

Gaming habits and the development of the E-sports industry in Hungary

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Abstract: We are living in a world of Digitalization and evolving technological development. On the line with traditional sports, eSports have risen a lot in popularity over a short period of time. This motivated our team to investigate the Hungarian gaming markets' habits, composition, consumer behavior and purchasing decisions. Having analyzed the videogame market both in Hungary and globally, we determined the most popular online games. Since the Hungarian eSport market is in its infancy, it is quite far behind in building the infrastructure and having the community's size to push for better events. In order to make accurate conclusions about the state of the Hungarian gaming market, we surveyed 724 respondents aged 13-55, both male and female to find answers to a set of carefully composed questions. We were successful in explaining the market's purchasing habits, betting activities and reviewed possibilities of development of the video game market.

Keywords: eSports, gaming habits, videogames, Hungary, gambling,

1 Introduction

Defined as an activity done for pleasure, requiring physical effort or skill, usually done in a specific area adhering to specific rules, traditional sports are now more than ever, resemble the definition of eSports. Having scrupulously analyzed the video game market as a whole and the most popular games that are played at professional levels ranging from first-person shooters and multiplayer online battle arenas, to battle royals and real-time strategy games, our team has set the goal to examine the Hungarian eSports market. The rapidly evolving gaming industry serves as an attractive business entry point for entrepreneurs – and as a result an opportunity to increase competition in the market. People are often inclined to believe that gaming is solely for teenagers and young people. Our study questioned this stigma and with the help of a multilateral questionnaire it identified key sociological behaviors that can be scrutinized when a new product is introduced to the gaming market. The thorough analysis of eSports in an emerging market such as Hungary is important because significant breakthroughs can be made in the discovery of specific peculiarities of Hungarian gamers. This would later manifest in the increase of competitive advantage of businesses focused on gaming and eSports. Comparatively, very few studies have been conducted in the sphere of gaming and eSports in Hungary not only because it is a

relatively new field of study, but also, the state of the market is still in its infancy, therefore it must be explored.

Even though not everybody online or part of the gaming community is interested in eSports currently, as it will become more and more mainstream, the general viewership will increase with it, although it is already growing at a tremendous rate. To demonstrate the statement, look at last year's most viewed championship – League of Legends (LoL), where the peak viewership was 3.98 million people, this was a 94% increase from the previous year world championships viewership (escharts 2020) while concurrent viewers were 1.01 million people (eschazrts 2020), and these numbers are keeping a steady increase from the past years, as the infrastructure and the general acceptance of eSports increases these numbers are bound to go even higher and higher, and eSports watch hours are just part of the actual hours' people spent on watching these games being played. In January 2020 LoL had 114 million hours watched (Newzoo 2020) and this is just one of the games that are popular currently. This also creates a problem for these streamers and competitors, with new games coming out and the volatility of the market games coming and going within months, organizations are left with teams that have nowhere to compete or streamers who are left unemployed due to the game they enjoy falling out of popularity.

Hungary is quite far behind in building the infrastructure and having the community's size and power to help and push for better events and teams. There are not many if any players on the professional level. This is mostly because it is a lot less accepted than in the world. There could be many social reasons as to why Hungarian people think this way, but it is bound to change with the movement (E-sportmilla) that started in 2013 as a movement and became a proper association and allowed for the V-4 event to be pursued by Hungary and the V-4 nations. Since then, the Hungarian league has formed for multiple eSports games such as LoL, CS: GO, PUBG, and Rainbow Six: Siege (R6) which is another First Person Shooter game. The Hungarian eSports, in general, started moving in the right direction but still has a lot of room to grow to produce players capable of challenging the bigger and better leagues, mostly since the Hungarian team doesn't have the necessary budget to pay for the bigger names in games and still keep profitability.

