

# Psychological analysis of «The sims 3» computer simulation game discourse: opportunity to create models of sustainable behavior

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**Abstract.** The article presents the results of theoretical analysis of possibilities of the psychological using of computer simulation game «The Sims 3». The novelty of the research lies in the practical summarizing of existing researches. It shows that the development of skills presented in game could provide a methodological material for metacognition learning and understanding the mechanisms of studying. Game also may be useful for social and foreign language skills development. Coping with stress, aggression and negative emotions allows player to realize emotional self-regulation. The game provides an opportunity to simulate situations from the player's life, recreate the past traumatic events and modulate the desired future. The game as a way of escapism can also act as a way of finding inspiration, creativity for real life. A number of studies that observe the manifestation of psychological traits and simulate various situations in the game "The Sims 3» have been noted too. The analysis of game strategies, influence of the factor of limited and unlimited time, reduced social and moral control are important for psychological analysis. A wide range of applications opens up opportunities for considering the game as a unique virtual environment that can be used in psychological and pedagogical practice.

## 1 Introduction

«The Sims 3» (2009) as one of the most successful computer game ever provides the player with ample opportunities for the implementation of creative ideas. Its unlimited possibilities and lack of a current goals allow player to implement different game strategies and simulate the variety of situations. The player determines all the characteristics controls and all actions of the character. So, «The Sims 3» may be useful for psychological analysis, because the players can «play with life», «cultivate a virtual existence where their character socialize, learn new skills» [1]. The purpose of the review is to generalize information about the use of "The Sims 3" in the psychology. This way the object of this study is the game itself, and the subject is those of its features that may be important for psychological analysis.

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Video games are the worlds that are safe contexts in which negative emotions can be worked out, and games allow a sense of control [2]. While playing computer simulation games we achieve the ability to control at least something during unpredictable periods of life, to try new things in the safe space of virtual reality; to cope with stress and current conditions, to correct them, to use the game as a source of creative ideas and insights. We can note that games may be useful for the formation of an individual's psychological culture in the educational process.

Games also act as a form of escapism, performing compensatory, adaptive, protest, relaxation functions that allow player to escape from an unacceptable, disturbing reality. Analyzing situations in which a player resorts to this kind of escapism can be an important addition to psychotherapeutic work.

## **2 Discourse of the game**

### **2.1 Psychological aspects of the game**

Playing, a players enjoy and relax, by the way, identification with the characters allows to get more pleasure from the game process. Also player acts as a creator in unique cultural continuum that allows to become a narrator of own story.

In the conditions of the game is conducted a parallel, virtual life, that is open for observation and reflection by analysis of one's own game strategies, manifestation of certain traits and analyzing one's own desires, relations and aspirations. However, in the virtual space we can be creative in those areas that are inaccessible to us in real life.

While playing the game, players may spend tons of hours with customization tools. Settings, creating a character, a house. The CAS (creating a sim mode) of the game allows player to customize every aspect of an appearance. This details and elaboration may allow to calm down, reduce the level of anxiety and tension. Redirecting energy into creation and creativity in «The Sims 3 gameplay» brings calmness.

In «The Sims 3», the player controls almost all aspects of the game (time, the actions of my character and his desires, weather). Sense of control that is given by the game may become a «piece of ground under your feet». But often, when people are just starting to play The Sims, they try to be cruel. Their Sims are starved, drowned in swimming pools, killed in various ways — mostly out of interest and to confirm the player's power. No one, moreover, will condemn players for cruelty and will not limit its manifestation.

In Sims 3: To to the Future, we are told clearly: every action you take will affect your ancestors. Took a vacation — changed the future. We can generalize this to the whole life, for example, « I started reading three pages a day — I finished reading this article a week later». Game shows that doing little by little, but constantly is much more effective than doing one and last super effort.

The game has happiness points — a resource that, like currency, accumulates when the character is feeling well. In the discourse of the game happiness is a resource. Characters use it to get awards — a diploma with honors, a character trait "insight", inheritance, immortality and many more.

This way we may see an allusion to Maslow's hierarchy of needs: when everything is in order with the basis of needs and a person is satisfied, it's time to develop skills, engage in creativity, study, or direct person's vector "outward", to communication and sharing.

