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# Youth online behavior, risks and avenues for mitigating them



**National report: Finland**



Co-funded by  
the European Union



Project Title: **Action-Based Approach in Addressing and Mitigating Risks of Young People in Online Social Networks**

Agreement Number: **2021-1-R001-KA220-YOU-000028688**

EU Programme: **KA2 – Cooperation partnerships in youth**



This document has been produced with the financial support of the 'ERASMUS+ KA220-YOU - Cooperation partnerships in youth' programme of the European Union. The content represents the views of the author only and is his/her sole responsibility. The European Commission does not accept any responsibility for use that may be made of the information it contains.

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# I. Introduction

The national report for Finland for the project *RISE - Action-Based Approach In Addressing And Mitigating Risks Of Young People In Online Social Networks* (Project No 2021-1-RO01-KA220-YOU-000028688) includes analysis of the survey results conducted with youth, interviews with experts and desk research based on research reports, studies, academic and media articles on fake news and misinformation regarding youth online behavior and the risks associated with the use of online social networks in the post-COVID-19-era in Finland. Based on the extensive research, the report will also provide conclusions and recommendations for the design of trainings programs and a game aimed at improving young people's ability to protect themselves from the identified risks.

The target groups of the report are young people between the ages of 16-30, who use the internet and social networks, as well as youth workers and youth trainers.

The research questions examined in the course of this report are the following:

- Which are the main activities and risk factors making young people vulnerable when accessing the internet?
- Which risks associated to the use of internet, particularly social networks are manifested the most in Finland?
- How can a safe online environment for young people be achieved?
- What should be the design and content of an online game combating online risks, fake news and other types of disinformation among youth?

The analysis introduces data on social media use, cyber threats, and cyber-crimes, media literacy, critical thinking and media education in Finland.

In terms of the survey conducted among young people, the purpose was to find out about their social media use, preventive behavior, attitudes towards current events and online experiences as well as their level of critical thinking when faced with false information.

The interviews were used to assess the manifestation of the risks associated with online use among young people, and the trends recognized by the experts in their work regarding youth online behavior as well as their recommendations.

## II. Methodology

The research was conducted using the RISE online survey regarding youth online behavior and the risks associated with the use of online social networks in the post-COVID-19-era, as well as in-depth interviews with experts.

The RISE questionnaire used in the survey was inserted in google forms and sent mainly by email to youth organizations, youth centers and experts working with young people in Finland, especially in the Helsinki and capital area, who shared it with the young people they work with. A total of 76 responses were collected. However, due to some data cleaning issues, the sample size analysed in the analysis section is 68 respondents.

In addition to the survey, LFI conducted four one-to-one interviews with experts working with young people. All respondents had previous knowledge and experience on the topic of research. One interviewee was a social worker, another was a child welfare social worker, the third interviewee was a youth worker in a community centre and fourth respondent was a theater director working with young migrants. They all had knowledge about the online behavior of young people and the risks of online social networks in the post-COVID-19-era, through their work with young people.

### III. Literature Review

#### 1. Finnish youth and social media

According to Statistics Finland <sup>1</sup>, all Finns aged 16 to 24 used the Internet regularly and 98 per cent of them used it several times a day. All Finns aged 25 to 34 used the Internet regularly and 99 per cent used it several times a day. Most of them had experience in online shopping and almost a half of the age group ordered food online. In 2021, the five most popular e-commerce product groups were clothing, shoes, accessories, restaurant portions delivered home, watching or downloading movies and TV series on the web, and listening to music on the web. 35-42 % had used the Koronavilkku app regularly (Finnish Covid-19-health app). These data appear in the Statistics Finland's 2021 survey on the use of information and communications technology by individuals.<sup>2</sup>

According to the 2019 survey, 95 percent of young people aged 13 to 29 years in Finland stated that, for them social media is a way to spend time. The majority of young people had experienced feelings of togetherness, accomplishment or peer support through social media, while roughly 47 percent associated feelings of sadness with the use of social media.<sup>3</sup>

According to a survey carried out by Merikivi et al. Among young people aged 7-20, the smart phone is the device that children and young people use the most to access the internet – the majority of all young people over the age of 10 who took part in the survey estimated that most of their internet usage is done on a smart phone. Young people are versatile users of the internet, even though many of them do not see themselves as such. The majority of young people feel

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<sup>1</sup> Statistics Finland. 2021. Use of information and communications technology by individuals 2021.

[https://www.stat.fi/til/sutivi/2021/sutivi\\_2021\\_2021-11-30\\_tie\\_001\\_en.html](https://www.stat.fi/til/sutivi/2021/sutivi_2021_2021-11-30_tie_001_en.html)

<sup>2</sup> Statistics Finland. 2021. Use of information and communications technology by individuals 2021.

[https://www.stat.fi/til/sutivi/2021/sutivi\\_2021\\_2021-11-30\\_tie\\_001\\_en.html](https://www.stat.fi/til/sutivi/2021/sutivi_2021_2021-11-30_tie_001_en.html)

<sup>3</sup> Statista. 2019. Social media use experiences of young people in Finland 2019.

