Timo Uusitalo

Players Manual to Self-Development in Esports

KAMK • University of Applied Sciences

Abstract

Author: Uusitalo Timo

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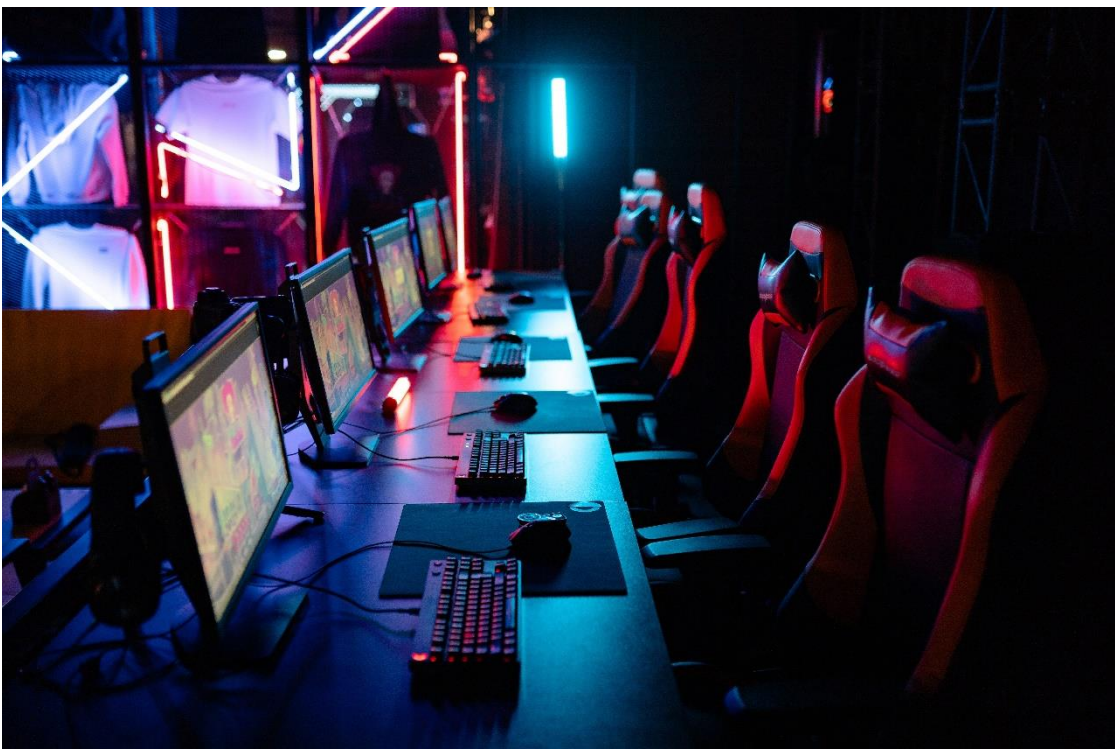
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This thesis was commissioned by Incoach Oy. Incoach Oy is a Finnish company whose business revolves around providing esports coaching services to individuals and educational institutes. They were looking for educational material related to esports to develop their coaching services.

This bachelor's thesis aimed to gather information that would be useful to individuals trying to improve as an esports player. This topic was a suggestion by the client as esports industry is in need of educational content for players looking to improve on a broader scale than their in-game skills.

A survey in form of an online questionnaire was added to test if esports players find the information and arguments presented in this thesis relevant and useful. For the most part the respondents regarded the arguments of this thesis's relevant or their responses could be interpreted as such.

Tiivistelmä

Tekijä: Uusitalo, Timo

Julkaisun nimi: Pelaajan opas e-urheilijana kehittymiseen

Tutkinnon nimi: Esports Business

Avainsanat: e-urheilu, pelaaminen

Tämän opinnäytetyön tilasi Incoach oy. Incoach on suomalainen yritys, jonka liiketoiminta perustuu e-urheiluvalmennuspalvelujen tarjoamiseen yksityishenkilöille ja oppilaitoksille. He halusivat e-urheiluun liittyvää materiaalia valmennuspalveluidensa kehittämistä varten.

