast, an avatar is the user's or player's representation within the digital or virtual environments (Nowak and Fox 2018; Damer 1997; Capin et al. 1999; Nam and Park 2009; Kang and Yang 2006), such as video games. An avatar is a representation of the player's identity and agency within the game that can be manipulated and is often modifiable - in many games, created by the player. The avatar can be viewed as an extension of the player, allowing for the sensory interactions with the game world and other players (Biocca 2006).

We contend that few would take issue with the above explications of avatars and characters in video games, which are often used interchangeably or treated as the same thing in video game studies (Bayliss 2007; Gast 2017; Hefner et al. 2007; Kuntjara and Almanfaluthi 2017; Banks et al. 2019). We maintain that we need to *consistently separate these constructs* in order to study player experiences and accurately measure a player's relationships with *both* characters and avatars. In particular, we must distinguish between identification mechanisms relevant to (video game) characters and embodiment mechanisms relevant to understanding (video game) avatars. Lack of such differentiation disrupts our ability to understand the role that these relationships play in broader gameplay motivations, processes, and outcomes.

At the likely root of this misconception is that in video games, we see a combination of virtual/digital simulations and narratives (Frasca 2001; Grodal 2000) that naturally incorporates both characters (that exist within the narrative world of a video game) and avatars (that embody the player in the digital world of a video game) within the same player's in-game representation, often called *player-character*. When discussing this representation, we are not always as interested in the phenomenological differences between a character and an avatar, but rather simply use shorthand to refer to the on-screen agent being controlled by a player (Banks et al. 2019; Downs et al. 2019). However, critical conceptual and empirical distinctions remain between characters and avatars that demand we define those constructs, and their constituent and resultant player experiences, separately.

Key issues

In this sense, characters and avatars are different because the former exists independent of players (endogenous, as a part of the narrative) but the latter involves players' deliberate creation and/or intervention (exogenous, within a game's simulation). As such, unnecessarily conflating player-character identification and player-avatar embodiment does not accurately represent their distinct experiences with video games. Because there is no distinction between characters and avatars in many video game studies, we can observe that studies apply such conceptions like ”wishful identification,” ”similarity identification” or ”embodied identification” as related phenomena (Kao et al. 2021). Another key misconception is ”avatar identification,” (Van Looy et al. 2012) which would be described further in more detail. Moreover, and as we will argue in this essay, conflating these ideas (and thus, using ”character” and ”avatar” as isomorphic and interchangeable notions), can confuse the theoretical and empirical record as assumptions in studies are being made based on unrelated scholarships and evidence from them.

For example, there is misperception regarding the impact of control and customization of an avatar on the identification with a character (Christy and Fox 2016; Kao et al. 2021; Kao et al. 2022). Sometimes, identification is referred to as merging with (Kao et al. 2022) or 'becoming' a character (Trepte and Reinecke 2010; Koulouris et al. 2020) or even equalized to the fact of playing for the player-character (Lin 2013). But identification is not about control. Instead, it is about the emotional connection and understanding of the character's motives (Cohen 2001). Control, for example, of a soldier in a first-person shooter (Klimmt et al. 2010), can be a part of the sense of embodiment as a relationship with an avatar (Gonzalez-Franco and Peck 2018), which is not specific to VR experience, regular video games can induce it too (Devlin et al. 2024).

Another fundamental distinction is that similarity with an avatar can be important for embodiment and presence (Birk et al. 2016), but it does not necessarily matter for identification with characters (Cohen et al. 2018). In that sense, anyone who plays *Tomb Raider* can identify with Lara Croft, for example, if they share the same values (Shaw 2014). Players can also identify with characters who have different personalities with them, not just appearances. It happens because identification often pertains to the possible Selves (such as desired or feared Selves) that interact with characters (Martínez 2014). Indeed, Downs et al. (2019) presented evidence of a polythetic structure to identification that considers physical similarity, value homophily, wishful identification, perspective-taking, liking, and embodiment as sufficient-but-not necessary conditions for identification to occur.