<https://www.statista.com/statistics/601977/experiences-of-social-media-use-among-young-people-in-finland/>

that they do not spend too much time online. According to this study, the majority of the time spent online by all age groups is spent reading or watching content that others have produced, searching for information on different topics and following current events. Teenagers are also particularly active in taking part in private discussions online.<sup>4</sup>

According to an OECD report, as most countries implemented social distancing and other methods to contain the virus during the pandemic period, youth organizations were concerned about the impact of COVID-19 on mental well-being, employment, earnings, disruptions to education, family relations and friendships, as well as the limitation to individual freedom. Many respondents also expressed concerns about accessing reliable information.<sup>5</sup>

More than 1.5 billion children and youth around the world were affected by the closure of schools and universities, changing their way of living and learning drastically. According to an OECD study across 59 countries, it was evident that despite the commitment of schools and teachers in ensuring that children had access to online education during the pandemic, not all students had consistent access to education – according to the study, most countries provided alternative learning opportunities, but only about half of the students were able to access all or most of the same courses as they would have in a school setting<sup>6</sup>.

As schools were closed, the quality of the home learning environment became even more important. Not all young people had the same access to electronic devices and internet access, which resulted in amplifying inequalities. For example, young people from less affluent backgrounds were less likely to have access to digital learning resources and less support from parents in home learning. Across OECD countries, more than one in ten 15-year-olds from

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<sup>4</sup> Merikivi, Jani; Myllyniemi, Sami & Salasuo, Mikko. 2016. Media hanskassa – lasten ja nuorten vapaa-aikatuutkimus mediasta ja liikunnasta 2016. <https://www.youthres.fi/publications/abstracts/a-grip-on-media>

<sup>5</sup> OECD. 2020. OECD Policy responses to Coronavirus. Youth and COVID-19: Response, recovery and resilience report. <https://www.oecd.org/coronavirus/policy-responses/youth-and-covid-19-response-recovery-and-resilience-c40e61c6/>

<sup>6</sup> OECD. 2020. OECD Policy responses to Coronavirus. Youth and COVID-19: Response, recovery and resilience report. <https://www.oecd.org/coronavirus/policy-responses/youth-and-covid-19-response-recovery-and-resilience-c40e61c6/>



disadvantaged schools did not have a peaceful place for self-study nor an internet connection at home, and one in five did not have access to a computer to do their studies <sup>7</sup>.

Multiple studies reported social isolation due to COVID-19 restrictions to be negatively associated with child and adolescent mental health outcomes. Many children felt they were missing out on usual daily activities and had lost relationships with peers, leading to increased anger, worry, helplessness, depression, loneliness, and other negative emotions and experiences. Many children found online learning to be difficult due to the lack of interaction with teachers, schoolmates, and friends. Esposito et al., (2020) observed that the change in routine had a greater negative impact on younger children (aged 11-13) compared to older children (aged 14–19). <sup>8</sup>

In contrast, Esposito et al., (2020) noted that 25% of girl and 19% of boy adolescents in the survey stated that their relationships had improved throughout the pandemic, and some said they were able to maintain contact with friends and reshape their social habits through online communication <sup>9</sup>.

Social media platforms, such as TikTok, can tell a lot about young people's everyday lives and how they experience online learning. According to the research, they found online course work overwhelming during the pandemic and sought support from their teachers, and provided and received support from peers through online platforms. TikTok is a fairly new and very popular

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<sup>7</sup> OECD. 2020. OECD Policy responses to Coronavirus. Youth and COVID-19: Response, recovery and resilience report. <https://www.oecd.org/coronavirus/policy-responses/youth-and-covid-19-response-recovery-and-resilience-c40e61c6/>

<sup>8</sup> Ladak, Amilya; Wu, Judy; Vossen, Caralyn; Stewart, Evelyn; Dove, Naomi; Long, David & Snell, Gaelen. 2021. Mental health impacts of the COVID-19 pandemic on children and youth. <https://acamh.onlinelibrary.wiley.com/doi/full/10.1111/camh.12501>

<sup>9</sup> Ladak, Amilya; Wu, Judy; Vossen, Caralyn; Stewart, Evelyn; Dove, Naomi; Long, David & Snell, Gaelen. 2021. Mental health impacts of the COVID-19 pandemic on children and youth. <https://acamh.onlinelibrary.wiley.com/doi/full/10.1111/camh.12501>

platform among young people around the world and it became even more important during the pandemic, for sharing fun content and everyday experiences.

Indeed, the only issues that COVID-19 crisis brought to school education were not related to accessibility and connectivity, but also digital literacy and the independent learning skills needed in order to successfully participate in online learning, as well as home environment needed for studying (e.g. quiet rooms, space) often pose problems in low-income families. Social media fulfills significant needs related to belonging, identity experimentation, self-expression, social connection, and political socialization of youth, but on the other hand, social media also brings up risks and challenges for youth, including privacy issues, self-esteem and individuality issues.<sup>10</sup>

**Prevalence of Internet usage and certain purposes of use in 2021, percentage of the population**

	Used the Internet <sup>1)</sup>	Usually uses the Internet several times a day	Online shopping <sup>1)</sup>	Bought food portions from restaurants directly or through courier services <sup>1)</sup>	Seen inaccurate or suspicious information or content on news sites or on social media <sup>1)</sup>	Used the Koronavilkku app regularly
16-24	100	98	73	43	84	35
25-34	100	99	74	43	78	42

Source: Statistics Finland<sup>11</sup>

According to “Social media and youth” survey published by Ebrand, the use of social media can help young people in several ways: it can help young people to find like-minded people and it can

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<sup>10</sup> Literat, Ioana. 2021. “Teachers Act Like We’re Robots”: TikTok as a Window Into Youth Experiences of Online Learning During COVID-19. <https://journals.sagepub.com/doi/full/10.1177/2332858421995537>

<sup>11</sup> Statistics Finland. 2021. Use of information and communications technology by individuals 2021.

