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Social relationships in video games: Social capital and video games

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CONTENT

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In the current paper we are going to discuss video game players by looking at the social world that surrounds them in an attempt to understand how social relationships between gamers are formed. Video games are described as games played through the electronic manipulation of images produced by a computer program on a monitor or other screen (Lexico.com, 2020) and are a product of digitization. Games, influence contemporary society similar to all other innovations brought by the Internet such as social media or digital commerce. The close connection with the digital world might be enough to argue the interest towards this specific type of games, but video games connection to the Internet represented a revolution with effects of exponentially greater relevance for the social sciences as the internet have greatly increased the social influence exercised by games. The Internet has not only made these types of games much easier to access, but it also has turned gaming into a social activity. Video games were obviously, even before, social activities, in this respect we can think of the typical image of young people gathering in front of a monitor to play a game together. However, the Internet has made it possible to create virtual societies in which every individual can participate, even in the absence of physical proximity. The games that are connected to the Internet are no longer a digital program focused only on fun, but one that additionally offers a connection with other people. The connection to the Internet that brings with it the possibility to play together with other people increased the popularity of video games, popularity that encouraged interest and investments in the development and implementation of video game systems aimed toward the formation of social relationships. Nowadays, the most popular video games incorporate systems dedicated to communication facilitated by Internet and as a result the world of video games strongly promoting the formation of social relationships and collaboration. Online video game players interact to participate in common tasks and goals in the virtual world where they meet (Molyneux, Vasudevan, & Gil de Zúñiga, 2015). Although video games also have negative elements, such as video game addiction, for most people consider that playing with other people is a positive experience that allows them to communicate with others even when they are not in physical proximity. Based on these accounts, we can say that in the virtual world of these games geographical distances are eliminated and at the same time a bridge is built across the cultural boundaries found in the real world. It can be said that these games reduce differences between

generations, socio-economic status and even suppress language barriers (Granic, Lobel, & Engels, 2014). Phenomenon that is also favored by systems dedicated to forming social relationships that facilitate the formation of virtual communities. The guilds systems are a good example of such a mechanism aimed at facilitating the formation of virtual communities (Ducheneaut et al., 2007; Nardi, 2010). Depending on the game, this guild systems may have different names ("alliance" in online strategy games) but regardless of the way they are named, this system facilitates the formation of communities with a clear social structure, generally finding a leader or a governing body as well as subordinates who are sometimes assigned ranks with different authorities or goals (Nardi, 2010, p. 15).

In order to be able to measure social relations, we chose to use the sociological concept of social capital, a concept often used in scientific works that address the formation of social relations in the digital world, including in works that address the formation of social relations within video games. Of particular interest are two distinct types of social capital. Bridging social capital that concerns casual relationships, useful for broadening horizons by opening the way to new information or accessing resources outside the individual's close circle (Steinkuehler & Williams, 2006) and bonding social capital that concerns the circle close to us or platforms that are united by strong ties, such as family and close friends, people who provide both emotional and substantive support (Steinkuehler & Williams, 2006; Huvila et al., 2010). Otherwise, the two types of capital present advantages but also disadvantages, bridging allows access to new resources (such as information on employment opportunities) but does not offer emotional support (we do not describe intimate things to people with whom we meet sporadically), bonding on the other hand provides emotional support (with close people we can discuss anything) but it does not increase or facilitate the gathering of new information or resources (most likely we know our close friends, when we are looking for a job, if there was a position available in the close circle we would already know).

As a result of the benefits of social capital, during the analysis of the specialized literature we approached several elements that may have effects on social capital (or at least the literature indicates so), among which the most influential ones seem to be: similarity between players, anonymity, the challenge of the game, the motivation for the game, the time spent in game and game genre. In addition to the previously discussed elements, there are specific elements related to social interaction and relationship types that could have effects on video game social capital.