This paper addresses the conceptual and methodological issues arising from the conflation of characters and avatars by establishing a clear theoretical distinction between them. We differentiate *characters* as narrative-driven entities that foster mental *identification* (e.g., via empathy) from *avatars* as simulation-based representations that facilitate sensory *embodiment* (e.g., via agency and control). By critiquing the empirical misconceptualization of "avatar identification," we propose a clarified framework and vocabulary that leverages existing distinct measurement practices. This approach aims to standardize research terminology, enhance the analysis of player experiences, and uncover new research opportunities regarding the dynamic interplay between identifying with a character and embodying an avatar.

PLAYER REPRESENTATIONS IN VIDEO GAMES

Broadly speaking, the digital representation of the player (and of the main character) in a video game – that is, the "thing" on-screen that represents the player's agency and is part of the story – is usually called the player-character (Kukshinov and Shaw 2022; Tychsen et al. 2008) or player-controlled character (Tychsen and Canossa 2008). It can be controlled by players via the avatar. Player-characters stand in contrast to non-player characters (NPCs), which refers to other narrative representations or 'social' entities onscreen beyond the player's control (i.e., the other inhabitants of a digital world, usually controlled via pre-determined programming script). Characters, whether they represent players or not, are designed to have distinct expressions, behaviors, movements, and personalities because they play unique and variably central parts of the unfolding narrative (Tychsen et al. 2008).

The approach by Frasca (2004) is helpful in understanding the difference between avatars and characters (within player-characters or in general). According to them, video games are both *simulations* and *narratives*. Narratives are a series of signs, or connected series of events based on the actions and experiences of characters (Green et al. 2019). Simulations are designed to model the *system of signs* from the original behavior system. Whether in games, VR, or digital environments (such as chats or forums being social simulations, but not physical ones), simulation is a dynamic model of a system that represents behavior through a set of underlying rules. It is composed of mathematical or logical constraints, algorithmic statements, that determine how the system behaves over time. Once a user or player plays, i.e., when an input is changed, the model, as a system of signs, calculates a new state and produces a corresponding output. Alternatively, narratives are representational, "they excel at producing both descriptions of traits and sequences of events […] A photograph of a plane will tell us information about its shape and color, but it will not fly or crash when manipulated" (Frasca 2004).

Avatars, as parts of the simulation, and characters, as parts of the narrative, represent different domains of a video game, which uniquely combines both. As a result, players' experiences depend on how much they are involved in the simulation vs how much the narrative is developed. Usually, but not always, "the more freedom the player is given, the less personality the character will have. It just becomes a 'cursor' for the player's actions" (Frasca 2001), meaning the avatar that is being controlled. In other words, two full-scale personalities, i.e., of a player and a character, may conflict during the gameplay. However, some of the features of both a character and an avatar are always there.

Characters

Character, as a concept, is not always clearly defined in the research (Sacco et al. 2017; Wiebe 2014; Shimomura et al. 2006; Tomlinson 2005; Drennan et al. 2004; Cavazza et al. 2002). It partially happens because characters are often indistinguishable from narratives *per se* insofar as they are fundamental semiotic elements of the narrative as they act according to their *motives* while changing the plot (Eder 2010). In other words, these elements are difficult to separate from the settings and situations in which characters are encountered, creating a dialectic relationship between character and story worlds (Busselle and Bilandzic 2009). In a very real sense, the character and the action are embedded in the narrative trajectory of a story (Martin 1986). Thus, characters are the driving part of the narratives, any entities that affect the plot (Jahan and Finlayson 2019; Garvey 1978), moved by their own *desires*, *motives*, *feelings* and other traits, qualities or characteristics (Garvey 1978). Characters are independent from players, as they cannot be manipulated or changed, as much as the (video game) narrative cannot be manipulated or changed, but (re)interpreted.

