

Generations in Love: An Introspection on Gaming Culture and Communities

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Abstract: Through an analysis of linguistic practices, this paper explores the shared and reinforced norms and standards of skill, identity, and membership that divide participants in the gaming community who have played games for most of their lives. Through the collection of ethnographic data, in the form of an interview and survey, this paper explores the emotional connection and patterns of engagement players experience with games and the gaming community. Participation in the gaming community is positioned by participants as all-encompassing- something that permeates participants' relationships, culture, and community online and offline. Moreover, expert mastery of game mechanics was found not to be a determinant of in-group and out-group division formation. These perspectives of participants are held in contrast to online movements, such as GamerGate, and their outdated metrics for membership.

Keywords: Identity, Virtual environments, Games, Membership, Semantic remediation

1. Introduction

Gaming landscapes, as virtual environments, are material and influential on the everyday lives of those who engage with them. A game's ability to resonate with players comes from its function as a semiotic resource. When players connect with game characters and narratives and engage in social interactions in these spaces, they ascribe meaning and value to the game and its content (Cameron, 2019). This paper explores the varying methods by which active participants in virtual gaming spaces create meaning through the expression of identity, group formation, and affiliation, as well as scales of alignment with norms and standards of gaming community hierarchies. These aspects are explored through survey and interview data collected from students at a German university.

1.1 Meaning Creation

Participation in a community is synonymous with engaging in a shared activity (Grant et al, 2018). Games function as semiotic resources through their role as a shared situated sociocultural activity. Player engagement in games and gaming culture is not passive consumption of gaming content but active absorption into a vibrant community that changes and grows with every interaction. As a growing ameba, play and engagement in social gaming spaces within structured virtual environments create meaning for players. Engagement in these spaces can also lead to the creation of an interactive culture.

Another means by which virtual gaming spaces act as a semiotic resource for players is in identity performance (Consalvo et al, 2019). As players utilize game artifacts as material objects in meaning creation, they reshape and recontextualize virtual landscapes to their own identity, which they then integrate into social interactions (Pinto, 2024). This process, known as semiotic remediation, is then utilized in group alignment (Consalvo et al, 2019). An example of semiotic remediation in gamer identity performance is the expression of play experience, in the form of hours of engagement within a community of practice, or hours of playtime devoted to one title or series (Cameron, 2019). Through semiotic remediations, games become cultural objects. As players move within, outside, and across virtual environments, they disseminate this culture through non-unidirectional processes across other communities within the larger gaming community (Heritage, 2021). Following the lines of intersectionality, this dynamic interactive culture co-creates further interactive material (Pinto, 2024). Thus, activities within virtual gaming spaces can simultaneously create meaning for individual players as well as create larger constructs of culture within society (Kim et al, 2021).

1.2 Membership

Community standards and norms of identity expression have evolved over the life span of gaming culture. One of the most traditional forms of identity performance is the expression of player experience. Over the years, we have been collective witnesses to the enforcement and implementation of standards and norms of identity expression by gaming community members in media and online spaces (Cameron, 2019). A community's standards, norms, and expectations play a role in how players judge their own and others' experiences in virtual gaming spaces. The more players adhere to these standards set by communities, the more they move from an outward position to a centralized core position in the group (Barany et al, 2024). Players use these standards to

draw in-group and out-group distinctions; many of these distinctions are drawn through linguistic actions of participants in gaming spaces. Intersectionality brings individual and collective identity performance and its rhetoric into larger communities (Kim et al, 2021). As players engage in these spaces and interact with others, their perception and conceptual representation of identity and roles are cultivated. As identities intersect, they create structures and hierarchies dividing core and non-core members within gaming spaces (Heritage, 2021). Resulting in communities dictating the constraints of identity expression (Grant et al, 2018).

1.2.1 Skill mastery

A common dividing factor is the mastery of gaming mechanics (Consalvo et al, 2019). According to these standards, membership or a higher status is ascribed to players who timely execute game mechanics and demonstrate sophisticated executions of gameplay. Rhetoric and narratives surrounding the mastery of gaming mechanics can be found in gaming spaces (Nacke et al, 2011). One example of this rhetoric can be found in recent dialogue surrounding the release of *Hollow Knight*. Participants within this discussion ascribe in-group status to players who completed unassisted *Hollow Knight* and downgrade or annul the membership or identity performance of participants who struggle to do so.