Tämän kandidaatintutkinnon tavoitteena oli kerätä tietoa yksiin kansiin, josta olisi hyötyä e-urheilijana kehittymiseen pyrkiville. Tämä aihe oli toimeksiantajan ehdotus, sillä e-urheiluala tarvitsee sisältöä pelaajille, jotka haluavat kehittyä kokonaisvaltaisemmin urheilijoina kuin pelin sisäisten taitojensa osalta.

Verkkokyselylomakkeella tehty tutkimus lisättiin testaamaan, pitävätkö e-urheilijat tässä opinnäytetyössä esitettyjä tietoja ja argumentteja oleellisina ja hyödyllisinä. Suurin osa vastaajista piti tämän opinnäytetyön väittämiä olennaisina tai heidän vastauksensa voitiin tulkita sellaisiksi.

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List of Symbols

CS:GO   Counter Strike: Global Offensive, first person shooter game

LoL   League of Legends, Team arena battle game

SC2   StarCraft 2, real time strategy game

1   Introduction

Esports is a young growing industry, an important hobby and even a career option for many people especially in the younger generations. The topic of making a player's manual for young gamers interested in competitive gaming was a suggestion by Incoach Oy, a Finnish company offering professional esports coaching services. Through the commissioning of this thesis Incoach Oy is looking to receive a compact written guide to provide their clients to develop coaching services provided by them.

This thesis is intended to answer questions and provide information on general problems developing competitive gamers encounter in their path. I chose this topic due to the lack of educational content around competitive gaming or esports. Players aiming at competitive development in games are lacking researched material around the subject. For this thesis I will be focusing on providing tools for gamers to aid them in establishing healthy practice habits, and make their time spent improving themselves at an esports title have more structure and thus be more efficient. A key purpose is to gather information into an easily accessible form, and thus make the reader aware of and interested in improving themselves on areas that have an impact on their in-game performance. The topics of this thesis will be covered for the most part on a surface level, as they are entire fields of research individually.

While one on one coaching websites for different esports titles do exists, however guides such as the one being made in this thesis do not exist yet in the context of esports. The online guides focus for the most part on improving the individuals in-game skills through tips and strategies.

1.1   Background

In this part I will go through why I ended up selecting this topic and the background of the thesis, as well as the commissioning party, what they wanted from this thesis and the theoretical background. The topic was suggested by Incoach Oy who were looking to develop their esports coaching services with new material that would be created from the basis of theoretical parts of this thesis.

Esports as a phenomenon is nowadays considered to have started in the 60's with the publication of game *Space War*, around which were held the first competitive gaming tournaments. During the late 20th century new games emerged and more tournaments were held but the industry only began its rapid still ongoing growth during the early 21st century with the spreading of internet. Esports is early becoming more professionalized with more investors and professionals other than the players entering the industry. During 2010's large mainstream companies such as McDonalds and traditional sports organizations for example Schalke 04 started sponsoring and establishing esports teams and companies. (Esports History: When It All Began (Origin of Competitive Games))

The number of coaches and coaching services in esports have grown rapidly within and with the industry during the 2010's. This is largely due to former top-level players retiring and moving into coaching positions themselves (Daily Sabah), as told by Josh "Jatt" Leesman, the head coach of Team Liquid LoL in an interview. Coaching positions in esports do not require formal qualifications, and research around subjects related to coaching in the context of esports has not been conducted as of now, which is a major inspiration for me to make a thesis from this topic.

1.1.1 Client and thesis goals

Incoach Oy is a company centered around providing and developing esports coaching services. They offer coaching in most of the most popular esports titles such as CS:GO, *Fortnite*, and LoL and are encouraging and helping schools to include esports related studies into curriculums. Incoach offers coaching for individuals as well as teams and works with numerous educational institutes. (*Incoach. n.d.*)

The goal of this thesis is to produce material for a guide, i.e. gathering information to an easily accessible form. The guide will be based on the theoretical parts of the thesis for the client. Goal is providing the reader with basic understanding or on the discussed topics to make them more aware of different areas impacting their in-game performance to make them interested in developing themselves on a broader scale than just in-game tactics, strategies and mechanical skills. Mechanical skills in esports stand for the micro-aspects of the gameplay such as better keyboard- and mouse control and precision.

