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**INTERCULTURAL RELATION BETWEEN SPORTS AND E-SPORTS:
OPENING A GATEWAY FOR SPORTS EDUCATION**

Master's thesis

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Šiauliai, 2015

ŠIAULIŲ UNIVERSITETAS
HUMANITARINIS FAKULTETAS
FILOSOFIJOS IR ANTROPOLOGIJOS KATEDRA

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Tarpkultūrinio ugdymo ir tarpininkavimo studijų programos studentas

**TARPKULTŪRINIS RYŠYS TARP SPORTO IR E-SPORTO: SPORTO
EDUKOLOGIJOS ĮGALINIMAS IR PANAUDOJIMO GALIMYBĖS**

Magistro darbas

Darbas yra originalus, kitų autorių mintys pateiktos pagal citavimo reikalavimus.....

(Parašas)

Šiauliai, 2015

SUMMARY

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INTERCULTURAL RELATION BETWEEN SPORTS AND E-SPORTS: OPENING A GATEWAY FOR SPORTS EDUCATION

Master's thesis

In this thesis the application of sports education possibilities for e-sports players, based on cultural similarities between sports and e-sports is researched. The research is relevant and significant because sports education in e-sports has not been previously researched, even though cultural and structural similarities between sports and e-sports is evident.

Research object – application of sports education possibilities for e-sports players. *Research aim* – To investigate if, based on the cultural similarities of sports and e-sports, sports education could be applied to e-sports players.

While performing the research “Intercultural Relation between Sports and E-Sports: Opening a Gateway for Sports Education” a quantitative research strategy was employed which was supported by qualitative research methods. During the research *content analysis*, *interview* and *survey* methods were employed. The main method of data collection was a *semi-closed online survey* where research relevant topic were covered. While seeking to carry out the set objectives content analysis and interviews were employed for cultural analysis of e-sports, the collected information alongside sports education literature was used in creation of online survey. The online survey was used in order to investigate the developments of e-sports players and areas where sports education could be employed. *Research scope* – the research was carried out from 2013 April to 2015 September, the research participants were e-sports players from Lithuania (interviews) and e-sports forums visitors (962 respondents).

The research indicated that there are cultural and ontological similarities between sports and e-sports in form of values, rituals, heroes and symbols (Hofstede, Trompenaars, Huizinga). Research results confirm that e-sports players follow a process of development, playing motives and goals differ according to their development stages, areas where sports education could be used were identified.

The thesis consists of 3 chapters: first chapter presents sports and e-sports cultures and their comparison, second analyses sports education, third – methodology, methods, scope, ethics, empirical e-sports culture analysis, survey results and interpretation. The chapters are followed by discussion, outcomes and recommendations, annexes.

SANTRAUKA

Gintautas Jazdauskas

TARPKULTŪRINIS RYŠYS TARP SPORTO IR E-SPORTO: SPORTO EDUKOLOGIJOS ĮGALINIMAS IR PANAUDOJIMO GALIMYBĖS

Magistro darbas

Šiame darbe nagrinėjamos sporto edukologijos mokslo panaudojimo galimybės elektroniniame sporte remiantis kultūriniais sporto ir e-sporto panašumais. Tyrimas aktualus ir reikšmingas tuo, kad sporto edukologijos panaudojimas nėra tirtas, nepaisant egzistuojančio kultūrinio sporto ir elektroninio sporto panašumo.

Tyrimo objektas – sporto edukologijos panaudojimo galimybės e-sporto žaidėjų ugdymui. *Tyrimo tikslas* – išanalizuoti ar, remiantis kultūriniais sporto ir e-sporto panašumais, sporto edukologija galėtų būti panaudota e-sporto žaidėjų ugdyme.

Atliekant tyrimą „Tarpkultūrinis ryšys tarp sporto ir e-sporto: sporto edukologijos įgalinimas ir panaudojimo galimybės“ buvo panaudota kiekybinė tyrimo strategija, kuri buvo papildyta kokybiniais tyrimo metodais. Tyrimo metu naudoti *turinio analizės, interviu ir apklausos* metodai. Pagrindinis duomenų rinkimo metodas – *dalinei uždara internetinė apklausa*. Siekiant įgyvendinti iškeltus uždavinius, e-sporto kultūros analizei pasirinkti turinio ir interviu metodai. Internetinės apklausos kūrimui buvo panaudota turinio analizės ir interviu metodais surinkta informacija, bei sporto edukologijos literatūra. Internetinė apklausa buvo panaudota siekiant iširti e-sporto žaidėjų raidą ir įgalinti sporto edukologijos panaudojimo galimybes. *Tyrimo dalyvių imtis* – tyrimas vykdytas nuo 2013 m. Balandžio iki 2015 m. rugsėjo, tyrime dalyvavo e-sporto žaidėjai (5 iš Lietuvos, 1 Didžioji Britanija), bei e-sporto forumų dalyviai (962 respondentai).

Atlikus tyrimą nustatyti kultūriniai ir ontologiniai sporto ir e-sporto panašumui vertybių, ritualų, herojų ir simboliu prasme (Hofstede, Trompenaars, Huizinga). Tyrimo rezultatai patvirtina jog e-sporto žaidėjai pereina raidos procesą, kurio etapuose susidaro skirtingi motyvai ir tikslai, nustatytos sritys kuriose galimas sporto edukologijos panaudojimas.

Darbą sudaro 3 skyriai: pirmasis skyrius pristato sporto ir e-sporto kultūras ir jų palyginimą, antrasis aptaria sporto edukologiją, trečiasis – aptaria tyrimo metodologiją metodus, tyrimo imtį ir etiką, analizuoja e-sporto kultūrą, pateikia empirinio tyrimo duomenis ir interpretacijas. Pateikiamos diskusijos, išvados ir rekomendacijos, priedai.

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INTRODUCTION

The ballistic expansion of today's computerisation, internet and virtual world, which is seeped into our everyday lives, has left us with an easy-access and vast variety communication means that stretch in every direction over a diversity of newfound cultures and communities. This expansion not only opened gates to innovative industry of computers but served as open flood gates to all kinds of new technology and professions and not coincidentally was the beginning of computer games. Ever since 1950s, when the first interactive computer game was created, the computer gaming industry has grown exponentially not only in terms of advanced technology and both graphical and gameplay capacities but in cultural and social aspects. At first it was merely an interactive means of basic computer entertainment, however now computer games have gained so much weight they span from casual entertainment for billions of people to serving as life-style or career choice for millions. Newzoo reports that in 2013 gaming has 1.231 billion gamers worldwide that generated an overall of 70.4 billion USD in net gains¹, which is 30 billion above the GDP of Lithuania in 2013². In today's world everyone is a gamer, independent of whether you are a *Facebook gamer* and prefer *Farmville* or *Candy Crush* or if you play MMO's³ for 14 hours a day. *E-sports* could be identified as a game genre and as a separate social phenomenon where technological advances allow a new form of sport-like culture to manifest. The strong competitive aspect of e-sports enables it to hold key values of sports, opening a new opportunity for computerized sportsmanship. Ever since 1997 *e-sports* has grown into an exponentially large community pooling over 100 million USD⁴ of tournament pool prizes over 50 most popular e-sports games up to year 2014. With over 2.4 billion hours of e-sports footage watched⁵ it rivals even some of the official sports exposure rates and rivals some of the professional sportsmen and sportswomen in income⁶. The area of e-sports has to offer an inclusive community as well as stage for gamers to realize themselves outside of the traditional forms of life-style, as well as denying the sub-culture stigma of gamers.

Research relevance. Even though researchers such as Lee (2007); Griffiths (2009), Shaw (2010), Zhong (2011), Taylor (2013) research game cultures and are involved in game studies as a social and cultural phenomenon, the amount of research performed on *e-sports* is miniscule. This might be due to several factors: the phenomenon is relatively new and is yet to receive enough attention (both positive

¹ <http://www.newzoo.com/infographics/global-games-market-report-infographics>

² <http://databank.worldbank.org/data/download/GDP.pdf>

³ Massive multiplayer online role-playing game

⁴ <http://www.esportsearnings.com/games>

⁵ Chen, 2014

⁶ Ibid.

and negative) from society; secondly the term *e-sports* in cultural and social aspects is still vague and ambiguous; thirdly due to the variety of genres in the gaming industry, some genres, such as MMORPG's, receive more attention from researchers as it provides materials (social / cultural / psychological/ developmental issues) to work with. However E-sports is gaining momentum in the academic world with scholars (Wagner (2006); Hutchins (2006); Rambusch (2007); Witkowski (2012) Taylor (2006, 2009, 2012, 2015)) performing various types of research, however unfortunately the research is mostly performed on basis of cultural studies, where educational aspects are left untouched. Thus I hope that this thesis will serve as means to fill at least a small portion of the gap of knowledge in the area of e-sports in the academic and research world.

The main emphasis that falls on computer games in general, independent of their genre, is the notion of play and leisure activity. Huizinga (1949) defines play as instinctive notion of pleasure seeking, the opposite of everything else we do in life for extrinsic motives. Playing is leisure activity in which we seek intrinsic pleasure, everything outside of it is work. However admittedly sports is also a form of play to some extent. Researchers (Guttman, 2012; Shirato, 2007) admit that there is an undeniable relation between play, games and sports. However as soon as the playing assumes the notion of competitiveness it becomes something else than playing, a notion closer to sports, which on the professional level is work. Such ontological discussions calls forth the idea that sports and e-sports, given their similar origins that stem from act of playing, can be very similar cultures. Trompenaars (1998) and Hofstede (2005) defines culture as an onion, where *values* are at the core and are expressed via *rituals* and *symbols*. Sports culture is no exception as it has its own socio-cultural system. Thus if sports follow the patterns of *play*, *game*, *sports* relations and have a cultural context, e-sports could also have the same characteristics.

The main issue with field of realization and line of work in e-sports is the vague development curve of the professional gamers and individuals who dedicate their lives to the culture, community and work. Even though the Asia-Pacific countries together with USA acknowledge the industry and life-style of professional gaming the majority of society still labels this area as *waste of time* or simply *games* as in children's play. In addition the *choice* to become a professional gamer involves not only simply engaging in the game, it stands for, as in choosing any career path, to dedicate an immense amount of time to the field of e-sports. The research reveals that e-sports holds a development curve of the players very similar to that of sports and where scholars do analyse the gameplay of amateur and professional players (Rambusch, 2007; Ferrari, 2013), the players themselves are researched only by several authors (Taylor, 2013). It is important to realize that the margins of the casual player, who supposedly plays for fun, and the professional e-sports player, who theoretically is working as an electronic athlete, have an

in-between in which development occurs from the later to the former. This development is a very individual process, untouched by the theories of education.

The age group most commonly involved in professional gaming is 16-26, this timeframe being the most crucial in an individuals' lives as it is when young individuals strive for education or early professional careers. As a result the individual is not only struggling with means to realize himself / herself in the gaming community whilst striving for the summit of competitive gaming but he is also facing the harsh decision of passing on the *traditional* means of securing his future (financially / professionally). Sports and education often go hand-in-hand in the development of young people as it is part of most education curriculums. From pre-school to university or college, physical education and sports are institutional instruments of education because they teach important values to students; help to maintain health and physical fitness; teach psychological, moral and social skills. (Tamošauskas, 2000; Laker, 2002; Vilkas, 2006; Lumpkin; 2010Freeman, 2012) However as long as e-sports is disregarded for mere computer games, following through with such educational alignment is impossible. Nevertheless were it to happen in the future, both the development for e-sports players and harmonization with mainstream education for them would be an easier process. Were e-sports in the future be on the same level of significance as sports, its adaptation in the physical education and sports education theory would result in the birth of a new object of research and practice in these fields of studies.

Research problem. The technological advancements provide us with a new phenomenon – e-sports, which is, not only by name, but by cultural structure very similar to modern sports. On top of it being only seldom researched, its cultural and educational aspects receive very little attention from scholars. At the centre of this vast industry lies the *player* whose development traits are a mystery from research standpoint. Thus is there a possibility that, based on the cultural similarities, a cross-disciplinary adaptation of sports education could be applied to the development of e-sports players?

Research object – application of sports education possibilities for e-sports players.

Research hypothesis:

H1: Traditional sports and e-sports have particular cultural similarities which stretch from individual player level to the socio-cultural phenomenon levels.

H2: Players in e-sports have their own goals and aims that go beyond the notion of pleasure and fun; and they can be differentiated according to these characteristics.

H3: E-sports players face difficulties in their gaming experience which can be addressed by sports education theory, practice and sports sciences.

Research aim. To investigate if, based on the cultural similarities of sports and e-sports, sports education could be applied to e-sports players.

Research objectives:

- 1) to analyse the main cultural aspects of sports and e-sports (empirical);
- 2) to compare the cultures of sports and e-sports based on the literature and empirical data providing theoretical basis of sports education adaptation in e-sports;
- 3) to characterize e-sports player development stages revealing a developmental curve;
- 4) to identify areas where sports education could be applied in the development of e-sports players.

Research methods and methodology. While performing the research for “Comparison of sports and e-sports culture: opening the gateway for sports educology” a quantitative research strategy was employed which is *structured, based on a scientifically drafted hypothesis (that is to be confirmed), by applying mathematical statistical analysis methods for arranging data – numbers* (Kardelis, 2007:276) which is supported by qualitative research methods. In this thesis a post-positivist notion is applied stating that the empirical data can attempt to reveal the reality fully however subjective notion that shape it, cannot be disregarded. Because quantitative research typically employs quantitative data collection methods, during this research an **online questionnaire** was employed for data collection. However as Berg (2009) suggested quantitative methods are often accompanied with qualitative methods, in order to better understand the culture of e-sports, **semi-structured interviews** with e-sports players and **content analysis** were employed as supportive methods which were carried out in social constructivist fashion where researcher observes the reality in its present state as a product of people engaged in the process of creating it, observing and generating meaning from it. (Cresswel, 2003:9)

The qualitative **content analysis** used in the research was concerned with a variety of types of internet based media concerning *e-sports* scene; observation of venues of *e-sports*; data collection on teams and different types of games and genres of games within the scene; *e-sports* team structure, infrastructure, participation ad dynamics. Such content analysis can be a valid source of information about the culture and allow to examine ideological mind-set, topics, symbols and similar phenomena. (Berg, 2009:243) In addition observation was carried out while watching e-sports matches, on YouTube and Twitch TV, observing Tournaments, observing Vodcasts, Streams, Interviews; reading forums and Reddit, as well as reading various journalistic articles; familiarizing with top teams in most popular games; participating in InfoShow LAN Party, Kaunas, 2014; etc.

During the research the main method of data collection was a quantitative online **semi-closed survey** where a mixture of closed, open and rating-scale questions (Tidikis, 2003; Bitinas, 2005; Leedy,

2005), that provide a variety of questions with more freedom for expressing opinion on very important questions. The semi-closed interview is useful because it provides us with a vast range of data that back up the closed question data with more qualitative examples and opinions. The ultimate goal of a survey is to learn about the large population by surveying a sample of that population thus capturing a moment in time of an ongoing activity, social phenomenon. (Leedy, 2005) The semi-closed survey helps us to take a sample of the e-sports players and reflect upon their struggles in developing and enjoying e-sports.

Research scope and organization.

Research participant scope – the research was carried out from 2013 April to 2015 September, the employed content analysis was carried out firstly online: via various media measure (Youtube, Twitch, E-sports forums, Reddit, Twitter, etc.), secondly by playing the most popular e-sports games (Starcraft2, DOTA2, League of Legends, CounterStrike: GO, Smite, Hearthstone) in order to grasp the environment the players were exposed to; thirdly attending the InfoShow LAN Party in Kaunas, on 17-19th of April, where e-sports amateur tournaments were hosted. During 2013, April to 2014 December, in total 6 semi-structured interviews were carried out with 4 players of an amateur e-sports team and two casters of e-sports. Half of the interviews were conducted via Skype, the other at the InfowShow LAN Party. The main method of data collection was an online survey using Google Forms, where using online survey and dissemination via e-sports forums and Reddit was performed. There were no gender or age restrictions, the survey was completely anonymous.

Research stages. The research was carried out on several stages. First of all content analysis was started in order to familiarize with the scene of e-sports; secondly review of sports literature was carried out; thirdly a hypothesis was formulated; then interviews were carried out, all of the interviews were recorder and are provided in the CD, one, as an example was transcribed and is available in Annex 4 online survey was carried out and a total of 962 respondents filled it out, the survey consisted of 71 questions in total, where two first parts were related to the demographic and player demographic information, the second was based on sports literature identifying difficulties that players ran into while playing on various levels and are addressed by sports education.

The collected data was analyzed and recommendations were provided.

Research novelty/significance. This master's thesis is important because it fills the gap in science theory and practice. The thesis reveals the researched object (development of e-sports players) as a new object of research for sports education, provides a basis for cultural comparison of sports and e-sports. It is important to mention that both cultural and educational studies of e-sports is a novelty topic in the world of academic research both in Lithuania and internationally. Because there are only seldom research done

on the cultural aspects of e-sports, the thesis provides empirical insight into the culture of e-sports and its players. This is the reason why this thesis is so broadly concerned with the cultures of sports and e-sports. The educational aspect of e-sports' players has never been researched, thus it suggests a new object of research for sports educology, as well as for cultural studies.

Thesis structure. This thesis consists of three (3) chapters: the first chapter is concerned with the definition of culture (Hofstede, Trompenaars), philosophy of sports (Huizinga, Guttman), sports culture (Shirato, Guttman), e-sports culture (Taylor, Witkowski) and comparison of the two cultures of sports and e-sports; the second chapter present the concepts of physical education and sports sciences, where objects and goals of the disciplines and the field themselves are discussed in the light of employability in e-sports; the third chapter is concerned with the overview of e-sports culture from empirical standpoint, quantitative data results are analyzed and interpreted, main player profiles are characterized, main areas of sports education intervention discussed. Conclusions, discussion and recommendations for education theoreticians and practitioners are provided. The thesis has 8 tables; 11 charts and 7 figures.

I. SPORTS AND E-SPORTS CULTURES: A HYPOTHETICAL CULTURAL RELATION

1.1. Theoretical Definition of Culture

Before we embark upon the cultural and philosophical aspects of the sports culture we need to establish the way we understand *culture* in this thesis. One might wonder why it is important to establish the concept, however the answer is not all that simple. We have to realize that culture in the disciplines we are embarking upon is quite enigmatic due to:

1. In the case of sports and body culture, even though it has a rich and ancient history the definition of sports culture differs greatly from the antic and modern times. The body cult, even though it left a distinct mark upon this field is not necessarily the main emphasis. (Guttman, 2012:19) This is extremely important to understand when resolving to assimilate e-sports to the culture of sports. The explanation of the concept of culture in particular the core-to-exterior relationship and how we see it will help us further on in understanding modern sports culture.

2. If we consider the culture of body and sports ambiguous than the culture of e-sports will fall into the category of esoteric. The sheer fact that it is a novelty even in our current world of technological expansion brings it to its own league. Culture in the areas of e-sports is not so easy to grasp. We have to reveal certain aspects of culture such as its processes of change and relativism to individuals, we have to account for the historic and institutional elements of e-sports' development.

Authors like Richard D. Lewis (1999), Geert Hofstede (2005), Milton J. Bennet (2013) and Alfons Trompenaars (1998), Clifford Geertz (1973) have studied culture in the context of intercultural communication. Subsequently this thesis is ground upon the substantiation of possible communication between the cultures of sports and e-sports by means of education based on the condition of cultural similarities, thus employing cultural theory of the scholars who are masters of intercultural communication is only reasonable. In his book *Riding the Waves of Culture*, Trompenaars observed that in his 20 years of experience in cultural workshops he has seldom received an identical explanation of culture from the participating groups. (Trompenaars, 1998: 21) Thus everyone has his/her own conscious or subconscious understanding of culture, the matter of fact is that cultures exist independent of our understanding in the process of our living. Interculturalism opens a path to us to link the two cultures and understand the similarities between them.

Both scholars Bennett and Hofstede agree that culture is a reproductive phenomenon. Hofstede indicated that every person belongs to a set of cultures simultaneously and that there are sets of layers we hold within each other (Hofstede, 2005:10) such as national, gender, social, etc. He also

discusses that even though the layers of cultures tend to change (mainly outer layers such as practices and symbols) core values (success, failure, belonging, etc.) or rituals hardly change during lifespan of a person and also its fundamentals in the levels of societies have hardly transformed in the last centuries (Ibid. 13). This is extremely important in terms of the environment we are researching in this thesis. The technological innovation that we live in these days has hastened the variation of our values, cultural diversity and beliefs (mainly due to the internet, social media and networks, globalization, etc.), one might even wonder that the Hofstede's outer layers of culture (symbols, practices, even Heroes) are in immensely greater supply for adaptation in the current expansion of communication. Trompenaars also draws our attention to the *onion* of culture, similarly to Hofstede pondering on the permeability of culture. He discussed that the outer layers in forms such manifestations as language, food, building houses, etc. are the *observable* ones, the expression of the *core* values. (Trompenaars, 1998:21-22) This expression and can only be carried out by communication inside or amongst cultures. Bennet also discusses that culture is maintained by human interaction. (Bennet, 2003:15) Understanding that the exterior of culture is an expression of the inner values and beliefs and their interchangeability is important for us in a way how we are going to observe e-sports' (object) players. These observations will enable us to make comparisons in the *core value* level between the two sports and e-sports cultures.

