



## e-Sports: Playing just for fun or playing to satisfy life goals?



Marcel Martončík

Institute of Psychology, Faculty of Arts, Presov University in Presov, Ul. 17. novembra 1, 080 01 Prešov, Slovakia

### ARTICLE INFO

#### Article history:

Available online 18 February 2015

#### Keywords:

e-Sports  
Progaming  
LAN party  
Computer game

### ABSTRACT

**Purpose:** e-Sports is an area of the game scene, in which computer game players specialize in a specific game, form game teams (clans), compete together in tournaments and meet at so-called LAN (Local Area Network) parties. The objective of this study was to compare the different types of e-Sports players from the perspective of their personality traits and explicit motives and to compare e-Sports players with casual players in selected life goals.

**Methods:** A questionnaire assessing life goals (Pöhlmann & Brunstein, 1997) and basic personality traits (Personality inventory KUD, 1986) were administered to 108 e-Sports players and 54 casual computer game players.

**Results:** In the group of e-Sports players, only clan leaders significantly differed in life goal power from those who were not members of any clan. Significant differences were also found between e-Sports players and casual players in terms of life goals affiliation and diversion.

**Conclusions:** e-Sports seem not only to be about playing computer games, but can also serve as a means of satisfying the need to belong. They do this by creating friendly relationships through membership in game teams and participation in LAN parties, or satisfying the need for power by upholding a position of a game team leader and determining its course of action.

© 2015 Elsevier Ltd. All rights reserved.

## 1. Introduction

Playing computer games is a very popular way of spending leisure time. The ability to play against human opponents, which is the main aspect of multiplayer computer games, contributes to its appeal. According to the [sc2ranks.com](http://sc2ranks.com) website, the strategic game StarCraft 2 has over 1 million players in Europe alone. The enormous increase in the number of players has led to the acceptance of computer game playing as a mainstream activity (Williams, Yee, & Caplan, 2008). In computer games, in a similar way to sports, it is possible to distinguish between competitive playing and occasional playing. The area of game playing in which the player's goal is to continually advance, regularly train, compete, and participate in leagues and tournaments is termed as e-Sports. It is important to emphasize that "e-Sports as a phenomenon deserves to be investigated purely for its influences on society and culture" (Wagner, 2006, p. 3). So far, there have been very few studies which have dealt with the demographic characteristics, playing style, identity or motivation of e-Sports players for playing (Jin, 2010).

### 1.1. Definition of e-Sports

In one of the few previous studies, Wagner (2006, p. 3) has defined e-Sports as "an area of sport activities in which people develop and train mental or physical abilities in the use of information and communication technologies". e-Sports represents a kind of a merge between electronic games, sports, business and media. It is necessary to point out the ongoing debate about whether it is possible to regard e-Sports as a kind of sport or not. Competitive gaming has some similarities with sports, such as regular training, team work or the perfect execution of tactics planned in advance (Hutchins, 2006). The term e-Sports itself is often replaced with other terms such as: progaming, ESport, cybersports, cyber athletics or competitive gaming. e-Sports is a phenomenon of mostly younger generations. An average player of e-Sports is between 15 and 25 years old and trains 3–4 times a week for 2–4 h (Müller-Lietzkow, 2006; Topalov, 2007). In contrast to casual players (casual gamers), e-Sports players mainly focus on one game, in which they specialize, train regularly and participate in LAN (Local Area Network) or online competitions. Many e-Sports players are members of game clans. These are organized teams of players that regularly train together and participate in leagues and tournaments (Griffiths, Davies, & Chappel, 2003). The game clan usually consists of a leader and other members. The role of the clan leader

E-mail address: [martoncik@centrum.sk](mailto:martoncik@centrum.sk)

is to build the game team by recruiting new players, eliminating inactive players or those who have been involved in misconduct, setting player rosters for matches, devising game tactics and communicating with sponsors.