2 The eSports market and its social elements

2.1 Forecasted growth of the market

In the previous year, there were 443 million people who watched eSports either regularly or occasionally with a split pretty close to each other around a 45% to 55% split between the regular viewers and the occasional ones it is visible that eSports has a decent retaining factor around it. This shows from the fact that from 2018 to 2019 there were 20 million viewers worth of growth in the eSports enthusiasts which is similar to the growth of the occasional viewers. With a

forecasted revenue of 1556.7 million dollars in 2023, increasing the potential of this growth even further via new games is becoming more and more mainstream especially because of certain games such as Fortnite. For example, one might even call this the moneymaker of eSports, as it might not be relevant by the time the big changes come around, it was the first of its kind to bring so much attention to games and eSports in such a small amount of time after its release. This phenomenon has been well- documented, the title has reached more than 125 million players on all platforms. (Goldman Sachs 2018)

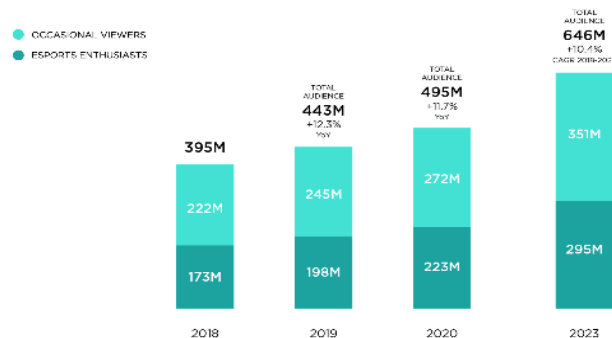


Figure 25 Newzoo's eSports audience growth forecast

This is important because with viewer numbers growing at this rate and not seeming to stop soon traditional sports leagues with already set fan bases might be challenged by this new and upcoming form of entertainment. Even in 2017 fans of eSports asked about what they think it will grow into, most people (71% of the asked) said that it will most likely become a mainstream activity that a lot more people will follow. Growth in the industry will create more and more jobs and more and more of the traditional sports teams will start to invest in this side of entertainment and athleticism. This rise will create stagnation in the development of video games though as the ones on top will do anything to keep themselves on top and push the new games that are less relevant out of the loop and not allow them to reach top eSports levels of viewership and player base. Similar to how the top football clubs tend to be the same due to the money they acquired from having the best players winning consistently and not allowing smaller teams to gain an advantage by buying up available talent from them at prices they cannot afford. This will create a similar environment where a small number of organizations will own the majority of big eSports titles and the leagues behind them.

2.2 Fan bases

Similar to regular celebrities and sports athletes, eSports professionals have fan bases as well – streamers. As one would have guessed, the numbers are smaller but, on the rise, as more and more find a way to give back to the community they built. These players or the organization that they work with gives them equipment

and other monetary values that are useful for the game or to someone using a specific system for example to giveaway to these communities. This gains them net views and both on the channels of their twitch.tv and on their social media platforms allowing them to get better sponsorships to benefit themselves and to be able to give back to their community even more. Some streamers and players hold regular community gatherings where the fans can meet these people in the flesh and hang out, of course, there are streamers who are afraid of this, especially female streamers, having massive male audiences which can be dangerous.

2.3 Female representation

eSports is a male-dominated field currently as in the player base. This poses several questions because unlike in traditional sports, eSports does not have physical requirements that would make a female version of eSports to come along, on the other hand, males have an inherent advantage due to the fact that most people playing are male, this usually means that males start playing videogames at a younger age and are generally welcome in any community that they try to join. On the other hand, females start later and are a lot less likely to be accepted easily into any male-dominated community.

3 Primary research findings about eSports in Hungary

In Hungary, about 3.7 million people play video games (eNet 2016) these players play on a wide array of equipment ranging from smartphones to consoles while the males prefer to play on bigger and stronger equipment females tend to play more on their smartphones. Video games generate about 27 billion forints in a year. Most of the players are still young males who spend more time playing and are generally regulated by their parents on how much they are allowed, due to this there is a rising demand for viewing experiences that allow these young boys to watch their favorite games. In 2017 at the Xbox One PlayIT Show, which was at the time, the biggest show regarding electronics and gaming in Hungary aimed at the general public was visited by thousands of people (eNet 2016). This year the European LoL leagues final would have been held in Budapest if not for the COVID-19 pandemic. There are still a lot of questions though regarding eSports and the way it is handled as well as the communities and the responsibilities that they take for what is happening around and in their communities, this is both the communities' and the organizations' job.

