# Psychologists' and psychology students' attitudes about gaming, problematic gaming, and the new diagnosis for gaming disorder

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This master's thesis examines psychology students' and graduated psychologists' attitudes towards digital gaming, problematic gaming, and a new diagnosis of gaming disorder. The purpose is to map the attitudes of Finnish psychology experts on these topics for the first time. For the study, 6 students and 10 professionals were interviewed. 9 of the interviewees were players, 9 were women and 7 were men. The interviews were semi-structured and included a 5-step ATGS-8 (Attitudes Toward Gambling Scale) questionnaire, in which the word *gambling* was changed to the word *digital gaming*, and open-ended questions were developed by the researchers themselves. For the analyses, value coding was used to classify participants' verbal responses according to the attitudes they contained. After the analysis, four groups were formed according to the results: benefits, disadvantages, problematic gaming and the diagnosis, and the responses in the ATGS-8. Most attitudes towards gaming were neutral and positive. No strong negative attitudes were found in the study at all.

This study brings new insights into the attitudes of psychologists towards digital gaming, problematic gaming, and the gaming disorder diagnosis. The interviewees expressed different yet supplemental attitudes to the overall data, which seems to adapt with the previous research well. Paradoxically, the benefits and disadvantages of games both contained social, cognitive, and emotional categories. The answers also differed in parts in which the respondents considered children separately in their answers. These findings can for example help in the development of an improved questionnaire about gaming attitudes.


Keywords: attitudes, psychologists, digital gaming, gaming disorder, problematic gaming

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Tässä pro gradu -tutkielmassa tutkimme, mitä asenteita psykologian opiskelijoilla ja työelämässä olevilla psykologeilla on digipelaamista, ongelmapelaamista ja uutta pelihäiriön diagnoosia kohtaan. Tarkoituksenamme on kartoittaa ensimmäistä kertaa suomalaisten psykologian alan asiantuntijoiden asenteita kyseisiin aihepiireihin. Tutkimusta varten haastattelimme 6:ta opiskelijaa sekä 10:tä ammattilaista psykologian alalta. Haastateltavista 9 oli pelaajia, 9 naisia ja 7 miehiä. Haastattelut olivat puolistrukturoituja ja ne sisälsivät 5-asteikkoisen ATGS-8-kyselyn (Attitudes Toward Gambling Scale), sekä tutkijoiden itse kehittämiä avoimia kysymyksiä. Kyselyssä korvasimme sanan ''uhkapelaaminen'' sanalla ''digipelaaminen''. Analyysejä varten käytimme arvokoodausta, jonka perusteella vastaukset luokiteltiin tulosten asenteiden mukaan. Analyysivaiheen jälkeen muodostimme neljä ryhmää sen perusteella, minkälaisia asenteita aineistosta löytyi. Nämä ryhmät olivat ovat pelaamisen hyödyt, pelaamisen haitat, ongelmapelaaminen ja diagnoosi sekä ATGS-8-kyselyn vastaukset. Suurin osa asenteista oli neutraaleja ja myönteisiä pelaamista kohtaan. Voimakkaan kielteisiä asenteita tutkimuksessa ei löytynyt.

Tämä tutkimus tuo uutta tietoa psykologien asenteista digipelaamista, ongelmapelaamista ja pelihäiriön diagnoosia kohtaan. Haastateltavien vastaukset sisälsivät moninaisia asenteita, jotka mukailivat aiempaa tutkimusta. Pelien hyödyt ja haitat sisälsivät kolme samaa kategoriaa: sosiaalinen, kognitiivinen ja emotionaalinen. Osassa vastauksissa haastateltavilla oli erilainen asenne koskien lapsia. Tutkimuksessa saatuja tuloksia voidaan hyödyntää tulevaisuudessa esimerkiksi pelejä koskevien asennekyselyiden laatimiseen.

Avainsanat: asenteet, psykologit, digipelaaminen, pelihäiriö, ongelmapelaaminen

# TABLE OF CONTENTS

# 1. INTRODUCTION

Digital game play, or gaming, has been a polarized phenomenon in our modern society for decades. Public discussion has often been limited to the negative side effects of digital games, even though the positive aspects have started to gain more media attention. Nevertheless, gaming is a growing phenomenon that is here to stay. The different attitudes we hold towards digital games and those who play them can affect the way we behave towards individuals who play games. This is especially important in the field of mental health as the mental health professionals' attitudes may affect the quality of the treatment.

In this study we aim to find out how psychologists and psychology students view gaming as a phenomenon and what problems they think gaming can possibly cause to the gamers themselves and those around them. The aim of our study is to explore these different attitudes that psychologists and psychology students hold and help shed light on the perspectives these mental health professionals may have towards digital games, problematic gaming, and the new diagnosis for gaming disorder. We believe that the findings of this explorative study are valuable as such in increasing the awareness of different types of attitudes that are present in the field of psychology.

## 1.1. Games explained

Game development has grown to be a very successful business all over the world. Engaging with games is easier than ever as digital games are available to anyone with a smartphone or computer. In this part of the introduction, we examine what studies have said about games, their benefits and disadvantages.

Digital gaming is gaming which happens through technology (with a computer, mobile device or gaming console). Games can be online games where the gamer plays with random people or friends on the internet, or they can be offline games which are generally called single player games. The

1

intensity of concentration required varies between different types of games, and the genres of the games range from strategy games to dancing games (Kuuluvainen & Mustonen, 2019).

Prevalence studies have tried to shed light on the possible problems regarding gaming. For example, physical health issues have been found to affect only a small subgroup of players and to be temporary, slight, and easily removed by better control of the amount of gaming (Griffiths & Davies, 2005). There is no doubt that spending an excessive amount of time engaging in any activity can lead to both physical and mental health problems. However, excessive gaming has been found to have a link to psychological well-being in some (Johannes, Vuorre & Przybylski, 2021). New findings between games and well-being are reported at an accelerating pace in the research field. So far, the highest risk for well-being due to gaming has been linked to considering only a relatively small subgroup of gamers (Griffiths & Davies, 2005). In a recent meta-analysis (Fam, 2018), the pooled prevalence of internet gaming disorder (IGD), a proposed diagnosis for problematic gaming in DSM-5, among adolescents was 4.6%. With the gaming disorder diagnosis (GD; the differences of the diagnoses are explained later in this introduction) had different prevalence rate. In a more recent meta-analysis, the adjusted prevalence rate of GD was 1.96% worldwide (Stevens, Dorstyn, Delfabbro & King, 2020). Higher prevalence was predicted using adolescent samples, smaller sample sizes and lower cut-off scores, but according to the GD rates males experience GD more than females (Stevens et al., 2020).

Almost every study focusing on the effects of gaming gathers data about how many hours the gamers have spent playing and reflects the results to the hours spent gaming (e.g., Johannes et al., 2021). Some studies have found that moderate gaming time relates to the positive well-being of the player (Kuuluvainen & Mustonen, 2019). At the same time, the hour limits for moderate and excess gaming differs between scholars. Przybylski (2014) studied 10 to 15-year-olds and found out that playing games more than 3 hours a day resulted in lower life satisfaction and lower tendency to prosocial behavior as well as more internalizing and externalizing problems. In the same study, moderate players (1 to 3 hours a day) were found to have no difference with the control group of non-players, while players with less than 1 hour of gameplay per day seemed to have higher life satisfaction, higher tendency to prosocial behavior and less internalizing and externalizing problems. As a result, our research included explorations of the interviewees' attitudes concerning gaming hours and their impact on gamers.

When it comes to learning new skills and using one's skills in a game, there is no direct connection between games and their effects on gamers. In the present studies of gamers, it is quite

difficult to point out where the gamer's own interests and set of skills in a game end and where the development of a particular skill through the game begins (Kuuluvainen & Mustonen, 2019). However, games have been found to develop resilience, cooperation skills and social skills (Kuuluvainen & Mustonen, 2019). In our thesis, we are interested in exploring what the participants of our study think the benefits of gaming might be.

Just like every other hobby or interest, gaming can also have a negative influence on a person's life when it becomes excessive. Games can be used to escape daily life and its duties and to regulate emotions (Salokoski, 2005). Games affect our emotions, and they can make gamers feel happy or successful as well as disappointed or angry. In the previous research, the link between excess or problematic gaming and emotions and stress have been studied. Excess gaming seems to have a link to emotion regulation in school children (Salokoski, 2005). Games seem to work as a gateway out of one's negative mood. Salokoski (2005) proposes that focusing on the game world may distract from negative feelings by offering a way not to think about one's feelings. Similarly, by diverting the attention from offline problems to online gaming, stress levels begin to relieve (Snodgrass, Lacy, Dengah, Eisenhauer, Batchelder & Cookson, 2014). Problematic gaming has also been linked to stress. When the stress levels in the "offline world" are considered overwhelming, gaming habits can turn excessive and the long-term avoidance of one's problems may start to magnify the problems instead of relieving the distress caused by them (Snodgrass et al., 2014). Of course, dealing with stress or feelings through gaming can be problematic especially if it becomes the only way to deal with difficult thoughts. Believing that escaping to the game world makes one feel better might develop into a disorder in time (Salokoski, 2005). One of the goals of our study is to find out what kind of associations our target group has considering games being used as a way to cope with emotions and stress.

## 1.2. Attitude theory

Oskamp & Schultz (2004) present that an attitude is a disposition to respond in a favorable or unfavorable manner to given objects. According to them, attitudes include some or all the following: evaluative beliefs about, affective reactions toward and behavioral responses toward the object that

is the target of the attitude. In addition, latent process theory approaches attitude as a variable that is not observable in itself and can be observed only through the process of interference. For example, when an individual is faced with a stimulus, they may react through their non-observable cognitive, affective, and/or behavioral processes. These processes can form an attitude towards the object causing the stimulus. Oskamp & Schultz (2004) point out that even though the attitude is unobservable, it can present itself in cognitive, affective, and/or behavioral reactions to the stimulus. According to them, in latent process approach even cognitive responses, that show evaluation of target object, fall under the category of attitudes as the attitude is a summary of the persons evaluative beliefs, affective reactions and behavioral responses towards an object.

## 1.3. How attitudes and stigma affect the field

In order to lessen the cognitive workload happening in the background of social interactions, we tend to categorize the people we meet by their different characteristics. As functional as these automated processes are in reducing the cognitive workload, they do not always portray the reality and can lead to negative biases towards individuals with specific characteristics or traits. According to Goffman (1963), stigma is an attribute that is deeply discrediting and reduces the person from whole and usual to a discounted one. For example, a person with mental health disorder could be seen as being at fault for their own condition and therefore labeled and identified to some degree as a failure. This type of stigmatized person would possess a so-called 'spoiled identity' which then causes the person to experience stigma (Goffman, 1963).

Ahmedani (2011) lists 3 perspectives to stigma. Social stigma (1) which refers to the stigma held by larger portions of the society and is ingrained in the structures of the society. For example, the negative beliefs towards individuals with mental health and substance abuse disorders are in the form of social stigma. Self-stigma (2) is the internalization of social stigma by an individual with the 'flawed' characteristics. When someone suffering from substance abuse disorder is perceived as a failure by society (social stigma), then this perception can be internalized by the individual creating further problems. Professional stigma (3) is held by the health professional towards their patient. In

other words, the appearance of social stigmas in the mental health professionals work and the unique stigmas emerging from the work itself (Ahmedani, 2011).

Stigma works as a major barrier in accessing treatment for mental health disorders (Knaak, Mantler & Szeto, 2017; Stuart, 2016; Henderson, Evans-Lacko & Thornicroft, 2013). Prominent stereotypes in society often suggest that individuals with mental illness are dangerous or that they are at fault for their illness. This type of social stigma can create a spiraling effect which affects everything from societal structures to everyday interactions with the said group. Strong evidence points towards the tendency to maintain greater social distance with those with mental illness (Norman, Sorrentino, Windell & Manchanda. 2008). Social stigma has also been linked to be present even among health professionals towards their patients (Ahmedani, 2011). The social distancing related to the social stigma has been shown to exist among health professionals as well (Volmer, Maesalu & Bell, 2008).

There have been several studies of the negative effects of social stigma towards problem gambling (Hing, Holdsworth, Tiyce & Breen, 2014). The lack of understanding about problem gambling can maintain the social stigma around it which can lead to self-stigmatizing beliefs and difficulties for help-seeking (Hing, et al. 2014). As the new diagnosis related to behavioral disorders, people with gaming disorder are at risk to very likely face the same kind of social and professional stigma. There has been barely any research on the topic of stigma towards gaming. Zhao & Zhu (2021) explored the stigma power towards gaming in the identity formation of young Chinese eSports players and found that the stigmatization of eSports may lead to the need to earn social respect by trying to make quick earnings. The awareness about professional stigma of gaming in general and gaming disorder in the context of healthcare remains as an important point of study.

## 1.4. Generational gap in the attitudes toward digital games

The emergence of new technologies has always been the cause of commotion (Orben, 2020) and the lack of exposure or knowledge about a topic can be argued to be one of the major causes for stigmatizing behaviour. According to Hing, Russell, Nuske & Gainsbury (2015) non-gamblers who didn't have exposure to gambling problems were more likely to stigmatize people with a gambling

problem. In other words, as commercial digital games have only existed since the 1970's, it would be logical to assume that the people born before digital games were invented would possess less knowledge than the people who lived their youths surrounded by them. This lack of exposure would therefore be seen as a higher chance of being negatively biased towards digital games.

Research points toward this kind of generational gap in the attitudes towards gaming (Brus, 2018). This generational gap can be seen across multiple areas of life such as parenting, research and in public health. Ferguson (2015) found that clinicians' beliefs about negative effects of digital games were predicted by age, gender, and negative beliefs about the youth. Most worrying subject among the clinicians was the potential addictive effects of video games and the potential for video games to affect children's mental health in a negative way. Concerns about digital gaming often emerge from the lack of familiarity with the medium (Ferguson, Nielsen & Maguire, 2017; Segev et al., 2017). The generational gap can also be seen in the field of research. Segev et al. (2017) studied possible biases in researchers' attitudes toward digital gaming. He suggested that perhaps the fading trend of negative bias is the result of the increasing amount of experience in the medium. As younger people who have been exposed to the medium all their lives enter different careers, perhaps we can expect the negative bias toward digital gaming to decrease even more in the future.

## 1.5. A new diagnosis

In the research field regarding problematic gaming there are many studies in which the existence of a gaming "addiction" has been the main question. Societies around the world have realized that digital games are here to stay and tried to figure out whether it could turn out to become a problem for the public. In this section, we look at what kind of concerns the upcoming gaming disorder diagnosis has raised.

As gaming has become a more common activity, diagnostic manuals have developed and formed criteria for problematic (or excessive) gaming. A proposition of a diagnosis for *internet gaming disorder* (IGD) was included in DSM-5 (Diagnostic and Statistical Manual of Mental Disorders, 5th revision). It was the only non-substance addictive behavior which was presented under "conditions for further study" (Petry, Rehbein, Ko & O'Brian, 2015), meaning that it is not a formal

diagnosis but a proposition of one. The criteria include symptoms such as preoccupation with gaming, withdrawal symptoms, tolerance growth, inability to reduce playing, loss of interest in other activities, continuous gaming despite problems and deceiving others about the amount of time spent on gaming. (Petry et al., 2015). Gaming was also said to help relieve negative moods and functions as a risk for losing a job or relationships due to gaming (Petry et al., 2015). In the upcoming ICD-11 (International Classification of Diseases, 11th revision), there is a diagnosis for *gaming disorder* (GD). It is said to be suitable for a person who over a period of at least 12 months lacks control over their gaming habits, prioritizes gaming over other activities and interests in life and continues gaming despite the negative consequences it has on life (Bulletin of the World Health Organization, 2019). The described criteria are not the same in the manuals, but the time frame of 12 months is also included in IGD (Petry et al., 2015).

The proposed diagnosis has raised a lot of discussion (Aarseth et al., 2017; Griffiths, Kuss, Lopez-Fernandez, & Pontes, 2017). Some studies use the word "addiction" when studying gaming disorder and others have avoided the word due to its strong negative connotation. In this thesis, we use the expression gaming disorder. So far GD (gaming disorder) does not have an official name in Finnish and the negotiations are yet ongoing, but as a word, "disorder" would be less stigmatizing and confusing than "addiction", which in public has a strong connotation with substance use disorder and gambling. We also focus on the diagnosis which has been announced to be included in ICD-11, since the DSM-5 is mostly used in the United States and, as Europeans, we are more familiar with the ICD and interested in the results the GD diagnosis has in the field of psychology in Finland.

The researchers have not yet found much of consensus in the matter of GD as the operationalization leans heavily on substance abuse disorder and gambling when it comes to the criteria of this disorder, according to Aarseth et al. (2017). Problematic gaming, which is just an example of GD, has been shown to exist with reports in the psychiatric and psychological literature and published case studies outlining treatment protocols for the issue, Griffiths et al. (2017) point out.

The concern with the new diagnosis' criteria is not only with the gamers but also the validity and effects of the criteria. One major concern is that if there was a GD diagnosis, the research might shift its focus from building the diagnosis' theoretical background to confirming the diagnostic criteria without questioning what it is based upon (Aarseth et al., 2017). While this might be possible, there is another possibility for the research to shift its focus. Instead, the researchers might have less interest in continuing the studies in this field without a diagnosis to study, which might disturb finding answers to the questions regarding the diagnostic criteria and interculturality aspects of the issue

(Griffiths et al., 2017). Aarseth et al. (2017) claim that this negative shift in focus is what happened with DSM-5 and the proposed diagnosis of IGD. There are also reports about the criteria for IGD that it distinguishes less frequent and more extreme symptoms which are characteristic to the phenomenon (Przybylski et al., 2016). The amount of knowledge and experience about the criteria is increasing and it is interesting to see how our target group in our study thinks about the new diagnosis in ICD-11.

Some scholars think that GD diagnoses might be just results of moral panic or technophobia (Ferguson, 2020). Maybe gaming is not the only activity that can be seen affecting one's health negatively. Any activity that takes an excessive amount of time in one's weeks constantly is going to affect children's development negatively, Griffiths & Davies (2005) have assumed. They also suggest that it is more relevant to study what kind of effects any activity, that takes more than 30 hours a week of one's leisure time, has on children's and adolescents' educational and social development instead of studying the addictiveness of games or other hobbies.