Now, what is culture in the definition? There are many opinions in the matter among the scholars, however they are somewhat of similar nature. For instance Hofstede and Clifford Geertz (1973) have a more or less similar view of the culture being a sort of a *social programming*. *Culture is best seen not as complexes of concrete behavior patterns-customs<...> but as a set of control mechanisms-plans <...> outside-the-skin control mechanisms.* (Geertz, 1973:44) What Geertz presupposes is that this set of rules (programming) is learned and followed and created by means of learning and repetition. If we were to explain Geertz's notion in the light of the core-exterior model of culture we would see that our behaviour, expression and reaction are pre-programmed by the core values instilled in us from the early stages of life. Similarly Hofstede discusses that culture is *software of the mind* where a person's behaviour is partly determined by his mental programs (Hofstede, 2005:3); *culture consist of the unwritten rules of the social game.* (Ibid. 4) The *programming* we are discussing here is by no means exclusively external, culture is by no means a biological being. Berger and Luckmann claimed that a *human being exist in the context of order, direction and stability* and that *social order is a creation of the human as a never-ending human creativity.* (Berger and Luckmann, 1967:72) However let's return to the definition of culture. Geertz affirmed that culture is often treated as a system of symbols (in the case of Trompenaars – artefacts) that each have their own relationship with each other and have an essential

structure or ideology that they are grounded upon. (Geertz, 1973:17) Thus we have to draw upon a conclusion that the *observable* culture is a system of symbols (food, music, language, etc.) that directly correlate to the underlying system of values. These symbols are not observed simply *a priori* but often require empirical observation and comparison. Trompenaars claimed that culture can be observed by comparing it to other cultures and seeking out differences in meaning, because the culture we observe is created by human interaction. (Trompenaars, 1998:24) He suggests that these differences can be clearly observed by *the arrangement of solutions it <the culture> selects for each set of problem situation*. (Ibid. 27) Only by communicating these expressions of culture we are able to distinguish elements that differ in the exterior and the interiors or cultures.

In his book *Culture and Organizations* Hofstede contemplated that culture is *like a phoenix* burning away and rising again due to its core never trembling. (Hofstede, 2005:36) The expression of the core, the external products of our interaction within the culture are always changing, still influenced by the values we hold. It is particularly important to us when we want to find links between sports and e-sports cultures. The player of e-sports might have the same core values as an athlete however his environment is significantly different. There exists, in the general public that sports and computer sports have nothing in common and are even the opposites of the spectrum. However cultural environment of e-sports and sports might actually have the same core values and players acting within the two fields might also be acting based on the latter. The expression, the outer layers of the onion, the publically observable reality is what contrasts them, resulting in a negative attitude and writing-off of the fields and the player. Thus in the light of this thesis we will aim to use the concepts provided above in attempting to distinguish which of the core and external cultural systems are similar and different in sports and e-sports, attempt to understand them and provide grounds to the empirical part of the thesis.

1.2. The Cultural aspects of Sports: a Theoretical Insight

Before we begin exploring sports culture it would be wise to distinguish between the definitions of sports culture and the Lithuanian term *kūno kultūra* (Eng. Body culture else know and Physical Education). Even though physical education is inevitably indispensable from sports the definition in the Lithuanian language does not impose that is a subject of cultural studies in its essence. In this thesis we will embark upon the Physical Education in the second chapter where educational traits of sports will be discussed.

In this overview of sports culture certain explanation of the description of work is required. We will approach the culture of sports in the relation suggested by Trompenaars and Hofstede

in way of core to external cultural manifestations. We will account that manifestations are the products of sport such as: rules, sports media, spectatorship, ethics, social weight of the athletes, etc. Whereas the core of the sports culture will be regarded as values, excellence, discipline, competitiveness, etc. The relations between these two groups have been discussed in the previous chapter.

Scholars such as Johan Huizinga (1949); Allen Guttman (2012); David Rowe (2004); Tony Shirato (2007), Roger Caillois (2001), Saulius Šukys (2005) have researched sports culture in various ontological, structural and social aspects. Understanding sports culture lies in the two major blocks: 1) what is sports and how do we define it in contrast to playing and games; 2) what are the main manifestations of sports culture in the socio-cultural field.

Play, games and sports

Often, a remark is made when one discusses e-sports is that it is just a *game* and that one is merely playing the game. I, being an e-sports enthusiast, usually reply with an argument that the act playing games is the basis of sports. Take the Olympic Games for instance, it has the word ‘game’ in the title. Isn’t it quite logical that all sports have not always been sports but rather games to play for fun? Well when it comes to cultural theory this concept is rather ambiguous.

If the author of this thesis were to attempt and define *play* in the most simple and innocent manner I would choose an example from my childhood where when I was of 5-6 years of age. I would often contest myself against the universe in a simple manner: *If I the number of tiles when I get back from school to my home will be greater than 500 something will happen...* In a sense it is what play is – a non-profitable, no-gain, waste of time.

Johan Huizinga in his book *Homo Ludens* discusses the definitions of play, game and sports in the relational sense. For him the term *play* in the sense is instinctive. (Huizinga, 1949:1) Play can be regarded as a psychological reflex that is regarded as a *discharge of energy* or *need for relaxation* (Ibid. 2) Play in the definition is different from what we call playing sports, play in this sense is uncharacteristic of any meaning beyond the instinctive pleasure seeking. Guttman remarks that *Play is autotelic. Pleasure is in the doing and not in what has been done.* (Guttman, 2012:13) The “what has been done” in this sense is providing no value. What the author of *From Ritual to Record: The Nature of Modern Sports* means is that play has no lasting value. However how can play not be attributed to sports in the direct action of playing sports? Well what Huizinga suggests is that *play* is the complete opposite of everything else we do in life. He differentiates it from everything we do in “ordinary life”. (Huizinga,

1949:4) Its instinctive notion of pleasure seeking can be compared to Freud's *Id* as opposed to the *ego*⁷, where the former is seeking satisfaction disregarding the social construct of life in the current system. According to Huizinga play takes up its own cultural and social function in a person's life. (Ibid, 10) However the comparison the famous *Id* might be brought even further, what Huizinga claims is that from *play*, very much like *Id*, it *gives rise to an infinite number of socio-cultural manifestations and transformations* (Shirato, 2007:17) it is remarked that play in the direct sense is the opposite of 'serious' however as we see in his work is that play, from it being the essence of culture and social interaction and every expression of culture for that matter, can be serious. For instance culture does not attribute itself to play via pleasure however *relation of play to culture<...> we might call the higher forms of play*. (Huizinga, 1949:8) What we draw from this is that even though in the context of sports play is indistinguishable from the culture of sports (because on the cultural level it is being played from the core to the exterior of the culture) the act of *playing* sports games is *play is of and for itself, rather than a means to an end* (Shirato, 2007:8). It becomes rather vague how the concept of play intertwines with sport, if play is the basis of any culture in the broad sense, what is the variance of *play* and playing sports? Guttmann employs an example of playing tennis, he claims that he plays tennis because he loves tennis and his wife (with whom he plays) (Guttmann, 2012:12) however Ričardas Berankis⁸ might also love tennis, however his motives are quite of different nature. Berankis, supposedly, plays tennis for many reasons including the pleasure, excitement and competition, however his ulterior motive as a professional player is without doubt is his income. Similarly Caillois affirms that freedom is key component of playing, one has the will to leave whenever he pleases. (Caillois, 2001:6), according to him it is essentially unproductive (Ibid. 10.) *It (play) is an activity connected with no material interest, and no profit can be gained by it*. (Huizinga, 1949:13) Nevertheless the core of the motivation is – play. Playing sports might be carried out by virtually everyone, from children in the yard kicking a ball around with elusive perception of the official rules of football or Beckham, however in the case of Beckham, it is – work, nevertheless supposedly driven by the joy play provides him. Huizingas influential work on the ontology of play provides us with a distinct dichotomy between what we see as play and how different yet related it might be to sports. This comparison is important to us by means of having a distinction and at the same time a philosophical *core* that will be employed in the later chapters to compare sports and e-sports.

⁷ Zigmundas Froidas, *Anapus malonumo principo*, (Vertė: Antanas Gailius), Vilnius, Vyturys, 1999.

⁸ <http://www.atpworldtour.com/en/players/ricardas-berankis/be90/overview>

While trying to grasp the meaning of sports in the cultural context we are bound to discuss games in the scientific sense. Schirato observed that on the cultural level sports are derived from play and games, which Guttmann identified as organized play (Guttmann, 2012:12), just on a more serious note (Schirato, 2007:10). Roger Caillois in his work *Man, Play and Games* (2001) provides us with a clearly set out classification of games. He in the book, even though criticizes Huizinga's view of the relationship between play and games he also attributes play to the freedom and wastefulness while attributing sports to work. (Caillois, 2001:8) What Caillois does and what is important for us is that he attributes play to games. What he does so masterfully is that he describes various types of games in the middle layer of *play* and sports (as sports is work). Even though he still separates the act of play from any occupation he manages to provide certain structure to it by introducing the game as a competition. Again contrary to sports he describes game as having *no other but an intrinsic meaning*. (Ibid. 7) Competition is internal, the desire to overcome your opponent within a *fixed space and for this given time*<...>*rules that must be accepted as such and that govern the correct playing of the game*. (Ibid. 7) Rules are accepted by the player internally, they are bound by these rules as though it is a fact of life, however they are in the real sense imaginary. Caillois claims that it is natural for the onlooker to feel the game and its rules are make-believe, however to the player it is his current reality. Thus the author discusses a list of attributes play must have of which we take note of two important notions for us: *Unproductive: except for the exchange of property among the players, ending in a situation identical to that prevailing at the beginning of the game* and *Governed by rules:<...> for the moment establish new legislation*. (Ibid. 10) The game starts and ends within its boundaries without any worldly material gain, except the exchange (which brings playing poker into the domain of games) amongst players. Rules are necessary in a game for several reasons – firstly they unlock the equality dimension amongst the contestants, secondly the *win* part becomes more satisfactory when both sides of the competition are bound by the same criteria.

In the classification of games, one of the most relevant groups of games to us which is close to the definition of sports according to Caillois is *Agon* – according to the author - incorporates games like football, chess or billiards, etc. He distinguishes this group from others via stressing that they are *competitive*<...> *(with) equality of chances is artificially created*. (Caillois, 2001:14) He explains that in this type of games, that we can account as sports, there are usually equal opportunities between opponents (explaining the necessity of divisions) and that the purpose of rivalry is that of seeking out equal opponents. Hence a competitive game, not bound by chance alone, could be identified as contest and as Guttmann defines sports as “*playful*” *physical contests*<...> *include an important measure of*

physical as well as intellectual skill. (Guttman, 2012:18) In this light we shall account sports as a subcategory of game in form of contest, where the former is a subcategory of play.

We have established for the most part the dimensions of play and games in reference to sports, however we have not touched upon the notion of sports in its entirety. First of all one has to understand that the discussion earlier about the intricate relationship between play, games and sports provide us with the fundamental understanding of sports as a whole phenomenon. However the way sports are played, seen and rendered meaning in the contemporary world is a different story. Taking into account the socio-political context in which modern sports acts within and which have been described by Shirato and Guttman one has to face the fact that sports carries weight that is far greater than the simple enjoyment of play or the test of determination.

Modern sports

Before we go in to the modern sports and its both fundamental existing values and means of expression of cultural aspects. We should dedicate a paragraph the history of modern sports. There are seven features, according to Allen Guttman that separate modern sports from the way they were viewed in the past. These are: *secularism; equality of opportunity to compete and in the conditions of competition; specialization of roles; rationalization; bureaucratic organization; quantification; the quest for records.* (Guttman, 2012:33)

Modern sports differ from the old-sports in the sense that due to various factors in the contemporary society the necessity to attribute sports to the unearthly domain has been rendered unnecessary. What Guttman call equality is the fact that everyone should have the opportunity to compete and that the competition should be relatively on equal terms. (Guttman, 2012:44) From this notion actually stems one of the key values of sports as we will see later on. Moreover – an athlete has be only an athlete, there is no room for other vocations to an athlete. (Ibid. 62) The amount of effort an athlete has to put-in in order to be competitive, for instance you can refer to the REST-Q⁹ to observe the amount of variables are included in the simple monitoring of rest among the athletes. The rationalization that Guttman refers to is somewhat linked to Caillois's rules where rules are a must to any game. This has the notion to, again, one of the core values of sports – equality. However Guttman refers to rules as opposed to rules for sports event carried out in tribes of Apaches (Ibid.) that were mainly ground upon superstitious variables and explains how in order for modern sports to have equality they had to have rationalize rules. We will touch upon that in chapter on e-sports culture explaining the omnipotence of

⁹ REST-Q Recovery Stress Questionnaire

rules there. In the centre of the immense pool of media, internet, league, fan, national and international attention most sports branches achieve stands at every modern sport a bureaucratic figure that manages everything mentioned above and below in this paragraph. Even though according to Guttman the ancient Greeks and Romans did have a bureaucratic entity of sorts it was miniscule in comparison to today's management bodies such as FIFA, FIBA, NBA, etc. During the 2015 FINA World Championships Julia Efimova beat Rūta Meilutytė by 0.14th of a second¹⁰ which kind of illustrates the obsession with numbers and calculation significance in the modern sports. Today every kind of sport has their own numeric quantification. However what significance does a record holding score on the score board mean in today's sports? As Guttman explains it has a marvellous *abstraction that permits competition not only among those gathered together<...> but also among them and others distant in time and space.* (Ibid. 79.) Sports globalization and technological breakthrough enables not only Guttman's named ability gleam through time and space but it undoubtedly drives so many athletes to aim for that historic moment of breaking a record.

Modern sports differ greatly from sports the way they were seen and carried out in the past. Modern sports, the way we see them now only have been around for almost one or two centuries. (Schirato, 2007:34) And with the increasing relevance of technologic expansion on all levels of society sports have been and are still being viewed differently. Even though some of the key elements and values of sports have not changed in the past hundred years, their significance and function in society are always changing.

Sports Values

In this chapter we will be analysing modern sports in such a structure that Hofstede describes culture as an onion (Figure 1.).

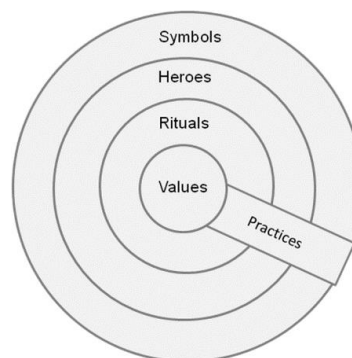


Figure 1. Hofstede's cultural onion (Hofstede, 2005:7)

¹⁰ <https://www.swimmingworldmagazine.com/news/yuliya-efimova-ruta-meilutyte-set-up-epic-battle-in-100-breast-semis-at-2015-fina-world-championships/>

At first we would like to overview certain values proclaimed in the sports domain and attempt to systemize them and label them in order to attempt to do the same to the “anticipatory” values of e-sports. To do this we will employ Martínková’s work on sports values and her distribution of them into extrinsic and intrinsic. (Martínková, 2015)

Taylor admits that values that are proclaimed by sports often correspond to those positive values of the society in general. (Taylor, 2015:8) Naturally when we observe athletes being given statuses of heroes they usually are socially positive or even neutral and whenever a popular athlete is suspected of drug abuse or maybe criminal activity (such as O.J. Simpson or the Lavrinovičiai brothers) they get very harsh treatment by the public because an athlete should be a gleaming example of an exemplary citizen. According Isidori & Reid we can attribute three types of sports values: Pure values; anti-values and mixed-values. (Isidori, 2015:8) According to her, pure values are purely positive values such as *health and wellbeing, playfulness, peace, socialization, social integration, friendship, creativity, self-improvement, active participation, self-control, fair-play, etc.* (Ibid.) The anti-values according to the author are the exact antithesis of the ones mentioned. Whereas mixed values and what is interesting, according to her are constantly on the brink of becoming negative values. For instance competitiveness as value is a pure value, however if the measures taken to achieve the level of competitiveness is unfair it drops into the domain of anti-values. (Ibid. 5) The values provided by Isidori can be seen as a very general scope of values cherished by sports, nevertheless they incorporate the basic understanding of what an athlete looks like in the eyes of the society and how he should see himself.

Values classification according to Martínková fall into two categories: intrinsic and extrinsic. Extrinsic values are values that are not necessarily developed for interior motives and are greatly influenced by exterior motives. Success in sport is one of the key elements that drive athletes to excellence. Whether you are playing street-basketball or performing in the 100 meter semi-finals at the Olympic Games. It is the most fundamental outcome of the competitions – you either win or lose. It provides fuel to the culture of winners and losers, celebrities and fortune. (Martínková, 2013:32) US colleges in 2013 have given out \$3 billion in scholarships¹¹ which is a direct result of one of the key values on sports at the professional levels – income. Income can be brought in by good performance or sponsors, TV, prize money, etc. (Ibid. 33) Professional players only recently gained such huge social and economic status. (Schirato, 2007:17) Today one cannot imagine sports without broadcasts, commenters, mascots, cheerleaders and huge crowds of spectators. Entertainment is described one of the extrinsic values of Martínková, she described the athlete serving two entrainment functions – one is entertaining

¹¹ <http://www.scholarshipstats.com/average-per-athlete.html>

yourself within the game and second – entertaining the spectator. (Martínková, 2013:34) As discussed earlier rules are one of the fundamental features of sports. Rules serve the means to develop a sense of authority and willing obedience. (Ibid. 36) In addition according to Schirato participation in sports also sociocultural training. (Schirato, 2007:17) What Martínková refers to socialisation, one of the extrinsic sports values identified by the author. (Martínková, 2013:36) However we will discuss the developmental features of sports in the 3rd section. Enhancement of daily life in Martínková's work (Ibid. 38) seem to correspond to Isidori's notion of self-improvement and participation and obvious health improvement. (Isidori, 2015:9)

Similarly Martínková noticed that intrinsic values of active participation can be summarized into the following list: *excitement, challenge, joy, active engagement, striving and improving, the exercise of skills, satisfaction in successful performance, playing and creating, actively expressing oneself, a sense of community, and kinaesthetic pleasures such as rhythm, etc.* (Martínková, 2013:60)

Values that an athlete develops for himself during the process of playing or training. However Schminke observed that individual values tend to change during time (Schminke, 2014:734) thus when he or she finds certain meaningfulness in his actions or the community he belongs to certain internal values might form. Martínková found that another group of intrinsic values of sport exists – self-knowledge. Self-knowledge is deeply related to understanding of one's limit and need for improvement. (Martínková, 2013:60)

In this study we find that these are the major values promoted by today's sports. These values are both the underlying driving mechanism for athletes as well as why it draws such significance to society. Sports are even labelled a *microcosm of society* (Boxill: 2003) since these values represent the admirable points of social values. However the key aspect to keep in mind that through these values that sportsmanship acquires importance to develop, enhance and achieve victory.

Sports Rituals

Even though according to Guttmann the Jicarilla Apaches linked sports to solar symbolism in form of a ritual. (Guttmann, 2012:31) Today's rituals in modern sports have little to do with sacrificial or lunar peculiarities of the ancient tribes. Nowadays rituals tend to hold a different forms such as handshakes, anthems, uniforms, etc. however do they have any particular meaning? Or are they just meaningless symbols of repetition? According to Goodger, they as arbitrary rituals *remind group members of their common, specific identity and values, and of the boundary between themselves and outsiders.*

(Goodger, 1986:220) Here we observe how the significance of rules stressed earlier is creating a sense of diversity and creating a separate reality to the athlete.

According to Klapp today's sports rituals follow the following patterns: *repetition, regularity, emotionality, drama and symbolism*. (Durmitriu, 2014:503) There are many ways to explain these dimensions of ritual in modern sports. For instance a symbolic pre-game ritual illustrated by Guttmann where the players and the staff are spending the night together before a match. (Guttmann, 2003:33) In addition wearing the same t-shirt for the fifth game, according to Schippers, is also an invisible and explanatory causal link from action to outcome. (Schippers, 2006:2534) The repetition that Klapp is referring to is the cyclic phenomenon of the games that are held on local, national and international levels. Durmitriu explains that the last three links in the list are focusing on the experience and social significance. (Durmitriu, 2014:503)

Thus what are we regarding ritual in the context of this thesis? Rituals are: the repetition and cyclic characteristic of games, tournaments, matches, etc. Together with the clothing; physical and social rituals, both internal and external (handshakes, anthems, salutations, compliment team hype-ups, etc.); superstitious rituals (the underwear, superstitious eating/acting habits, personal tokens, etc.); external dramatic rituals of performing at his best and providing himself as an exemplary athlete, sharing and believing in values of fair-play, honesty, modesty, etc. (Ibid. 505) All in all sports rituals serve the role of maintaining the sport social ethos or having a symbolic superstitious belief system. The ritual system, even though we have discussed it very briefly follows the bottom-up union of Hofstede. The rituals are for showcasing and practicing the values as well as communicating theme to the wider socio cultural dimension.

Status of Hero in Sports

According to Hofstede *Heroes* in the cultural context are *persons, alive or dead, real or imaginary<...>prized in a culture*. (Hofstede, 2005:7) If we considered rituals of sports to be an expression of the values that sports have in the eyes of the society, then athletes are the carriers of that fire. They are the stars and the reason why sports exist the way they do. They do the work, do the training, achieve from zero to hero, they are the ones who break the records, who win the trophies, the whole system and the infrastructure of any team is in order to bring them and values, nationality and representation to the spotlight.

