THE MINECRAFT PHENOMENON IN THE CZECH ENVIRONMENT

CONTENTS

1. Foreword

Play is a part of everyone's life – it is one of the driving forces that allow us to explore our identity, it is a tool of human socialization, a means to discover the world around us, used since our early days. We use games to learn, to explore and games provide us with excitement, fun, but also teach us lessons.

With the arrival of information and communication technology and the massive growth of the Internet, playing started to move to virtual environments. In particular, games that allow multiple players to play together (so called Massive Multiplayer Online Games, MMOGs) have been very popular. One of today's most popular games that has become popular especially among the younger generation of players, is Minecraft, with millions of active players from around the globe.

Since Minecraft is very popular among Czech children as well, we decided to map this phenomenon in more detail through our research, in which we managed to involve more than **2,300 active players, mostly children**, from all regions of the Czech Republic.

In our research, we have focused on **why children actually play Minecraft, what brought them to playing Minecraft, how much time they spend in this environment and in which activities they engage, whether they have encountered risk forms of communication in this environment and how they solved any such situations. We also focused on whether and to what extent do gamers among children exhibit signs of addictive behavior.** The research also explored whether gamers would welcome the integration of activities associated with playing Minecraft into regular classes at school or homework.

The results of our research are summarized in this final report.

For the Implementation Team
Mgr. Kamil Kopecký, Ph.D.
Palacký University in Olomouc

2. What is Minecraft?

Minecraft is a computer game developed by Mojang in 2011 that has managed to gain popularity among a very strong community of players from all over the world over its several years of existence. Minecraft is a so-called sandbox game that allows players to do virtually anything in an open environment – build houses, grow plants, raise animals, gather minerals, create social relationships and so on. The game is very complex – it has a sophisticated physical environment with functioning ecosystems of flora and fauna, while technically-oriented players can create simple or complicated circuits, operational machines. The game also accurately simulates basic economic relations including market supply and demand.

The basic version of Minecraft has two game modes – Creative (this mode is designed especially for those who want to build without limitation) and Survival (survival game, where the objective is to survive, obtain housing, food, raw materials, etc., in the game environment). However, the game can be expanded with numerous other game modes such as Adventure, Spectator, Skyblock, minigames etc.

Minecraft is labelled PEGI 7 (www.pegi.info/), making it suitable for players aged 7 and more.

The Minecraft player community has been growing steadily in the Czech Republic as well, with tens of servers allowing children and adults to learn and have fun in this game. It was primarily Minecraft and other online games that gave birth to the so called Let's play (LP) and youtuber community on the Internet. These are players who record playing games, providing their commentary. They then distribute the resulting video to others through video servers such as YouTube. When playing Minecraft, players fully use their imagination and creativity and come up with their own stories that they live out in the game environment.

For more information, visit www.minecraft.net.

3. Research identification

The research called **The Minecraft Phenomenon in the Czech environment** was implemented by the Centre for Prevention of Risky Virtual Communication of the Faculty of Education, Palacký University Olomouc in cooperation with Vodafone and Google. It follows on the research of risky behavior in Czech children in the online environment conducted by the Centre's team (E-Safety) since 2010.

4. Methodology

Procedure

The basic research tool used was an anonymous online survey created using Google Forms and distributed to all regions of the Czech Republic – primarily to operators of Minecraft servers, the player community, but also to teachers and principals of elementary and high schools.

Data collection took place between 1 September 2016 and 31 December 2016. In the following months, outputs were evaluated and interpreted. Data evaluation was performed in the statistics software Statistica.

Research participants

A total of **2,331 respondents participated in the research** (73.75 % men, 26.25 % women). The average age was $\hat{x}$=16.18, mode $\tilde{x}$=13.00, set dispersion value was s^2=246.64 (s=15.10). 82 % of participants were players younger than 18 years. The detailed age structure of the research group can be seen in the graph below.

Chart 1 Age structure of the set
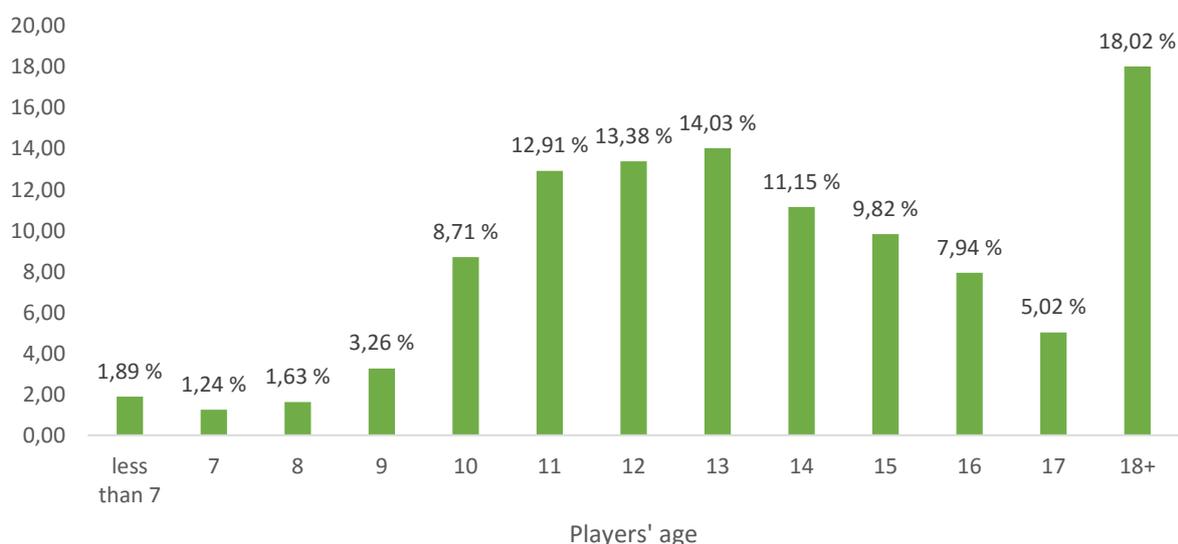
(n = 2331)

Most of the set consisted of pupils of elementary schools (68.08%) and high schools (25.23%) from all regions of the Czech Republic. 93 % were of Czech nationality (the remaining part consisted of players that indicated Slovak or Polish nationality).

