VIDEO GAMES AS A TRAINING OF TOLERANCE TO UNCERTAINTY IN YOUTH

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Abstract

The aim of our study was to identify the influence of video games on the tolerance expression of the individual. We used Budner's Intolerance of Ambiguity Scale (IAS), V. Boyko's Diagnostics of Communicative Disposition, V. Boyko's Diagnostics of Communicative Tolerance and psychological interviews.

The study included two stages. At first stage, we applied Budner's IAS and V. Boyko's Diagnostics of Communicative Tolerance to three groups of respondents: persons who do not play video games (36 respondents), players in strategy games (25 respondents) and players in Real Life Role Play games (RPG) (33 respondents). We surveyed 94 respondents aged 19-27 years, 63 male and 31 female. In the second phase of the study, we used a biographical method and interviewed 16 respondents on the impact of body swap games. Video games with a gender role changing of the player will promote the development of communicative tolerance and tolerance for uncertainty. The differences in the total rate of communicative intolerance we founded to be the lowest in the group of body swap players, but players in strategy games were also more communicatively tolerant than those who had no experience with video games at all. The uncertainty tolerance study found no significant differences in tolerance to the undecidability, we found differences according to the Kruskal-Wallis criterion for three unrelated samples and the significance of differences according to the criteria of complexity and novelty (by $p \leq 0.05$). Players in strategy games have the highest tolerance for complexity and novelty, and non-players have the lowest. Men have more causes for gaming (9) than women (6) do. Male players more value the content of a game, and for female players are more important to communicate with other players and the opportunity to try on different skins of the characters.

Keywords: tolerance, gender, video games, computer games, uncertainty, recreation.

Introduction

The increase in the number and variety of modern video games, the widespread involvement of both teenagers and youth in this type of activity creates a need to study the impact of video games on personal devhionshipelopment. The problem of this study is to investigate the influence of such a phenomenon as "body swap" on tolerance to uncertainty.

Considering the current state of game genres differentiation, we can note that male and female representations of virtual worlds have reached the level of uncertainty through gender swap games development. Game development is the creation of games, and gender swap (body swap and sex swap) is a condition in which two (or more) persons share the thoughts and find themselves in each other's bodies. Conflicts between

traditional ideas of male and female roles and the modern reality demands complicate people`s self-perception, causing a complex of negative feelings and self-frustration and disappointment in the world. Technological uncertainty requires "switches" that game development shows in its creations: the beauty, sexuality, uniqueness of the virtual world heroes shown through the game representation. Modern gaming capabilities are able to evoke quite vivid ideas of the ideal body image, language and actions of game characters, which affect the identification with them.

The aim of the article is to study the level of tolerance for uncertainty in persons who play video games regularly and the correlation between tolerance for uncertainty and the tendency to gender swap.

Theoretical backgraund

Video games, the same as other types of media, are full of social constructs, which represent the cultural norms of society. Game process also actualize gender patterns of behavior. Interest in the gender models of behavior representation in video games appeared in the 90s of the XX century (T. Bolbot, I. Burlakov, A. Luchinkina, L. Yurieva). At the time, video games were considered by developers to be a "boys' business." Their content included mainly topics that were defined traditionally as male. In the early years, the arcades were filled with fantastic shootouts, races and sports games, which mainly attracted a male audience. Even the game characters were mostly male, and the rare female characters usually played the passive role of a victim in a difficult situation and were portrayed as sexual objects. Games "for boys and girls", which were popular in the 90s were simple flash games that, compared to more complex plot games, less "immerse" the player in the context of the game. In addition, most modern games are not gender-specialized, representatives of all genders play them (Kushner, 2020).

Beginning with ICD-11 (2019), which includes new sections on sexual health and in which those disorders that were previously classified as other classes (for example, transsexualism was in the category of mental disorders), now called "gender mismatch" and belong to the category of "sexual health conditions." There is also a new addictive disorder - gaming disorder (6C51), which describes a pathological addiction to video games. The inclusion of gaming disorders in the ICD is a factor that countries take into account when planning health strategies and tracking trends in disorders.