1.2.2 Gender performance

Another distinction for membership within the gaming community is gender performance. Members can rank, degrade, or withhold membership from individuals who perform certain genders that do not align with national or political movements (Alkhalifa et al, 2022). The most notorious dialogue surrounding this standard of in-group distinction was the dialogue surrounding a series of video essays by Anita Sarkeesian, “Tropes vs. Women in Video Games” in 2016. Known collectively as “gamer gate”, these discussions led to an online harassment campaign where members who ascribed to these ideologies were violent towards non-conforming members both in and outside of digital spaces (Moser, 2025). Ideologies from this era remain in our collective memories and manifest into the stereotype of a gamer often portrayed as a young, overweight, under-employed, lazy, straight, white cisgender male (Heritage, 2021). Although some communities still disseminate sexist ideologies that stem from outdated standards of gamer pedigree, only attainable to cis, white male players, this research portrays the current members of the gaming communities as having long outgrown these obsolete elitist mentalities.

1.3 The Role of Language

Analysing how players interact and engage with virtual gaming environments can provide insights into the psychological connections players have to games (Wang et al, 2021). The exploration of player interaction was done through the ethnographic data collection. Ethnography allows for an investigation of the methods of social and cultural meaning creation as well as the positioning of individuals within wider constructs. Traditionally involving physical spaces, recent studies of gaming culture have further pushed the boundaries of ethnographic data collection into virtual spaces.

Language practices have long been the resource through which identity is performed and communities to disseminate, reinforce, and monitor identity ideologies of membership in digital spaces (Horner, 2019). Analysing the language practices of players in virtual spaces allows for an exploration of the nature of identity expression, in-group and out-group formations, and the reflection of semiotic remediation in external social and cultural spaces. In sociolinguistics, the language practices and choices of individuals are a result of the sociocultural environment of said individuals. Thus, the memberships and social categories of individuals determine their language production (Grant et al, 2018). Previous investigation of the linguistic practices in virtual games found semantic systems being used in the negotiation of voluntary action within a fictional world, in the form of coordinated gameplay and play strategies (Richard et al, 2019)

Linguistic actions of identity performance have as much to do with micro-level enforcement of identity and membership norms as standards within individual communities as they do with macro constructs of power and prestige across society and culture. On an individual level, individuals will reproduce linguistic practices to resemble and align with groups with which they wish to be identified as members. On a wider scale, the membership ideologies and the identity performances of communities are disseminated and imposed on individuals through the medium of rhetoric (Grant, 2018). These micro and macro processes can be seen in both the *Hollow Knight* and Sarkeesian discussions. Individuals are aligning with groups through the replication of player ideologies and gamer identity performance. These individual productions are lexicalized, formed into rhetoric, and spread across the gaming community into wider constructs of society and culture (Heritage, 2021).

2. Investigation

The investigation of identity performance, player semiotic remediation, and models of hierarchies of membership is done through a combination of language analysis and the collection of ethnographic data in the form of a survey and interview. The survey and interviews were administered to volunteers from the University of Rostock. Player experience is rarely measured dynamically across the lifespan of players. It is rather a cumulative calculation of time and resources devoted to a game or virtual gaming spaces.

2.1 Live Gaming Sessions

The initial survey consisted of ten questions, which were administered to players who participated in live gaming sessions. Thirteen participants agreed to answer questions about their gaming habits, preferred genres, the preferred language spoken during play, their preferred format of play, and their identity. Players selected the preferred genres from a list of open-world (OW), Massive Multiplayer Online Games (MMO), Massive Multiplayer Online Role-Playing Games (MMORPG), Role-playing Games (RPG), action/adventure (act./adv.), first-person shooter (shooter), kart or simulated racing (racing), or Player-verse-Player (PvP) (fighting), as well as their preferred play mode of individual (solo), collaborative (co-op), online, or in-person. Players select their preferred languages during play as Spanish, Mandarin, English, Italian, French, Arabic, German, Hindi, Russian, or other, as well as indicated their frequency of English use (never, occasionally, sometimes, often, always). Finally, participants were asked to indicate if they identified as a gamer and what type of gamer they viewed themselves as (casual, competitive, novice, expert, serious, or hardcore).

