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ONLINE HARASSMENT AS A TYPE OF SCHOOL VIOLENCE

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1. INTRODUCTION

Cyberbullying is probably the most frequently mentioned hazard of digital technology in relation to young people. This phenomenon is of an interdisciplinary character, intriguing teachers, psychologists, sociologists, media professionals and jurists. The phenomenon can be defined as a hostile, harassing and repetitive behavior causing injuries using electronic devices, including the sending of offensive and hateful contents, spreading rumors online, or sharing humiliating images and videos on the Internet (*Willard, 2005; Tabby Project, 2012*). Early definitions used the term “electronic”, which also featured in later studies as the use of electronic equipment is a distinctive characteristic of the activity (*Li, 2007; Li and Beran, 2005; Patchin and Hinduja, 2006; Smith et al., 2008; Slonje et al., 2012*). This expression is somewhat misleading, as it contains more than just information and communication technology, it represents a broad range of other devices. Therefore, in my study I opt for the prefix “online”, which highlights the network-bound nature of the phenomenon. As for the suffix, I stick to using the Hungarian word ‘zaklatás’ (online harassment), following the first translation (*Olweus, 1999*), which has since then become widespread in Hungarian secondary literature (*Buda, Kőszeghy and Szirmai, 2008; Domonkos and Ujhelyi, 2015*).

In Hungarian-speaking scholarly papers, online harassment was first mentioned in relation to studies on school violence. In this regard, articles presented the phenomenon as a new form of indirect harassment without any empirical data on the one hand (*Balázs, 2009*), and tried to describe the frequency, manifestations, and characteristics of online harassment in Hungary on the other hand (*WIP, 2007, EU Kids Online, 2011; Parti and Schmidt, 2012; and the Domonkos and Ujhelyi, 2014*).

2. AIMS OF RESEARCH

In my analysis of extant secondary literature, my aim was to summarize the major results of research from an educational perspective. I participated in the work of the Digital citizenship research group (ELTE PPK ITOK, DA, 2013) in which we reconstructed *Ribble’s* digital citizenship model within the educational context (2009, 2011). As a member of the research group, my main goals were: (1) the formulation and elaboration of the aspect of digital social connection within the digital citizenship model; (2) locating the theme of cyberbullying within this particular area; (3) investigating the frequency, forms, and roles of cyberbullying.

In the second phase of the research, I analyzed possible predictors of school and online harassment along demographic and personal dimensions such as gender and age, relying on the strengths and difficulties questionnaire (SDQ) (Kóbor *et al.*, 2013, SDQ, which scales: emotional problems, hyperactivity, peer relationship, conduct and pro-social behavior).

In the third phase of the research, I focused on contextual factors. These were parental mediation, school mediation, school climate and attitudes of bystanders, digital stress and the presence of information and communications technology. In this phase of my research, I implemented both qualitative and quantitative methods. The topics of the focus group interviews were defined by questions addressing the familiarity with, prevention and treatment of digital stress, internet security, parental and school mediation, as well as online harassment.

3. THEORETICAL CONTEXT

Although research on the topic indicates gender differences regarding involvement, the results are sometimes inconsistent. The majority of studies reveal that boys are more likely to be perpetrators (Li, 2007; Wright *et al.*, 2009; Slonje *et al.*, 2012; Festl and Quandt, 2013), while the risk of online harassment victimization is higher among girls (Li, 2007; Slonje and Smith, 2008; Mesch, 2009; Wright *et al.*, 2009; Schneider *et al.*, 2012; Vázsonyi *et al.*, 2012; Festl and Quandt, 2013). Certain studies, however, found no particular gender differences (Slonje and Smith, 2007; Domonkos, 2014). Research on the correlation between harassment and coping with stress indicates that victims who speak about harassment or attempt to address the problem some way (e.g. by problem-focused coping¹), reported fewer health problems than those who tried to avoid stress (Völlink *et al.*, 2013).