From the data that our team has managed to gather from the group it was focused on showed that the eSports audience is generally young and mostly in-between the ages of 19-29 as most of the people who filled out the questionnaire was in this age group, this is the generation that has grown up on playing videogames and talking about it with friends and family they are the most active ones on social media as well as streaming websites.

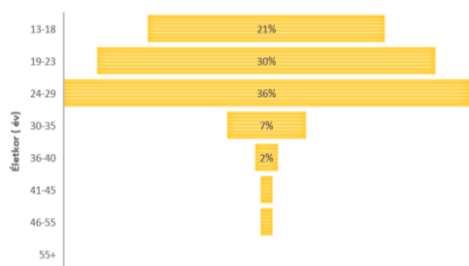


Figure 26 Age groups. Source: Own research, 2021, N=714

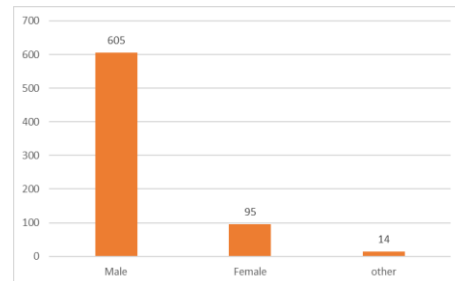


Figure 27 Gender of Respondents. Source: Own research, 2021, N=714

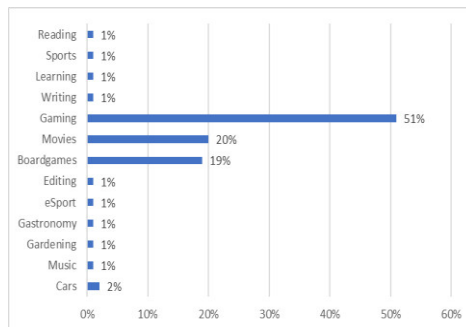


Figure 28 Hobbies of respondents. Source: own research, 2021, N= 714

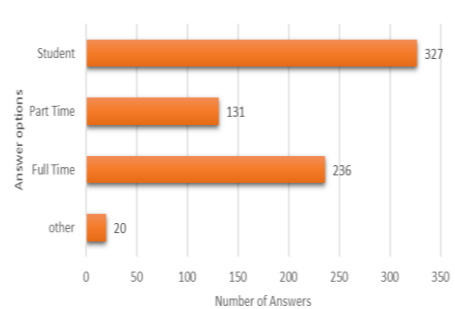


Figure 29 Employment status. Source: Own research, 2021, N=714

While in our case the majority of respondents (Figure 2) were male this shows to us that while the data might not be perfect due to the fact that as a male we have more male friends and these people are more likely to help us in getting responses for the questionnaire also has some merit to it, as it was previously mentioned in the eSports community females are harshly criticized some would say harassed by their male counterparts for these girls to show that they are as good as a male they would have to be above them in rank to a point that the male cannot argue the fact, otherwise it will be blatantly pushed on to the girl being lucky, this might be the reason the demographic between gamers and viewers differ to this extent in the gender department.

As it is visible in (Figure 4) provided by our research shows that these people are mostly gamers who prefer to game above most other things around them and they like sports which shows why they prefer eSports to traditional sports due to it combining their favorite hobbies. The choice was given to people to choose more than one hobby that they like or prefer but as you can see most of these people either did not have anything other than Gaming or are very reserved hobbies that one usually does by themselves or with a small group of friends. This creates this

group that is hard to access as the only real interest they have is playing games and watching content about these games let that be professional or only for mere entertainment value. Most of the people are Students or Full-time workers (Figure 5) while the option was given to choose more than one option so in these cases some people are both students and full-time workers or part-time workers. This creates a point where most people are at the beginning of their careers or getting towards the point they want to reach this shows us that they have a rather small amount of free time or they have a small amount of sleep other than their work or student responsibilities.