[https://www.stat.fi/til/sutivi/2021/sutivi\\_2021\\_2021-11-30\\_tie\\_001\\_en.html](https://www.stat.fi/til/sutivi/2021/sutivi_2021_2021-11-30_tie_001_en.html)

give ideas and tools for youth to find and build their identity and improve their self-esteem. Research about young adults (aged 18 to 31) revealed that social media use can have a negative impact upon study success: the more time a young adult spends on social media, the more social media has a negative impact on their success in their studies.<sup>12</sup>

The survey published by Ebrand observed the use of social media among Finnish youth aged 13 to 29. On average, youth use social media 15-20 hours per week. Nowadays schools are establishing rules for teen social media and mobile phone use. Most often young people use the Internet and social media at home but also at school, outside and with friends. The most popular social media services among Finnish young people are WhatsApp, YouTube, Instagram, Spotify, Snapchat, TikTok, Facebook, Discord, Pinterest, Jodel and Steam. Whatsapp usage rate is 93%, for YouTube 88%, for Instagram 82% and for Facebook 46% of respondents.

The survey also identifies some trusted resources, such as public news website Yle.fi, trusted by 88% of the respondents. 73% of the respondents also think that local newspapers' digital contents are reliable news sources. Wikipedia is trusted by 44 % of the respondents.<sup>13</sup>

## 2. Cyberbullying and cybercrime

Online bullying or cyberbullying – i.e. sending, posting, or sharing negative, false, or malicious content about someone else online, including private information – and cyber-crimes – i.e. committing a crime targeting someone's finances or security through online means – are common phenomena in the digital age. It is often challenging to get help or advice when faced with such problematic situations. Finnish online service "Someturva" offers psychological and legal help for people who faced online bullying or other cyber-crimes. According to the survey

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<sup>12</sup> Tanner, Niina; Radwan, Rami; Korhonen, Helmi & Mustonen, Terhi. 2020. Sosiaalinen media, ongelmallinen sosiaalisen median käyttö ja someriippuvuus. Sosiaalipedagogiikan säätiö. <https://somerajaton.fi/wp-content/uploads/sites/17/2020/10/Somekatsaus.pdf>

<sup>13</sup> Ebrand. 2022. Some ja nuoret -katsaus. <https://www.ebrand.fi/some-ja-nuoret/>

over half of the Finnish population has experienced being a victim of cyber-crime. <sup>14</sup> Most common online crimes are sexual and other type of harassment. Young online users have often faced online bullying or other type of online harassment. Almost 34% per cent of survey respondents have been a victim of some kind of online bullying. A comparison of the survey data between 2016-2022, revealed that online bullying has increased by 20%. <sup>15</sup>

Common types of online harassment include: spreading private information and/ or lies about someone, name-calling, sexual harassment, threatening, persecution and identity thefts. According to Someturva, most harassment happens on social media, as opposed to other forums.

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### 3. Fake news

In the survey on the use of information and communications technology by individuals 2021, data were collected on checking the truthfulness of information on the Internet. It is common to come across suspicious or false information and content on the Internet. During the past three months prior to the survey, 63 per cent of Finns had encountered information and content on the Internet which they considered false or suspicious. Young people found suspicious content more often than old people. 84 % of youth aged 16 to 24 and 78 % of young adults aged 25 to 34 had seen inaccurate or suspicious information or content on news sites or on social media.<sup>17</sup>

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<sup>14</sup> F-Secure. 2019. Internetissä on haastavaa tunnistaa rikoksen tunnusmerkkejä. <https://www.f-secure.com/fi/press/p/internetissa-on-haastavaa-tunnistaa-rikoksen-tunnusmerkkeja>.

<sup>15</sup> Ebrand. 2022. Some ja nuoret -katsaus. <https://www.ebrand.fi/some-ja-nuoret/>

<sup>16</sup> F-Secure. 2019. Internetissä on haastavaa tunnistaa rikoksen tunnusmerkkejä. <https://www.f-secure.com/fi/press/p/internetissa-on-haastavaa-tunnistaa-rikoksen-tunnusmerkkeja>.

<sup>17</sup> Statistics Finland. 2021. Use of information and communications technology by individuals 2021. [https://www.stat.fi/til/sutivi/2021/sutivi\\_2021\\_2021-11-30\\_tie\\_001\\_en.html](https://www.stat.fi/til/sutivi/2021/sutivi_2021_2021-11-30_tie_001_en.html)

Finland is at the top of the list of European countries deemed the most resilient to misinformation in schools, according to the Media Literacy Index<sup>18</sup>, compiled by the Open Society Institute Sofia. An article published on World Economic Forum Website states Finland, Sweden and the Netherlands are among the top nations of the world that impart digital literacy and critical thinking skills to school children, in order to protect them from the culture of disinformation. Research studies state that a positive correlation was present between resilience to fake news and the level of education. The OSI report also asserts that increased levels of knowledge and better critical-thinking skills diminish the threats imposed by fabricated information.<sup>19</sup>

Finnish fact-checking organisation Faktabaari (FactBar) employs different fact-checking methods at Finish schools and believes good research skills, coupled with better critical thinking skills are vital for school children. It also distinguishes three areas to be aware of: misinformation (faulty information or errors, usually by accident), disinformation (e.g. frauds, someone distributing false information without realising it is false), and mal-information (stories that intend to damage someone's reputation).<sup>20</sup> Faktabaari has even been presented as a good example in American mainstream media, such as CNN<sup>21</sup>. Media literacy forms an integral part of civics education in

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<sup>18</sup> How It Started, How It is Going: Media Literacy Index 2022. 2022. Open Society Institute Sofia.