Research provided varied data. According to self-report results, 30 per cent of teens between 11-16 years (EU Kids Online, 2011), 45.6 per cent of teens between 15-18 years (Parti and Schmidt, 2012) and 38.5 per cent of teens between 7th and 11th grades (Domonkos and Ujhelyi, 2014) have been subject to online harassment. Children of single parent households, and with lower levels of education showed greater vulnerability (EU Kids Online, 2011). Students in lower grades are also more likely to be victims of online

¹ "Problem focused coping: the individual focuses on the situation and the problem, to aimed at changing that can be avoided in the future." (Margitics and Pauwlik, 2006, 44.o.)

harassment (*Domonkos and Ujhelyi, 2014*), while those from higher grades and with lower socioeconomic status are more likely to become perpetrators (*EU Kids Online, 2011*). Moreover, teens who consider themselves popular among online acquaintances are more likely to become perpetrators (*Schmidt, 2013*). Researchers concur that traditional school bullying and online harassment are closely related, and that roles of victims and perpetrators cannot be separated clearly (*Parti and Schmidt, 2012; Domonkos and Ujhelyi, 2014*).

In recent years, researchers have started to take contextual factors such as peer relations, school factors (*Festl and Quandt, 2013*), and parental mediation² (*Mesch, 2009*) into account. The risks of becoming a perpetrator are increasing with lower levels of parental control (*Ybarra and Mitchell, 2004*) and physical punishment (*Diamanduros et al., 2008*). There are some common characteristics of the victims such as low self-esteem, and limited coping skills because of parental overprotection (*Gradinger et al., 2009*). Online harassment research reported that the cliques at school, the aggressive atmosphere or the existence of traditional bullying can also lead to online harassment (*Festl and Quandt, 2013*).

Studies on the relationship between traditional and online harassment concluded on the one hand that the frequency of traditional harassment is higher than that of online harassment, and on the other, that there is significant overlap between these two (*Beran and Li, 2005; Festl and Quandt, 2013; Dehue et al., 2008; Dempsey et al., 2011; Li, 2007; Reeckman and Cannard, 2009; Slonje et al., 2012; Michael and Ybarra, 2004*). This means that offline perpetrators are more likely to become online perpetrators (*Li, 2007*: close to 30%, according to *Hinduja and Patchin (2006)* 2.5 times more likely), while the victims of traditional bullying are more likely to become victims on the Internet as well.

² Parental mediation refers to parents controlling the appropriate consumption of media, as well as helping the interpretation of media content. *Mesch (2009)* mentioned two types of parental mediation: restrictive mediation and evaluative mediation. Restrictive parental mediation is a passive form, which includes time restriction on Internet use, the installation of filters monitoring software, and checking search history. The evaluative parental mediation is an active form, which contains discussing online content and the creation of common rules.

4. EMPIRICAL RESEARCH

4.1. The online harassment role in the digital citizenship model

Research questions: A team of researchers at ELTE PPK ITOK used *Ribble's* Nine Elements of digital citizenship model (*Ribble, 2007; 2011, Olle, 2012*) to formulate a new concept of digital citizenship. The main topics of this model are: (1) communication and the using of tools, (2) activity and behavior, (3) and value creation and productivity (*Ollé et al., 2013*). Abandoning the age-based framework of generation-specified theories, the model emphasizes individual responsibility, development, and conscious activities. Topics involved were digital health, digital self, and digital social connection. The latter was my own research topic.

Figure 1. Competence field of digital activity and behavior

Competence field of digital activity and behavior	
Individual competency areas	Social competency areas
Digital health <ul style="list-style-type: none">— physical— psychological	Digital social connection <ul style="list-style-type: none">— legal boundaries (copyright, online harassment)— social norms— (e-etiquette)
Digital self (footprints) <ul style="list-style-type: none">— security— self-representation	

The topic of digital social connection includes social rules, norms, and customs, as well as their competent, functional, active, and engaged application and shaping in an online environment. One element of digital social connection is online harassment, which was investigated along subjective and objective frequencies, gender, school grades and age.

The general objective of digital citizenship research was:

1. To create a structured model that integrates the competences of digital citizenship, identifies, and defines its areas and its main and partial competencies. Due to and in light of the rapid development of the infocommunication technology, we considered to update the original model, looking beyond current and popular themes.
2. After we have defined partial competencies, we created a competence network based on the updated model and the cognitive and affective domain of *Bloom's* Revised Taxonomy (*Anderson and Krathwohl, 2001*).