So far there has not been any agreement considering the symptomatology and evaluation of problematic gaming, which will not cross out the possibility of problematic gaming being just a coping mechanism behind other disorders and problems (Aarseth et al., 2017). The comorbidity of other disorders, however, might not be the reason for problematic gaming to exist as an outcome. In their results from a two-year longitudinal study, Gentile et al., (2011) found that risk factors for pathological gaming were greater amounts of gaming, lower social competence, and greater impulsivity whereas depression, anxiety, social phobias, and lower school performance were found to represent the outcomes of pathological gaming. Games as a coping mechanism, on the other hand, have been recognized before. Some studies have managed to show that online gamers display signs of an addiction, but the results also seem to show that games are used to suppress the gamer's own problems and unsatisfactory attributes (Griffiths & Davies, 2005). Whether gaming has comorbidity with other disorders or acts only as a coping mechanism is something the current and future studies must show. Qualitative research would help finding out the base of the gaming addiction (Griffiths & Davies, 2005). In this study, there is a possibility for the participants to involve perceptions of comorbidity in their attitudes.

# 1.6. Research question

Our research question was:

> *What kind of attitudes about gaming and gaming disorder do psychology students and professionals express?*

Since our study turned out to be qualitative and explorative, we realized that comparing groups would not yield reliable findings. That is why we could not keep two additional research questions originally planned ("*What types of differences there are in attitudes towards gaming in general and gaming disorder between the students and the professionals?*" and "*What are the differences in attitudes between those who play games regularly and those who do not play at all?*").

We expected to find a lot of attitudes to the category of disadvantages of games because psychologists are typically quite aware of things affecting people's well-being, especially on the mental level. However, we expected to find a lot of mentions of the benefits of games as well due to the same reason. The generational gap was expected to be noticeable in the attitudes as well as the participant's own gaming history.

# 2. METHODS

## 2.1. Choosing the method

We believed that with a qualitative study we could get more detailed information for our subject. We made the decision to collect the data mainly by interviewing our sample instead of having multiple gathering methods for data because to interviewees that would mean engaging in this study once, which makes the participation simpler. Our study design did not require an ethics committee approval, but it follows the TENK (*Finnish National Board on Research Integrity*; 2019) guidelines and the principles of the Helsinki Declaration.

We decided to use a third-party application, Zoom Cloud Meetings, for the gathering of the data. Both thesis writers were present in the interviews along with the interviewee, which makes the total of participants 3 in every interview. We recorded every interview with Zoom and downloaded the recordings directly on our university's personal servers, behind passwords, via VPN to ensure only we had the access to the data. After all the interviews, we transcribed the interviews into our personal files in University of Jyväskylä's servers using only the soundtracks (no video recording was included in any transcription although it was automatically gathered by Zoom as well). There was no collection of other field data during the interviews. When we had transcribed and anonymised all the interviews verbatim, we deleted the original audio data we had gathered to ensure the interviewees' anonymity.

## 2.2. Creating the interview

Every interview began with background questions. From every participant, we examined the interviewees' age, gender, gaming history and gaming habits of their close ones. From the professionals, we also asked about their work experience, job title (workplace) and whether they have

faced gaming disorder related issues in their job and if those experiences have affected their position towards gaming (see Appendix 1: the interview).

We decided to modify and use Attitudes Toward Gambling Scale-8 (*ATGS-8*; Canale, Vieno, Pastore, Ghisi, & Griffiths, 2016), because no other gaming related questionnaire was available. It consists of eight questions which tell the person's attitudes toward gambling, and together with our own questions the interview would not get too long or tiring for the interviewees. The ATGS-8 has a Likert scale with five different options from 1: strongly disagree to 5: strongly agree (Canale et al., 2016). Although there is no consensus whether gambling can be linked with gaming, many researchers are assuming that there can be some similarities between the two due to the pathological aspect in both (Gentile et al., 2011). We are interested in the assimilations our interviewees make with other pathological issues to gaming, but all in all, in this study we are avoiding the comparison of gaming and gambling on purpose, since we focus on gathering information about the *attitudes* people have and we find that gambling and gaming still have some major differences. One problematic linkage considers that the line between problematic gaming and normative gaming is still very shady, but sometimes perceived the same way as the line between pathological gambling and non-pathological gambling (Ferguson, Coulson, & Barnett, 2011). As the debate goes on, we found it best for our research to use an applied version of ATGS-8, where the word gambling has been replaced by the word gaming. Before using the ATGS-8, we also translated the questionnaire to Finnish. We used ATGS-8 as a Likert-scale questionnaire in our interviews but asked the interviewees to clarify their opinions and thoughts behind the chosen number so that we would get more information from the question.

In addition, to gather more diverse answers with our interview, we came up with our own questions which would give us more information on the issue. We wanted to shed light on what students and professionals think generally about digital gaming, problematic gaming, and gaming disorder as a diagnosis. For example, as general questions about gaming we asked, *"What are the positive effects of gaming?"*, *"What are the negative effects of gaming?"*, *"Can gaming reduce loneliness or the likeness of becoming marginalized in society?"* and *"Does gaming affect people's violent tendencies?"*. Under the topic of gaming disorder and problematic gaming we had such questions as *"When would you say a gamer plays too much?"*, *"Would you assimilate a gaming disorder with pathologized alcohol consumption, smoking, substance abuse or gambling?"*, *"Do you think it was the right decision for WHO to add the gaming disorder into the next diagnostic manual (ICD-11)?"* and *"Is gaming disorder really just a symptom from another mental disorder?"*. With these questions we seek to get more knowledge about professionals' and students' views related to gaming disorder diagnosis and what they think is the diagnosis' importance. For less talkative

interviewees we also wrote a few extra questions, so we had more questions to motivate the interviewees to think about the subject and tell us more about their insight. These were rarely used in our interviews. Typical length for an interview was about 35 minutes.

We delivered these interviews in Finnish but after we had finished writing our transcriptions and decided which citations we wanted to especially highlight in our study, we translated those parts into English in our thesis.

## 2.3. Positionality and the sample

As the writers of this thesis, we both share a strong interest in psychology as well as in digital gaming and we both consider ourselves as active gamers. The subject of our thesis was chosen due to our inherent interest towards digital games and how they are seen in the field of psychology. Even though our own attitudes towards digital gaming were slightly biased towards gaming being seen as a more positive than negative phenomenon, our aim was to approach the subject at hand with neutrality.

We arranged a pilot interview with a psychology student from the University of Jyväskylä. This pilot interview was recorded only to test the recording of the interview and to get feedback on the questions and the flow of the interview. This pilot was used to modify the questions so that they would better capture the attitudes and opinions of the interviewee. We excluded the pilot from our final sample.

After the pilot, we contacted students through the University of Jyväskylä's emailing list for psychology major students. We approached the students that answered the email with a preliminary inquiry about their gaming habits in order to choose those who did have experience with gaming as well as those who did not. We got 8 answers in total. Our goal was to get an equal number of males and females into the sample, as well as an equal number of playing students and non-playing students. We did not consider the length of the students' studies so far.

We ended up interviewing 6 students: 3 males and 3 females of which 3 students play games regularly and 3 students do not play games typically or at all. Two more students answered our inquiry but did not get picked for this study as we had to draw a limit to the number of participants due to lack of resources. All students who got picked were either familiar, friends or known to us prior to the interviews. None of them knew the questions beforehand but many had heard the subject of the study before attending the interview and receiving any formal information. The students were in

different phases in their studies. Some were already finishing up their studies via an internship, while some were still in the middle of their bachelor's program or master's program. We did not happen to have any 1st, 2nd, or 3rd year students in our sample. The mean age was 24 (SD =11,4 years). None of the students dropped out or refused to give information during the research.

After finishing the interviews with the students, we turned to interviewing the professionals in the field. First, we made slight changes on some of the questions in our interview before interviewing the professionals. We decided to ask the question *"Can gaming reduce loneliness or the likeness of becoming marginalized in society?"* in two parts, since we noted that the students were struggling a little bit as they tried to answer both questions simultaneously. Similarly, in the question *"Can you come up with another hobby or activity that would possess a similar tendency for addiction or risky behaviour as digital gaming?"* we saw it better to ask separately about the risk behaviour instead of making the interviewee try to fit their thoughts into one answer.

To get participants, we made a post to one of the closed groups for psychologists around Finland on Facebook and managed to get the most interviewees with it. Next, we sent personal messages especially to school psychologists and therapists around Finland, whose emails were public on the Internet, which gained us a couple of more interviewees. After sending a dozen emails with no luck, we decided to try the Facebook post again. Through Facebook, we gained the last interviewees, with a total of 10 psychologists and therapists (master's in psychology) to interview. None of the professionals dropped out or refused to give information during the research. Only one professional was not picked for the study, since we managed to get 10 professionals, our goal, before they reached out to us.

We wanted to have more professionals than students in our sample since there are more graduated psychologists in the work field than still in the universities in Finland. We also tried to take on account the professional interviewees' sex so that we would have more females than males due to the ratio of sexes in the work field. We figured that trying to get more non-playing professionals than playing professionals in the sample would represent the reality in the field better because psychology is known to have more females in the field, especially from older generations, who might not play as much digital games as men in a wide age scale. All in all, we hoped to get a balance within the sample of professionals and have at least an equal number of professionals who do not play digital games or know anything about them because the ones who play or have an opinion about digital games seemed to have more interest to become interviewed as they were, expectedly, more eager to answer to our invitation.

The professionals' age was on average 33,3 years (SD = 9,8 years). Their and the students' demographic information is shown in Table 2.1.

| Code | Status | Gender | Plays games | "Gamer" | Job experience (yrs) | Current job title |
|---|---|---|---|---|---|---|
| O1 | student | female | no | N/A | N/A | N/A |
| O2 | student | male | no | N/A | N/A | N/A |
| O3 | student | female | no | N/A | N/A | N/A |
| O4 | student | male | yes | yes | N/A | N/A |
| O5 | student | female | yes | yes | N/A | N/A |
| O6 | student | male | yes | no | N/A | N/A |
| A7 | professional | female | yes | yes | Less than 5 | Psychologist in healthcare |
| A8 | professional | male | yes | yes | Over 15 | Psychologist in healthcare |
| A9 | professional | female | no | N/A | Less than 5 | Psychologist for adolescents |
| A10 | professional | male | yes | yes | Less than 5 | Psychologist in healthcare |
| A11 | professional | female | no | N/A | Less than 5 | Psychologist for adolescents |
| A12 | professional | male | yes | yes | Less than 5 | Psychologist for adolescents |
| A13 | professional | female | yes | no | Less than 10 | Psychologist for children |
| A14 | professional | male | yes | no | Less than 5 | Psychologist for adolescents |
| A15 | professional | female | no | N/A | Over 20 | Psychotherapist |
| A17 | professional | female | no | N/A | Less than 5 | Psychologist in healthcare |

Table 2.1. The demographic information of the participants, excluding their ages. Code stands for the anonymised code for the interviewee: O's are for students and A's are for professionals and the number switches with their gender. Status means whether the participant was interviewed as a student or as a professional. If the participant said they do play games on a somewhat regular basis, they got "yes" under Plays games. The players then get asked if they would identify themselves with the title "gamer" (*"Would you call yourself a gamer?"*) and their answers can be seen under "Gamer". Naturally, we did not ask this question

from the ones who said they did not play any games typically. Job experience and the job title information was gathered from the professionals only.

As seen from the table, our sample had no male psychologists who did not play at all (4 out of 4 do engage in gaming) and most female psychologists (4 out of 6) did not play games in their daily life. Our attempts of getting a balanced sample of professionals were not so successful due to the lack of non-playing male psychologists. Also, only 3 of the professionals had over 5 years of job experience in the field of mental health.

## 2.4. Analysing the data

When the transcriptions were done, we ran them through Atlas.ti 8 and later through Atlas.ti 9 on our university's computers. Only the writers of this thesis coded and were able to access the data in Atlas.ti and in other software providers used for handling the data. For the analysis, we adapted value coding by Saldaña (2013, p. 110) and focused on coding attitudes from the transcripts. Our method in this study is thus deductively oriented and not to be confused, for instance, with thematic analysis.

First, we coded all the transcripts openly to familiarise ourselves with the data. The codes were named according to what topics the answers held by analysing what the participant had said (e.g., *disadvantages in games: social life; addictiveness; problematic gaming; time spent on gaming; gratification*) and to what question it was an answer to (e.g., *ATGS-8 item; the new diagnosis; gamer; the experience of problematic gaming through job*). In the second phase, we reanalysed all coded citations by interpreting them through *attitude*, i.e., if and how they reflected an attitude of the interviewee. This was defined by our definition for an attitude (Appendix 3) and the decision to label all the answers which held a personal view or a way of thinking about the subject/question at hand as an attitude.

After that, we took all the attitude coded citations to Excel where we sorted the attitudes into three groups according to the target of the attitude in the citation: gaming in general, problematic gaming, and the diagnosis. These groups were previously formed from the themed questions in the interview. We also included ATGS-8 as its own and 4th group even though the answers were partially included in the gaming in general and problematic gaming groups. We labeled the answers in ATGS-8 as attitudes as well. Some of the citations pointed clearly towards one of the four groups, which was determined by the asked question and the first coding of the answers, but some of the citations had

attitudes in more than just one group. In those situations, we saw fit to sort the citation in parts to several groups (also ATGS-8 items which had answers fit to other three groups).

When the sorting was done, we classified the attitudes from the groups into subcategories which were found from the groups and formed our results from there. The ATGS-8 items had their own category and the rest of the citations, and their coding were categorized in two major groups: gaming in general and the questions about the gaming disorder. Since we noticed that the gaming in general group had mainly a lot of mentions about the benefits and the disadvantages of games, we decided to divide the gaming in general group into benefits and disadvantages before forming and reporting of the subcategories. That is why they are both reported under their own topics in the results. Also, the attitudes toward the new diagnosis were seen to fit among the other problematic gaming attitudes so the new diagnosis is one of the subcategories under the questions about the gaming disorder.

# 3. RESULTS

Markings in quotations explained:

"= the beginning and the end of the quotation

... = the interviewee is momentarily silent

-- = the original quotation has been shortened for relevancy

All of the quotations used in this section can be found in their original form in Finnish in Appendix 2.

## 3.1. The benefits of gaming

All the interviewees were able to find multiple benefits of gaming even if their answers were tilted more towards gaming being more harmful than good. Most of the answers were from the direct question "What are the benefits of digital gaming?" while some came from questions asking if gaming should be allowed at all. Most of the benefits found from the answers in the ATGS-8 scale can be

found under the last section of Results. The attitudes that included benefits of gaming were grouped into 3 categories: cognitive and educational benefits, social benefits, and emotional benefits.

## 3.1.1. Cognitive and educational benefits

The participants mentioned a wide range of different types of possible cognitive and educational benefits that can result from gaming. The most common educational benefit mentioned was improvement of language skills (mentioned 8 times); some of the interviewees had personal experience of improving in foreign language due to gaming and a few mentioned noticing the same benefit in their children's gaming. One interviewee talked about gaming raising more intrinsic motivation to learn a language in order to perform better in games:

> *"And modern youth know English very well, and at least with our boys it is that they know [English] because of gaming, they don't read any fictive novels in English, but they do play games in English, so they learn from that."*

Other cognitive and educational benefits that had 2 or more mentions were a possibility to improve reaction time (3), perceptive skills (3), spatial awareness (2), ability to plan things (2) and improvement of IT-skills (2). Other mentions were better concentration, improvement in overall cognition, hand-eye coordination, patience to plan and prepare, problem solving skills, attention span and strategies that can be applied to real life situations. It was said that the need to think and memorize various things and solve puzzles while gaming are actions that improve cognitive functions. Strategy games were said to improve thinking and to help hold various things in mind at the same time. **While all participants named more than one possible cognitive or educational benefit, the most frequently mentioned benefit was language learning.** Variety of other possible improvements included reaction time, perceptive skills, spatial awareness, and ability to plan things.

## 3.1.2. Social benefits

Digital gaming was also characterized as having many possible social benefits. Social benefits that had more than one mentions included the chance to meet new friends and stay in touch with friends (4), way to manage and widen social circles (4), chance to broaden one's exposure to different cultures and people (4), a way to improve cooperation skills through team games (4), gaming being just like any other hobby to discuss about (2) and a chance to find new communities and belong in them (7).

In the mentions about gaming and communities around it, it was said that gaming can allow lonely people to find groups or communities to belong to through gaming. Gaming was described to have communities within multiplayer games themselves. Gaming was also compared to having the same effect as any hobby when it comes to being able to talk about common interests and experience meaning in belonging to a group that shares an interest. One interviewee brought up that gaming communities can strengthen the feeling of being cared for and that one's opinions, experiences, and thoughts matter.

Three attitudes rose in the social benefits category with different takes on the quality of social connections made in online gaming. The first attitude describes interaction within online games having the potential to be as meaningful as with real life contacts:

> *"But perhaps, maybe somehow comes to mind the perspective, that it is often thought that only the live face to face contacts are somehow meaningful even though of course it can be as meaningful to talk with someone online while playing with them."*

While in the second one the interviewee says that even though gaming does lower the feelings of loneliness, it does not substitute live contacts:

> *"It doesn't probably prevent loneliness, but it surely can lower the feelings of it, I think that it doesn't substitute live contact in a way, but it can surely lower the loneliness felt by many people."*

In the last one, it was thought that even though gaming can offer a wide range of sociality to other people within their communities the connection would still be rather limited most of the time:

> *"I believe that to some degree communal gaming can offer a very wide range of sociality and it does offer at least some kind of connections to other people, but I believe that most of the time it is rather limited connection that you can get from it."*

Gaming was described to have allowed people to stay in touch with friends and arrange get togethers online even with the restrictions caused by the COVID-19 pandemic.