2 Theoretical framework

The theoretical parts of this thesis are a combination of interviews, academic sources and online articles some of which have originally not been created for the setting of esports. This is due to the lack of academic sources and research on the topic. Some parts of the source material are taken from research on traditional sports and other topics and applied to the setting of esports.

2.1 Importance of well-being

Esports can be physically and mentally extremely demanding similarly in professional and amateur level, and regular sleep, exercise and nutrition play part in the overall wellbeing and performance (The Global Esports Federation Expands Commitment to Health and Wellness in Esports 2021). Throughout wellbeing and good understanding of personal motivations, strengths and weaknesses helps in improving as an esports player as in any area of life.

2.1.1 Fitness

Violeta Ivanova, physiotherapist working as a performance coach for Roots Gaming says there is a common misconception among gamers that physical wellbeing would be disconnected from in-game performance, even though physical wellbeing is a part of general wellbeing that is connected to mental health and cognitive abilities. Most common performance issue she faces are wrist problems, and a typical reason for players retiring young are wrist problems or injuries. (Kajak Esports 2021a). Another example of fitness being connected to performance in esports is that a gamers pulse can rise to above 160 beats per minute which is equivalent to running extremely fast (Science shows that eSports professionals are real athletes 2016).

2.1.2 Rest and maintaining focus

Most, if not all, gamers and aspiring pro players in esports can probably recognize themselves or someone they know playing long hours when they are trying to improve their skills. Sleep and recovery which are connected to ability to focus are areas that can easily be ignored in these scenarios. According to Ivanova sleeping well does not in and of itself make you better but is connected to the general wellbeing (Kajak Esports 2021a).

Mental fortitude and the ability to maintain a high-level of focus for extended periods of time are key skills in any esports one can compete in. A person is not able to maintain their highest level of focus or peak performance all the time. Being able to focus is crucial not only for performance but also quality of practice. SC 2 professional Joona "Serral" Sotala explained in an interview how he emphasizes quality of practice over quantity and does not want to force himself into practicing long hours (Yim 2018). In addition, the timing of meals helps in having high energy levels and ability to focus when needed, ideally eating a proper meal several hours before a match or practice session (Kajak Esports 2021a).

2.2 Psychological skills

Understanding personal sources of confidence and motivation are important skills when trying to improve in any area of life. Recognizing the strengths, weaknesses and areas of development is important to be able to make progress (Malvela & Ronkainen 2020, 38-42). Self-reflection is a method of achieving a better understanding of one's own set of skills, strengths, and weaknesses.

2.2.1 Building self-confidence

Self-confidence is a positive factor that helps us in life. It means that you trust in your set of skills and abilities and it allows you to have a sense of control in your life (What is self-confidence? 2021). Self-esteem is a person's broader view of themselves. A person with low self-esteem can be the absolute best at what they do, and be confident in their skills, but have low self-esteem due to other areas of their life (Malvela & Ronkainen 2020, 38-42).

Self-efficacy, or one's belief of how attainable certain level of performance is (Bandura 1977), has been identified as a source of confidence (Hays et al 2007). The same person with the same skill-set may perform differently depending on fluctuations in their self-efficacy (Hays et al 2007, 434-456).

Past experiences can reflect on self-confidence. Series of successes can increase self-efficacy and persons belief on what level can be attainable. The manner of communication in our environment plays a part to our self-confidence. It impacts how we face and react to mistakes and failures. If lost games and mistakes made are talked as being momentary inconveniences, they do not leave lasting negative traces to our self-confidence. Sometimes feelings can be the only aspect driving a person to a new peak performance. (Malvela & Ronkainen 2020, 38-42)

Self-knowledge is one's knowledge of personal sensations, thoughts and beliefs (Gertler 2003). One has to be able to recognize the strengths, weaknesses and areas of development to make progress (Malvela & Ronkainen 2020, 38-42). What this refers to includes for example a personal need for rest and what motivates, outside of the in-game skills.