## **2.2 Possibilities of using «The Sims 3» video game**

Game-based learning may «improve comprehension and higher order thinking skills, promote learning outside of the classroom, and provide an innovative approach to learning beyond the traditional lecture format of higher education» [3]. It is also noted that simulator games may influence processes associated with metacognitive awareness [4].

The use of informal learning experiences like non-standard teaching techniques increases the involvement in the learning process, creates positive mood of students and motivates them to master the discipline. More authentic contexts for the study of abstract processes (meta-skills, critical thinking skills, self-relations) can be formed precisely by using game-based learning. In attention, computer games may develop visual data processing skills in children (visual attention, speed of visual data processing). The modern understanding of images as primary sources of information refers to the importance of the constructive use of computer games.

Simulation games are useful for learning foreign languages due to their multiplicity and clarity, high correlation with life. Changing the language of the game opens up a large number of names (household, everyday objects and phenomena, social interactions, technical aspects like the interface) and may be successfully used in innovative pedagogical practice. The game has a significant and realistic sociocultural context, that makes it possible to simulate situations of interpersonal communication. Informal and colloquial vocabulary and lexical skills are especially consolidated.

The mechanism of attractiveness creates positive relationships between characters if one of them can do at least 2 things well (write/draw/cook/play computer etc.). If character is developed and improved by the player, most of the non-playable characters treat him well and the characters become friends almost at the first acquaintance. This way «The Sims 3» shows that until we start investing in yourself as a valuable resource, you will not be needed by anyone.

Some players may identify themselves with the sim, like they said: «I imagine that my sim is my body. I am an observer, I control the actions and imagine that I am in the game», that helps to look at one's life as a character's life. From the outside, with objective sight some of worries may disappear. This process is used in mindfulness meditation and is called «step back», when we become an observer to the flow of thoughts, states. Sometimes it helps to understand how much resources we waste. Some players say, «We live in the dark fog of life, not even in its bright strip of awareness, and we spin within the boundaries of our memory like squirrels in a wheel».

«The Sims 3» as a simulator of psychological life shows that there is no rapid progress in life, there is no awareness and the opportunity to distract from the eternal road – probably that's why some players constantly want to play. An ability to abstract from direct involvement in life, from experiencing, agonizing, tantrums, pain, love, and reduce its emotional significance and see fast progress.

## **3 Discussion**

Computer games, including «The Sims 3», creates an active learning student-focused environment, which allows to consolidate the skills in practice. Teaching students English as a second language in the experiments of Miller and Hegelheimer [5] with the help of «The Sims 3», with the help of additional materials (online dictionary, grammatical descriptions and exercises, culture notes) successfully improved language skills. The informal, colloquial and frequently used vocabulary presented in the game made it possible to significantly improve the speed of language learning.

Tsikalas [6] notices that gameplay may be useful for the following goals. «Interpersonal problems» and their solutions reflects in strategies that player choose. Players can replay traumatic experiences of the past in a safe environment to feel better or to solve some kind of problem. Similar patterns can be observed in the gameplay, and during its analysis it is possible to explore the manifestation of personal qualities in a virtual environment. «A safe arena for behavioral experimentation» makes it possible to free player from social norms and manifest in a sincere way of self-expression. «Identity Development» consists in gradually learning one's preferences in terms of appearance, character, style of music or even home decoration. By playing, people can recognize themselves in possible simulated social and everyday situations of the future. «Anger Management» refers to the safe manifestation of destructive feelings in a situation where there is no one to harm. «Socialization» means that games and play are laden with common cultural and social ideas and norms. Playing simulator games also develop reflection that helps to consciously compare and contrast the structure and content of one's play with others. Sometimes it is interesting to observe, what opportunities are you interested in? Do you play effectively to reach a goal or you are trying to make a «TV series»? Can you play as a negative character who is building a career as a criminal, cheating and spoiling relationships with everyone? Can you play as a serial lover character? Such observing through the game may help to understand yourself better.

The directions of training skills, including social ones, in the virtual sphere of simulation games are being actively developed; it is noted that it would be easier for respondents to master professional activities if games were developed for their profession.