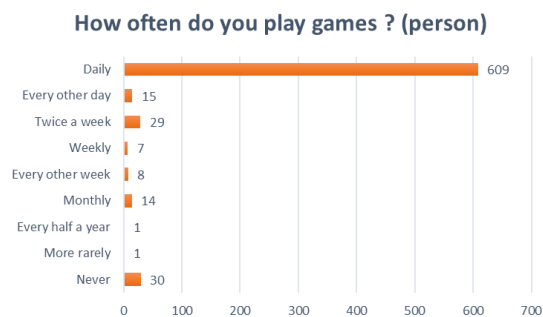


Figure 30 Regularity of playing games. Source: Own research, 2021, N=714

The data shows that most of the respondents are playing daily creating more and more opportunities for them to run into eSports or online gaming content. This creates players who are interested in getting better and are looking for players they can learn from and of videos online or even live streamer who are creating educational content.

Playtime (Figure 7) is another factor that might influence the chances of these people becoming part of the industry or just keeping themselves as gamers.

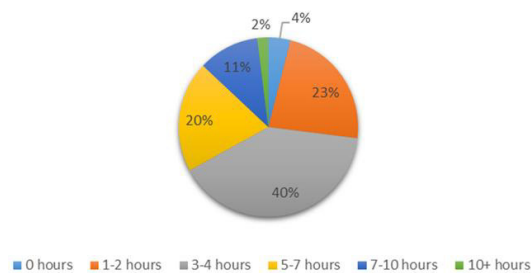


Figure 31 Typical hours played daily. Source: Own research, 2021, N=714

From the gathered data it shows that people who play games tend to play three to four hours a day that they play this might not be every day but in general a session of gameplay will go on for longer than a YouTube video in which they can leave at any given moment. While this might play into addiction in a regular state in the current condition of the COVID-19 virus pandemic and self-isolation these seem relatively correct as to how much time people have on their hand that otherwise, they might have not had. As such people most likely spend more time playing games than they would in case of a regular lifestyle.

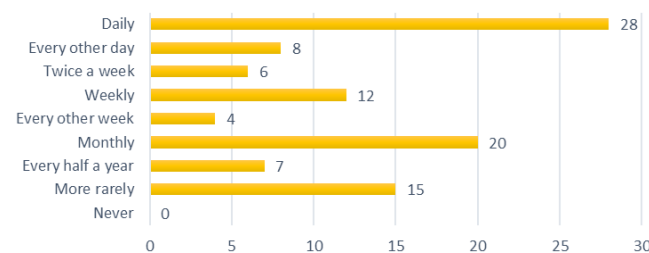


Figure 32 Regularity of viewing online gaming content among respondents. Source: Own research, 2021, N=714

eSports is also benefiting from the global quarantine as more people have a chance to view and watch what is going on this is going on both in Hungary and around the globe. The data itself might not show it as most people tend to spend relatively small time out of the amount of time watching gaming content on eSports but the global numbers show that there is a huge viewer base regularly watching so let us take a look at the biggest eSport currently League of Legends in from the 13th of April 2020 to the 19th of April 2020 its viewership varied from 3.68million (Newzoo 2020) hours to 6.19 million hours(Newzoo 2020) watched, with most of this viewership being on the official eSports channels of Riot Games, with the playoffs of several regions going on at the same time this is prime time for eSports fans to view games.

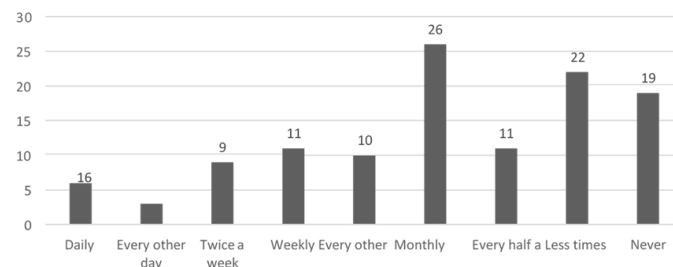


Figure 33 Regularity of viewing of traditional sports among respondents Source: Own research, 2021, N=714

From the gathered data (Figure 9) it shows that people who play and consume a high amount of online gaming content, video games, or eSports are less likely to watch a lot of traditional sports, but they usually still watch with some regularity. While this is not a perfect indication of what people prefer due to the vast amount of traditional sports available for everybody it is visible that these people are a lot more accessible on an eSports broadcast than on a traditional sports broadcast most likely due to the preference of the virtual world which they themselves find entertainment in, as well as the fact that these broadcast of traditional sports are usually paywalled behind a channel not everybody has access to while eSports in its current form is free to watch if you have internet access available let that be on your smartphone, smart tv, consoles or personal computer.