To reinforce this point, consider that narrative branching—or different narrative paths—are not created by players *per se* but rather, they are products of someone else's (design) choices. In a very real sense, what allows players to choose their path is not due *solely* to the narrative but rather, the system that represents this narrative. For instance, "choose your own adventure" books with physical branching options (e.g., urging the reader to turn to one page or another) or in a video game, a series of options presented to the paper that create an illusion of coauthorship but among a fixed set of options. On this latter point, Stang (2019) argues that agency in video games is something of a clever illusion that is *interpreted and experienced by players* rather than a fully open-ended and autonomous experience. In a sense, players are co-authors of *their own experience within the narrative* (Wellenreiter, 2015) but players are bound in that system to what has already been created for them.

In many video games, players likewise engage pre-defined characters when playing the game, who are sometimes transmediated IPs, such as Spider-Man or Batman (Fuchs and Thoss 2019). Characters are displayed on-screen and to varying degrees, players are introduced to their backstories as relevant to the narrative unfolding, providing some motivation and justification for the player to engage the game world through the eyes (figuratively or literally) of that character. Just as audiences form perceptions of relationships with characters in non-interactive media (Dibble et al. 2016), video games players often form relationships with characters in video games as well. Engaging the narrative means being related to or interacting with the characters in some way (Busselle and Bilandzic 2009). Within a potential parasocial relationship (Giles 2010), the narrative consumers often make moral judgments over certain characters (Haigh 2015). Predictably, we enjoy it when we align with and sanction (i.e., agree with) the protagonists' actions, as well as when we abhor the antagonists' actions (willing them to be punished) (Raney 2010). In video games, players may disagree with actions they are required to perform (Kukshinov 2024a).

Being a mental representation (Bertetti and Thibault 2022), characters may exist for us beyond the moment we play a game or consume another narrative. As a result, parasocial relationships with them (such as identification) can evolve beyond the immediate encounter (Giles 2002), it extends beyond exposure to the character (Ewoldsen et al. 2021) and often includes a desire to find out more about them

(Cohen 2014). In contrast, avatars are not mental representations in our mind, they represent us and our actions in various media environments.

Avatars

As do characters, avatars appear across various media technologies. In social media, avatars might refer to the computer-generated visual image that represents a user or bot during an online interaction (Nowak and Rauh 2017) or as a graphical representation of a user's self-identity and desire for self-disclosure (Kang and Yang 2006) (others even argue that screen-names can be understood as avatars; see Bowman et al. (2015)). In VR, avatars constitute digital or "virtual representations that are controlled by human users" (Nowak and Fox 2018; Fox and Ahn 2013). In video games, avatars represent players and their actions (Trepte and Reinecke 2010), or their Self and agency (Klevjer 2022); they function as visual representation of a player that navigate and interact within a virtual world to seek out and achieve in-game objectives (Szolin et al. 2023). In that sense, the cursor, if interactive, can be the minimal form of the screen-projected avatar (Klevjer 2022).

Overall, an avatar is always some sort of (visual/digital/virtual) representation of the media user that can be manipulated and through which the simulated environment of a game can be manipulated. An avatar does not have its own motivations, desires, or feelings to identify with. An avatar, as a representation of the Self, can be modified and be seen to represent the user, not the story as the character does. Thus, what we create or customize is fundamentally not a character but an avatar. "The avatar is primarily a mediator of agency and control, not a 'character' that we identify with" (Klevjer 2022). What players feel like they manipulate in video games is the simulation, which is *designed to be manipulated*, including avatars as parts of these simulations.

RELATIONSHIPS WITH PLAYER REPRESENTATIONS IN VIDEO GAMES

In any given video game, players can interact with characters and avatars, and relate to both, some, or none of them. There are also other characters in video game narratives (i.e., non-player characters) to which players can relate and form relationships with (Elvery 2023). In the end, identification is the most prominent form of character relationships being measured. Even though these measures are explicitly designed to assess emotional and mental connections with story elements (Cohen 2001), they are often applied to interactions with avatars that replace characters in study designs ('t Riet et al. 2018; Perry 2022).