Authors stress the importance of mass media and internet in the contemporary heroism of athletes. Smart noted that sports celebrities are becoming merchandise and are consumed by the

consumer as any other goods (Hernandez, 2011:10) In today's capitalist and consumer world the hero is the one who earns the most (i.e. Cristiano Ronaldo), the best player be it NBA, Premiere League or EuroBasket, they all are super-rich superstars. Back in the industrial age in USA heroes were being artificially crafted by journalists in newspapers by means of biographies, articles and photos. (Roessner, 2009:39-46) Nowadays a superstar athlete has its own managers, writers, photographers, agents, hair and make-up specialist, etc. They are involved in mass media campaigns and deals with sponsors. For instance Tiger Woods earned 50 million dollars from deals with Nike, Rolex and Upper Deck during the year 2014-2015.¹²

However do athletes that are worshiped today and are indeed superstar of the sports world cherish the same ideology and values that are the cornerstone of sports as a culture? Joshua Shuart in his study defined the hero of sports in the following characteristics:

HERO	distinguished person, admired for their ability, bravery or noble qualities and worthy of emulation
CELEBRITY	famous person
SPORTS HERO	status given to one who succeeds in sport and reaffirms the American value structure
SPORTS ANTI-HERO	athlete who does not affirm the predominant value system in American society
CELEBRITY ENDORSER	well-known person used in advertisements, whose function it is to sell products

(Figure 2. Sports hero characteristics, Shuart, 2007:128)

The characteristic provided by Stuart perfectly illustrates the sports hero of today's sports: ability bravery, fame are the qualities of a hero. However we observe that the line between being a hero and the anti-hero, very much as we have seen in the value distribution of Isidori, is value endorsement. Thus we again confirm the direct linkage within Hofstede's onion.

Symbols of Sports

Symbols according to Hofstede are the most interchangeable and at the same time the most visible characteristics of a culture. (Hofstede, 2005:7) Mostly everything that is visible about sports fall into the category of symbols: landmarks, team logos, fans and their attributes, anthems, team foods, fashion, and so on and so forth. There is, however no particular obligation to identify them in this current

¹² <http://www.adweek.com/news/advertising-branding/tiger-woods-earns-83-times-more-money-endorsing-things-playing-golf-165649>

chapter as they will be identified in cohesion with the e-sports exterior cultural traits in order to provide contrast.

It is evident that the cultural characteristics of sports are bend accordingly to the classification of cultural theory and definitions. In additions it can be explained by employing the theory suggested by Huizinga, explaining the philosophical notion and meaning behind what drives sports and at what moment do we differentiate it from the act of playing. Sports culture today holds the characteristics that are quite new and it keeps on evolving accordingly to social and technological change, on the other hand it is an inseparable element of society. Nevertheless, is the sports world ready to accept novelties as it was one or two hundred years ago? This question is still unsolved, however the next candidate, without doubt is e-sports.

1.3. Electronic Sports as a New Expanding Culture

The fuel that allowed the gaming industry to burst to such extent is the invention of internet and the accessibility it provided to gamers around the world. The direct result from having an opportunity to simply connect brought about the creation of *online gaming*, boosted the gaming industry due to accessibility capabilities and helped gamers to gather into one immense community of gaming world as it is now. The *NPD Online Gaming Report* reported that 62% of all gamers report playing games online¹³, which attests to the claim of internet importance in the gaming industry. However in this thesis I would like to differentiate that here *online gaming* is used in the sense of multi-player type games not *only online access* single player ones as the competitive gaming scene is almost entirely online based.

The concurrent aspect of online and LAN¹⁴ gaming is the competitiveness. Such as in sports competitiveness, it exists in virtual games as well. Thus so as sports originated from games (i.e. the Olympic Games) so did *e-sports* originate from online games, both having the key element – competitiveness. Ever since 1997 *e-sports* has grown into an exponentially large community pooling over 100 million USD¹⁵ of tournament pool prizes over 50 most popular e-sports games up to year 2014. With *2.4 billion Hours of e-sports video watched last year, as millions around the world watched live streams*¹⁶it rivals even some of the official sports exposure rates and rivals some of the sportsmen and sportswomen with salaries of *\$1.1 million Earnings since 2011 of Chen Zhihao of the Chinese team*

¹³ <http://www.edge-online.com/news/new-npd-online-gaming-report/>

¹⁴ Local Area Network

¹⁵ <http://www.esportsearnings.com/games>

¹⁶ Chen, 2014

*Newbee*¹⁷ of DOTA2¹⁸. The area of e-sports has to offer an inclusive community as well as stage for gamers to realize themselves out of the traditional forms of life-style.

One might wonder while reading this chapter on why is the description of video game culture and e-sports is far more detailed and extensive in the theoretical and empirical parts of the thesis. The answer to that question lies in the fact that the object of this thesis is indeed the “gamers” or the e-sports players and thus our main focus is this cultural field. Other than that the necessity expand upon this field is crucial because the methodology employed in this thesis required an exclusive amount of knowledge about the field of e-sports and it will serve the reader to fully grasp the cultural and social sides of the matter. Moreover, sports in this thesis, aside from its obvious fascination and cultural imprint on society throughout the ages, is not the focus of attention but rather means to affirm the status of e-sports as „in line“ with sports in terms of cultural attributes and laying grounds to the employability of sports education theory.

It is required, in order to continue, to reflect upon the method of analysis we are going to employ in the following section. In the previous chapters we discussed the cultural characteristics of sports. However one should keep in mind that sports theory (from philosophical, cultural, and educational fields) is vast and relatively old. Thus the philosophical and ontological structure insights are available in the literature. However this is not the case for e-sports. Thus in order to understand and grasp the culture of e-sports we are going to employ a top-bottom way of analysing separate segments of e-sports culture. Again we a going to employ Hofstede’s cultural *Onion* however we are going to start form the exterior and move down to the *core values*. The core values as they have never been isolated will be written up based on the findings.

Video Game Culture

Before we begin with the description of e-sports culture, it is obligatory to expand upon the culture of video games and its origins. Since we have established what is the ontology behind sports and games in general we should dedicate a small paragraph to the video game culture as a larger part of the tree that e-sports branches off of. It is also important in order to distinguish e-sports from other video games.

Ever since 1950s, when the first interactive computer game was created¹⁹, the computer gaming industry has grown exponentially not only in terms of advanced technology and both graphical

¹⁷ Ibid.

¹⁸ Dota 2 is a 2013 multiplayer online battle arena video game and the stand-alone sequel to the Defense of the Ancients

¹⁹ <http://www.infoplease.com/spot/gamestimeline1.html>

and gameplay capacities but in cultural and social aspects. And back then it was merely an interactive means for entertainment, however now computer games have gained so much weight they span from casual entertainment for billions of people to serving as life-style or career choice for millions.

There are 72,698 books when you enter 'video games' into the search bar of www.scribd.com²⁰, which is all in all impressive. The technological expansion of our lives and almost 50 years of exposure to video games have left a distinct mark on the former young and the young generation all over the world. Every 90^s kid has his own version of his experience of gaming, bet it his first Commodore²¹ in USA or, in the authors case, Super Nintendo Entertainment System²², we all been there. Today we have a vast variety of choices in consoles, PCs, games and media and one might say a sense of culture. However in word of Adrienne Shaw *one is not born a gamer, one becomes one*. (Shaw, 2013²³) In other words, the culture of video games is not for everyone to grasp and to cherish.

Shaw argues that the type of gamer as we have understood them in the past decades have shifted in many ways. She questions the notion of how the *gamer* has shifted from that of a sub-culture into the mainstream. (Shaw, 2010:408-409) Which brings our attention to today's gamer, who are they? Stay at home moms, businessmen who blow off steam with a match of CoD:MW ²⁴after a long day, a teenage boy who spends his afterschool time in the mystical world of Tera²⁵. Many of us are engaged in video games on many levels. However this is what game culture is?

Andy Robertson at TEDxExeter²⁶ argues that video games are more than entertainment, he argues that they fill one's life as much as books, movies or any type of deeper cultural activity. Mark Griffiths, one of the most prominent scholar of video game culture and social aspects provides an extensive list of educational features of video games to children. (Griffiths, 2012:47-48) T.L. Taylor in his wonderful book on his experience in Ever Quest 2, analysing the in-game community and the virtual world provides us with insight on how closed virtual communities bring meaning to virtual reality. According to Jenkins Video game culture is about interacting with media, participating, and convergence (Shaw, 2010:412). Games as well as gamers are constantly evolving as the technology keeps pacing ahead, the possibilities of internet seem to be limitless in the future. According to D. Lee *the broader*

²⁰ <https://www.scribd.com/search-books?query=video+games>

²¹ <http://www.theguardian.com/technology/gamesblog/2014/feb/04/the-six-best-retro-consoles-for-modern-gamers>

²² Ibid.

²³ <http://adanewmedia.org/2013/06/issue2-shaw/>

²⁴ <http://www.ign.com/games/call-of-duty-4-modern-warfare/xbox-360-902590>

²⁵ <http://tera.enmasse.com/>

²⁶ <https://www.youtube.com/watch?v=RTJUJ44kew>

populace is however only starting to realize that gaming itself is not just for trivial fun but has become another channel of human relationships, other words, part of people's actual lives. (Jin, 2009:39)

The author would want to refrain from an extensive analysis of the video game culture and leave it to other scholars that will perhaps attempt to analyse this vast and immensely interesting field of cultural studies. To this thesis, the explanation of existence of a larger cultural body is sufficient to enable a continued discussion of e-sports.

On the Scientific Relevance of E-sports

E-sports is a relatively new topic in the academic field as well as it is an innovative phenomenon in the wider socio-cultural domain. Nevertheless it has been researched in a variety of research fields (Michael G. Wagner (2006); Brett Hutchins (2006); Jana Rambusch (2007); T. L. Taylor (2009); J Thiborg (2009); Laxmisha Rai (2009); Donghun Lee (2011); Emma Witkowski (2012); Simon Ferrari (2013); Emiliano Santarnecki (2013); Elliot Hewitt (2014); Marcel Martoncik (2015); and others). However, e-sports has never been extensively researched as a cultural field or in education fields (aside from some solitary works). Hewitt argues on the attribution of e-sports to sports questioning the term of physical activity and stressing the relevance of media culture and the importance it is gaining in the spectatorship area. (Hewitt, 2014:81-82) Extensive research is presented by Rambusch on the gameplay features and mechanics of Counter-Strike (Rambusch, 2007). Similarly to scholars who research MMORPGs²⁷ such as Zhong (2011), Lee (2007) who argue on the social capital online games provide and maintain, research has been performed by scholars on e-sports attempted to identify such traits as such as *teamwork, problem solving and quick decision-making* to be supporting evidence of effective communication in e-sports (Khoo, 2012); similarly Trepte revealed that online activities transfer into offline dimensions as form of eye-to-eye communication, offline bonding. (Trepte, 2011) Realising that e-sports are an immensely growing socio-cultural field of new media it would be detrimental to neglect it as a fruitful research field to understanding contemporary media-culture. Authors like Wagner attempted to lay the foundation for academic treatment to e-sports, provide clear definitions and propose possible fields of research in this area. (Wagner, 2006:1-3) Scholars Thiborg, Ferrari and Lee argue on the relations of e-sports to sports, none however attempted to do so on the cultural level. (Thiborg, 2009; Ferrari, 2013; Lee, 2011) However we will attempt to define the relation between the two disciplines later on. Magnificent work has been done by Martoncik on defining e-sports player profiles and in-game systems as well as motivation to which we will be referring in the upcoming sections. (Martoncik, 2015)

²⁷ <http://www.wisegeek.com/what-is-a-mmorpg.htm>

E-sports has been defined by scholars by various definitions, some identify it as *competitive gaming* (Thiborg, 2009:1) which is undoubtedly relevant when establishing connections with sports culture.

Even though e-sports is a novelty in both the general public and the scientific world, researchers are gaining interest in this field. Representatives from various fields perform research on this area, however it can be still regarded as miniscule. Nevertheless as e-sports is gaining momentum in general and is becoming a more acceptable culture, it is sure to gain interest from other fields of studies as well.

Defining E-Sports as a Culture

In chapter III section 3.1. we will discuss the methods employed in this thesis such as the online document and media analysis, observation and interviews with e-sports players. The data collected via these measures will be used in exploring e-sports both in the theoretical and the empirical parts.

While exploring what e-sports is Jean-Christophe Arnaud explained the definition of this field by simply mashing two words together ‘sports’ and ‘electronic’. (Arnaud, 2010:10) However it is not as simple as that. Even though it would appear to be quite tangible, e-sports is not virtualization of sports as in the case of a study performed by Seeger (2012). What makes e-sports have the word sports in them has nothing to do with digital adaptation of sports. Even though there are major titles²⁸ that are indeed classified as sports in the sense that we consider e-sports, for instance FIFA which according to www.esportsearnings.com stands in the 17th spot on the largest income from tournaments in e-sports, we will be focused on the major e-sports games which frankly on the aesthetic and functional side (on the first glance) have nothing to do with sports as we are used to consider them. Here we provide you with the top 15 most gain grossing e-sports titles in 2015:

No.	Name	Prize Money	Amount of players	Amount of tournaments
1.	Dota 2	\$25,283,809	785 Players	157 Tournaments
2.	League of Legends	\$4,577,629	1544 Players	224 Tournaments
3.	Counter-Strike: Global Offensive	\$3,700,575	1946 Players	408 Tournaments
4.	Smite	\$3,013,072	139 Players	27 Tournaments
5.	Call of Duty: Advanced Warfare	\$2,111,792	531 Players	222 Tournaments
6.	StarCraft II	\$2,111,143	400 Players	443 Tournaments
7.	Hearthstone: Heroes of WarCraft	\$1,405,855	432 Players	179 Tournaments

²⁸ <https://worldgaming.com/#!/play/>

8.	Heroes of the Storm	\$1,149,977	518 Players	171 Tournaments
9.	World of Tanks	\$392,151	232 Players	12 Tournaments
10.	Halo 2 Anniversary	\$378,667	77 Players	13 Tournaments
11.	Heroes of Newerth	\$263,661	118 Players	14 Tournaments
12.	Super Smash Bros. Melee	\$223,851	231 Players	134 Tournaments
13.	Mortal Kombat X	\$218,813	54 Players	32 Tournaments
14.	Ultra Street Fighter IV	\$179,185	98 Players	60 Tournaments
15.	Super Smash Bros. for Wii U	\$148,629	214 Players	99 Tournaments

Table 1. E-sports Stats For 2015²⁹

All of the titles above, aside from Counter-Strike: Global Offensive and Call of Duty: Advanced Warfare are all fantasy-theme-based games.

As we have discussed in the sports section of the thesis one of the key elements of modern sports culture is bureaucratization (Guttmann, 2003:70) in other words, organization. In e-sports the overarching organizational bodies could be identified as Electronic Sports League³⁰ that both have North American and European branches, also the first e-sports office in Europe – ESL One³¹ based in Germany, Cologne; Electronic Sports World Cup³²; World Cyber Games³³ and the ESL Gaming Network³⁴. These major e-sports organizations carry out the majority of world-class tournaments, media coverage and supervision in all major e-sports games. However in addition, each game that is classified as e-sports have their own official webpages, unofficial fan-based internet platforms and networks such as: Mobafire Network³⁵; LiquidPedia³⁶ (that base their website on a Wiki model); GosuGamers³⁷ (which is also an online betting platform); various Reddit³⁸ boards dedicated to e-sports and each individual game, strategies and communities. On top of that we have numerous individual internet platforms dedicated to each of the games, however to list them all here would be too extensive. One should keep in mind that these platforms do not only govern the professional e-sports players but also provide information about tournaments, matches, games, team, players, etc. Networks such as Mobafire focuses on in-game information, guides, discussion boards for casual and competitive players. Lithuania also has an official

²⁹ <http://www.esportsearnings.com/history/2015/games>

³⁰ www.esl.eu

³¹ <http://www.esl-one.com>

³² <http://www.eswc.com>

³³ www.worldcybergames.com

³⁴ <http://www.eslgaming.com>

³⁵ <http://www.mobafire.com/>

³⁶ wiki.teamliquid.net

³⁷ www.gosugamers.net

³⁸ www.reddit.com

national ESL representative³⁹ as well as many unofficial fan-based bodies such as: DOTA2 Lietuva⁴⁰; League of Legends community⁴¹; Counter-Strike Source community⁴² and others. So for e-sports, even though it is still a very young field it already has a backbone to its organization and management as a spectator sport. It is very important because it provides seriousness to the community, to the fans, teams and future professional players.

We have discussed the scientific relevance, overviewed the main games in the e-sports and somewhat explained the basics of e-sports organization. Due to the reason that e-sports does not have a significant amount of literature and has not been extensively researched, the researcher had to employ content analysis to understand this culture. The analysis of collected data together with theoretical insight from the scholars overviewed above can be found in chapter III, section 3.2. In order to understand the following section it is advisable to review the mentioned part. For now we shall continue with comparison of sports and e-sports cultures.

1.4. Cultural Similarities between Sports and E-Sports: A Long-Lasting Discussion

This chapter will be concerned with summarizing and contrasting two cultures: sports and e-sports. It is done in order to shorten the gap, on the cultural level, between sports and e-sports, thus enabling the usage of sport education theory in this thesis. *It's not a sport — it's a competition. Chess is a competition. Checkers is a competition....Mostly, I'm interested in doing real sports:* – ESPN⁴³ president John Skipper. The author of this thesis would like to clarify that the aim of this comparison is not to prove that e-sports *is the same thing as* sports, because they differ in many ways, very much like golf differs from American football. The purpose of this comparison is to show that on the cultural level they are *similar* in their value system, rituals and symbolic meanings they produce. It is intended to reveal that on the structural system of meaning e-sports in terms of the community, scene and players it is significantly similar to sports.

As we have touched upon the comparison of values in the last chapter between sports and e-sports, there is a significant amount of parallels between the two cultures in terms of values. However broader insight into the matter has to be provided. In the first chapter of the sports culture section we have discussed the differences between *play*, *games* and *sports* in the context of sports. Thus it is

³⁹ <http://www.esports.lt/news/show/8004/Lietuvos-Elektroninio-Sporto-Lyga/>

⁴⁰ <http://www.dota2.lt/>

⁴¹ <https://www.facebook.com/lolbendruomene>

⁴² <http://www.css.lt/wp/>

⁴³ Entertainment and Sports Programming Network, a U.S. based global cable and satellite television channel.

mandatory to do the same kind of analysis in terms of e-sports in order to seek out philosophical, cultural and social aspects that link the disciplines of the topic. Needless to say such work has only by a handful of scholars (Thiborg, 2009; Lee, 2011; Ferrari, 2013; Wagner, 2006) none of which in context of education.

Thiborg (2009) observed that sports and e-sports both derive from the domain of *play*, where the pleasure is perceived as the key foundation of the activity, however here, at the very beginning, sport and e-sport splits into two different areas. E-sports is generally attributed to the domain of video games by the general public which directly corresponds to the notion of play, as in it is a strictly *leisure* activity which is *non-profitable* in any way aside from direct pleasure. Sports in a sense is also *for pleasure*, however it has a higher standing in societal value system ranging back from times of Plato. (Šukys, 2005:43-44) From the very early stages in a child's life sport, in the education curriculum, loses its *play* attribute, as it is no longer playing as and when you please but rather playing *sports* in order to gain something. This notion is very widely illustrated by P. Karoblis in his characterization of youth athletes (2005:426-430), however we cannot claim that sports do not provide pleasure in all levels of participation. Sports on the cultural levels is also far from belonging to Huizinga's domain of play due to earlier discussed attributes. However, when does e-sports loses its factor of strictly *playing*, contrary to it being just for pleasure? Plain video games and some online-games, in their characteristics, never leave the domain of *play*, the causes and effects of satisfaction are pre-programmed in the game, Griffiths identifies them as *partial reinforcement effect (PRE)* (Griffiths, 2009) one of the key factors for game addiction.. They are designed to be casual and provide the joy and unbidden act of playing for fun, without gain outside of the boundaries of the game itself. Huizinga and Guttmann agree that the domain of *play* is left when additional attributes to the activity are added. In e-sports as a culture the notion of simple *play* has never been the standalone feature, that is why they are differentiated from video games. E-sports is not simply a genre of video games, it is a culture and community driven by competition and spectatorship. The values that were identified also serve as arguments towards a culture that shares not only the simple notion of *play*. It should be also noted that the player has a certain boundary that has to be crossed *per se*, in order to leave the *play* domain in his personal development in the context of e-sports. We have earlier identified that there is a certain classification to e-sports player and they are classified in accordance to the motives of playing e-sports. In this thesis we will assume a position that, according to the classification, a *casual* and an *experienced* player still belongs to the domain of *play*, whereas as soon as he reaches motivation to compete and plays e-sports games driven by competition he is no longer *playing* in Huizinga's sense. Thus the notion of simply *playing* video games is correct,

however it should never be attributed to all levels of e-sports player. As much as the athlete is not simply playing for fun, the e-sports player is not playing for leisure alone.

In the ontological perspective of *games* provided by Caillois and Guttmann we observe a clear distinction of the phenomenon from play and sports, here competition, rules and internal rewards are key. In addition the mentioned three features in light of sports and e-sports will be analysed. As mentioned in the previous chapters rules are mandatory to the execution of values professed by sports. Equality and fair-play are concurrent to the games that are played in sports. Games in sports could be identified as structure for the carrying out of professional sports. Sports are played on the emphasis of physical game activities whereas e-sports is done via technology based virtual measures – video games. These video games are designed in the way to raise the competitiveness and rule-bound environment for sport-like activity. Thus both in sports and e-sports the notion of game (in the spirit of competition) is used as method for enacting the process of sporting.

