RICERCHE

The habit of massively multiplayer online role-playing games (MMORPGs): A phenomenological analysis of bodily self-perception in gaming addiction

Marsia Santa Barbera[α] & Willem Ferdinand Geradus Haselager[β]

█ **Abstract** We investigate the role played by bodily self-perception and social self-presentation in addiction to massively multiplayer online role-playing games (MMORPGs). In this paper we will develop the hypothesis that, at least in some cases, the habit of role-playing can be interpreted as a response to gamers' need to explore a different bodily self-identity. Players tend to become deeply involved in this kind of game, especially in the character identity creation process. Participants might see and seek reflections of their desired selves in their avatars. We suggest that in some cases gaming can be considered an addiction associated with self-perception, social acceptance, and body-image distortion. We explore how the phenomenological duality of body (*Leib* and *Körper*) can be useful for analyzing the creation of game identities preferred by players. On the basis of this analysis, we sketch some therapeutic suggestions, combining aspects from two specific therapies: Internet Addiction-Cognitive Behavioral Therapy (IA-CBT) and Body Image Cognitive Behavioral Therapy (BI-CBT). We hope these suggested approaches will be of value to gaming addiction specialists.
KEYWORDS: MMORPGs; Leib/Körper; Bodily Self-perception; Game Identity; Addiction

█ **Riassunto** *L'abitudine ai giochi di ruolo in rete multigiocatore di massa (MMORPGs): una analisi fenomenologica della percezione corporea di sé nella dipendenza da gioco* – Intendiamo indagare il ruolo svolto dalla percezione corporea di sé e dalla autopresentazione sociale nella dipendenza da gioco di ruolo in rete multigiocatore di massa (MMORPGs). In questo lavoro illustreremo l'ipotesi per cui, quantomeno in alcuni casi, la disposizione al gioco di ruolo può essere interpretata come risposta al bisogno dei giocatori di esplorare una diversa identità corporea di sé. Chi partecipa a questo tipo di gioco tende a un coinvolgimento profondo, specialmente nel processo di creazione dell'identità caratteristica. I partecipanti possono vedere e cercare riflessi dei loro sé desiderati nei loro avatar. Noi suggeriamo che in alcuni casi il gioco può essere considerato una dipendenza associata alla percezione di sé, alla accettazione sociale e alla distorsione della immagine corporea. Esploreremo come la dualità fenomenologica tra corpo vissuto e corpo (*Leib* and *Körper*) possa essere utile per analizzare la creazione delle identità di gioco preferite dai giocatori. Su questa base offriremo alcuni suggerimenti terapeutici, combinando aspetti tratti da due terapie specifiche: la Internet Addiction-Cognitive Behavioral Therapy (IA-CBT) e la Body Image Cognitive Behavioral Therapy (BI-CBT). Auspichiamo che questi approcci possano essere validi per chi lavora nel campo della dipendenza da gioco.
PAROLE CHIAVE: MMORPGs; Leib/Körper; Percezione corporea di sé; Identità di gioco; Dipendenza

[α]Dipartimento di Scienze Cognitive, Psicologiche, Padagogiche e degli Studi Culturali, Università degli Studi di Messina, via Concezione 6/8 - 98121 Messina (I)

[β]Donders Institute for Brain, Cognition and Behaviour, Radboud University, Heyendaalseweg 135 - 6525 AJ Nijmegen (NL)

E-mail: mbarbera@unime.it (✉); w.haselager@donders.ru.nl

1 Introduction

INTERNET ADDICTION (IA) REFERS TO the damaging and uncontrollable use of online technologies. It is of considerable societal concern,[1] and falls within the clinical category of non-substance addictive behaviors in DSM-5.[2] This widespread and increasing phenomenon leads to negative consequences for social life.[3] According to Young and colleagues,[4] IA is an umbrella term encompassing several kinds of behaviors, which can be divided into five subtypes: (1) cybersexual addiction – compulsive use of adult websites for cybersex and cyberporn; (2) cyber-relationship addiction – over-involvement in online relationships; (3) net compulsions – obsessive online gambling, shopping or day-trading; (4) information overload – compulsive web surfing or database searches; (5) computer addiction – obsessive computer game playing. When people are unable to control their game use they run the risk of jeopardizing their employment and relationships.[5] If, on the one hand, the use of technology may be considered a positive phenomenon – technologies are part of our embodied experience to the extent what they may augment our mind, sensory, and bodily experience[6] – on the other hand, this use can become excessive and unhealthy compared to standard game playing.[7] As You and colleagues[8] summarize, online game addiction can be viewed as a form of IA, and has been found to cause neck and elbow pain, anxiety, violence, loss of interest in other activities, negligence of school studies and social isolation.