A study by Visser, B. et al. [7] analyzes people's gaming strategies, having a tendency to be deceitful, aggressive and manipulative. They performed fewer friendly social interactions during the game than subjects who were not inclined to these qualities [8]. The psychopathy of the Cheater-Hawk hypothesis was studied with the help of 205 students who were defeated to play four same-sex characters with predetermined personalities within the framework of this hypothesis. The characters represented a cheater, a hawk, a cooperator, and a dove. The main forms of interaction reflected charm, friendliness, and provoked/unprovoked aggression ("mean" and "fight" behaviors). It was noted that people with psychopathic traits more often used hawkish behavior (mean and pugnacious behavior). People with a higher level of psychopathic traits were angrier and aggressive in general, and also especially targeted our hypothetical character-the «victim» sim. This research opens up the possibility of using video game paradigms to investigate behavior.

An analysis of the game in people with high and low neuroticism scores [3] indicated the tendency of subjects with a high level to win more often to be rude to other characters, to skip work and not pay the bills, than the subjects with a low level did it. There are marked gender differences in game strategies – for example, men more often perceived it as entertainment and the possibility of unpunished acts, and women spent more time taking care of the house and family. These provisions confirm the availability of opportunities provided by the game to observe the manifestation of certain traits.

Games are also seen as an attractive strategy for teaching psychology; receiving feedback, low costs of errors that occur, and the possibility of learning how to solve ethical problems in simulation can be factors that increase interest in learning. However, games also provide competition, challenge, exploration, fantasy, goals, interaction, results, people, rules, and security. [9]

«The Sims 3» allow to simulate the storytelling qualities of life [10]. The game motivates to tell stories about the lives of the characters, in which player may be highly involved. It also allows to look at player's life from the outside and characterize the vector of actual movement.

Safe and variable virtual reality of the game allows to abstract from the rules and norms existing in society, avoid stressful factors of real life. The possibility of testing alternative

social strategies to overcome everyday conflicts and tensions is noted, in this case we turn to a model of real relationships and a place from where we can contemplate the 'real world'.

Kerr [11] notices that it is possible to simulate social situations with the power of virtual reality. The security and variability can be useful, for example, for mastering social skills by people with Asperger's syndrome.

Time of character's life is the most important resource in the game. It can be converted into experience, relationships, skills. So it is interesting to compare game strategies when character's life is limited or unlimited. We may compare the choice of goals, relationships, everyday actions, compliance with moral, legal and ethical norms, the relationship between the actions of the character and the existential needs of the player. The game also shows that the way for bigger and more meaningful goals is achieving the small ones. The possibility of studying the player's actions depending on the time factor was also noted, for example, in the absence of aging of the character being played and the aging of all other characters in the city, that is a situation of actual immortality [12].

While playing it is possible to see the way of mastering character's skills in stages. Gameplay shows practical and accessible ways for everyone to master it, for example to read specialized literature and attend courses. In addition, the "scale" of the skill, which is filled all the time, shows the progress of its development – and visibility of the progress is very valuable for understanding methodology of studying.

The discourse of the game involves the gradual improvement of character by mastering skills, both specific (horse-riding, cooking) and general, non-specific, closest to the concept of "soft-skills" (charisma, logical thinking). The speed of mastering the skill depend on the abilities and inclinations of the character (the «artist» trait will help character to draw faster), use in practice (it is faster to master the skill not through a book, but through interactions with objects), environment (sport skill easily masters in the gym, not at home) and invested time (it takes more time to master each next level).

Gameplay can be useful for mastering everyday skills – for example, apologizing in a situation of interpersonal communication or how to exhibit cleanliness and punctuality. However, the characters are forced to pay taxes and bills on time. This is an important law — pay on time. And, it would seem, there is nothing to worry about if the bills are overdue — you can always be a little late. However, in this game, there will be a penalty for non—payment within the prescribed period - a bailiff will arrive and take anything from the character's house that corresponds to the cost of the bills. Therefore, all players carefully monitor to pay bills on time — otherwise there will be punishment.

The completeness of the gameplay allows us to examine the theory of A. Maslow's pyramid of needs. Needs are presented in the game according to the rules of the pyramid. Without satisfying basic psychological needs (hunger, shelter), actions related to higher needs are not available – hungry characters cannot write books or water flowers, do actions related to the character's life goal (self-actualization). Importance of each need greatly represented in the game: also, the ability to distinguish between psychological needs and tiredness (for example, hunger and boredom), the inability to satisfy the need forever (for example, to sleep for the whole next week) can act as a methodological teaching material. Also it is showed how important to invest in basic needs — a comfortable good bed, a good refrigerator and a shower. According to the pyramid of needs, these investments will provide a comfortable base for further development. This also includes paying attention to nutrition, health and leisure.

