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EVIDENCE SUMMARY

PERILS OF THE INTERNET

LAURI HIETAJÄRVI

Summary

- Internet use also involves some risks. Internet users may encounter phenomena with significant harmful effects on their wellbeing.
- Nevertheless, harmful phenomena are rare.
- Strengthening media literacy reduces risks.

In which area is there still a lack of knowledge?

- The definitions of the threats vary and they are inadequately reported. As a result, the prevalence of various threats is not very well known.
- Causal relationships are unknown.

Recommendation

- There is need to increase qualitative understanding of the phenomena.
- The concepts must be used more accurately.

CYBERBULLYING

Over the past decade, 24 different definitions have been given to cyberbullying¹. Based on these, cyberbullying can be determined as the use of information and communication technology to harm, harass, insult or embarrass other people, in a deliberate and repeated manner².

Based on estimates, the prevalence of becoming victimised by cyberbullying ranges from 15 to 35 per cent

internationally³, but the most recent statistics reveal less concerning results. For instance, of the pupils in years 8 and 9 of basic education who responded to the 2017 School Health Promotion study by the Finnish Institute for Health and Welfare, 25.2 per cent had been bullied at least once during the previous year, but only 28.9 per cent of these respondents reported that the bullying occurred online or via mobile phone. As a result, around 7 per cent

1 Peter & Petermann, 2018

2 Peter & Petermann, 2018

3 John et al., 2018

of young people had encountered cyberbullying at least once during the school year. 5.8 per cent of the respondents in 2017 and 5.5 per cent in 2019 had encountered weekly bullying (including cyberbullying)⁴. According to a follow-up study conducted in two Finnish cities, 3.5 per cent was experiencing cyberbullying, while 18.2 per cent had been subject to so-called normal bullying⁵. According to a smaller data set collected from a single city, 18 per cent had experienced cyberbullying, 20.6 normal bullying and 11 per cent both kinds of bullying⁶. The results of the most recent Global School-based Student Health Survey are as follows:

SHARES OF PUPILS WHO HAVE BEEN SUBJECTED TO CYBERBULLYING		
	girls	boys
total global average	14%	12%
Finnish 11-year-olds	16%	14%
Finnish 13-year-olds	17%	13%
Finnish 15-year-olds	15%	13%

Source: WHO's Global School-based Student Health Survey, 2020

There is variation in the numbers, and forming a clear picture is difficult due to the aforementioned lack of a common definition, the poor quality of research, and the absence of a summary of long-term research and qualitative case descriptions.

A medium-sized effect with varying accuracy has been found between cyberbullying and worse wellbeing and self-esteem, more self-destructive behaviour and other challenges in peer-to-peer interaction⁷. For instance, there is a medium-strong relation between cyberbullying and suicide ideation, depression and anxiety⁸. However, this is not a unidirectional relation,⁹ and the situations are not

identical. Young people with mental health or wellbeing challenges may also be more likely to be subjected to bullying. This is particularly the case with chronically ill or disabled people: the estimate of prevalence varies between as much as 2.0 and 41.7 per cent in this group¹⁰. There is a clear but weaker relation between cyberbullying and self-esteem, physical symptoms and externalizing symptoms, such as self-harm or substance abuse. Compared to non-bullied young people, those subjected to cyberbullying have an around twofold risk for self-harm and, similarly, those who self-harm are at a risk of being subjected to bullying¹¹. However, it appears that active online communications do not particularly expose young people to online bullying. By contrast, according to a study based on the WHO's Global School-based Student Health Survey, the young people most active in using online messaging services have the highest number of close friends and they encounter the least bullying, and exclusion from these group chats appears to be a common form of bullying¹². According to a Finnish study, becoming a victim of both normal bullying and cyberbullying appears to be most harmful¹³.

There is a clear and significant relation between cyberbullying and worse wellbeing outcomes. Practising socioemotional skills, media literacy, and media behaviour appear to succeed in combating cyberbullying¹⁴. In managing bullying cases and helping victims, it is also key to consider that in each cyberbullying situation, bullies and victims are different and impacts vary¹⁵. Although the consequences of cyberbullying are significant in the worst cases, more serious cyberbullying appears to be rather rare. Overall, the biennial monitoring of the School Health Promotion study indicates that bullying is becoming less common—or is increasingly likely to fall out of the reach of research methods¹⁶.

4 Finnish Institute for Health and Welfare (THL), School Health Promotion study

5 n = 2,061, Tiiri et al., 2019

6 n = 700; Uusitalo-Malmivaara & Lehto, 2016

7 Kwan et al., 2020

8 Fisher et al., 2016

9 Kwan et al., 2020

10 Alhaboby et al., 2019

11 John et al., 2018

12 Bjereld et al., 2017

13 Tiiri et al., 2019

14 Hutson et al., 2018

15 Peter & Petermann, 2018

16 Haaste, 2019; THL, 2020

REVIEWS AND META-ANALYSES EXAMINING CYBERBULLYING

Source	Type	No. of studies included	No. of participants
Kwan et al. (2020)	review summary	19 reviews	(unknown)
John et al. (2018)*	meta-analysis	26	156,384
Fisher et al. (2016)*	meta-analysis	55	257,678
Hutson et al. (2018)	systematic review	23	(unknown)
Peter & Petermann (2018)	systematic review	24	(unknown)
Alhaboby et al. (2019)	systematic review	10	3,070

*Also included in a summary by Kwan et al.