Several studies have focused on the large number of online role-playing gamers.[9] In this paper, we focus specifically on the phenomenon of massively multiplayer online role-playing games (MMORPGs), which represent the most attractive and immersive online computer gaming experience within a multiplayer environment. MMORPGs can be distinguished from other kinds of Role Playing Games (RPGs).[10] They differ, for instance, from tabletop RPGs in terms of the virtual nature of the embodiment, the rich array of roles a character/avatar can play, as well as the rich virtual environmental input that computer game contexts provide. MMORPGs are distinct from Live Action Role Playing (LARP) in that changes to embodiment and character can be much greater than those allowed through the physical portrayal of characters via clothing and props in LARP. Finally, in contrast to single player computer RPGs, massive social interaction and community building is a crucial feature. MMORPGs are interesting, not only because of these specific characteristics which distinguish them from other types of computer games, but also because of the intensive social experience they provide. Gamers have the opportunity to contact many other participants, since gaming is a focus of activity for social community building.[11] Studies on online gaming[12] show that MMORPGs represent a place for an informal process of socialization.[13] The potential for character identity creation adds the dynamic of a social identity change[14] to the opportunity for participation in long-term social groups.[15] Hence, gamer identity is a social identity embedded in a deeply involved participation in a virtual community. You and colleagues[16] note that adolescents who play MMORPG have higher tendencies to addiction than adolescents who play other game genres.[17] In such cases, over time, a person's game identity (GI) can become stronger and better defined to the point that gamers may be tempted to project their avatar, with both its physical and psychological features, onto their everyday selves.[18] Due to their large freedom of choice,[19] gamers can customize their avatar according to their ideal (physical and psychological) criteria. These criteria might be dependent on the desire to be and have a body that is perceived to be more socially presentable to others. Gamers who struggle with their own self-acceptance because of body dissatisfaction, might also experience body-image distortion. In this paper, we develop the suggestion that, by choosing and playing with their avatars, gamers can engage in experimental bodily and social self-presentation, which may be

related to complications with their body self-acceptance.

Chappell and colleagues[20] apply an interpretative phenomenological analysis that could be used to understand how gamers express themselves when they create their own characters and identities. However, this approach does not go into detail about gamers' bodily self-perception, their potential body dissatisfaction, and social self-acceptance needs. The suggestion presented here aims to deepen this analysis by applying *Leib/Körper* dualism (basically the difference between *being* a lived-living body and *having* a body as a physical object) to gaming habits that may constitute a risk of becoming addictive. Several therapies have been proposed for excessive or addicted video game players, combining pharmacological with psychological means.[21] The mainstream treatment is based on Internet Addiction Cognitive Behavioral Therapy (IA-CBT), which is also considered the most influential model.[22] However, we suggest that this model might miss important aspects of a client's body-image assessment and the interventions needed to address them. This is precisely the focus of the so-called Body-Image Cognitive Behavioral Therapy (BI-CBT). This therapy is based on cognitive behavioral methods and is adopted for patients who present with disturbed or distorted body-image, that is, in cases of anorexia nervosa, binge eating disorders, body dysmorphic disorders, and other body-image disturbances.[23]

Body dissatisfaction has been regarded as an essential factor in eating disorders: being dissatisfied with your body can lead to the experience of internalizing body dissatisfaction as a reflection of unaccepted self.[24] Moreover, to paraphrase Levenkron,[25] body distortion is one of the main components that reinforces anorexic or eating disorders. In terms of treatment, a cognitive behavioral therapeutic technique is usually proposed, alongside an attempt to uncover the nature of the anorexic/bulimic identity (mostly based on body-image distortion) and the extent to which it

takes over a client's sense of self.[26] In view of these aspects, our study suggests a combination of elements from the above-mentioned therapies: IA-CBT and BI-CBT.

The paper is structured as follows: Section 2 offers a detailed examination of MMORPGs, outlining their main characteristics with a focus on the importance of the process of character identity creation as a crucial feature of the game; Section 3 distinguishes two kinds of identities, namely one's identity in the real world ("R") and the game world ("G"); Section 4 applies a phenomenological approach, specifically the *Leib/Körper* distinction, to players' bodily perception in gaming habits and addiction; Section 5 explores the value of this approach by considering a combination of two specific therapies; Section 6 sums up the outcome.

2 MMORPG(s): Main features and Character Identity Creation (CIC)

Massively Multiplayer Online Roleplaying Game(s) are a combination of role-playing video games and massively multiplayer online games in which a very large number of players interact with one another within a virtual world.[27] These online games allow players to create and control their own avatars for the purpose of playing with others, either as allies or competitors, in a 3D graphical video environment.[28] Players can create new virtual worlds and objects[29] in addition to their unique personal stories.[30] They can communicate with each other by texting or audio messaging, thereby enriching the gaming experience with social interactions.[31] MMORPGs provide unique social environments where at times the relationships and experiences can rival those of the physical world: e.g. people fall in love, get married, elect governors, attend poetry readings, start a pharmaceutical business, and so forth.[32]

Alongside these central features, MMORPGs can provide highly involving social experiences in which cooperation and mutual assistance are intended to be essential.[33] Virtual

worlds are vibrant sites for communities[34] and are generally called "guilds".[35] A guild is typically an in-game association of player characters. It is formed to make grouping and raiding easier and more rewarding, as well as to create a social atmosphere in which to enjoy the game. The label "guilds" might thus be considered relevant: it aims to emphasize the social organizational aspects of groups and (sub-)groups within the virtual world, including, for instance, formal roles like master-apprentice, healer, etc.

MMORPGs represent a unique world in which individuals become deeply involved and regularly spend a significant amount of their time;[36] they sometimes feel more comfortable and self-confident in the gaming world than in their real life. They can create long-term relationships with other players, especially because of the features that support the formation of in-game communities.[37]

A few examples will provide an idea of the kind of games we are talking about: *Star Wars Galaxies* (SWG);[38] *World of Warcraft* (WoW);[39] *EverQuest* (EQ);[40] *Dungeons & Dragons Online* (DDO).[41]

2.1 The uniqueness of MMORPG(s): Character Identity Creation (CIC)

Differences between MMORPG(s) and other common kinds of video games, involving, for instance, football and street fighting, reveal some interesting features. The core differences comprise:

- a social component,[42] which depends on the number of players able to play together at once;[43]

- the open-ended nature of MMORPGs in terms of system of goals and achievements;[44] by contrast, traditional video games end at some point, or become repetitive;

- the unique opportunity they offer players to decide to become someone else, by creating a new identity[45] or a different personal story[46] across game sessions.