2.3   Motivation

Motivation is a mental process that directs behaviour. In sports there are two types of motivation, intrinsic- and extrinsic motivation. Intrinsically motivated player is driven by enjoyment of playing, challenge of competition and improvement. Extrinsically motivated players are after rewards such as winning trophies or reaching a new high on a game's ranked ladder. Cohn n.d.

Extrinsic rewards are part of esports. Professional teams are competing for titles in for example CS:GO Majors, LoL world championship or Dota 2 The International, and everyone can go to a nearby LAN and participate in a tournament. Extrinsic motivation is necessary and can be beneficial. However if the driving motivation is being extrinsic, it can lead to competitive pressure and anxiety, making it more difficult to cope with failures and damage your self-efficacy and confidence (Cohn n.d.). Majority of motivation should ideally be intrinsic. Intrinsic motivation helps you keep focus, reduces performance related stress, and lets you enjoy what you are doing (Cohn n.d.).

2.4   Orderliness of life to help improving

Routines and habits create the framework for our days. They can be greatly beneficial when striving towards a specific goal, in this thesis's case improving as an esports player. Former and current esports professionals have publicly spoke during the past few years about the benefits structured and planned out days bring to improving.

2.4.1   Routines

Daily routines create structure to our days and are beneficial to mental health. They can for example help in reducing stress, be a coping mechanism and relieve anxiety (Brenner, 2020). Former top level esports player in LoL Lauri "Cyanide" Happonen reflected on his years of professional play, and described how at the time he did not fully understand the positive impact a daily schedule of studying, playing and exercising as a coping mechanism had on his performance at the time, but came to realize this afterwards (Kajak Esports 2021b).

Ivanova mentions light exercise such as stretching and using a stress ball as examples of beneficial pregame routines to help calm down and get into the right mindset (Kajak Esports 2021a). These could similarly be used as bedtime routines on top of avoiding electronics for a while before sleeping.

2.4.2   Habits

Habits are small decisions and actions performed daily. James Clear claims our lives are sums of our habits (Clear, n.d.). In context of improving as a player this means that you are ultimately as good as your daily habits, and how do your everyday actions reflect to the goal of improving. Tossavainen, Hietaniemi, & Huhtinen define six success factors that can help in changing habits to support improving as a player:

You should plan and foreshadow your daily actions. This is makes you able to accomplish more with less effort. Focus and pay special attention to one thing at a time, however keeping the big

picture constantly on your mind. The result is a combination of little things. New habits are made of small but crucial things. In middle of your ordinary days taking a moment to simply stop, helps you relax and clear your thoughts. To achieve your long-term goals, you will have to try to reach your short-term ones. Failures are learning possibilities and make you stronger. What's crucial is how you act when facing them.

2.5   Development

Goals have been shown to be the primary source of motivation (Latham & Locke, 2012) and are thus important when trying to improve. Reflective learning is another method one can use when trying to improve in esports as in any other field as well. Learning biases are however something to be wary of when doing this, and while getting rid of them is not realistic of desirable (Bougie et al 2019), being aware of their existence assists in not being harmed by them to a large extent.

2.5.1   Goal setting theory

Goals are the primary source of an individual's motivation, and goal-directed action stems from biology (Latham & Locke, 2012). Latham & Locke mention two core findings made that led to the development of goal setting theory in 1990's being as follows:

1.   Linear relationship between the difficulty of a goal and performance level.

2.   Specific and more challenging goals led to a higher performance compared to having no goals or vague, general ones such as "do your best".