Many researchers merge embodiment and identification as forms of player relationships. Hofer et al. (2017) suggested that identification and embodiment (and self-presence) essentially denote the same process, i.e., the feeling of being the avatar and as such, being able to act through the avatar to influence or impact the gameworld. However, their results indicated the opposite: the more emotions a video game avatar (meaning *character*) expresses, the lower the sense of embodiment the player will have because such emotions would remind the player that they are separate entities from the *avatar* (see *character*). At the same time, while other researchers (Sah et al. 2021) distinguished identification and embodiment as two forms of player relationships, they did not consider the role of the narrative and characters in these relationships. This signifies a larger issue of lacking focus on the narrative and characters in game studies and player experience research.

Character Identification

Cohen's scale (2001) is one of the most popular measures of identification across narrative and video game studies that other new measures also rely on (Li et al. 2013). On the conceptual and operational levels, identification in Cohen's scale does not refer to the sense of agency or visual similarity with a character, but rather having an emotional and mental connection to that character. In reviewing items from this scale:

> Identification focuses on sharing the perspective of the character; feeling with the character […] a process that consists of increasing loss of self-awareness and its temporary replacement with heightened emotional and cognitive connections with a character. […] identification is a response to communication by others that is marked by internalizing a point of view rather than a process of projecting one's own identity onto someone or something else (Cohen 2001).

In other words, Cohen's articulation of identification includes awareness of a character's perspective, interpretation of events and motives in relation to events and other characters; the ones who identify with the character can understand and relive the character's emotions, and feel emotions for them (Busselle and Bilandzic 2009). The original scale included 10 questions (Cohen 2001), although later versions by Tal-Or and Cohen (Tal-Or and Cohen 2010) attempted to distinguish identification and transportation items. Such distinction was critical given that because transportation (as a state of being lost in a story) was not a necessary element of identification, i.e., while transportation may involve emotional connection with characters, these processes have different distinct foci and factors that contribute to them (Green and Appel 2024). The identification measure includes five questions that encompass the feeling of understanding the character, the events as the character understand them, the character's motivations, and cognitive and emotional empathy towards the character. Later work by Downs et al. (2019) likewise argued that these items could be more specifically understood as perspective-taking, as a component of (but not all-inclusive) identification as a higher-level construct.

Overall, identification across any media form is a mental (Green et al. 2019) or imaginative engagement and relationship with characters, which, according to Smith (2022) includes recognition of character as a continuous agent, alignment with their actions, and their moral evaluation, or 'allegiance.' (2022) As a result, identification often happens when narrative consumers adopt characters' goals and motivation, share their values (Shaw 2014), and mentally experience and imagine the events from the perspective of the characters (Green et al. 2019).

As mental or imaginative processes, they are not necessarily tied to the game play process, as we can relate to characters after (Martínez 2014) or even *before playing the game* and, therefore, manipulating (and embodying) the avatar (Allen and Anderson 2021). Moreover, physical (or demographic) similarity does not matter for identification (Cohen et al. 2018) as much as various sensory experiences from the feeling of control or other cues that may appear while being in a virtual space with a virtual body or other representation. Recent empirical evidence (Downs et al. 2019) suggests that physical similarity (β = .30) had the weakest loading with identification, thus offering additional evidence that similarity is not so well-suited for understanding character identification. Finally, as with other types of mediated

narratives, video game narratives often include multiple characters players can identify with, whether they control their representing virtual bodies (e.g., when there are multiple protagonists) or not (i.e., we can identify with NPCs). As a result, a character in a game does not need an avatar for a player to identify with it.