3. Developing a questionnaire based on the competence network.
4. To situate online harassment within the model, and investigating the frequency, forms and roles of online harassment.

Participants: Comparing the background questionnaire and the one referring to the second competence field yielded 407 samples (46.2 per cent of which were girls and 53.8 per cent were boys; from among responders 36.6 per cent studied in primary school, 9.8 per cent in vocational school, 44 per cent in secondary school, 7.4 per cent in high school, and 2.2 per cent in college or university). We formed three groups according to age: precocious puberty (10-14 years), late puberty (15-18 years) young adults (19-27 years).

Measures: The questionnaire was available online between 17 September 2013 and 7 October 2013. The self-report questionnaire for student on the topic of digital social connection contained 11 items in the background questionnaire, and 79 items in the competence questionnaire.

Results and discussion:

- 38.7 per cent of the students were involved as victims, 38.1 per cent were involved as perpetrators.
- Regarding the risk of being a perpetrator, we did not find any age difference. The risk of victimization decreased with age, with a significant difference between the younger and older groups (chi-square=6,441; df=2; p<0,05).
- The analysis of the interrelation between roles and gender shows a significant difference: both victims (U=15011, p<0,01) and perpetrators (U=14983, p<0,01) were rather boys.
- Examining objective victimization showed that the most common forms are insulting messages (M = 2.38; SD = 1,305), flame war (M = 2.36; SD = 1,368) and unauthorized sharing of images (M = 2.34; SD = 1.371). From the perspective of victims, the least typical form was personality theft (M = 2.12, SD = 1.323), and sharing personal information (M = 2.08; SD = 1,192). With regards to these forms, we found no gender difference.

Examining the objective perpetrators role showed that the most common form is sharing pictures without permission (M = 2.3, SD = 1.412), flame war (M = 2.3; SD = 1.32) and offensive message (M = 2.28, SD = 1.357). The least typical forms

are denigration ($M = 2.08$, $SD = 1.294$) and personality theft ($M = 2.13$, $SD = 1.369$).

- Concerning repentance of perpetrators after the harassment, we found a significant difference between genders ($U = 17630.5$, $p < 0.05$) Boys ($M = 2.47$, $SD = 1.2$) reported higher remorse rates than girls ($M = 1.83$, $SD = 1.02$).
- There were significant gender differences concerning responsibility ($U = 17892.5$, $p < 0.05$) and awareness ($U = 17264.5$, $p < 0.01$). The girls had higher means in both examined areas. There was no significant difference between the responsibility and awareness indexes of age groups.

4.2. Examination of individual factors

Objectives: The online and traditional bullying research shows that a very high proportion of the students are involved, both as victims and perpetrators. This study can be considered as a preliminary research in order to better understand predicting factors of online harassment. The research analyzed school bullying and cyberbullying predictors along demographic and individual dimensions, such as gender, age, used Strengths and difficulties (SDQ, scales: emotional problems, hyperactivity, peer relationship, problems of conduct and pro-social behavior; *Kóbor et al.*, 2013) questionnaire.

Participants: The sample was composed of 9th and a 10th grade high school students. The evaluable sample size was 172, of which 46.5 per cent were boys, 53.4 per cent girls. The mean age was 14.1 years. Most respondents study in vocational high school (44 per cent), or primary school (36.6 per cent), they lived mostly in Budapest and Eastern Hungary (54.1 per cent, 43.6 per cent respectively).

Measure: The questionnaire for teachers was available online from mid-September to early October 2013. The questionnaire was partly self-developed, it was self-evaluating and it contained closed-end questions. The questionnaire consisted of three sections: it contained the items of the Strengths and Difficulties questionnaire (SDQ), as well as items addressing school harassment (bullying) and online harassment.