### 1.2. Personality traits of players

Most of the previous studies have been focused on the personalities of game players in general or on players of Massively multi-player online role-playing games (MMORPG). Many studies have found that there are differences in the personalities of the players in connection to playing different game genres (Borders, 2012; deGraft-Johnson, Wang, Sutherland, & Norman, 2013; Johnson, Wyeth, Sweetser, & Gardner, 2012; Orr, Ross, & Orr, 2012; Tekofsky, Spronck, Plaat, Herik, & Broersen, 2013; Williams et al., 2008; Zammito, 2010). One of the studies, which focused on the dynamics of the guilds (a guild is a version of a clan in the MMORPG environment), seem to think that the players' behavior in the online world is parallel to their physical world, in which the degree of group activities is similar to that in the online world (Seay, Jerome, Lee, & Kraut, 2003). Thus, more sociable people should form more relationships in the online environment too.

### 1.3. Motivation of e-Sports players

Studies which have focused on e-Sports and LAN players have found that players' most significant motive was the motive of sociability, followed by the motive of fun, and only then by the motive of performance (Frostling-Henningsson, 2009; Hobler, 2006; Jansz & Martens, 2005; Müller-Lietzkow, 2006). For half of the players, victory in the league or tournament was not found to be important at all (Müller-Lietzkow, 2006). e-Sports and LAN parties' players are predominantly motivated by the desire for social contact, for which the party creates suitable conditions (the opportunity to meet other players, cooperation between them and mutual communication) and less by the desire for competing and winning.

### 1.4. The present study

Demetrovics, Urbán, Nagygyörgy, et al. (2011, p. 823) state that "we have to consider that these applications (online games) satisfy basic and concrete human needs in the conditions of our modern society". For instance, to satisfy the need to belong (according to the Maslow's hierarchy of needs), players can communicate with each other during the game, or form game teams for social interaction purposes (Teng & Chen, 2013). Thus, if games do not just serve the purpose of entertaining the player, and can be perceived in a broader context as a space that is able to satisfy the needs of the player, then it is also possible to expect different personality traits and motivation characterization of players specialized in a particular playing style.

Therefore, the aim of the current study was to examine the existence of differences between various types of e-Sports players; specifically clan leaders, clan members, non-members of a clan, solo players and team players. The differences in life goals of intimacy, affiliation, power, diversion and achievement as well as the personality traits of dominance and extraversion were examined. In addition, it aimed to look at the existence of differences between e-Sports players and casual players in the specified life goals.

## 2. Method

### 2.1. Procedure and participants

The study sample consisted of 108 e-Sports players with an average age of 20 ( $SD = 3.27$ ) and 54 casual players with an average

age of 23 ( $SD = 5.44$ ) playing two real-time strategy games. The e-Sports players consisted of 39 players of the game StarCraft: Broodwar and 69 players of the game WarCraft 3. Out of this, 44 players (solo players) preferred one-on-one games (1v1) and 64 players (team players) preferred playing with a team mate against the same number of opponents (2v2 etc.). In terms of the structure of the players, there were 21 clan leaders, 49 proper clan members and 38 who were not members of any clan. The players were of Slovak and Czech nationality as players from both countries play in common e-Sports leagues and tournaments. The players were asked to fill in a questionnaire directly on Battlenet or they were contacted via email. The questionnaires were administered online. Casual players were deemed as players who did not play any computer game professionally, played games for more than 2 h per week and did not play any MMORPG games. Casual players were recruited by non-randomized occasional sampling.

### 2.2. Measures

The personality inventory KUD is used for the basic personality dimensions which are activity, stability, dominance, rationality and extraversion (Personality inventory KUD, 1986). The inventory consists of 80 items, 16 items for each dimension. Respondents answer on a three-level scale (I agree; I do not know; I disagree). In this study only the dimensions of dominance ( $\alpha = 0.721$ ) and extraversion ( $\alpha = 0.752$ ) were evaluated. Dominance is characterized by imperiousness, self-assurance, independence, authoritative-ness and aggression. Extraversion is characterized by cooperation, gregariousness, openness, sociability and communicability.