Among them we find physical proximity which is seen as an element that facilitates the formation of stronger relationships or a bonding social capital. Based on these data, Trepte, Reinecke & Juechems (2012) investigated video game players, indeed finding positive effects regarding physical proximity. This seems to influence the formation of social capital, especially of the bonding type (Trepte, Reinecke, & Juechems, 2012). Also, the quality of the relationship outside the game is a contributing factor. Players who already know each other outside of the game and who decide to play together strengthen their relationship. The existence of a pre-gaming friendship can be related to the formation of a bonding social capital facilitated by a better mutual knowledge through the time spent in video games (Perry et al., 2018). As a rule, however, among players we quickly find sporadic relationships, the works that focused on the impact of games in the development of social capital show how in video games the acquisition of social capital seems to be limited to one of the "bridging" types, rarely having elements in the composition specific to the "bonding" type such as emotional support (Trepte, Reinecke, & Juechems, 2012; Williams, et al., 2006), similar to social networks (Steinfield, Ellison, & Lampe, 2008). The studies that focused on the previously mentioned guilds (alliances) observed how although some bonds are formed, they cannot be seen as close bounds or more specifically as a bonding social capital. Even though bonding seems to be rarer, there is no denying the ability of players to form large, diverse social relationships. Social capital in video games is influenced by numerous elements related to the player's interaction with the game itself. Regardless of platform, game genre, or other characteristics, research suggests that interaction in multiplayer online video games encourages prosocial behaviors such as teamwork, trust development, and community building. In some ways, multiplayer video games can be considered similar to other digitally mediated human interactions. People are gathered in a virtual space where they can converse and interact (Molyneux, Vasudevan, & Gil de Zúñiga, 2015).

In the following we will focus on several distinct variables, identified as a result of the literature analysis, with recognized effects on social capital, describing these effects in detail.

The age of video game players is increasingly balanced, with the elderly being the only age group that is heavily disproportionate to the others. If in the past video games were popular especially among teenagers (Tejeiro Salguero & Morán, 2002), over time, along with the aging of the first generation of players, the average age has also increased, with adults now being

consistently represented among players (Entertainment Software Association, 2019; Entertainment Software Association, 2020; Entertainment Software Association, 2021). The diversity can be explained by the younger generations maintaining their openness to games and the older generations retaining their interest in them (Quandt, Grueninger, & Wimmer, 2009). This tendency brought challenges to the formation of social relationships, observed in the anthropological study of Nardi (2010) where the author, although strongly empathizing with the advantage of teammates of different ages, observed the limits imposed by the characteristics of specific life stages. It is possible to have understanding between people belonging to different age categories, but for this to happen, the specific limitations of people at different stages of life, which bring with them a certain social role, must be understood. One such role is that of a parent which reduces play time or even calls for sudden interruptions to play sessions, as a result of role tasks influencing play dynamics and group cohesion (an example illustrated by Nardi, 2010). In order to avoid mismatches, the gamer prefers to play and socialize with people of his own age who share their time similarly (Quandt, Grueninger, & Wimmer, 2009; Howe Jr, Livingston, & Lee, 2019). Playing with people who have a similar schedule (daily pattern) ensures a linearity in the group's progress in the game, reducing the possibility of one member being left behind which can mess up the progress of the whole group. To illustrate this progression, we can imagine two players playing the same game together, let's say they both started from the same point, and one of them plays more and the other less, while the one who plays more will progress faster in the game and the difference between the two will become more and more apparent.

Gamer type: In the literature, we usually find the division of gamers into hardcore and casual gamers, depending on their dedication to gaming. A hardcore gamer is seen as a more dedicated gamer who plays diverse and complex games that he purchased more often than downloaded for free (Morin, et al., 2016). Casual gamers are usually seen as players who prefer simpler games and usually play on mobile devices (Trefry, 2010; Risi et al., 2015). However, the preference for a casual game, in itself, does not indicate the type of player. The casual gamer is a "person who plays games in a casual way or has a casual attitude towards video games" (Kuittinen et al., 2007), one can even say that they "dislike difficult games" (Juul, 2010, p 29). In gaming investments, hardcore gamers invest additional economic, emotional and time resources. Even if an avid gamer plays a free-to-play game, most of the time they are open to investing money in additional services offered by these games, in-game purchases (a popular system where

free-to-play games earn revenue), or simply donating to the developer (Howard, 2019; Gattig, Marder, & Kietzmann, 2017). Further complicating the situation, reports indicate gender differences in the classification of gamers into the two types, but also the possibility that female avid gamers have different characteristics than boys (Poels et al., 2012).