Gaming was said also to be international as it allows people to connect all around the world and get exposure to different languages, cultures and to allow people to make friends from other countries. Social circles were a noticeable category of attitudes in social benefits that included mentions about gaming being able to enlarge the social circle of the player and reach out to more potential friends. It was said that gaming may enable people living in remote areas to be able to find friends that share specific interests with them. One interviewee mentions that gaming may allow opportunities for social interactions especially for those who find social interaction in person too challenging. Another interviewee stated that for some online games can provide a very meaningful social environment and recounted a true story they had read about the benefits of social connections in games:

> *"-- a very touching story about a boy suffering from muscular atrophy whose only friends were, even unknown to his parents, in one adventure game world and that there he had not told anyone about these physical limitations. There he was able to build some sort of ideal identity that served him perfectly"*

**The participants were able to find several social benefits such as the ability to stay in touch with friends, chance to form new social circles and communities, improve cooperative skills through teamwork and reach out to a wider group of potential friends with similar interests.** The participants also had various views whether the connection made in games can be as meaningful as connections in real life.

### 3.1.3. Emotional benefits

The attitudes related to emotional benefits included the possibility for gaming to work as a way to relax and lower stress (5), a way to redirect or distract your thoughts (5), bring experiences of success (3), a fun way to spend time (2), as entertainment (2) and as a coping mechanism (2):

*" ...It can be a relaxing moment for a young person or for a child, like a really nice hobby and in some situations, it can also be a necessary way to escape so that you can get away just for a moment from something..."*

Gaming was generally thought of as a leisure activity that offers ways to relax and spend time. While gaming was thought to bring experiences of success one interviewee added that especially when the individual can notice their own improvement and progress within the game. Gaming was described to offer experiences equally to many people due to the relatively cheap price. Gaming was also thought to offer flow-experiences. The competitiveness of some digital games was said to possibly teach about handling emotions. Gaming was also said to have the chance to improve the ability to handle disappointments. In the answers about gaming working as a coping mechanism, it was said that for some gaming might be the only thing keeping everyday life in check and even be their only lifeline. Another interviewee mentioned that digital games can be used to cope with pain. Lastly gaming was described to offer the temporal detachment from difficult things which was thought to be beneficial in some situations like crisis debriefing:

*"Well for example if some young person has a difficult situation at home and at school, doesn't have any friends or is being bullied and home doesn't provide any support then perhaps one wants to escape their own life to games and perhaps there they can get an alternative chance to their own everyday life."*

**Gaming was seen as a cheap, accessible form of entertainment that can work as a way to relax, have fun, redirect thoughts and in some cases as a coping mechanism.**

## 3.2. The disadvantages of gaming

The interviewees seemed to hold more attitudes about the disadvantages of games than the benefits of games. These attitudes were found throughout the interviews but especially in the answers to a few particular questions: "What negative effects do games have?" "Do games affect a person's violent tendencies somehow?" "Does gaming prevent people from loneliness or alienating from society?" "What kind of issues gamers have or might have in managing other life aspects and does the amount of game hours affect this?"

20

In the ATGS-8 questionnaire, the negative attitudes of the interviewees were present in their answers to several statements. These findings are described more specifically in the ATGS-8 results section.

We formed 5 categories about the attitudes considering the downsides of games and gaming: social, life management, emotional, cognitive, and physical. In multiple categories, the downsides were clearly linked to children or adolescents but not to adults. Attitudes about the gaming industry, the addictiveness of games and the concern especially about children are presented in the discussion, as they were not directly the disadvantages of games.

## 3.2.1. Social disadvantages

The largest category with different negative attitudes was the social aspect. In this category, we included all the attitudes which contained mentions about family life, socializing with other people, effects on one's interaction and whether gaming can inflict loneliness or alienation from society.

In social downsides, the most mentions (6 times) were held by the attitude which states that games do not prevent gamers from alienating from society. The second most mentions (5) were that social life may decrease due to gaming. The interviewees also thought that gaming may increase and/or maintain loneliness (4). Gaming was seen as one reason for an increased number of problems in family relationships (3) and as an activity which might alienate gamers from real life social interactions (3). **Digital gaming was thought to possibly affect gamers' social relationships negatively: decreasing the number of social encounters, increasing conflicts in families, and alienating gamers from other people.**

Gaming was seen as a reason for the decreased overall amount of communication in families. Depending on the number of hours spent on games, gaming was seen as impairing family life, especially when gaming becomes the top priority for the gamer. Gamers were often believed to have arguments about gaming in their intimate relationships as well.

When it comes to social anxiety, gaming can be seen as a way to escape it and the problems it brings to the individual. Part of the blame is on the gaming environments:

> *"-- if there occur problems with other people it is quite easy to just block others away and not necessarily develop the skill to like resolve the contradiction in a given situation -- these skills I believe would be good to maintain, as games do not always teach us those necessarily."*

Thus, games can be thought to reduce the connections to other people. Offline games are thought to contain a higher risk of alienation from society and especially if gaming turns addictive. There is thought to be a link between alienated gamers (or gamers with a high risk of alienation) and many gaming hours. Overall, the connections gamers have with other gamers were seen mostly quite limited.

Live interaction with people was thought to be more important than the interaction which happens through gaming. Mobile gaming has changed the way children spend their recesses in the school yard and it was seen as a risk from the adult point of view. For female gamers, the game environments might be hostile, according to one interviewee:

> *"--I've understood that to women and girls the [gaming] environments can be pretty hostile from the discrimination point of view, for what I have read about different scandals -- I've come to understanding that for example [games] may contain misogyny -- which can cause stress to the players --"*

Children were thought to acquire bad communication style from online gaming and becoming bullied in games was said to be a risk especially to children.

## 3.2.2. Disadvantages in life management

Life management turned out to be the second largest category in the disadvantages. In this category, we included all the attitudes where the interviewees present any attitudes about issues in other aspects of life in gamers' lives.

The gamer's responsibilities were said to suffer due to gaming (mentioned 6 times). The interviewees specified that work or school may suffer due to gaming (mentioned 3 times). Games were seen as able to create problems in time management (2). Games were thought to offer short-term feelings of satisfaction and success which may lead the gamer away from their responsibilities. The amount of time engaged in games in a day was thought to affect the possibility of problems evolving. At the same time, games were not always seen as the reason for life management problems but as enabler:

*"It's one booster for people struggling with mental health, to somehow deepen the gap or low because [games] offer some sort of substitute system to fill one's day with the experience of success -- and thereby mess up the rhythm of one's day, may collapse the ability to study or to work --"*

Games were seen as to deepen the problematic situation of people with mental health disorders due to the use of virtual reality as a way to fill the empty feeling in life. Gaming was thought to take too much time from the gamer's wellbeing and other daily life activities. Gaming might unbalance the gamer's leisure time, according to one interviewee. Another interviewee pointed out that in general gaming was not the only way to seemingly spend time poorly or unsuccessfully in life. Some games were recognized as taking a lot of time.

According to one interviewee, when problems are accumulating, gaming may be harmful for the gamer's mental health and probable addiction to games. Another concern was that gaming might result in dropping out of school. Most likely the ones thought to have problems in their daily lives were the ones who have difficulties with gaming as well, especially children. Poor skills in self-regulation, which was seen to concern especially children, was thought to lead to sinking into gaming instead of taking care of responsibilities. **Gaming was seen as an activity which leads gamers away from their responsibilities, affects school or work negatively and makes people with mental disorders or poor self-regulation sink into them, increasing probable present issues in gamers' daily lives.**

### 3.2.3. Emotional disadvantages

Emotional disadvantages contain all the attitudes where the interviewees express how gaming may make the gamers feel about their lives. Attitudes considering violent tendencies were also included into this category.

Gaming was thought to possibly inflict additional stress to gamers. According to a couple of interviewees, if a person consumes every waking hour of their day in gaming, their life might become boring or empty:

*"-- some games may reduce … the contact with other people -- perhaps there is a dulling effect on everyday life [in games], a person may become isolated or, interact less with other people in the live world because of it --"*

*"-- the use of one's time, if [gaming] takes too much time from other aspects of life, as it very often might, then it does impoverish one's life --"*

When participants were asked whether games affect violent tendencies in some way, the results were varying. Mostly those who played games themselves did not consider gaming to increase violent tendencies. Some participants thought gaming to possibly increase the gamer's violent tendencies. Violent games were said to expose to difficulties with impulse control, which may appear as aggression or difficulty to diminish aggressive impulses. Violent games were also seen to increase violent tendencies if practiced without external control from caretakers and to excite children in a negative way:

*"-- a little child is allowed to play R-rated games, it can certainly affect [on violent tendencies] or if the child's gaming is not restricted in any way, even if the game is not violent but if it is an intense action game, I think it stimulates restlessness -- for example, after gaming there may appear hitting --"*

Violent games were also thought to increase children's incapacity to understand the consequences of their own violent actions and to diminish the way a child empathises with the victims of violence. **Gaming was seen to have the possibility of making gamers' lives dull and possibly empty, whereas violent games were seen to affect especially children by lowering the understanding of consequences of their actions, increasing violent tendencies, and distorting their view of violence.**

### 3.2.4. Cognitive disadvantages

As cognitive downsides, the interviewees named multiple issues they think gamers may have with their executive functions and what might affect them.

The most mentioned cognitive downside was the negative influence on gamers' attention span (mentioned 3 times). Similarly, there were also mentions about the gamers' weakened long attention

span and increased impatience. Games were seen as potentially controlling and limiting the gamers' thoughts and as able to disrupt gamers' cognitive skills when gaming turns excessive and other daily activities are reduced. The gamers' performance could also collapse due to gaming, according to one interviewee. Another possible downside of games was that the reality of the gamer may become distorted. In addition, there was a concern about using money in games:

*"-- they are not the kind of skills that we inherently develop but which we have to learn, so I guess that children probably don't have the ability to even fully understand the consequences of using money in games -- if one's executive functions skills -- are lacking, then similarly [using money in games] can be problematic for an adult or an adolescent."*

One interviewee pointed out that to them the progressive use of technology in the modern world was seen as a possible threat to the future of human development in general. Games with fast pacing and a flood of stimuli expose children to uneasiness, restlessness, and poor attention span. One professional stated that adolescents and children need a lot of support in moderating their gaming due to their incomplete development of executive functions:

*"-- young children, whose executive functions are still very undeveloped, they need a lot of support to keep [gaming] moderate and within limits, as [gaming] affects a person's ability to concentrate -- even in adults, if it starts to take over the rest of one's life too much, it starts to affect one's cognitive functions to some extent."*

**Games were seen to negatively affect gamers' attention span and to limit their patience and thoughts, and children especially need support in using money in games and moderating their gaming due to their undeveloped skills with executive functions.**

### 3.2.5. Physical disadvantages

The category for physical downsides includes spoken attitudes which reflect how gamers' physical well-being might be at risk due to gaming.

To the gamers' health, games were thought to have significant downsides especially if games begin to replace physical activities and other daily tasks of one's life. The problems with the sleep

routine (mentioned 11 times) and with the eating routine or diet (4) were the largest downsides the interviewees pointed out:

*"-- the circadian rhythm and problems with too little sleep -- if it often gets out of hand in the evening, those game sessions may continue until the early morning, and then in the morning you should be waking up and start doing something, this is a potential threat to maintaining the balance --"*

*"-- if one stares too long at the screen it is, it can be noticed how much it affects as one's state of alertness is -- like it is difficult to go to sleep when one is clearly on overdrive or like one has a headache and experiences physical symptoms like that --"*

If the gamer experiences depression or anxiety and their down spiral grows stronger for some reason, the daily routines and patterns might collapse. The decrease of physical activity was mentioned a couple times in the interviews. The lack of sleep that gamers might experience, may inflict the quality of their lives, as well as other aspects in life might suffer. Gamers expose themselves to screens while gaming and this was thought to influence gamers' alertness and energy levels in a negative way. **Major problems in gamers' physical well-being were seen to be affected by an irregular sleep and eating routines, which might turn into bigger problems in gamers' lives if physical activity is decreased or there appear to be mental health problems as well.**

## 3.3. Questions about the gaming disorder

### 3.3.1. A problem with gaming or a problem with well-being?

When the interviewees were asked "Is problematic gaming often just a symptom from other mental health problems?" gaming was seen as a symptom and as its own core problem in the interviews. Some stated that it can be either depending on the situation. Key concept that arose in several interviews was that problematic gaming works as a tool to escape from one's current situation. This escaping was characterized as a disruptive coping mechanism to escape situations that are causing anxiety or stress. Gaming was said to give instant gratification which in itself is often enough to choose it over slower methods of acquiring the same feeling of accomplishment:

> "-- in studying the reward comes later than the pain but the dopamine comes later in the exam when one realizes that hey, I know this stuff. In gaming that dopamine hit comes instantly so of course a smart person would think why would I take the pleasure later when I can have the pleasure now."

Gaming was also said to often be used as a tool to fill something that is missing from one's life. The powerful rewards of gaming were said to be something that diminishes the more natural rewards of achievement in everyday life:

> "That's how I see it that the rewarding side of gaming worlds causing adrenaline and hormonal storms is so strong that it in a way casts aside these more natural ways of achieving same experiences and it rewards so fast and instantaneously that the more boring everyday nature of everyday life can't compete with it in that kind of situation"

In addition, it was said that even though problematic gaming can be seen as a symptom of other mental disorders, it can also develop independently to someone with no prior mental health problems. The addiction towards gaming was said to be able to form gradually from the continued seeking of pleasure that slowly replaces other important aspects of life:

*"-- similarly, as someone can escape to alcohol their mental health problems, but in a way, it can also take someone who has things under control, so that the pleasure [from gaming] starts to pull more and more --"*

Another common answer that arose was that even though gaming disorder can originate itself from other mental health problems, it can then evolve to its own problem without the other mental health problems. It was also said that once this stage has been reached, it is not enough to treat only the original symptoms, but that the gaming disorder needs its own treatment:

*"-- rarely it is the only source that everything originates from, but I would not say that it is just a symptom from other mental health problems -- at the point when it is a serious problem it is one that needs treatment for itself, and it is not enough to treat just the mental health problems around it."*

Gaming was seen as a powerful way to redirect one's thoughts away from sources of stress and therefore work as a coping mechanism. **There was no consensus among the participants whether gaming is just a symptom from other mental health problems or not but mostly it was said to depend on the situation.**

## 3.3.2. Gaming disorder diagnosis

Every participant said that having a gaming disorder (GD) diagnosis on its own would be a good thing. The benefits of the diagnosis were diverse. To discuss the phenomenon, we would need the existence of a diagnosis, according to an interviewee, since the awareness of addressing the problem was seen to be facilitated by the diagnosis. The diagnosis would make it easier to identify and name the phenomenon, and to support or treat people with a GD. Excessive gaming was seen to cause sleep problems, interpersonal problems and to impair daily productivity and the diagnosis was thought to reach these key factors in the GD. According to one participant, with a concrete diagnosis the severity of the problem can be understood, and the problem can be seen as a disorder for which help is available. Many participants saw that with a diagnosis, the GD would be taken seriously, although there were some concerns attached to it being a diagnosis on its own:

*"Well, that's a difficult question, or pretty much double-edged, -- it's easy to see that [the diagnosis] in itself makes [GD] more recognisable and you can then get better help for it, and at the same time there is the concern that more and more things are labelled as psychiatric problems so .. hard to say."*

In addition to an increased number of psychiatric labels, other possible negative effects of the GD diagnosis were mentioned. One interviewee wondered if the timeline of 12 months would be far too long in the criteria. A few of the participants worried if gaming gets labelled as a disordered behaviour too lightly in the future and if some of the healthcare staff would scribe the diagnosis based on wrong interpretations. The lack of knowledge of GD was considered concerning when it comes to older generations of healthcare professionals that could possibly misinterpret normal gaming behaviour as GD:

*"-- it is quite important to be properly trained to know what gaming disorder is, because then there will be no such interpretations where a young person plays like all night long, but their life is not disturbed in any way by it and then it would be interpreted as a gaming disorder even if there is no real problem."*

The participants were also afraid if the diagnosis for GD becomes a sign which points at mental health problems rather than at the issues in gaming industry and game development. The lack of biological evidence-based research behind the diagnosis was mentioned to possibly affect losing the diversity of the phenomenon at hand. **The new diagnosis of gaming disorder was thought to hold the key factors in problematic gaming and to make the problem visible to the society, making support for gamers available.** With the diagnosis, though, the issues might rise among the older generations in health care who do not know much about it and its background, and among the gaming industry, who could blame the gamers for their problems instead of reforming the game development.

### 3.3.3. Is gaming disorder comparable to substance use disorders?

The interviewees had different views on whether the addictive behaviour in gaming disorder shares similarities with substance use disorders. There was no unanimous view on how substance related addictions can be compared to the addiction present in gaming disorder. Some stated that the main

difference comes from the fact that in the addictive behavior caused by gaming, there are no substances being consumed or injected into the body and therefore there cannot be physical addiction to gaming. One participant stated that the difference comes from the lack of the need for detox. While another questioned whether most substances causing substance use disorders really are physically addictive:

*"-- there is still often that misunderstanding that substance addictions the physical addiction is highlighted even though on many drugs that are quite mild. -- Maybe the difference comes from the fact that games don't affect the body the same way when there are no chemicals being injected into the body."*

One interviewee stated that the experience working with people suffering from substance use disorders was the reason they did not see problematic gaming comparable with substance abuse disorder. While also mentioning that the difference was due to the lack of physical substance affecting one's brain mechanisms:

*"Well, I think that perhaps not fully because in [substance addictions] there is some physical substance that affects in the brain level so gaming affects us through different brain mechanisms so I would say no you can't compare these to each other."*

They also mentioned that the experience working with people suffering from addictions is the reason why they did not see digital gaming as a similar phenomenon. Another interviewee saw the difference in the withdrawal symptoms saying that in substance addictions it is much stronger and stated that perhaps behavioural hobbies were more related to gaming disorder:

*"That's a difficult question, in those there is still that physical addiction and withdrawal symptoms so strong that perhaps more likely [similar to] some behavioural hobby, addictive workaholism or athletes having the need to go for a run --"*

Another question that surfaced was whether addictive behaviour can move from one target to another. Several participants saw that the people with the tendency to become addicted can replace the target of the addiction when necessary. Several interviewees believed that the core problem behind any addictive behaviour is the lack of ability to handle one's current situation and to process feelings. The second core problem being the way how addictions take priority over everything else. These core problems were seen to be present in addictive behaviour whether it was behavioural or substance related:

*"I know people who have been able to stop a substance addiction, but then moved on to play digital games very addictively. Never heard of it happening the other way around, but I do think that the way how much it takes space from one's mind, taking priority over everything else is what is typical in addictions --"*

**Some consensus among participants was that gaming differs due to it not being a physical addiction and it not involving external substances affecting the neurochemical balances of our brains.** It was also seen that individuals susceptible to addiction could replace one addiction with another and that the core problem behind any addiction is the inability to handle one's current situation.