This latter difference is the most relevant for our purposes, since it highlights the opportunity the gamer has to play around without inhibition with their character preferences. In other words, the first step of these games involves the exploration of a potentially big range of avatars, resulting in Character Identity Creation (CIC). Players can choose from gender, race, specific detailed physical features, professions, and even their deity alignment (morality). Once they decide to enroll, they can continue to change various aspects of their online personality. Because the game offers the opportunity for physical and psychological changes, players can present themselves to others in any way they would like to. In particular, focusing on the Dungeons and Dragons Online game for illustration, this change might involve:[47]

1) *Personality*: Characters are individuals with their own, stories, interests, connections, and capabilities. Their personality is a crucial aspect of the game, distinguishing characters from one another, and creating unique blends of strengths and weaknesses, presenting a mix of opportunities and limitations for others.

2) *Character details*: Character details include both physical and psychological features. These details reflect the character which players have in mind. Characters' physical descriptions (along with their name) will be the first thing that the other players at the table learn about a participant. Making these choices in CIC usually takes a large amount of time.[48]

3) *Race and name*: The character description leads to sample names for such characters. Players also choose their race and this can affect name choice. Most MMOs stick to the standard fantasy races, Elves, Dwarves, and then, of course, Humans. There are fantasy name generators that provide name suggestions for specific races or categories of creatures.[49]

4) *Language*: Language, like name, is related to race. The race indicates the languages characters can speak by default, and the background chosen by players might give them access to one or more additional languages of their choice.

5) *Sex/Gender*: Participants can play a male or female character. They are not confined to binary notions of sex and gender. An elf could be seen as androgynous or hermaphroditic, for example. They could also play a female character who presents herself as a man or a man who feels trapped in a female body. Their character's sexual orientation is for them to decide.

6) *Height and weight*: Players can decide their character's height and weight, using the information provided in the race description or on the random height and weight table. For example, a weak but agile character might be thin, while a strong and tough character might be tall or just heavy.

7) *Other physical characteristics*: Further choices include the character's age and the color of his or her hair, eyes, and skin. To add a touch of distinctiveness, players can even give their own character an unusual or memorable physical characteristic, such as a scar, a limp, or a tattoo.

8) *Personal Characteristics*: An array of traits, mannerisms, habits, beliefs, and flaws give a person a unique identity. There are four main categories of characteristics: personality traits, ideals, bonds, and flaws. Beyond those categories, players can also think about their character's favorite words or phrases, tics and habitual gestures, vices and pet peeves, and whatever else they want to imagine. More specifically, personality traits might describe the things a character likes or dislikes. Ideals are the things that players believe in most strongly, their fundamental moral and ethical principles: from life goals to the core belief system. Bonds represent a character's connections to people, places, and events in the world. They tie participants to things from the background and drive a character's motivations and goals. Finally, a character's flaw refers to some vice, compulsion, fear, or weakness.

9) *Alignment*: A typical creature in the game world has an alignment, which broadly describes its moral and personal attitudes. Alignment is a combination of two factors: one identifies morality (good, evil, or neutral), and the other describes attitudes toward society and order (lawful, chaotic, or neutral).

10) *Background*: Every story has a beginning. A character's background reveals where the participant came from, how they became an adventurer, and their place in the world.

11) *Equipment*: Each background also provides a package of starting equipment, that is to say, tools, money, food, clothes, and so forth.

By making these choices, gamers may find their self is reflected by or projected onto the avatar they have chosen within the MMORPG environment.[50] Throughout this section we will provide quotes that aim to illustrate how players might perceive their relationship to their avatar. One participant, for instance, describes one of his male personas in the following manner: «[..] He was an exploration of myself in virtual form».[51]

Gaming encourages identification with characters and what is chosen in the game could also be an alternative self: «I role play completely: My character is nothing like the real me, but I "become" that character».[52]

Players can identify themselves completely with their character in the game; playing a character might be a matter of taking over the specifics of the role, which can start a process of self-reflection: «When I play the game, I start getting into it, and you start taking the role of the person»;[53] «I know it sounds strange but the more I played her the better I knew myself».[54]

In this way, participants are likely to create a character that is a projection of their own personality.[55] As the following quote shows, the player's self can become the center of the character concept:

> I think that for me playing a character is really more about picking an aspect of my own personality, no matter how dormant and how latent, and magnifying, and amplifying it to the forefront and making it the driving part of the character I play.

[...] it does relate to my own personality, or at least a possible version.[56]

The opportunity to create idealized characters as virtual, alternative selves[57] is a special characteristic of these kinds of games. Avatars can be seen as an embodied and embedded extension of a gamer's psychological and physical self. The multiple choices available allow them to create a new identity close to or, alternatively, very far from the way they actually are:

> With my characters, I can be much more sensual and sexual than I am in my own life because I'm very shy... [in] the real world, there are real consequences whereas in game, no big deal[58] [...] She was a powerhouse socially. She allowed me to be desirable. She allowed me to be elegant [...] to be sensual even, in a time when those were all things that were denied to me in my real life. And if I hadn't had that escape... I really think that there would have been even more damage done.[59]

Once again, unlike football and street fighter video games, MMORPGs allow gamers to choose (and consequently to be) a character who may embody some aspects of their ideal self.