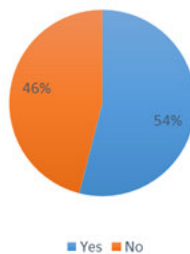


Figure 34 Do Hungarians watch the MNEB league Source: Own research, 2021, N=714

3.1.1

The state of the Hungarian eSports scene currently is slowly starting to grow (Figure 10) into something with the assistance of government funding. The first biggest step taken by the government was working together with V4 countries and making an eSport convention that moves from country to country creating opportunities for these countries to hold such events and show the big leagues of Europe that they can hold events successfully and be allowed to hold a bigger event with the assistance of the European league, this was about to happen in Budapest in 2020. As it is visible from the provided data most people do not care about the Hungarian league but similar to the world most of those that do follow, follow the same big games that are followed in the world which are LoL, CS: GO, R6, these games are the ones with most regular leagues and continuous broadcast both here in Hungary and in the world as well. The data collected also shows that people are more likely to listen in English than in Hungarian this creates a bigger break between us and the working league system that could normalize eSports in Hungary but what is the effect of this as previously mention they create an issue where even if the broadcast is at the same quality as the English versions due to the people being accustomed to the English broadcast a lot fewer people turn into the Hungarian broadcast.

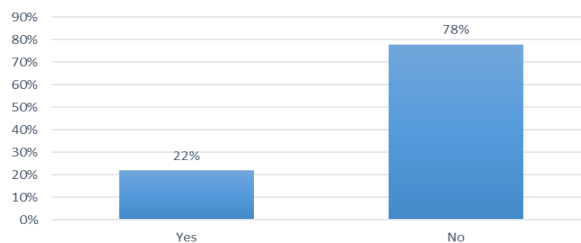


Figure 35 Likelihood of purchasing the equipment used by their favorites Source: Own research, 2021, N=714

Another question asked (Figure 11) was about their purchasing choices based around their favorite online personality let that be a team, a player, or just a streamer. While people who are favoring these items over their own choices are in the minority, it shows a good point that these players have respect in their opinions and can influence a decent amount of people to purchase an item that they are sponsored by or that they use regularly allowing for them to create a better opportunity for both themselves and the sponsors to be able to sell the products they are looking for

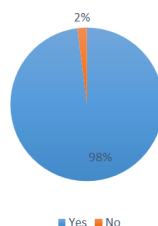


Figure 36 Do Hungarians purchase merchandise from their favourite esports teams. Source: Own research, 2021, N=714

While purchasing online and getting it delivered to them seems to create disinterest in people purchasing.

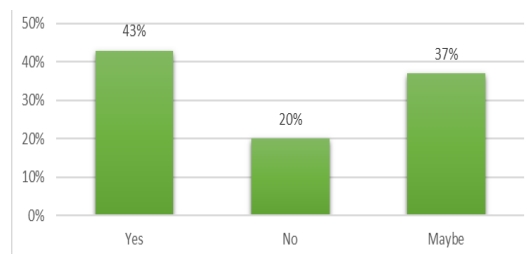


Figure 37 Would Hungarians purchase in-game items question among respondents. Source: Own research, 2021, N=714

In-game content related to their team is quite a popular idea that people embrace, as it shows even in the data gathered, while this concept is already happening throughout several games, the amount could be increased, as it shows that there is a demand for these items, as it is visible though it shows that some people answered with maybe given the option this is most likely due to the fact that they would make a decision based on the look of the item itself and less about the organization, content creator.

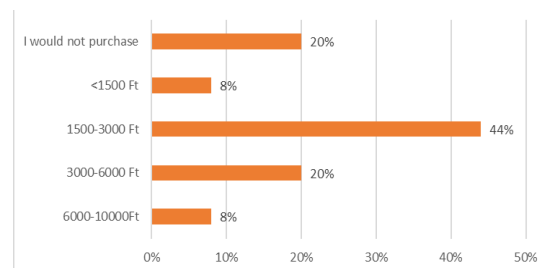


Figure 38 How much were the respondents willing to spend on these items. Source: Own research, 2021, N=714

While these items are likely to be purchased by people the price is something that could make or break someone's interest in buying such items if someone feels that the value, they get out from it is not big enough. As the collected data suggest most people in Hungary are willing to pay between 1500 Ft to 6000 Ft which is a relatively high amount for these types of items, as they are usually going for less than 6000 Ft. This shows that in the case of the skins being a good quality and well-designed, people will buy and will be willing to pay a relatively high price for microtransactions.

