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Sexting in the Population of Children and Its Risks: A Quantitative Study

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Abstract

In our paper, we deal with the results of the research on Sexting and Risky Acquaintances Made by Czech Children in Cyberspace, which was implemented during 2017 by the Centre for the Prevention of Risky Virtual Communication at the Pedagogical Faculty of Palacký University in Olomouc in cooperation with the company O2 Czech Republic. The research focused on the sharing of own intimate materials in the internet environment (the so-called sexting), risky acquaintances in the online environment and other related phenomena. A total of 4878 respondents aged 8-17 (48.77% of boys, 50.41% of girls) from all over the Czech Republic participated in the research. The research Sexting and Risky Acquaintances Made by Czech Children in Cyberspace reveals a high increase in the number of children who send their own intimate materials to others in the Internet environment and who thus practise the so-called sexting. More than 15% of Czech children send their intimate materials to other persons.

Keywords: Sexting, Risky Behaviour in Cyberspace, Internet Safety.

Introduction

Sexting is a relatively new and rapidly expanding phenomenon referring to electronic distribution of text messages, own photos or own videos with sexual content (Jolicoeur & Zedlewski, 2010; Kopecný, 2012), which takes place in the virtual electronic media environment—especially the Internet. Often, mobile phones, tablets or webcams are used for sexting.

One of the commonly used definitions specifies; sexting as an act of sending photos capturing nudity, namely via mobile phones or other electronic media such as the Internet (Streichman, 2011). Newly, according to some authors, sexting is mainly associated with young people who obtain their sexually tuned materials (the so-called youth-produced sexual images), and then distribute and publish them (Wolak, Finkelhor, & Mitchell, 2012). This definition has been complemented by Sullivan (Sullivan, Cleary, & Sullivan, 2004): sexting also includes suggestive text messages and images depicting naked or partially naked children or adults, that are further

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spread by mobile phone or the Internet. Other authors (Ringrose, Gill, Livingstone, & Harvey, 2012) extend the number of platforms and tools allowing the distribution of such materials by social networks, especially Facebook and MySpace.

Sexting is further defined as the sharing of sexually tuned photos (Lenhart, Purcell, Smith, & Zickuhr, 2010), including personal sharing, sharing through text messages, online sharing or sharing in other ways.

Despite the disparity of definitions, there is consensus regarding the need to differentiate within sexting category between primary sexting, consisting of the actual production or self-production of the image, generally consensual, and secondary sexting, in which the image is sent with or without the consent of the person depicted in it (Calvert, 2014; Mitchell, Finkelhor, Jones, & Wolak, 2012; Ringrose et al., 2012).

Another researchers (Wolak & Finkelhor, 2011) divide sexting into two main categories – “experimental” and “aggravated”. Under experimental sexting, there are three subcategories: romantic, sexual attention seeking and other. Romantic sexting refers to teenagers who are already in a relationship, sexual attention seeking refers to teenagers who may send sexts with the intent of gaining someone’s attention, and other refers to circumstances where a sext might have been created but not sent. Within aggravated sexting, there are the subcategories of adult involvement and youth involvement, with youth having the subcategories intent to harm and reckless misuse. Sexting with intent to harm refers to using sexts as a form of revenge, while reckless misuse refers to situations where there may not have been an intention to harm but the image is shared without consent (Wicks, 2017).

Prevalence of Sexting

Since 2008, sexting researches have been taking place in a number of countries – USA, Great Britain, Australia, Canada, China (Jolicoeur & Zedlewski, 2010), and also in the Czech Republic and Slovakia (Kopecký, Szotkowski, & Krejčí, 2014b). For example, interesting results on the prevalence of sexting among young users of Internet and mobile phones are provided by the research conducted through the American project called The National Campaign to Prevent Teen and Unplanned Pregnancy (The National Campaign to Prevent Teen and Unplanned Pregnancy, 2008). This research involved a sample of 653 teenagers aged 13–19 (and 627 adults aged 20–26) and showed that 38% of them sent sexually tuned messages to other people, and that 19% of teenagers sent their own naked photos to other persons. Regarding adults aged 20–26, sexually suggestive sexting messages were sent by 58% of respondents, whereas 32% of them sent their own naked photo. It is also interesting to look at the reasons why sexting is practised by juvenile users – 71% of girls and 67% of boys send sexually tuned content to their boyfriends or girlfriends; sexting thus becomes part of their intimate relationship. 21% of girls and 39% of boys sent intimate photos to a person whom they planned to meet (The National Campaign to Prevent Teen and Unplanned Pregnancy, 2008).