Results and discussion:

- I have found that traditional forms of harassment were characterized by a higher frequency: 30.9 per cent of students were offline, 13.4 per cent of them were online victims; 16.8 per cent of students were offline, 8.1 per cent of them were online perpetrators.
- The majority of victims discussed their experiences with parents (offline: 28.4 per cent, online: 21.5 per cent) and friends (offline: 22.2 per cent, online: 34.7 per cent). The majority of those (~80 per cent), who discussed their experiences with someone received more help.
- As for the role of perpetrators, gender ($b=-.454$, $t(172)=-2,816$, $p<0,01$) problems of conduct ($b=.133$, $t(172)=2,327$, $p<0,05$) and hyperactivity ($b=-.087$, $t(172)=-2,315$, $p<0,05$) were significant predictors. 22 per cent of the variance was explained by the model ($R^2=.221$, $F(7,164)=6,651$, $p<.001$).
- As for the role of victimization, age ($b=-.283$, $t(172)=-5,938$, $p<0,01$), emotional problems ($b=.149$, $t(172)=2,795$, $p<0,01$), problems of conduct ($b=.205$, $t(172)=-2,508$, $p<.001$) and peer relationship problems ($b=.224$, $t(172)=-2,917$, $p<0,01$) were significant predictors. 35.7 per cent of the variance was explained by the model ($R^2=.357$, $F(7,164)=12,999$, $p<0,01$).
- Significant predictors of the online victimization were age ($b=-.153$, $t(172)=-3,457$, $p<0,01$), and problems of conduct ($b=.174$, $t(172)=2,444$, $p<0,05$). 15.3 per cent of the variance was explained by the model ($R^2=.153$, $F(7,164)=4,236$, $p<0,01$).
- As for online perpetrators, it was found that significant predictors were gender ($b=-.347$, $t(172)=-2,437$, $p<0,05$) and problems of conduct ($b=-.079$, $t(172)=-2,402$, $p<0,05$). 13.9 per cent of the variance was explained by the model ($R^2=.139$, $F(7,164)=3,775$, $p<0,01$).
- As for the relationship between gender and roles, it can be said that girls are more likely to be affected as offline victims ($\chi^2=11,616$; $df = 5$; $p<0,05$). As for the relationship between gender and forms, from the victim's perspective, girls were affected more by exclusion ($\chi^2=12,762$; $df = 3$; $p<0,01$), while boys were more involved in whipping ($\chi^2=8,293$; $df=3$; $p<0,05$), pushing ($\chi^2=8,673$; $df=3$; $p<0,05$) and threatening ($\chi^2=8,610$; $df=3$; $p<0,05$).

- As for carrying out harassment online, there was a higher rate of boys (chi-square=12,321; df=4; p<0,05). Regarding the forms of online harassment, a higher rate of girls experienced exclusion (chi-square=11,360; df = 3; p<0,05), whereas boys were involved more in sending threatening messages (chi-square=9,759; df = 3; p<0.05).
- The majority of victims discussed their experiences with parents (offline: 28.4 per cent, online: 21.5 per cent) and their friends (offline: 22.2 per cent, online: 34.7 per cent). As for the offline type, girls discussed victimization with friends (chi-square=12,006; def. = 1; p<0,05) and their siblings (chi-square=4,444; df = 1; p<0,05), while boys discussed victimization with their teachers (chi-square=9,013; df = 1; p<0.05). The majority of those victims (80 per cent), who discussed their experiences received help.
- 43.4 per cent of victims never learned the identity of perpetrators.

4.3. The impact of contextual factors for online harassment

Research question: The present study focuses on participants who do not become either perpetrators or victims, and on the relationship between contextual factors on the one hand and victim/non-victim as well as perpetrator/non-perpetrator groups on the other. Furthermore, the study investigates the characteristics of these groups and the differences between them (digital dependence, digital stress, parental and school mediation, school climate, victim blaming, bystanders).

Research participants: The participants of both focus group interviews and surveys were students from 7th to 11th grades. The sample for the surveys consisted of 98 elementary and high school students (M=14,15, SD=1,78) with 55.1 per cent girls, and 44.9 per cent boys. The ratio of secondary and primary school students was 18.4 per cent (n=18), and 81.6 per cent (n=80) respectively. 31 students (31.6 per cent) were from Budapest, 33 students (33.6 per cent) from Western Hungary, and 34 students (34.6 per cent) from Eastern Hungary.