> In role playing I am able to play characters similar to myself – but different in some ways. Take one Kerran character – he is similar to me in some ways, but even more outgoing and VERY flirty in a sincere way, just like I would be if I was flirty in RL – but in RL I am NOT flirty. By "trying out" some of these characteristics, I sometimes find aspects of the character I like and I might try to weave them into my daily behavior. Other things, of course, I throw out that don't work or aren't practical. IE- I'm married, so being flirty all the time isn't practical at all.[60]

This electronic self-representation allows

almost unlimited possibilities. Through the game, participants can thus explore several kinds of personalities, likewise achieving new identities or expressing their ideal one.

In all, MMORPG(s) are an environment for the construction and reconstruction of a self. They allow the gamer to experience multiple identities as well play out aspects of their self, by «building something, being someone».[61] This is exactly the so-called moment of "alterity" where players can experience the sensation of being someone else.[62]

> With RP, I can be whoever I want [...] I can be creative, and I can "be" someone that I would never be in RL. It's kind of therapeutic to be honest. You can take RL situations, and work them into your character.[63]

This is, once more, an unparalleled opportunity to play with one's identity and to "try out" new ones.[64] Furthermore, since this process will involve both the physical and the psychological aspects of selfhood, gaming can be a matter of (body) self-identity and social self-presentation. The next section focuses on how gaming may help someone face dissatisfaction with their body and non-acceptance.

3 From "R" identity to "G" identity: From habit to addiction

As indicated above, gaming may be a way to try to better express and experiment with one's identity,[65] or even to experience a multiplicity of ideal selves. It may happen that players feel more self-confident in the game than in real life. They might feel unsatisfied who they are in some ways, sometimes physically speaking, sometimes in terms of cognitive or social style. Aspects of physical non-acceptance may lead to psychological issues. This is what a young player claims, by complaining about the body he has: «A lot of the kids have girlfriends. I feel left out. I don't have any best friends. It's not my fault. It's my size. Everybody thinks of me as a little kid».[66]

Since the avatar in the game can be seen as the extension of one's bodily self-perspective, choosing specific features for an avatar may constitute a response to the need for being socially presentable and well accepted. Upon a successful choice, gamers might start feeling more comfortable in the virtual world than in reality. In such cases, gaming addresses a perceived need to escape from real life, avoiding a dissatisfaction with aspects of their physical R appearance which represents an obstacle to social presentation and social acceptance. An 18-year-old ex-addict, for example, states: «I liked gaming because people couldn't see me, they accepted me as my online character».[67]

As McKenna and Bargh[68] have proposed, enacting an ideal self online may reduce the discrepancy between players' actual and ideal self, and increase their feelings of self-confidence and self-worth.[69]

At this point, it could be appropriate to point out the value of body-image both in phenomenological[70] and psychological terms.[71] The phenomenological meaning of body-image may be taken to involve the mostly conscious idea or mental representation that a person has of her own body and the body of others. According to psychologists, there are two different ways of conceiving of a body-image. The first entails the perceptual construct that pertains to the accuracy or distortion of a person's estimates of their physical features, while the second is the attitudinal body-image construct reflecting their affective, cognitive and behavioral dispositions to such physical attributes, namely to their appearance.[72]

From both a phenomenological and psychological point of view, such dissatisfaction – which comes first from the non-acceptance of the body – may jeopardize the overall perception of one's body-image. In other words, body dissatisfaction can negatively affect a good or healthy body-image. The game could strengthen this perception (and the need to escape) by offering the wonderful illusion of having and "being" a perfect body, at least in the virtual environment. In particular, it may happen that players cannot make peace with their own bodies and consider the game to be the only possibility for reaching the wished-for perfection. This is what a young player, named Jimmy, claimed: «For me the game is to see how long I can be perfect. Every day I try to be perfect for ten minutes longer».[73]

Gaming is not merely (or even at all) a matter of losing or winning, especially for someone, like Jimmy, who cannot accept the way he looks. He fears that people are always noticing him: «thinking that I am ugly. [...] I especially hate being around girls».[74]

It seems that, due to his body dissatisfaction and non-acceptance, Jimmy feels better in the game, by playing with his characters' appearances, dress and weight. Hypothetically, gamers struggling with an unwanted bodily-self in this way, may end up being in conflict with their real (world) identity. They might move closer to the identity they have acquired in the game, through playing the role of characters they have painstakingly customized. In this way, the "G" identity might become overestimated or mixed up with the "R" one.

Before going into further details, the types of gamers or of identities should be better addressed.

Kinds of gamers: According to De Grove, Courtois and Van Looy,[75] it is appropriate to use the label of "gamers" when it comes to MMORPG(s). Gamers can be classified into three groups or categories by their Identity Strength, indicating higher, middle and lower levels of intensity:[76] "hardcore gamers", "heavy gamers", and "casual gamers". These three groups might be characterized by the amount of time they generally spend gaming. This time spent gaming can be taken as an indication of their motivation to play the game. Hardcore gamers may regard themselves as devoted players who are engaged in the most complex and challenging games. They are keen to achieve epic wins and seem to exhibit the greatest persistence. They seem to be the most intrinsically motivated, and

their enjoyment enhances their persistence. Heavy and casual gamers are motivated to continue to play as a result of both feelings of enjoyment and a sense of connectedness.[77] The more such participants become involved in the game, the more time they will spend in gaming and the more prone they are to become a stronger or, better, hardcore gamer.