Are e-sports real sports? That question is discussed among people involved and not involved in the area. Even though this topic is not receiving significant attention from researchers, it is broadly discussed online. Moreover Taylor provides an interesting analogy, suggesting that at one time, many of the contemporary sports branches (such as chess, darts, snowboarding or poker) were also a topic of discussion whether they are real sports. (Taylor, 2013:36) It is however very interesting that e-sports players themselves are very uncertain on whether e-sports should be accounted as sports. From my own experience communicating with e-sports players, some are firmly sure e-sports is sports, some do not want it to be attributed to sports. Discussions in the media such as these: 1⁴⁴, 2⁴⁵, 3⁴⁶, 4⁴⁷, 5⁴⁸, are very commonly reoccurring on the Internet, players and enthusiasts are also drawn into the discussions (such as: 1⁴⁹, 2⁵⁰, 3⁵¹, 4⁵²). Thilborg in his study discussed the benefits of e-sports being recognized as sports for the whole industry. He discusses that recognition of e-sports would bring about more funding and structure to the scene, as well as recognition from the state would help e-sports players to aim for higher achievements. (Thilborg, 2008) We have a clearly laid out example of South Korea where e-sports has been a national sports for more than a decade and it is a national pastime very much seeped in the

⁴⁴ <http://www.mmogames.com/gamearticles/versus-esports-vs-sports/>

⁴⁵ <http://recode.net/2015/04/27/video-games-on-espn-its-time-to-stop-pretending-esports-are-real-sports/>

⁴⁶ <http://www.forbes.com/sites/insertcoin/2014/09/07/espn-boss-declares-esports-not-a-sport/>

⁴⁷ http://www.huffingtonpost.com/jesse-aaron/the-controversial-dichoto_b_6692052.html

⁴⁸ <http://kotaku.com/sports-vs-esports-according-to-a-lawyer-1727766965>

⁴⁹ https://www.reddit.com/r/Cynicalbrit/comments/345vyj/are_esports_real_sports_and_does_it_even_matter/

⁵⁰ https://www.reddit.com/r/Games/comments/345yct/totalbiscuit_are_esports_real_sports_and_does_it/

⁵¹ https://www.reddit.com/r/AskReddit/comments/27yrzi/is_esport_a_real_sport_or_not/

⁵² https://www.reddit.com/r/AgainstGamerGate/comments/3g7rrx/are_esports_real_sports/

national culture. (⁵³,⁵⁴, ⁵⁵ also Jin, 2008) The discussion in, for now, endless and in the author's opinion requires more attention from scholars in various disciplines to enact upon the synthesis of sports and e-sports on the national and international levels. It is unavoidable considering the technological advancement and the importance of computers and internet to everyday lives of society.

One of the key symbols of modern sports could be identified as *spectatorship*. Guttman was particularly interested in the spectatorship aspects of sports (2012) in addition to authors like Huizinga (1949) and Dawson, P. and Downward, P. (2009), as well as Li-Shiue Gau (2013). Spectatorship over the years has changed the way and how often society views sports and what definition it hold to the viewer. Television and Internet had a huge impact on the way we observe sports and how much money does the spectating generates (Guttman, 2012:193-194) which also influence the income of athletes and teams. Gau provides the value system of sports spectatorship: *1. Enjoyment; 2. Sociability; 3. Identity; 4. Status; 5. Moral; 6. Spirituality; 7. Epistemic; 8. Aesthetics; 9. Ritual* (Gau, 2013:7-10) which are key elements of the reasons why spectator sports are so popular. However it is very interesting to note that both Guttman and Dawson note that spectatorship might increase participation in sports among the spectators. (Dawson, 2009:17-21) (Guttman, 2012:215) which supplements the value advertisements of sports, especially promotion of health.

Lee (2011), Cheung (2011), Ditmarsch (2013), Witkowski and Taylor (2010) analyzed the spectatorship phenomenon in e-sports. Cheung while analysing the spectatorship aspects within the StarCraft scene identified these three themes to e-sports spectatorship: *commitment to the in-game values, investment in the tension of play, and the vicarious relationship between players and spectators*. (Cheung, 2011:2) As the author explains the spectators in e-sports live events are, as in sports, second broadcasters, and ones who closely observe the rule and ethical side of the game. In addition the spectating community also works together to make it as enjoyable as possible. Viewers usually have their favourites and when the drama unfolds as new strategies are introduced into play by instantaneous decision making or reaction speeds. However live tournament participation is, as in sports, only a fraction of the spectating phenomenon in e-sports. Kaytoue while analysing Twitch streams found these to aspects to influence the spectatorship view rate: *1) most content is generated by users, and 2) major eSports events and new game releases cause a big increase in the total number of viewers* (Kaytoue via Ditmarsch, 2013:13) Evidently a huge amount of content on the internet e-sports media is generated by the player themselves, however the largest numbers are still pooled in by the large tournaments that are

⁵³ <http://www.nytimes.com/2014/10/20/technology/league-of-legends-south-korea-epicenter-esports.html>

⁵⁴ <http://www.businessinsider.com/e-sports-are-popular-in-south-korea-2014-10>

⁵⁵ <http://www.korea.net/NewsFocus/Sci-Tech/view?articleId=100629>

live streamed and available on YouTube, usually posted in the channels of tournaments, casters of players themselves. However the argument that should be laid out here is that with the key elements of similar attributes to sports and e-sports spectatorship (tournaments, live events, fans, spectators, etc.), the aspect of sociability it provides to the community of spectators (Taylor, 2010:4); and the sheer amount of spectating e-sports attracts (56 million regular e-sports enthusiasts in 2014⁵⁶) that is on par both culturally and by relevance to people. It is also how e-sports becomes *sports* for the non-pro players who are simply consumers to whom the players, teams and organizations provide the same entertainment factor as sports for sports enthusiasts.

One of the key arguments against e-sports being acknowledged as sports seems to be the lack of physical activity in the matter. Wagner in his work defines *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* (Wagner, 2006:3) which is very similar to Guttmann's notion of sports where he identifies it as physical as well as intellectual activity. (PAGE) Whereas Ferrari also argues that e-sports can be identified as much of an athletic activity as any sports. (Ferrari, 2013:2) We have discussed previously how physical can the activity of e-sports be for players of all levels. However the physical engagement characteristics of the bodily function in e-sports holds more than hand-to-eye coordination or APM. It is as Witkowski argues also related to the bodily sensation of the player where not only cognitive and plain physical actions are in play but also the body-knowledge and performance, where players' habitual physical responses are trained (Witkowski, 2009:55) It is that physicality that is required to employ the intellectual and cognitive knowledge to the fullest and to do so psychological preparation characteristic to e-sports is crucial. Similarly Ferrari refers to *mechanics* [that] *need to be drilled in order to become routine*. (Ferrari, 2013:5) Because e-sports could, theoretically, be attributed to games like chess as in low-key physical games, however the amount of concentration, reaction and fast decision making that have to coordinate with the *mechanics* of the game on the physical side is of a different characteristic. On top of this, e-sports relies heavily on communication and coordination if the game is team-based thus a significant amount of the activity also relies on coordination of action (Wagner, 2006:3) Thus as Ferrari claims, all mental games have a physicality to them, taking it even further as to the body language of the opponents playing key roles in competition. (Ferrari, 2013:4) It should be stressed that these features of physicality is not merely searching for qualities of e-sports physicality, it is just that they are merely researched and have not been extensively described in the scientific literature.

⁵⁶ https://images.eurogamer.net/2014/dan.pearson/Newzoo_Preview_Images_Global_Growth_of_Esports_Report_V4.pdf

Psychological aspects of sports have been discussed very broadly in the scientific literature. Authors such as Hardy (1996) and Burton (2008) extensively cover the psychological aspects of sports preparation to the players. The information about psychology and psychological preparation of e-sports players is very limited. However it agreeable that psychological preparation for the top-tier pro teams is relevant. The psychological preparation before matches, decision making and information processing and stress handling. (Sources: 1⁵⁷,2⁵⁸,3⁵⁹) However in this thesis we propose a possibility that the vast knowledge that sports psychology provides could benefit not only pro-player but also individuals who play on competitive level. Sports psychology deals with a range of other psychological factors outside stress such as motivation, goal-setting, arousal, coping with loss, etc. An observation from Wagner, which is noteworthy, that the usage of information and communication by children today far surpasses that of adults, and this *generation gap* is widening. (Wagner, 2006:3) E-sports is a perfect illustration of this *gap*, however on the one hand the immersion of young individuals into a technologically advanced field might be unthreatening, on the other hand can be quite difficult to manage with the added sportive *competition* factor. Psychological support follows Sports and Physical Education (PE) of young individuals from school to coaches in teams, since the educators are trained to identify and cope with psychological issues, however in e-sports we observe this trait only at the very pro-level. However this will be more broadly discussed in the next section.

We have on the larger part discussed the cultural characteristic similarities of sports and e-sports, thus there is no need to elaborate on the obvious similarities between the infrastructural similarities; organizational structure of both fields, symbolic similarities as means to express cultural traits that have been covered in the previous chapters.

The cultural parallels we have identified in this chapter provide an undeniable implication that culturally and structurally sports and e-sports have correspondences on various levels. The value systems, their expression and development of players follow similar traits to those in sports. We will, based on this comparison, ground the possible usage of sports education theory in e-sports player development and wellbeing. The need for the adaptation of sports education theory will be explored in the empirical part of this thesis.

⁵⁷ <http://www.redbull.com/en/esports/stories/1331659424363/mind-game-how-esports-psychology-can-help-you-win>

⁵⁸ http://lol.esportspedia.com/wiki/Article:Are_psychologists_needed_within_the_eSports_environment%3F

⁵⁹ http://www.gamasutra.com/blogs/AmineIssa/20141001/226430/The_Science_of_ESports_Performance.php

II. THEORETICAL SYSTEM OF SPORTS EDUCATION

2.1. Physical Education and Sports Sciences

Authors agree that physical education is physical activity with an educational purpose that have both the attributes of play and attributes of sports, eventually leading to either physical fitness or sports competency. (Freeman, 2012; Limpkin, 2011) However it is often differentiated from author to author on what are the goals of physical education, some more strictly rely on the physical and fitness side of pupils attributing only partially to the intellectual facets of physical education (Vilkas, 2006) some on the other hand, in the development of physical qualities include the notions of sports technique and psychological attributes (Ivaškienė, 2005), stress the emotional and self-identity development via physical activity (Tamošauskas, 2000:90-99), some even though differentiate physical education from sports, admit that even through body culture development sports qualities should be taught; (Grobovienė, 2006: 7-9) some are optimistic about the inclusion of sports into the physical education curriculum because it would help to socialize the students into the upcoming functioning in society, teach values of sports and personal skills. (Laker, 2002: 22-24) There exists a theoretical dispute amongst scholars of physical education and sports studies, one that disagrees on what is the main focus of physical activity, whether is the *movement* alone that is physical activity or whether it should employ a multi-theoretical approach. (Lumpkin, 2011:13-15) This dispute is very sensitive to the object of this thesis on how do we treat the theory of physical education and sports sciences and how do we apply them to our benefit. In order to be as clear and as efficient as possible we have to make certain distinctions.

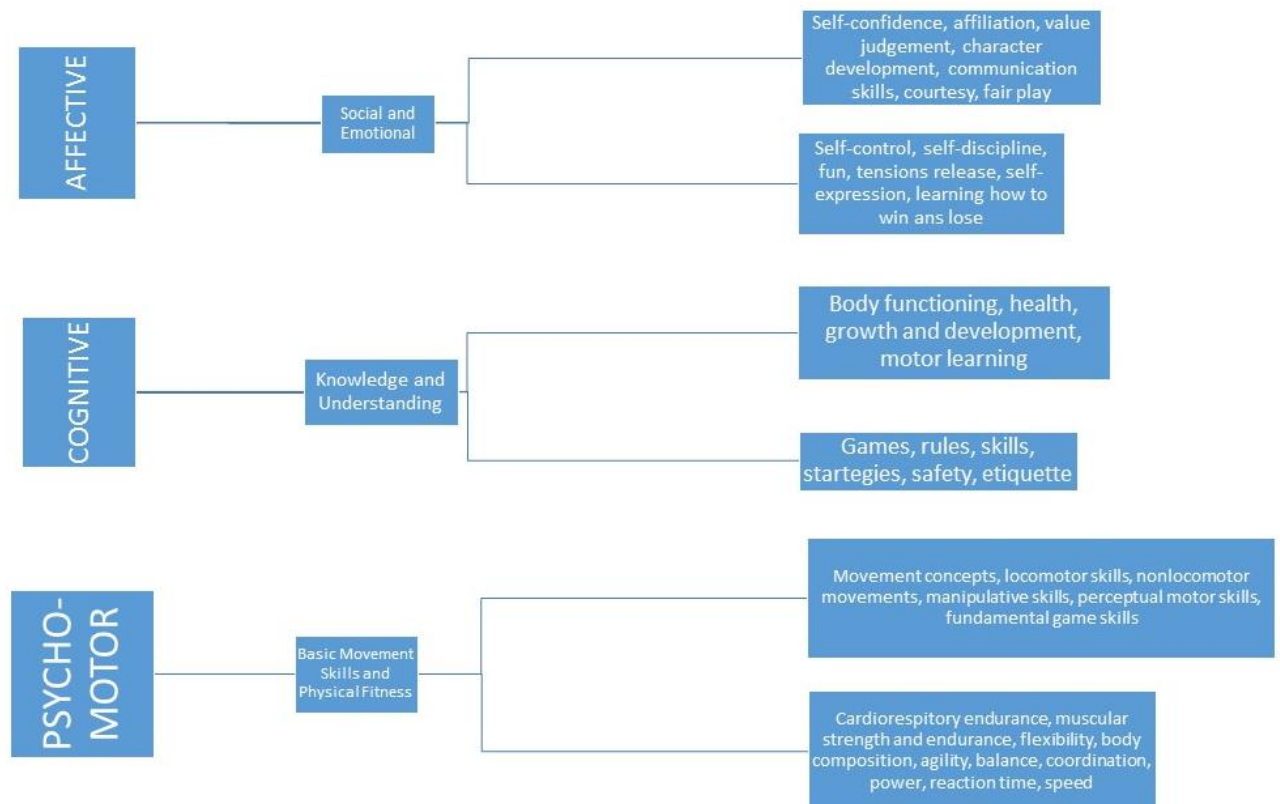
To do so we, at first have to distinguish between two key roles of the educator in sports education. Firstly, similarly to how we have covered the distinctions between *pedagogy* and *education* we have to distinguish between a physical educator and a coach. According to Lumpkin, the traditional physical educator is firstly a pedagogue in a school or college, further on it becomes differentiated into exercise sciences, sport management and athletic training. (Lumpkin, 2011:78) This is supported by the common stress of physical educator's responsibility to carry out at first body culture fundamentals and educational role of tutoring, mentoring. A physical educator will be often found in schools, carrying out the role of a teacher, following a certain educational program within the physical education curriculum. However the theory of physical education and goals of the body culture curriculum incorporate the preparation of sportsmen and Olympic athletes (Tamošauskas, 2008:45) suggesting that even though the main role of the physical educator is development of the general physical education curriculum, he can be specialized. One of the key differences between a physical educator (teacher) and coach is that the

teacher provides the student with new information and techniques, whereas the coach is more interested in maximizing the existing skills and competences and providing more oriented support. (Hunter, 2006)

Roland Naul observed that in the field of physical education, in the 1980s and 1990s a shift happened where certain nation adapted certain definitions and philosophy of the field. He noted that four major vectors were created: *sport education* and *physical education* group; *health education* and *movement education*. (Naul, 2003) Which is very peculiar due to the fact that one can certainly observe differences in Lithuanian physical education theory compared to British, American and European in general. What Naul also observed is that the majority of European countries have adopted the health and movement models. (Ibid. 4) Thus explaining the lack of sports orientation in the Lithuanian models of physical education.

Lumpkin provides a model (Fig. 3) of objectives of physical education, exercise sciences and sports studies which is perhaps the closest to what we would identify as the overarching sports education. These three groups incorporate the majority of aspects of physical education and sports sciences we are interested in and are looking to identify the needs of in e-sports players. How we approach this is of key importance to our purposes.

Chart. 1 Physical education, exercise science and sports studies objectives (Lumpkin, 2011)



This model provides us with the key conceptual objectives that we will regard to our purposes in identifying areas of the sports education beneficial and employable in the development of e-sports players. The scheme includes the physical aspects, psychological traits, orientation towards game mechanics, without withdrawing from the key value orientation of sports while developing the player.

Physical education in its entirety and main focus on the school/university curriculum is not entirely applicable to the target players of e-sports. As we have discussed earlier there is the physical domain of e-sports, however only a very small part of the methodology and curriculum applied for e-sports. The very fact that e-sports are very heavily competitive and competition is key to succeeding in the field brings it much closer to sports. The model that Lumpkin provides suits our needs because it incorporates both the physical education without which the education of e-sports player would not be possible and the sports sciences disciplines that should be beneficial and related to the preparation of e-sports players. This theoretical objective model will be used in terms of identifying the areas of e-sports player development that can be targeted by the sports education we will be exploring further on.

2.2. Physical Education

Even though there are no school or university e-sports programs in the sense of physical education, this field could benefit from having a teaching curriculum in the future. If we were to re-think the physical domain of this educational field and attempt to design a physical education approach to computer-based activity players of e-sports could benefit from it in the early and later stages of development. Knowledge in e-sports is key to advancing, whereas physical education could provide means to acquire, comprehend, analyse, synthesize, apply and evaluate the knowledge gained by experience or research. (Lumpkin, 2011:22) The negative attitude of e-sports having no health-benefits could also be augmented by an institutionalized and thought-out approach of physical education towards e-sports and provide a balanced direction of the field similar to the one provided by Tamošauskas (2008:45). Physical education has the accumulated knowledge that can be re-shaped for the purposes of e-sports education, for instance in a more technology oriented approach, however maintaining the obvious health and physicality promotion. Scholars (Vilkas, 2006; Tamošauskas, 2000, 2003; 2008; Čepelionienė, 2005; Freeman, 2011; Lumpkin, 2011) agree that physical education is meant to enhance ones physical abilities, health and prepare and help attain necessary abilities, skills and capacities of physical and mental activity in sports, at the same time promoting a healthy, socially active lifestyle. If the sports world and society were to accept e-sports as a legitimate sports, physical education could and would help in preparing healthy, fit and sports oriented individuals for e-sports. The values and benefits

of physical education, if we were to claim that playing e-sports is physical action, could be easily transferred into the domain of e-sports. For instance if the physical education, according to Freeman (2011) uses physical means to attain intellectual, social and aesthetical growth and physical activity provides improvement in body and mind (2011:6), computer based activity could provide social, intellectual growth as well and if we were to address the benefits of physical activity to e-sports performance, it could also help with aesthetical and body aspects.

In order to help the reader to visualize the possible model e-sports oriented physical education system we are going to attempt, based on the cultural values and orientation of e-sports culture to re-think the physical education structure and content fit for e-sports individuals, of A. Vilkas (2006:14):

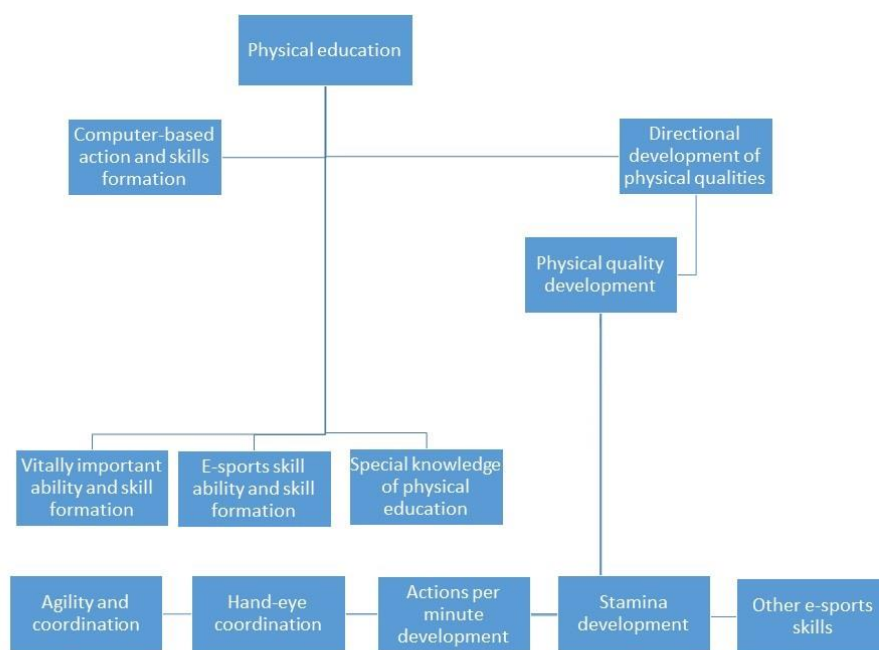


Chart 2 Physical education objectives according to e-sports (based on Vilkas, 2006)

Such model would incorporate both the e-sports oriented skill acquisition in addition to the benefits provided by the physical activity to the individual. However it is not as easy to do as to simply replace the word physical with computer-based. Naturally in order for such a model to be efficient and adaptable a more extensive physical education research would be mandatory. This should be regarded as a possible field of studies to other scholars, program or policy makers.

We currently see the obvious stress on physical activity in physical education and it is without doubt the key feature in this educational field. However a necessity to re-think the physical is coming with the rise of e-sports, where the physical will be computer-based and where educators will

have a challenge and task to transfer all of the positive incentives of physical education into the field. This transition will have to account for health promotion, fitness promotion on top of the computer-based e-sports skill acquisition. Physical activity has to go line-in-line with skill development necessary for efficient and optimal e-sports performance.