At the same time, as D. Ilchuk and A. Tkelyuk rightly point out (Ilchuk, Tkelyuk 2018, p. 19), video games are a miracle of the twentieth century and the development of games continues. The more advanced the technology, the less it imposes restrictions - the more accurately popular games will reflect the needs and feaures of the human soul. There is no doubt that the new games will allow us to speak more clearly about the relationship between consciousness and the unconscious, about visual perception and archetypes, about vague and unobvious phenomena in the psyche, which so far no one pays attention. Anyway, nowadays video games are one of the newest sources of psychological information. A. Gordienko (Gordienko, 2017) notes that modern video games have a positive impact on the development of mental processes, but his work does not sufficiently consider the influence of games on personality development. G. Chaika (Chaika, 2013) in his research pays attention to the values and motivation of

players, but does not study the impact of games on the development of such personality characteristics as tolerance for uncertainty. The works of S. Kuzikova (Kuzikova, 2018) and V. Barko, V. Ostapovych (Barko, Ostapovych, 2019) studied tolerance to uncertainty and communicative tolerance in different groups of respondents, but without the aspect of its impact on video game players.

It is clear that users have their own worldviews, their own whims and preferences. Gender swap is the recognition of the opposite sex as better than one's own, because it is easier to be a woman or a man. "Body swap" - a change of body to the body of the opposite sex due to a beautiful shape or sexual difference. "Sex swap" - the search for the opposite sex with a demonstration of their own superiority over (En, Lan, Tay, Ng, 2011).

Valve has launched an LGBTQ+ sale in its Steam digital store, which first starts in fall of 2019. The "Summer of Pride" campaign is dedicated to the Pride Month in the United States and offers sales on games that in one way or another represent the topic of same-sex relationships and sexual minorities.

The LGBTQ+ magazine Out Magazine published the results of a study by Nielsen Media. The study discusses the benefits of different sexual orientations in games. More than 20,000 gamers took part in the survey, 10% of whom identify themselves as LGBTQ+. According to the survey, sexual minorities choose consoles: 77% own game-consoles and only 29% own PCs.

The LGBTQ+ organization GLAAD nominated The Last of Us Part II in the Outstanding Video Game category at the Media Awards ceremony. GLAAD protects the interests of LGBTQ+ communities and ensures their representativeness in the media (Schutter, 2011). According to the organizers of the ceremony, the nominee for the Media Awards most accurately and honestly portrays community members and the problems they face (Kolo, Baur, 2004).

Methodology

In order to study the characteristics of tolerance to uncertainty in gamers and the role of this parameter in the preference for gender swap, we used the following methods:

A) Theoretical - analysis, systematization and interpretation of scientific sources on the problem of uncertainty of video game players;

B) Empirical - Budner's Intolerance of Ambiguity Scale (IAS) (Barko, Ostapovich adaptation, 2019), V. Boyko's Diagnostics of Communicative Disposition, V. Boyko's Diagnostics of Communicative Tolerance and psychological interviews.

The study included two stages. At first stage, we applied Budner's IAS and V. Boyko's Diagnostics of Communicative Tolerance to three groups of respondents: persons who do not play video games (36 respondents), players in strategy games (25 respondents) and players in Real Life Role Play games (RPG) (33 respondents). We surveyed 94 respondents aged 19-27 years, 63 male and 31 female. In the second phase of the study, we used a biographical method and interviewed 16 respondents on the impact of body swap games.

Results

In the study of communicative tolerance, we decided to pay attention not only to the general indicator, but also to individual scales. It made possible to assess which variables are more related to recreational gaming. The results are shown in Table 1.