<https://osis.bg/?p=4243&lang=en>

<sup>19</sup> Tariq, Khadijha. 2020. Finland most resilient to misinformation in classroom milieu. Academia. Pakistan's premier education magazine. <https://academiamag.com/finland-most-resilient-to-misinformation-in-classroom-milieu/>

<sup>20</sup> J.Cord, David. 2022. Educated decisions: Finnish media literacy deters disinformation. This is Finland. Published by Finland Promotion Board. <https://finland.fi/life-society/educated-decisions-finnish-media-literacy-deters-disinformation>; Tariq, Khadijha. 2020. Finland most resilient to misinformation in classroom milieu. Academia. Pakistan's premier education magazine. <https://academiamag.com/finland-most-resilient-to-misinformation-in-classroom-milieu/>

<sup>21</sup> Mackintosh, Eliza. CNN. Finland is winning the war on fake news. What it's learned may be crucial to Western democracy. <https://edition.cnn.com/interactive/2019/05/europe/finland-fake-news-intl/>

Finnish schools. Finnish students study propaganda campaigns, advertising and many other aspects of media.

Finland tops the media literacy index, an annual index of European countries measuring resistance to fake news. Finland's success rests on the teaching of media literacy skills in schools. Finland begins teaching information literacy and critical thinking to children in kindergarten as well as providing media literacy classes for older people. The aim is to make sure that everyone (from students to politicians) can spot various forms of misinformation, disinformation and malinformation.

Media literacy skills are therefore seen as increasingly important. Media literacy is the "ability to critically engage with media in all aspects of life" <sup>22</sup>. Media literacy skills include differentiating facts from opinion and analysis, verifying sources, and understanding how the media works. <sup>23</sup>

Media literacy gained attention as a part of Finnish education in the early 2010s. Following fake news campaigns focusing on immigration, the European Union, and NATO membership, the Finnish Government recognized the need to increase the population's skills to identify digital misinformation. This was done through a cross-sector approach to improve media literacy within Finnish society, with a particular focus on children. <sup>24</sup>

The Finnish national media education policy is implemented by the National Audio-visual Institute and the Ministry of Education and Culture in collaboration with media education professionals. The Department for Media Education and Audiovisual Media (MEKU) is legally tasked with promoting media education, youth media skills and fostering a safe media environment for children, while NGO-run fact-checking service, Faktabaari provides fact-checking and media literacy materials for schools.<sup>25</sup> ).

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<sup>22</sup> Quicke, Audrey. 2020. Media literacy education in Finland. Nordic Policy Centre. [https://www.nordicpolicycentre.org.au/media\\_literacy\\_education\\_in\\_finland](https://www.nordicpolicycentre.org.au/media_literacy_education_in_finland)

<sup>23</sup> Quicke, Audrey. 2020. Media literacy education in Finland. Nordic Policy Centre. [https://www.nordicpolicycentre.org.au/media\\_literacy\\_education\\_in\\_finland](https://www.nordicpolicycentre.org.au/media_literacy_education_in_finland)

<sup>24</sup> Quicke, Audrey. 2020. Media literacy education in Finland. Nordic Policy Centre. [https://www.nordicpolicycentre.org.au/media\\_literacy\\_education\\_in\\_finland](https://www.nordicpolicycentre.org.au/media_literacy_education_in_finland)

<sup>25</sup> Quicke, Audrey. 2020. Media literacy education in Finland. Nordic Policy Centre. [https://www.nordicpolicycentre.org.au/media\\_literacy\\_education\\_in\\_finland](https://www.nordicpolicycentre.org.au/media_literacy_education_in_finland)

## **Media education in Finland**

Media education in Finland has strong traditions, dating back to the 1950s. Before media education, this activity was called education in mass communication, communications education and audiovisual education, but the objectives and practical actions are in many ways similar.<sup>26</sup>

Media education is a part of most administrative procedures, and media education is included in the curricula of different levels and degrees of school education. The implementation of media education is laid out in the Finnish Public Libraries Act, and there is plenty of public and private funding available for it. Furthermore, the National Audiovisual Institute is a public authority that has a statutory duty to promote media education.

The occupational training in various different sectors integrates media education skills training, and it is also possible to study the topic as a minor or major subject or as different courses in Finnish universities. There are many organizations that offer supplementary training in media education and produce materials supporting professional development. The Ministry of Education and Culture also promotes media literacy with support, guidance and other resources.

<sup>27</sup>

The importance of media literacy and promotion of media education is significant in Finland. It is a topic that is frequently brought up in public conversation. The media education initiatives are supported by many of the more general positive traits in Finnish society, including a strong commitment to free speech and trust in the media. Finnish people use different media to a great

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<sup>26</sup> Salomaa & Palsa. 2019. Ministry of Education and Culture. Media literacy in Finland. National media education policy. <https://medialukutaitosuomessa.fi/mediaeducationpolicy.pdf>

<sup>27</sup> Salomaa & Palsa. 2019. Ministry of Education and Culture. Media literacy in Finland. National media education policy. <https://medialukutaitosuomessa.fi/mediaeducationpolicy.pdf>

extent and the attitudes Media use is widespread in Finland, where attitudes toward technology and the media are favorable. Finnish media education is well-known around the world. <sup>28</sup>