Kinds of identities: Being a gamer might be classified as an identity category. Investing a certain amount of time in playing digital games is part of a gamer identity: gaming basically constitutes opportunities for identity building in a direct and facilitated way.[78] In this process, identity is most substantially modified by the ways that gamers can control their digital characters.[79]

As we have seen, a big difference can emerge between the "R" identity, that is a person's identity in the real world, and the "G" one, namely their identity in the game. Nevertheless, during a gaming session, these two different identities probably get mixed up by gamers. In other words, the distinction between the actual real-world self and the performed virtual identity can collapse. This is because gaming allows for rather extreme shifts in identity: the more gamers play, the more they get involved, the more likely they are to mix reality and the game. In particular, they may begin experiencing strong identification with their alter ego, the avatar they have carefully created.[80] One way to think about this possibility is in terms of the difference between character-discrepancy and self-discrepancy. Character-discrepancy is the difference between the attributes of a player's virtual (character) and ideal self, while self-discrepancy refers to the difference between the attributes of a player's ideal and real selves.[81] In terms of self-identity, can the gap between the real self and the ideal self be bridged by the virtual character? Put it in another way, may the character constitute a sort of connection point between the real and ideal self?

If it is true that gamers – through their avatars – can alternatively embody a version of their ideal self, to the extent that the virtual environment offers them a possibility for self-discovery and self-transformation, the reply to the above-mentioned questions could very well be affirmative. However, to the extent that gaming provides a mental and emotional outlet for this malleability of the self-concept,[82] "virtual game-selves" and "real selves" could also start to conflict with each other.[83] Over various game sessions, a point may be reached where gamers, feeling deeply involved in the game, take the risk of sacrificing their R identity for the G one.

4 A phenomenological approach to players' bodily perception in gaming addiction

Role Playing Games (RPGs) applied to massively multiplayer online contexts may be more than a habit: it can take over gamers' lives until it becomes an addiction as strong as that of drinking or gambling.[84] In light of this, what kinds of motivations could be involved in the phenomenon of gaming addiction?

According to Lewis[85] people become addicted because they lack self-trust. He claims that the way to escape addiction is by restoring self-trust, that is, it involves a process of re-acquiring self-trust, which, in turn, implies self-acceptance. On the assumption that self-creation and self-perception are embodied and embedded processes,[86] there is a role for the rehabilitation of body-image in this self-reinforcing perception. Following this logic, the way back to reality for a gamer might consist in an attempt at restoring a sane body-image.

Lack of self-trust, in the context of gaming addiction, might be connected to bodily self-acceptance and bodily social self-presentation. Both bodily self-acceptance and bodily self-presentation are tightly intertwined with bodily self-perception which could, in turn, be dependent on a distorted body-image. The gaming process, along with its singular and significant opportunities for Character Identity Creation (CIC), might respond to gamers' need to feel more satis-

fied with a (sort of ideal) body which would be either socially presentable or acceptable.

The process of character creation provides the crucial moment when players can acquire their perfect or ideal body-image, by choosing to be and to have another body. In this connection, how could phenomenology assist in the interpretation of this inclination? From a phenomenological perspective, being and having a body is a matter of *Leib* and *Körper*.[87] We owe this conceptual distinction to the philosophical anthropologist Helmuth Plessner[88] although its origins can be found in Merleau-Ponty. Both philosophers were strongly inspired by Husserl's phenomenological work. *Leib* refers to the lived-living body, to bodily nature as something that human beings *are*. *Körper* refers to the body-object, to something that humans *have*. The body is both the subject and the object of intentionality: *Leib*, which experiences worldly things, and *Körper*, which is experienced as a thing in the world. In the words of Plessner: «[A] human being always and conjointly is a living body and has this living body as his physical thing».[89]

At the stage of customization, the avatar created with attention to every single detail, becomes the extension of the player's body – that is, the physical *Körper* they would like to have – as well as the reflection of their *Leib,* since it enfolds all those features related to the way they would like to be, and to live socially. Phenomenologically speaking, the mechanism of CIC responds to the need to restore a healthy body-image. Because of the often intense experiences of flow and immersion during games,[90] players can move from experiencing "acting *on* the screen" to "acting *within* the screen".[91] Along these lines, we venture to suggest that, at least in some cases, gamers who start with what could best be characterized as "*Körper*" avatar at the beginning of the game, might increasingly, though never completely, experience their avatars as "*Leib*" after long-term playing. We think Plessner's *Leib/Körper* distinction is useful for capturing the nature and im-

portance of the identification that MMORPGs enable players to experience with their ideal self-related avatars. These avatars are, or rather become, much more than mere renderings or portrayals of an ideal. During the game, the players become increasingly embodied in their avatar and start experiencing their game environment from within their virtual *Leib* to a significant extent. In other words, the hypothesis we are putting forward is that this move, from experiencing the avatar as *Körper* to *Leib*, might help us understand how an addiction to MMORPGs develops.

Body-image rehabilitation and, consequentially, enhancement is therefore a crucial topic for a psychological account. The field of psychology may find an ally in phenomenology to the extent that phenomenology may help us treat addiction, by taking the "*Leib/Körper*" distinction between being and having another body into account. Furthermore, since gaming concerns a specific addiction,[92] thinking of a specific intervention is as necessary as it is wise. In this case, it could help us provide suggestions for a therapy for gaming-addicted clients suffering from body-image cognitive distortions.