The set included both long-time Minecraft players who have played for several years as well as new players who just started playing Minecraft. The graph below shows detailed information about the set structure in terms of playing time.

Chart 2   How long have you been a Minecraft player?
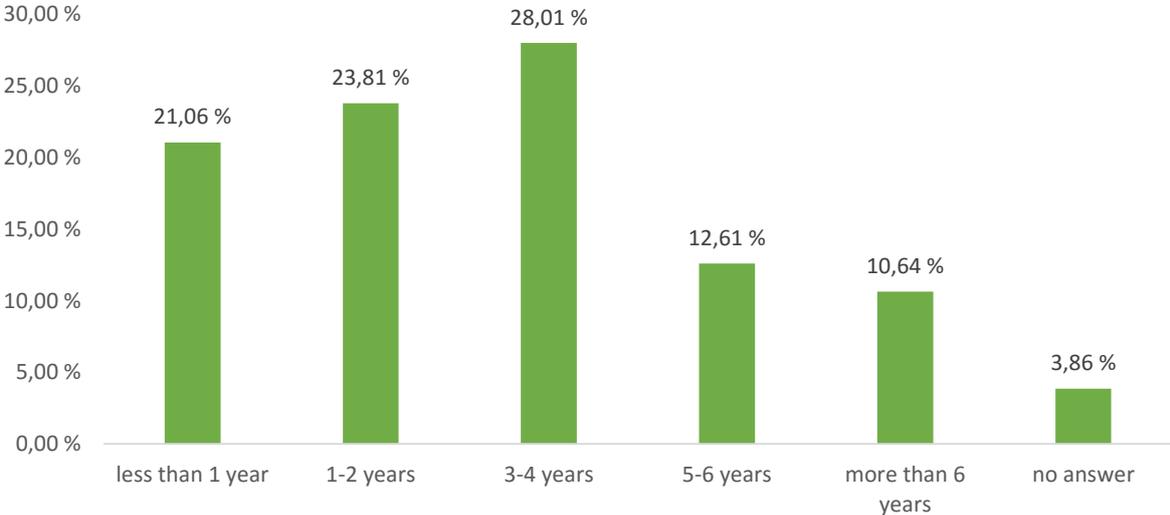
(n = 2331)

Most of the set consists of casual players (72.63%), 22.69% were players who also act as administrators, moderators, developers or administrators of Minecraft servers.

Research tool

A research tool in the form of an online survey was created to for the purposes of our research. The survey focused on identifying information about playing Minecraft from the players' point of view. The online survey consisted of 5 parts with items focusing on the identification of demographic   data of the players, players' gaming preferences, playing time, social aspects related to playing the game, risky forms of communication related to playing the game (both from the perspective of victims and offenders) and manifestations of addictive behavior. The research tool consisted of 39 items in total.

5. Basic results

5.1 Basic information about playing Minecraft

5.1.1 Gaming preferences

As mentioned in the introduction, Minecraft can be played in several modes – Survival, Creative, Adventure, etc. The game modes differ and focus on various activities – the essence of the Creative mode is primarily creation, unlimited construction of buildings, mechanisms, landscape modifications, etc. Survival mode focuses primarily on surviving in an environment that contains many obstacles that make it harder for players to survive. This mode also allows players to build, create and mine, however, players need to count with hostile objects – so called "mobs" (derived from the term mobile, that is a moving object created and controlled by a computer).

Players mostly play the Survival mode (50.58% players confirmed this preference), followed by the Creative mode (27.80%).

Chart 3   Preferred game modes
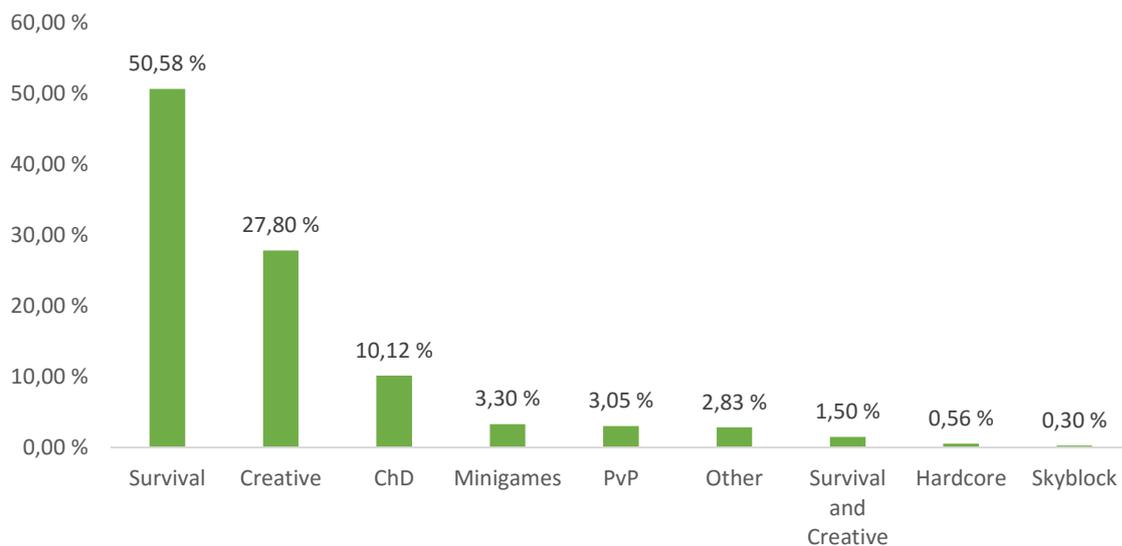
(n = 2331)

Children engage in a large amount of mostly creative activities in the world of Minecraft. The most common ones are mainly building structures and virtual cities, gathering resources and creating objects (so called crafting). These activities are followed by raising virtual animals, creating simple or complex gaming mechanisms. Only a third of Minecraft players prefers PVP (player vs. player) fights.