In the field of cultural policy, the promotion of media literacy has been supported regularly as a part of the audiovisual policy for over ten years with. The Department for Art and Cultural Policy is also responsible for the performance management of the National Audiovisual Institute, which has an administrative duty to promote media education. In the field of cultural policy, libraries have also long played a key role in promoting citizens' media competence, and library development funds have also been allocated to media education projects and training. A key actor among the associations in the media education sector is the Finnish Society on Media Education. Many of the active organizations in media education in Finland are members of the Society. <sup>29</sup>

Media education is involved in many areas in Finland – schools, early childhood education, youth work, library activities, NGOs, media organizations and the private sector, as well as in art education. <sup>30</sup>

In addition to media literacy, we can talk about the media skills that are needed in modern society. Examples of media skills include “media production, interpretation of media content, skills in using media equipment, information retrieval skills, critical thinking about media-mediated information, media-mediated communication and interaction skills, social and political inclusion and influence through the media, and use of media to support life management and

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<sup>28</sup> Salomaa & Palsa. 2019. Ministry of Education and Culture. Media literacy in Finland. National media education policy. <https://medialukutaitosuomessa.fi/mediaeducationpolicy.pdf>

<sup>29</sup> Salomaa & Palsa. 2019. Ministry of Education and Culture. Media literacy in Finland. National media education policy. <https://medialukutaitosuomessa.fi/mediaeducationpolicy.pdf>

<sup>30</sup> The Finnish Society on Media Education (FSME) website. <https://mediakasvatus.fi/in-english/>



well-being”<sup>31</sup>. Media skills support critical and creative thinking and inclusion. When members of society have strong media skills, this can be seen as strengthening democracy.<sup>32</sup>

#### 4. Online gambling

Online gambling is another risk that young people may encounter. Easy access to the internet and increased use of mobile devices have increased gambling opportunities globally and made it more common and normalized among young people. However, there is not much information about group behavior and norms in online interaction. Participating in gambling activities is popular among young individuals, but it is illegal for minors (youth under 18–21 years of age in the United States and under 18 years of age in Finland, South Korea, and Spain). Research also states that there are different online communities formed around gambling, which encourage young people to gamble, leading to increased youth gambling problems around the world. There are many risk factors that may translate into youth problem gambling, including personality characteristics, especially impulsivity, thrill seeking, and social influence from family and peers or other types of risky behavior.<sup>33</sup> However, in Finland the legislation preventing minors from gambling is very strict. In order to play online gambling games, the person must identify themselves digitally in order to confirm that they are 18 years of age or older, and they must verify their place of residence<sup>34</sup>.

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<sup>31</sup> The Finnish Society on Media Education (FSME) website. <https://mediakasvatus.fi/in-english/>

<sup>32</sup> The Finnish Society on Media Education (FSME) website. <https://mediakasvatus.fi/in-english/>

<sup>33</sup> Savolainen, Iina; Oksanen, Atte; Kaakinen, Markus; Sirola, Anu; Zych, Izabela & Paek, Hye-Jin. 2021. Study about The role of online group norms and social identity in youth problem gambling <https://www.sciencedirect.com/science/article/pii/S0747563221001515>

<sup>34</sup> Ministry of the Interior. Gambling. <https://intermin.fi/en/police/gambling>

## IV. Analysis of the quantitative data

### 1. Demographic characteristics

We received 76 answers to the survey in Finland, but the sample size analysed here is 68 respondents, due to some data purging issues. In terms of age group, 56.6% of the respondents were aged 16-18, 19.7% were aged 19-22 and 15.8 % were aged 27-30. In terms of their gender, 51.3% of the respondents were women and 40.8% were male. Their national background was quite heterogenetic: 85.5 % described themselves as Finns, but there were also those with immigrant backgrounds. According to [Statistics Finland](#) the median monthly full-time salary in Finland was 3,314 euros in 2021, rising from 3,228 in 2020.

The survey results show that 55.3% of the respondents had the annual household income slightly below, about or slightly over 15 000 euros. 40.8 % of respondents had the annual household income notably over 15 000 euros. According to Statistics Finland, men earned a median income of 29 500 € in 2017, while women earned 25 000€.

The majority of the respondents (56.6%) lived in a region of 500 000-100 000 residents, while the rest (28.9%) lived in a region of 100 000 -10 000 residents or in a region of under 10 000 residents (14.5%).

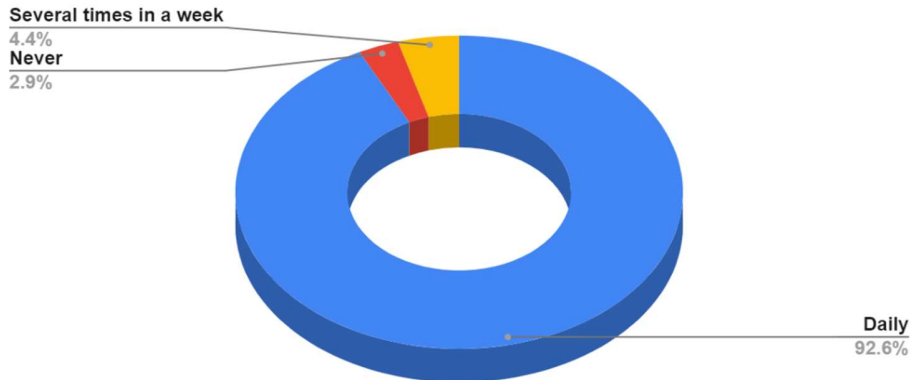
72.4 % of respondents had completed basic education and majority of them were currently students (88.2%). 11.8 % of respondents answered that a high school diploma was their highest education degree. 7.9 % of respondents had completed a university degree and 6.6 % of respondents had completed further education.