## 3.3.4. Is gaming disorder comparable to gambling?

When asked about how digital gaming compares to gambling, the consensus was towards digital gaming being closer to gambling than substance use disorders. The similarities listed were the lack of physical substance altering the brain chemistry on a biological level and the lack of physical addiction. The key differences were said to be money as in digital games it rarely is the main motivation for action:

*"-- that money is not the key point maybe in digital gaming, you don't put money in and hope to win more and in a way, there is a loop -- I think that in digital games money is not the main point even though you lose money when buying games."*

The other key difference was that in digital games the mental rewards are possibly more abstract, and more commitment is needed to achieve them. Overall gambling was considered to be the closest comparison even though it didn't share all the same characteristics:

*"I agree that it is definitely comparable and maybe the closest comparison -- it is the process of addiction that is more connected to the good feelings caused by doing and not just brain chemical reaction that comes from drugs, it is precisely that good feeling that hooks that is similar as in gambling. --"*

There were two interviewees that disagreed with most interviewees and did not consider gambling addiction and gaming disorder close to each other. The first one said it to be due to the idea

that in gambling the rewards are given in a short timespan while as in gaming it is more of a long-term commitment that finally yields the reward:

> *"Somehow, I wouldn't connect these two even though I understand where the idea comes from, but somehow, I feel that in gambling the period of rewards is so short, the cycle when you get a reward for yourself. I think in digital gaming you need much more long-term commitment, and the reward can come later --"*

The second one saw most of the digital games not having any addictive mechanisms seen in gambling:

> *"In some digital games there is necessarily no gambling, or anything related to gambling so it's not necessarily the same mechanism that makes gambling addictive."*

**Digital gaming was seen closer to gambling than substance use disorders and money was seen as the differentiating factor between gambling and gaming disorder.**

### 3.3.5. Other hobbies or activities that compare to gaming

When asked about similar hobbies or activities possessing similar tendency for addiction as digital gaming, there were mentions of extreme-sports (4), physical exercise or sports (3), sexual activities (3), food (2) and work (2)

In the answers that talked about extreme sports being similar, the key similarity seemed to be the adrenaline rush that was said to connect gaming with extreme sports. Extreme sports that were mentioned included skydiving, mountaineering and Benji jumping:

> *"Well, this types of exercise-addictions in which people look for the same, so that it is the execution and the excitement that is looked for so that could be one that gives similar emotional feelings when it comes to addictions maybe when hooked to something like extreme sports, perhaps those could be similar"*

The key concept of gaming that arose in the answers was the interactive part of gaming that other otherwise similar hobbies, such as binging Netflix series, might not provide:

*"-- people watch Netflix these days also in a way that you should have something to do then let's put a binge on and there is of course that one more episode one more episode and it is often more passive than gaming, but there the rewarding could be based on a same mechanic, well maybe little bit as the interaction is missing but it is near it --"*

One interviewee talked about gaming perhaps being comparable with anything that one can immerse themselves with and gave the example of a cyclist who eventually did nothing else than cycling but then added that digital gaming is still its own category when it comes to addictions, and it cannot fully be compared to any other addiction since one access another world when gaming. The participant also stated that gaming is this other world through a screen and is in no way real:

*"-- I think it is [gaming] still so much its own world, if we think for example the person that cycled and cycled and eventually lost their job and all but they were still in this real world but in gaming you are in an another world through your screen that is in no way real, so I would see it so that you can't fully compare it to any other addiction or thing."*

Gaming was compared to a variety of different activities such as extreme sports, sports, sexual activities, social media, etc. **Gaming was seen as something that gives feelings of excitement and rush of adrenaline while agency was seen as an important dividing factor that separates gaming from more passive activities.**

## 3.4. ATGS-8

The results in this section consist of the numeral value the interviewees had given to the items and some of the attitudes and quotes that were important to highlight. ATGS-8 has a Likert scale with five values as answers: strongly disagree (1) - disagree (2) - not disagreeing or agreeing (3) - agree (4) - strongly agree (5). In the Table 3.1, all the given values by every participant are listed below every scale item. The highlighted value is the mode in the item. Note that in the 7th item the mode is bimodal.

| Code | 1. People should have the right to play games whenever they want | 2. There are too many opportunities for gaming nowadays | 3. Gaming should be discouraged | 4. Most people who play games do so sensibly | 5. Gaming is dangerous for family life | 6. On balance gaming is good for society | 7. Gaming livens up life | 8. It would be better if gaming was banned altogether |
|---|---|---|---|---|---|---|---|---|
| O1 | 3 | **2** | **2** | 3 | **3** | 3 | **4** | **1** |
| O2 | 3 | 4 | 4 | 2 | 4 | 2 | 2 | 2 |
| O3 | 3 | **2** | **2** | **4** | 2 | **4** | **4** | **1** |
| O4 | 3*; **4** | **2** | 3 | 2 | **3** | **4** | 5 | **1** |
| O5 | 3 | **2** | **2** | **4** | **3** | **4** | 2; **5**\*\* | **1** |
| O6 | **4** | **2** | 1 | **4** | **3** | **4** | 3 | **1** |
| A7 | 2*; **4** | 1 | **2** | **4** | **3** | **4** | 5 | **1** |
| A8 | 2 | **2** | **2** | 5 | **3** | **4** | 5 | **1** |
| A9 | 5 | 3 | 1 | 3 | 4 | 3 | **4** | **1** |
| A10 | 3 | 1 | **2** | **4** | 2 | **4** | **4** | **1** |
| A11 | **4** | 1 | 1 | **4** | **3** | 3 | **4** | **1** |
| A12 | **4** | 1 | 3 | **4** | 2 | **4** | 5 | **1** |
| A13 | 2*; **4** | 3*; **2** | **2** | 3 | 2 | **4** | 5 | **1** |
| A14 | 2*; **4** | **2** | **2** | **4** | 2 | **4** | 3 | **1** |
| A15 | 1 | 5 | 4 | 2 | 5 | 2 | 3 | **1** |
| A17 | 5 | **2** | 1 | 3 | **3** | **4** | **4** | **1** |

Table 3.1. The values participants gave to the items in the ATGS-8 scale.

*: the different value for when the participant considers only children in their answer.

**: the participant had a different value for the experiences during the Covid-19 pandemic.

**In the attitudes for the first item, the participants mentioned that people have the right to spend their leisure time as they want as long as their habits do not disturb their closed ones, they can still take care of themselves or their responsibilities, and they are not actively dependent on someone else's care or control due to a lack on their own skills of control.** The responsibilities towards relationships and the society go before the person's right to play games, according to one participant. One answer called for an ability to restrict one's gaming in the terms of their own well-being:

*"-- people should also have the skill, to perceive how they want to use their time in their lives -- to find a balance between the important things -- it would also be important to have the ability to consider the effects of their choices in their lives --"*

Adults were allowed to play as much as they want, although there were mentions of a "line" which a gamer might cross if their gaming becomes harmful to themselves or their work. In that case, the right to play games was not seen equal.

A few participants thought it necessary to give a different value for children's gaming in this item. It was seen that the parents are obligated to restrict their child's gaming if necessary and to support their child in other aspects of life so that everyday life could form "natural restrictions" for gaming. These restrictions were not specified by the interviewee. Children were not seen having a right to play games as much as they want. The gaming of a child was seen as a restrictable thing if restricting becomes necessary. Children were thought to need restrictions to their gaming habits by their parents and the setting of boundaries for children's gaming was seen as justified and an obligation:

*"Here I'm thinking of course the age of gamers, of course it is tied to age how a person can play games, I think that children and even adolescents need the setting of boundaries by an adult, but of course adults are free to do whatever they want --"*

*"-- yeah, to my mind especially adults should have the right to play games and self-regulate the amount of that, but I think that controlling the children's gaming hours is justified and a parent has the right and also an obligation to control their children's hours of gameplay."*

When asked in the second item if there are too many gaming opportunities nowadays, most of the participants did not think there were too many. There is still room for new gaming opportunities, according to some. The accessibility aspect was also brought to the discussion by one participant:

*"I think 'too many' is a pretty strong phrase and I don't think many games are accessible to everyone, so in that sense I wouldn't say that they would be too easy for everyone to get."*

**The number of gaming opportunities was not seen affecting the growth of gaming by most of the participants.** There did not seem to be too many opportunities, because people do not face situations in which they would be forced to play games. Despite this, restricting the availability of games for example in classrooms was seen as a good idea. The amount and existence of gaming opportunities were not seen as the problem or the reason for problematic gaming. The choice in the game opportunities was not thought to be harmful, but for some people, who play too much,

continuous game ads could be seen as problematic. There might be too many gaming opportunities visible in harmful amounts to children and young people, but adults are seen as responsible for choosing non-harmful games. The amount of gaming opportunities was said to blur the limits of regulating of games with children:

> *"Maybe the fact that it's like available all the time, so I think there doesn't appear any kind of transition or like .. with children the kind of regulation of sort when to play games and when not to --"*

**In the third item, games were seen having many positive aspects, which is why most of the participants thought that people should be encouraged to play.** The attitude toward games was seen as polarized, which should not be in the way of encouraging people to play. One participant said that people could be encouraged to play games suitably. Games might contain benefits to gamers. For example, cooperation and language skills were seen to improve through games. Games were seen as a typical hobby and as a cultural experience that should get the same amount of encouraging towards as any other activity:

> *"-- after all, there are benefits and when those benefits are recognised, there is a possibility of making use of them, in ways, and which may not be found in other means, like interactivity and, artificial intelligence, how those help in learning, such similar qualities may not be found in books --"*

> *"To my mind, just like we encourage people towards literature, films, music, and other cultural experiences, I do think that games can very well fall into the same category which we can kind of encourage people to explore whether that's the kind of area they enjoy. I have a positive attitude toward this."*

Some of the participants thought that people should not be any more encouraged to play games as they are being encouraged to engage in other hobbies. Gaming was seen appropriate in small amounts, but it was not thought to be worth encouraging to: physically active hobbies and socializing through them was more desirable according to one participant. There still were mentions about long distances to other people, where gaming could step in and help. Otherwise, people who wish to play games were thought to search for games themselves:

> *"-- This is a tough one because there are also a lot of, for example, lonely adolescents who can't really go anywhere, for whom the social pattern through games can become important,*

*these depend so much on the situation but generally I think that people may not need encouragement since [gaming] happens anyway if one is interested in it."*

In the fourth item, many participants believe that most of the gamers do play sensibly. According to one interviewee, most of the gamers were not seen as sensible players and this was affected by the age of a player. Another interviewee mentioned that rarely gamers can say that games do not walk over their responsibilities. For this item, some of the professionals had their answers based on pure intuition without any knowledge about the subject, which they mentioned out loud. **All in all, problematic and uncontrolled gaming were seen as rare phenomena**:

*"According to my view, most of those problematic gamers are yet luckily the minority here or I mean not the problematic gamers but people who struggle with gaming."*

*"-- I think that the uncontrolled gaming is a rare phenomenon, like, most of them surely, I think, play such amounts which are or that it is not bad to them."*

**To family life in the fifth item, gaming was thought to possibly be dangerous but not by default.** If the gaming would stay under control, act as an activity for the whole family or if it would be a normal part of everyday life in the family, gaming would not be dangerous. Gaming was compared to every other activity which could turn problematic for a whole family and the situations were seen as individual:

*"-- it depends so much on the family -- if a family has a lot of attitudes against [gaming] or one cannot complete set tasks or the time together is too little [due to gaming] -- it cannot be said that it's digital gaming in itself, probably anything in a family can turn out to be a problem."*

**The values in the sixth item reveal that most of the participants believe that games are good for society**. Games were seen as a part of the culture and to have value as a cultural and entertainment product as well as a communal and international factor. Gaming was thought to guide the development of technology. Gaming was also thought to be more of a way to be entertained and to be at play, which does not need to be a highly productive activity all the time. According to the answers, games were thought to contain some side effects as well, yet games were seen to have more positive than negative effects and the benefits of games were thought to outweigh the disadvantages of games:

*"-- it may be that I am not familiar enough with the disadvantages [of games] but I think I see that the disadvantages may not be, necessarily .. or that I don't think there are so many of those disadvantages in a way -- there wouldn't be more [disadvantages] than benefits or that there could be more benefits than disadvantages."*

A few of the participants did not see games as too beneficial to society or that they even inflict a lot of harm (not specified how or what). One participant said that humanity would get along without games as well.

**With the claim that gaming livens up one's life (seventh item), the participants mostly agreed.** Gaming was seen as a media which can offer experiences others cannot (immersion, social aspect, achievements, communities). It was compared to films and TV in general as a way to pass the time and to be entertained:

*"-- Yes, it definitely enlivens, digital gaming can offer such experiences that are very difficult to realise in any other way, and some [experiences] are not able to be realised in any way other than gaming, it can offer such enlivening experiences on a very large scale to all senses."*

Although games were thought to increase the number of realities around us, they were also seen to decrease the connection to other people. The impulse was seen to come from outside, which was not thought to be as enlivening as books, meditation, or a conversation with a friend. Games were thought to enliven the lives of gamers but not of those, who are not gamers and sometimes games were thought to bore the gamer's daily life. As long as there are no life management issues at stake, games were seen to liven up one's life:

*"Um .. strongly agree, when it doesn't involve that it makes one somehow dependent on it or causes anxiety, sleep problems or something like that, or that one loses control of life due to it."*

**In the final item of the scale, banning gaming was not seen as helpful to the situation since gaming is just as good a way to spend time as any other hobby and it brings joy to the gamer.** Gaming was thought to be just a symptom or a disruptive coping mechanism when gaming turns problematic. It was also seen as a tool to protect oneself from other disadvantages:

*"-- if it was banned altogether then (laughing) there would be a dark game market of some sort -- of course there is no problem at all if it stays within certain limits .. gaming might also protect from other disadvantages in some way ... I do not know, it's difficult to say --"*

None of the participants would ban gaming altogether. They "strongly disagreed" with the item or just "disagreed" with it.

# 4. DISCUSSION

The aim of this study was to explore with qualitative methods what attitudes psychologists and psychology students have about digital games, problematic gaming, and the new diagnosis for GD. The study brings new information about different types of attitudes that psychologists and psychology students hold towards gaming, gaming disorder and the new diagnosis.

The answer to our research question (*What kind of attitudes about gaming and gaming disorder do psychology students and professionals express?*) turned out to be diverse. Benefits of gaming had three main categories (cognitive & educational, social, and emotional) and disadvantages were classified to five main groups (social, life management, emotional, cognitive, and physical). The wider number of disadvantages in the results was not too surprising. Although the answers had more variety in disadvantages of games, this did not mean that interviewees noticed only the negative effects of gaming. Even though many researchers tend to focus mainly on the negative side in games and report the negative effects of gaming widely (Meriläinen, 2020) the participants of our study also named various benefits of digital gaming. Overall, not many strongly negative attitudes toward gaming were found in our data.

An interesting finding was the somewhat contradictory attitudes on whether gaming impairs or benefits gamers. In the results cognitive, emotional, and social aspects of gaming got mentions from their benefits as well as their disadvantages. Paradoxically, it seems that the way gaming benefits one individual may disrupt another and vice versa. For example, while one might get great social benefits from gaming, the other might become alienated from social circles due to gaming. This means that it is not possible to point out for example the social disadvantages of games without bringing up the social benefits of games. From a diagnostic point of view, this makes recognising and treating problematic gaming or gaming disorder difficult because the benefits and disadvantages of games are paradoxically tied together. It is likely that different kinds of games and game designs affect which benefits or disadvantages can typically be attached to them. This information is important to professionals who might struggle with discussing about games and therefore they should

be informed that the games include both positive and negative effects, and these can vary from an individual to another.

All participants saw various possible cognitive and educational benefits and disadvantages to gaming. Language learning (more specifically learning English as a foreign language) was most frequently mentioned in the category of cognitive and educational benefits. Video games offer a rich environment for exposing oneself to a foreign language that has been supported by research. According to a meta-analysis by Tsai & Tsai (2018), video games can effectively motivate and advance the acquisition of second language vocabulary. The participants of our study did not specify which genres of video games they thought to be most likely to advance the learning of a language. Studies have shown that at least adventure games (Chen & Yang, 2013) and simulation-based games such as The Sims (Ranalli, 2008) offered significant improvements in vocabulary knowledge while online multiplayer games offer a wide range of opportunities of socialization in foreign language which have proven to improve gamers' competence in the used language (Jabbari & Eslami, 2019). It remains safe to assume that games that do not require understanding of any language in order to advance in the game, such as rhythm games, would not have the ability to greatly improve a gamer's language learning. Therefore, it would be important to remember that not all games require understanding of the language and that all gamers do not benefit from games in the context of language acquisition.

Cognitive benefits mentioned by the participants such as reaction time, perceptive skills, spatial awareness, ability to plan things, hand-eye coordination, problem solving skills, attention, and overall cognition have all been tentatively backed by research (Powers, Brooks, Aldrich, Palladino, & Alfieri. 2013); it remains to be seen which results will survive future replication efforts. While some of these benefits mentioned in our study included the genre of the game believed to have the benefit, most of the mentions did not specify the genre. The understanding of the benefits and disadvantages which different genres of digital games offer could be a useful tool for clinicians to better understand the benefits and disadvantages their patients' may experience.

As for the cognitive disadvantages the participants mentioned the possibility for digital games to cause weaker attention span and limit their patience and thought processes. This view is supported at least by some research, as a study by Bailey, West & Anderson (2010) showed a negative correlation between digital gaming and proactive cognitive control. Gaming disorder has been linked to problems with executive functions and to the ability to control impulses (Kuuluvainen & Mustonen, 2019). A systematic review by Dullur, Krishnan & Diaz (2021) showed an association between gaming disorder and ADHD. The participants did not directly mention the association of ADHD or other developmental disorders and gaming, most of them did mention the gamer's abilities for

example in executive functions, emotional skills, and social skills to be linked with problems in gaming.