In the attempt to analyze the phenomenon of addicted MMORP gamers, what we would like to highlight with our relatively modest use of phenomenology is that, body dissatisfaction could be considered one of the important causes of the addiction. Indeed, such feelings of dissatisfaction, for instance, connected to social presentability, may lead gamers into this process of bodily self-non-acceptance and may inflate their idea of unhealthy body-image. Of course, the hypothesis that we sketch here requires further investigation and empirical support. One way of obtaining relevant evidence would be to examine the amount of time and attention hardcore MMORPG players invest in the process of avatar selection, their levels of game immersion, and their acceptance of their bodily self and social self-presentation. One prediction that could be formulated on

the basis of the perspective we sketched above is that low acceptance of bodily self and difficulties with social self-presentation would correlate significantly with high involvement in avatar selection and game immersion. The following section aims to further elucidate our suggested perspective. It also explores a possible intervention for gaming-addicted clients based on the phenomenological relevance of the gamer's body-image, which attempts to combine two specific kinds of therapies: internet addiction cognitive behavioral therapy (IA-CBT) and body-image cognitive behavioral therapy (BI-CBT). Of course, the next section is merely intended as a way to further illustrate the hypothesis we put forward above regarding the relevance of the *Leib/Körper* distinction for MMORPG addiction. We hope it will be critically considered by clinical experts.

5 The Body-image value: A phenomenological suggestion for gaming therapy

The phenomenological approach suggests that therapists consider whether body-image might be a matter of importance, even in the case of addicted "hardcore" gamers. A crucial question addresses what their avatar(s) mean for players, what kinds of desires or needs lead to the creation of these characters. As previously discussed, this phenomenological analysis of gamers' body-image perception involves the possibility of interpreting the body both in terms of *Leib* and *Körper*. This analysis may then be related to the gamer's level of body satisfaction. We have therefore taken into account this possibility of escaping from a reality in which players might feel unsatisfied with the way they look. We hypothesized that body non-acceptance could entice them to be involved in a virtuality where they can achieve a more ideal embodiment. This, we hope, sheds some light on the CIC process.

To the extent that the body-image might be relevant to gaming addiction, it would be interesting to explore the combination of two kinds of therapies: cognitive behavioral therapy for internet addictions (IA-CBT) and cognitive behavioral body-image therapy (BI-CBT).

In IA-CBT, treatment progresses through a 3-stage model: (1) Behavioral Modification (e.g., counselor and client work collaboratively to identify the scope of the problem to be addressed; this teaches clients to be self-reporters); (2) Cognitive Restructuring (e.g., addressing the maladaptive cognitions and perceptual distortions used by clients to justify their internet usage); (3) Harm Reduction Therapy (e.g. identifying and addressing any coexisting factors associated with the development of the addiction; addressing the personal, relational, social, occupational, or situational stressors precipitating problematic usage).[93]

BI-CBT may entail administration of a self-report inventory of body-image beliefs, cognitive restructuring of automatic thoughts, homework assignments, and generalization strategies. This cognitive-behavioral treatment is also based on self-reinforcement and imagery exercises, focusing on assertiveness and body acceptance.[94] This kind of program relies on body-image education, relaxation training, desensitization, identification and restructuring of negative body-image cognitions and behaviors, enhancement of positive body-image activities, generalization training, relapse prevention, and stress inoculation. In other words, body-image CBT consists of education, homework exercises, including body-size and weight-estimation exercises, aimed at correcting perceptual distortions.[95]

BI-CBT has been shown to be efficient for obese patients: in most cases, losing weight does not guarantee a "normal" body image, since clients' desire to acquire a better physical self-image.[96] This therapy includes information that challenges negative stereotypes of obesity, modification of intrusive thoughts of body dissatisfaction, and overvalued beliefs about physical appearance, elimination of body checking, and exposure to situations that would previously be avoided because of body-image issues.[97]

Within a phenomenological framework, a combination of these two kinds of therapies might be productive. In particular, phenomenology raises the possibility that it might be worthwhile considering whether people with internet/gaming addiction (might have) a sort of body social-presentation concern and, above all, that their body-image might be distorted in a way that is very similar to that of patients affected by body-image disturbances. Virtual gaming may allow players to express themselves in ways they may not feel comfortable with in real life because of their appearance, gender, sexuality, or age.[98] Similarly, patients with eating disorders can experience a preoccupation with the image they create in the eyes of others,[99] unwilling to accept the reality of what they see, or think they see, in the mirror.[100] MMORPGS give such players the opportunity to design a new, more optimal, Körper. They may come to experience this as a Leib in their virtual socio-physical environment – to such an extent that the continuation of this experience is sought above all else. Hence, this possibility raises the question as to which aspects of BI-CBT could reasonably be adopted to address internet/gaming addiction. The phenomenological account of bodily self-perception and social self-presentation suggests that we consider the second step of the IA-CBT, namely, "Cognitive Restructuring" (e.g., addressing the maladaptive cognitions and perceptual distortions experienced by clients) and combine it with some aspects from BI-CBT (such as the self-report inventory of body-image beliefs, cognitive restructuring of automatic thoughts based on negative body-image, homework assignments focused on body acceptance, etc). According to Veale and colleagues,[101] the overall goal of cognitive restructuring is to develop alternative beliefs that include accepting that beauty is subjective and that human beings are far too complex to be evaluated solely on the basis of a defect in their appearance.[102]