Gender of the player: Video games have long established themselves as a male-dominated medium, which is why some elements of video games seem to be designed to appeal more to men. However, there is no reason to believe that these elements would make girls enjoy video games less or perform poorly in them (Hayes, 2007; Walkerdine, 2007). Numerous studies have shown, in terms of game performance, that there are no significant gender differences (Fran & Lori, 2004; Walkerdine, 2007; Shen et al., 2016; Ratan et al., 2015), with some studies highlighting the advantages that girls bring to groups of teammates within online games such as obvious benefits in maintaining team cohesion (Kim, et al., 2017). Despite this, girls are not taken seriously when they display their passion for video games, especially evident in competitive games where girls have to demonstrate their skills more often compared to boys (Walkerdine, 2007; Greenberg et al., 2010; Nardi, 2010; Ruvalcaba et al., 2018; Kaye, Pennington, & McCann, 2018; Ratan et al., 2015).

In addition to stereotypes regarding the performance of girls, we observe another social phenomenon that predominantly affects the female gender with an alarming magnitude in video games, namely sexual harassment. Predominantly found in online games, bullying appears to be influenced by the degree of mutual knowledge between players, with a lower prevalence in groups of friends (McLean & Griffiths, 2013; Kim, et al., 2017; Cote, 2017) and more likely in groups of strangers (such as game-generated random ones) (Cote, 2017). The phenomenon has obvious effects on the formation of social relationships, with girls often resorting to specific strategies to mitigate harassment in online games, including actively hiding their identity, avoiding all forms of verbal communication with other players (Cote, 2017; McLean & Griffiths, 2019) and participating in online activities only with known people (Cote, 2017).

Personality Traits: Studies have identified possible links between personality traits and motivation for video games (Park, Song, & Teng, 2011), individuals who play games to socialize tend to have high levels of extroversion, agreeableness, neuroticism, and openness (Graham & Gosling, 2013). Yee, one of the most well-known specialists in motivation for video games, analyzed a link between motivation for gaming and personality traits. Initially the author

observed that video game players usually fall into 3 motivational clusters: Action-Social, Mastery-Accomplishment and Immersion-Creativity. Later linking these clusters to 3 personality traits respectively: Extroversion of Action-Social; Consciousness of Mastery - Achievement; Openness to Immersion - Creativity (Yee, 2016).

In video games, the behavior specific to people with high scores in the scales of extroversion and agreeableness may be favorable to the development of social relationships in video games and implicitly to social capital. The literature highlights the fact that good collaboration and a pleasant environment within groups are preferred by gamers (Kou & Gui, 2014), people with personality traits specific to the agreeableness factor and the extroversion factor are more likely to encourage such an environment in a group (Tov, Nai, & Lee, 2016).

Time spent in the game: Some scientific theses, especially those of the last decade, regard the time that players spend in games as a problematic element (Wood, 2008; Wood, Griffiths, & Parke, 2007). Early work examining the problem of video game addiction considered Time spent playing (TPJ) (TSP) as an item with increased influence on pathological video game use (Yang & Oh, 2007; Wood, Griffiths, & Parke, 2007; Tejeiro Salguero & Morán, 2002). Recently, however, a growing body of work sees time as an element with ambiguous (Tisseron & Gravillon, 2010), low (Seok & DaCosta, 2014), or even nonexistent (Kovess-Masfety et al., 2016) impact in relation to addiction or pathological use of video games. Time, according to these papers, is only problematic when a player spends time in games without taking breaks (Seok & DaCosta, 2014). These moments are described in the literature with the help of the term "binge-gaming" which represents the time spent in the game without taking breaks or taking insignificant (very short) breaks. Recent reports indicate a growing trend of binge gaming, with the majority of gamers in the US reporting that they have played for more than four consecutive hours (Limelight Networks, 2020). It is important to emphasize, however, that a gamer can spend a substantial amount of time in a game and at the same time have a balanced life as measured by good relationships with family, friends, and school (Tisseron & Gravillon, 2010).