In the results, most of the social benefits mentioned were benefits to be gained from online multiplayer games: staying in touch with friends, improving one's cooperative skills and forming new social circles and communities through games. The idea that playing games can increase one's cooperative skills has some support from research. Playing prosocial video games has been noted to lead to short-term helpful behaviour (Granic et al., 2014). Multiplayer games can also be helpful in developing one's social skills (Kuuluvainen & Mustonen, 2019). The participants' attitudes about social benefits seem to lean on the current research quite well.

The interviewees of this study had some contradictory attitudes towards whether connections made through online games can be as meaningful as connections in real life. A few participants stated that connections formed in digital games would be more limited than connections in real life. According to previous research, gaming can negatively affect one's social life. Online gaming does not only take time away from face-to-face interactions but also may lead to gamers having overall weaker and smaller offline social circles due to excessive gaming (Heng, Zhao & Wang, 2021). In our study the alienation from others due to gaming was also a mentioned concern. Alienation has been found to be a significant positive predictor of the level of gaming disorder (Heng et al., 2021). Thus, weak ties with family, school or other prosocial institutions typically lack affiliation to the individual, resulting in the individual turning to alternative social environments such as digital games. The more professionals understand about social benefits and disadvantages of gaming, the better they can discuss their patient's gaming habits and link those to their well-being.

Not all participants agreed on the emotional benefits and disadvantages of gaming. While some interviewees saw gaming as a fun leisure activity that offers a chance to lower stress levels and redirect thoughts, others saw the possibility for gaming to make daily life dull and boring. Various studies have associated gaming with a series of positive experiences and emotions for the players (Granic et al., 2014; Russoniello et al., 2009). Gaming eases stress, helps the player to alter their mood and feelings, works as a balancer between work and leisure, brings joy and produces interaction with other gamers (Kuuluvainen & Mustonen, 2019). The positive emotional related effects of gaming may also be highly dependable on the genre of the game in question. For example, puzzle games have been found to lower stress and prevent anxiety (Russoniello et al., 2009).

The participants of this study saw gaming as a coping mechanism that gamers use to reduce stress and possible anxiety. While most gamers benefit from the way games lower stress and can help regulate emotions (Kuuluvainen & Mustonen, 2019), those who suffer from difficulties regulating their emotional experiences can find gaming evolving into a maladaptive coping strategy (Blasi et al.,

2019). According to Lee (2017) younger adults with psychosocial difficulties are more likely trying to avoid the adverse moods such as anxiety, stress and depression and therefore be more likely to engage in excessive gaming.

Some participants in this study thought that games would lead gamers away from their responsibilities and everyday activities while negatively affecting their school or work performance. Some studies show similar results in life satisfaction of gamers. In a systematic review, several findings indicate that for example, males agreed more often that playing games interfered with class preparation than females (Boyle, Connolly, Hainey & Boyle, 2012). In studies, different types of scales have been used to measure the level of problematic gaming and satisfaction in life, which are thought to indicate if there could be correlation between them. Adolescents with high GAS (*Gaming Addiction Scale*) scores have been found to report more likely lower levels of life satisfaction (Männikkö, Billieux & Kääriäinen, 2015). Some game genres may simultaneously produce detrimental and positive outcomes in gamer's lives. MMORPG (*Massive Multiplayer Online Role-Playing game*) players have been linked with spending a significant number of hours playing games and reporting greater interference of games with their academic work and social life while coincidentally reporting greater enjoyment of the game (Boyle et al., 2012). The reasons for the interviewees of this data to hold these attitudes about gamers' life management skills can be diverse. Not all participants of our study had experience in gaming. It is possible that some of the participants in this study lean on the stereotype of a lone gamer especially if they did not have gamers in their close relatives or as their patients. Another and possibly more likely explanation could be that the participants in this sample were up to date with the previous studies or had some experience about gamer's life management skills personally or professionally. Being aware of the life management problems gamers may face is essential for the professionals in mapping their patient's overall well-being and giving necessary guidance to those who feel gaming might be turning into a problem.

The concerns about gamers' physical well-being are highly associated with irregular sleep and eating in our data. Problems with sleep routine have been reported in research before (Boyle et al., 2012; Männikkö et al., 2015). The importance of sleep to the overall well-being especially in adolescents and students was brought up by our interviewees. The worry was that without proper sleep, the ability to learn and obtain new information and skills would become impaired.

Interestingly, the notion made by our participants about mental health problems possibly inflicting a gamer's well-being is somewhat in line with the previous research. Depression, anxiety, and social phobias have been linked to problematic gaming, which would be an outcome of these mental problems (Gentile et al., 2011). Of course, it is not clear how well the participants in our data inherently know about problematic gaming being an outcome for some issues, but this connection

seems to be somewhat accurate and important in non-stigmatising gaming as the root problem in mental disorders.

In sum, gaming was seen to bring various benefits and disadvantages to gamers. Some of these were contradictory in nature, for example games were seen to reduce attention-span while on the other hand to improve it. Gaming was seen to cause loneliness and to prevent it. This contradictory nature of gaming might prove problematic for the mental health professionals when trying to form an understanding of what gaming offers to their patients. Many of the attitudes of the participants of this study were backed up by research and it is highly likely that as professionals or students of psychology the participants have been exposed to the said research in their academic, professional, or everyday lives.

In the answers to the items of ATGS-8, while most of the respondents answered the questions without mentioning age, a few of them gave two answers discounting their attitudes towards the gaming of children and adults separately. Generally, in the interviews the concern was greater when the participants considered children in their answers, but with adults their attitudes were more liberal. The participants argued that children are not necessarily capable of controlling their own gaming and therefore need the supervision from adults the younger they are.

Interviewees reflected their attitudes towards games through the actions of the gaming industry. For some participants, criticism against game developers had increased and they were thought to take a conscious advantage of addictive game mechanics to maximize revenue. The participants saw gambling as one of the closest comparisons when it comes to problematic digital gaming. Money was seen as one of the differentiating factors between problematic gambling and gaming disorder by the participants of our study. It is worth considering how gambling and gaming differ, since the monetisation of digital games has turned into abusing gambling-like mechanics (Columb, Griffiths, & O'Gara, 2019). Before, games were mostly sold to consumers as fully developed copies. Nowadays, lots of games gather data from their players and use the data to offer various in-game purchasing opportunities designed specifically to the individual so that the player would spend real money in the game (King, Delfabbro, Gainsbury, Dreier, & Greer, 2019). These micro-transactions and gambling-like mechanics of online games are bringing gambling and gaming closer together, although gaming does not necessarily have to revolve around money as much as gambling (Columb et al., 2019). As gaming and gambling move closer to each other as phenomena, it would be interesting to study whether the different forms of stigma can move from one source to another.

Few of the interviewees had experienced a change of becoming more critical towards digital gaming after being exposed to the problematic side of it in their work. These interviewees had either

been gamers or had close relatives that played digital games and had mainly seen gaming as a hobby. This was an interesting discovery that we did not expect. As most of the people play digital games without it turning into a problem, it is understandable that the negative side of gaming can be perceived non existing. This finding also raises the question of whether it is possible that some of the mental health professionals that are only exposed to the negative side of gaming will have more negative attitudes towards digital gaming than those who have wider exposure to the medium.

In our study none of the participants viewed the new gaming disorder diagnosis only in a negative light. The diagnosis was seen to bring more attention to the problem, help develop successful treatment methods and supporting research and the discourse, when the phenomenon is known and named. The interviewees also mentioned the lack of knowledge and empathy from older healthcare workers who might not be able to understand the complexity of gaming's influence on one's life. Again, the gaming industry was mentioned here: the participants hoped that the industry would care about the diagnosis and take an interest in making their games more ethical.

The progress of creating effective treatments for gaming disorder is ongoing. The diagnosis has just become effective in the beginning of 2022. Thus, it is not yet known what the recommended treatment for gaming disorder will eventually be in those countries where the translations of the manual are still in progress. In the further research, it would be interesting to look at how the new diagnosis has been received and how often it is prescribed to gamers seeking help. As awareness of the diagnosis increases, it would also be interesting to map again the professionals' attitudes towards gaming and the diagnosis of gaming disorder.

As our sample was tilted towards participants in their 20's and 30's, our findings are biased by age. We only found a few instances of an interviewee stating an opposing attitude toward gaming where the age was mentioned. One interviewee answered that as "an older bloke" they would not recommend gaming to an individual because other hobbies such as football and ice hockey are preferable. Of course, it must be said that age is not always the deciding factor whether one has been exposed to gaming or not. For instance, one of the participants over 40 was a very enthusiastic gamer and saw digital games as a part of culture along with books and movies. It remains for further research to explore the generational gap in attitudes towards gaming among mental health professionals.

The study brings new information regarding what kind of attitudes psychologists in Finland hold towards digital games and therefore those who seek help from them regarding problematic gaming. This is an important topic of discussion as professional stigma can interfere with the treatment of gaming disorder. The effect of gaming stigma has not been researched enough and we hope our study will open more discussion and research on the topic of professional stigma towards digital games and gaming disorder. Another merit of this study was that we were able to gather

information about the interviewees' attitudes especially with the ATGS-8 questionnaire but also with our own open questions. We hope that the interviews we conducted can help in the development of future surveys, where the attitudes towards gaming and gaming disorder diagnosis are examined. It is worth noting how we found that the participants' attitudes depended on whether they referred to children or adults in the ATGS-8 questionnaire items, and future measures should take this into account. Since the original scale was about gambling, the items are more directly linked to adults' behaviour. Digital gaming, however, has much more diverse users in the population. Due to this notion, we recommend developing scales about attitudes toward digital gaming and separating the attitudes considering children and adults.

Another addition worthy of consideration would be to somehow include different genres of digital games into the questions as they play an important role in the diverse field of digital gaming. The wide scale of different genres of video games has been a problem in the previous studies considering how gaming affects individuals, as gamers of different genres are grouped together (Kuuluvainen & Mustonen, 2019). In addition to genres, a wide variety of different types of gaming platforms are usually dismissed in the public discussion, although the effects of different platforms of gaming in the development of gaming disorder have been studied in previous research. A study of Belgian and Finnish adults (N = 899) found little evidence of digital gaming disorder in those who played mainly mobile games (Lopez-Fernandez, Männikkö, Kääriäinen, Griffiths, & Kuss, 2018). Therefore, it is possible that not all digital game platforms will cause interference as much in the individual than some other platforms. The issue requires more research in the future to find out how the used platform together with the genre played affects the development of problematic gaming habits.

The study's respondents' attitudes with believed benefits and disadvantages of digital gaming reflected the recent research on the subject. This could be since the interviewees were professionals or academic students who could have read some of these research papers themselves or been exposed to them in some way in their professional or academic lives. While we did map the exposure to digital gaming itself, we did not ask about how much academic knowledge the participants had about digital gaming. It is also very likely that the participants that agreed to participate in our study had higher than average interest or exposure to the subject beforehand. This could have also tilted the attitudes seen in our data towards a more positive view.

The answers to some questions such as "What kind of attitudes towards digital games have you noticed in your work environment?" and "How are digital games seen in society in general?" were not included in our results as we saw that a person's view on how the majority sees certain phenomena can differ greatly from the way they see it themselves. These questions would still be

interesting for the future research to investigate: the target of a study could be precisely the individual views of how the public views digital games and how that is believed to have changed over time.

The numeric results of our ATGS-8 survey did not allow for inferential statistical analyses or group comparison due to the present study design. Therefore, we could not compare the participants on various interesting differences in attitudes such as whether the attitudes in the field of psychology can be differentiated by the participants' age, gaming activity or experience working with patients who express the criteria for gaming disorder. These types of comparisons will remain as an interesting point of focus for future quantitative studies with larger sample sizes.

For the future research we recommend forming a new attitude questionnaire for gaming, which might help mapping the attitudes about the subject amid different professions. The questions or scale items should note that the respondents may have different attitudes when considering children and adults. The base knowledge of the respondents about games would also be important to map: personal or peer experience of gaming and what games (genres) under which platforms have been experienced. As the gaming disorder diagnosis becomes better known, it would also be interesting to study the attitudes of the ones having the diagnosis, whether they experience self-stigma through healthcare and what means they have found helpful in attempts to control their problematic habit. The dynamic between the help-seekers and providers is crucial to the process of getting better, as it can support the path of change and healing or, in its worst, alienate the help-seeker from the society even more.

# 5. REFERENCES

Aarseth, E., Bean, A. M., Boonen, H., Colder Carras, M., Coulson, M., Das, D., Deleuze, J., Dunkels, E., Edman, J., Ferguson, C. J., Haagsma, M. C., Helmersson Bergmark, K., Hussain, Z., Jansz, J., Kardefelt-Winther, D., Kutner, L., Markey, P., Nielsen, R. K. L., Prause, N., Przybylski, A., Quandt, T., Scimmenti, A., Strarcevic, V., Stutman, G., Van Looy, J. & Van Rooij, A. J. (2017). Scholars' open debate paper on the World Health Organization ICD-11 Gaming Disorder proposal. *Journal of Behavioral Addictions,* 6 (3), 267–270. Retrieved from: 10.1556/2006.5.2016.088

Ahmedani B. K. (2011). Mental Health Stigma: Society, Individuals, and the Profession. *Journal of social work values and ethics*, 8 (2). 41–416. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3248273/

Bailey, K., West, R., & Anderson, C. A. (2010). A negative association between video game experience and proactive cognitive control. *Psychophysiology*, 47 (1). 34–42. https://doi.org/10.1111/j.1469-8986.2009.00925.x

Blasi, M. D., Giardina, A., Giordano, C., Coco, G. L., Tosto, C., Billieux, J., & Schimmenti, A. (2019). Problematic video game use as an emotional coping strategy: Evidence from a sample of MMORPG gamers. *Journal of Behavioral Addictions*, 8 (1), 25-34. Retrieved from https://akjournals.com/view/journals/2006/8/1/article-p25.xml

Boyle, E. A., Connolly, T. M., Hainey, T. & Boyle, J. M. (2012). Engagement in digital entertainment games: A systematic review. *Computers in Human Behavior*, 28 (3). 771–780. ISSN 0747-5632. Retrieved from https://doi.org/10.1016/j.chb.2011.11.020

Brus, A. (2018). Generagency and problem gaming as stigma. Published in J. Enevold, A-M. Thorhauge & A. Gregersen (Eds.) *What's the problem in problem gaming?* (p. 51-64). Nordicom, 123. Retrieved from http://www.nordicom.gu.se/sites/default/files/publikationer-helapdf/whats_the_problem_in_problem_gaming.pdf

Bulletin of the World Health Organization. (2019), 97 (6), 382-383. Retrieved from http://dx.doi.org/10.2471/BLT.19.020619

Canale, N., Vieno, A., Pastore, M., Ghisi, M. & Griffiths, M.D. (2016). Validation of the 8-item Attitudes Towards Gambling Scale (ATGS-8) in a British Population Survey. *Addictive Behaviors*, 54. 70-74. Retrieved from 10.1016/j.addbeh.2015.12.009

Chen, H.H., & Yang, T. (2013). The impact of adventure video games on foreign language learning and the perceptions of learners. *Interactive Learning Environments*, 21 (2), 129-141. Retrieved from https://doi.org/10.1080/10494820.2012.705851

Columb, D., Griffiths, M., & O'Gara, C. (2019). Online gaming and gaming disorder: More than just a trivial pursuit. *Irish Journal of Psychological Medicine*, 1-7. Retrieved from: https://doi.org/10.1017/ipm.2019.31

Dullur, P., Krishnan, V., & Diaz, A. M. (2021). A systematic review on the intersection of attention-deficit hyperactivity disorder and gaming disorder. J*ournal of psychiatric research*, 133, 212–222. Retrieved from https://doi.org/10.1016/j.jpsychires.2020.12.026

Fam, J. Y.. (2018). Prevalence of internet gaming disorder in adolescents: A meta-analysis across three decades. *Scandinavian Journal of Psychology*, 59 (5), 524-531. Retrieved from https://doi.org/10.1111/sjop.12459

Ferguson, C.J. (2015). Clinicians' attitudes toward video games vary as a function of age, gender and negative beliefs about youth: A sociology of media research approach. *Computers in Human Behavior*, 52, 379-386. Retrieved from https://doi.org/10.1016/j.chb.2015.06.016

Ferguson, C. J. (2020). Video Games During the Time of the Plague. *Psychological Inquiry*, 31 (3), 242-246. Retrieved from https://doi.org/10.1080/1047840X.2020.1820222

Ferguson, C. J., Coulson, M., & Barnett, J. (2011). A meta-analysis of pathological gaming prevalence and comorbidity with mental health, academic and social problems. *Journal of Psychiatric Research*, 45 (12), 1573–1578. Retrieved from https://doi.org/10.1016/j.jpsychires.2011.09.005

Ferguson, C. J., Nielsen R. K. L., Maguire R. (2017). Do Older Adults Hate Video Games until they Play them? A Proof-of-Concept Study. *Current psychology,* 36 (4), 919–926. Retrieved from https://doi.org/10.1007/s12144-016-9480-9

Finnish National Board on Research Integrity TENK. (TENK). (2019). A Practical Model of Self-regulation on Academic Integrity: a Russian-English edition of the Code of Conduct for Research Integrity in Finland. Retrieved from https://tenk.fi/sites/tenk.fi/files/TENK_RCR_rus_eng_pdf.pdf

Gentile, D. A., Choo, H., Liau, A., Sim, T., Li, D., Fung, D., & Khoo, A. (2011). Pathological video game use among youths: A two-year longitudinal study. *Pediatrics*, 127 (2), 319–329. Retrieved from https://doi.org/10.1542/peds.2010-1353

Goffman, E. (1963). *Stigma: Notes on the Management of Spoiled Identity*. Penguin Books.

Granic, I., Lobel, A. & Engels, R. C. M. E. (2014). The Benefits of Playing Video Games. *American Psychologist*, 69 (1), 66-78. Retrieved from https://doi.org/10.1037/a0034857

Griffiths, M. D., & Davies, M. N. O. (2005). Does video game addiction exist? Published in J. Raessens & J. Goldstein (Eds.). *Handbook of Computer Game Studies* (p. 359-368). The MIT Press Cambridge, Massachusetts London, England.