Avatar Embodiment

In current discourse, the sense of embodiment with an avatar is a feeling heavily associated with VR experiences (Peck and Gonzalez-Franco 2021). However, it is integral to realize that (sense of) embodiment is also a part of the video game play experiences (Szolin et al. 2023; Gregersen and Grodal 2008). Depending on the exact technological features (and afforded by them experiences) of the simulations that can promote sense of embodiment, it can be described as a feeling comprised of body ownership illusion and sense of agency (Murphy 2017). In a broader sense, sense of embodiment can be described by various sensations related to a body in virtual spaces, where ownership describes the feeling that the virtual body belongs to us; location refers to a sense of where we locate self and body relative to each other; and the agency is the feeling of being in control of one's own actions (Forster et al. 2022). These same notes are captured by Biocca (2006), who discussed progressive embodiment in terms of the synchronization of sensorimotor inputs - of course relevant to VR systems, but Bowman (2021) argued that this can be extended to explain more basic human-computer interactions, such as gamers taking up controllers to engage on-screen avatars.

In broadest terms, the sense of embodiment is a multi-sensory experience or an illusion (Biocca 2006). Similar to the sense of presence, the sense of embodiment is an activity-based feeling (Floridi 2005) or sensation that arises from the interaction with the system or the simulation (Kukshinov 2024b). In other words, and in contrast to the character identification, it is *necessary* to play the game, i.e., to manipulate the avatar, to feel embodiment. *In the process* of playing and controlling our representation in the game, we may feel these multi-sensory experiences.

Specifically, Gonzalez-Franco and Peck (2018) identified major features to measure embodiment via self-report, such as the *sense of body ownership* or *tactile sensations*; however, while tactile feedback is often less applicable to a regular play experience, ownership remains relevant even without a visible avatar (Murphy 2017). More critical to video games is the *sense of location*, which measures the cognitive alignment of the physical and virtual bodies (e.g., "I felt as if my body was located where I saw the avatar"), and the *sense of agency*, which assesses the player's active control over the play (e.g., "It felt like I could control the avatar as if it was my own body") (Christy and Fox 2016). Additionally, the framework includes the *response to external stimuli*, capturing sensory reactions to the gameworld (e.g., "I had the feeling that I might be harmed"), and *appearance*, which addresses visual similarity and customization (e.g., "It felt as if my (real) body were turning into an 'avatar' body") (Birk et al. 2016).

"Avatar Identification" as Empirical Misconceptualization

While it is possible to identify with characters or embody with avatars, "avatar identification" is the most explicit example of conceptual conflation of avatar embodiment and character identification. Its understanding can range from operationalization as a mere fact of avatar customization (Birk et al. 2016; Allen and

Anderson 2021) to a form of parasocial relationship, or friendship and/or idolization with the virtual persona (Hua and Xiao 2023). While sometimes, ”avatar” is only used as a term to signify a ”player-character” in a video game, such as *de facto* measuring character identification as noted earlier (Song and Fox 2016), often times ”avatar identification” studies conflate unrelated research paradigms of narrative and avatar/presence studies resulting in predictable empirical conundrums.

Some of the ”avatar identification” measures (Li et al. 2013) rely on the Cohen's operationalization (Cohen 2001), basically referring to character identification (via ”feelings during play” or ”positive attitudes toward avatar”) and, partially, narrative transportation (i.e., ”absorption during play”). However, one of the most widespread measures, the ”avatar identification” scale by Van Looy et al. (2012), includes sense of embodiment (or 'embodied presence'), avatar similarity, and the desire to be like the player character (referred to wishful identifications), combined into a scale to measure a single phenomenon. Predictably, as a result of mixing these distinct bodies of literature, researchers apply inconsistent measurements under the same conceptual umbrella.

The concept of ”embodied presence,” as a part of the ”avatar identification” (Van Looy et al. 2012), is the most evident example of the conceptual and empirical tension we can already observe in the recent ”avatar identification” research (Allen and Anderson 2021; Lan and Van Berlo 2023; Wang et al. 2021). As noted by Allen and Anderson (2021), measuring embodied presence requires to *play the game using the avatar*, while we can relate to characters, e.g., wishfully identify with them, only *by learning about them* (Allen and Anderson 2021), making them distinct variables. For example, when a player chooses to play a game with their favorite character in it (such as Batman), they are likely to already identify this character, but they certainly can't feel embodiment until they play the game. In that sense, embodiment can be considered a product of 'functional' consequences of game play, while identification of 'psychosocial' consequences (Abeele et al. 2020). In fact, ”avatar identification” is sometimes divided into physical and psychosocial (or emotional) components (Wang et al. 2021), highlighting the predictably dual nature of this construct. Other studies, such as by Lan and Van Berlo (2023), simply excluded the ”embodied presence” subscale, measuring sense of embodiment separately.