They determine the issue of the "do your best" goal as that it is defined subjectively, whereas a highly specific unambiguous goal makes it clear what qualifies as a sufficient performance. Specific high goals have been noticed to activate deeper knowledge and skills a person needs to reach that goal, that they may not need to utilize in routine tasks. (Latham & Locke 2012)

An ideal goal for you to strive for should be specific and demanding. Too easy goals lead to lower time spent working, whereas too complex ones can cause a person becoming tunnel visioned on sub-goals to achieve imminent results and lose focus on the primary goal. (Latham & Locke 2012)

2.5.2   Setting a goal

This chapter gives an example of goal setting through LoL. You want to develop your individual skills that are as separate from your team members performance as possible. First you need to define a goal that you can clearly determine if you have reached or not. Lets say in this example that the goal is to win laning phase, which refers to the first 14 minutes of a round of LoL, in which a game generally lasts between 25-30 minutes and is separated to three phases of which laning phase is the most reflecting of a person's skill in 1 vs. 1 scenarios.

Firstly you need to define metrics that you will use to determine if you have won, which could be in the game your gold-advantage over opponent, and your experience lead over opponent. After this you set a large enough sample size of games, for example 50 or 100 over the course of which you gather data from your games over these statistics and pay special attention on improving around them. In the end you compare statistics from before your set goal with the ones you played after setting it and compare and analyze the results. Watching your own replays after each game and thinking why you succeeded or failed in that game plays a crucial part in developing.

In a different game such as CS:GO you could utilize your damage per round and kill to death ratio as statistics to follow your development in a similar manner as in the LoL example. Although statistics especially in a team environment are not necessarily reflective how valuable you as a player are to your team, what they do reflect when playing solo ranked games over large samples of games are your individual skills. These fundamental skills that play a part in every single game and round of whatever esports game you are looking to improve at and are crucial when you are reaching for the high level.

2.5.3 Learning through reflection

Reflective learning aims to make learning a conscious process through asking questions and critically thinking about your ideas (Reflective learning 2020). Reflection involves linking recent experiences to previous learnings to then process and evaluate the information (Costa & Kallick 2008). According to Costa & Kallick this should then be extended to applying what we learned through reflecting to context beyond the initial circumstances. Following is an example of what the process of reflection for a round of whatever game CS:GO, LoL, SC2 etc. could be like:

- How do you prepare for your game?

- What are the first things you do?

- What were the game deciding moments, what caused them?

- Why did you do the actions you did?

- What would you do differently knowing how the game transpired? Could you have acted differently?

2.5.4 Learning biases

To handle vast amounts of information, our brain develops subconscious mental shortcuts to handle repetitive tasks, which is called heuristics. A cognitive bias occurs when heuristics fails to produce the correct decision (Bougie, May & Smith 2019). They explain how cognitive biases can be harmful to learning and make us resistant to acquiring new information that does not suit our previous understanding. To try becoming unbiased could easily become counter-productive but biases should not gate us from considering new ideas or ways of performing (Bougie et al 2019).

While reviewing a game of for example LoL, there is a common prejudice that taking an objective in the game, such as destroying an enemy tower is advantageous. When this situation occurs in game the first thought is that the situation is favorable to the team that destroyed the tower as it theoretically takes them closer to victory. While it can be true in some scenarios, it is however a cognitive bias due to a tower missing from the map having impact on other areas of the map,

and how the teams are strategically able to continue the game as it can even be harmful if for example the tower is destroyed too early into the game. Critically reviewing decisions such as in this example is useful in making us question common conceptions, view the game from different or new angles and deepening understanding on former concepts.

3 Research

The topic of this thesis was selected due to the lack of research on it in the modern day, due to esports being a young industry. The research of this thesis was conducted with a questionaire, the questions of which were selected to test the relevance of the arguments and information presented to individuals trying to improve as esports players. The questionaire was distributed to the esports business students of Kajaani University of Applied. They were asked beforehand if they considered themselves competitive gamers making an active effort in improving their skills.

3.1 Methodology

I chose to utilize qualitative research method due to questionnaire being a natural way to find out if amateur level esports players find the information, methods and arguments presented in this thesis relevant and useful for players looking to improve their skillsets in esports.

The questionnaire was made and distributed in Google Forms. The recipients were students of Kajaani University of Applied Sciences in the Esports Business program and they were asked beforehand if they were amateur esports players making an active effort in improving themselves. The level in which the subjects played at the time of conducting the research was not considered, as it was deemed irrelevant to the topic at hand.