Studies conducted in recent years in the USA (Ybarra & Mitchell, 2014) also show that approximately 7% of young Americans aged 13–18 send their own intimate materials to their peers. Authors also point out that sexting is a sign of sexual development and discovery, not a problem caused primarily by modern technologies. Further studies (Gordon-Messer, Bauermeister, Grodzinski, & Zimmerman, 2013) that were conducted in the USA on a sample of more than 3000 adults aged 18–24 confirm that sexting is practised by 28% of them (sending and receiving intimate materials) while 12% only receive intimate materials (without sending to others).

Table 1. Brief overview of selected Sexting Prevalence Studies in the USA and Europe

<i>Study implementer</i>	<i>Sample (% of women)</i>	<i>Results</i>	<i>Year</i>	<i>Source</i>
AP-MTV	n = 1247 (50.8), age: 14–17 & 18–24	Sending: 24% (14–17) 33% (18–24)	2009	(Knowledge Networks, 2009)
Benotsch, Snipes, Martin and Bull	n = 763 (66.0) age: 18–25	Sending or receiving: 44%	2013	(Benotsch, Snipes, Martin, & Bull, 2013)
Boulat et al.	n = 1012 (60.7) age: 10–15, 16–20, 21–25, 26+	Sending: 18.42% (10–15) 33.70% (16–20) 48.84% (21–25) 34.87% (26+)	2012	(Boulat et al., 2012)
Cox Communications	n = 655 (49.0) age: 13–18	Sending: 9%	2009	(Kim, 2009)
Dake, Price, Maziarz and Ward	n = 1329 (48.0) age: 12–18	Sending or receiving: 17%	2012	(J. a. Dake, Price, Maziarz, & Ward, 2012)
Dir, Coskunpinar, Steiner and Cyders	n = 278 (53.8) age: 18–43	Sending: 46.6%	2013	(Dir, Coskunpinar, Steiner, & Cyders, 2013)
Fleschler Peskin et. al.	n = 1034 (62.6)	Sending: 21.2%	2013	(Fleschler Peskin et al., 2013)
Hinduja and Patchin	n = 4365 (49.5) age: 11–18	Sending: 7.7%	2010	(Hinduja & Patchin, 2010)
Lenhart	n = 800 (48.7) age: 12–17	Sending: 4%	2009	(Lenhart, 2009)
Mitchell, Finkelhor, Jones and Wolak	n = 1560 (50) age: 10–17	Sending: 2.5%	2012	(Mitchell, Finkelhor, Jones, & Wolak, 2012)
NCPTUP	n = 1280 (50) age: 13–19	Sending: 20%	2008	(The National Campaign to Prevent Teen and Unplanned Pregnancy, 2008)
Phippen	n = 535 age: 11–18	Sending (someone from friends) 40%	2009	(Phippen, 2009)
Rice et al.	n = 1839 (48.14) age: 14–17	Sending: 15%	2012	(Rice et al., 2012)
Temple et al.	n = 946 (55,9) age: 11–19	Sending: 27.6%	2012	(Temple et al., 2012)

Source: Systematic and extended overviews of sexting studies (Cooper et al., 2016; Klettke et al., 2014)

A very good insight into sexting prevalence can be acquired through a systematic overview of sexting information prepared by researchers from the Deakin University (Klettke, Hallford, & Mellor, 2014), which transparently outlines the results of sexting studies made in recent years in Europe and the USA. These results are then complemented by a systematic review by English and Swedish researchers (Cooper, Quayle, Jonsson, & Svedin, 2016).

The table 1 clearly shows that sexting is relatively widespread in the USA. That is why a number of states have included sexting into their in their legal norms– for example, the spread of intimate materials by children is considered an offense in Arizona, Nevada or Hawaii, and a crime in Alabama, Florida, Georgia, Utah or Nebraska (Hinduja & Patchin, 2015). At the same time, a number of US states have developed specific legal standards that focus on the abuse of intimate materials to revenge another person (e.g. former partner) – the so-called revenge porn law (Hinduja & Patchin, 2015).