Table 1: Survey results of player experience and identity

Player	Hours/ week	Preferred Genre	Play Language	English use	Game mode	Gamer Identity	Gamer Type
Br	20+	act/adv, MMO, MMORPG, OW, RPG, shooter	German, English	sometimes	co-op, online	yes	expert, hardcore, competitive, serious
Tb	1-2	OW, RPG	German	never	solo	yes	casual
F	1-2	act/adv, MMO, MMORPG, OW, RPG	English, German	always	co-op, online	yes	casual, expert
L	2-5	MMO, OW, RPG	English, German	often	co-op, online	yes	casual
Jb	1-2	OW, RPG	English, German, Other	often	co-op, online	yes	casual
Sb	15-20	act/adv, racing, RPG, shooter	English, German	always	co-op, online	n/a	casual, competitive, novice
A	10-15	act/adv, OW, racing, shooter	English, German	always	co-op, online	yes	casual, competitive
D	5-10	fighting, shooter	English, German, Russian	often	co-op, online	yes	casual, competitive
E	1-2	act/adv, MMORPG, OW, racing	English, German	occasionally	co-op, online	yes	casual, serious, expert
N	2-5	MMO, OW	English, German	often	co-op, online	no	casual, novice
C	15-20	act/adv, OW, RPG, shooter	English, German	always	co-op, online	yes	serious, expert, hardcore,
P	1-2	act/adv, OW	German	sometimes	solo	n/a	casual, competitive
G	1-2	act/adv, OW, shooter	English, German	often	co-op, online	yes	casual

2.2 Interview

Nine individuals volunteered to participate in an interview. In sociolinguistics, identity performance is discussed through the context, sociolinguistic history, interactants, and physical resources of individuals (Grant et al, 2018). The interview questions explore the context of participants' experience in the gaming community, how

participants experienced the sociocultural history of the gaming community and its rhetoric, their interactions with the linguistic practices of others in said community, and their uses of physicality and gameplay to establish themselves in a community. The following chart demonstrates the question topics:

Table 2: Interview topics

Interview Topics		
Personal Experience	Identity	In-group & Out-group Divisions
Background in games	Self-identification	Games genres and titles
Play habits	Peer-identification	Monetary commitment
Media consumption habits	Gender connection	Time commitment
	Multilingual connection	Gaming Language
		Extra-linguistic clues

3. Results

The analysis of the interview and survey explores the context, interactions, and linguistic resources of participants.

3.1 Context

When exploring context, sociolinguistics connects family biographies, geographical, educational, and professional histories of individuals and their linguistic practices (Grant, 2018). The interview and survey responses provided personal gaming biographies of participants through their gaming habits, their personal history of play in games and virtual gaming environments, and their experience in gaming communities, which impact their linguistic practices.

3.1.1 Gaming habits

In the survey, a majority of participants reported playing games for 1-2 hours a week (50%), with the most common play mode being online co-op (83%). In the interviews, participants gave a range of time spent gaming from 10 minutes a day to 25 hours a week. Both in the survey and interview, most participants reported playing games in social, co-op, or collaborative settings, with only two participants in the survey and participant “P” in the interview reported a preference for solo gaming. The most popular genres among survey participants were open world (92%) and action/adventure (67%). Interview participants aligned with the genres of horror, shooters, Multiplayer Online Battle Arena (MOBA), Real-Time Strategy (RTS), action/adventure, RPG, fighting, and simulation. Moreover, three interviewees positioned gaming habits and their changes as being dependent on time constraints or the nature of the relationships of those playing together. Some correlated changes in friend groups or changes in school, with a movement from couch-co-op or local area networks (LAN) to online co-op and collaborative. Four marked changes in play settings are related to job or study schedules. Participant “P” marks changes in their gameplay by the game title and co-players:

P: So lately I haven't got like lots of time because I'm- like I have lots to do in university. But when I have time, like on weekends, I do like lots of hours. I would say, like an afternoon. For example, when [family member] also visits, then we play together and do the Mario games or something, or Wii Sports or something like that.

All interview participants reported differences in gaming habits compared to when they were children, but only three reported a connection between their experiences gaming in childhood and their gaming habits as adults. Participant “E” recounts changes in their gaming habits and a unifying value of games as fostering and maintaining relationships across those fluctuations. Participant “E”’s response aligns with previous research that player engagement in games is goal-oriented in its use of maintaining and fostering social relationships (Moser, 2026):

E: So, of course, my parents, I don't play with them anymore- any video games. They come too old. I think the question of age is really interesting regarding gaming, too. But in general, I would say it's more of an experience between friends- to keep friendships up, to make new friendships, of course, over the internet, but also with to play with existing friends. For instance, [friend] have a Minecraft server or just like that. And then we use platforms such as Discord to communicate. So, it's still a social experience, just like as a child, but in a very different way.