Table 1 The most common activities of Minecraft players

Activities of players	Frequency (n)	Relative frequency (%)
Building structures, cities	1,321	62.64%
Mining raw materials	1,182	56.05%
Crafting	1,050	49.79%
Raising animals	971	46.04%
Creating complex mechanisms (redstone circuits, pistons, automatic machines...)	772	36.61%
PVP combat	725	34.38%
Building XP farms	590	27.98%
Trading (managing a shop, buying x selling etc.)	495	23.47%
Running a server (admin, moderator, developer...)	470	22.29%
Minigames	44	2.09%

(n = 2109)

5.1.2 Time characteristics of playing

Playing Minecraft is subject to criticism due to the amount of time spent by players in the game. We have therefore focused on how often children play Minecraft and if there is a major shift in the amount of time spent in the game environment that would occur in all players (one of the signs of addictive behavior is growing tolerance – increase in the time required to satisfy a specific need).

Approximately one third of players in our set (33.20%) plays Minecraft for less than one hour a week. Almost half of them (44%, n = 340) are players who have only started playing Minecraft and are new to gaming.

Chart 4 Frequency of playing Minecraft in a week
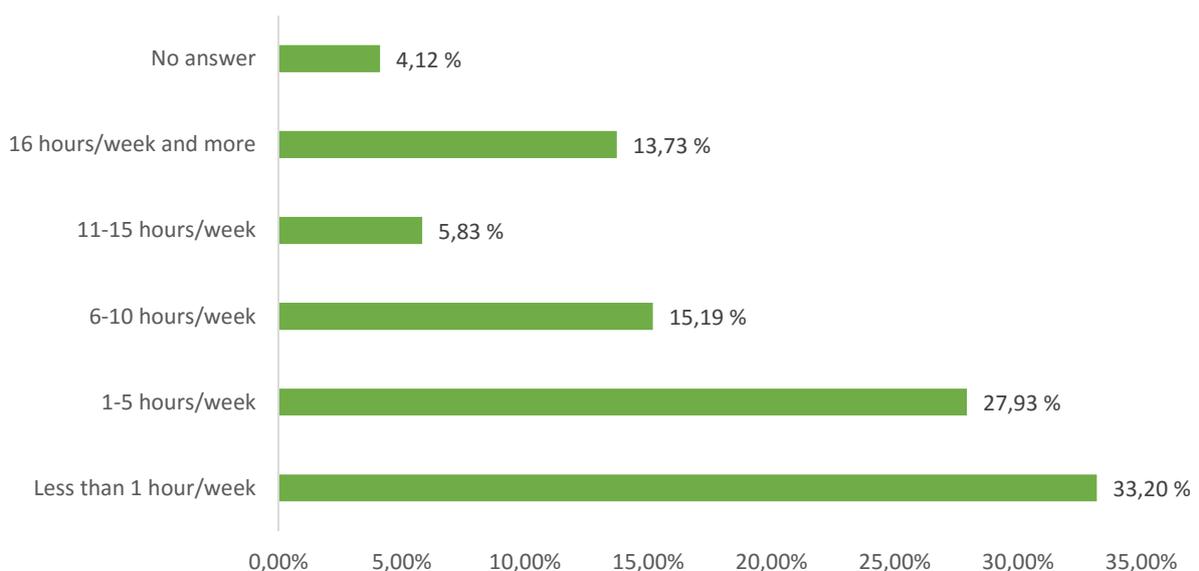
We also investigated whether there is any significant change in the length of playing between the time when players started playing Minecraft and the current condition. The entire set shows a decrease in the amount of time spent playing Minecraft – the number of players

playing Minecraft for several hours a week decreases, while the number of players who play Minecraft less than 1 hour a week increases (increase of 12%).

Chart 5 Changes in playing time (started playing vs. present)
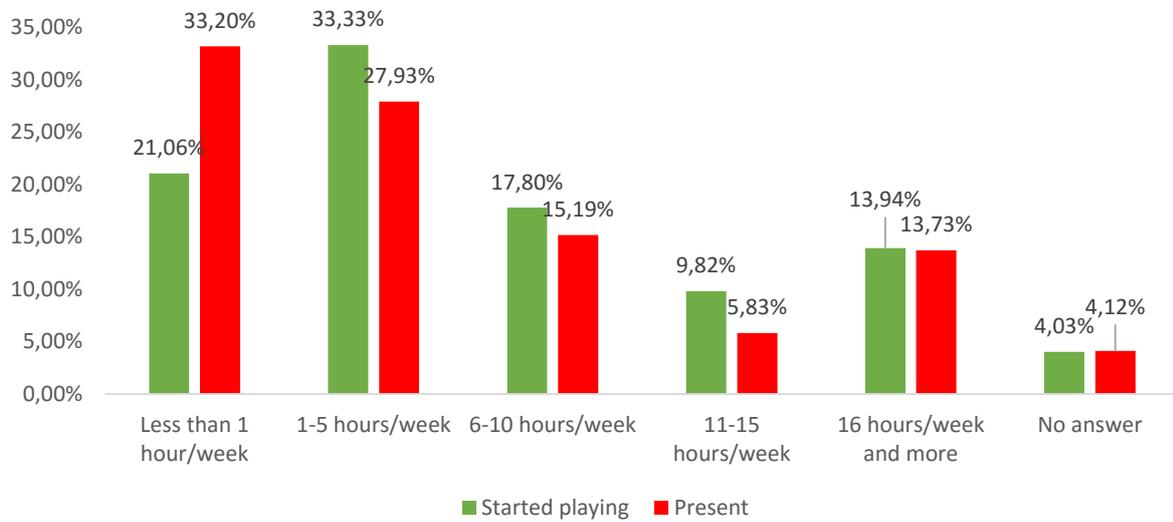

In order to get a more accurate picture of playing time distribution throughout the week, our analysis focused on specific days and times spent playing the game. More than 44% of players play every day – players do not distinguish workdays or the weekend. 40% of players play only on the weekends, reducing or eliminating gaming activity on workdays. 11% of players play only on workdays.