Griffiths, M. D., Kuss, D. J., Lopez-Fernandez, O. & Pontes, H. M. (2017). Problematic gaming exists and is an example of disordered gaming. *Journal of Behavioral Addictions,* 6 (3), 296–301. Retrieved from https://doi.org/10.1556/2006.6.2017.037

Henderson, C., Evans-Lacko, S., Thornicroft G. (2013). Mental illness stigma, help seeking, and public health programs. *American Journal of Public Health,* 103 (5), 777-780. Retrieved from 10.2105/AJPH.2012.301056

Heng, S., Zhao, H., & Wang, M. (2021). In-game Social Interaction and Gaming Disorder: A Perspective From Online Social Capital. *Frontiers in psychiatry*, 11:468115. Retrieved from https://doi.org/10.3389/fpsyt.2020.468115

Hing, N., Holdsworth, L., Tiyce, M., & Breen, H. (2014) Stigma and problem gambling: current knowledge and future research directions. *International Gambling Studies*, 14 (1), 64-81, Retrieved from 10.1080/14459795.2013.841722

Hing, N., Russell, A., Nuske, E., Gainsbury, S. (2015). The stigma of problem gambling: Causes, characteristics and consequences. Victoria, Australia: Victorian Responsible Gambling Foundation. Retrieved from https://responsiblegambling.vic.gov.au/documents/351/Hing-Stigma-of-problem-gambling-2015.pdf

Jabbari, N., & Eslami, Z. (2019). Second language learning in the context of massively multiplayer online games: A scoping review. *ReCALL*, 31 (1), 92-113. Retrieved from 10.1017/S0958344018000058

Johannes, N., Vuorre, M. & Przybylski, A. K. (2021). Video game play is positively correlated with well-being. *Royal Society open science*, 8 (2). Retrieved from https://doi.org/10.1098/rsos.202049

King, D. L., Delfabbro, P. H., Gainsbury, S. M., Dreier, M., & Greer, N. (2019). Unfair play? Video games as exploitative monetized services : An examination of game patents from a consumer protection perspective. *Computers in Human Behavior*, 101 (2019), 131–143. Retrieved from https://doi.org/10.1016/j.chb.2019.07.017

Knaak, S., Mantler, E., & Szeto, A. (2017). Mental illness-related stigma in healthcare: Barriers to access and care and evidence-based solutions. *Healthcare management forum*, 30 (2), 111–116. Retrieved from https://doi.org/10.1177/0840470416679413

Kuuluvainen, S. & Mustonen, T. (2019). *Digitaalinen viihdepelaaminen ja digipeliriippuvuus: Katsaus pelaamisen eri ulottuvuuksiin*, (2). Sosiaalipedagogiikan säätiö, Helsinki.

Lee, Y. (2017). Exploring the role of escapism in the DSM-V criteria for internet gaming disorder: A meta-analytic investigation (Order No. 10620071). Retrieved from https://www.proquest.com/dissertations-theses/exploring-role-escapism-dsm-v-criteria-internet/docview/1955176758/se-2?accountid=11774

Lopez-Fernandez, O., Männikkö, N., Kääriäinen, M., Griffiths, M. D. & Kuss, D. J. (2018). Mobile gaming and problematic smartphone use: A comparative study between Belgium and Finland. *Journal of Behavioral Addictions*, 7 (1), 88–99. Retrieved from 10.1556/2006.6.2017.080

Meriläinen, M. (25.1.2020). Towards being gaming literate: Youth digital gaming and adverse consequences as a parenting issue. University of Helsinki, Helsinki.

Männikko, N., Billieux, J. & Kääriäinen, M. (2015). Problematic digital gaming behavior and its relation to the psychological, social and physical health of Finnish adolescents and young adults. *Journal of Behavioral Addictions*, 4 (4), 281-288. Retrieved from: 10.1556/2006.4.2015.040

Norman, R. M. G., Sorrentino, R. M., Windell, D., & Manchanda, R. (2008). The role of perceived norms in the stigmatization of mental illness. *The International Journal for Research in Social and Genetic Epidemiology and Mental Health Services*, 43 (11), 851–859. Retrieved from https://doi.org/10.1007/s00127-008-0375-4

Oskamp, S. & Schultz, P. W. (2005). *Attitudes and opinions* (3rd ed.). L. Erlbaum Associates.

Petry, N., Rehbein, F., Ko, C-H. & O'Brian, C. (2015). Internet Gaming Disorder in the DSM-5. *Current Psychiatry Reports*, 17. Retrieved from: 10.1007/s11920-015-0610-0

Powers, K. L., Brooks, P. J., Aldrich, N. J., Palladino, M. A., & Alfieri, L. (2013). Effects of video-game play on information processing: a meta-analytic investigation. *Psychonomic bulletin & review*, 20 (6), 1055–1079. Retrieved from https://doi.org/10.3758/s13423-013-0418-z

Przybylski, A. K. (2014). Electronic gaming and psychosocial adjustment. *Pediatrics,* 134 (3), 716–722. Retrieved from 10.1542/peds.2013-4021

Przybylski, A. K., Weinstein, N. & Murayama, K. (2016). Internet Gaming Disorder: Investigating the Clinical Relevance of a New Phenomenon. *American Journal of Psychiatry*, 174 (3), 230-236. Retrieved from https://doi.org/10.1176/appi.ajp.2016.16020224

Ranalli, J. (2008). Learning English with The Sims: exploiting authentic computer simulation games for L2 learning. *Computer Assisted Language Learning*, 21 (5), 441-455, Retrieved from 10.1080/09588220802447859

Russoniello, C. V., O'Brien, K., & Parks, J. M. (2009). EEG, HRV and Psychological Correlates while Playing Bejeweled II: A Randomized Controlled Study. *Studies in health technology and informatics*, 144, 189–192. Retrieved from 10.3233/978-1-60750-017-9-189

Saldaña, J. (2013). *The coding manual for qualitative researchers,* (2). SAGE Publications. ISBN 978-1-44624-737-2.

Salokoski, T (2005). *Tietokonepelit ja niiden pelaaminen.* Jyväskylä: Jyväskylän yliopisto. ISBN 951-39-2269-3

Segev, A., Rover, M., Appel D. I., Abrams, A. W., Rotem, M. & Bloch, Y. (2016) Possible Biases of Researchers' Attitudes Toward Video Games: Publication Trends Analysis of Medical Literature (1980–2013). *Journal of medical internet research,* 18 (7). Retrieved from 10.2196/jmir.5935

Snodgrass, J. G., Lacy, M. G., Dengah H. J. F., Eisenhauer, S., Batchelder, G. & Cookson, R. J. (2014). A vacation from your mind: Problematic online gaming is a stress response. *Computers in Human Behavior,* 38, 248-260. ISSN 0747-5632. Retrieved from https://doi.org/10.1016/j.chb.2014.06.004

Stevens, M.W.R, Dorstyn, D., Delfabbro, P.H. & King, D. L. (2020). Global prevalence of gaming disorder: A systematic review and meta-analysis. *Australian & New Zealand Journal of Psychiatry*, 55 (6), 553-568. Retrieved from https://doi.org/10.1177/0004867420962851

Stuart, H. (2016). Reducing the stigma of mental illness. *Global Mental Health*, 3. Retrieved from 10.1017/gmh.2016.11

Tsai, Y-L. & Tsai, C-C. (2018). Digital game-based second-language vocabulary learning and conditions of research designs: A meta-analysis study. *Computers & Education*, 125, 345-357. Retrieved from 10.1016/j.compedu.2018.06.020

Volmer, D., Maesalu & M., Bell, F. J. S. (2008) Pharmacy students' attitudes toward and professional interactions with people with mental disorders. *International Journal of Social Psychiatry* 54 (5), 402-413. Retrieved from https://doi.org/10.1177/0020764008090427

Zhao, Y., & Zhu, Y. (2021). Identity transformation, stigma power, and mental wellbeing of Chinese eSports professional players. *International Journal of Cultural Studies*, 24 (3), 485–503. Retrieved from https://doi.org/10.1177/1367877920975783

# 6. APPENDICES

## Appendix 1 – Semi-structured interview

*--- Read this definition first to the interviewee ---*

Defining digital gaming: digital gaming is gaming that happens through technology (with PC, mobile device or gaming console). Games can be online games, where the player plays with other people on the internet or they can be offline games, so called single player games. The intensity regarding the needed concentration changes from game to game and the genres in gaming range from strategy games to dance games.

**Background questions:**

1. Age
2. Gender
3. How often do you play digital games if you play at all?
   a. What kind of changes have there been in your gaming activity throughout your life?
   a. Would you call yourself a gamer?
4. Do your family or close friends play digital games?
   a. How active gamers would you describe them?

*--- Questions 5 to 8 only for the professionals ---*

5. What is your job title in your current work?
6. How many years of experience do you have in the field of mental health?
7. Do you have experience with problematic gaming in your work?
   a. Have these experiences affected your attitudes towards digital gaming in general?
8. How naturally do you feel like you can talk about digital games with your clients?

**Attitudes Towards Gambling Scale (ATGS-8), refitted for digital gaming**

1. People should have the right to game whenever they want
2. There are too many opportunities for gaming nowadays
3. Gaming should be discouraged
4. Most people who play games do so sensibly
5. Gaming is dangerous for family life
6. On balance gaming is good for society
7. Gaming livens up life.
8. It would be better if gaming was banned altogether


*--- Often asked additional question ---*

*Should digital gaming be limited through governmental limitations on the time an individual is allowed to play digital games as some countries in Asia already do (personal digital game accounts are linked to social security numbers and these are linked to specific hour limits and time slots when gaming is allowed)?*

## Questions about attitudes towards gaming in general

**1.** What kind of positive benefits do you see in digital gaming? How about the cons of gaming?

**2.** Does gaming prevent loneliness? Does it prevent falling out of society?

**3.** What kind of other problems could gamers have in everyday life, studies, or work?

    **a.** Would you describe these problems to be linked to the number of hours spent gaming?

**4.** Does gaming affect violent behaviour in some way?

**5.** How are digital games seen in society in general?

    **a.** Have these general views affected your attitudes towards gaming?

        **i.** Has there been any changes in these attitudes over the years?

    **b.** Do the attitudes that your family and friends have towards digital games affect your own attitudes?

    **c.** What kind of attitudes towards digital games have you noticed in your work environment?

        **i.** Who has had these attitudes? (Management? Co-workers? etc.)

## Questions about gaming disorder:

*--- Read this definition first to the interviewee ---*

WHO (World Health Organization): Gaming disorder can be characterized as continuous or recurring gaming behaviour through internet or without, that embodies the following characteristics:

- Continuous or recurring uncontrolled gaming behaviour
- Prioritizing gaming over other points of interest and daily actions
- Continuation of gaming without care for the negative consequences
- The problematic gaming is serious enough to cause noticeable problems in studies, work or in family life, or in other areas of life.
- The problematic behaviour has continued for at least 12 months. This timeframe can be shorter if other criteria is fulfilled, and the symptoms are serious

1. Is problematic gaming often just a symptom from other mental health problems?
2. Can gaming disorder be compared to substance addictions such as alcohol, tobacco, or illegal substances?
    a. Is digital gaming comparable to gambling?
    b. Can you come up with another hobby or activity that would possess a similar tendency for addiction or risky behaviour as digital gaming?
3. When does one play too much?
4. Was it the right decision from WHO to add gaming disorder to the diagnostic manual (ICD-11)?
    a. What are the pros of the decision to add the new diagnosis?
    b. What are the cons of the decision to add the new diagnosis?

# Appendix 2 – Original quotations used in this master's thesis

**Results, benefits of gaming**

1. *"Mä oon eri mieltä, 2, kaiken kaikkiaan sisi jos ottaa kaiken … toi on paha mä en tiedä pitäskö mun sittenki sanoo 3 koska sitte siinä ei oo kompetenssia mulla kyllä sanoo että miten se on, en, tähän kysytäänkin mun mielipidettä mutta .. no se että just että … et siihe liittyy niin paljon haasteita just siihen semmosta niinku ajankäytöllistä nukkumaan menemistä et se tavallaan on sitten pois varsinkin varmaan sit semmosissa perheissä joissa ei niinku on vanhemmuudessa semmosta vajetta tai miten sen nyt nätisti sanois jossa ei niinku kyetä pitämään rajoja riittävästi tai ei pidetä tai sillä tavalla et sitte ja jos lapsella on pahoinvointia ja sit pakenee nii sitte se pelaaminen kyllä voi niinku riistäytyy käsistä ja viedä niinku mennessään tai sillee et on niinku sitte on aamuisin tosi väsyny, mut sit toisalta taas sit **nykynuoret osaa englantia tosi hyvin, ja ainaki meidän pojilla se on ne osaa kyllä sen pelaamisen takia ei ne täällä mitään kaunokirjallisia kirjoja lue englanniks vaan ne pelaa englanniks nii ne oppii siinä**, ja sitte varmaan siinä oppii jotain .. sodankäyntitaitoja (nauraa) ainaki mun poika joka on nyt armeijassa nii se sano että joissain tilanteissa voi olla hyötyä että hää on et on pelannu, siis mä en tiiä onks se sitte joku se että osaa niinku tietokonetta ylipäätään käyttää en mä tiiä mistä, voi olla et ihan metsässä, mut sit toisalta se antaa myös yleensä pelaaminen sosiaalisia suhteita sen kautta saa niitäki, tavallaan toi on vähän kimurantti kysymys että .. mut ehkä jos niinku jos ihan jos laittaa kaikki jos, ehkä mä oon ku mä oon ite 70 ja 80 luvulla viettäny nuoruuden ni sitte se mun käsitys siitä hyvästä nuoruudesta ku nykynuorilla .. kyl mä pidän sen 2"*

2. *"Ei voi mun mielestä sanoo et se niinku ehkäisis tai olis ehkäisemättä et, et varmaan se voi toimii kumpaankin suuntaan .. **mut ehkä, ehkä jotenkin, tulee mieleen se näkökulma et usein ajatellaan että, et vaan ne sellaset kasvotusten olevat kontaktit on jotenki merkityksellisiä vaikka tottakai se voi olla ihan yhtä merkityksellistä, jutella netissä jonkun** kaa pelata jonkun kans siellä tai, olla osa sit jotain sitä kautta ja toki ihmisten tarpeetkin on niin erilaisia kuitenkin, ei voi mun mielestä sanoo, suuntaan tai toiseen"*

3.  *"No ei varmaan ehkäise yksinäisyydeltä mutta kyllä se sitä tunnetta varmasti voi lievittää et mä aattelen että se ei niinku korvaa niitä livekontakteja tietyllä tavalla mutta varmasti lievittää monen ihmisen yksinäisyyttä."*

4.  *"Hmmm. Mahdollisesti kohtuudella et pelaaminen voi sekä lisätä että vähentää yksinäisyyttä se voi myös olla että ihminen hakee sosiaalisten suhteiden korviketta peleistä pelaa jotain roolipeliä jossa on hahmoilla ihmissuhteet tai jotain semmolasta niinku muuta ihmiselämäsimulaatiota ja sillee myös niinku ylläpitää omaa yksinäisyyttään että ei hae sitä sosialisuutta oikeesta maailmasta vaan peleistä **et jossain määrin sellanen yhteisöllinen pelaaminen se voi tarjota hyvin laajaa sosiaalisuutta ja se tarjoaa ainaki jonkilaista yhteyttä muihin ihmisiin mutta luulen että suurimman osan ajastas se on melko rajallinen yhteys minkä siitä saa.**"*

5.  *"Kyllä osittain ilman muuta. Eli eli se ne yhteisöt joissa on mukana monilta osin voi vahvistaa tunnetta että minusta välitetään mulla on arvoa mun mielipiteillä, kokemuksilla ja sanomisilla on merkitystä ja ja mä en muista oliko se ylen sivuilla semmonen **tosi liikuttava tarina tämmöstä lihassurkastuvaa sairastavasta pojasta jonka ainoat kaverit olivat jopa hänen vanhempiensa tietämättä niin olivat yhdessä seikkailupelimaailmassa ja hän ei siellä myöskään kertonut näistä fyysisitä rajotteista muille ihmisille että hän siellä pystyi rakentamaan itsestään jonkilaisen ihanneidentiteetin joka palveli häntä ihan täydellisesti** vaikka hän sitten lopulta menehtyi siihen sairauteen yllätyksenä näille kanssapelaajille et et kyllä se potentiaalisesti isollekki osalle hyvin merkittävä sosiaalinen maailma. Mutta se ongelma on juuri tässä että jos se täyttää kaiken sen tilan eikä se sitten tätä fyysistä läsnäoloa sitä ei pääse niinkun noudattamaan tai toteuttamaan tai sitä eiehkä edes kaipaa jossain kohtaa niin kyllä mä katsoisin että se on jonkinlainen puute"*

6. *"Öö .. sosiaalinen kanssakäyminen ja se tapahtuu siiss, niinkun .. parhaimmillaan sehän on mmannertenvälistä pelaamista että niinku pelaa eri kielisten kanssa eri kulttuurien kanssa et siinä se vuorovaikutus parhaimmillaan vuorovaikutus, siinä ohessa juttelu, kielten oppiminen ,tietokonetaitojen oppiminen, varmaan siin sitäki oppii emmää tiedä mutta vois kuvitella, sitten niin, mä sanoin jo kielet, englanti nyt ainaki .. sitte nii totaa ... **se voi olla rentouttava hetki nuorelle, tai lapselle se voi olla semmonen niinku .. se voi olla iha oikeesti niinku kiva harrastus, ja kiva niinku .. jossain tilanteissa se voi olla jopa tarpeellinen pakopaikka, et pääsee pois hetkeks, niinkun jostain** .. ja sitten niin tota .. kyllä se saattaa jotain jotain kognitiivisia kykyjä kehittääkki, voisin kuvitella että, jotain voi kehittää .. jotain havainto- havainto havainto-motorisia, havainto sormimotorisia tämmösiä (nauraa) kykyjä, en tiiä mutta ehkä te tiedätte jotain tutkimuksii ehkä niistä voi olla oikeesti jotain hyötyyki"*

7. *"No vaikka esimerkiks jos jollakin nuorella on sellanen hankala tilanne kotona ja koulussa että ei vaikka oo yhtään ystäviä tai kiusataan ja kotoa ei sitte saa välttämättä yhtään tukea siihen nii sitte ehkä haluaa palkea- ha-haluaa paeta sitä sitä omaa elämää sitte pelimaailmaan missä .. missä ehkä saattaa tavallaan saada jonkinlaisen vaihtoehdon sille omalle arjelle"*