SEXUAL HARASSMENT AND OFFENCES

Although most of sexually explicit messaging, i.e. sexting, involves normal peer-to-peer interactions¹⁷, it may also contain some risks. When assessing risks, a distinction should be made between consensual behaviour and non-consensual activities and criminal offences¹⁸. Around 20.3 per cent of young people have been non-consensually exposed to sexual content and 11.5 per cent to sexually explicit suggestions¹⁹. Of the young people, 14.8 per cent had sent sexually explicit messages, i.e. sexted; 27.4 per cent had received such messages. 12

per cent had shared messages without the recipient's consent, and 8.4 per cent had unwillingly received messages²⁰. According to the 2019 School Health Promotion study, 20.6 per cent of Finnish pupils in years 8 and 9 of basic education had experienced disturbing sexual propositioning or harassment, and 16.9 per cent had experienced these via their mobile phone or online²¹.

Increasing internet use had also enabled new forms of sexual offences, such as sexual predation targeting children known as grooming²². While the number of reports related to grooming has been growing, the phenomenon is known poorly so far. The dearth of theory

REVIEWS AND META-ANALYSES EXAMINING SEXUAL HARASSMENT AND OFFENCES

Source	Type	Topic	Number of studies	No. of participants
Madigan et al. (2018a)	meta-analysis	non-consensual exposure to sexual content or suggestions	40	55,921
Madigan et al. (2018b)	meta-analysis	sexting	39	110,380
Mori et al. (2019)	meta-analysis	sexting	16	35467
Fernet et al. (2019)	systematic review	online domestic violence (women)	32	13,143
Nikolovska (2020)	systematic review	grooming	135	(unknown)

17 Mori et al., 2019

18 Krieger, 2017

19 Madigan et al., 2018a

20 Madigan et al., 2018b

21 Finnish Institute for Health and Welfare (THL), School Health Promotion study

22 Nikolovska, 2020

and research specifically focused on the online environment is a key problem of grooming research, as sexual grooming online is explained and partly created by the special characteristics of the online environment²³. Between 1 and 78 per cent of young women have been subjected to harassment online or in person or other domestic violence. The great variation in the estimates is due to a lack of overall definitions.²⁴ Key aspects in preventive work include mindful decision making online, media literacy and ensuring confidential information flow between children and young people, and their guardians and the authorities²⁵.

OTHER PERILS

Other harmful marginal areas are also found online. For instance, the active social media use of 18–25-year-

olds appears to be moderately related to alcohol consumption²⁶, which can be partly explained by peer-to-peer interactions. The young people spending more than average time on digital media are also more likely than others to be exposed to so-called harm-advocating content (pro-self-harm, pro-eating disorder and similar content²⁷) or cybercrimes, which are related to poorer subjective wellbeing²⁸. Nevertheless, the harm-advocating content does not appear to considerably increase self-destructive behaviour²⁹, but often has the opposite effect. Correspondingly, 63 per cent of Finnish young people or young adults had encountered online hate speech, and those with prior experiences of being victimised found this more disturbing than others³⁰. Overall, measures developing media literacy work fairly well in preventing the impacts of harm-advocating content or engaging in risky online behaviour³¹. ■

23 Nikolovska, 2020

24 Fernet et al., 2019

25 Nikolovska, 2020

26 Savolainen et al., 2020

27 see e.g. Keipi et al. 2017

28 Kaakinen et al., 2018

29 see e.g. Dyson et al., 2016

30 Savimäki et al., 2018

31 Vahedi et al., 2018

An evidence summary is a systematic review that summarises the latest and strongest evidence related to a specific topic. Instead of forming arguments or speculating, evidence summaries are as objective as possible. They present the consensus of the researcher community, knowledge of the strongest level of evidence. An evidence summary must pass an assessment process. The evidence synthesis method has been described in more detail on page 17–18.

This evidence summary is based on a list of international systematic reviews compiled by an information specialist based on a systematic information search and Finnish case studies on the effects of digital media on young people (more detailed description of the information search on p. 20–21). For this synthesis, reviews and studies concerning the indirect risks related to media use, related definitions, prevalence and connection with wellbeing or health were systematically selected from the list based on their title and abstract. Sources such as those providing an overall description of an individual's problematic media use or media use in general were not included. Another criterion for selecting reviews providing evidence included a low risk of bias. In other words, the reviews had to include assessment of the level of evidence in original studies, and the methodological level of Finnish original studies had to be at least acceptable (for the assessment criteria, see p. 15). Moreover, this synthesis refers to theoretical discussion papers and selectively to the latest high-quality international studies. The evidence summary was assessed by Professor Kimmo Alho, University Lecturer Janne Matikainen, Professor Mika Pantzar and Professor Katariina Salmela-Aro (all from the University of Helsinki).

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* = quality-assessed Finnish study

** = quality-assessed review

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