More than a half of players (57%) do not have an exactly specified period for playing Minecraft. Out of those that have specified the time, most players have indicated playing between 12:00 and 18:00 (19.78%).

Chart 6 Game time (hours)
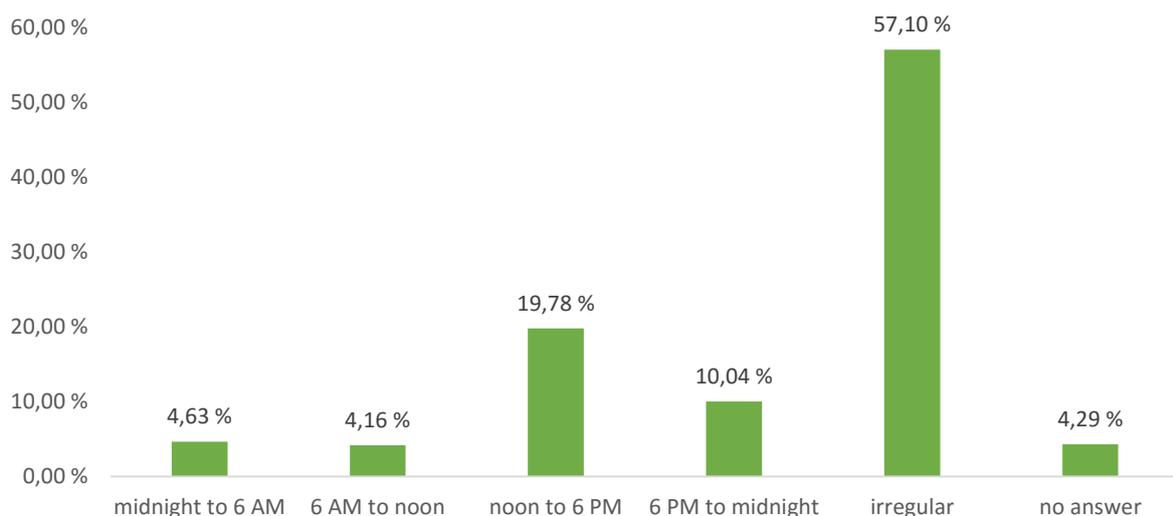
Game time is very important for children and many players are willing to lie to their parents (or partners) because of playing Minecraft. We have therefore investigated whether players had ever lied to their parents or partners about how much time they spend playing Minecraft. **18.40% of players (n = 429) had lied to their parents (or partners) about time spent in the game.**

10

According to the players' responses, **more than a half of parents (61.18%) restrict playing time of their children**, 36.04% do not restrict the playing time of their children in any way.

5.1.3 Social characteristics of playing

Our research also investigated who introduced players to playing Minecraft. As expected, children are most frequently introduced to the game by their friends, siblings, or they started playing by themselves. The following graph shows a detailed overview.

Chart 7   Who introduced you to playing Minecraft?
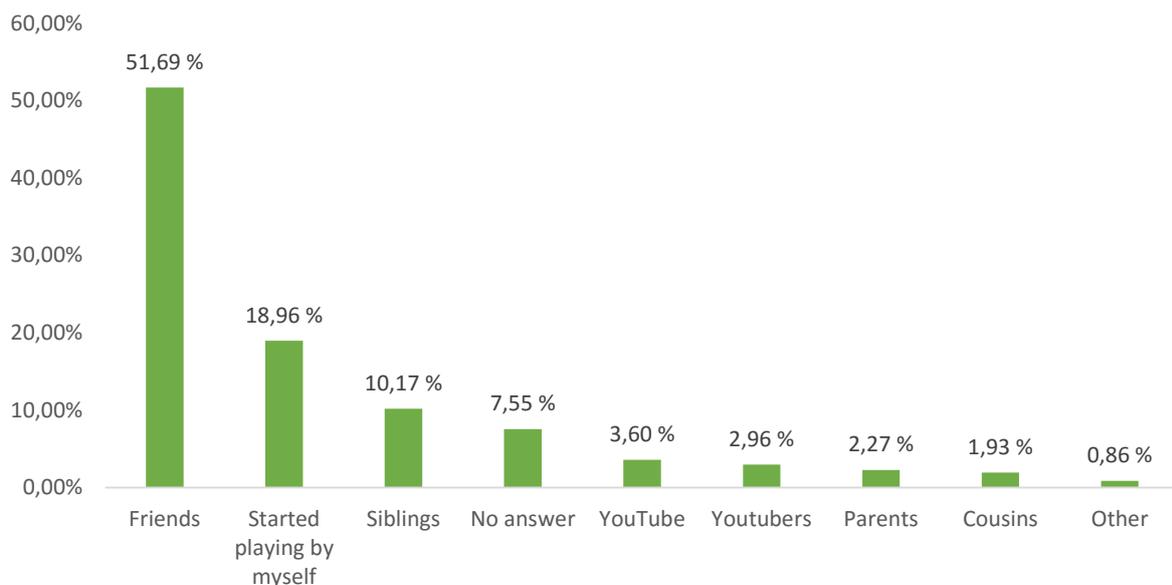
Children most frequently play Minecraft with their friends they know from real life (61.16%), with siblings (19.02%) and other relatives – cousins (13.72%), with their father (3.85%) or their mother (6.34%). Almost 32% of children confirmed they play with players they do not know from real life and do not know their identity. 11.27% of children play by themselves. Almost 80% (79.02%) parents know that their children play Minecraft.