Interesting results are also provided by studies conducted outside Europe, such as sexting research in Peruvian adolescents (West et al., 2014). This research proves that sexting was practised at least once by 20% of a sample of 949 high school students, whereas boys practise sexting more than girls. Recently conducted research on the risk behaviour of Czech and Slovak children (Kopecký et al., 2014b) shows that sexting is practised by 7–9% of Czech and Slovak population aged 11–17. More than 70% of children also confirm that they know that sexting is risky. The latest research carried out in the Czech Republic, however, the border sexting move to the level of 15%

The newest research EU Kids Online IV (Bedrošová, Hlavová, Macháčková, Dědková, & Šmahel, 2018) realized in many European countries revealed, that 35% of Czech children and adolescents received a sexual message in 2017. 25% of Czech children and adolescents were asked by someone on the internet for sexual or intimate information in 2017 and 10% of children and adolescents posted or published a sexual message in 2017.

Tools used for Sexting

Many modern communications technologies, especially smart phones, tablets and webcams, are used to realize sexting. These serve primarily to voluntarily record intimate photos or videos that are further expanded through online services. Typical services used to spread intimate materials include Facebook, Instagram and Snapchat, and various instant messengers such as Facebook Messenger, WhatsApp, Viber, and Skype are also used to spread. Sexting also spreads through YouTube or Vimeo video servers.

However, intimate material may not only be voluntary, in many cases intimate material has leaked involuntarily to the online environment (secondary sexting) – for example, through video chat. Video chat services primarily enable users to communicate in real time via a webcam or camera of a mobile touch device. But it can also quite easily be used to record videos of communication that can be further disseminated or exploited in the context of threats or blackmail – called sextortion (Kopecký, 2017). Intimate material leakage occurs, for example, in an online video chat environment such as Omegle, Tinchat or Whisper. In the Omegle video chat environment, for example, there have been a number of criminal offenses in which an adult offender has forced child users to go out of the webcam, record videos, and he used the recordings for his own satisfaction (Owen, 2017). However, video recording from video chat – after minor software modifications – allows all common services.

Motivation for Sexting

Sexting is a risky phenomenon that is closely intertwined not only with adolescence of current young people but also with a changing approach to human sexuality. There are many reasons for the practise of sexting:

a. Sexting is perceived as part of romantic relationships

As confirmed by a number of authors (Albury & Crawford, 2012; Döring, 2012; Lenhart et al., 2010; Ringrose et al., 2012), sexting is used during introductory parts of the partnership as a tool for attracting the attention of the partner, flirting, excitement etc. Within the established relationship, sexting is a sign of love, intimacy, mutual trust between partners. Similarly, sexting is practised by partners who are physically separated for some time and communicate with each other particularly through ICT.

b. Sexting functions as a tool to suppress boredom

Many studies show that sexting is often practised as a tool for suppressing boredom (Lenhart et al., 2010). In a number of studies (Kopecký, 2012; Kopecký, Szotkowski, & Krejčí, 2012), boredom becomes a very common reason for sharing intimate materials with peers, especially in the environment of social networks.

c. Sexting arises as a product of social pressure

In a number of documented cases, sexting originated under the pressure of a particular social group—classmates or partners, for example. If sexting takes place within a partnership, girls can be forced into sexting by their partners (Lippman & Campbell, 2014); sexting then becomes a normal part of the relationship. For partners, it is an expression of mutual trust, love and physical attraction. There are many sexting cases where a group of girls—classmates decided to shoot their intimate photos and mutually share them “out of partnership”. Unfortunately, after the leak of such photos, these girls became the subject of ridicule, cyber bullying and harassment; they were referred to as “whores”, they were publicly denigrated etc. (Kopecký, Szotkowski, & Krejčí, 2014a).

d. Sexting as a product of the so-called consumer society, as a tool of self-presentation

A number of researchers (Van Ouytsel, Walrave, & Van Gool, 2014) highlight the link between sexting and the demands of the so-called consumer society. In the media, especially in advertising, human sexuality is presented very markedly. Through the media communication, pubescents and adolescents are confronted with models of physical beauty which includes “being sexy”. Sexting is commonly practised by celebrities, singers, actors and athletes; it is part of television, film, music clips and other media forms of presentation.