Methodology: In the first phase of this research, I conducted a focus group interview with students. Then I gathered data through online surveys containing closed-ended questions from the same students. Sampling was always preceded by informing parents in writing and receiving their statements of approval. Themes of the surveys were digital

stress, topics discussed in previous studies (*Ragu-Nathan et al.*, 2008; *Tarafdar et al.*, 2011; *Shu et al.*, 2011) topics concerned were technological overload, technological invasion, technological complexity, security, technological insecurity items addressing the forms in which online harassment is manifest, school mediation (*Mesch*, 2009), school climate, parental mediation, attitudes toward victim blaming and toward technology.

Results and Discussion:

- The parents of non-perpetrators discuss with their children more often about online activities, treating inappropriate contents, safe Internet use, and e-etiquette. Moreover, the tools of parents of non-perpetrators more frequently include temporal restrictions on or prohibitions of Internet use, as well as their direct supervision and control.
- From among types of mediation, the frequency of items of school mediation is the highest: the most frequent is teachers discussing advantages and disadvantages of Internet use with their students. The second is the topic of safe Internet use, then that of dealing with disadvantages. The least frequent is discussing online conduct and its rules.
- The analysis of the relationship between school climate and affected groups reveal that patterns of perpetrators and non-perpetrators significantly differ in the following aspects: school climate ($t(96)=2,45$, $p<0,05$); the school aspect of school climate ($t(96)=2,69$, $p<0,01$). GPA's of non-perpetrators are substantially higher than those of perpetrators.
- Concerning bystander attitudes, it can be stated that for girls the means of positive items are higher in all cases and lower concerning negative statements. It is peculiarly stressful for girls and non-perpetrators to witness a peer falling victim to harassment.
- On the basis of their means considering the dimension of victim blaming and statements of the domains individually, one can see that the two groups significantly differ with regards to victim blaming. Victim blaming index was ($t(96)=-3,3$, $p<0,01$). The mean of non-perpetrators was lower.
- Concerning the relationship between digital stress and the two groups, one finds a significant difference with regards to digital dependence ($t(96)=-3,81$, $p<0,01$), digital invasion ($t(96)=-2,08$, $p<0,05$) and digital overloading ($t(96)=-2,86$, $p<0,01$) the mean of non-perpetrators is lower in all three aspects.

- Concerning the interrelation between digital stress and victim/non-victim groups, one can state that there is significant difference between the two groups with regard to digital dependence ($t(96)=-3,4$, $p<0,01$), digital invasion ($t(96)=-2,6$, $p<0,05$) and digital overloading ($t(96)=-2,57$, $p<0,05$). The mean of non-victims is lower in all three aspects.
- According to their, mean non-victim and victim groups are not significantly different with regards to their attitude toward technology. However, non-perpetrator and perpetrator groups show significant difference with regards to two items: dangerous-harmless ($U=806$, $p<0,05$) and valuable-worthless ($U=798$, $p<0,05$). The mean of non-perpetrators is lower in relation to both items.
- In case of prevention and treatment I identified two main problems. First, mainly as a result of the ineffaceability of internet contents, in all groups the feeling of powerlessness and insolvability emerged. On the other hand, at the start of conversations ignorance appeared to be a key solution strategy. Later, in an interview discussing a certain school bullying it came out that ignoring the harassing student did not solve the problem and what is more, at the end the victim had to switch school.