In addition, in the context of BI-CBT therapy, changing a distorted body-image, necessarily involves a process of acceptance of one's physical appearance. Discovering and then also correcting body-image cognitive errors can be essential here, as illustrated by the following case. Andy is a 40-year-old male who experiences considerable distress over going bald. He has indicated to the therapist that he often experiences body-image distortions that lead to feelings of dejection and disgust about his looks:

> I stare in the mirror at my bald spot and feel depressed because I think it makes me look older. I wonder how old I look. So I zoom in on the wrinkles under my eyes and then the grey in my eyebrows, and I think about how old or unattractive all these areas look. The more I find wrong with my body, the older, uglier, and more depressed I feel.[103]

During one session, the therapist had Andy stand in front of the mirror, verbalize the dysfunctional thoughts reflecting this error, and rehearse aloud the corrective thinking. He was asked to write the errors and corrections in his diary when he got home and then to write out corrective dialogues for his other main cognitive errors.[104] In a similar way, when it comes to patients with gaming addiction, also struggling with a distorted body-image, the suggestion is that some aspects of BI-CBT could be combined with this second step from IA-CBT. This combination could be helpful for increasing the level of satisfaction in the client's bodily self-perception, mostly by fostering meaningful improvements in his/her body-image. Phenomenology would be of help in understanding the relevance of the question as to whether people with internet/gaming addictions could have an underlying body social-presentation concern and, above all, whether their body-image might be distorted/disturbed in a way that is similar to that of patients affected by body-image disturbances. Additionally, it could be investigated whether aspects of BI-CBT and IA-CBT can be combined in an attempt to address gaming addiction. In light of

this, MMORPG addiction treatments could follow-up on the role of the body and the meaning that gamers attribute to it, either inside or outside the game, by focusing on the value of CIC for addicted game players. We suggest that looking closely at the way patients consider their own body-image might be useful for clinicians working with game addicted patients in ways not unrelated to eating disorder patients. BI-CBT could perhaps be effective in meaningfully improving cognitive, evaluative, affective, perceptual, and self-reported behavioral aspects of the body-image of MMORPG addicted patients. Difficulties with bodily self-acceptance and social self-presentation, related to strong body dissatisfaction, can lead people to isolate themselves and to avoid social interaction. A similar motivation could play a role in the overall patterns of an addicted gamer's thoughts, stimulating them to search for more self-confidence in the virtual world.

6 Conclusion and future work

The work reported here focused on the role of bodily self-perception in the creation of addictive habits of playing MMORPGs. We suggested the potential relevance of a phenomenological perspective, in which the double role of the body, as *Leib* or *Körper*, would be crucial for identifying what kind of desires might be hidden in the CIC process. This possibility for creating a character, which can be both a physical and psychological projection of the way gamers would like to perceive themselves, may constitute an important aspect in the uniqueness of these online games. They offer a fascinatingly wide range of choices for experiencing and trying out various kinds of identities. Through their meticulously customized characters, gamers can experiment and gain experience with different identities in their search for the desired one. In other words, these games offer gamers an endless opportunity for change, for discovering and building their ideal self. The desire to engage in these activities might

come from body dissatisfaction connected to social self-non-acceptance. Gaming can represent the possibility of escaping from a reality in which it is difficult to present oneself to others. Phenomenologically, the attractiveness of MMORPGs comes not only from the possibilities they offer for experimenting with different physical and social selves by building a new *Körper*, but also because they provide a level of immersion that can transform this into the experience of a *Leib,* to a significant extent, at least some of the time. This might be an important factor in the emergence of addictive gaming. In the light of this hypothesis, a combination of aspects from two types of therapies, IA-CBT and BI-CBT, has been proposed.

By way of conclusion, we would like to offer a suggestion that, instead of problematizing MMORPGs in general, takes advantage of specific features that could help reduce the grip of addiction. For example, an alternative version of a MMORPG in which an avatar, close to but not identical with the player, might be provided. Such an avatar could be a close, "gamified" reflection of the participant's actual bodily self, but still allow them to explore alternative social interaction strategies. Indeed, it would offer the possibility of gaming in a more realistic way, starting from similar physical and acceptable psychological characteristics which really belong to the player. This 'semi-realistic' avatar (more realistic than a completely idealized one) would provide the gamer with an opportunity to restore bodily self-acceptance, during game sessions. In addition (and perhaps at a later stage of the therapy), one could consider stepping outside of the context of MMORPGs, as one of our reviewers suggested, for example by using live-action roleplay, as in LARP, where the characters are immersed in a fictional story, but still perceive each other physically in the real world. This might promote R body acceptance even further than is possible within a virtual game context, especially because the actions performed during LARP are enacted by the whole, physically real, world

body, thus intensifying the Leib experience. One could consider timing these different types of RPGs sequentially. Starting out with a semi-realistic avatar in an MMORPG, then using more realistic avatars, and finally moving towards LARP. All this is merely to indicate that gaming presents us with many different types of worlds we can explore, in order to explore ourselves. As in the real world, this comes with risks, but also opportunities.

Notes

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[2] Cf. M.N. POTENZA, *Non-substance addictive behaviors in the context of DSM-5*, in: «Addictive Behavior», vol. XXXIX, n. 1, 2014, pp. 1-4.