### 2. Internet use and online behaviour

According to the survey results, the vast majority of the survey participants used the Internet every day (92.6%).

## Frequency of access to the Internet

Sample size: 68 respondents



The survey results show that the main reasons for which the respondent group uses the Internet are related to entertainment (such as watching films, listening to music or playing games), communication (staying in touch with friends and family, colleagues and teachers), distance work or education (work from home, distance education and study-related purposes) and online shopping (researching products and brands).

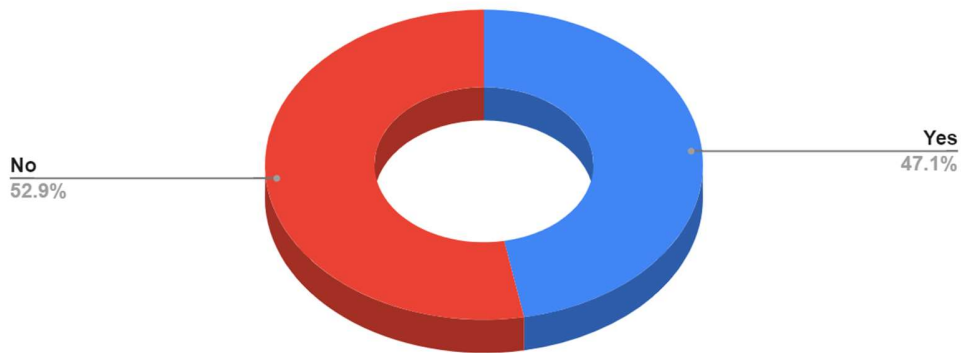
According to the survey, Instagram and TikTok were the most used social media platforms among the respondents. Facebook and Twitter were less popular compared to Instagram and TikTok. When asked how often the respondents communicated with other users via public social media platforms, 67.1% of the respondents declared that every day or at least 1-2 times in a week. Private chats were popular among respondents: 68.4% of the respondent group communicated daily via private chats with other users.

Many of them had the experience of sharing some personal and private information online with unknown people. For example, 36.8% of the survey respondents had shared their personal data (social security number, name etc.) online with unknown people. 47.1% of the respondents had shared intimate photos or private information with friends and partners online.

32.4% of the respondents had shared the information about their location and 25% of the respondents had shared information about their personal and private life online with unknown people. 19.1% had shared intimate photos or videos. 44.1% of the group did not have any experience with sharing their personal data online with unknown people.

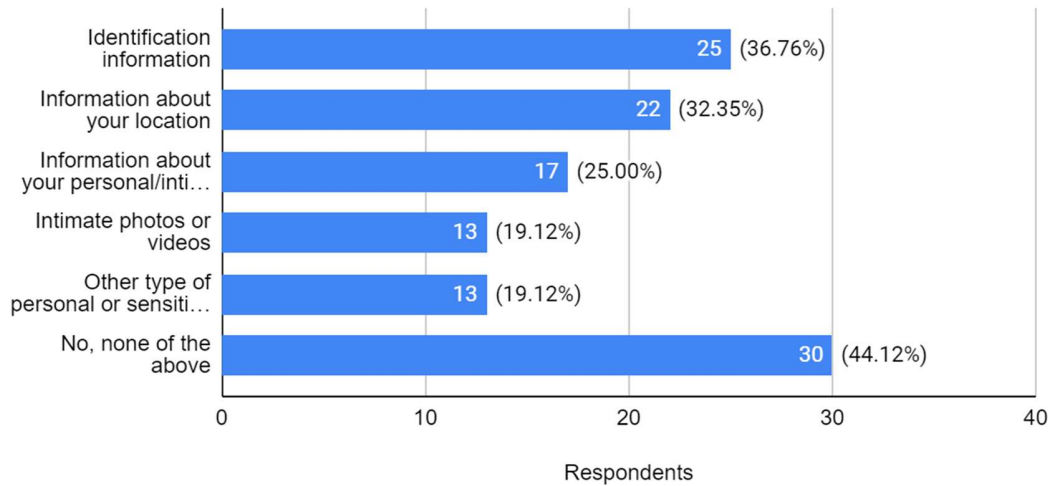
### Sharing of intimate information/images with friends or partners online