5. CONCLUSION

As indicated in the introduction, there is a growing tendency to regard social media websites as settings for education (Kárpáti et al., 2012; Csobánka, 2013; Tóth-Mózer, 2013; Papp-Danka, 2013). Therefore, the online environment becomes part of the school setting. Further studies show the problems concerning schools. These include the low rate of digital competences of users (Fehér and Hornyák, 2010) and questions arising from characteristics of the Internet, such as (1) attributing psychological meaning to technological difficulties (Ujhelyi, 2015); (2) physical and psychological effects of anxiety and stress caused by features of technology or its errors (Brod, 1984, Tu et al., 2008, Shu et al., 2011); (3) the study of Internet as a social setting and its relations to emotions, with particular attention – for the present study – on aggression. I pay special attention to aggression resulting from textual communication and the lack of nonverbal signs (Ujhelyi, 2015). Studies focusing on the interrelation between schools and online harassment are of peculiar importance (Festl and Quandt, 2013; Török, 2012; Slonje et al, 2012; Dempsey et al, 2011; Reeckman and Cannard, 2009; Dehue et al, 2008, Li, 2007; Beran and Li, 2005; Ybarra and Michael, 2004). Governmental attempts of creating measures to address the problem designate schools as settings of prevention (Domonkos and Ujhelyi, 2015). Therefore, it is essential to focus not only on the specialist's challenges of digital culture, related research, and the cognitive aspect of digital competence but also on the emotional-volitional component and the study of online socialization.

I have attempted to approach my research topic from various angles. Therefore, I also considered *individual* and *contextual factors*. In categorizing the forms of online harassment, I followed the taxonomy of Willard (2005) and the *Tabby Project* (2012). However, contrary to them, I did not include the phenomenon of sexting, as in my view it is rather a *risk factor* than a manifestation of my research topic, online harassment. I believe that disclosing intimate information by the individual becomes a form of harassment only if the sensitive data is delivered to a third party or made publicly available. With regards to the role of participants, a *focus shift* has occurred in the research. Whereas in the *first* and *second phase* researches *victim* and *perpetrator roles* were the focal points, in the third phase, I rather attempted to explore the characteristics of non-victim and non-perpetrator roles. Research on these two groups as well as

exploring and emphasizing their characteristics might turn into an important field of prevention.

The first phase of my research was *exploring secondary literature*. In this phase I consulted and catalogued (a great number of) analyses and gave a detailed presentation of the findings of research on online harassment as relevant from the perspective of institutionalized education. According to the results on the institutional level, it can be stated that *perpetrators emerge from among more popular students*; they take a central role among their peers; online harassment is more frequent in classes with a higher number of cohesive cliques (*Festl and Quandt, 2013*). Victims are less popular and they are characterized by low self-esteem (*Gradinger, 2009; Limber, 2002*), which is further reduced due to harassment. Awareness of these characteristics may provide teachers with important information, as increasing cohesion among students in the artificially created groups of the schools is a pedagogical task of paramount importance. Furthermore, community identity and *strengthening group cohesion may develop into a protective force against online harassment*. The research of *Völlink* and his colleagues (2013) also established the fact that long-term harassment particularly increases the feeling of helplessness in victims. Victims who talk about their experiences or focus on solving their problem report fewer health problems. Furthermore, the *victim's request for help prompts supporting behavior in bystanders* (*Machácková et al., 2013*). Contrary to these, passive strategies, such as avoidance or deference (both of which turned up in focus group interviews) could usually stop harassment only for a short while. According to the unanimous results of various studies, the risk of online harassment is increased in higher grades (*Ybarra and Mitchell, 2008; Robson and Witenberg, 2013*) and high school students are most at risk, Therefore, prevention should be commenced in lower grades.

My first findings are related to my work at the Digital Citizenship Research Group (ELTE PPK ITOK, DÁ, 2013). In the research group, we attempted to formulate the concept of 21st century citizen (who is experienced both in the offline and in the online world, who is a valuable member of the community and an ethical and responsible individual). Furthermore, we endeavored to reformulate the educational model of becoming a citizen (*Ribble 2009; 2011; cf. Chapter 4.1. of the present dissertation*). One the one hand, it was our aim to conceive an adequately broad and flexible framework that can suite the fluctuations of the online environment. On the other hand, the possibilities of developing digital competences was a focal point in our research. The major, interrelated fields of competence in our model were the following: (1) communication

and the using of tools, (2) activity and behavior, (3) value creation and productivity. My personal – theoretical – task was to form a definition of digital social connection and to define its constituent parts within the model of digital citizenship. Following the elaboration of subtopics, I constructed a competence field for digital social connection based on the structure of cognitive and affective requirements within Bloom's extended digital taxonomy (*Anderson and Krathwohl, 2001*). I illustrated the objectives to be achieved during development with examples on each level.