Stigmatization: In the case of video game players, although currently the perception of them is constantly changing as a result of their popularity, over time through the lens of many controversies promoted in the community space, video game enthusiasts have been exposed to stereotypes/labeling (Kowert, Festl, & Quandt, 2014). Even today we find in the media

descriptions of the avid gamer as a person with a lack of respect for personal care (who ignores the daily toilet and eats unhealthily) or as an idle and lazy person.

Voice Communication: Because games require maintaining a constant flow of communication, but also focusing on game controls, players prefer to use voice communication over other traditional communication methods such as text communication. Voice communication allows the player to focus on game tasks in contrast to text communication which requires dividing attention between in-game action and writing or reading messages (Wadley et al., 2003; Wadley, Carter, & Gibbs, 2015).

Perceived Anonymity: We humans constantly aspire to connection (Sharon & John, 2018), and one method through which we can connect is the Internet. The increase in connectedness among people through the Internet has effects on our personal lives, especially evident when we talk about anonymity. Currently, anonymity is difficult if not impossible to achieve (Hite, Voelker, & Robertson, 2014, p. 22). Globally, there is an increased concern for anonymity as well as for personal data visible on the Internet (European Commission, 2021). Low anonymity can reveal weak points that abusers could use for illicit purposes (Sharon & John, 2018) at the same time, increased anonymity encourages acts of discrimination through the protection offered, those who post deviant messages with their identity hidden (Curlew, 2019). However, there are not only negative consequences. A study shows that reducing anonymity in a group can increase the quality of decisions, increase the number of ideas and solutions generated by a group, or even increase participants' satisfaction with a social activity (Tsikerdekis, 2013).

Accessibility: In the issue of accessibility to video games we can focus on two central aspects. First of all, the technological requirements necessary to run the game, requirements that have a progressive character depending on the complexity of the game. The more complex a game, the greater the technological requirements. Secondly, we are talking about the internet connection, in order to be able to play the games together with other people a stable and strong connection is required to facilitate the presentation of the actions of the teammates in real time. Both aspects are about the economic resources of the player, with the monetary investment aimed at ensuring both a powerful device and a good connection.

Empiric study

In the current thesis, the decision was made to implement a quantitative study with the aim of identifying and exploring how different elements of players and video games contribute to the formation of the player's social capital.

In summary, the study aims to identify those relationships that have effects on social capital. To achieve this goal, the study focuses on several relational dimensions composed of variables with different basic characteristics (individual, microsocial, macrosocial and video game elements) that through their interaction can lead to an increase or decrease in social capital. The analysis of specialized literature highlights several variables that influence the formation of social capital. The study investigates the relationships between social capital and the following variables: player type, time spent in the game, voice communication, perceived anonymity, accessibility, stigma and personality type with the aim of confirming or disproving assumptions regarding their links with social capital. Subsequently, possible mediations of some variables in the relationships of others with social capital are also investigated, with their help a deeper interpretation of the relationships can be generated. Two mediations are hypothesized, a mediation of the variable time spent in the game in the relationship between player type and Online Social Capital and a mediation of the variable Perceived Anonymity in the relationship between voice communication and Online Social Capital.

The results of our analysis confirm the majority of our hypotheses. Our findings indicate that hardcore gamers possess a greater level of online social capital, which is likely a result of the significant amount of time they spend engaging in video game play. Additionally, we observed that individuals who utilize voice communication in video games tend to have greater online social capital, as the reduced anonymity in the group setting enhances their social interactions. Individuals who are stigmatized for their passion for video games tend to have higher online social capital but lower offline social capital. Lastly, our study found that those with extroverted personality traits tend to possess a higher level of offline social capital. This is the only trait found to have an effect on offline social capital. Regression analyzes confirmed the relationship between the use of voice communication and online social capital, with regular use of voice communication promoting the development of online social capital. Similarly, hardcore gamer type relates to online social capital. The link can be explained by the characteristics of the hardcore gamer, gamers who fall into this typology are dedicated video game players who take

video games and their related mechanics seriously, including social aspects (such as teamwork) (Bosser & Nakatsu, 2006; Howard, 2019).