2.3. Sports Sciences

Sports sciences is the “next level” of physical education from which physical educators, coaches, trainers and manager pool their knowledge and theory from. Lumpkin defines exercise and sports sciences as a range of interdisciplinary sciences that in light of physical education, sports and exercise produce sub-disciplines. (Lumpkin, 2011: 36-38) Here we have a list of disciplines (exercise and sports sciences) that she identifies: *Exercise physiology; Athletic training; Motor development; Motor learning; Sport biomechanics; Sport history; Sport management; Sport philosophy; Sport and exercise psychology; Sport sociology.* (Lumpkin, 2011:38)

We are going to discuss the elements of this that according to the object of this thesis would be most beneficial to e-sports players. This will be done by identifying the key objects and aims of the fields as well as key areas of action that are most relevant to our study.

Discipline	Description
Exercise physiology	<p>The field of exercise physiology is mainly concerned with the physical attributes of exercise and how the body of the athlete adapts to exercise or lack of exercise. (Winter, 2009:7) It aims at establishing the training regimen of those recovering from disabilities, who o excessive training or are returning from leave of training, etc. This is done via observing the body movement, measuring and evaluating various physical attributes training. The main aim of this field is to maintain physical fitness of professional athletes and refrain them from causing injury.</p> <p>Currently exercise physiology is concerned with <i>muscular function, nervous system and its operation, respiratory function, cardiovascular function, muscular strength and endurance, cardiovascular endurance, the development of fitness, the effects of exercise, defining and measuring physical fitness, the development of fitness physiology of performance, and the effects of ergogenic aids (drugs or hormones) on the body.</i> (Freeman, 2012:61)</p>

<p>Motor development and motor learning</p>	<p>Motor development is a field of studies concerned with the motor behaviour and skills of children and adults, closely linked with the physical growth and acquisition of new motor skills for certain daily-life or, more extensively, sports performance. (Lumpkin, 2011:44) An example of a motor skills could be identified as a basketball throw, where the athlete does not have to think on how much force he put into the throw, he rather just makes it in the course of the game. These skills are developed by performing motor learning.</p> <p>Motor development is a field of studies concerned with the motor behaviour and skills of children and adults, closely linked with the physical growth and acquisition of new motor skills for certain daily-life or, more extensively, sports performance. (Lumpkin, 2011:44) Motor skills development is usually carried out by the coaches who have intentional use for the motor skills that are developed. Motor skill development is used for students of every age, however literature (L. Ridgway, 2009) suggests that young individuals have more adapt environment to gain long-lasting motor skills, nevertheless adults also have the ability learn new motor skills.</p>
<p>Sports management</p>	<p>According to Mikalauskas (2000) the main aspects of management as a coach is involved in formal and informal management of the team, where various functions are employed to influence the members, internal and external communication and relationships, decision making and quality of training and competition; the main object of the management is the team, where functions of planning, organization, coordination, control and motivation are carried out. (Mikalauskas, 2000:13) How the training and participation regimes are organized is of key importance in order for the athlete not to overwork and overextend. According to Skernevičius, the beginning of a successful athlete training management is the primary analysis of the athlete; data collection of physical, psychological and motivational data (Skernevičius, 2011:66) These tests are usually carried out in relation to other sports studies disciplines with a pre-prepared plan in regard to the field of sports.</p>
<p>Career management</p>	<p>At almost every step of a young and adult athlete development he or she is under constant observation from educators and coaches or managers later on. And we have, on part, explored that constant re-evaluation and assessment is key to reassuring the developmental pathway of athletes. If we were to differentiate three appearing pathways of an athlete career development it would look like: school sports</p>

participation, university/college sports participation and either pro-level sport participation or career related to sports. Other career choices are dropping out of sports area. According to *AlJazeera from basketball to football & ice-hockey, less than 2% of college players move on to become professional athletes*⁶⁰ similar findings have been provided by NCAA here ⁶¹ and here⁶². According to *esportsearnings.com* there are currently 9554 active earning pro-players in e-sports⁶³ and for instance *League of Legends* had 76 million players in 2014.⁶⁴

In addition Wylleman & Lavallee provides a developmental chart of career transitions based on age where we can observe an institutionalise entity from the age of 15:

AGE	10	15	20	25	30	35
Athletic level	Initiation	Development		Mastery		Discontinuation
Psychological level	Childhood	Adolescence			Adulthood	
Psychosocial level	Parents Siblings peers	Peers Coach Parents		Partner Coach		Family (Coach)
Academic & vocational level	Primary education	Secondary education	Higher education		Vocational training Professional occupation	

Fig. 4 A developmental perspective on transitions faced by athletes at athletic, individual, psychosocial, and academic vocational levels [reproduced from Wylleman & Lavallee (2004, p. 516) with permission] (Wylleman, 2009:89)

Thus it is certain that only a small fraction of individuals make it to the pro-scene of e-sports. Career management tackled these problems on the side of coach and managers and helps through the process.

Sport psychology

Sports psychology is concerned with psychological sport activity features, its influence on the athlete, development, perfecting in certain sports areas; how the individual's conscious and character is developing and interacting within the boundaries of a specific sport area; how psychological attributes increase or decrease performance; psychological aspects of learning and performing physical skills; leadership phenomenon; moral will of athletes; competition influence on athlete; team cohesion (Freeman, 2012; Miškinis, 2002; Karoblis, 2005; Mikalauskas, 2002; Meidus, 2005)

⁶⁰ <http://america.aljazeera.com/watch/shows/the-stream/the-latest/2014/1/3/life-after-collegesports.html>

⁶¹ <http://www.ncaa.org/about/resources/research/probability-competing-beyond-high-school>

⁶² <http://www.ncaa.org/about/resources/research/estimated-probability-competing-professional-athletics>

⁶³ <http://www.esportsearnings.com/history>

⁶⁴ <http://www.ongamers.com/articles/report-more-than-70-million-people-watch-esports-worldwide/1100-1157/>

	<p>Kremer (2012) differentiates sports psychology into two areas: clinical sports psychology and educational sport psychology. The field of interest in this study is going to be mainly be educational psychology. This area deals with the following attributes of psychological traits: anxiety; stress; motivation; commitment; burnout; dropout; goal setting; fear of failure; achievement; mental imagery and practice; attention; concentration; mental toughness; self-talk; motor skills development; emotion mobilization, self-confidence; will strengthening; will to fight; goal orientation; risk management; psychological barriers; and support. (Kremer, 2012; Miškinis, 2002)</p>
Sports history	<p>Sports history is concerned with documentation and analysis of people, events, organizations, and trends that shaped and are shaping the modern sports (Lumpkin, 2011:49) This discipline is concerned with when, why and how certain events occurred in the history of sports. Sports history is also interested in what are the relationship between historical, economical, societal and cultural variables in regard to sports. Sports historians keep track and analyze the progress and development of modern sports, keep track of broken records, famous athletes, etc.</p>
Sports philosophy	<p>This discipline is concerned with the place and meaning of sports in our lives, what relationships it has with our culture, daily lives, society; what are the relationships of sportsmanship, character development and sports participation. (Freeman, 2012) The major focus of this discipline are values displayed in sports, why people engage in sports and what influence it has on society, what is the meaning of competition, spectatorship, sportsmanship, athleticism, etc.</p>
Sports sociology	<p>Sports sociology is concerned with the social units, organizational structure and social processes of sports and how sports influences the social aspects of growing process. This field of studies observes and analyzes how sports can be employed and benefit the development of children and how it can help them grow into healthy, social and useful adults. (Freeman, 2012:50) It basically is interested in how society approaches sports and how sports influence society and its processes. Sports sociology investigates what are the relationships of sports with culture and social order in the world in context of race, gender, nationality, ethnicity, social mobility, etc. (Lumpkin, 2011:60)</p>

Table 2 Sports Science Disciplines

We will now discuss the hypothetical application possibilities of each of the discipline listed above in reference to e-sports:

Exercise physiology: could be mainly used in averting and treating traumas in e-sports, even though there are no documentations of e-sports traumas. Even if it appears to be odd to have injuries in e-sports as it is not extensively physical as traditional sports it is not uncommon^{65,66}. These injuries mainly deal with wrist areas and back areas. **Motor development and motor learning:** motor development is as crucial in e-sports as it is in sports. E-sports players have to develop motor skills in order to shorten their reaction times and enhance decision making. Training regimes adapted from sports motor development could enhance performance for amateur and professional players. **Sports management:** coaching and management are seen in e-sports on the professional levels. However amateur players cannot afford such luxuries. An institutionalized version of e-sports managers such as we see coached and educators in school could be very beneficial to e-sports players. **Career management** could be especially useful for competitive and aiming to be pro players, because those players are the ones that will probably face the choice of advancing to professional levels, outside perspective, evaluation and assessment to a young player could be useful from the professional side as well as support. **Sport psychology** is perhaps the most practically applicable discipline in e-sports, it can be beneficial to all levels of e-sports player. Goal setting, motivation, stress management, relaxation, mental training strategies that work for athletes should theoretically be useful for e-sports players as well. Adaptation of such techniques should lie in the hands of coaches and educators. However specifying e-sports specific psychological preparations methods could be also taught to amateur players. **Sports history** in e-sports could be regarded as a separate discipline. For now this task is left to e-sports enthusiast who document various events in the e-sports world, however a scientific approach would allow a deeper insight into how and why certain things occurred the way they did and what impact it had on the cultural levels to e-sports communities. **Sports philosophy** could also be a new discipline which would be a continuation of sports philosophy. **Sports sociology** in e-sports could play a very significant role in how the society approaches e-sports and what kind of relations does it have with the rapidly expanding social phenomenon online and offline. If we see e-sports as a new tandem of sports in the digital age, it, without doubt have and is having an impact on new and old generations.

The disciplines that are listed above can be applied in many ways in the field of e-sports. The application however is highly dependent on the further research performed by scholars in the field

⁶⁵ <http://kotaku.com/the-injuries-that-are-ending-esports-careers-1718373200>

⁶⁶ <http://motherboard.vice.com/read/achilles-wrists-meet-the-doctor-who-is-saving-esports-careers>

and interdisciplinary approaches applied by representatives of the fields of sports science. For now, in the context of this thesis, we suggest only the object for these areas, which is e-sports players and their development and e-sports scene. These fields should be concerned with the development of e-sports players of all levels both in (possibly) institutionalized and field application. When it comes to physical education, exercise and sports sciences there are many aspects from which e-sports could benefit. There will without doubt a necessity for adaptation of sports education for the needs of e-sports in the future. This is however one of the many theories that could be applied in this field. In order to illustrate the adaptability of theories discussed in this part we will attempt to identify the needs of various levels of e-sports players in the empirical part of the thesis.

III. CULTURAL ANALYSIS OF E-SPORTS AND APPLICATION OF SPORTS EDUCATION

The following chapters are based on the synthesis of cultural analysis performed via the method of content analysis (explored in 3.1.) and literature on e-sports, as well as various internet sources and the main methods of data analysis: semi-structured interviews and the online survey. The first part of this section will be dedicated to the explanation of methodological definitions and structure. The second part will be overviewing the analysis of e-sports culture as it was observed via content analysis. Furthermore, the third part will attempt to describe, using the statistical data collected, the player profiles of e-sports and what characteristics they hold. Last but not least, the last part will be dealing with assessment of needs and difficulties each type of players deal with, their motivational and gameplay features.

3.1. Research Methodology and Organization

Research methods and methodology. While performing the research for “Comparison of sports and e-sports culture: opening the gateway for sports educology” a quantitative research strategy was employed which is *structured, based on a scientifically drafted hypothesis (that is to be confirmed), by applying mathematical statistical analysis methods for arranging data – numbers.* (Kardelis, 2007:276) and was accompanied by qualitative research methods for cultural analysis. In this thesis two philosophical approaches are employed for two different methods of data collection. Firstly the content analysis and perception e-sports culture is approached from the position of **social constructivism**. Social constructivism claims that we create the properties of reality rather than discover them (Kukla, 2000:2) that is that in order to create the social reality actors of thought and action are required. The researcher observes the reality in its present state as a product of people engaged in the process of creating it, observing and generating meaning from it. (Cresswel, 2003:9) The data collection and analysis is based on a **post-positivist** notion. Post-positivism states that even though we cannot wholly uncover the reality via research, we can attempt to represent it as best as we can. The empirical data can attempt to reveal the reality fully however subjective notion that shapes it, cannot be disregarded. (Mujis, 2010:5) Quantitative research is regarded as instrument which can affirm or deny certain ideas, in other words to verify certain statements about education. Such results are only possible via analysis of information which should be valid and have a conceptual basis. (Bitinas, 1998:136) Quantitative research methods provide means for deeper analysis of static and dynamic processes, provide means to knowledge that can

be applied in controlling of social processes, the knowledge is usually reflected in numeric expressions and indicators. (Kardelis, 2007; Tidikis, 2003) While explaining the quantitative research methodology B. Bitinas stressed that positivist methodology claims that *without quantitative analysis object's empirical analysis is impossible* (Bitinas, 78:2006). Nevertheless he also implied that *quantitative analysis is an internal research component of research outcomes, usually irrelevant to the user* (Ibid.). Indicating the necessity of qualitative part of the analysis phase to the data which also implies the plausible efficiency of qualitative data for thorough perception of the phenomenon. *Positivist methods employ a deductive approach to research, starting with a theory and testing theoretical postulates using empirical data* (Bhattacharjee, 44:2012) In the case of this thesis the research will be conducted both in the social constructivism fashion in order to explain e-sports culture and compare it to sports; and post-positivist approach of providing a hypothesis supported by theoretical background from literature sources within fields of cultural studies (sports, game culture and e-sports) and education fields (sports education and physical education) providing a hypothesis which will be confirmed or denied by empirical data from the survey. The hypothesis will be tested via means of collecting data using **the survey method**.

Video game studies from social science standpoint has received attention from many scholars (Taylor, 2009; Witkowsky, 2012; Griffiths, 2013; etc.) However when analyzing literature conducted in this field one can observe a pattern in terms of methodology. Quantitative methodology and its methods are dominant amongst scholars analyzing video games of such genre as MMORPGS, VMMOs, DOTA-type and other games. This pre-supposes a certain tendency towards performing field studies in the area, one that supposes a quantitative approach. Amongst many types of methods out there in Social Sciences carried out only a handful of them (Taylor, 2013; Shaw, 2012) have employed qualitative research methodology. In the early planning stages of this study qualitative approach was foreseen and semi-carried out, however the researcher has run into certain limitations and barriers within the gaming scene of *e-sports*. The reason why qualitative methods failed was due to lack of availability of interviewees and their reluctance to participate. The design of the method for gathering data was a **semi-structured interview** with bottom-to-top *e-sports* gamers (from casual *e-sports* gamers to top-tier professionals). However the lack of willingness to participate in interviews has appeared to be overwhelming. Out of 30 interviews planned in the design of the research only 5 interviews were carried out in the timeframe of one year with tens of them still pending. The interviews were used in the sense which is suggested by Berg - *interviewing is defined simply as a conversation with a purpose. Specifically, the purpose is to gather information.* (Berg, 2009:66). Nevertheless one cannot neglect the efficiency of the data, especially when the researcher is quite unfamiliar with *e-sports* from the players'

perspective, the methods of a qualitative interview provided a deeper insight into the culture as supposed by Berg *interviews are useful when researchers are unfamiliar with respondents' life styles, religious or ethnic cultures or customs, and similar attributes.* (Ibid., 70) Thus in this study the qualitative data collected in these early stages of the research will work as **supportive data** in social constructivist fashion to the overall observation of the gaming and *e-sports* culture, which will also be reflected in the theoretical part of the thesis, as well as helping to understand and interpret data in means of *triangulation of method*<...>*mixing qualitative and quantitative styles of research data.* (Neuman, 2006). Moreover this should add not only to the validity of data but also help to perceive the data collected via the main, quantitative, method of data collection and analysis.

The triangulation of methods, in this research, is also concerned with the **content analysis** such as: a variety of types of internet based media concerning *e-sports* scene; observation of venues of *e-sports*; data collection on teams and different types of games and genres of games within the scene; *e-sports* team structure, infrastructure, participation and dynamics. According to Berg any item be it video photo or text can subside to analysis. (Berg, 2009:240) The lack of literature on e-sports is filled with content analysis and helps to fill the gap of *background knowledge on the research topic and question* (Newman, 14:2006) required as Newman suggests in the analysis stage of the research. Also as Berg suggests *every method is a different line of sight*<...>*by combining several lines of sight, researchers obtain a better, more substantive picture of reality.* One and inseparable line of sight in this research will be the content analysis and observation of the *e-sports* culture via online media analysis. The content analysis was carried out while watching e-sports matches, on YouTube and Twitch TV, observing Tournaments, observing Vodcasts, Streams, Interviews; reading forums and Reddit, as well as reading various journalistic articles; familiarizing with top teams in most popular games; participating in InfoShow LAN Party, Kaunas, 2014; etc. All materials used are provided in Annex 6.

The main method of data collection was the **survey**. The survey was carried out using **internet based platform** (Google Forms) with all levels of e-sports players. The purpose of the survey was twofold: 1. To attempt to confirm the profiles of players that were determined via operationalization of the gathered data during observation and interviews according to their self-identification and goal, motivation and achievement orientation in the survey; 2. To identify their educational, developmental and support needs in enhancing their development and performance. The results were to be systemized according to the established profiles. While analyzing the results certain characteristics appeared in the physical and psychological needs differentiated amongst the types of players that participated in the interview. The data collected during the observation and interviews helped to formulate the demographic

and the player-demographic parts of the interview. This was done in order to maximally foresee all the possible answers in order to match their function. (Tidikis, 2003:477)

During the research the method was an online **semi-closed survey** (See Annex 1) where a mixture of closed, open and rating-scale questions (Tidikis, 2003; Bitinas, 2005; Leedy, 2005), that provide a variety of questions with more freedom for expressing opinion on very important questions. The semi-closed interview is useful because it provides us with a vast range of data that back up the closed question data with more qualitative examples and opinions. The ultimate goal of a survey is to learn about the large population by surveying a sample of that population thus capturing a moment in time of an ongoing activity, social phenomenon. (Leedy, 2005) The semi-closed survey helps us to take a sample of the e-sports players and reflect upon their struggles in developing and enjoying e-sports.

Data analysis methods. While looking to accomplish the set objectives in the thesis and achieve the aim of the study, the collected data was analysed using a bivariate type of analysis, employing a descriptive bivariate data analysis method is applied which allows an identification and relations of two cross-tabulated variables (Singh, 2007:125-126) in our case e-sports players versus other variables of interest. The thesis is using a hypothesis and attempts to confirm it via identifying relations between created player profiles and their motivational, physical and difficulties in e-sports to establish the employability of sports education. The data is interpreted using descriptive means.

Research scope and organization. Research participant scope – the research was carried out from 2013 April to 2015 September, the employed observation was carried out firstly online: via various media measure (YouTube, Twitch, E-sports forums, Reddit, Twitter, etc.), secondly by playing the most popular e-sports games (Starcraft2, DOTA2, League of Legends, CounterStrike: GO, Smite, Hearthstone) in order to grasp the environment the players were exposed to; thirdly attending the InfoShow LAN Party in Kaunas, on 17-19th of April, where e-sports amateur tournaments were hosted. During 2013, April to 2014 December, in total 6 semi-structured interviews were carried out with 4 players of an amateur e-sports team and two casters of e-sports. Half of the interviews were conducted via Skype, the other at the InfowShow LAN Party. The main method of data collection was an online survey using Google Forms, where using online survey and dissemination via e-sports forums and Reddit was performed. There were no gender or age restrictions, the survey was completely anonymous. The author draws attention to the notion that e-sports forums and Reddit boards of e-sports are mainly visited by either e-sports players or enthusiasts. Defining the population of the performed data collection is very difficult and nearly impossible because of facts that: players in e-sports are counted in the tens of millions, there is no data available of the percentage of players that visit the forums or Reddit boards of their

games. While analysing the gathered data four major types of e-sports players were determined: casual, experienced, competitive and professional. These were used as variables in the data analysis to the needs that were identified.