[3] Cf. N.H. NIE, D.S. HILLYGUS, *The impact of Internet use on sociability: Time-diary findings*, in: «IT & Society», vol. I, n. 1, 2002, pp. 1-20; J.A. BARGH, K.Y.A. MCKENNA, *The Internet and social life*, in: «Annual Review of Psychology», vol. LV, 2004, pp. 573-590; P.M. VALKENBURG, J. PETER, *Social consequences of the internet for adolescents. A decade of research*, in: «Association for Psychological Science», vol. XVIII, n. 1, 2009, pp. 1-5.

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[8] Cf. S. YOU, E. KIM, D. LEE, *Virtually real: Exploring avatar identification in game addiction among massively multiplayer online role-playing games (MMORPG) players*, in: «Games & Culture», vol. XII, n. 1, 2017, pp. 56-71, here p. 58.

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[11] Cf. E. DOMAHIDI, M. SCHARKOW, T. QUANDT, *Real friends and virtual life? Computer games as foci of activity for social community building*, in: P. MOY (ed.), *Communication and community*, Hampton Press, New York 2012, pp. 149-169.

[12] Cf. C.A. STEINKÜHLER, D. WILLIAMS, *Where everybody knows your (screen) name: Online games as "third places"*, in: «Journal of Computer-mediated Communication», vol. XI, n. 4, 2006, pp. 885-909. Cf. H. COLE, M.D. GRIFFITHS, *Social interactions in massively multiplayer online role-playing gamers*, in: «CyberPsychology & Behavior», vol. X, n. 4, 2007, pp. 575-583.

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[16] Cf. S. YOU, E. KIM D. LEE, *Virtually real: Exploring avatar identification in game addiction among

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[20] Cf. D. CHAPPELL, V. EATOUGH, M.N.O. DAVIES, M. GRIFFITHS, *EverQuest - It's just a computer game right?* cit., p. 68.

[21] Cf. D.H. HAN, P.F. RENSHAW, *Bupropion in the treatment of problematic online game play in patients with major depressive disorder*, in: «Journal of Psychopharmacology», vol. XXVI, n. 5, 2012, pp. 689-696; J.C. ROSEN, *Body image assessment and treatment in controlled studies of eating disorders*, in: «International Journal of Eating Disorders», vol. XX, n. 4, 1996, pp. 331-343.

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[27] Cf. D. CHAPPELL, V. EATOUGH, M.N.O. DAVIES, M. GRIFFITHS, *EverQuest – It's just a computer game right?* cit.; E.A. BOYLE, T.M. CONNOLLY, T. HAINEY, J.M. BOYLE, *Engagement in digital entertainment games: A systematic review*, in: «Computers in Human Behavior», vol. XXVIII, n. 3, 2012, pp. 771-780; M. SUZNJEVIC, M. MATIJASEVIC, *Why MMORPG players do what they do: Relating motivations to action categories*, in: «International Journal of Advanced Media & Communication», vol. IV, n. 4, 2010, pp. 1-20.

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[32] Cf. N. YEE, *The labor of fun*, cit.

[33] Cf. H. COLE, M.D. GRIFFITHS, *Social interactions in massively multiplayer online role-playing gamers*, cit.; N. DUCHENEAUT, N. YEE, *Data collection in massively multiplayer online games: Methods, analytic obstacles, and case studies*, in: M. SEIF EL-NASR, A. DRACHEN, A. CANOSSA (eds), *Game analytics*, Springer, Berlin/London 2013, pp. 641-664.

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[45] Cf. D. Chappell, V. Eatough, M.N.O. Davies, M. Griffiths, *EverQuest – It's just a computer game right?* cit.

[46] Cf. S.T. Wang, C.J. Yang, W.C. Kuo, *The clusters of gaming behavior in MMORPG: A case study in Taiwan*, cit.

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[51] S.L. Bowman, *The functions of role-playing games*, cit., p. 165.

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[57] Cf. K. Bessière, A.F. Seay, S. Kiesler, *The ideal elf: Identity exploration in World of Warcraft*, cit.

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[59] *Ibidem.*

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tices, and functions of role playing in MMOs, cit.

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[85] Cf. M. LEWIS, *The biology of desire. Why addiction is not a disease*, Public Affairs ed., New York 2015.

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[87] Cf. E. HUSSERL, *Zur Phänomenologie der Intersubjektivität* (1905-1920), in: E. HUSSERL, *Gesammelte Werke*, Bd. XIII, hrsg. von I. KERN, M. Nijhoff, Den Haag 1973, p. 57; H. PLESSNER. *Laughing and crying: A study of the limits of human behavior* (1941), translated by J.S. CHURCHILL, M. GRENE, Northwestern University Press, 1970; M. MERLEAU-PONTY, *Phenomenology of perception* (1945), translated by D.A. LANDES, Routledge, London/New York 2012.

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[93] Cf. K. YOUNG, *Understanding online gaming addiction and treatment issues for adolescents*, cit.

[94] Cf. T.F. CASH, J.R. GRANT, *Cognitive-behavioral treatment of body-image disturbances*, cit.; J.C. ROSEN, P. OROSAN, J. REITER, *Cognitive behavior therapy for negative body image in obese women*, cit.; J.C. ROSEN, *The nature of body dysmorphic disorder and treatment with cognitive behavioral therapy*, in: «Cognitive & Behavioral Practice», vol. II, n. 1, 1995, pp. 145-168.

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