Increasingly complex study requirements and results concerning safe and constructive online presence lead from the recalling (remembering) of rules necessary for such presence and conduct to the constructive development, shaping, and maintaining (creating) an online community. In case of affective requirements, the same process leads from the acceptance of the legitimacy of rules necessary for safe online use and conduct (reception) to individual integration, and successful participation in an online community (internalizing values). Following the creation of the competence network, I developed a *measurement device*, the items of which applied not only to the partial competences of digital social connection but also to the investigation of the *frequency of online harassment* and its *manifestations* as well as its roles. Concerning the forms in which online harassment is manifest, the replies of both perpetrator and victim groups show that verbal harassment is more frequent than its social alternatives (exclusion from online group or misuse of visual content). With regards to both offline and online perpetrators, girls show a significant difference concerning the implementation exclusion from among types of harassment, whereas boys considerably more often implement the sending of threats. Repentance rates following online harassment are rather low, which is congruent with the opinions of *Mesch (2009)*, *Festl and Quandt (2013)* and the characteristics of the online setting. Due to physical distance and the lack of nonverbal communication, perpetrators do not see the reaction of their victim and do not face the consequences of the harassment. Therefore, the possibility of feeling empathy toward the victim is decreased, which – in turn – reduces remorse.

The results of the second phase of my research concern the role of individual factors in (online) harassment. As I pointed out, I was intent on approaching the phenomenon from as many angles as possible. Therefore, in my research I laid special emphasis on studying individual characteristics. I assumed that this would help me explore the predictors of school and online harassment and that it would enable a novel approach in researching the relationship between offline and online harassment.

According to my results, important predictors of becoming an online perpetrator are gender and hyperactivity. Predictor variables can account for the entirety of the model in 13.9 per cent. With regards to *becoming an online victim*, age and problems of conduct have a significant explanatory relevance. In this case, predictor variables account for the entirety of the model in 15.3 per cent. Comparing offline and online harassment shows that analyzed factors have a lower predatory value in case of online harassment. Peer relation problems and emotional symptoms do not function as predictors with regard to online harassment. Instead they might act as risk factors. If actors of online harassment signal the problem only to peers, those affected are even less visible for teachers. However, it can be interpreted as a protective measure, since relying on social support may function as health protection. Moreover, companions can act as helpers in case of treatment. These indicate that in handling online harassment, it is essential to make students familiar with fitting ways of protection and treatment strategies.

Online perpetrators are most often classmates, schoolmates, or friends, which is a natural consequence of the fact that those with whom teens are in daily contact are their peers. More than half of the victims did not know who their harassers were. This ratio is similar to the one observed by *Patchin and Hinduja (2006)*. It needs to be emphasized, however, that knowing the perpetrator is more disturbing for the victim: in such cases, one can observe a higher rate of emotional stress among them (*Staude-Müller et al., 2012*) and this makes the issue of prevention and treatment into a school problem. In case of an unknown perpetrator, specialists and teachers in the victim's immediate vicinity could take the role of flaggers, since identifying the perpetrator as well as discontinuing harassment and removing the content can often only happen with the help of further professionals.

In the third phase of the research, I focused on contextual factors which are considered – according to certain results of secondary literature – to significantly influence the frequency and course of harassment, and especially affect the pedagogical prevention of harassment and the mitigation of its detrimental consequences. In this phase of the research I concluded that in order to explore possible ways of preventing harassment, it is not only necessary to get to know affected individuals (and their context) as well as possible, but that investigating forces protecting non-affected individuals (non-perpetrators and non-victims) may also yield valuable information. Therefore, in this phase, I focused on groups of non-affected. From among results, I emphasize only those that help prevention. My results drew an unfavorable image about victim blaming.

Members of the perpetrator-group are in solid agreement that harassment is acceptable and that there are individuals who deserve to be bullied or hurt. The mechanism of victim blaming came up even in the interviews, even though it did not feature among questions. This indicates that perpetrators implement notions of victim blaming in explaining their deeds and acquitting themselves to a great extent. This is an emphatic aspect of prevention inasmuch as victim blaming can prevent the exhibition of active bystander-attitudes.