Research stages, process and logics. Quantitative as well as other research methods require the order, process and stages of the data collection and analysis to be logical and well thought out. Most commonly the literature distinguishes these steps in performing research: research organisation; collection of empirical data; research data processing; result adaptation. (Kardelis, 2007:109) The research was carried out on several stages. First of all observation was started in order to familiarize with the scene of e-sports; secondly review of sports literature was carried out; thirdly a hypothesis was formulated; then interviews were carried out, all of the interviews were recorder and are provided in the CD, one, as an example was transcribed and is available in Annex 4; online survey was carried out and a total of 961 respondents filled it out, the survey consisted of 71 questions in total, where two first parts were related to the demographic and player demographic information, the second was based on sports literature identifying difficulties that players ran into while playing on various levels and are addressed by sports education. The research process is illustrated in the following graph:

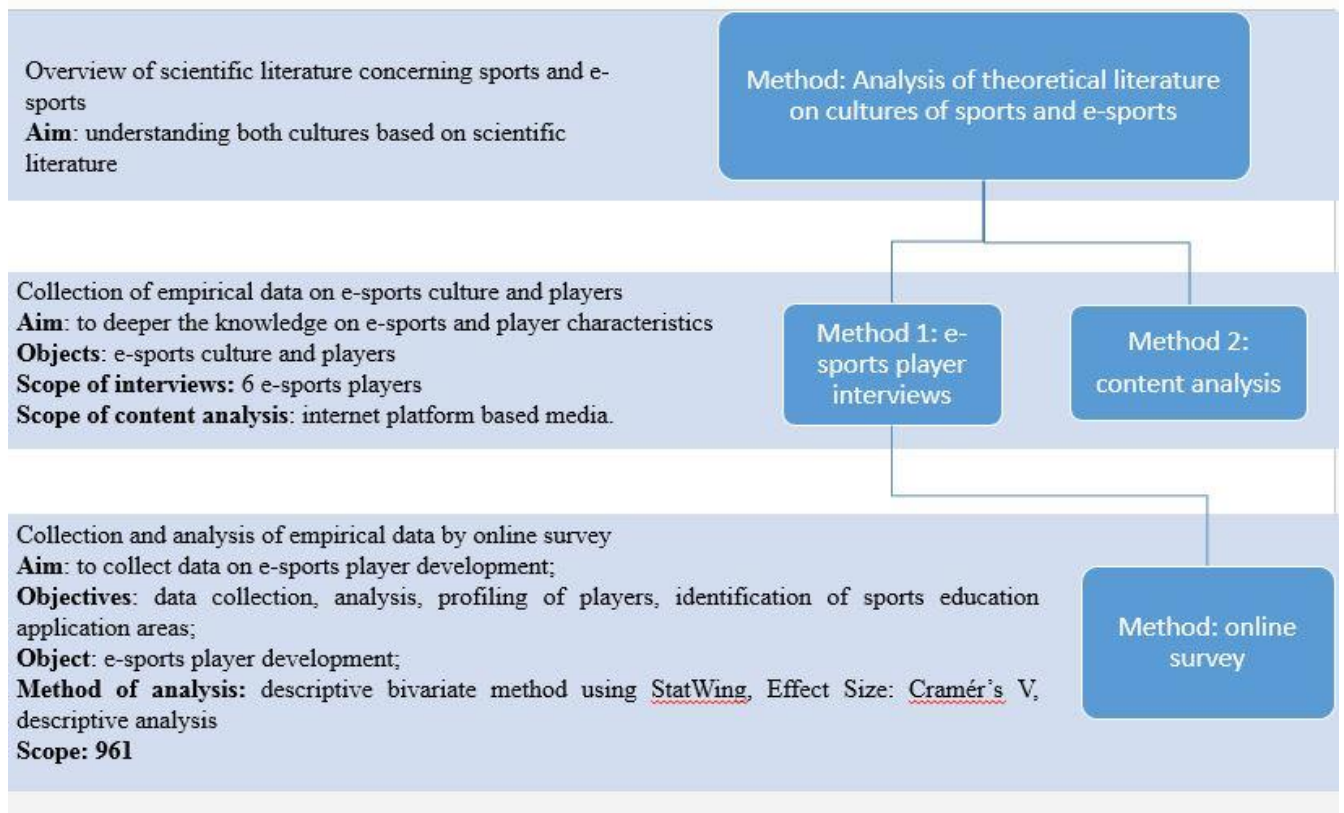


Chart 3. Process of research

The collected data was analysed and recommendations were provided.

Research ethics. While discussing ethics of research it is important notice that in research where data is collected using surveys it is important to ensure their wellbeing during and after the survey is carried out. (Gaižauskaitė, 2014:45) The researcher has to inform the respondent on the purpose of the survey and ensure the voluntary participation of the respondents, confidentiality has to be ensured, etc. While performing this research these research ethics principles were adapted:

1. Ensuring absolute anonymity and data protection;
2. While conducting the interview with players and caster the recording was performed after receiving an oral confirmation;
3. Participation of the interviewees and respondents in the survey was voluntary;
4. All participants were informed of the purpose and content of the study.
5. If requested all participants were promised with feedback.

3.2. Analysis of the Culture of E-sports

Symbols of e-sports culture. In the theoretical part of the thesis we have analysed the culture model provided by Hofstede where symbols, rituals, heroes and values serve a significant role. While seeking to perform content analysis we have to incorporate all of the structural part of this model and their characteristics analysed in theoretical part and fuse them with reality of e-sports and expressions of symbols, rituals, hero and value formed there. We will now attempt to describe, according to Hofstede, the symbols of electronic sports culture. We will do so in finding and identifying correlations between what Hofstede claims to *symbols* (Hofstede, 2005:7) and what Trompenaars identifies as *explicit products of culture* (Trompenaars, 1998:21) and factual evidence in the empirical culture of e-sports.

The author of this thesis, while attending the InfoShow LAN Party in Kaunas in April 17-19th, had the opportunity to speak to some of the Baltic teams of DOTA2, League of Legends and CS:GO before and after matches. I consider myself to be a video game and e-sports enthusiast with vast experience of the video game culture, however while observing the teams and listening to their strategy crafting or casual chit-chat I found myself to be puzzled of what the topic was about.

Language/jargon – is somewhat of a universal and a very concrete concern when it comes to e-sports. On one hand the specific language of e-sports is part of a larger universal pool of abbreviations/jargon/specific terminology of the video game culture. The language of the video game culture is in a sense an extension of the Geek Culture (Tocci, 2009) specific language as a form of

transference from the old Dungeons and Dragons fandom (now and online MMORPG⁶⁷) (see Taylor, 2012:12) and as many of the early and contemporary games were fantasy based (such as in T.L.Taylor – EverQuest) transference occurred. The e-sports language has certain characteristics of that, however it would be wise not to extend on this matter. What is specific to e-sports language can be understood two ways: 1. The common language that e-sports (casual to professional) use in the community and defining terminology of the culture. For instance: league, tournament, game abbreviations, structural jargon of defining different games (FPS⁶⁸, MOBA⁶⁹, Turn-based⁷⁰, RTS⁷¹, etc.); 2. In-game language which is very specific to the game one is playing, although sharing some similarities. To elaborate, MOBA specific jargon and abbreviations: Denying, Farming, Ganking, Offlane/safelane, etc; FPS: ninja defuse; Molly; FF (friendly fire); so on and so forth. This could go on for pages, if the reader would love to see the extended list refer to the endnotes:ⁱ; ⁱⁱ. Also in e-sports culture, we find examples of universal terms and languages as well such as: meta-game, gg (good game), hf (have fun), gl (good luck), wp (well played), etc. Taylor also remarks knowing how to properly greet the opponent to be invaluable to players (Taylor, 2013:95) Communication is usually done via chat or, for more efficient and fast communication via headsets and internal or external audio communication. Further reading can be done ⁱⁱⁱ E-sports players and spectators, more or less understand these terms, however it greatly depends on the level of expertise of a player with e-sports and the game of discussion.

Dress in e-sports is somewhat similar to the fashion trends in sports where each team has their own logos, colours, names and sponsor adds on their apparel. Some examples of team logos:



Figure 5. Team Solo-Mid logo



Figure 6. Team Ninjas-in-Pyjamas logo



Figure 7. Team Cloud 9 logo

Correspondingly the teams and the fans, again similarly to sports wear their teams attributes, however these are mainly t-shirts:

⁶⁷ <https://www.ddo.com/en>

⁶⁸ First person shooter

⁶⁹ Multiplayer online battle arena

⁷⁰ Specific genre of games where the action is based on cyclic turns

⁷¹ Real-time strategy



Figure 8. Team Na-Vi of DOTA2

Dressing up in your favourite team t-shirt or jerseys or any other cosplay that might represent your gaming beliefs. To the spectator it add to the notion of a meaningful leisure activity and to the seriousness of e-sports all together. *Showing how you fit into the scene, in part by demonstrating your expertise and skills, become key activities for participants.* (Taylor, 2010:5)

Hofstede identifies as one of the ever-changing parts of the symbolic dimension of culture the **status symbols** (Hofstede, 2003:7) In e-sports, as well as in sports status affirmation corresponding to Hofstede notion of temporality, can be determined via two measures that can be attributed to players depending on their level. Independent of the level of a players' skill and expertise or talent for that matter, every e-sports game defines status with a *ranking system*. The ranking system is usually based on the win/loss ratio of the player. Casual, experienced, competitive or professional players, if they conduct online playing will fall into this ranking. The ranking system is usually built in the game itself or can be supplemented through external measures such as ranking websites such as GosuGamers or ESLGaming. During the interviews conducted during InfoShow LAN Party 2015 interviewees stressed that In-game and global rankings are one of the few ways of getting scouted by large teams (i.e. Major League Gaming, Fnatic, etc.) or receiving sponsor offers. On the professional level status is achieved by the simple act of winning. Similar to sports, the natural outcome of competition is – win or lose. This is the main source of income both in prize-money and in sponsor support. Each game has its own ranking system on global scale of the top teams and players.

Before visiting the InfoShow LAN Party in Kaunas, I mainly watched e-sports via Youtube or TwitchTV⁷², however having visited the venue, as small as it was gave me a positive cultural shock. What Taylor describes in his work as a personal space bubble exploded for me that day and for many gamers and spectators I suppose. Having the Kaunas Sports Hall to themselves e-sports enthusiast gathered to share their passion, expressing themselves visually and orally, observing and discussing gameplay and teams. Many of them knew each other from online relationships, other, such as me, were

⁷² www.twitch.tv/

just bystanders, nevertheless included into the pool of enthusiasts based on the sheer fact that you were there. The term “*geeking out*” was used by Taylor (2010:4) in describing the participation of an event alike. A true feeling of commonness and belonging I might add.

What Trompenaars defines as an *observable reality* (1998:21) in the context of e-sports were already, on-part, defined above, however there are some additional features that are worthy discussing in light of Guttman’s differentiation list of modern sports. Even though monetary income is of key importance in e-sports to attain the level of *single-vocation* for any professional or aiming to professional level player, a trophy same as in sports remain a significant cultural artefact. It is a token of achievement for any e-sports player, a token of being able to overcome your opponent on equal terms.

E-sports is a relatively new culture and is on the developmental stage of growing as a culture and still could not be identified as mainstream in the general socio-cultural spectrum. The expression of culture is still very miniscule compared to sports. Even though as we have seen these symbols exist and are usable by the community and the spectators they are also hard to grasp. Nevertheless they exist and help define the culture as it is currently.

Rituals within the Culture of E-Sports

Both Guttman and Huizinga in their work, as explored earlier (PAGE), stress the importance of rules. Rules in e-sports are pre-determined and absolute and there are very little ways to circumvent them. To elaborate, all of the games that are being played in e-sports are pre-programmed and there can be almost no intervention from the player’s side, providing equal and absolute rights for every player to compete on even terms. Where in sports **rules** have certain shifts and are enhanced from time to time due to technological advancement in e-sports it is entirely up to the designer and the augmentation usually happen in similar fashion. Rules of the game never simply change, they have updates, never however leaving the “fair-play” boundaries. To elaborate, every player is bound by in-game, pre-programmed set of rules, however Bartle in his classification of player identified the *Explorer*⁷³ type of player or what Taylor calls Power Gamers in MMORPGs. (Taylor, 2006:19) These types of player exists in e-sports both on the professional and the amateur levels. What they do is they “break the game” within the set boundaries of rules constantly creating new widely used meta-game. Nevertheless the rules of the game are the same for every player, there are ways to cheat, however tournament tend to have referees. (Ibid, 79) Another interesting feature of e-sports is the updated of games. When I visited

⁷³ <http://gamedevelopment.tutsplus.com/articles/bartles-taxonomy-of-player-types-and-why-it-doesnt-apply-to-everything--gamedev-4173>

the InfoShow LAN party I had the opportunity to meet and acquaintance a DOTA2 team “BabyFaceNoSpace” and during their participation in the tournament (they won the 1st place) a very peculiar phenomenon occurred. Right before the semi-finals Valve⁷⁴ released a small game update which changed the meta-game of the heroes⁷⁵ they were choosing in that match. Thus some in-game mechanics are bound to change, however it is up to the players skill and knowledge to adapt to these minor changes in the game. On the amateur and professional tournaments each tournament organiser provides the player with their set of participation rules and in-game rules, many long standing tournament have their very specific and detailed rulesets. (Ibid, 65)

When it comes to rituals in e-sports we will attempt to differentiate, as we did in sports section of the thesis, rituals in two groups. One being the external rituals and internal ones, commonly shared amongst players and teams. **External rituals** in e-sports can be differentiated seemingly similar to sports: The events are usually carried out on cyclical timeframes, for instance The International, World Cyber Games and Intel Extreme Masters are held annually (World Cyber Games have been identified by Taylor as the Olympic Games of e-sports (Taylor, 2012:12). Whereas some of the tournaments are organized by sponsors and are usually invitational (similarly to Tennis). When it comes to the event organization it follows the typical sports structure: major events are held in large stadiums (The International 5 was held in Key Arena, Seattle⁷⁶), smaller ones are usually held either online or face-to-face LAN⁷⁷ matches in dedicated venues (usually rented houses). **Commenting** or **casting** is another shared infrastructure unit of sports and e-sports. Casters in e-sports are commonly former or current players who perform live commenting on matches during tournaments.

Internal rituals in e-sports can be attributed to moments before and after a match or what Guttmann describes as pregame rituals (Guttmann 2012:33), where players usually greet each other as an act of respect (this is done on the professional as well as casual levels and has been a long standing tradition) and congratulate the winning/losing team. This is done either via text in chat in-game or physically by a handshake or a hug. There is also the low and high-five with fans after leaving the game. Due to the fact that teams are usually of international composition, national anthem playing is not a feature of e-sports. Teams in DOTA2 have their slogans that they shout-out to hype-up before a match. Some player have their talismans that they sit beside their computers for good luck, for instance a famous CS:GO player Get_Right has his famous Teddy Bear⁷⁸ without which he doesn't play matches. Taylor in

⁷⁴ <http://www.valvesoftware.com/>

⁷⁵ <http://www.dota2.com/heroes/>

⁷⁶ <http://www.keyarena.com/events/detail/the-international-dota-2-championship>

⁷⁷ Local area network

⁷⁸ <http://static.hltv.org/images/galleries/6636-medium/1427632645.299.jpeg>

her work also noticed a ritual where e-sports players, when playing face-to-face LAN matches would all carry backpack with their own keyboards, mouse and headsets. (Taylor, 2013:41) The equity between players in terms of technology is ensured by providing them with the extract performance PCs, however they are free to have their own accessories identified by Taylor.

E-sports as Entertainment and the Status of Hero

For many people the act of watching a person play video game might seem ridiculous, however for many the act of playing can arouse the same reaction. Moreover it is arguable that watching sports might seem like a waste of time as well. The most basic response to the question addressed to person who is watching, let's say a Football match, as to why is he watching instead of playing himself would be "I am not physically fit enough", "I have no one to play with", "I don't know how" or "they are professionals". Taylor observes that the very nature of video games calls forth the individuals involvement. (Ibid, 181) E-sports have the same conditions as sports when it comes to spectating. To watch someone utilize his skills at the best levels possible provides a certain satisfaction. Moreover the technological expansion of computer sciences and the internet provides us with an astonishingly convenient way to mark the field of e-sports as *entertainment*.

According to GameSpot, in 2013 a total of 2.4 billion hours of e-sports have been watched online.⁷⁹ There are a few way e-sports becomes a media-based entertainment: 1) the gamers *stream* their games via TwitchTV or YouTube (see: Twitch⁸⁰; YouTube⁸¹ 2) in YouTube you have "gaming-personalities" who are either game enthusiasts or professional players who record their videos and provide them with commentary and appealing edits (see: YouTube⁸²); 3) Live tournaments that are streamed via various networks like GosuGamers; 4) Live Tournaments be it professional or amateur what can be visited by spectators. These ways of getting audiences to watch e-sports are the main reason e-sports are so popular and produce so many fans for players all around the world. A very important role is played by the casters who cast these live tournaments. They are usually former pro-players or competitive players with vast experience of the game and help the audience, at best to their ability, to grasp what is happening on the screen. (Ferrari, 2013:11) Professional gamers who participate in international tournaments are what is closest to **Heroes** Hofstede identifies in his symbolic level or culture. The superstars of this genre are the players, they are followed online, admired, copied and idolized by fans all over the world.

⁷⁹ <http://www.gamespot.com/articles/gamers-watched-2-4-billion-hours-of-esports-in-2013/1100-6420035/>

⁸⁰ <http://www.twitch.tv/directory/game/Counter-Strike:%20Global%20Offensive>

⁸¹ <https://www.youtube.com/user/TrumpSC/videos>

⁸² <https://www.youtube.com/user/TotalHalibut>

Values as the Core of E-sports

We have, to the best of our ability described the e-sports culture in the detail necessary to synthesize the values that e-sports culture advocates. Even though in order to establish *values* of a certain culture we would need empirical data to ground them upon, we will attempt based on the observation of documents and e-sports in general attempt to establish implicit values of e-sports. This is done due to the lack of literature available on the culture of e-sports, aside from the extensive research performed by T.L. Taylor (2013).

Following Hofstede’s model for culture we have, partly established the symbols, rituals and understood how and why does the culture of e-sports need and have heroes. It should be admitted that by attempting to extract the principle values of e-sports we will have no other choice but to base them on the principality of how, in reverse, sports values are displayed in its cultural field. Very much like when Trompenaars claimed that the observation of cultural elements can be achieved via comparison (Trompenaars, 1998:24), so will we attempt to contrast the values of sports against supposed valued of e-sports.

Sports culture value	Expression of value in the culture	Expression of value in the culture
Equality	Rules provide equal opportunities to all players and participants; Sports are accessible to every race, gender, nationality, age, etc.; Relatively equal opportunities for anyone to aim to be a professional athlete.	Pre-programmed rules and tournament rules provide equal opportunities to all players on every level; E-sports are accessible to every race, gender, nationality, age, etc., however one needs a computer and an internet connection; Everyone has a chance to become a professional e-sports player.
Health and wellbeing	Sports promote physical fitness and body culture; Athletes are great examples and role-models to maintain one’s fitness; Athletes actively promote healthy lifestyle; Some athletes fail to promote healthy lifestyles by abusing drugs in their careers;	E-sports players are viewed as antithesis to a healthy individual; Extensive playtime, junk food and energy drinks are the stereotypical image of an e-sports player;
Socialization and social integration	Sports can help individuals in the process of socialization as sports is a significant part of today’s world, it is inclusive and promoting communication;	Even though the image of a video gamer is a an “anti-social one” online communication is gaining a social capital momentum in today’s world of technological expansion (Zhong, 2011)

	Via sports people are able to attain skills, norms, values, behavioural patterns, etc. (Almos, 2008:70)	Video gamers are communicative and outgoing (blogs, vlogs, Youtube, streaming, etc.); Computer literacy and internet communication; Vast online platforms for e-sports players to communicate and integrate into the culture.
Multiculturalism	Sports can be enjoyed by everyone independent of his/her cultural beliefs; Sports promote intercultural dialogue via international/cultural/religion competition, etc.	Sports can be enjoyed by everyone independent of his/her cultural beliefs also internet anonymity and game platforms and format leave very little rooms for any kind of discrimination (thought still existent); Even though e-sports is a very international phenomenon, healthy competition among nationalities is still visible (i.e. GosuGamers provide top teams list with their national flags);
Self-improvement / participation	Top athletes serve as role-models for young individuals advertising self-improvement, discipline, etc. Result-based goals, achievement celebration, coaching, national identity, winning, community	Top e-sports players show gamers that it is possible to become a superstar player, promoting the idea that e-sports is as serious as sports; Various jobs inside the industry also promote passionate people to get involved and strive for a career in the field; Pro-players show how much work and dedication one has to put in to become a professional; Streams and videos show numbers of hours and research done in order to be the best; Most games provide a convenient method to track your progression (ranking system); You can be ranked amongst the top players if you are good enough, there are no barriers for achievement; E-sports games promote player versus player participation.
Money	Very closely related to being a superstar athlete; Gaining money in sports enables you to do what you love without any other distractions; Top athletes gain immense amounts of money;	The top pro-players gain money for playing; Gaining money in e-sports allows you to do what you love without any distractions; It is very difficult to achieve this level;

	Being a professional athlete is a good career choice.	Being a professional e-sports player is a bad career choice; Getting “big” money is very difficult as income is prize winning dependent.
Competition	Winning is everything in sports; You have the same conditions as our opponents does, thus winning is being better than him/her; Winning leads to personal advancing.	Winning is everything in e-sports; The whole system is based on win-lose system; You have the same conditions as our opponents does, thus winning is being better than him/her; Winning leads to personal advancing.

Table 3 Sports and e-sports values

It is natural that values in e-sports follow a similar patterns to those in sports. E-sports has a negative connotation in society and the media, however on the cultural level these two cultural fields do not differ that greatly. We still do not know very much about e-sports and how it shall continue in the socio-cultural context of today’s society, however we can be certain that it will hold a significant position. Perhaps as it becomes more intertwined in the general society and culture we will observe a clearer manifestation of these cultural beliefs and values instead on having to rely on artificial and synthetic value explanation.

E-sports as a culture is an interesting novelty of the development of technology and a proof that new industries and cultures manifest from this expansion. This culture follows the traits and definitions provided by cultural theoreticians and abides to the rules set out for cultural identity. It has its own values and symbols, structure and organization as well as actors like players and spectators. On its own it is a distinguishable and comparable culture on mostly any cultural aspect. Being driven by core values that are very similar to sports it is safe to say that even though, for now it is not the same as traditional sports and in some cases is not regarded as such, it, on the cultural level, without doubt has the characteristics of modern sports.

3.3. Defining the Player Profiles of E-Sports

During the content analysis and player interviews we have accumulated enough knowledge to determine the four types of e-sports players, as we have discussed in the previous sections: Casual, Experienced, Competitive, Aiming at professional level and Professional are the main levels of e-sports players differentiated in this thesis. The purpose of this chapter will be to determine the characteristics of each group of players. The purpose of such characterization is to deny the popular assumption that e-sports players play solely for leisure and fun. The determined profiles and their aspects

will also help in further analysis as well. Broader analysis of player and team phenomenon from cultural perspective can be found in Annex 5.