In summary, the study "Social relationships in video games: Social capital and video games" aimed to investigate the variables that influence the social capital of video game users. The research is novel in its focus on a relatively understudied topic within the academic sphere in Romania, as well as in the development of a unique scale for measuring the characteristics of hardcore gamers, which was constructed based on data from previous studies that have identified the distinctive attributes of this type of gamer. The need for this research, as well as for continued study of the topic of video games, is evident given the large number of players that is predicted to continue growing in the future, as well as the significant economic importance of the video game industry, which currently generates substantial revenue and is expected to have a substantial societal impact.

The study not only identifies correlations but also endeavors to explain the underlying mechanisms behind the observed relationships. One relationship that was examined is the relationship between voice communication and perceived anonymity. The study suggests that the enhancement of social capital is not a direct outcome of voice communication, but rather that the reduction in perceived anonymity resulting from voice communication promotes behaviors that are beneficial for the development of social capital.

The current research is not exhaustive in nature, rather it aims to contribute new data on a topic that has been relatively under-explored in the Romanian academic sphere. The topic of socialization among video game players, although of significant interest in other countries, has received limited attention in Romania. The need for further research in this area is evident given the growing number of players and the increasing importance of video games in people's leisure time. The present study provides new insights into the characteristics of video game players in Romania, as well as general findings on the formation of social relationships within these games. The topic of social relationship formation within video games is of ongoing interest and it is likely that the significance of digital socialization through games will continue to increase. Therefore, despite its limitations, this study is considered to be beneficial not only to the field of sociology in Romania but also to sociology as a whole. Further research is needed to gain a deeper understanding of the relationships identified in this study, such as the correlation between extroversion and offline social capital. This correlation is particularly noteworthy as it is the only

link identified between online and offline environments. A longitudinal study could provide valuable insights into the origins of these relationships and whether they are indeed established outside of virtual environments. Identifying favorable variables for translating online relationships into offline environments has the potential to be useful not only within the context of video games but also in other social domains within the virtual world.

External validation

As the findings of the study have the potential to have direct effects on video game players, it is appropriate to consult the target population regarding the results. This approach is also motivated by the possibility of researcher bias or the potential for certain aspects to be overlooked due to adherence to strict scientific methods. In this regard, this study aims to present the results primarily to the population of video game players, a group that can provide valuable insights and alternative perspectives in the evaluation and interpretation of the results. The method of data distribution and collection used in this study can be considered innovative for a Romanian work. The results were disseminated via a video posted on a popular platform dedicated to the distribution of such materials, and feedback was collected through the comments section of the platform. Furthermore, the video material was created using original materials and was specially designed for this study, with no external sources utilized. To ensure the originality of the content, students from the Faculty of Theater and Film and the Faculty of Political, Administrative and Communication Sciences at Babeș-Bolyai University were contacted to contribute to the creation of specific frames and to incorporate the content of the material used.

The method chosen for the dissemination and collection of data and feedback, although with its obvious limitations, has proven its feasibility especially in terms of dissemination through the large number of views enjoyed by the video material. It is obvious that there is an active interest in Romanian society regarding video games as well as towards the studies that address this topic. Community engagement as measured by the response rate via the video comment function was lower, but this can be attributed to a general trend that is not necessarily related to the material in question. Through the feedback provided by the community with the help of comments we can see that our results are confirmed by the players, they provide practical examples from the gaming world for most of the observed phenomena and confirm our interpretations. Pleasingly, in addition to the confirmations we talked about previously, we also obtained in some cases from the community explanations or alternative interpretations of the

results, interpretations that we did not initially think of. Such an alternative comes in the relationship between voice communication and social capital, which can also be explained by using voice communication exclusively with people the player knows (he already has friendships). Equally gratifying is the fact that these alternative explanations do not contradict our interpretations, but can complement them. Regarding the transposition of relationships from the online to the offline or physical environment, the qualitative data reiterates the importance of carrying out a longitudinal study. Study in which an individual's friends are analyzed according to their environment (online or physical) at different points in time over a long period of time. The mention of the preconceptions that still exist in society regarding video games and the people who are passionate about them demonstrate a certain prevalence of them in society, an aspect strengthened by the lack of mention of these stereotypes by the author in the video material.

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