3.2 Research Results

The research results are represented in this chapter. I will present the overall results of the questions. The length of answers was not limited in the questionnaire and thus some were too detailed to be included in their full length. They can be viewed from the appendices. A total of nine answers were received to the questionnaire from the students of Kajaani University of Applied Sciences esports business degree program's students.

3.3   Research data

This is an overview to the data provided by the research. Not all the answer are presented here due to their length and details. They can be viewed from the appendices at the end of the thesis. The responders unanimously agreed on that physical fitness and performance in esports are connected. Following graphics display responds to two other questions.
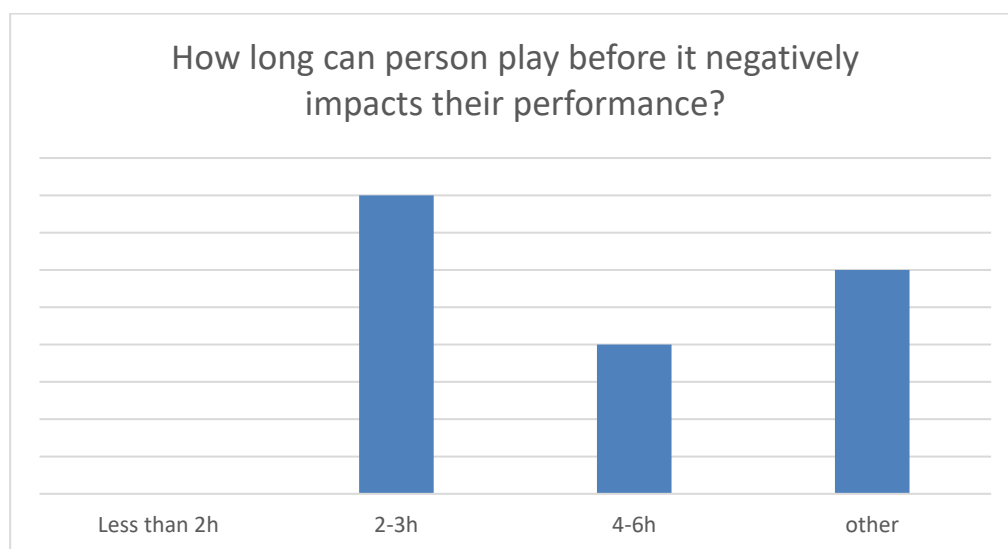

Figure 1. How long do you think one can play before the length of session starts negatively impacting their performance?. (=9)

First figure when generalized to a larger scale suggests the idea that majority of gamers consider the optimal length of a gaming session somewhere between 2-3h when trying to achieve peak performance. Other answers contain responds with no clear time limit for achieving an optimal performance, or ones longer than 6+ hours.
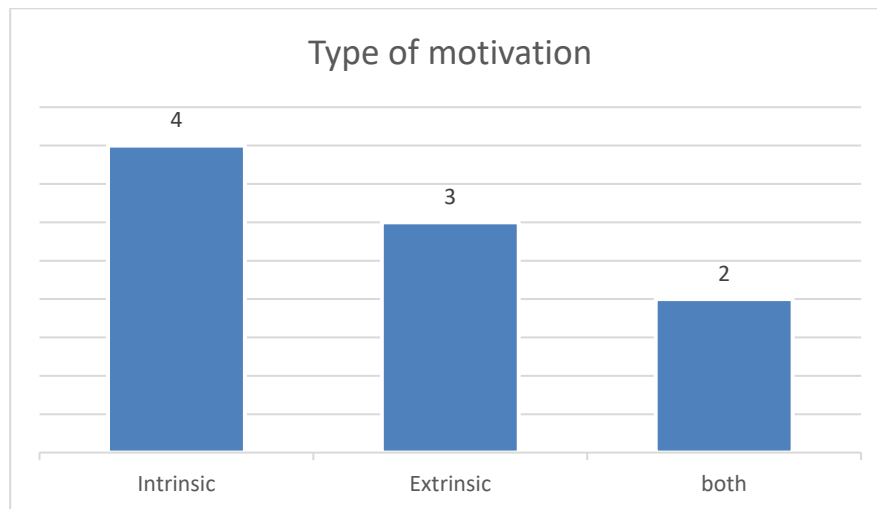
Figure 2. Are you extrinsically or intrinsically motivated?. (=9).