Table 1

Communicative intolerance (average values)

Attitude Components	Non-players N = 36	Strategy games players N = 22	Body swap players N = 33
1. Rejection or misunderstanding of the individual	6,4	5,6	4,5
2. Using yourself as a benchmark in evaluating others	3,2	4,3	5,7
3. Categorical or conservative assessment of people	6,8*	3,1*	1,6*
4. Inability to control oneself or to smooth out unpleasant feelings when confronted with uncommunicative qualities of partners	5,7*	3,3*	2,2*
5. The desire to remake, re-educate the partner	5,1	6,1	3,8
6. The desire to adjust the partner for themselves, to make them comfortable	6,2	5,5	3,4
7. Inability to forgive others for their mistakes, awkwardness, unintentional troubles	5,8	2,6	4,5
8. Intolerance to the physical or mental discomfort of the partner	1,8	2,3	1,6
9. Inability to adjust to the partner	4,6	2,2	1,3
Total	45,6*	35,0*	28,6*

Calculating according to the Kruskal-Wallis criterion for three unrelated samples, we revealed the reliability of the differences of the total indicator of communicative intolerance (by $p \leq 0.05$): it was the smallest in the body swap group, but strategy game players were also more communicatively tolerant than those who had no experience with video games at all. The uncertainty tolerance study did not reveal any significant differences in undecidability tolerance. We found differences according to the Kruskal-Wallis criterion for three unrelated samples and revealed the significance of differences according to the criteria of complexity and novelty (by $p \leq 0.05$). Players in strategy games have the highest tolerance for complexity and novelty, and non-players have the lowest. However, remains the problem - does a high level of tolerance develops by the game, or, conversely, intolerance of uncertainty prevents participation in gaming activities? We used biographical interview to find more answers.

In-depth interviews highlight three points:

"Gender swap" - an assessment of the adaptation to the character development (leveling);

"Body swap" - studies the formation of gender identity, despite the distinctions of personality (a man plays a female character, or vice versa);

"Sex Swap" - the emergence of new stereotypical terms associated with the fact that other characters, at first glance, have no place in the world of the game, they only complicate its understanding, as many gaming companies made these games for a specific gender ("Battlefield V»). Here are some examples of players' statements.

Player 1: "It's a very intense game, at least you can create a character and better to choose a girl - she has more outfits… I like the game itself, and it does not really matter who my character is. At first, it was difficult for me to play for the female character, but then I got used to it and began to explore the possibilities"

Player 2: “What amazes me in this game, in this world, is the choice. In real life: first, earn money, and then find what suits you and in the game everything fit on any texture and everything suits… I started this game just for things and clothes, maybe that is why I like to dress up the characters, not play them. I like to "try on different options" ("Sims 4"). Such statements are typical for people who prefers "body swap".

Player 3: “After reading the book, watching the TV-series, the Witcher's game universe becomes the place to admire this world. Its "attractiveness" is in life situations: lying politicians, greedy people, destructive wars... But Geralt of Rivia changes everything, he either kills or intimidates. The game process is also influenced by the activities offered to the player, especially "to make ladies fall in love with you" or when you play for a man ("mutant") brothel and cabaret become more interesting for you… " (Fig.1.)

Fig. 1. Geralt, a character from the game "The Witcher"

We can evaluate the statements with several criteria. The criterion of the ability to get feeling of joy from the game: both men and women are more or less able to enjoy the game. One of the most important criterion is a diligence and speed of learning the game world, but at the same time the lack of ability to feel happy.

The criterion of achievement is a high motivation to do something off the standard (for example, the developers of "Saint's Row" give the players a plastic surgery salon-simulation in game).

Players selected characters according to the following criteria: appearance, sexuality and abilities (warrior, sorcerer, thief).

Men tend to identify themselves with the character more fully - the constructs are detailed almost from the first person (they try on the characters on themselves), which occurs in 76% of statements. Women did not have such a task, they have someone to protect them (they have only 19% of statements of that type). This suggests that in this case, gender stereotypes present in the daily minds of players implement comprehensively - some complement others. We can assume that women play video games because:

• They want to immerse themselves in the archaic, to play back their fears.

• The game implements research and creative strategies for them, which compensate the initial focus on force in society, which is considered to be more men`s strategy.