The total number of respondents in the survey was 955, the total distribution according to player profiles self-identification was as follows:

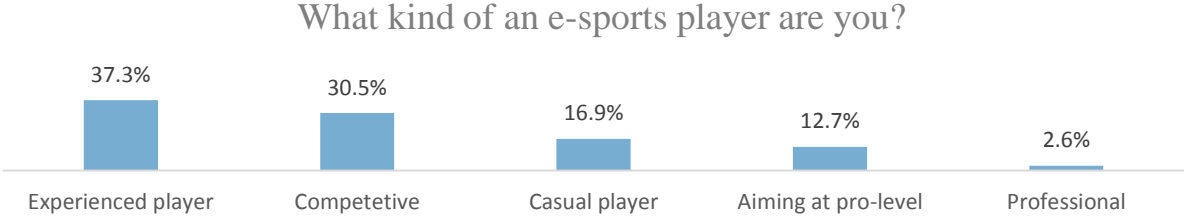


Chart 3, player distribution according to player types.

The player distribution was rather anticipated, due to the natural progression curve the players of e-sports undergo. The smallest count was the professional players (2.6%; total – 25), which given their accessibility is rather a given; the competitive and experienced player pool has the largest number of respondents (30.5% (266) and 37.3% (353) accordingly); casual player count was significantly lower, however this is explainable due to the fact that casual players do not tend to visit game forums very often. *Aiming at pro level* will be more broadly explained in the profiling section, however their numbers are among the lowest due to the fact that they are on the natural regression curve.

Demographics

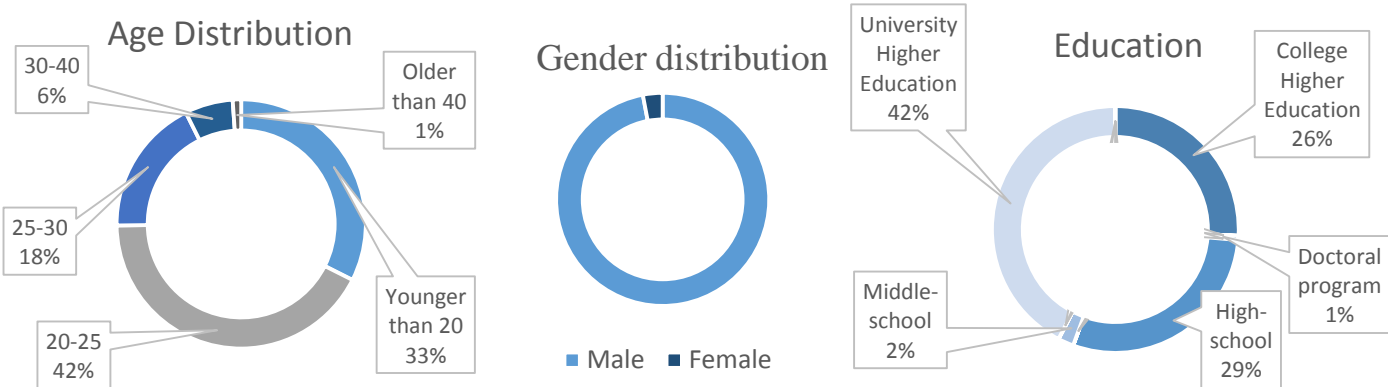


Chart 4 Gender distribution Chart 5 Distribution according to education Chart 6 Education

The data indicated the respondents distributed according to age in the fashion of the majority being of age 25-30 years old (42%), second largest pool was younger than 20 (33%), the 25-30 accounted for 18% and 30-40 were merely 6%. It is very interesting to note that the data directly corresponds to the notion that appeared in the interviews with e-sports players where some of them indicated that the optimal age for an e-sports player is 15-25, that being the optimal age span for a career

in e-sports (this was also covered in the documentary *Free to Play*⁸³). Gender distribution was no surprise to the author as among scholars (Witkowsky, 2012) it is a notable characteristic that women tend to play less video games, the survey provided similar outcomes. The majority of respondents had either University (42%) or College (26%) education; or High School (29%) education. The most popular games amongst the respondents were HOTS, DOTA2, Hearthstone, CS:GO and League of Legends.

Most Popular Games Among The Respondents

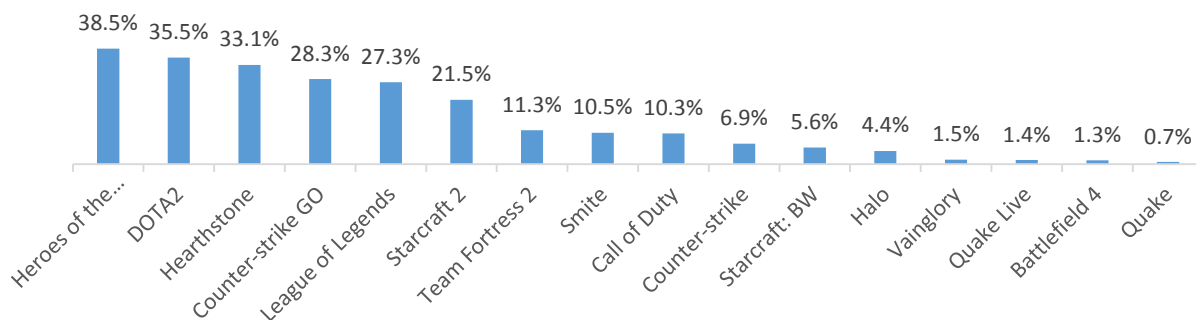


Chart No. 7 Distribution of Players according to Games

The Casual Player

Casual players tend to spend less time on games, for instance the majority of casual players have spent less than 2000 hours on one game, however 26.3% of them have spent more than 2000 hours which really questions how casual is a casual player, however it might be an issue with how respondents define themselves. Nearly one third (28 %) of all female respondents belonged to the casual player type. Half (50%) of casual players had day-time/part-time jobs or (47.5%) were students; and 23.1% were supported by their parents. 92.5% of casual players indicated not participating in tournaments and even though 90% of casual players indicated that the main motives for playing is “fun to play” half of them still indicated that “competition and satisfaction in beating my opponent” (51.9%) and “increasing my skill” (51.2%) are important motivators for them to play. Even though 82.9% of casual players indicated that their goals in e-sports are “casual gaming” or “exploring the game” (50%), 51.3% indicated that “testing their skills against others” was also important. The types of playing usually done by casual players are “casual playing” (92.5%) or “playing with friends” (51.2%). The playing is most often done with friends (69.4%); solo play (67.5%) or with strangers (33.1%). When asked what are the most important things in e-sports 88.1% of respondents claimed it is “to have fun”, however second aspects was “fair-play and ethics” (56.3%) and “to perform well with your team” (53.1%). So even though we observe the typical attributions to a casual gamer, where fun to play is the biggest

⁸³ <https://www.youtube.com/watch?v=UjZYMI1zB9s>

priority, we still see that the competitiveness of e-sports is affecting those on the casual playstyle. It is also interesting to note that the second “most important thing” in e-sports for casual player is “fair play” which indicated a good grasp of e-sports values even on the casual type of players. However this might also be explained by the fact that many e-sports players tend to watch e-sports, thus grasping the key values of the scene.

The Experienced Player

As the developmental curve is going up the hours spend on one e-sports game tend to increase as well, 44.9% of experienced players have spent more than 2000 hours on one game and 25.6% spent more than 1200 hours. 79.5% of them indicated that they do not participate on tournaments. 49.9% of experienced player had a day-time/part-time job or were students (48.2%); 28.3 % were supported by their parents. When it comes to their goals experienced players indicated that “testing my skills against others” (76.7%) to be most important, second was “exploring the game” (46.3%) and “casual gaming” (41.8%). The most popular types of play for experienced players was the “casual playing” (74.8%) and “playing with friends” (60.8%), however “competing against other players” was third with (57.8%). Similarly to casual players, experienced players tend to play more with friends (76.2%) or solo (68.2%) than strangers (28.6%). When asked to indicate to most important aspects in e-sports the top three most popular answers were “to have fun” (83.6%); “fair-play” (61.9%) and performance in team (54.5%). Experienced players tend to value the aspects of competition more, however casual gaming is still key activity for them. They tend to have more friends online so value playing with them. Same pattern when it came to values was identified, however it appears that team-play is of key importance to them. This can be explained with the fact that an experienced player will have quite broad knowledge of the game mechanics.

The Competitive Player

More than 2000 hours were spent by 60% of competitive players and 11.5% spent more than 1200 hours on one game while 7 players indicated spending up to 6000-10000 hours on one game. 58.7% of competitive players indicated participating in tournaments. Half of the competitive type players indicated having a job (50.7%) while 58.3% were students; 24.7% of them were supported by their parents. Here we observe a disparity in comparison to the later groups because 2.4% of competitive players indicated making money off e-sports and the same amount (2.4%) working in e-sports (not as a player). The motivation that drives competitive players divided as follows: 77.9% indicated “it is fun to

play”, however 75.8% stated it was “competition and satisfaction in beating my opponent” and 74.7% “increasing my skill”, also 53.8% indicated that they “like to challenge themselves”. When it comes to goals in e-sports, the most popular was “testing my skill against other players” 80.8% and the second was “Aiming at becoming a professional player” 24.8%. Competitive players admitted that they usually “compete against other players” 80.3% or “play with friends” 58.5%, however they also indicated that they do “casual playing” (40.8%) as well. Strangely enough, competitive players also indicated that they most often play with friends (71.6%), however a significant amount of them play solo (65.4%) and with their team (30.4%). Value assessment of competitive players indicated the same pattern as in previous cases where fun was top priority (72.6%) and “fair-play” took the second spot (63.5%), however the third spot was taken by “to be competitive” (60.1%) and “perform well with your team” and “to play a role in your team” (accordingly 55.6% and 46.2%). It is also interesting to note that competitive player chose more values in general, as in they recognized more in general, such as “enthusiasm and love for e-sports culture” (44.4%); “winning” (44.4%). This is the first group where “health and well-being” rose together with other values. Competitive players tend to stress competitiveness, as well as increasing their performance, however the notion of joy of play is still of great importance. We see a greater sense of values, this might probably be explained by the fact that they spent more time in e-sports and are more familiar with the culture, as well as it is of greater significance to them. Competitiveness, team play and winning came into focus in this group as well.

Aiming at Pro-level

Players in this group have correspondingly more hours spent, for instance 55.5% of them have spent more than 2000 hours on one game and 10.1% more than 1500. Moreover 10 players indicated having spent from 3000 up to 30000 (1 player) hours on one game. Only one female player fell into the category of aiming at pro-level. 76.1% of this group indicated that they participate in tournaments. Interestingly, more students (53.4%) are in this category than those who had a day-time / part-time job (41.7%), more players however are supported by their parents (35.8%), however 14.2% (17 players) indicated that they are earning money from e-sports as a player or via streaming (5%); 4.2% indicated that they work within the scene of e-sports. The main motivation for this groups can be divided into “competition and satisfaction in beating my opponent” (75%); “increasing my skill” (61.7%); “having my own-play style and seeing myself as an e-sports player” (54.2%); “I like to challenge myself” (48.3%); etc. The aiming at pro-level group had totally different goals compared to the former groups their goals divided into “aiming at becoming a professional player” (82.4%); “setting for a career in e-

sports (player)” (47.9%) and “testing my skills against other players” (44.5%). Differences can also be observed in the type of playing players within this category do: “competing against other players” (82%); tournament participation (44.2%); “playing with friends (44.2%) and training (44.2%). While assessing who they usually play with almost the same amount of players marked solo play (60.8%) and playing with friends (61.7%), however here the third largest pool was “I play with my team” (55%). A similar pattern as competitive players can be observed in this category where in general more values were picked out, the top values for player who are aiming to become professionals are: “To perform well with your team” (70.8%); “fair-play” (65%) and competitiveness (63.3%), fun in this category is only fourth (63%). The players in this group display a clearly significant diversity in comparison to other types of players in their motivation, goal setting and features of play. The values, however remain of similar characteristics to those of competitive. It is clear that this type of player is on a different level terms of income and general immersion into the scene of e-sports.

Professional Players

72% of professional players have spent more than 2000 hours for gameplay of one game, two players have spent more than 1500 hours, one more than 8000, one more than 10000 and one more than 16000 hours. 100% of professional players indicated that they participate in tournaments, also the same amount were male. 62.5% of professional players who participated in the survey are earning money form e-sports as a player, 33.3% are students and the same amount are supported by their parents; 29% have a day-time/part time job and 25% are earning money via streaming/YouTube. While assessing the motivation to play e-sports professional players indicated that the top motivator is “competition and satisfaction in beating my opponent” (60%); “increasing my skill” (48.8%); belonging to the e-sports community (44.4%), however again similarly to the former category, fun fell into 4th spot with 44%. The top goal for professional players was “setting for a career in e-sports (player)” (52%); “aiming at becoming a professional player (40%) and “exploring the game” (24%). Professional players who participated in the survey indicated that the type of playing they usually do is participating in the tournaments (88%); “competing against other players (52%); training (52%) and streaming (40%), where playing with friends is only in the fifth place (32%) and casual (28%). In the survey professional players indicated that they usually play with their team (52%) or solo (48%) similarly to playing with friends (44%). The top priority value for professional players was the “fair-play” 68% and “winning” (56%; enthusiasm and love for e-sports (52%); later competitiveness (48%) and the community (44%). Professional players displayed a clear cut difference in tournament participation, earnings, training

emphasis and values system. Tournaments, training, streaming are all top priorities to this groups, as they, at this levels can be regarded as ‘work’. Enjoyment and exploration are secondary.

The data indicates that a shift is observable in the curve of player advancement from the casual to professional players. This shift indicates a change of playing habits, time spent, motivation, goals and values. At every step we see a change in how and why the game is played and what motives are driving the player. If we were to see the casual player as one end of the spectrum and the professional player as another we could use the spectrum provided by the literature of Huizinga and Guttman where fun of playing and work of sports are at the opposite sides. The same phenomenon can be observed while profiling the players of e-sports where fun and enjoyment are becoming increasingly secondary as we approach the pro-levels. Thus we can assert that e-sports, from the player’s perspective is far from being for leisure and performance. Different types of players have very diverse motivation and reasons to play, as foreseen, only the casual player could be identified as playing solely for pleasure.

3.4. Development of E-sports Players

The survey consisted of three topical blocks, of which two were used in identification of the types of players of e-sports. The third block deals with identification of issues the players are dealing during their experiences of gameplay and also identifies their awareness of the exterior support they are or might be gaining, as well as self-assessment.

Physical Assessment

Lumpkin identifies physical education as *a process through which an individual obtains physical, mental, and social skills and fitness through physical activity.* (2011:4) Even though there is no such thing as physical education in context of e-sports, the physical aspect of the game and physical activity of the players is undeniable. They are engaged in physical action inside and outside of e-sports. How they interact and what are the benefit and how they could be employed and enhanced is a new challenge for the field of physical education.

The question at hand is are the players aware of the physical development advantages and what they bring to e-sports. We are going to begin with the physical awareness of e-sports players. They were asked if they do physical fitness, the total response rate was 70% said “yes” and we observed no differences between types of players:

Do you do physical fitness?	Experienced pl...	Competitive	Casual player	Aiming at pro-l...	Professional
Yes	68.8%	70.5%	72.5%	70.0%	64.0%
No	31.2%	29.5%	27.5%	30.0%	36.0%

Table 3. (Effect Size, V=0.035)

Players had the option to enter the text into the survey as to why they thought it was important to do physical exercise. Among the most popular answers some players indicated: (1) *Mental fitness requires physical fitness or at least supports*; (2) *Health is important out of e-sports. Inside of e-sports it helps with reaction speed and focus*; (3) *helps in your reflexes, hand-eye coordination, as well as maintaining your body's fitness, since more often than not, e-sports only trains the mind*; (4) *Typical sportsmen are limited in the time <...> E-sports players can play 24 hours a day - it is therefore possible to dedicate yourself entirely to the game, at the detriment of your personal health<...> realizing there is more to being a professional gamer than just sitting in front of a screen all day.*

When asked whether they would benefit from doing physical fitness in the context of e-sports performance, the majority (76.2%) responded positively.

Do you think your performanc...	Aiming at pro-l...	Casual player	Competitive	Experienced pl...	Professional
Yes	77.1%	73.6%	75.5%	78.4%	64.0%
No	15.3%	21.4%	16.8%	18.5%	24.0%

Table 4. (Effect Size, V=0.025)

Here we observe that e-sports players tend to favour physical training as means to enhance their performance in the gameplay. We can assume that this awareness is the product of either experience or physical education their received in schools. Nevertheless the very fact that they do realize that bring forth the very essential notion of physical education that the mind is developed though the body. The inevitable relationship exists and could be addressed by physical education in ways of enhancing and directing e-sports players in how to harness the physical advantaged of exercise and fitness maintaining.

When asked which of the provided physical qualities are important to the performance of an e-sports player the answers were as follows: 86.9% - “reaction speed”; 73.5% - “eye-to-hand coordination”; 72.9% - “being able to stay focused for long hours”. However among those physical qualities included in the questionnaire the player respondent’s added additional ones such as:

- *Managing multiple activities at once, thinking ahead and predicting enemies movements in a way I would consider similar to chess; teamwork and interacting with your friends;*
- *Motor skill;*
- *Being able to think about multiple things, memorise informations, predict, also reaction speed without precision is worthless;*

The majority of respondents indicated that these qualities are possible to improve:

Do you think it is possible to in...	Experienced pl...	Competitive	Casual player	Aiming at pro-l...	Professional
Yes	94.3%	94.4%	93.6%	95.7%	84.0%
No	5.7%	5.6%	6.4%	4.3%	16.0%

Table 5. (Effect Size, V=0.075)

The physical attributes we observe here are not a novelty and are definitely not e-sports specific. These qualities are the cornerstone of physical education and sports development. The very purpose of physical education, as we have discussed, is to enhance one's physical abilities, whereas these are physical abilities to be enhanced in e-sports. It is only a matter of which abilities we address and what the key purpose is. The objectives of physical education could include the qualities identified above.

We have also inquired which food do respondents prefer and if they follow any diets. The majority (82.5%) of respondents indicated that they do not follow any diets. In addition while evaluating which food they prefer the majority of respondents choose the middle option (avg. 5-6), however professional players tended to choose junk foods more (avg. 4).

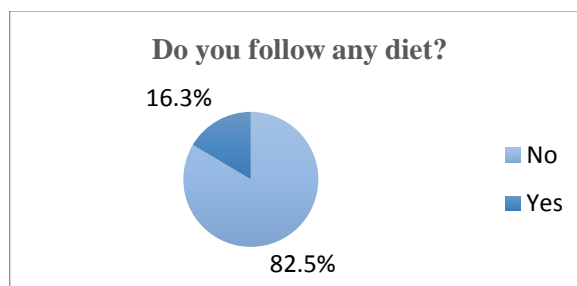


Chart No. 8 Types of Mentoring amongst Players

Out of all respondents 35.5% admitted that they have a bad habit of drinking (47.4%) and smoking (35.5%), also 17.1% of them admitted they abuse light drugs and 3.8% - medicine abuse. Casual players tended to drink more (32%, $V=0.543$); this tendency drops accordingly to the rising of player levels.

Eating habits and health in general are one of the objectives of physical education. This area could be potentially covered by the discipline. Providing proper education of eating and health benefit to the player would increase the health of e-sports players, providing benefits not only to their performance in e-sports but also increasing the quality of life altogether. Here another observation could be made that e-sports and professional players do not promote healthy lifestyles. The scene has a stigma *per se* which incorporates high amounts of caffeine, energy drinks; unhealthy eating habits and medicine abuse.

The data implies that e-sports players who participated in the survey are very much aware of the physical benefits of exercise outside and inside the game performance. Their awareness of that physical qualities can provide advantage to their performance is as remarkable. They have not only the knowledge of the most commonly known physical qualities of e-sports but also have knowledge used in physical education theory. The identified notions correlate to the Cognitive aspects of the physical

education provided by Lumpkin (2011). It is important to remark that awareness of body-mind-body is visible among the responses regarding the physical qualities of e-sports.

Mentors and coaches. According to Hunter (2006) a coach is interested in maximizing a player’s performance. We asked the respondents if they think they would benefit from having a coach in e-sports. Unfortunately only 68.4% respondents that they would actually benefit from having a coach. This might be explained by the fact that coaches in e-sports, on the amateur levels are uncommon. However we see, not a statistically significant, however an increase in importance alongside the advancement of levels of players. This increase could be explained by the players’ awareness of what a coach does in e-sports, however coaches are usually seen as veteran players with greater experience of the game.

Do you think you would ben...	Experienced pl...	Competitive	Casual player	Aiming at pro-l...	Professional
Yes	65.7%	69.2%	59.1%	84.0%	76.0%
No	34.3%	30.8%	40.9%	16.0%	24.0%

Table 5. (Effect Size, V=0.151)

The main reasons indicated why they would benefit from having a coach were: “they have advanced knowledge of strategy and tactics of the game” (61.7%); “providing constant feedback” (63.3%); “they have vast experience of the game” (61.3%); “performance monitoring” (53.2%). In addition the players had the option of providing additional answers via text, suggestions were:

- *Having someone to help with non-game aspects and discipline;*
- *IF the coach understands meta-game well, he can correct our errors on-the-fly and, if experienced, he could show his POV on some situations;*
- *Improve teamwork within the team because we're currently a bunch of uncoordinated monkeys;*

However here an important distinction should be made between a player with vast experience of the game acting as a coach and a real coach with knowledge of educational traits and sports science. The role of the coach in the team is not only transference of knowledge but also professional monitoring. Coaches in e-sports could and should undergo training, making it a legitimate, education grounded profession. What physical education and sports sciences have achieved could be very efficiently employed by such professionals.