The questionnaire GOALS assesses general, long-term life goals (Pöhlmann & Brunstein, 1997). Respondents are presented with 24 goals pertaining to six major life domains: intimacy, affiliation, altruism, power, achievement, and diversion. For each goal, three attributes are rated: importance, attainability, and degree of success at attainment. Each of these goals' attributes is rated on a 5-point scale ranging from 1 (not important) to 5 (very important). In this study, only the attribute of importance (which goals are desirable and valuable for the person and indicate the strength of his/her commitment to a goal) for the life goals of intimacy ( $\alpha = 0.743$ ), affiliation ( $\alpha = 0.805$ ), power ( $\alpha = 0.760$ ), diversion ( $\alpha = 0.818$ ) and achievement ( $\alpha = 0.757$ ) was evaluated.

## 3. Results

A one-way between subjects ANOVA was conducted to compare the effect of the different types of players in the life goals of affiliation, achievement, dominance and power, as well as the personality trait of extraversion in clan leaders, clan members and those not members of any clan. There was no significant effect of the different types of players on affiliation ( $F(2, 105) = 0.387, p = 0.680$ ), achievement ( $F(2, 105) = 1.396, p = 0.252$ ), dominance ( $F(2, 105) = 1.362, p = 0.261$ ) or extraversion ( $F(2, 105) = 1.540, p = 0.219$ ) at the  $p < .05$  level for the three conditions. The results of one-way ANOVA testing differences between clan leaders, members and not members of any clan in power are presented in Table 1.

There was a significant effect of the different types of players on power at the  $p < .05$  level for the three conditions ( $F(2, 105) = 3.211, p = 0.044$ ). The results of the post hoc comparisons are presented in Table 2.

**Table 1**  
Results of one-way ANOVA for the life goal power by different types of players.

	Mean of squares	df	F	p
Power	3.710	2	3.211	.044

**Table 2**  
Comparisons of the different types of players in the life goal power.

<i>I</i>	<i>J</i>	Mean difference ( <i>I</i> – <i>J</i> )	Standard error	<i>p</i>
Clan leader	Clan member	.353	.198	.213
	Not member of any clan	.523	.206	.038
Clan member	Not member of any clan	.169	.164	.662

**Table 3**  
Results of *t*-test and descriptive statistics for affiliation by type of player.

	Type of a player				<i>t</i>	<i>df</i>	<i>p</i>
	e-Sports player ( <i>n</i> = 108)		Casual player ( <i>n</i> = 54)				
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Affiliation	3.682	0.884	3.324	0.758	2.549	160	.012

**Table 4**  
Results of *t*-test and descriptive statistics for diversion by type of player.

	Type of a player				<i>t</i>	<i>df</i>	<i>p</i>
	e-Sports player ( <i>n</i> = 108)		Casual player ( <i>n</i> = 54)				
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Diversion	3.789	0.903	3.463	0.729	2.304	160	.022

The post hoc comparisons used the Hochberg's GT2 test and indicated that the mean score for the clan leader condition ( $M = 3.904$ ,  $SD = 0.743$ ,  $n = 21$ ) was significantly different from the not members of any clan condition ( $M = 3.381$ ,  $SD = 0.787$ ,  $n = 38$ ). However, the clan members condition ( $M = 3.551$ ,  $SD = 0.744$ ,  $n = 49$ ) did not significantly differ from the clan leaders and not members of any clan conditions. The effect size for this analysis ( $f = 0.248$ ) was found to meet the convention for a moderate effect (Cohen, 1977).

An independent-samples *t*-test was conducted to compare both affiliation and extraversion in solo players (1v1) and team player (e.g. 2v2) conditions. There was no significant difference in the scores for affiliation ( $t(106) = -0.895$ ,  $p = 0.373$ ) nor extraversion ( $t(106) = -1.211$ ,  $p = 0.229$ ) for solo players and team player conditions.

The only statistically significant differences between e-Sports players and casual players were found in affiliation and diversion. The results of the independent-samples *t*-tests for these life goals are presented in Tables 3 and 4.