• Men have a clear opposition of modern behavior strategies (cognition, creativity) and archaic (run away, pursue).

• Aggression and force are associated with the foolishness and they are opposed to rationality.

• Expressed construct with a moral and ethical dilemma: mean and evil are opposed to the hero - honest and fair.

In general, male players have more causes (9) for gaming than women (6) do. Men give more value to the content and aim of a game (leveling, character features (perks), choosing a quest line) and for female players are more important to communicate with other players and the opportunity to try on different skins of the characters.

Discussion

Nowadays it is hard to find a person who does not have a laptop, PC or game-console. Modern smartphones make a range of opportunities to take your free time even wider. Contrary to popular belief about the harm of video games based on virtual reality (ICD-11), they have usage in psychology, for example, as a method of diagnosing individual features of self-regulation. Video games reduce gender differences in the distribution of spatial attention and spatial orientation. Gender differences begin to appear only after you got skilled in the game, and for women, spatial attention and the ability of spatial orientation is more useful in the game than for men.

A separate part of the biographical research was the study of aggression: the correlation between the level of aggression with the frequency of playing video games, and the types of preferred games. Gaming can increase a player's level of aggression only if it influenced by the additional circumstances: personal life situation, emotional state, personal features of character.

In most cases, players have a stable and relevant self-esteem. The ideal and real components of the "Self" structure merge and transfer to the "Video game self" structure. In this way, video game gives you the opportunity to imagine yourself as your ideal "here and now".

During the formation of addiction (disorder) such things start to escalate: the contradictions between the desire for the game and the impossibility to fully satisfy this

need, awareness self- uselessness (futility of the game) and the inability to stop it, the contradiction between real and virtual Self.

It is inexpedient to consider the personality of gamers and their psychological features only in the plane of individual psychological or stereotypical factors, because only in their entirety they allow us to form an idea of the modern choice of the player as a representative of gamers' subculture, his inner world, strengths and weaknesses. The portrait of the individual as a whole includes two components: gender- sexual and psychological. Why is there a "gender swap" uncertainty?

As in the real world, virtual inhabitants of role-playing games can develop themselves almost endlessly, become stronger, smarter, more resilient and influential. This process can take indefinitely. In order for their characters to raise their level, players must devote to the game a significant amount of time. Motivation: "just to get a level, to make the character look different from the usual NPC ("Non-Player Character"), and for competition with other players" Gamers often want to be the best in the game. Players "hunt" for "experience" (grinding), getting the resources for many hours or even days. Gamers become addicted to the feeling of success in this game, to being the center of attention, there grows a "body swap" feeling ("it was not the character, who made it, but me").

Not everyone understands that game development companies do not play their own games; they only create and code it.

Modern games include people in cyberspace ("body swap", "gender swap", "sex swap") allowing you to naturally fit into socio-cultural realities. Virtual culture fills game forms with new functionality: innovative, virtual-educational, creative. Spending more and more time in the virtual game space, gamers create another format of communication, which focuses on themselves, their conscious demonstrating their current mood, state, their mindset to others with the desire to share instant feelings and emotions.

Conclusion

Computer games with a gender role changing of the player promote the development of communicative tolerance and tolerance for uncertainty. We revealed the reliability of the differences of the total indicator of communicative intolerance: it was the smallest in the body swap group, but strategy game players were also more communicatively tolerant than those who had no experience with video games at all. The uncertainty tolerance study did not reveal any significant differences in undecidability tolerance. We found differences according to the Kruskal-Wallis criterion for three unrelated samples and revealed the significance of differences according to the criteria of complexity and novelty (by $p \leq 0.05$). Players in strategy games have the highest tolerance for complexity and novelty, and non-players have the lowest. Men have more causes for gaming (9) than women (6) do. An in-depth interview revealed gender differences in motivation to play body swap games. Male players more value the content of a game, and for female players are more important to communicate with other players and the opportunity to try on different skins of the characters.

The prospect of further research is to study the impact of other recreational activities on the development of tolerance for uncertainty.

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