8. *"No tuoki on kakspiippunen juttu, en tohonkaan ossaa yksselitteisesti vastata et riippuu varmasti, tilanteesta tuokin, sit että, niinkun .. **tulee mieleen semmonenkin tilanne että jos on sitte, semmosessa, niinku vaikka vammautunu niin pahasti et se kotoa liikkuminen on muuten tosi hankalaa nii joskus ne pelit voi olla ainut keino olla niinkun, ihmisiin yhteydessä silleen että, kukaan ei tiedä että sulla on vamma ja suhtaudu suhun semmosena, ihmisenä joka tarvii aina apua et se voi olla, ainut ympäristö missä voi olla 100 prosenttisesti niinku toimintakykynen, ja sillon se voi olla nimenomaan se tekijä joka ehkässee sen että putoaa kokonaan tästä ihmisten verkostosta,** mut sitten toki siinä on se kääntöpuoli et se voi niinkun, sitten myös lukita ne kaikki muut verkostot jos se elämä siirtyy vaan sinne"*

## Results, disadvantages of gaming

1. *"No varmaan aattelis et ne on ne ajankäytölliset, ongelmat .. ja johtuen siitä että se on varmaan monesti viihdyttävää ja aiheuttaa hyviä tunteita tai hyvää fiilistä se pelaaminen, nii siinä voi olla sitte se, ikään ku ajankäytöllinen haaste että, ei oo nii mielekästä tehä jotain asioita mitkä ei siinä hetkessä oo kiinnostavia mut ne ois tärkeitä*

*pitkällä aikajänteellä nii, tämmösiä haasteita voi olla ja .. sit tämmösiä ehkä sosiaalisiin tilanteisiin vois olla omat haasteensa että ku, pelimaailmaa pystyy kumminkin, muokkaa ja kontrolloimaan mieleisekseen .. nii se ei välttämättä kehitä aina sellasta pitkäjänteisyyttä koska on aina helppo vaihtaa peliä tai helppo vaihtaa, ikään ku sitä kohtaa mistä peliä lähtee etenemään, niin tuota, ehkä tämmöseen pitkäjänteisyyteen se ei välttämättä aina tue ja tietenki on pelejä ja on pelaamista mikä tukee pitkäjänteisyyttä, mut sitte myös seki **jos ihmisten kanssa tulee ongelmia tai vaikeuksia nii se on aika helppo paikka vaa blokata ihminen pois niinku eikä välttämättä kehitä sitä että mites me nyt ratkottas tää ristiriita tässä tilanteessa**, joka taas tämmösissä livesuhteissa on ehkä, konkreettisempaa koska se ihms- sitä ei vaa voi niinku hävittää siitä tilanteesta vaan se pitää jotenki hoitaa et esimerkiks vaikka jossai oppitunneilla tai koulussa tai, keskenäiset kohtaamiset nii on siinä mielessä hyviä koska, niitä ei välttämättä pelimaailmassa opi sitä ongelmienratkaisu, ihmissuhteisiin liittyviä ongelmanratkaisuja, niin niin, että että se ois minusta aina hyvä pitää kumminki että me opittas myös tässä maailmassa mitä me ei voija ikään ku vaa tietoteknisesti muokata, vaan se meijän pittää eri tavalla kohdata ne haasteet ja ongelmat nii **näitä taitoja mä aattelen että ois kyllä hyvä niinku ylläpitää ja niitä ei välttämättä aina pelaaminen opeta**."*

2. *"Mmh .. mulle tulee mieleen semmonen anekdootti ehkä mä muistan et ku mul oli, tai ku mä olin lapsi mun isoveli pelas tosi paljon ja et sil sil mietin tätä pettymyksensietoa tunnesäätelypuolta ehkä nii sil saatto mennä hermot joskus joskus lensi niinku, varmaan aika monella lentää nii, seinään vaikka noita ohjaimii ja tällasta et siit voi tulla sellast niinku ylimäärästä stressii tietysti, sit mä uskoisin et et niinku riippumat siitä et onks se pelaaminen itsessään jotenki pahaa mitä mä nyt ajattelen et se on nii se voi tuottaa vaikeuksii sit perheenjäsenten kanssa et varmaan erityisesti nuorille et ne joutuu kuuntelee sit valittamista aika paljon et lopeta se pelaaminen aina sä vaan pelaat ja, sä et tee mitään muuta ku pelaat .. rahaa menee varmaan aika paljon jos haluu ostaa jonkun game chairin tai mitä näit muita on, erityisjuttui, nuoret puhunu jonkun verran töissä .. aa .. sit tietty et jos nyt sattuu käymään sil taval huono tuuri et on, liian moni asia tavallaan sattuu samaan aikaan kohdalle jää siihen tietyl taval koukkuun siihen pelaamiseen nii voihan se olla sit mielenterveydelle haitallista , et jos siihen siihen tulee sit riippuvaiseks et jos se muodostuu jotenki tavakas käsitellä niit vaikeuksii mitä omas elämäs on ... aa ehkä siel on myös mahdollisuus, nii no tietty se näkökulma et **mä oon ymmärtäny et et jotenki ehkä, niinku syrjinnän näkökulmasta et ympäristöt voi olla***

*esimerkiksi naisille tai tytöille välil aika sillee hostiileja tai vihamielisiä, tai sit mitä* **nyt on lukenu näistä niinku eri skandaaleista** *et kuinka hyvin siellä sit niinkun, mä uskon et siel niinkun on potentiaalia sille et erilaiset moninaiset identiteetit tulee hyvin kohdatuks koska siihen liittyy niin paljon sellast kokeiluu ja luovuutta mut sit* **on toisaalta myös ymmärtäny et saattaa olla että, et esimerkiks just, vaik niinku olla naisvihaa** *tai mitä muita tyyppisii ilmiöitä,* **jotka voi sit aiheuttaa, pelaajille stressiä ..** *joo, ehkä tollasia, tuli mieleen, unirytmi voi mennä sekasin, jos jotenki, on on vaikka pelaa jonku kaa joka pelaa toisel puolel maata ja näin eteenpäin."*

3. *"* **Se on yks buusteri mielenterveyden kanssa painivien ihmisten kohdalla syventää jotenki sitä kuilua tai alhoa koska se tarjoaa jonkinlaisen korvikkeen järjestelmän täyttää päivän onnistumisen kokemuksilla** *ja sitten täyttää jotain sellasta tyhjiötä mitä ehkä tää reaalimaailma ei sillä hetkellä pysty tarjoamaan että et se voi syventää sitä kierrettä varsinkin niinkun masennukseen ja sosiaalisen ahdistuksen osalta* **ja sitä kautta niinkun sotkee päivärytmin voi romahduttaa toimintakyvyn opintojen tai työkyvyn osalta** *voi erakoittaa koska se verkkoyhteys voi ikäänkuin täyttää kaiken sen sosiaalisen tarpeen sitten ei kaipaa niitä hankalia ihmissuhteita siihen reaalimaailmaan joita ilman ei sitte kuitenkaan näin ajattelen niinkun viime kädessä sitten valtaosa ei pärjää."*

4. *"No nyt sanoisin ihan että tuota, toisaalta eri mieltä ja toisaalta samaa mieltä että .. mmhh ... sinällään et se kyllä tuo varmasti lisää, todellisuuksia .. et on erilaisia vaihtoehtoja mitä ilman pelejä ei oo mahollista kokea .. mutta sitten se että .. mm .. ainaki* **jotkut pelit saattaa vähentää sitä … niinku ehkä yhteyttä toisiin ihmisiin** *tai … mut ehkä se elävöittää, nii, et kyl se voi olla semmone, ikään kuin ..* **ehkä arkea myös tylsistyttävä vaikutus sille että ihminen ehkä, voi eristäytyä tai, vähemmän olla, tekemisissä muitten ihmisten kanssa livemaailmassa sen takia** *mutta tuota, mut toisaalta on sillä semmonen elävöittäväki vaihtoehto et ku se tuo jotai semmosta mitä ei tässä maailmassa välttämättä muuten ois, sanotaan että samaa mieltä mutta on siinä omat, niinkun, tekijänsä minkä takia oisin myös eri mieltä"*

5. *"Mm .. ehkä se että nykyään aika monet pelit on luotu ihan tahallaan addiktiivisiks et jos miettii vaikka miten joku wowi on muuttunu, nii siinähän pelaajalle annetaan aina palkinto ku se avaa sen pelin, ja sitte sitä toistetaan ja jossain vaiheessa, tai että mä en yhtään ihmettele että jotkut ihmiset addiktoituu peleihin koska siis kyllähän niistä ihan oikeesti on tehty semmosia et ne oikeen houkuttelee siihen .. ja tota .. ehkä siihen liittyen just sellanen* **ajankäyttö et jos se vie muulta elämältä liikaa aikaa niinku se usein**

*saattaa viedä, nii kyllähän se köyhdyttää elämää jos sitte kaikki aika menee pelkästään pelaamiseen"*

6. *"Kyllä mä sanoisin että se voi vaikuttaa lisäävästi toki tässäki varmaan monet asiat vaikuttaa mutta jos ajattelee että jos vaikka **pieni koululainen saa pelata k-18 pelejä nii ihan varmasti voi vaikuttaa tai jos lapsen pelaamista ei mitenkään rajoteta vaikka se ei suoraan oliskaan väkivaltapeliä mut jos se on joku intensiivinen toimintapeli niin kyl mä aattelen et se semmosta levottomuutta stimuloi** ja sit jotenki pienen ihmisen aivot menee ihan ylikierroksille jolloin **esim pelaamisen lopettamisen jälkeen saattaa tulla muksimista tai lyömistä** tai tuli mieleen että meillä nuori tykkää kattoa super nannyä me katotaan aina sitä hänen kanssaan niin siinähän on joka jaksossa melkein lapsen väkivaltanen ongelmakäyttäytyminen tai aggressiivinen käyttäytyminen ja paljon pelaaminen mitä aikuinen ei pysty rajaamaan et se on musta aika toistuva ilmiö."*

7. *"Joo ja aattelisin ettei aikuisillakaa välttämättä oo et **ei ne semmosia taitoja oo mitkä meille luontaisesti kehittyy niinku vaan ne on semmosii taitoja mitä meidän pitää opetella nii**, niin niin aattelisin että, että että todennäkösesti lapsella ei oo vielä sitä kyvykkyyttäkään täysin oppia ymmärtään niitä seurauksia mitä siitä on siitä **rahapelien pelaamisesta** ja aikuisella sitä voi sitä kyvykkyyttä ja nuorella olla, mutta sitte **jos niitä, oman toiminnan ohjauksen taitoja**, tämmösiä ajatuksen ja tunteitten toimivia käsittelytaitoja **ei oo, nii sillo, samalla tavalla se voi olla ongelmallista, aikuiselle tai nuorelle."***

8. *"Öö no tietysti se että jos tota niin, nuoret pienet lapset pelaa, ikätasolle sopimattomia pelejä, niin sit ne niinkun vaikutteet voi jäädä niinkun, oon törmänny töissäni heihin joilla jää niinku erilaisia pelkoja, ja ihan selkeenä on se että monet vanhemmat sanoo sitä, että kun se lapsi ei pelaa, niin se on paljon rauhallisempi ja kun ne pelit on taas olemassa niin lapset on paljon niinku keskittymiskyvyttömämpiä ja levottomampia ja niinku tota kiukkusempia, et et kyllähän mä aattelen että varsinkin **nuorten lasten kohdalla joilla niinku toiminnan ohjauksen kyvyt on vielä hyvin kehittymättömiä, niin niin totaa, he tarvii paljon tukee siihen että se pysyy se pelaaminen kohtuudessa ja rajoissa, et kyllä se vaikuttaa niinku ihmisen keskittymiskykyyn** ja voisin kuvitella et **myös aikuisella että jos se menee, se alkaa peittämään muuta elämää alleen liikaa, niin niin tota se vaikuttaa ihan niinku kognitiivisiin toimintoihin jossain määrin."***

9. *"Ehkä yks niinku tossa vastaanottotyössä tutuimpia ja eniten esille tulevia on tää **vuorokausirytmi ja ja vähän nukkumisen aiheuttamat ongelmat** jotka ei varmaan ole*

61

*riittävän vakavasti otettuja vieläkään että niitä joutuu kyllä terottamaan ihmisille että opiskelijalle yhdeksän tunnin päivittäiset unet on aika lailla välttämätöntä että pysyy niinkun toimintakykyisenä ja pystyy omaksumaan jatkuvasti kaikkea uutta asiaa jota joutuu sulattelemaan ja integroimaan omaan ajatteluunsa et se on ihan eri asia opiskelijalla kuin vaikka työssäkäyvällä jonka työpäivät on aikalailla ehkä rutiininomaisia ja se ei sillä lailla kognitiivisesti ole niin kuormittavaa kuin opiskelu et tää tää **jos se usein karkaa käsistä sitten siellä iltapainotteisesti ja aamuyöhön saattaa jatkua ne pelisessiot ja sit kumminki aamulla pitäis herätä ja lähteä tekemään jotain nii tää on semmonen potentiaalinen uhkatekijä sen tasapainon ylläpitämiselle** ja tota kyllä varmaan parisuhteessa eläville ihmisille joista toinen pelaa ja toinen ei niin se on kanssa semmonen toistuvasti jatkuvasti sitä parisuhteen kitkaa lisäävä asia et siinä helposti syntyy jonkunlainen kilpailutilanne kumpi on tärkeämpää ja riitojen aiheuttaja siitä. Taloudelliset asiat on myös et et tuota on missä määrin pelaaminen vaatii resursseja taloudellisesti satsata siihen kilpavarustelua kaikenlaisten ominaisuuksien saamiseksi ja ja osteleminen kuitenkin kuuluu joihinkin peligenreihin ihan olennaisesti että siellä pelin sisällä saattaa sitten isompiakin summia mennä. Nää nyt ainakin.”*

10. *“Toisaalta se ainaki mitä itellä tulee et **jos liikaa tuijottaa ruutua nii se on, huomaa et se vaikuttaa tosi paljon et oma vireystila on, sitte totaa, tai semmonen niinku että on vaikka vaikea nukahtaa ku on vielä tosi ylikierroksilla tai että niinku sattuu päähän ja on tämmösiä fyysisiä oireita** et jos on liikaa, ruudun edessä, tämmösiä voi toki olla ..”*

**Results, questions about the gaming disorder**

1. *"Kyllä mä näkisin että että ne kenen kanssa mä oon töitä tehny ja lukenu ja muuta niin yleensä aina siellä on pohjalla jotain muuta ja sitte niinku et on joko ahistaa ei oo joko kiinnostusta tulla kouluun tai ahistaa tulla kouluun tai sitte töitä on kertyny niin paljon että ei tiedä mistä alottaa se oma toiminnan niinkun ohjaus on niin heikkoa että ei sit sit et ei siitä oikee tuu mitään ilman tukea ei osaa pyytää apua [häiriö] se on niinkun helppo [häiriöääniä] tai sillee ku **opiskelussa palkinto tulee myöhemmin ku se tuska saa nyt mut sit se dopamiini tulee myöhemmin vasta sitte kokeessa ku tajuaa että aa mähän osaan nää pelaamisessa se dopamiinihitti tulee heti blingblong sieltä tulee jotain pisteitä ja kaikkea ja heti tuntuu mukavalta niin tottakai nii fiksu valitsee miks mä ottaisin nautinnon myöhemmin ku mä voin saada nautinnon nyt sehän on ihan järkevä jos sitä ei niinku pysähdy miettimään niin niin tota kyllä se se on niinku coping-keino muiden joukossa** ehkä se on vaan niinku yli kun ei oo muita niin siihen niinkun ajautuu mä niinku jotenki nään sen näin"*

2. *"Monesti on mun mielestä kyllä. Että et toki se on jo kun se on vuosikausia jatkunut niin se on jotenki vyyhtenä kytkeytyny sen ihmisen siihen elämäntapaan ihan kiinteästi että ihan et kun se on noin eksessiivistä tämmöstä ylenpalttista että se menee kaiken edelle niin jotenkin siinä on joku lähtötila jota se pelaaminen on täyttämässä jonkunlainen pettymys yksinäisyys alakuko masennus pelko ihmisten kanssa olemisesta että **näin mä ajattelen et se pelimaailman adrenaliinia ja muuta hormonaalista myrskyä aiheuttava palkitseva puoli on niin voimakas että et se ikäänkuin syrjäyttää nää ns. Luonnollisemmat tai arkisemmat tavat saada niitä samoja elämyksiä ja se on niin nopea se palkitsee niin välittömästi voimakkaasta että tää arjen tylsempi ja hitaampi ja kärsivällisyyttä kysyvä luonne ei pysty kilpailemaan sellasessa tilanteessa.**"*

3. O2: Se voi olla mut kyl se voi niinkun kehittyä niinku itsenäisestikin suht, mä veikkaan et se voi kehittyä niinkun suht hyvinkin niinkun mielensä kanssa balanssissa olevalle ihmiselle se voi jossain määrin sit ruveta vaan kehittymään ku se on niin, jos on niinkun, vai vaatiik se sit jonku otollisen hetken tai … jjoo, se voi olla sitä mut se voi myös itsenäisesti kehittyä, näin mä oletan, **vähän samalla tavalla ku että joku voi, joku voi siis, paeta alkoholiin niinkun, pahaa mielenterveysongelmii, mut sitte tavallaan se se voi viedä mennessään myös semmosen joka niinku, jolla periaattees on kaikki aika hyvinki, et se vaan sitte se mielihyvä siitä rupee vetää enemmän ja enemmän** ja sit hiljalleen se niinkun, noin, se on sitä tavallaan että, joo et se voi olla pakoreitti välttämiskäyttäytymistä niinkun, ja pakenemista, tai sit se voi myös niinku koukuttaa mielihyvää et hakee mielihyvää siitä enemmän ja enemmän ja hiljalleen siitä tulee ongelma

4. "Mä sanoisin että se on harvoin tavallaan se tekijä joka on tavallaan josta kaikki alunperin lähtee pelkästään mutta en mä sanois että se on kuitenkaan vain oire ei se olis perusteltavaa muutenkaan sillä olis sillon ICD:ssä oma oireluokkansa jos se ois syytä nähdä pelkkänä oireena että siinä vaiheessa kun se on kuitenki vakavatasonen ongelma nii se on semmonen mitä pitää hoitaa myös itsessään että ei riitä että sä hoidat niitä muita mielenterveyden asteita siinä ympärillä"

5. "No se on vaikee kysymys, tai aika semmonen kakspiippunen et et samaan aikaan mut ku mä kuuntelin noita kriteerejä nii mä just tajusin et ei esim omassa työssä et vaikka siel monii muita, häiriöitä skriinataan et onko, käydään läpi aika tarkkaakin oikeestaan kaikilta asiakkailta niinku diagnostisii haastatteluja että onks sul tällaista tällasta tällasta niin et totahan ei käydä läpi ja sen takia sitä ei varmaan sieltä niinku kovin, helposti tunnisteta et sisäänsä se lisää sitä et se tunnistetaan paremmin ja siihen voi ehkä sit saada paremmin apua, ja samaan aikaan niinkun on se huoli siitä että yhä, enenevässä määrin asiat on psykiatrisia ongelmia, et .. vaikee sanoo."