From the very early age, children need patterns of behaviour that they can imitate. And the media give children information that denudation and sharing of intimacy is “normal”. Children then do not see sexting as something dangerous or risky and are willing to imitate this model of behaviour.

e. Sexting as a tool of revenge

In a large number of documented cases of sexting in children and adults, published intimate materials were used as a tool of attack. In some cases, intimate photographs were used to blackmail the child (Kopecký, 2014)—the initial communication of the children grew in the

exchange of photographs whose intimacy gradually increased. The result was a very intense extortion of the children who were forced to send their own intimate materials. In some cases, sexting also serves as an instrument of revenge against ex-partners (Walker, Sanci, & Temple-Smith, 2013). There are a number of websites where boys upload photos or videos of their former girlfriends and comment on them cheaply (for e.g., *check this bitch out!*). In the same research, respondents said that “sexting means nothing if practised by boys but girls doing the same are stigmatized”.

Sexting is very closely related to cyber bullying; intimate materials easily become a tool for serious – often destructive – forms of cyber aggression and can lead to the suicide of a child victim or an adult in extreme cases.

Methodology

The research, *Sexting and Risky Acquaintances Made by Czech Children in Cyberspace* was carried out during 2017 by the Centre for the Prevention of Risky Virtual Communication at the Pedagogical Faculty of Palacky University in Olomouc in cooperation with the company O2 Czech Republic. The research follows up the studies of cyber bullying, child grooming and another risky phenomena, whose were realized by the same team in 2010-2016.

Procedure

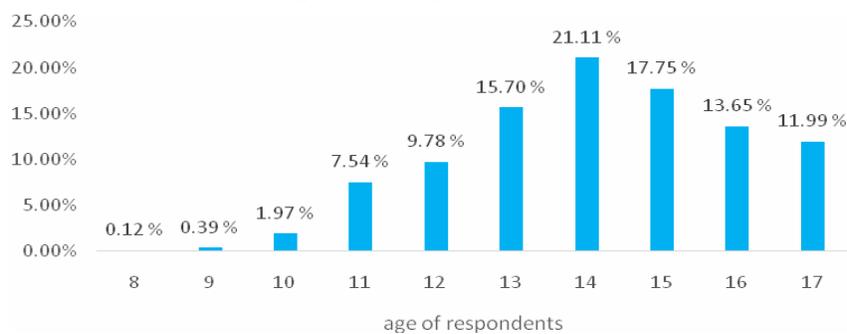
As a basic research tool, we chose an anonymous online questionnaire (in the Google Forms environment) which was distributed to the target group by the teachers of primary and secondary schools throughout the Czech Republic. The distribution of this questionnaire was also carried out in cooperation with regional and city managers and co-ordinators of risky behaviour prevention, ensuring the distribution of the questionnaire among the pupils of individual regions.

Preparation of the research and testing of the validity and reliability of the research tool within a pilot survey were carried out from 1 January 2017 to 13 February 2017. Data collection took place from 1 March 2017 to 19 May 2017. In the following weeks, partial outputs were evaluated and interpreted. Statistic software Statistica was used to analyse the data obtained.

Participants in the research

A total of 4878 respondents (50.41% of girls, 48.77% of boys) from all regions of the Czech Republic were involved in the research. Their mean age was 13.13 years ($\bar{x}=14.00$), straggling of the group reached the value of $s^2=3.47$ ($s=1.86$).

Figure 1. Age structure



(n=4878)

Measurement

For the needs of our research, we created a research tool, the online questionnaire, focused on finding out information about sexting and risky acquaintances made by Czech children. The questionnaire was composed of 3 parts oriented to the area of sexting (motivation for sexting, forms of sexting, platforms for the practise of sexting, etc.), risky acquaintances made by children (risky communication with strangers, willingness to meet in the real world) and other information about behaviour of children in the online environment. In this paper, we focus exclusively on the field of sexting.

Results

1. Sexting in Czech children – sending and sharing intimate materials

When analysing the prevalence of sexting in Czech children, we stem from the definition of sexting, according to which the term sexting refers to electronic distribution/ dissemination of text messages, own photos or own videos with sexual content (Jolicoeur & Zedlewski, 2010; Kopecký, 2012), and which takes place in the virtual electronic media environment – especially the Internet. Therefore, we focus on sexting in its three basic forms – in the form of text (including sexually explicit text), in the form of photos (including photos capturing a totally or partially exposed body) and in the form of videos (including videos of partially or totally exposed person or persons).

Likewise, we distinguish sexting in the form of sending intimate material to another person (boyfriend, girlfriend), which usually takes place via private communication, from sexting in the form of sharing intimate material (which usually takes place in public or in a group of more users who are capable of its further dissemination).