5.1.4 Gameplay videos (Let's play, youtubers)

A very popular activity among Czech Minecraft players is recording gameplay videos and sharing them with other users – e.g. on YouTube, or through live streaming. **Almost one in five (23.12%) gamers record their own gameplay videos.**

As for sharing gameplay videos with other users – **14.03% of players (n = 327) share their gameplay videos with others.** 20% of players have their own YouTube channel for sharing their Minecraft gameplay activities. Only 1.5% make live streams of their game.

5.1.5 Positive and negative aspects of playing Minecraft reported by the players

Players mostly assess the game positively, they appreciate the options offered by the game, especially the game style itself, using "cubes" in the game environment, creativity, freedom, a large number of gameplay options, massive game world, etc.

Word cloud – what players see as positive in Minecraft

Note: The word cloud was generated from responses of 1,433 players.

Hraní – Playing; Všechno – Everything; Stavět – Build; Kreativita – Creativity; Možnosti - Possibilities

Only a very small percentage of players assess Minecraft negatively, the negative aspects are associated primarily with the game community (defamation, unjust punishments, swearing), with cheating (hacking), some also see the language used in the game community as negative (grammar mistakes), others report cyberbullying and risky forms of behavior.

Word cloud – what players see as negative in Minecraft

Note: The word cloud was generated from responses of 456 players.

Nic- Nothing; Hackeři – Hackers; Lagy – Lags; Grafika -Graphics; Bugy - Bugs

5.2 Risk phenomena associated with playing Minecraft

As in other online environments where user accumulate, even in the Minecraft environment, there is a number of risk phenomena that can affect players. This does not mean that the Minecraft environment itself would be risky, the risks are created by the individual players (just like on social networks).

5.2.1 Players as victims of cyber aggression

As in other online environments, also in Minecraft a large number of players become victim of different types of cyber aggression that can have serious or less serious forms. Most commonly, Minecraft players experience so called griefing, i.e. someone destroys or breaks what they created in Minecraft (griefing was confirmed by 43.38% of players). Further, players are quite often confronted with verbal aggression, including swearing and insults (31.93%) and virtual "killing" using banned techniques – so called tpa-kill (27.71%). Many game servers fight against forms of aggression and banned forms of behavior, punishing aggressive behavior using different types of sanctions – the most common ones include "mute" (player banned from chat for a certain time) or "ban" (player banned from entering the game for a certain time, during which it is impossible to log in).

A fifth of players (23.75%) experienced situations where other players tried to obtain their real contact information – e-mail, Skype name, Facebook profile, phone number etc. Nearly 12% of child players also confirmed that other people in the game tried to obtain their personal data – their real name and surname; 6% of players pointed out that other players asked them for a picture of their face.

17.55% of child players experienced virtual theft and nearly 11% confirmed that other players solicited in-game money from them.

More risky acts of cyber aggression, which can be considered cyberbullying, include mainly long-term threats and blackmail. Threats were confirmed by 16.64% of child players, 11.25% of players experienced blackmail. Nearly 6% of players experienced situations, where one of the other players recorded them in the game and then used the video to mock them.

However, high-risk forms of behavior also occur in Minecraft, mainly **soliciting intimate photos from players. 5.45% (110 of 2,017) of children confirmed that other players asked them for a picture in which they would be partially or completely naked. 7.73% of Minecraft players also confirmed that other players tried to convince them to meet in real life.**

On a positive note, more than 41% of players (41.25%, 832 of 2,017) reported they have not encountered any risk form of communication or risk communication phenomenon in the Minecraft environment.

The table below provides a comprehensive overview of the risk forms experienced by Minecraft players.

Table 2 Overview of risk phenomena encountered by Minecraft players

Risk phenomenon	Frequency (n)	Relative frequency (%)
Griefing – someone destroyed my building	875	43.38%
Someone insulted me or was rude to me in Minecraft	644	31.93%
Someone killed me in Minecraft using banned techniques (TPA kill...)	559	27.71%
Someone in Minecraft asked me for my real contact information (e-mail, Skype, Facebook)	479	23.75%
Someone robbed me in Minecraft (e.g. did not pay the agreed amount etc.)	354	17.55%
Someone threatened me in Minecraft	332	16.46%
Someone in Minecraft asked me for my real personal information (name, surname)	239	11.85%
Someone blackmailed me in Minecraft	227	11.25%
Someone tried to solicit in-game money from me	220	10.91%
Someone asked me for the password to my Minecraft account	196	9.72%
Someone stole my game account	178	8.82%
Someone tried to solicit real money from me (through a text message, bank transfer, etc.)	164	8.13%
Someone in Minecraft tried to convince me to meet in real life	156	7.73%
Someone tried to infect my computer with a virus (e.g. using an infected link, email, etc.)	149	7.39%
Someone in Minecraft asked me for a photo of my face	125	6.20%
Someone recorded me while playing and then used the video to mock and humiliate me	120	5.95%
Someone in Minecraft asked me for an intimate photo (with me partially or completely naked)	110	5.45%
None of this happened to me...	832	41.25%

(n = 2017)

5.2.2 Players as initiators of cyber aggression

As already mentioned in the previous chapters, Minecraft players experience different types of risk communication phenomena and cyber aggression. For this reason, we have explored the issue also from the point of view of players –aggressors.

A very positive finding is that in the game, more than 60% of players (1166 of 1920) do not behave aggressively to other players, do not attempt to hurt them or to destroy their creations.

However, for various reasons, aggression occurs in the remaining players. The table below provides a summary.