Either Embodiment, or Identification

Another key reason for differentiating the concepts of avatar (embodiment) and character (identification) lies in the varied combinations of the player relationships and experiences. Existing research demonstrates that sensory experiences of embodiment are fundamentally different from mental experiences of identification (Kukshinov 2024a), with evidence showing that these constructs should not be measured as a single, unitary phenomenon (Allen and Anderson 2021). For instance, it is possible for a player to identify with a character without (fully) embodying an avatar or, conversely, to embody an avatar without (fully) identifying with a character. Similarly, players may relate to the character but disassociate from their own actions performed via the avatar during the same game play (Kukshinov 2024a) and vice versa.

While individual differences and player preferences play a role in shaping these experiences, the likelihood of experiencing embodiment or identification also depends on the degree of development attributed to either avatar or character, i.e.,

certain design decisions in games may enhance or diminish the capacity for embodiment (via simulation parts) or identification (via narrative parts). For example, some researchers make a distinction between presence games (e.g., first-person shooters) and non-presence games (Nunez and Blake 2006). Willumsen (2018) suggested using character complexity and avatar control as scales to differentiate games.

Specifically, some games or genres prioritize embodiment over identification. These games often feature: a first-person perspective (1PP), which is closely associated with embodiment (Gorisse et al. 2017) and promotes sensory experiences (Havranek et al. 2012); customizable avatars, allowing players to control the avatar's appearance to enhance embodiment (Waltemate et al. 2018); high action-based agency, offering players a wide range of movements/interactions or a higher isomorphism of the movement (kinematics) (Gregersen and Grodal 2008; Havranek et al. 2012); non-specific characters, devoid of predefined traits such as emotions or backstory (Rogers et al. 2018), which encourage players to project themselves into the avatar (Allen and Anderson 2021). And the character that is felt in control via avatar is not seen as a distinct other (Banks 2015). Overall, these features stimulate self-focused interaction and a sensory involvement with the game's simulation.

In contrast, narrative-driven games tend to focus more heavily on facilitating mental relationships with the character as a distinct other, such as identification, by involving engaging stories and developed characters with their own back-stories, motivations, and personalities. Such games may provide *specific* and/or emotionally complex characters with defined backstories, personalities, and motivations (Cohen 2001), inviting players to mentally immerse themselves in the character's journey. Alternatively, they may have game features that stimulate observation vs active involvement, e.g., turnbased combat with lower isomorphism of the movement (kinematics), or a third person point of view (3PP) is better suited for observation of the overall situation compared to the 1PP (Tamborini and Skalski 2006; Debarba et al. 2015).

Thus, players may embody avatars and identify with characters to varying degrees. This distinction underscores the need for research and design to consider how games mediate these two facets of player experience to create meaningful and diverse gameplay.

DISCUSSION

Avatars and characters are distinct video game entities even when the same player incorporates them. It is possible, but not inevitable, to identify with the character by formulating an emotional/mental connection with the character as a part of the narrative regardless of whether it has an avatar controlled by the player. Identification requires understanding the story and the character's feelings and motives. Even if the character is not well-developed, it is still possible to identify with them, but the relationship may not be substantial. Nevertheless, there is always some virtual/digital representation of the player that can be manipulated and embodied, which is usually an avatar.