Type of motivation with the responders distributes quite evenly between internal and external driving motivations. The data suggests that one can not be specifically identified as driving for esports players.

3.4   Reliability and validity

The research is easy to reproduce, however having certain issues. Raw data was not in a practically appliable form and handling it proved time consuming. For its key purpose of testing the information and arguments of the thesis I however consider the survey successful.

3.4.1   Reliability

This thesis's questionnaire ended up having fewer responders than hoped for which causes issues for the validity of the gathered data, as the sample size is small. Target audience I consider correct for the topic. Replies were the recipients own subjective views on the topics, with the intention of measuring if the information presented in this thesis's theoretical part were found relevant by the recipients. Data provided by the research is relevant for providing a brief view on the ideas and characteristics of average competitive esports players of varying skill levels.

3.4.2 Validity

While I consider the research method of choice correct, the execution however had issues. Some of the questions could have been provided with preselected answer choices to make interpreting the data easier and receiving more accurate answers. The issue is primarily noticeable in that presenting the research data in a simple form is difficult. However, I do not consider this hurting the overall validity of the research to an extent where the data gathered should be considered invalid. It was able to provide answers with information relevant to the research and finding if the arguments and information presented in this thesis's theoretical part are considered useful by people looking to improve as esports players. The thesis's theoretical part and the research handle the topics at a general level, for which it should be considered sufficient and thus valid.

4   Conclusion

Esports industry is becoming more professional year by year and this development is reflecting to the players wanting to compete. The industry is plagued by players retiring young, which has inspired the making of this thesis. The amount of money increasing in the scene impacts what is expected of future players in terms of professionalism. The aim of this thesis was to make aspiring professional players aware of a wider area of fields they can develop themselves in to support their development as a player and support in making esports a healthier lifestyle in general.

The importance of wellbeing and healthy habits is not as understood in the esports industry as it could be. Positive development has been and is happening as professionals from fields of wellbeing such as physiotherapy are entering the esports industry and are producing content specific to it. Vast amount of information impacting the wellbeing, career longevity and development of aspiring players still has to be searched for and applied to an esports setting from traditional sports and research revolving around it that may not be considering aspects and nuances that would be relevant to esports.

Former and current professional esports players have begun publicly speaking of matters such as wellbeing, healthy practice schedules and the importance of mental health. As the industry has grown older and with it the number of former and current professional players, these wellbeing issues have been begun to be brought up and become better understood. Aspiring players should listen to them and not repeat their mistakes.

The purpose of this thesis was to gather relevant information to people aiming at developing as competitive esports players. Its successfulness in this goal can be properly evaluated later if it ends up being distributed by the client Incoach Oy in a form of user experiences.

Connection of performance in esports and physical wellbeing were agreed on and understood by the respondents. Taking care of basic physical wellbeing and goal setting are simple examples of areas people try to improve as competitive gamers.

The topics of this thesis have been covered only briefly which is the main drawback of a thesis of this type, as time constraints make a more in depth view unfeasible. This thesis provides a

collection of topics relevant to the development of players and ideally makes the reader aware of and interested in researching and deepening their understanding on the areas.

This thesis could act as a starting point to a future, more throurough view on the areas it covers. Each topic has a need for research conducted on esports that would consider the unique features it has compared to traditional sports.

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Appendices

Questionnaire

1. Do you think physical fitness impacts performance in esports?

2. How long do you think one can play before the length of session starts negatively impacting their performance?

3. Are you extrinsically or intrinsically motivated? Intrinsically motivated player is driven by the joy of playing, whereas extrinsically motivated players are after rewards such as winning trophies or reaching a new peak on a game's ranked ladder.

4. Do you set specific goals to yourself? Why?