The scores for affiliation were higher for e-Sports players ( $M = 3.68$ ,  $SD = 0.88$ ) than for casual players ( $M = 3.32$ ,  $SD = 0.76$ ). The effect size for this analysis ( $d = 0.434$ ) was found to have approached the convention for a moderate effect (Cohen, 1977).

The scores for diversion were higher for e-Sports players ( $M = 3.79$ ,  $SD = 0.90$ ) than for casual players ( $M = 3.46$ ,  $SD = 0.73$ ). The effect size for this analysis ( $d = 0.397$ ) was found to have approached the convention for a moderate effect (Cohen, 1977). There was no significant difference between e-Sports players and casual players in intimacy ( $t(160) = 0.397$ ,  $p = 0.692$ ), achievement ( $t(160) = 0.411$ ,  $p = 0.682$ ) or power ( $t(160) = 0.034$ ,  $p = 0.973$ ).

#### 4. Discussion and conclusions

The objective of this study was not to focus on players' motivation for playing alone, but to point out the connection with general

motivational tendencies such as explicit motives - life goals to particular playing styles in the area of e-Sports. It also aimed to reveal some of the differences between e-Sport players and casual players in these specified life goals. The study was based on the rationale that if someone creates life goals focused, for instance, on meeting new people or controlling and directing others, it will be mirrored also in the way that they play a specific game. This is connected to the perception of e-Sports itself. It is not just computer game playing, but also a space (virtual and real) for meeting and interacting with players with specific rules and regulations. Among the specified types of players no significant differences were found in personality traits of extraversion and dominance nor the life goals of intimacy, affiliation, diversion and achievement. However, there were differences found in the life goal of power where clan leaders showed significantly higher scores than those not members of any clan. The clan members did not differ significantly from the other two types of players.

The motivation for membership in a clan does not have to be the need to help others to improve (life goal of intimacy) or the need for intensive interaction with other players (life goal of affiliation). Rather, it can be the need to participate in competitions at a clan level, where whole teams, not individuals, compete in leagues. It is also maybe the sponsors' support. Membership in a clan could also be explained by the need for new playing experiences, to which differences in the life goal of diversion between e-Sports players and casual players could also point to. However, caution is necessary in interpretation, as neither the types of clans (e.g. focused on victories, focused on friendly relationships) nor the players' motivation to become their members were detected. The alternative explanation could be that clans originate for various reasons; some are focused on results and success, they have sponsors and recruit only high quality players while others are based on friendly relationships. This has also been supported by the study of guilds in MMORPG games (Williams et al., 2006). The absence of differences in the life goals of diversion and achievement can also be explained by the fact that individuals with no team affiliation can participate in tournaments and leagues too. They are interested in winning the game just like the clan members. The personality trait of dominance does not have to be expressed in the form of leading a clan, but also in the style in which the player plays in a specific game and how he or she communicates with the opponent during the game. This style can be marked by self-assurance and aggression, e.g. by taking initiative in the game, or by attacking even with a smaller number of units. Thus, it could be interesting to study the mechanism of playing, or peculiarities of the players' playing style. As expected, clan leaders scored higher in the life goal of power than those not members of any clan. Therefore, people with a strong explicit power motive, desire to control and direct other people and achieve high status in the virtual environment too. This was reflected in upholding the position of a clan leader. No differences were found between the clan members and those not members of any clan, which could be explained by the fact that even some regular clan members could have leader ambitions. The first step to becoming a leader is becoming a member of the clan.

An explanation of the finding that team players are not more extroverted or do not have a stronger life goal of affiliation than solo players could also be that different preferences for a certain playing style does not have to be related to the need for a more intensive social interaction, but can be rooted in the mechanism of that game. A team form (i.e. 2v2) can be more entertaining for some players, due to the cooperation and higher amount of possibilities for devising new and creative tactics.