Implications to research

With this paper, we offer a clearer vocabulary for player experience research (Buruk et al. 2019). By providing clear definitions and separating these constructs, the study resolves an ongoing issue in video game studies where ”character” and ”avatar” are often conflated. This clarity will enhance the consistency of research terminology, allowing scholars to build on each other’s work and compare findings more effectively. This may also help to avoid ambiguities and overlapping definitions that lead to construct proliferation. Avatars are the player’s representation within the game environment; it is a representation of the player’s identity and agency within the game and is often modifiable. Characters are, independent from players, integral parts of the narratives with which players can have mental relationships, such as identification.

It is important to remember that sometimes there are games that have neither a distinct character, e.g., in terms of expressed feelings, values, or motives (Rogers et al. 2018), as in driving simulators where the character is usually just implied (Bayliss 2007), nor a tangible avatar, as in strategy games. However, it is still important to remember that if a video game does not have a player’s avatar, it still can incorporate a strong sense of agency or control on which embodiment, along with other senses, also relies (Murphy 2017), i.e., the avatar, or its visibility, is not a prerequisite of the sense of embodiment (Lugrin et al. 2018). See Table 1.

Separating identification with characters from embodiment of avatars provides a deeper understanding of the player’s relationships with game elements. This is essential for studying how these interactions shape key gameplay motivations, experiences, and outcomes. Also, the proposed conceptual clarification offers a refined lens for measuring and analyzing player experiences. This distinction helps researchers develop more targeted and reliable methods to assess identification and embodiment, reducing conceptual ambiguity in experimental designs and survey instruments.

In the end, identification and embodiment should be measured separately, provided it is plausible to measure both. Some players often do not care about the character or the story but still embody the avatar and play the game. This represents a different set of effects that video game play imposes on players. While identification is based on and results in strong emotional ties with characters, it induces emotional effects such as a fear of loss. It is crucial to note that we do not develop emotional connections with every character in video games. For example, there is an experiential difference between killing mobs (i.e., masses of ”mobile objects”) and significant characters in video games.

Studying the effects of video games - or media in general - is a complex task, which becomes problematic when one variable is measured in place of, or alongside, another without addressing this discrepancy (Allen and Anderson 2021). In video game studies, it also becomes problematic when a player embodying an avatar (or a point of view) is considered to ”become” the character (Trepte and Reinecke 2010). However, glimpsing at what a character sees is insufficient to understand them or experience their virtual life. Empathy, like identification, is a mental relationship that requires learning, mental effort, and time to evolve (Kukshinov et al. 2025).

Feature	Avatar (Simulation)	Character (Narrative)
Core Concept	A representation of the **player's** agency and identity (e.g., Klevjer 2022; Trepte and Reinecke 2010).	An integral part of the **story** with predefined motives (e.g., Eder 2010; Garvey 1978).
Player Relationship	**Embodiment** (Biocca 2006; Peck and Gonzalez-Franco 2021)	**Identification** (Cohen 2001; Green and Appel 2024)
Primary Locus	**Sensory / Functional** (Abeele et al. 2020).	**Mental / Psychosocial** (Abeele et al. 2020).
Key Mechanisms	**Control**, agency, customization, body ownership (e.g., Birk et al. 2016; Forster et al. 2022).	Perspective-taking, **empathy**, understanding motives (e.g., Busselle and Bilandzic 2009; Cohen 2001).
Requires Play?	**Yes**; it is an activity-based, sensory experience (e.g., Biocca 2006; Floridi 2005).	**No**; it is formed as a cognitive process that does not require interaction (e.g., Allen and Anderson 2021; Martinez 2014).

Table 1: Conceptual Distinction Between Avatar (Embodiment) and Character (Identification)

Future avenues

The Interplay Between Identification and Embodiment

Understanding and assessing character identification and avatar embodiment as distinct relationships between the player and the player-character introduces new possibilities for research. A clear delineation of these constructs focuses scholarly attention on plausible interactions between identification (with a character) and embodiment (of an avatar) that is currently overlooked in video game studies. While research on these concepts exists, the frequent conflation of these constructs limits our ability to examine these variables, as well as their covariation patterns, in a systematic manner.