Table 3 Overview of risk phenomena committed by Minecraft players

Risk phenomenon	Frequency (n)	Relative frequency (%)
Griefing – I destroyed someone's building	586	30.52%
I killed someone in Minecraft using banned techniques (TPA kill...)	279	14.53%
I insulted or was rude to someone in Minecraft	274	14.27%
I asked someone in Minecraft for their real contact information (e-mail, Skype, Facebook)	198	10.31%
I robbed someone in Minecraft (e.g. did not pay the agreed amount etc.)	183	9.53%
I threatened someone in Minecraft	147	7.66%
I asked someone in Minecraft for their real personal information (name, surname)	134	6.98%
I blackmailed someone in Minecraft	128	6.67%
I tried to solicit in-game money from someone	128	6.67%
I tried to convince someone in Minecraft to meet in real life	114	5.94%
I asked for someone's password to their Minecraft account	108	5.63%
I tried to infect someone's computer with a virus (e.g. through email)	107	5.57%
I stole someone's game account	103	5.36%
I asked someone in Minecraft for a photo of their face	96	5.00%
I recorded someone playing so that I could use the video to attack that person (for example to humiliate him/her, etc.)	95	4.95%
I tried to solicit real money from someone	94	4.90%
I asked someone in Minecraft for an intimate photo (completely or partially naked)	88	4.58%
I did not engage in any of these activities	1166	60.73%

Almost a thousand players (n = 962) also shared the reasons for attacking other players, what brought them to do it, what motivates them. For more than half of the players (53.01%), attacking other players is a form of entertainment, or a form of revenge (48.44%). More than a quarter of players attack out of boredom (26.61%), or they want to see how their victim will react to the aggression (21.52%). The following chart provides a summary of the different causes of attacks.

Chart 8   Why players attack other players
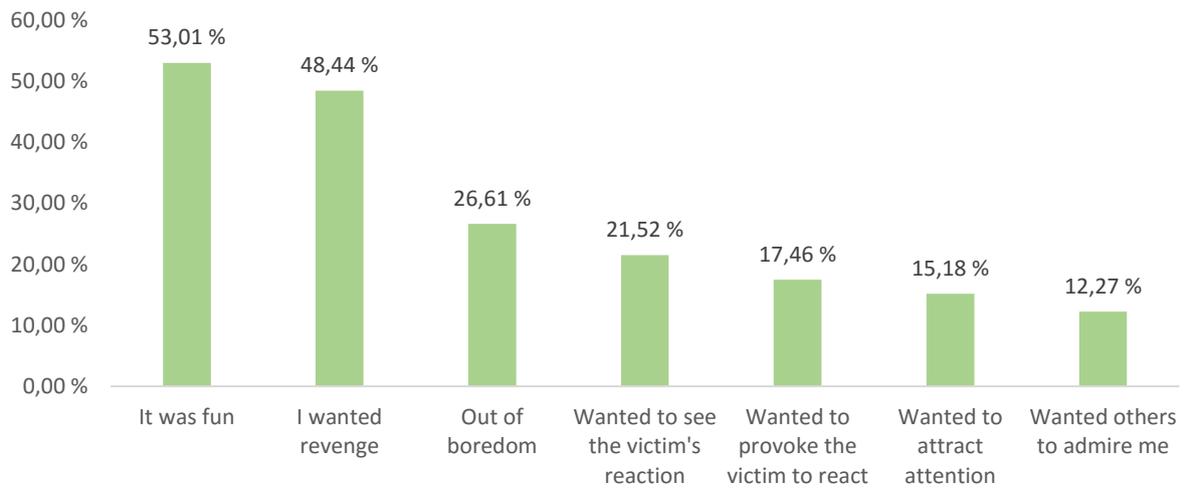
5.3 Addictive behavior in the Minecraft environment

A significant part of the research focused on symptoms of addictive behavior in Minecraft players. The research investigated mental, physical as well as behavioral manifestations. It should be noted that some of the symptoms may not necessarily be signs of behavioral addiction or excessive use of online games (e.g. aggression, etc.)

Approximately 16% of players think they are addicted to playing Minecraft. There is a range of addictive behavior symptoms that occur in child players – the most common ones include loss of control over time spent at the computer, confirmed by more than quarter of players (28.23%). Other symptoms include burning eyes (22.40%), back pain, pain in the hands, increasing the time spent playing the game, headaches, etc. The table below provides a detailed summary.

Table 4 Manifestations of addictive behavior in Minecraft players

Manifestations	Frequency (n)	Relative frequency (%)
Thinking about Minecraft while not playing it	529	32.12%
Loss of control over time spent at the computer	465	28.23%
Burning eyes	369	22.40%
Back pain	357	21.68%
Pain in the hands, wrists	346	21.01%
Increasing the time spent in the game	322	19.55%
Headache	303	18.40%
Getting up early/staying up late to play the game	240	14.57%
Occurrence of aggression if someone restricts/interrupts our game	226	13.72%
Eating disorders (no time for food, or eating while playing...)	216	13.11%
Blurred vision	193	11.72%
Cannot fall asleep after playing Minecraft	183	11.11%
Worse results in school	171	10.38%
Disruption of family relationships (arguments because of Minecraft, etc.)	148	8.99%
Abandoning previous interests and friends because of Minecraft	147	8.93%
Problems with partners caused by Minecraft	125	7.59%
None	280	17.00%

(n = 1647)

6. Opinions of players

"Thinking of Minecraft while not playing it" is something constant. People want to finish things. E.g. completing a puzzle. You concentrate on that fully and once completed, you can focus fully on something else. But what if you don't complete the puzzle? Your brain keeps thinking of that activity and wants to finish it.

(boy, 12 years, South Bohemian Region)

The Czech PVP community is a very dark place, there are people who, for the sake of success of their projects, used Internet attacks such as DdoS and hacking through mysql and the players themselves are no saints, they are eager to fight and draw attention to themselves, so I do not expect anyone to be friendly to you.