A statistically significant difference between e-Sports players and casual players was found in the life goals of diversion and affiliation, where e-Sports players scored higher in the specified life

goals. This is in agreement with other study findings (Frostling-Henningsson, 2009; Hobler, 2006; Jansz & Martens, 2005; Müller-Lietzkow, 2006). In other life goals no significant differences were found. The most attractive thing for e-Sports players is actually the multiplayer nature of playing and social interactions between the players in a real or virtual environment; not the playing itself. The players can form teams, train together and compete in leagues. The communication between the players is also enabled and supported by the environment outside the game – so called Battlenet, which is built-in the games StarCraft and WarCraft, where the players can communicate with each other. At the same time, they can meet in real life at a number of LAN parties, which are more about meeting online friends than about competing (Simon, 2007). It is typical for smaller countries such as Slovakia and the Czech Republic that their e-Sports players often meet outside playing too; and thus strengthen their friendly ties. That is in contrast to MMORPG players who interact predominantly in an online environment. Another finding was that e-Sports players scored more highly in the life goal of diversion, which could be interpreted as players' greater need for new experiences. This can be satisfied in the gaming life of the e-Sports environment. It is not just about sitting at a computer and playing games, but about studying a certain game, training together and devising new strategies, and about the thrill of competitions and meeting new players from all around the world. As expected, no significant difference between e-Sports players and casual players was found in the life goals of intimacy and power. Contrary to what might be expected from the definition of e-Sports, no difference was found in the life goal of achievement. Other studies have found similar results (Jansz & Martens, 2005; Müller-Lietzkow, 2006). The explanation can be found in the items of the scale detecting the life goal of achievement. It is more about personal development in various areas than about performance. It could be more suitable to use a different measuring method, which would focus on an aspect of performance. It is possible that both groups have the same need for development, but they practice it in different areas.

#### 4.1. Limitations

The internal validity of the study could have been compromised by the fact that some aspects were not measured or observed; such as how long a player plays a certain game; player's skills, which could influence his or her ability to join game teams; nor the type of clan (e.g. focused on victories, focused on friendly relationships). The players' motives for their clan membership, for playing itself, or for LAN event participation were not considered either. It would be interesting to compare players' motivation for playing with their explicit and implicit motives, or to observe the differences in particular types of players in facets of the Big Five personality model. Another limitation of the presented study could also be that players in the control group were not only focused on real-time strategy games, but also played other games.

#### 5. Conclusions

The results of the present study suggest that e-Sports is not only about the computer games and playing itself, but it can also serve as a means of satisfying various needs, e.g. the need to belong by forming friendly relationships through the membership in game teams and participation in LAN parties, or by satisfying the need for power through upholding the position of a game team leader

and determining its course of action. The presented study tries to point out the positive aspects of playing computer games and challenge what is often assumed in game-playing e.g. a sign of addiction. On the contrary, the study suggests that e-Sports as a specific form of playing computer games can be a valuable way of spending leisure time and a means of expressing themselves for young people in the rapidly changing modern world.