3.1.2 Gaming environments

By analysing the nature of the shared activity of the individuals, we can best understand their linguistic practices and the context in which they are situated (Grant et al, 2018). The interview provided a detailed representation of the actions of participants within virtual gaming spaces. Participant “V” description of a gaming session is representative of the patterned use of virtual gaming spaces and CMC third-party systems, like *Discord*, found in this data (Hamari, 2017):

V: Sometimes it's also that we're sitting like in a Discord. We have the game open, for example, a little game like "Valheim", for example, ...and we're just like doing some unnecessary grinding, but we're doing it a third time. It's mostly to speak like with the people. So, you speak with them, interact with them socially... in the meantime, you're sort of like chopping down trees to gather wood.

All interview participants reported that their game-centred interactions were accompanied by social interactions outside of virtual environments. Seven participants reported that gaming interactions accompanied daily or weekly social interaction with the same individuals. Two (see participant “P” in section 4.1.1) described the accompanied social interactions as more sporadic:

V: And the interesting thing is that we also met up once or twice. We're from all over Europe. So, it was quite difficult to find a time and date. But two times, once in [city name] and once in [city name], we met up, and it was quite a blast.

For survey and interview participants, English was a common language of play. A majority of survey participants reported playing games in German (100%) and English (83%), and speaking English often (33%) during gameplay. Nine interview participants reported playing games in English, six reported speaking English while playing, two reported speaking German while playing the game in English, and three reported playing games and speaking in German. In the interview, participant “V” describes their active decision to participate in an English-speaking server and its use as a semiotic resource for identity performance:

V: I was playing a little bit with a German- they're called outfits. So basically, there are clans, communities, and I played with the Germans a bit, but I soon outgrew them a bit. And then I was looking for like an English playing outfit- English speaking outfit. And there I met the people from [guild name]. And with them, I'm playing until now, I guess. Yeah, so it's now been like ten years.

In interviews, three participants framed virtual gaming environments as a dynamic medium through which diversity and culture are shared and constructed. In their view, games were seen as cultural objects (Consalvo et al, 2019), as well as mediums for the creation of culture (Kim et al, 2021). Participant “V” describes playing *PlanetSide 2*, their exposure to popular music and culture, and participation in the creation of gaming culture:

V: So, you have like a big server where you have like a thousand, fifteen hundred people...and the appeal for me was like, you could really have this feeling of like being somewhere out in the open, and you were with a hundred others...and you also had voice communication. So, you always had people like then hooking up their line out, and then you were running around, and you heard people blasting "Captain Jack", for example, which was quite an interesting, nice thing.

3.1.3 Historical norms and standards

In the interviews, participants discussed their experience with gaming language as well as rhetoric and its connection to ideologies of identity, performance, and membership in the gaming community. Seven interview participants identify lexemes within the domain of games that could be used as an indicator of membership. Participant “Br” description of idiolects aligns with previous research that individual language practices reflect larger constructs of identity performance and group association (Grant et al, 2018):

Br: I believe every in-group has its own language, and in gaming, it's mostly certain abbreviations. And then you would notice, okay, if somebody knows what a KDA is, what a headshot ratio is, or something like that, or bloom or whatever.

Three interview participants also reflected on ideologies connected to violence (Moser, 2025) and addiction (Wang et al, 2021). Participant “V” discusses how active participants and members of the gaming community were viewed as violent and out of touch in culture and society as they were growing up:

V: There was this whole "killer-spiel" debate...Yeah, I would say that it- that was sort of a prejudice that was had from parents more. And from peers, it was more of the um- prejudice against not being outside

enough, not being socially active enough. I would say that is rather the peer aspect, though that has changed...So nowadays, that stigma is gone, I believe. But yeah, that used to be sort of like a social exclusion that you're not really too social, you're gaming, you're not enough outside.

All participants in the interviews expressed an awareness of sexism and acts of harassment in gaming communities in connection with gender performance (Heritage, 2021). Two participants reported personally experiencing sexism and harassment:

E: I'm relatively active in strategy games that focus on history, such as the interwar era, the World War II era, and of course, that attracts people... let's call them bigots, and they don't treat female gamers very well.