Sexting in the form of text (intimate, erotic messages) is practised by 24.76% of Czech children (1208 children from 4878). More than 91% of them use this form rarely, occasionally; intimate messages are regularly sent by about 8-9%. In principle, this form of sexting is not as dangerous as other forms but can be misused, e.g. in a situation where a message with intimate content intended for a “lover” or “very good friend” is revealed by the current partner of the sender. Sexting in the form of distributing own intimate photos is practised by 15.37% of Czech children. 72% of them share intimate photos rarely; the remaining 28% often provide their own intimate photos in the Internet environment to other people. Own intimate photos were sent by 53.75% of girls and 46.25% of boys. Distribution of own intimate photos is highly risky – it can be abused for extortion, threats and other forms of online and offline aggression, especially in situations where the persons on photos can be identified (e.g., by their faces).

It is interesting to see whether sexting occurs also in adults over the age of 18, who also joined our research and whose data have been excluded from the research results. At this point, we note that our research shows that sexting in the form of sending intimate photos was practised by 40% of persons at the age of 18-25 (98 persons from 234). However, given the low number of respondents over 18, this conclusion cannot be applied to the entire adult population.

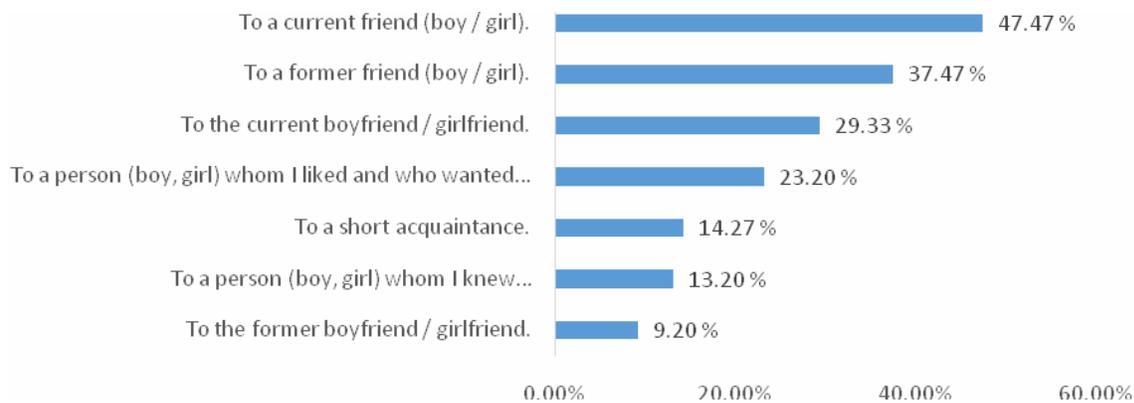
In the online environment, approximately 6% (287 children from 4878) of Czech children sent their intimate videos. More often, intimate videos are sent by boys (64.91%) than girls. Distribution of own intimate videos is highly risky – it can be abused for extortion, threats and other forms of online and offline aggression, especially in situations where the persons on photos can be identified (e.g., by their faces).

Children’s Internet users also share intimate materials – primarily through social networks. Sexting as sharing own intimate materials in the form of text, photos and videos is practised by 5.55%, 4.96% and 3.19% of children, respectively. In our research, we also investigated whether children perceive sexting as a safe or rather risky phenomenon. The vast majority of respondents perceive sexting as a high risk phenomenon; on our scale, sexting was designated as very risky by more than 74% of children’s respondents. Only 5% of children consider it safe.

2. Recipients of intimate materials

A very important question is to whom children send their intimate materials and why. In most cases, they send intimate materials to their boyfriends or girlfriends, friends (boys or girls) or potential partners.

Figure 2. To whom did you send your “sexy, erotic” photo or video, on which you are partially or totally undressed/naked?