For example, as highlighted in the study by Hofer et al. (2017), identification may sometimes contradict embodiment. Participants in their study reported feeling less embodied with an avatar when the character expressed emotions independently of their own. Similar conclusions are offered by Allen and Anderson (2021). This suggests that conflicting dynamics between identification and embodiment can undermine a player's immersive experience. Alternatively, when studies conflate these concepts, they may erroneously conclude that 'customization improves identification,' when a more precise analysis would show that customization improves embodiment, while identification (the mental, narrative-based process) may be unaffected or even reduced if the player's actions conflict with the character's prescribed emotions.

Investigating whether similar effects occur in other contexts or genres and understanding the conditions under which such contradictions arise could greatly enrich our understanding of player experiences. There are more questions that arise from this. How does the presence of a specific detailed character in a simulator-type game, coupled with a developed avatar, shape the player's sense of embodiment? Similarly, how do players respond when the avatar's appearance or abilities conflict with the character's personality, narrative, or role in the game? Furthermore, does the emotional disassociation between the character and the player, as observed in the study by Hofer et al. (2017), suggest that character emotions are essentially independent of player emotions? Are there particular circumstances, such as specific game genres, in which both identification and embodiment can be simultaneously and equally stimulated?

Ethics, Empathy, and Proteus Effect

The distinction between avatars and characters is particularly critical when examining the behavioral and social effects of video games, such as the Proteus effect (Szolin et al. 2023). Viewed through the framework of this paper, the Proteus effect is a phenomenon rooted in *avatar embodiment* rather than *character identification*, however, not all instances of embodiment in video games result in a Proteus effect (Praetorius and Görlich 2020). Because the avatar is a representation of the player's agency within the simulation, players rely on visual cues (e.g., height, attractiveness, gear) to infer how they should behave based on a player's own beliefs (Yee and Bailenson 2007). This behavioral modification is derived from the external attributes of the digital body (the avatar) rather than an internal connection to a narrative persona (the character).

This distinction explains why embodiment (alone) can lead to superficial or even harmful outcomes. While specific avatar attributes can produce positive behavioral shifts, such as increased confidence (Szolin et al. 2023), reliance on visual stereotypes often reinforces negative social biases. For instance, studies indicate that embodying sexualized female avatars can increase rape myth acceptance (Fox et al. 2013). In these cases, the player embodies the *form* (Avatar) without engaging with a defined *subjectivity* (Character). This issue is reinforced by "identity tourism," where dominant groups exploit the identities of marginalized others (Nakamura 2002). By focusing on the sensory experience of controlling a digital body, players may adopt the guise of another's experience without the requisite mental effort to understand it.

Consequently, distinguishing embodiment from identification reveals the ethical limits of simulation. "Wearing" the digital body of a marginalized other via avatar embodiment is insufficient for "living a life of" or understanding the perspective of that person. Seeing or doing as someone else (Embodiment) does not equate to being or feeling with them (Identification). True empathy requires the mental effort of engaging with a character's backstory, motives, and internal state (Kukshinov et al. 2025). Therefore, to move players from superficial role-play to genuine understanding, design must go beyond avatar customization and focus on deep characterization. By locating themselves to or engaging with the mental model of the narrative, players may be able to adopt the character's perspective to understand what they feel (aka affective perspective-taking), feel what they feel (aka empathy), or feel on response to what the character feel (aka sympathy) (Busselle and Bilandzic 2009).

CONCLUSION

In conclusion, this study establishes a necessary theoretical boundary between avatars and characters, distinguishing them as separate entities that facilitate distinct player experiences: embodiment through simulation and identification through narrative. By disentangling these constructs, we highlight how current methodologies often erroneously conflate the sensory experience of controlling a digital body with the emotional process of connecting to a fictional persona. Consequently, accurate measurement requires researchers to first evaluate a game's specific affordances, such as the level of avatar control versus the depth of character backstory, to ensure they are assessing the correct dimension of the player-character relationship.

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