(boy, 17 years, Olomouc Region)

I have a suggestion for a specific server, it is time they started doing something about their mod team... The mod team is not doing its job. And I haven't seen any admins that would do something about it, instead when someone complains about a mod, they jump at him and the person who complained gets either a ban, or they start picking on him... I would like to repeat I got about 4 bans / 7 bans for no reason because of this bias... And I haven't done anything that would be so terrible. Perhaps I am not the nicest player, but that does not mean I should be getting bans for not breaking any rules. Or for breaking the rules which are not included in the rules.

(girl, 14 years, Zlín Region)

I study at a public grammar school and I would like to study medicine one day (that is why I use only the white coat skin in MC – for some reason it gives me motivation for real life, too). Besides MC, I also play basketball and in my free time I like to explore the world of biology, chemistry and physics. I like chatting with other players (it livens up the game if you understand each other well and have a good talk).

(boy, 16 years, Vysočina Region)

I don't think Minecraft is harmful, quite the opposite, it is beneficial. I already talked to the teacher of our class about how Minecraft could be introduced as a program for 3D modeling.

(boy, 14 years, Liberec Region)

Don't take Minecraft as something bad. You also think that the players are only kids. But the first Minecraft community consisted only of people above 25 years. It was very hard to meet anyone who would be younger. For example, majncraft.cz, which was the first and still is the largest LEGAL Minecraft server, was full of people 18+ only. There still aren't many kids, because you have to buy the game.

(man, 24 years, South Moravian Region)

The questionnaire was a good idea. I look forward to the results. Btw: If this should address the behavior of kids online, then this is not because of MC, but simply because parents do not pay attention to their kids. You can see that below non-MC videos as well...

(boy, 17 years, Pardubice Region)

I think that for the 16+ category, Minecraft is nothing much. Most of these people enjoy only playing on servers, but that gets ruined by little kids. If you try to defend yourself or if you make fun of the kids, you are usually the one who gets punished, and that's a pity. Most people therefore often leave and move to Technic (more technical Minecraft)

(boy, 17 years, Prague)

I think that this research is a great idea and it warns players to be careful so that no one can hurt them in Minecraft (not only Minecraft, but other games as well).

(boy, 12 years, Hradec Králové Region)

I would like to have Minecraft for girls (with animals like dogs, cats, dolphins, birds, butterflies, kitties, rabbits, etc.) ... thank you very much and I hope this beautiful girl's dream will come true ☺.

(girl, 11 years, Karlovy Vary Region)

I would like some good servers where players would not hack, so that I can finally play some Minecraft. It is also annoying when players play like a team even if they are not in the same team.

(boy, 11 years, Hradec Králové Region)

7. Summary

Minecraft is a very popular computer game among Czech children – it offers children and adults an open environment with a large number of game options and a sophisticated ecosystem, allowing them to realize their ideas and dreams, offering space and time for active relaxation, while also educating children in a certain way.

Minecraft is a game that is very non-violent in its essence – most players play Minecraft because they can, without any limits, build, mine, craft objects, raise virtual animals, design complex circuits or trade with others.

Since Minecraft is very attractive to child players, they spend a large amount of their free time. According to our research, 23.68% of child players play Minecraft for more than 11 hours a week, 13.73% play the game for more than 16 hours a week. More than 44% of players play Minecraft every day – children do not distinguish workdays or the weekend. According to the players' responses, more than a half of parents (61.18%) restrict playing time of their children.

More than half of players (51.69%) confirmed that friends who also play Minecraft, introduced them to the game. These friends are also the ones, with which they play the game most often. Approximately every fifth Minecraft player (23.12%) captures their gameplay, however, only 14.03% share their videos with other players.

As in other online environments, also in Minecraft quite a large number of players become victim of different types of cyber aggression that can have serious or less serious forms. Most commonly, Minecraft players experience so called griefing – that is someone destroying or breaking what they created in Minecraft. Further, players are quite often confronted with common types of verbal aggression, including swearing and insults (reported by 31.93% players). Threatening was confirmed by 16.46% child players, blackmail was reported by 11.25%, 6% of players also experienced situations, where one of the other players recorded them in the game and then used the video to mock them publicly. 5% of players also reported that other players asked them for a picture in which they would be partially or completely naked.

A very positive information is that more than 41% of players reported they have not encountered any risk form of communication or risk communication phenomenon in the Minecraft environment. Minecraft is therefore an environment that is essentially very safe. Situations where children encounter serious forms of cyber aggression are rather rare and are not typical for this game.

Approximately 16% of players think they are addicted to playing Minecraft – however, this is not a case of real destructive addiction, but rather addictive behavior (so called behavioral addiction). There is a number of effects associated with excessive playing of the game that occur in child players: 28.23% of players reported they have lost control over time spent playing Minecraft, 22.40% has experienced burning eyes, 21.68% reported back pain, players also report pain in the hands, wrists, headaches, growing tolerance to gaming, disruption of daily schedules (getting up early/staying up late because of the game), eating disorders, blurred vision, sleeping disorders, etc.

We therefore recommend limiting the time children spend playing Minecraft and not to forget the necessary relaxation (computer hygiene) – both mental and physical.

8. Quotes

A large portion of parents of children who actively use the computer and the Internet are familiar with the word Minecraft. Minecraft is one of today's most popular games globally that has had an impact on a significant part of the current child population. Minecraft can be clearly evaluated as positive – the game focuses primarily on children's creativity and its development, it inspires children and provides a space for self-expression, promoting cooperation between players and developing the imagination of children. However, this makes the game so attractive to children that it is capable of consuming all of their free time quite quickly, suppressing other activities. It is therefore necessary to limit the time spent playing the game, regulate it and offer a sufficient number of alternatives outside of the game environment ("computer hygiene").