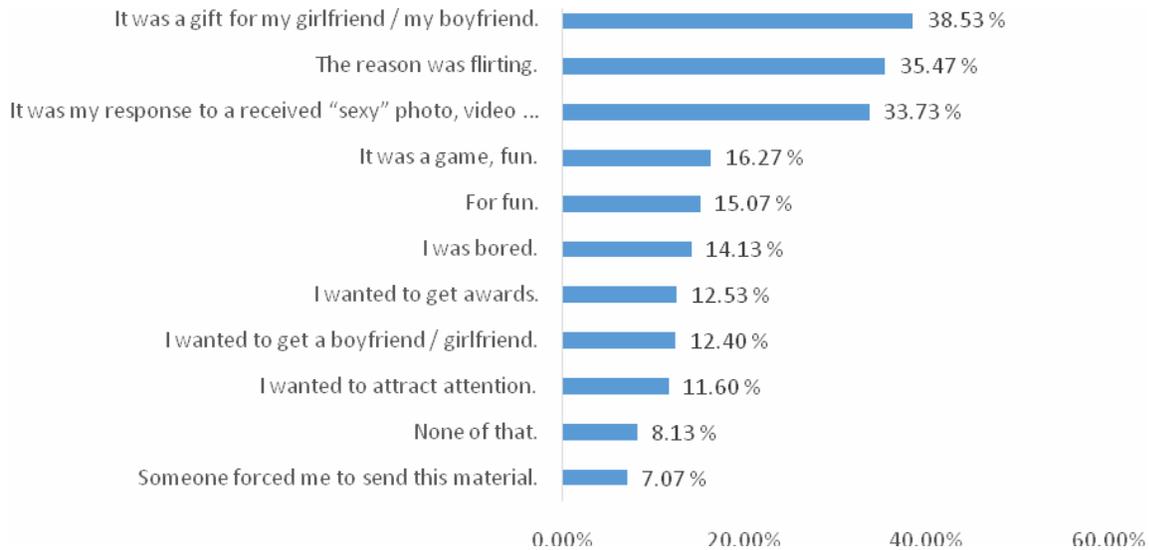
(n = 4878)

3. Motivation for Sexting

Children practise sexting primarily within their partnerships – intimate materials are often seen as “gifts” for a girlfriend or boyfriend, or as a response to these gifts. Intimate materials are also used in flirting – intimate materials were used for this purpose in more than a third of cases (35.47%).

Intimate materials are less often sent for fun or out of boredom, or the need to get awards in the online environment. It is alarming that more than 7% of children practising sexting were forced to do so by another person and intimate materials were not sent voluntarily.

Figure 3. Why do children send their intimate photos and videos to other Internet users?



n = 750

4. Children as recipients of intimate materials

In our research, we also focused on whether children receive intimate materials from other users, i.e. whether they participate in sexting as recipients (not as senders or disseminators) of erotic photos and videos. In this case, children do not practice sexting actively (they do not send, do not share) but participate in it passively – as recipients.

More than 40% of children (40.96%) confirm that they have received a provocative erotic or pornographic photo in the Internet environment from another person, on which someone is partially undressed or totally naked. One fifth of children (21.51%) also confirm that they have received erotic or pornographic videos from their Internet friend.

A large number of children thus encounter sexting without practising it actively. However, in a situation where children receive intimate material, they are obviously able to further disseminate it through online communications services.

5. Tools for the practise of Sexting

The tools used for sharing intimate materials in the Internet environment are clearly dominated by the Facebook social network; this network was used for sexting by more than 65.73% of children. Facebook Messenger takes the second place (54.13%) and is followed by the ever-popular Snapchat (50.93%). These three services/tools prevail completely. In this imaginary order of popularity, Instagram, WhatsApp and Skype are placed with a wide distance and are followed by traditional SMS, e-mails, etc.

6. Whom would children contact in a situation where their intimate materials were abused

If an intimate child photo is misused (e.g. an intimate photo is distributed online, the child is extorted using an intimate material, etc.), the child confides to his/her parents only in 38.8% of cases. It is also alarming that almost a third of children (32.9%) do not say about their problem to

anyone. The child is naturally ashamed and does not want the public to know about sexting, and to become a target of unwanted attention, humiliation or even bullying.

Table 2. Whom would children contact in a situation where their intimate materials were abused

Category	N	%
Parents.	1894	38.83
No one.	1605	32.9
Current friend (boy / girl).	1328	27.22
Current boyfriend / girlfriend.	692	14.19
Siblings.	529	10.84
Teacher.	296	6.07
Online counselling.	273	5.6
Former boyfriend / girlfriend.	99	2.03
Former friend (boy / girl).	79	1.62
A short acquaintance.	73	1.5
Police	12	0.25
No answer	336	0.07
n = 4878		

7. Sexting and webcams

The tools that children use to communicate in the online environment include webcams. Webcams are also used for sexting; we therefore focused on whether children ever exposed themselves in front of their webcams and whether someone else exposed himself/herself over webcam in front of them.