When asked if the respondents have a mentor, the answers were as follows: 89.7% of the total respondents indicated that they do not have mentor. Statistically relevant differences were observed among the types of players:

Do you have a mentor in e-s...	Casual player	Experienced pl...	Competitive	Aiming at pro-l...	Professional
No	95.6%	91.8%	89.6%	83.3%	60.0%
Yes	4.4%	8.2%	10.4%	16.7%	40.0%

Table 6. (Effect Size, V= 0.199)

The more competitive the players get and the more they approach the pro-levels, mentors become more popular. The types of mentoring received divided almost equality amongst the players:

What kind of mentoring are you receiving?

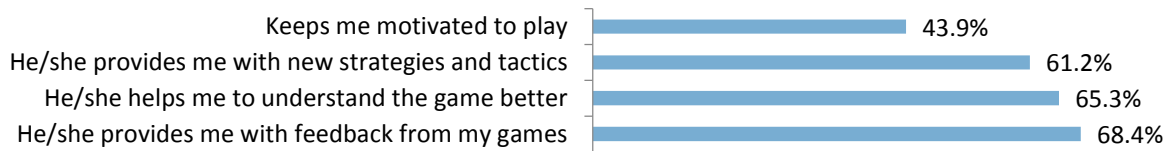


Chart No. 9 Types of Mentoring amongst Players

When asked if they think they would benefit from having a mentor the player's opinions were very similar, 68.9% thought they would benefit from having a mentor, the player the option of providing their thoughts (almost 200) on how they would benefit, some of the answers included:

- *He could point out my mistakes, tell me different strategies and just give me insight on stuff I might have never thought of*
- *Someone experienced could give me ideas and thoughts on my game, cause I cannot think outside the box most of the time, and don't know what's wrong with my playstyle*
- *Sometimes people might give you a fresh look and a good opinion about your style and mistakes; give an advice of how to improve.*

The role of the mentor in e-sports is different from that of a coach. The role of coach is an institutionalized one and the coach usually expect a sort of a reward from the player or the team. Mentor in this case is a "critical friend" who provides feedback or gives advice on certain aspects of the gameplay. If we were to attempt to find a parallel of a mentor as it is seen in e-sports we would identify it as teacher, one who has either greater knowledge of the game or e-sports in general. The way teacher is defined by Hunter (2006) could be the closest to what a mentor does in e-sports, that is provides new information or feedback. Keep in mind that we are able to do this comparison simply because there is no institutionalized or official role of a teacher in e-sports. The mentor, as it is in e-sports, could be replaced by a specialized e-sports teacher in the future.

Career, development and support

In this part we are going to analyse the responses we received while wanting to find out how our respondents felt with aiming for professional careers and importance of family support to them, since Wylleman & Lavallee (2004) indicates roles of family and coach to be key in athletes' development towards professional scene. Nearly half (49.7%) of the respondents thought family, friend or school

support was not important to them when it came to e-sports. To those who indicated that the support was important the answers divided accordingly:

Is support from your family, ...	Casual player	Experienced pl...	Competitive	Aiming at pro-l...	Professional
No	50.0%	55.1%	53.1%	31.1%	37.5%
Yes	50.0%	44.9%	46.9%	68.9%	62.5%

Table 7. (Effect Size, V= 0.158)

We see a statistically significant increase in the need for family support as the ladder of player competence increases. This could be explained by the increasing professionalization of the field as it gets more serious and important to the player. When the player is facing a decision if he wants to continue to the path of a professional career, family support is increasing in significance. Here the role of a coach on the lower levels of career development would be crucial to the players, however aspects of career management only reach the player on the professional levels. When asked how the support was important we observed no statistically significant data, however the respondents had the opportunity to provide textual answers and some of the player indicated that not only the support of family was relevant but also support from exterior actors such as school, an opinion from a professional player:

- *The more people or communities that recognize that you are competing every week for a 2-5K prize pool along with having <...> thousands of dollars of gear every month or whenever a new product arrives is great motivation especially when you are already over-filled and can give it back to your town <...> by donating X amount of money to the town or to my old high-school*

As we see such exterior support actors play a key role in the development of e-sports player and the scene in general. This call for the necessity and significance of institutionalization of e-sports where the state and society accepts e-sports not only as a sub-culture but also as everyday reality. This also has a relationship aspect where the support from such actors makes the decisions for young individuals to aim for a professional e-sports career easier. The recognition makes the scene acceptable by society a norm as for any sports.

The decision to follow a professional career in e-sports is difficult for many reasons and only a few are willing to sacrifice everything. When asked if they are aiming to become a professional e-sports player 28.6% of respondents indicated that they are. The reasons for that distributed accordingly:

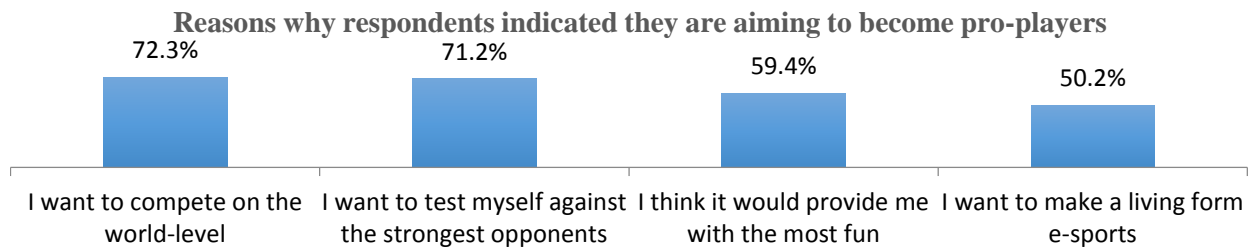


Chart No. 10 Reasons for player to be going pro

There were no significant statistical differences amongst the answers of respondents.

Amongst the responses some were provided by text: *working at somethin tht u good at it and u rly LOVE it is the best thing in the world* and *I want to show that my country also have a good e-sport player*. During the interviews with Lithuanian e-sports players a tendency was seen that one of the main reasons why players tended not to go for a career in e-sports was the lack of recognition from society and that the scene in Lithuania is lacking both the attention and players/teams. Moreover as Matrinkova (2013) observed some of the values of sports are sense of community and expression of oneself. Where there is a community in e-sports it is usually and international one, national recognition can play a key role in the dedication towards e-sports. Athletes tend to take pride in representing their country, however e-sports is considered a sub-culture and not very popular in Lithuania for instance. Even though we see a clear representation of values of competition, testing oneself, satisfaction successful performance, one of the key ingredient is money, as in any sports.

The main reason why respondents indicated they were not aiming to become a professional player were: “I have other goals in life” (70.5 %); “it is too hard to become an e-sports professional” (39.6%); and “I don't see myself having what it takes” (45.4%). We, again witness the effects of lack of institutionalized e-sports, the role of e-sports as a sub-culture. Recognition by society and popularization of e-sports could abolish such opinion by players. E-sports curriculum in schools and universities would help to maintain e-sports in line with other educational activity. When asked what the players would benefit from when aiming to become a professional player, respondents indicated that they would benefit from a “team” (71%), “dedicated location to train” (57.1%), sponsors (50.1%). All of which could easily be solved with input from education institutions and organizations providing the necessary means to develop e-sports players.

Player Development and Obstacles

In this chapter we aim to identify how the players develop their skills and how they enhance their performance, what parallels we could identify with sports education and sports sciences, which aspects would be addressed by them.

According to Lumpkin (2011) physical education provides means to acquire, comprehend, analyse, synthesize, apply and evaluate the knowledge gained by experience or research. In e-sports two key agents that can provide performance feedback are friends/team mates or coaches/mentors. However self-assessment is crucial when approaching training and performance enhancement. We asked respondents to identify key dis-advantages they thought they had over other players. The major obstacles respondents felt were important distributed accordingly: “I don't have much time to play” (49.6%); “Bad influence on my education/work” (26.5%), three of the respondents indicated trauma as the reason. In addition, respondents indicated some additional obstacles unknown to the researcher: (1) *Bad approach to training*; (2) *Finding a team who has the same ideals as I do*; (3) *Teammates' lack of time commitment*; (4) *Not having a team to train with*.

The majority of these could be addressed by proper, e-sports specialized education. Such education could target the key areas of required development, for example using specialized models such as provided by Vilkas (2006), tackling the issues players face. The training done in accordance to the player types divided in a manner where we observe clear increase of training taken upon by player as the curve towards pro-level rises:

Do you do training to increas...	Casual player	Experienced pl...	Competitive	Aiming at pro-l...	Professional
Yes	28.5%	47.6%	71.5%	85.6%	76.0%
No	71.5%	52.4%	28.5%	14.4%	24.0%

Table 8. Do you do training to increase your performance? (Effect Size, $V = 0.377$)

Respondents indicated these to be most important influences of training on their performance: Casual players: “it helps me to become a better player” (87.2%); “helps me to understand the game better” (87.3%); “provides me feedback on my performance” (55.3%). Experienced players tended to stress similar aspects: “it helps me to become a better player” (82.9%); “helps me to understand the game better” (73.5%); “provides me feedback on my performance” (61.2%). Respondents who identified as competitive stresses: “it helps me to become a better player” (89.9%); “helps me to understand the game better” (72.5%), however we see “makes me more competitive” (45.9%) and “helps to prepare for tournaments” (32.9%) also stressed. Players aiming at pro-level also noted that “it helps them to become better players” (89.2%) and “helps me to understand the game better” (75.5%), however “helps to prepare for tournaments” (54.9%) and “makes me more competitive” (54.9%) have significant

more value compared to other groups. Professional players stressed “helps to prepare for tournaments” (83.3%) and “it helps me to become a better player” (77.8%); also “makes me more competitive” (55.6%).

It is notable that reasons for training differ accordingly to the player types, more casual players tend to increase their performance for intrinsic motives, driven by satisfaction of the game itself. However as the players’ levels increase more extrinsic motives are observed. The motivation to train is driven by various values the players advocate. Training, however, why and how it is done could be monitored and recorded by professionals at any level of performance.

Burton (2008) noticed that goal setting provides a positive mental attitude and it key to any successful athlete. 33.9% of respondents admitted that they set goals for themselves in e-sports; 37.3% said they sometimes set goals and 22.9 admitted that they do that rarely. Goal setting seems to be more popular with players who are aiming at pro-levels (58.8% - often; $V=0.192$) and competitive (41.8%; $V=0.192$); casual players tend to rarely set goals for themselves (33.3%; $V=0.192$). This, however is characteristic of the higher performance athletes in sports as well. Proper goal setting is crucial to teach in order to it not to backfire and cause damage on the performance

Even though 49% of respondents admitted they do not do image training, 38.9% indicated that they are engaged in this activity. This is most popular with players aiming at pro-levels (50%; $V=0.211$); competitive players (46.3%; $V=0.211$) and professional (36%; $V=0.211$). Casual player tended to not rely on image training the most (61.9%; $V=0.211$). Burton (2008) admits that mental training is characteristic of sports training regime of athletes and can be useful for professional and amateurs. It is also noted that it is beneficial to do extrinsic (assisted) mental training as well.

Psychological Issues of E-Sports Players

The last part of the survey was concerned with psychological issues that players run into in their gaming experiences. The question asked in the survey dealt with psychological problems that players felt prior, during and after their gameplay. The types of questions in this part included scale-questions and yes or no questions.

E-sports admittedly does not have such a large domain of physical activity as sports, thus it only has partial benefits from sports sciences related to exercise and physical preparation. Thus for our purposes one of the most relevant fields of sports sciences is the psychological fields. Some elaboration on this is required. We can assume, based on the cultural analysis of video game culture and e-sports culture that individuals who engage in e-sports and jump into such highly competitive fields are entirely

new on how to develop themselves and prepare for nerve racking and stress induced matches, tournaments, online and offline participation, training, etc. Thus their psychological preparation as compared to young athletes could be identified as rather novice. Sports and exercise psychology can be very beneficial to inexperienced e-sports players therefore we will examine this field of sports studies broader.

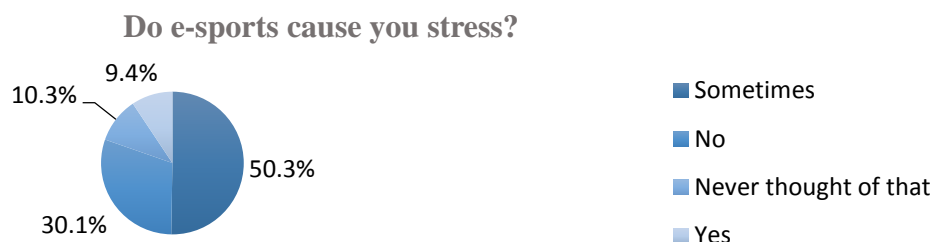


Chart No. 11 Stress amongst e-sports players

Respondents were asked if they feel stress while playing e-sports and how they evaluate their ability to handle it. It was observed that aiming at pro players (54.2%; $V=0.08$) and experienced sometimes felt stressed the most (52.4%; $V=0.08$); we see drop in stress levels further up the progression scale: competitive (51%; $V=0.08$) and professional (40%; $V=0.08$). The majority of respondents on the scale of 1-10 evaluated their ability handle stress at 7 ($P=0.179$; $f=0.09$). It observable that the averages tend to drop lower according to the curve of development (casual – pro), the differences however are not statistically significant. Lose streaks seemed to be the biggest cause of stress for respondents (61.4%) in addition to not understanding why they kept loosing (36.1%), second biggest reason was when players did not see themselves improving (44.5%). The overall handling of stress by respondents could be identified as good. Which directly correlated to the ability to relax before a match where respondents indicated being able to relax quite efficiently, the average indicator was 7 (out of 10). Jones (2008) noted that stress us common among athletes and for inexperienced athletes can cause major issues in performance. As professional athletes have psychological support from coaches and teachers such interventions (coping techniques, moral support, etc.) in e-sports might help players in dealing with stressful situation in competition and training.

Nearly half of the total respondents indicated that they do not have any problems of concentration during game matches (46%; $V=0.176$), however 42.6% ($V=0.176$) of them indicated that they sometimes do have difficulties to concentrate. Professional players tended to have most problems with concentration, where 24% ($V=0.176$) of them indicated either having trouble to concentrate (24%) or sometime had such difficulties (24%; $V=0.176$). Experienced player had least problems with

concentration (58.8% had none; $V=0.176$). Concentration is another aspects of e-sports which could be addressed by techniques designed for sports athletes.

There are various ways to approach confidence and lack of or overconfidence in sports, where athletes have to maintain optimal levels in order to perform well. Among respondents least confident during game matches were professional players (24%; $V=0.176$), however 31.6 % of the respondents indicated that they sometimes had confidence difficulties. In addition 60.6% of respondents admitted that their game performance was affected by negative thinking. This was most felt by casual (62.5%) and experienced players (63.2%). Sports psychology is concerned with handling confidence and motivation of athletes, where certain techniques employed by professionals to monitor and enhance motivation of athletes.

The empirical data at hand indicates that there are specific profiles or characteristics to e-sports players that are driven by motives to play that are beyond the notion of play. We observe various motivation, goals and aspects of player and why they engage in playing e-sports. The diverse features of the player profiles suggests a developmental aspect of advancement through these phases and that the experience gained from it results in shift in values and perception of the players' role and goals in the field. The data on player development perception reveals such emphases on physical dimension in e-sports where players are aware of physical impact on their performance and gameplay, its benefits and aspects, the relationship of body to mind. The inquiry into possible educational interventions of player also reveal that they would and could benefit from having educational professionals enhance their performance and learning experience. We also reveal that family and exterior (school) support could benefit the players both in their development and career setting as well as reasons from aiming or refraining from professional play. The data also provides an important insight in player development in terms of obstacles they face on organisational, physical and psychological levels; their knowledge and techniques used.

DISCUSSION

In this thesis while analysing the cultures of sports and e-sports special attention is paid to the systems of values, rituals, heroes and symbols in the cultural context, as well special attention is paid to the ontological aspects of sports, sports and e-sports organization and player characterization. On top of these aspects development of e-sports players, the developmental curve and characteristics are discussed, areas of sports education intervention identified. While seeking for a more concrete, deeper analysis it would be advisory to concentrate on either education or cultural studies with less stressed relations and employ a deeper analysis of sports education.

In the thesis the author aims to identify the areas where and if sports education could be employed in e-sports. The empirical data signified that such demand is possible. However if a need for deeper insight should arise, it would be recommended to perform case studies or long-term observation of players, as well as phenomenological interviews. However scholars should realise and account for the fact that e-sports players are not very easy to approach. Nevertheless they are keener to communicate online.

It is worthy to note that sports player and symbols are very seldom analysed in the thesis, however the author thinks that it is e-sports that should be borrowing from sports theory and literature as they do seem very culturally and ontologically similar. Such borrowing is bound to happen when we look at what paces e-sports is gaining recognition in society.

This thesis also fails to overview the vast experience of Korea, China and Japan where e-sports is a very rooted aspect both culturally, socially an institutionally. Unfortunately analysis of literature is not possible due to language barriers. Nevertheless English literature is available to some extent and it is without doubt that if we were to embark into deeper research of e-sports such inquiry would be mandatory.

It is very important to realise that acceptance of e-sports on similar terms as sports culturally, socially and institutionally would benefit both the e-sports scene and the players themselves. Acceptance, popularity and cultural values of e-sports as sports would allow the players to embark upon this field not as a sub-culture but as a mainstream activity without any stigmas attached to it, very much like sports is viewed in the eyes of the society. However sports education scholars should contemplate on how to make e-sports cherish the same positive values as sports in order to meet the requirement of society.

CONCLUSIONS

The analysis of sports culture and ontology revealed and allowed to understand the phenomenon of sports, its significance, cultural structure and relationship of play, games and sports in cultural and practical sense. The theory also provided structure towards further analysis of e-sports and main points in cultural comparison.

The empirical and theoretical research performed in this thesis, even though e-sports lacks in scientific theory and exploration, allowed to understand e-sports culture from the same cultural analysis model as in analysis of sports culture. Organization, structure, symbolical expression such as language, jargon, dress, status symbols, team and player characteristics, rituals and values of e-sports were overviewed which enabled the establishment and conceptualization of e-sports as a separate culture.

On the basis of literature analysis of sports and e-sports, as well as analysed data from empirical research we have established cultural and structural similarities between sports and e-sports. It is safe to state that cultural similarities between these two fields are present. The value systems, their expression and development of players follow similar traits to those in sports. By establishing that e-sports, despite being grounded on video games, do not follow only the idea of play, it is an extremely competitive area, where players of any level are encouraged to compete. E-sports similarly to sports have already established a strong status of entertainment e-sports with live events similar to those in sports. Arguments of physical interaction were accounted for as well identifying that physical characteristics such as hand-eye coordination, motor skills and bodily sensations play key roles in e-sports participation. E-sports on every aspect of cultural attributes is either similar in nature to sports or are undesignedly mimicked due to semblance in ontological origins.

On the grounds of empirical research we identify and differentiate at least five (5) types of players in e-sports, which are different based on the dedication and motivation of playing e-sports games as well shifts in attitude towards their development and goals in the activity. This shift indicates a change of playing habits, time spent, motivation, goals and values. At every step we see a change in how and why the game is played and what motives are driving the player. The diverse features of the player profiles suggests a developmental aspect of advancement through these phases and that the experience gained from it results in shift in values and perception of the players' role.

The data collected using an online survey provides information on what challenges do e-sports players face in their development and activity. The results indicate that players are aware of the relationship of body to mind and that physical attributes influence e-sports performance. The data reveals a necessity of

educational bodies in their development and the clearly significant benefits the player would have from educators and coaches. Institutionalization, moral, financial, management and career support necessity was revealed. Main obstacles that players run into are bad approaches to training, interference of e-sports activity and other life goals/activity, lack of team organisation, bad influence on work/education. However it was observed that players tend to use similar training, performance enhancing, psychological and organisational techniques. Reasoning, approaches to training and obstacles tended to differ accordingly to the player types identified. These developmental properties could and should be addressed by the sports education disciplines overviewed in the thesis.

All three hypotheses are considered to be proven: 1. Traditional sports and e-sports relationships on cultural and ontological levels were explored and evidence provided that these similarities do exist. 2. Players motivation in playing e-sports go far beyond the notion of play and leisure and differentiate accordingly to player types and levels of performance and achievement, empirical data supported this claim. 3. E-sports players run into difficulties while advancing and acting within e-sports, areas of sports education application have been identified.

RECOMMENDATIONS

In reference to the data collected during this research it is advisable for sports education theoreticians and practitioners to include or investigate and discuss the possibility of including e-sports players and e-sports in general as additional objects of research and sports education application.

Institutions that prepare sports educators or coaches could also regard e-sports players and scene as an additional and new area of work and specialization. The phenomenon of coach or game analysts are a new phenomenon in e-sports, however it is gaining momentum. The majority of coaches in e-sports are hired for their vast knowledge of the game, however adaptation of physical education and sports science knowledge would provide new job and specialization opportunities for those studying sport.

Video game culture researchers could pay more attention to this new and unique phenomenon in the history of video games. This area could be studied from various cultural study standpoints and could provide new ground for other disciplines to understand this field.

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Additional Online Resources are provided in Annex 6.

ANNEXES

ⁱ DOTA2 terminology: <http://www.redbull.com/en/esports/stories/1331645702509/an-urban-dictionary-for-dota-2>;

ⁱⁱ CS:GO terminology:

https://www.reddit.com/r/GlobalOffensive/comments/13vvin/csgo_terminology_101/

ⁱⁱⁱ E-sports terminology: 1. <http://worldoftanks.eu/en/content/guide/eSport/glossary/>; 2. <http://www.allinmag.com/e-sports/inside-esports/the-business/march-2015-troiano-blog-gaming-terminology-guide-2>; 3. <http://fantasyesportsleagues.com/esports-terminology/>.