Four reported being in proximity to someone who had personal experience with sexual harassment:

Br: I've played like two games of "Valorant", never again. Yeah, you join the voice chat, I played it with a familiar friend of mine, and she talks, gives a call, and the first thing you hear are bigoted insults. So never touching that again.

Reflecting on these trends, three participants spoke on the disempowerment of female gender performance (Heritage, 2021), while two reflected on the over-representation of hetero cis males in games (Moser, 2025). Participant "Jb" describes the dissemination and reflection of sexist beliefs from social and cultural norms in games and gaming spaces (Grant et al, 2018). Participant "Jb"'s expressions of lower and higher levels of linguistic actions also reflect an understanding that individuals are using sexism and harassment to position themselves as centralized core members (Barany et al, 2024):

Jb: There was a very clear problem with sexism in gaming. Gamergate was, of course, that's an extreme example, but there is a lot of low-level sexism...I would say both on the side of the consumers, of the gamers, and of game development...the inherent sexism of our society are to be found in gaming as they are found in movies, as they are found in anything that is mainstream culture...we have a problem with sexism in mainstream culture, so it will radiate out into gaming.

3.2 Interactants

The identity performance of an individual can be seen by investigating the ways individuals adapt to and distance themselves from the linguistic patterns of others (Grant et al, 2018). Most survey participants self-identified as a gamer (75%), with the majority identifying as a casual gamer (83%). All interview participants identified as gamers.

Two participants expressed alignment with larger ideologies of gender performance and its connection to the serious gamer identity (Hamari, 2017), as well as an understanding that certain gaming communities can influence the performance of identity (Heritage, 2021). Participant "E" describes how the selection of game titles and genres is dictated by the influence of these ideologies:

E: There are more male gamers than female gamers, and that female gamers are often treated very poorly in certain communities, depending on the types...So I would say it's unfortunately a huge part if you're a male gamer or a female gamer, that also could influence which games you pick.

Three participants displayed a lack of alignment with traditional rhetoric and ideologies about gamers and non-gamers, as well as casual and serious gamers. When pressed, participant "Dm" expressed disagreement with mechanics and genre being a norm or standard for membership, while asserting that device and time commitment could function as in-group divisions in some communities:

Dm: I also play competitively, so if you want to make the distinction there...I personally wouldn't say you have to do that to be a gamer. I think I'd be pretty easy-going in calling someone a gamer, I guess. Maybe I'd say something like playing, I don't know, "Candy Crush" on the way home is maybe not directly a gamer per se, but if you own a console or a PC and sometimes play games or something, sure, definitely.

However, seven participants actively distanced themselves from negative stereotypes proliferated by other communities (section 4.2). They ascribed equal memberships to players of board games, card games, and digital games, including skill mastery (Consalvo et al, 2019). Participants' inclusion of board games and card games is consistent with research perspectives that video games accommodate broader social networks outside of online spaces (Moser, 2025). When pressed to explain their justification or equal membership, participant "Jb" describes their use of the rhetoric "gamer" and the value of play as an ideology of membership:

Jb: I don't think that is a terminology we should use because I think the term can be reclaimed because it's absolutely harmless... I would say the difference between a capital "g" gamer and the most explicit difference I can find is between people who centralize it for a certain reason, for example, for competitive play.

3.3 Physical Resources

Participants in the interview recognized physicality as a linguistic resource, how it can be crafted by individuals to align with certain groups, as well as a semiotic resource for identity performance (Grant et al, 2018). Participant "H" describes the physical objects, clothing, and physicality of a stereotypical gamer:

H: I'm picturing always like this huge room with LEDs and the big microphones, the keyboard and mouse is always blinking and has like cute little effects. Yeah, at least two monitors, of course... I mean, the stereotype is like messy hair, unwashed clothes, and stuff, but that's not really the case. Like sitting there in casual clothes but still clean and sitting more relaxed and stuff, but not dirty or somethings like that.

Physicality was also used in their rejections of ideologies of gender and identity performance in the gaming community. Participant "Jb" jokes about fitting the stereotypes of a gamer in their appearance:

Jb: The gamer is in opposition to the successful, well-adjusted person. There is the idea of the neckbeard...I mean, I'm the neckbeard. But the basement dweller, yeah, absolutely.