From our research group, 3.87% of the children expose themselves in front of their webcams (189 from 4878 children). We also asked whether someone else exposed himself/herself over webcam in front of children. Here we find very interesting information – 22.2% of the children confirmed that someone else exposed himself/herself in front of them via webcam.

Discussion

The prevalence of sexting in the European countries is steadily rising – this increase can be due to a number of factors, e.g., *changes in approach to human sexuality* (sexuality becomes public, it is not only intimate, human sexuality is publicly presented in the media, everyone has access to sexual content – including children, etc.) and in *interpersonal relationships* (sexting is becoming a regular part of interpersonal relationships or part of courtship, flirting, etc.).

Although the effect of sexting on human relationships may also be positive, it poses many risks which we will address in greater detail.

a. Risks associated with Sexting

Sexting is particularly risky because the *victim provides potential attackers with sensitive material* that can be misused for various forms of cyber-attacks (such as cyber bullying, targeted manipulation, extortion, etc.). This material can circulate in the Internet environment for several years after its acquisition, and it is very difficult to remove it from this environment. Even after removing the

material from specific websites, the victim can never be totally sure that a repeated attack will not occur in the future (Kopecný et al., 2014a).

Another risk associated with sexting is the loss of social reputation and prestige. In connection with this, for example, the victim has problems with gaining or retaining employment or social relations; in the pubescent community, he/she is referred to as a prostitute, publicly demonstrated, insulted and attacked. Sexting thus moves into cyber bullying with increasing attack intensity. In many cases (e.g. cases of Jessica Renee Logan – 2008, Hope Witsell – 2009, Emma Jones – 2010), cyber bullying associated with sexting ended with suicide of the victim (Kopecný et al., 2014a). In a number of cases, sexting also directly led to the dismissal of a person who was caught on intimate materials – there are many cases of dismissal for such reasons, related to teachers, fire-fighters, police officers, journalists, etc.

A very dangerous risk is the so-called *sextortion*, i.e. extortion using intimate materials of the victim (AÇAR, 2016; Flores et al., 2015; Kopecný, 2017). As part of this process, the child is first manipulated to provide his/her Internet friend (offender) with their own intimate materials which are then used to extortion and threats. The extortionist's goals may be different – a pursuit of getting more intimate materials (child pornography) from the child, a pursuit of raising money, a pursuit of compelling the child to meet in the real world, etc. When a child is extorted, the extortionist is usually an adult person masked by a child's identity. In most cases, the extortionist are men (Kopecný, 2014).

Sexting can lead to *serious health problems*, such as emotional and psychological anxiety (Gordon-Messer et al., 2013; Sadhu, 2012), which may result in suicidal tendencies (Curnutt, 2012). Some studies (Benotsch et al., 2013) conducted in American schools show that *sexting is associated with risky sexual behaviour, especially with the number of sexual partners and the occurrence of unprotected sex*. Other studies (Dake, Price, Maziarz, & Ward, 2012) also demonstrate a *link between sexting and the use of addictive drugs*, especially marijuana, cigarette smoking and fitful alcohol consumption.

In many cases, *perpetrators of sexting may be sentenced to imprisonment* – intimate photos or videos often capture children and fall into the field of the so-called child pornography; the law forbids both the production of these materials and their possession and further dissemination. However, children are usually not sentenced to imprisonment when involved in the distribution or production of these materials (Wolak et al., 2012). Instead, their punishment is done through *community service, home prisons, probation supervision*, etc.

b. Options of protection and defence in the online environment

In order to fight the risky impacts of sexting on children or adults effectively, it is essential to focus on prevention. Above all, it is important to explain to the child (and adult) the value of its personal data and how easily they can be misused in the online environment. In particular, it is necessary to clarify the dangerousness of intimate photos or videos that capture the exposed human body together with the human face. Photos/videos of the human face allow an easy and quick identification and can be effectively misused for disparagement or direct extortion and threats. Children must realize the importance of withstanding the pressure of online users (or their surroundings) to ensure their own safety.

If the intimate material has already leaked, it must be ensured that dissemination of the material through the Internet is stopped or that its spread is at least slowed down. There are different possibilities: blocking of the materials, reporting users who further disseminate the materials, blocking of specific profiles or discussion groups, etc. The users whose intimate materials have

leaked into the online environment, however, will never be sure that their erotic photos/videos are no longer spread through the Internet. Intimate materials can also appear with a longer time span – e.g. many years since they were acquired. They can emerge, for example, in a situation where the person captured on the material is publicly known and users are actively seeking information about that person on the Internet.