Sponsorships with different relations to the games are one of the main income sources of eSports, so it is important for them to try and get sponsors the fans would enjoy viewing the advertisements of, or they believe can create interesting advertisements relating to eSports.

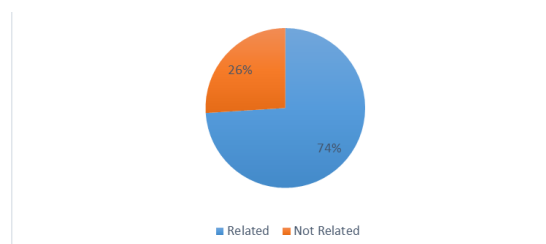


Figure 39 What types of sponsorships (related/unrelated) would the respondents be glad to see more in eSports Source: Own research, 2021, N=714

3.1.2

So, it is an important question to ask what kind of sponsors would prefer to see in eSports. As the data suggests, more people are interested in seeing items that are related to eSports, such as hardware, equipment, payment methods. The reasons given for this were mostly that they are found more useful by them, they must be better because they are promoted by these streamers. They give ideas about what to buy the next time people want to buy such equipment. This is what is important for them around gaming, and similar answers all around when asked why they choose their answer to the question of what types of sponsorships would they prefer to see in eSports. This is likely due to the fact that people trust that these relating brands are there to help and give them something they care about instead of just showing themselves off and not really giving anything other than a name to the eSports scene. Several answers given show that to some degree this is the case as it was previously shown as well. It is thought that they look better in the eSports scene. It is targeting a young audience who are not interested currently in buying a car, getting house insurance somethings that the non-related sponsors could be advertising to them. In general, the consensus in the answers siding with related sponsors was that because they are fit better, easier to sell, people prefer to buy stuff advertised with pro players, and in general, people are more interested in these than non-related ones.

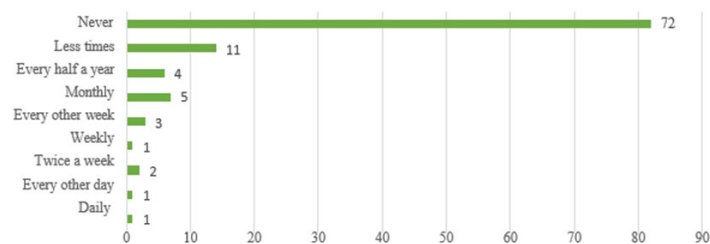


Figure 40 How often do the respondents bet on eSports. Source: Own research, 2021, N=714

eSport betting in Hungary is currently not that relevant most people do not bet on any type of eSports games with next to nobody betting regularly. The data our team has gathered shows this as well. While there are some outliers to this most people do not think of eSports as something to bet on in its current state. This shows that either it is unavailable to people or that they cannot find where to bet or they never had the intention to bet anyway.

With the help of the program called STATA, statistical analysis was performed as well. T-analysis was used in order to compare the relationship between in-game spending and e-sport watching habits. In the questionnaire that was consciously structured it was possible to add values to those 8 questions that involved the

analyzed topic. Intra-class correlation was performed to explore reliability which was based on the following values.

- In case of $0,5 > ICC$ – low reliability
- In case of $0,5-0,75 ICC$ – medium reliability
- In case of $0,75-0,9 ICC$ - good reliability
- In case of higher than $0,9 ICC$ - excellent reliability

To determine the relationship itself, Pearson's correlation analysis was performed in order to get a better understanding about the connection between the used questions. Due to the size of the sample, the exploration of the relationship was determined with modified values seen down below. (The value of alpha was determined to be 0.05 throughout).

- 0,00 - 0,20 – weak connection
- 0,21 - 0,40 – moderate connection
- 0,41 - 0,50 – medium connection
- 0,51 - 0,64 – strong connection
- 0,65 – 1,00 – very strong connection

Before starting the analysis, a Shapiro-Wilk normality test was performed. Logarithmic transformations were used for the non-normal variables. Based on the following values, (alpha value throughout 0,05) the results were considered statistically significant if the value of p is greater than 0,05.