Sample size: 68 respondents



## Type of information shared by respondents with online acquaintances

Sample size: 68 respondents

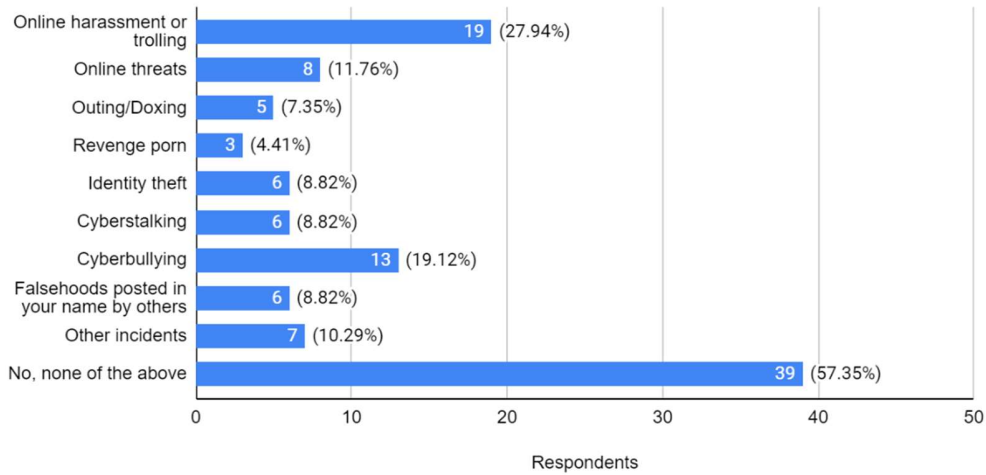


### 3. The manifestation of risks associated to internet use

When asked if they ever experienced any adverse event (hacking, online harassment, misuse of personal information, cyberbullying, stalking, someone sharing their private data online, revenge porn etc.), 57.4% told that they did not have any such experiences. 27.9 % of the respondent group said that they had experienced trolling or online harassment. 19.1% of the respondents declared that they had been a victim of cyberbullying.

### Type of online abuses experienced by respondents

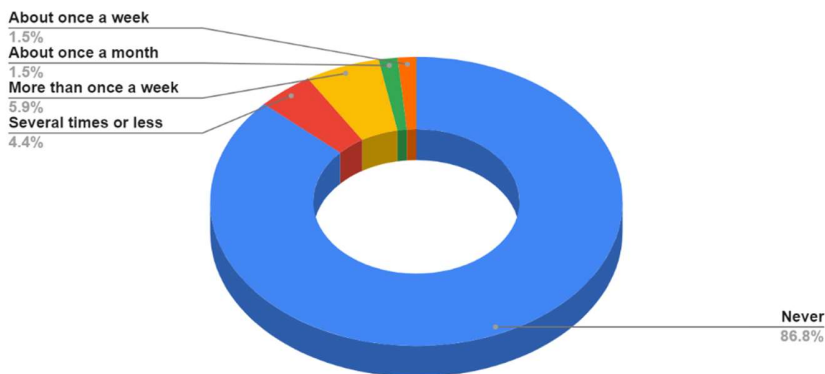
Sample size: 68 respondents



It was rare to try online gambling among the respondent group. 86.8 % didn't have any experiences about online gambling over the past two years.

### Frequency of online gambling over the past two years

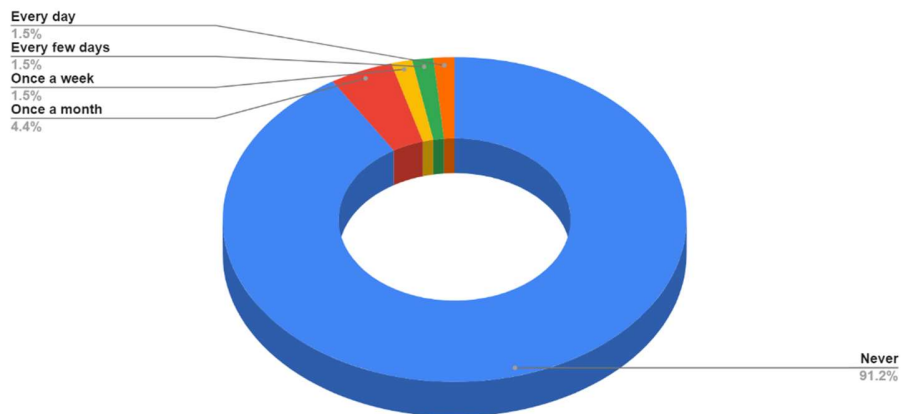
Sample size: 68 respondents



When asked about their 3 main information sources about politics or the latest news and events, the most popular source were the respondents' own social networks (59.2%), international news platforms (55.3%), and friends, colleagues and family (52.6%). National or local news platforms were used notably less for finding information about politics or the latest news compared to the

international news platforms. The vast majority of the respondents (91.2%) did not have any experiences about making public comments on news platforms.

Frequency with which respondents comment on online news platforms  
Sample size: 68 respondents



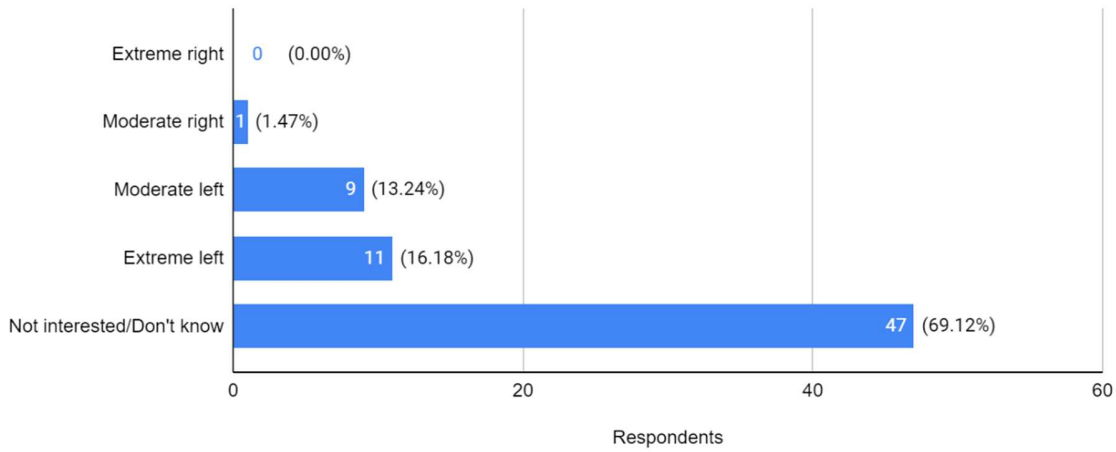
Slightly over half of the respondents said that they are reading and following the news about politics and actual events every day or almost daily. 69.7% of the respondent group followed the news at least once in a week.