Six interview participants noted linguistic sign usage in the form of consumable products to signal membership in the gaming community (Prior, 2010). Participant "V" describes the importance of merch (merchandise) like items of clothing or keychains to his performance of identity:

V: I like understated merch... not a t-shirt where you have vividly on the whole front, you have like the logo of the "Witcher", I would rather have is maybe have...a little plaque sort of only for those that know it will recognize it...So I would say that would also translate to how I identify as a gamer.

4. Conclusion

With the increased proliferation of gaming culture in society and the saturation of this once sacred out-group culture, modern participants in the world of games are continuing to adapt and embrace new definitions of what it means to be a gamer. This paper explored how games, as virtual landscapes, define and shape the identity of players. This paper explored how, when players engage in games, they are not passively following game content; rather, they are actively shaping their experience through their interactions with virtual environments (Pinto, 2024).

The responses of participants in this study demonstrate how norms, standards, and ideologies of membership in the gaming community have changed and shifted drastically. Games and virtual gaming spaces were seen as valuable third spaces to foster and grow relationships. However, there was a distinct difference between their use as semantic resources and their role outside of virtual spaces. This perception was part of a wider trend of defining membership as wider community participation, life-long engagement, and collective models of identity performance. All participants actively rejected previous ideologies of membership, and only a minority of participants signalled traditional models of competitive play as an indicator of membership. Overall, players in this once-niche, now mainstream gaming space understand membership and identity as an expression of a cumulation of time: hours of play, years of engagement in gaming spaces, and shared moments of community, and love of gaming.

Ethics Declaration: In alignment with the university's policies and national data protection policies, no data was collected on participants' gender, nationality, or age. Further ethical clearance was not required for this paper.

AI Declaration: An AI tool was used as a grammar and spelling checker in the development of the paper.

References

- Alkhalifa, R., & Zubiaga, A. (2022). "Capturing stance dynamics in social media: open challenges and research directions", *International Journal of Digital Humanities*, Vol. 3, No. 1, pp 115-135.
- Barany, A., & Foster, A. (2024). "Context, community, and the individual: Modelling identity in a game affinity space", *Virtual Learning Environments* pp. 85-102.
- Cameron, A. (2019). "No more games: An intersectional approach to geek masculinity and marginalization in video gaming culture", *A journal of communication, culture & technology*, Vol. 19, No. 2, pp 19-31.

- Consalvo, M., & Paul, C. A. (Ed.) (2019). "Welcome to the discourse of the real: Constituting the boundaries of games and players", *Real Games: What's Legitimate and What's Not in Contemporary Videogames*, pp 19 – 37.
- Grant, T. D., & MacLeod, N. (2018). "Resources and constraints in linguistic identity performance: a theory of authorship", *Language and Law/Linguagem e Direito*, Vol. 5 No. 1, pp 80-96.
- Heritage, F. (2021). *Language, gender and videogames: using corpora to analyse the representation of gender in fantasy videogames*, Palgrave Macmillan, Cham, Switzerland.
- Horner, B., & Alvarez, S. P. (2019). "Defining translanguality", *Literacy in Composition Studies*, Vol. 7 No. 2, pp 1-30.
- Kim, G. M., & Johnson, L. L. (2021). "Playful practices: Reimagining literacy teacher education through game-based curriculum design", *Research in the Teaching of English*, Vol. 55 No. 3, pp 241-264.
- Nacke, L. & Drachen, A. (2011). "Towards a framework of player experience research". *Proceedings of the 2011 Foundations of Digital Games Conference (EPEX 11 Workshop)*, pp 21-28.
- Moser, S. (2026). "Why Play Games?", *An Introduction to Contemporary Aesthetics: Art, Community, and Experience*, Routledge, New York.
- Pinto, F. (2024). "Beyond the screen: Exploring the player's role and its impact on emotional experiences in video games", *The International Journal of Games and Social Impact*, Vol. 2, No. 2, pp 28-56.
- Richard, G. T, McKinley, Z. A., & Ashley, R. W. (2019). "Collegiate eSports as Learning Ecologies: Investigating Collaborative Learning and Cognition During Competitions", *Transactions of the Digital Games Research Association*, Vol. 4, No. 3, pp 1-41.
- Wang, X., Abdelhamid, M., & Sanders, G. L. (2021). „Exploring the effects of psychological ownership, gaming motivations, and primary/secondary control on online game addiction", *Decision Support Systems*, Vol. 144, pp 1-42.