Those who watch e-sports will most likely only watch games that they like (0,57.)

Players who watch e-sports in English will purchase e-sports merchandise more likely than those who only watches it in Hungarian (0,45).

Those who watch e-sports will most likely watch it in English (0,65). There is a very strong correlation between these two aspects that leads to the conclusion again that most Hungarian players are still watching e-sports in foreign languages.

	14th question	15th question	16th question	17th question	31th question	32th question	33th question	34th question
14th question	-	-	-	-	-	-	-	-
15th question	0,38*	-	-	-	-	-	-	-
16th question	0,24	-0,18	-	-	-	-	-	-
17th question	0,33*	0,4	0,31	-	-	-	-	-
31th question	0,41*	0,19	0,33	0,55 ^{VP}	-	-	-	-
32th question	0,21	0,18	0,36*	0,45 ^{VP}	0,65 ^{VP}	-	-	-
33th question	0,18	0,04	0,3	0,28	0,07	0,17	-	-
34th question	0,28	0,29	0,18	0,56 ^{VP}	0,57 ^{VP}	0,53 ^{VP}	0,18	-

Table 7 Correlation analysis Source: Own research, 2021, N=714

Conclusions

In general, the information that our team was looking for was found, as we successfully managed to get a good view of the Hungarian groups' consumption of both online gaming content and eSports. Information and data gathered from here showed that it is quite normal for these young people to view this type of content regularly and creating demand for it in both Hungarian and English with this in mind it became clear to us that eSports can and most likely with time will become more and more popular in Hungary, allowing for a new industry to create more workplaces, allowing for people to have a whole new foundation to their online entertainment in Hungarian. Although currently, the preferred language is not Hungarian with more and more Hungarian broadcasters and the European leagues' permission to be broadcasted in Hungarian from a different stream will allow those who are interested and are blocked by a language barrier from consuming eSports and online gaming content. The age group and gender ratio was something that did not surprise any of us, as most of the people who responded, most likely know us or one of our friends, and as such, having a primarily male audience with smaller female participation seems perfectly realistic. Also, this means that the data in its self might not be perfectly representative but this is pretty much a given, due to the fact that as a small research group we, unfortunately, do not have access to the same research facilities and budget as a research firm. Other than this the global pandemic itself creates some issues, as people spend more time at home and have more time to spend on their hobbies and in general in front of any type of entertainment that they can find. This also might make some of the hours viewed or played data inflated. While viewer bases are growing and keeping up with worldwide trends, other sides of this are lacking, for example, something that is quite common for eSports viewers is betting on these games similar to traditional sports fans. This does not happen in Hungary, as the majority of the respondents never bet on these games, talking about traditional sports we have to take a look at how much time are people spending watching these besides eSports and online gaming content and it shows that they view a lot less traditional sports than they view eSports and online gaming content showing that the easiest way to access these people for marketers of organizations is to go through the eSports systems. All respondents to the questionnaire were Hungarian so that our teams' goal to focus on the Hungarian viewership was fulfilled to the absolute maximum.

One of the main ways to reach a bigger audience for the Hungarian leagues is to normalize watching eSports in Hungarian and as such, create an environment, where people find out about it in Hungarian first and then later find out about the English, so their first memories are with the Hungarian shows, and as such, will be more likely to return there, as that is the place they find out first. Other suggestions for the MNEB are to promote more towards everybody and in general push more ideas and do not just use their own social media platforms but use other forums based around eSports to show that they are around, that they are trying to be better. Additionally, our suggestions include finding sponsors who have

relevance for the customers, at first going for sponsors that will bring you newer viewers who will see that they are there with twenty other people will show the wrong idea. As for sponsors and marketers wanting to reach gamers through eSports, we advise them to make it relating, trying to push your products into their lives from their point of view, you do not have to create a new product for them just make modifications to your basic ideas so that it interests them to create these advertisements using relating terms that they understand, make it fun for them, as they are not the average customer that you can just reach through television, newspaper while keeping this in mind these people have their preferences

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