It is possible to transform through the gameplay – the mechanism of modulating and playing certain situations is able to transform a person. For example, we can develop public speaking skill by modelling it through gradually reducing its emotional significance.

The game can be important for realizing and venting one's own anger without harming other people and the environment, for example, by torturing virtual characters. Also the

ability to control all aspects of the game (and with the presence of special game modifications, even the basic gameplay mechanics) allows you to get the control that is hard to get in the real life. High quality of the details provided by the game (in terms of choosing appearance, home improvement) may help to calm down and reduce anxiety and tension. The possibility of experimentation may also have a psychotherapeutic effect.

Interaction with the community of players also has a positive effect on the well-being of players, allowing them to share creativity, willingness and desire to share their gaming experience. It is noticed that when guided by a therapist, clients may be able to repair difficult events in their past, learn about the repressed parts of personality, simulate the image of the desired future. It is possible to cope with the current state of guilt, fear or anxiety. Recreating or changing past experiences, coupled with the reflection of the current mood and the image of the future, directly affect the style of the game. It is possible to consider the problem of how cultural and social norms and prohibitions affect players personally and are played out in the game. The feeling of nostalgia associated with playing Sims 3 in childhood is often experienced due to the fact that players bring a piece of themselves into the gameplay, are inspired by the game and perceive it as a source of knowledge and creativity [12].

Iversen notices [13] that asking the client about the tactics of the game strategy in some cases can allow the therapist to establish rapport with the client, for example, when asking gamers or patients who find it difficult to talk specifically about their experiences, but it is easier to abstract to the character level. The gaming community also acts as an informal circle of communication, which is important for personal development and support - it is valuable to feel one's belonging both to the group and to ideas, to grow and develop within this group, especially when the ground is knocked out from under one's feet.

There are various situations presented in The Sims 3 in which (controlled or uncontrolled) aspects of behavior that characterize the pursuit of status, wealth and prestige are modeled. Players have a strong incentive to consume and the need to acquire things (cars, houses, things, cars, vouchers, etc.) or to achieve success and popularity in order for the characters to be realized (with celebrity achievements, career advancement) [14]

To sum up, we can highlight the following features submitted by the authors. They reflect the needs and requests of the players launching the game, and each item requires a more thorough empirical analysis, since it opens up opportunities for the use of the simulator games as a projective methodic.

1. Reliving the past traumatic experience through the construction of it in the safe virtual space;
2. Implementing basic game motivations;
3. To create and model social situations when social, moral and ethical norms are reduced;
4. Mastering social skills;
5. Realizing the importance of a time resource;
6. Getting full control, which can help for relaxation and calming in chaotic unpredictable life;
7. Modelling the situations that are important sources of intrapersonal conflicts;
8. Reflect and analyze one's game strategies to identify the manifested personal traits and qualities;
9. Becoming a creator in the unique artistic and aesthetic continuum of the game;
10. Showing creativity in those areas that are inaccessible in reality;
11. Developing a leading and desiring type of activity;
12. Getting pleasure and relaxation, especially by identifying myself with a character;
13. Mastering storytelling and improving narrative skills;
14. Considering the hierarchy of needs as a methodological material for studying Maslow's pyramid;

15. Studying a foreign language by using the interface and the universality of the simulator game [15];
16. Comparing one's game strategies depending on the factors of the game;
17. Analyzing one's attitudes to social values;
18. Observing the manifestation of psychopathological traits in the gameplay;
19. Coping with stress, anger without harming the environment;
20. Participating in the gaming community, which is important for personal development;
21. Realizing that playing games may be a form of escapism.
22. Etc.

## 4 Conclusion

Thus, a unique virtual gaming environment of a computer game «The Sims 3» currently acts not only as an actual means of teaching the manifestation of psychological patterns, but also as an interesting psychological environment in which modeling and research of game strategies depending on variable factors – both internal (gender, age, psychological characteristics) and external (security of the virtual environment, limited time, reduced social control, etc.) can be a valuable resource for psychological analysis. It also may complement and diversify the educational process, increase the interest of students in it and address the topic of methodology for the development of skills, including specific and foreign ones.

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