All in all, *parental mediation* occurs rarely, which can be attributed to factors related to age and technology, and to the phenomenon of digital divide between generations. *Non-perpetrators* reported more frequent parental mediations. They discuss with their parents Internet activities, safe Internet use, and online conduct more frequently. Moreover, their Internet use is more often regulated, prohibited, supervised, or controlled. Non-victims exhibit less parental mediation, which is however, still higher than in the case of victims. Non-victims discuss with their parents the handling of inappropriate contents and online conduct more frequently. Moreover, their parents tend to directly supervise or control their online activity. The lower frequency of parental mediation in case of perpetrators and victims directs attention to the issue of school mediation, since institutional pedagogy and education are fields in which children and young people whose parents implement mediation less frequently become available.

I believe that integrating the elements of safe Internet use and constructive online activity into school courses is quite difficult, since in elementary schools, which are the primary area of prevention, computer classes are elective and even these are offered in a small number. Even though the role of bystanders and the high value of victim blaming emerged as important aspects of prevention. This makes the fight against online harassment into a communal task. In this continuous endeavor, various societal factors, among them settings of institutional education must play their role.

Non-perpetrator groups achieved significantly higher means both with regard to *school climate* and the *school aspect of the school climate*. In general, non-perpetrators consider their classmates more helpful, and they enjoy school activities. For non-perpetrators, the most disturbing is to see one of their peers falling victim to abuse, when as bystanders they are suited to report harassment.

It is important to mention that the *non-perpetrator* group considers the Internet more dangerous and less worthy. This is a significant difference. This group has also achieved lower means in the areas of digital dependence, digital invasion, and digital overloading. It is also characteristic of *non-perpetrators* and *non-victims* that they are less likely to

excessively identify with technology, to feel that it is indispensable or that digital tools predominate in their lives. This attitude might be the result of direct or indirect bad experiences in the past with online interfaces. Alternatively, the fact that from the start they consider the Internet more dangerous or less worthy, may prevent them from being involved in online harassment. My research did not answer these questions.

One must also discuss the limits of the research. One of these is that data gathered with surveys allowed the sample to choose only from predefined items. Therefore, data collection could cover only certain topics. Since participants filled out the surveys on their own, individual interpretations of questions or statements as well as immature or distorted self-reflection could also occur. It is also worthy of noting that the sample size was small: since access to this sample was difficult, research was decelerated and the sample size was limited. Almost without exception, schools signaled that they are overwhelmed by innumerable requests of research participation, and after a certain point they are forced to cease receiving approving and fulfilling such requests.

With constant development in information and communication technology, features well known to us from the domain of offline socialization, emerge with regards to online socialization as well. Furthermore, problems challenging users and professionals alike keep turning up. Among possible new research directions, one can name the phenomenon of *non-use*, which refers to a refusal of using digital technology or social networking services. This may entail complete abstention or discontinuing their use. The latter includes those who registered earlier on a social networking website but then suspended, deleted, or deactivated their registrations or accounts. Abstention or discontinuing may also be caused by reasons related to online harassment: such as fear, concerns about information privacy, as well as various conflicts (*Ujhelyi and Domonkos, 2016*). Online socialization, aggression and thus online harassment is part of the already well-known research field. Further, detailed study of relevant contextual factors, especially parental mediation, school mediation and school climate might be justified. Moreover, an exhaustive investigation of the topic from a legal perspective might also yield useful information in the future. The most important direction, however, is the practical application and impact analysis of research results. Preventive measures may play a role in vocational training for teachers, or they might become part of computer classes or even ethics classes in the institutional settings of schools. The most important aspects of prevention are the characteristics and effects of the online setting, familiarity with its forms and with risk factors, the roles of bystanders and the phenomenon and

danger of victim blaming as well as the issue of digital self-representation and the related field of privacy.

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7. PUBLICATIONS BY THE AUTHOR ON THE SUBJECT MATTER OF THE DISSERTATION

7. 1. Book Chapter

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