6. *"Mm.. no voi olla myös se että siinä vaiheessa ku, aam peliriippuvuudelle on diagnoosi niin myös terveydenhuollon ammattilaisia aletaan kouluttamaan siitä .. mm, mutta mulla tulee toisaalta myös huonona puolena mieleen se että että tota etenkin jos on vanhemman ikä- vanhemman ikäluokan ammattilaisia niin … niin tota siinä on aika tärkeetä et koulutetaan oikein et mitä se peliriippuvuus on ettei sitte tuu sellasia tulkintoja että joku nuori pelaa vaikka kaikki illat mutta elämä, ei tavallaan häiriinny mitenkään siitä pelaamisesta ja sit se tulkittais peliriippuvuudeks ja jota pitää hoitaa vaikka välttämättä mitään varsinaista ongelmaa ei olis."*

7. *"Jahas mä taisin tehdä sen riinastuksen tossa jo äskön eli sanoisin että kyllä ja* **kuitenki sit on myös se että usein on se väärinkäsitys mun mielestä että päihderiippuvuusksissa korostetaan jotain fyysistä riippuvuutta joka monien päihteiden kohdalla on kuitenki aika lievä ja sit toinen on se psyykkinen ja toiminnallinen sosiaalinen riippuvuus ja et kyl mä nään että ne on ihan jossain määrin rinnasteisia ehkä se ero tulee siitä että pelit ei sillee samalla tavalla vaikuta elimistöön et siellä ei oo niinku kemikaaleja joita pistetään kroppaan."**

8. *"Öö .. **mä ajattelen et ei ehkä ihan täysin koska niissä on kuitenki joku tämmönen niinku fyysinen, fyysinen aine joka vaikuttaa tuolla aivotasolla että et sitte niinku pelaaminen vaikuttaa eri mekanismien kautta, aivoihin, et ei voi ehkä rinnastaa**, ja tää tulee ehkä myös vähän siitä näkökulmasta, öö ku jonkun verran on näitä niinku, päihde- päihteiden .. öö, miten sen sanois siis päihdeongelmaisten kanssa työskentelevien kanssa käyny vuoropuhelua ja ollu erilaisissa koulutuksissa nini sieltä myöskin on tullu sitä ajatusta että, et digipelaaminen ei oo ihan samanlainen ilmiö niin, se varmaan vaikuttaa tähän omaan käsitykseen myös, ja ajattelen että, siin on eri mekanismit"*

9. **Tää on paha kysymys kun niissä on kuitenkin se fyysinen riippuvuus ja vierotusoireet niin vahvat että olisko enemmänkin joku jostakin toiminnallisesta harrastamisesta tuleva riippuvuus työholismi tai tai urheilijoilla että on pakko päästä lenkillä** *mitä en ymmärrä ollenkaan* **joku sellanen niinkun toiminnallinen että et se mielihyvä mikä siitä tekemisestä tulee joka ei niinkun oo oikeessa suhteessa siihen käytettyyn aikaan tai siihen et mitä kaikkea se sitten poissulkee sitten elämästään. Ehkä näin ajattelisin itse.**

10. *"No kyllä mä ajattelen et semmonen addiktiivinen henkilö voi näihin kaikkiin niinku koukuttua sillä tavalla että niinku tiedän henkilöitä jotka on vaikkapa pystyny lopettamaan päihteiden käytön mutta sitte on siirtyny pelaamaan tosi addiktiivisesti toisinpäin en tiedä mutta näin päin tiedän ja tota kyl mä ajattelen et se että miten paljon se valtaa mielestä tilaa miten se menee niinku muiden asioiden edelle mikä riippuvuuksissa on asiaankuuluvaa nii se on samankaltainen ilmiö joillaki."*

11. *"No vähä sama et se niinku se .. nii, vähä samalla tyylillä että se raha ... niinku mä en tiiä, vähä sama juttu että .. **se raha ei oo se pääpointti, ehkä siinä digipelaamisessa, et sä et laita rahaa ja toivo voittavas enemmän ja tavallaan siinähän on semmonen kierre,** mä oletan, mä en oo ihan perehtyny näihin asioihin hirveesti mutta joo .. **mä koen et siihen se digipelaamisessa ei aina se raha ole se pääpointti vaikka sulla voi mennä rahaa siihen että sä hankit niitä pelejä"***

12. ***"Siitä oon samaa mieltä että se on siihen ehdottomasti rinnastettavissa ja se on ehkä lähin rinnastus siihen"***

    H2: *"Joo onks sulla jotain tavallaan onks se just se kun se on pelaamista tai semmosta vai mikä siinä tekee sen"*

    *"Nii ja se se **ehkä riippuvuuden prosessi on sitte enemmän siihen tavallaan sen niinku tekemisen tuottamaan hyvänolontunteeseen et se ei oo mikään semmonen ihan niinku aivokemiallinen reaktio mikä tulee sitte jostain tämmösistä päihdeaineista vaan se on nimenomaan se hyvänolontunteeseen tavallaan koukkuun jääminen mikä sitte on saman tyyppistä kun rahapelaamisessa ei nekään siis oo täysin samanlaisia prosesseja tietenkään mutta niinku lähempänä"***

13. ***Jotenkin ei tulis mieleen yhdistää näitä mä ymmärrän mistä se ajatus tulee mut jotenkin mustsa tuntuu et uhkapeleissä ja rahapeliriippuvuudessa siinä on niin lyhytkestoista tavallaan se yksittäinen tavallaan se sykli et millä sä saat palkkion itselles et mun mielestä kuitenki jossain digipelaamisessa niin tarvitaan paljon pitkäjänteisempää sitoutumista ja se palkkio voi tulla niinku vasta myöhemmin** mutta en mä siis tiedä tähän liittyy se mun pohdinta mä en tiedä varmuudella mutta en yhdistäis näitä heti ensimmäisenä toisiinsa vaikka ymmärrän että ne on saman diagnoosin alla pyöriny joskus aikaisemmin*

14. *"Jossain videopeleissä vaikka niissä ei oo välttämättä semmosta uhkapelaamisen tai niinku mitään uhkapelaamiseen liittyvää että siinä ei välttämättä toimi samat mekanismit mitkä vaikka uhkapelaamisessa olis addiktoivaa"*

15. *"No tämmöset niinkun, liikunta-addiktiot niin niissä haetaan vähä ehkä niitä samoja, et on niinku se, suorittaminen ja sit semmonen jännitys, mitä haetaan et se vois tulla mieleen et siitä vois hakkee ainaki sitä samanlaista niinku, tunnefiilistä niinku riippuvuuden suhteen, jostaki tällasista niinkun, jos on, koukuttunu vaikka johonki tämmösiin extreme liikuntalajeihin ni, ne vois ehkä olla vähän samantyyppisiä"*

16. *Hyvä kysymys tota hmm emmä tiedä, **jengi tuijottaa netflixiä nykyään kans sillee pitäis jotain tehdä nii pistetään siitä binge päälle ja siinäki on tietysti se että no vielä yks jakso vielä yks jakso se on tietysti vähä niinku se on yleensä niinku sellanen passiivisempaa ku pelaaminen mutta tota siinä ehkä se palkitsevuus vois olla aika samalla samanlaisella mekaniikalla nii ehkä vähä vois no okei siitä puuttuu se interaktion osuus mutta vähän sinnepäin saattais olla** mut muuten en osaa sanoa sellasta harrastusta*

17. *"No ei nyt kyllä äkkiseltään tuu mieleen **mä aattelen et se on kuitenki nii semmonen oma maailmansa kun, jos nyt mietitään, vaikka sitä ihmistä joka pyöräili, pyöräili niin ku sitte siltä meni varmaan kaikki työt ja kaikki, öö.. nii hänhän kuitenki on siinä niinku reaalimaailmassa mut sitte pelaamisessa niin, sitä ollaan niinku .. ruudun välityksellä jossain maailmassa joka ei oo millään tavalla todellinen, nii mä näkisin et sitä ei voi ehkä rinnastaa ihan täysin mihinkään muuhun, muuhun niinku riippuvuuteen tai asiaan"***

## Results, ATGS-8

1. *"Tuota … samaa mieltä, ja aattelisin niin että, että .. **ihmisillä pitäs myös olla sen lisäks se taito, hahmottaa sitä että kuinka he haluaa aikansa elämässään käyttää** mitä on ne tärkeet asiat eli **löytää se tasapaino niitten tärkeitten asioitten suhteen**, ja .. sillon mä aattelisin että, samaa mieltä tai vahvasti samaa mieltä et se ihminen ite saa valita sitä omaa ajankäyttöö suhteessa niihin tärkeisiin asioihin, mä aattelen psyykkisen hyvinvoinnin näkökulmasta, ja tuota .. mutta sitten taas jos henkilöllä ei oo kyvykkyyttä, päättää elikkä puhutaan viakka pienestä lapsesta nii sillon mää vastaisin että eri mieltä,*

*eli sillon koen, että jos se taito ei riitä siihen, valintojen tekemiseen, ikään ku lyhyen ja pitkän aikajänteen hyödyt, huomioiden nii sillon mä aattelen et se pitää olla niinku huoltajan ja aikuisten, tehtävä on sitä, reunaehtoja sinne asettaa mut jos puhutaan tämösestä henkilöstä joka on niinku, ikään ku nuoresta tai aikuisesta nii sillon mä aattelisin et samaa mieltä, mut heiänki kohalla **ois tärkeetä että heillä on se kyvykkyys, arvioida niitten valintojen vaikutuksia omaan elämään** että .. vähän tämmöne"*

    a. *"**Tässä mä tietysti mietin niinkun ihmisten ikää että tottakai se niinku se on ikäsidonnaista miten voi niinku oman tahdon mukaan pelata että et kyl mä aattelen et lapset ja varhaisnuoretki tarvii aikuiselta kuitenki sitä rajaamista mutta mut tottakai aikuiset voi sitte tehdä mitä haluaa** että mutku puhutaan näin yleisesti nii sillon mä sanoisin ton ykkösen"*

    b. *"Joudun vastaamaan tässä tän tylsän ei samaa eikä eri mieltä eli käytännössä. oikeus .. \*Häiriötä nauhoitteessa\* **joo mielestäni on toki varsinki aikuisilla pitäis olla oikeus saada pelata digipelejä itse määrätä sitä määrää mutta nähdäkseni lasten digipelaamisen määrän säätely on perusteltua ja vanhemmalla on oikeus olla ja myös vähä velvollisuuski säädellä omien lasten digipelaamisen määrää."***

2. *"**Mun mielestä liikaa on aika voimakas sana ja mun mielestä monet pelit eivät ole saavutettavia ihan kaikille että siinä mielessä en nyt sanoisi et et ne olis liian helppoa ihan kaikille saada.**"*

    a. *"**Ehkä se että etku se on niinku koko ajan saatavilla niin tota mä aattelen että et siinä ei tuu sellasta niinkun siirtymää tai niinku sään .. Semmosta niinku lapsillaki semmosta säätelyä jotenki et millon pelataan ja millon ei** ja must tästä on hyvä esimerkki se että ku mä nään aamulla ku pikkulapset kävelee kouluun vaik olis 20 astetta pakkasta heillä ei ole hanskoja kun he heillä on puhelin millä he pelaa koulumatkalla ja naapurinpoika käveli penkkaan yks aamu kun mä katoin sitä hänen kävelyä niin hän törmäsi lumipenkkaan ja sit hän havahtu et että hetkinen 20 oli pakkasta ja kylmät kädet paljaat kädet että joo"*

3. *"Erii mieltä … koska, **onhan siitä, hyötyjäki et ku ne hyödyt tunnistetaan nii, on siellä mahollisuutta niinku hyödyntää niitä, tavoilla mitä välttämättä etuja ei muissa keinoissa oo, semmonen vuorovaikutteisuus ja, vaikka tekoäly, miten se auttaa oppimisessa nii ei sitä välttämättä kirjoissa oo samanlaisia ominaisuuksia** ni, et sillee aattelisin että, eri mieltä oo"*

68

a. *"Mun mielestä ihan niinkun me kannustetaan kirjallisuuteen, elokuviin, musiikkiin muihin kulttuurielämyksiin niin kyl mä miellän että pelit ihan hyvin voi kuulua siihen samaan kategoriaan että me voidaan ikään kuin kannustaa ihmisiä silleen tutkailemaan että onko se semmonen alue mistä tykkää. Kyllä mä suhtaudun positiivisesti."*

b. *"Tää onki vähä vaikee ku mä ajattelen että tääki riip… hmmh no mä sanon ton neljä et samaa mieltä mut et tota. **Tää on vaikee koska on myös paljon sellasisa niinku vaikka yksinäisiä nuoria jotka ei pysty oikee lähtee mihinkään joille tavallaan se sosiaalinen kuvio voi sitte tulla tärkeeksi sieltä pelien kautta et nää riippuu niin tilanteesta mut yleisesti mä aattelen että ehkä ei tarvii kannustaa ku se tulee joka tapauksessa sieltä kaikille jotka kiinnostuu."***

4. *"**Mun käsityksen mukaan suurin osa et se ongelmapelaajat on kuitenkin onneksi vielä vähemmistö tai ei ongelmapelaajat mutta ihmiset joille se on ongelmallista**"*

a. *"Samaa mieltä eli 4 … no, kyl **mä aattelen ehkä että se niinku hallitsematon pelaaminen on sit harvinaisempi ilmiö, että niin, suurin osa varmasti tai mun mielestä, pelaa semmosia määriä mikä on kuitenki niinku heille tai et se ei oo heille haitaksi.**"*

5. *"Mm … tosi vaikee kysymys … ehkä mä vastaan tuon 3 ei samaa eikä eri mieltä, koska **se riippuu niin valtavasti siit perheestä** että jos kaikki vaikka tykkää pelata nii eihän siin oo, sit voidaan pelata yhessä tai toinen voi pelata ja toinen voi tehä jotain muuta mut **jos perhees on vaikka asenteita paljon sitä vastaan tai, pelaaminen menee jotenki yli et ei saa vaik tehtyy jotain sovittuu asioita tai yhteinen aika jää vähäiseks** et kauheestihan se riippuu siit perheestä et **ei voi sanoo et, se digipelaaminen itsessään et varmaan mikä tahansa asia voi perheessä muodostuu ongelmaks.**"*

6. *"Kyl mä … mm .. no kyl mä sanoisin 4 .. joo .. en oo no en oo ehkä perehtyny niinkun, **voi olla että mä en oo perehtyny niihin haittoihin tarpeeks mut mä ehkä nään että niitä haittoja ei ehkä, välttämättä .. tai et en usko et niitä haittoja ois niin paljo ettei tavallaan,** öö .. mä en saa sanoja suuhuni mut tavallaan et **niitä ei ois enempää ku niitä hyötyjä tai et hyötyjä voi olla enemmänki ku haittoja.**"*

7. *"Viis. **Kyl se ehottomasti elävöittää digipelaaminen pystyy tarjoomaan sellasia elämyksiä mitä on hyvin vaikeaa toteuttaa millään muulla muodolla ja osa ei tavallaan pystykkään millään muulla tavalla toteuttamaan ku pelaamisella et se pystyy hyvin laaja-alaisesti tarjoomaan sellasia elävöittäviä elämyksiä ihan kaikilla aisteilla tavallaan.**"*

a. *"Öö .. vahvasti samaa mieltä, sillon ku siihen ei liity just näitä et et siitä ois jotenki riippuvainen tai se aiheuttaa ahdistusta, uniongelmia tai tai sellasia, arjen et se niinku elämänhallinta katoaa sen myötä."*

8. *"No … no mä en oikeen nää että miten sitä voitas ees kieltää kokonaan, et sen takia **jos se kiellettäis kokonaan niin (nauraa) tulis sellaset pimeet pelimarkkinat** ja sitte ei ei se oo se on vähä sama että ei voi niinku alkoholia kieltää, et ennemmin alkoholi pitäis kieltää se aiheuttaa vielä enemmän mut ei ei siinäkään niinku oo mitään järkee et se kiellettäs, niinku pelaa- ei .. ja siin on oikeesti jos jos **eihän siinä niinku mitään ongelmaa oo jos se pysyy tietyis rajois .. et voihan olla semmonen tuli mieleen et voihan olla et se pelaaminen myös suojelee jollain tavalla joltain muilta haitoilta .. et en mä tiedä että, vaikee sanoo** mut varmaan siitä on tehty tutkimuksia et miten nuorten ajankäyttö on muuttunu vuosien saatossa ja miten se tavallaan on vaikuttanu psyykeen erilaisiin huoliin tai muuta ja, sitte päihteidenkäyttöä ja kaikkee että .. voiks niistä nyt vetää mitään johtopäätöksiä se on tietty eri asia .. 2 joo"*

# Appendix 3 – A guide to coding the found attitudes

The definition of an attitude. In the used data, an attitude is something a person said that express at least one of the following:

- Attitude is a justification for an opinion
- The denying of others' attitudes and justifying of one's own attitudes with experience or other
- A way of thinking or feeling about something that affects a person's behavior
- A justification for one's attitudes or actions in relation to one's opinions
- The direct description of one's attitudes and changes in them