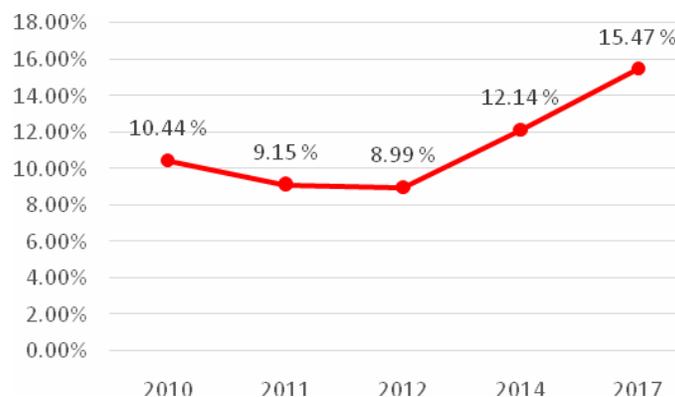
As part of our research, we also asked children who is their primary source of information about sex. For boys, the primary source of information about sex is Internet (49.89%); for girls, this primary source is still their mother (46.4%). Only 18% of boys and 11% of girls ask their father for information about sex and about one-third of the children would turn to the teacher. Nearly half of the children surveyed confirm that they have passed sex education at school; nevertheless, this education mainly focused on topics related to human physiology and physical health (pregnancy, contraception, sexual diseases) while the psychological level of interpersonal relationships is not addressed within common education in the majority of schools. It is therefore essential that primary school education is also geared toward the new ways of communicating and acquainting in the online environment and the associated risks. However, a highly important factor is mainly the influence of the family which is able to ensure and support the prevention of risky behaviour already before the children start their school attendance.

Conclusion

The research, *Sexting and Risky Acquaintances Made by Czech Children in Cyberspace* reveals a high increase in the number of children who send their own intimate materials to others in the Internet environment and who thus practise the so-called sexting. More than 15% of Czech children send their intimate materials to other persons. There can be a number of causes – a shift in perception of human sexuality, a change in the functioning of partnerships in the online environment, conformity, insufficient prevention (on the part of parents and schools), as well as inappropriate patterns that children mimic.

In comparison with the data from the set of studies *Danger of Internet Communication 1-5* of the Pedagogical Faculty of Palacky University in Olomouc, it is possible to state that sexting among children is steadily increasing (the increase by 41.8% to the current 15.47% compared with 2012).

**Figure 4. Progression of Sexting
in the population of Czech children in 2010-2017 (sending)**



Source: Data from the research: *Danger of Internet Communication III-V* and *Sexting and Risky Acquaintances made in the Online Environment*

If children get into problems associated with sexting, they inform their parents about it only in 38% of cases; in 32.9% of cases, they do not tell anyone. Their confidants mainly include their friends. The situation is very sensitive for the victims and they do not want their intimate materials to leak uncontrollably into the internet environment, e.g. in the public erotic galleries. On the other hand, they want to solve the problem and therefore they contact anonymous counselling centres (e.g. Safety Lines, etc.). Very few children would turn to the police with the problem of intimate material leakage (0.25%, 12 children from 4878).

Although children does not practise sexting actively, they still encounter intimate materials in the Internet environment – over 40% of children (40.96%) confirm that they have received a provocative erotic or pornographic photo in the internet environment, on which someone is partially undressed or totally naked. One fifth of children (21.51%) also confirm that they have received erotic or pornographic videos from their Internet friends. Likewise, more than a fifth of children experienced a situation where another person exposed himself/herself in front of them over webcam (e.g. through an erotic video chat).

Sexting is most often practised through the Facebook social network (65%), followed by Facebook Messenger (54.13%), Snapchat (50.93%) and Instagram (12.40%), or through their combination. Other tools used for to distribute intimate materials include WhatsApp Messenger, Skype or traditional SMS/MMS and e-mails.

However, sexting is not always practised voluntarily; 7% of children confirm that they have been forced to spread their own intimate material by another person – e.g. by extortion or threatening. Here we are talking about the so-called sextortion, i.e. extortion using intimate materials of the victim (AÇAR, 2016; Flores et al., 2015; Kopecný, 2017). The extortionist's goals may be different – money, a pursuit of gaining further intimate materials, a pursuit of compelling the child to meet in the real world, etc.

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