Mgr. Kamil Kopecký, Ph.D. *(Palacký University Olomouc)*

Play is one of the basic human activities. Everyone engages in play throughout their lives, while its position is most significant during childhood and adolescence. During these periods, it is associated primarily with leisure activities, where we experience joy, satisfaction and fun, however, it can have an educational aspect as well. With regard to the possibilities and especially the availability of modern information technology in today's world, so called computer games are becoming more and more common. Children born after 1993, sometimes called the Google generation, spend a significant part of their free time in the online environment, it is therefore necessary to keep up with the times and offer children games that can not only entertain them, but offer an educational quality as well. Minecraft has just the right potential.

PhDr. René Szotkowski, Ph.D. *(Palacký University Olomouc)*

There is a saying that enough is enough, and the same is true in the digital world. The Internet and modern technology can bring great benefits; however, the extent of their use must be beneficial without becoming a burden. Especially when it comes to children. Their activities, in the same way as food, should be varied, balanced and should come in adequate amounts. To a large extent, it is the responsibility of the parents if they can protect their children from addiction to the Internet, social networks or playing games. It is about setting healthy limits and checking whether children keep them. A good digital parent also takes care of the life that children have online, in the digital world.

Pavel Košek *(Public Affairs Manager, Vodafone Czech Republic a.s.)*

User safety has always been top priority for Google. Our long-term focus has been to increase safety not only in terms of services, but also in other educational projects. We cooperate with the Centre for Prevention of Risky Virtual Communication at Palacký University Olomouc for example on the Centre for Safety and we have also organized three years of the Web Rangers project together. We were therefore glad to support another activity that will help making the Internet and online services safer for everyone.

Pavla Grigarová *(Marketing Manager at Google for Czech Republic and Slovakia)*

9. About the implementers

9.1 Centre for Prevention of Risky Virtual Communication at the Faculty of Education, Palacký University Olomouc

The Centre for Prevention of Risky Virtual Communication at the Faculty of Education, Palacký University Olomouc (the "CPRVC") is a certified university department focusing on risk forms of communication of children and adults in the Internet environment. It focuses primarily on cyberbullying, cyberstalking, cybergrooming, hoax and spam, sexting, social engineering in the online environment, risks of sharing personal data on social networks and other dangerous communication phenomena.

In terms of research, the CPRVC conducts both basic as well as applied research (including contract research). The Centre focuses e.g. on risk communication of children and sexual abusers, risk sharing of personal data across different communication platforms, specific forms of cyber attacks using webcams (webcam trolling), revealing fake profiles, identifying fraudulent online shops and commercial offers, recognizing attackers, supporting victims, etc.

In the field of research, education and intervention, the CPRVC cooperates with a number of companies, particularly with Google, Seznam.cz, O2 Czech Republic, Vodafone, IBM, Allegro Group, ESET, as well as with the Czech Police, National Headquarter against Organized Crime and other institutions. In addition to research, the Centre is also involved in a national project focused on the prevention and education in the field of risk behavior on the Internet called E-Safety (www.e-bezpeci.cz), it also runs an online counselling service for victims of Internet attacks (www.napisnam.cz), linked with the Safety Line, the Police, the Department of Social and Legal Protection of Children and other specialized institutions.

The Centre also engages in a range of activities that popularize positive use of modern IT technology in education and research, focusing e.g. on the use of 3D technology (Google Cardboard, Oculus Rift, 3D scanning, Leap Motion, Google Glass) and 3D printing.

In 2015, the E-Safety project won the national round of the European Crime Prevention Award.

9.2 Vodafone

Vodafone has been working globally on developing the concept of **Digital Parenthood**, focused on promoting modern technology and its positive role in increasing digital literacy and healthy child development. The Vodafone Foundation, as part of its grant program Technology for Society, supports courses and projects focusing on the prevention of risk behavior on the Internet in both children and the elderly.

Investing in education and raising public awareness
Since 2013, the Vodafone Foundation and Vodafone donated over CZK 800,000 to the E-Safety project for the prevention, education, intervention and raising awareness related to risk behavior of children on the Internet. In 2016, the Vodafone Foundation also invested in a social network simulator, so called Fakebook, which allows children to practice safe communication. Parents can evaluate and improve their skills, while also developing their digital parenthood.

Find out more about **Digital Parenthood** at www.vodafone.cz/digitalni-rodicovstvi

9.3 Google

The Czech branch of Google was founded in 2006 by its current Director Tania le Moigne. Since its opening, it has introduced to the Czech market more than 140 localized services for Czech users, including popular products such as Google Maps, Google Docs, Google Translate, YouTube, Google Chrome or the Android operating system. Small, medium and large businesses in the Czech Republic can use online advertising in the search and content network (Google AdWords), monetize their content using Google AdSense or use analytical tools for planning and measuring campaigns: Google Analytics, Google Trends, Consumer Barometer, Global Market Finder and more. Google also contributes to the global positive publicity of the Czech Republic – the home page logo celebrating the 605th anniversary of the Prague astronomical clock was seen by users in 38 countries.

Helping the Czech Republic grow
Google in the Czech Republic currently focuses primarily on digital transformation. The Digital Garage project offers Czech citizens, particularly students and small and medium businesses, online marketing courses completely for free. Google has been teaching Czech companies how to expand internationally using the Export Accelerator for two consecutive years now. The Women@Google program has long supported women and girls in the IT field and has cooperated successfully with the Czechitas community, the Dobrý anděl fund as well as other significant partners from various industries.

10. Implementers contact information

Pedagogická fakulta
Univerzita Palackého v Olomouci

Palacký University Olomouc , Centre for Prevention of Risky Virtual Communication, Faculty of Education
Mgr. Kamil Kopecký, Ph.D. (kamil.kopecky@upol.cz, +420 777 146 808)
PhDr. René Szotkowski, Ph.D. (rene.szotkowski@upol.cz)

Centre for Prevention of Risky Virtual Communication
Faculty of Education at Palacký University Olomouc
Žižkovo nám. 5, Olomouc, 77140

www.prvok.upol.cz | www.e-bezpeci.cz

facebook.com/ebezpeci