#### References

- Borders, J. B. (2012). *Relationship between personality and video game preferences*. Thesis. Sacramento: Carolina State University. <<http://csus-dspace.calstate.edu/bitstream/handle/10211.9/1807/Thesis%20final.pdf?sequence=1>> Accessed 06.06.14.
- Cohen, J. (1977). *Statistical power analysis for behavioral sciences*. New York: Academic Press.
- deGraft-Johnson, Ch., Wang, Y., Sutherland, M. B., & Norman, K. L. (2013). *Relating five factor personality traits to video game preference*. Human-Computer Interaction Technical Report.
- Demetrovics, Z., Urbán, R., Nagygörgy, K., et al. (2011). Why do you play? The development of the motives for online gaming questionnaire (MOGQ). *Behavior Research Methods*, 43(3), 814–825.
- Frostling-Henningsson, M. (2009). First-person shooter games as a way of connecting to people: "Brothers in Blood". *CyberPsychology & Behavior*, 12(5), 557–562.
- Griffiths, M. D., Davies, M. N. O., & Chappel, D. (2003). Breaking the stereotype: The case of online gaming. *CyberPsychology & Behavior*, 6(1), 81–91.
- Hobler, M. (2006). Shoot first, ask questions later: Motivations of a women's gaming clan. Paper presented at the 57th annual conference of the international communication association. <[http://www.allacademic.com/meta/p169615\\_index.html](http://www.allacademic.com/meta/p169615_index.html)> Accessed 06.06.14.
- Hutchins, B. (2006). Computer gaming, media and e-Sport. Paper presented at 'Sociology for a Mobile World', the annual conference of the Australian sociological association.
- Jansz, J., & Martens, L. (2005). Gaming at a LAN-event: The social context of playing digital interactive games (DIGs). Paper presented at the annual meeting of the international communication association. <[http://citation.allacademic.com/meta/p\\_mla\\_apa\\_research\\_citation/1/1/1/9/6/pages111968/p111968-1.php](http://citation.allacademic.com/meta/p_mla_apa_research_citation/1/1/1/9/6/pages111968/p111968-1.php)> Accessed 06.06.14.
- Jin, D. J. (2010). *Korea's online gaming empire*. Cambridge, Massachusetts: The MIT Press.
- Johnson, D., Wyeth, P., Sweetser, P., & Gardner, J. (2012). Personality, genre and videogame play experience. In 4th International conference on fun and games, Toulouse.
- Müller-Lietzkow, J. (2006). Sport im Jahr 2050: E-Sport! Oder: Ist E-Sport Sport? *Merz Wissenschaft 50 Jg.* (Vol. 6, pp. 102–112).
- Orr, E. S., Ross, C., & Orr, R. R. (2012). Trait and symptom differences between factions in online gaming: The vulnerable side of evil. *Computers in Human Behavior*, 28, 739–743.
- Personality inventory KUD (1986). *Osobnostný dotazník KUD – T-20*. Test manual. Bratislava: Psychodiagnostické a didaktické testy, n.p.
- Pöhlmann, K., & Brunstein, J. C. (1997). GOALS: Ein Fragebogen zur Messung von Lebenszielen. *Diagnostica*, 43, 63–79.
- Seay, A. F., Jerome, W. J., Lee, K. S., & Kraut, R. (2003). *Project Massive 1.0: Organizational commitment, sociability and extraversion in Massively Multiplayer Online Games*. <<http://www-2.cs.cmu.edu/~afseay/files/44.pdf>> Accessed 06.06.14.
- Simon, B. (2007). Geek chic: Machine aesthetics, digital gaming, and the cultural politics of the case mod. *Games and Culture*, 2, 175–193.
- Tekofsky, S., Spronck, P., Plaat, A., Herik, J., & Broersen, J. (2013). Psyops: Personality assessment through gaming behavior. In *Proceedings of the international conference on the foundations of digital games*.
- Teng, Ch., & Chen, W. (2013). Team participation and online gamer loyalty. *Electronic Commerce Research and Applications*, 13(1), 24–31.
- Topalov, N. (2007). *ESports Book das Jahr des Aufbruchs*. Top Ideas Marketing & Events GmbH.
- Wagner, M. (2006). On the scientific relevance of eSport. In *Proceedings of the 2006 international conference on internet computing and conference on computer game development*.
- Williams, D., Ducheneaut, N., Xiong, L., Zhang, Y., Yee, N., & Nickell, E. (2006). From Tree House to Barracks: The social life of guilds in World of Warcraft. *Games and Culture*, 1(4), 338–361.
- Williams, D., Yee, N., & Caplan, S. E. (2008). Who play, how much, and why? Debunking the stereotypical gamer profile. *Journal of Computer-mediated Communication*, 13, 993–1018.
- Zammito, V. L. (2010). *Gamers' personality and their gaming preferences*. Thesis. Simon Fraser University. <<http://www.veronicazammito.com/thesis/Zammito-Veronica-MSc-thesis.pdf>> Accessed 06.06.14.