The majority of the respondents followed the news quickly and they just read the title and the first chapter of the article (53.9%). Some (28.9%) only looked at the title and image, and nearly 40% (39.5%) read the whole article.

When asked about their personal political orientations, the majority of the respondent group (69.1%) did not know their political orientation or responded that they are not interested in politics. 29.40% of the respondents declared their political views to be on the left of the political spectrum. Only 1.5% of the respondents said that they have a right-wing political orientation, and no respondent self-identified as extreme right-wing.

## Political orientation of the respondents

Sample size: 68 respondents



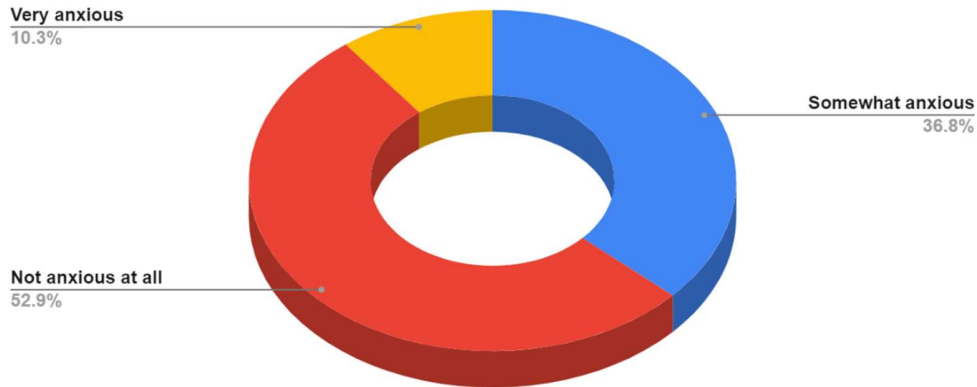
## 4. Attitudes towards current events and correlation with fake news

When testing the level of anxiety following the news in this survey, there was a question related to Covid-19 pandemic as well as the war in Ukraine. Respondents were notably more concerned about the Ukraine-Russia war compared to Covid-19. 47.1% were concerned about Covid-19, whereas 64.7% of the respondent group reported that they are concerned about the Ukraine-Russia war.



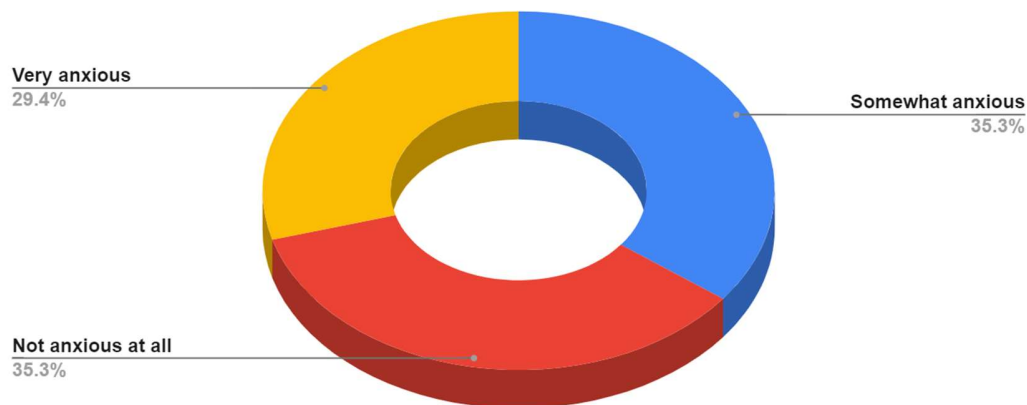
## How anxious respondents felt about the COVID-19 pandemic

Sample size: 68 respondents



## How anxious respondents felt about the war in Ukraine

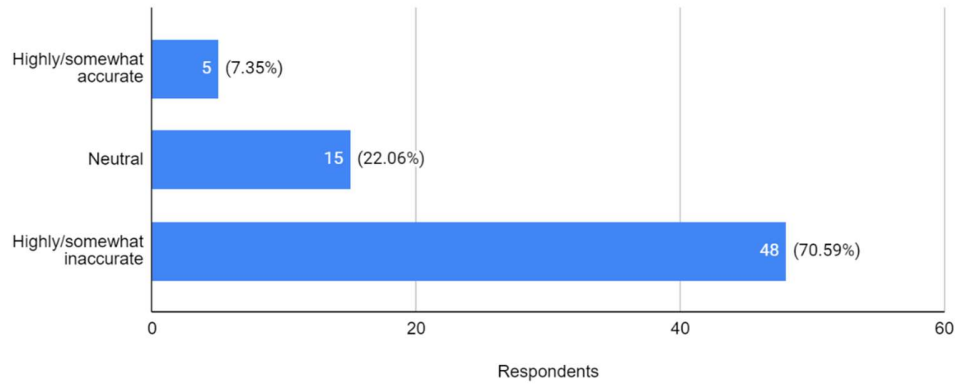
Sample size: 68 respondents



In terms of false information, during the survey the respondents had to determine if 5 different statements were true or false. These statements were related to Covid-19, such as “Covid-19-vaccination can cause infertility.” 61.8% of the respondents estimated that this statement is not or is likely not true. 32.4% of the respondents chose the option “neutral.” Only 5.9% of the respondents estimated that the statement is likely or it is true.

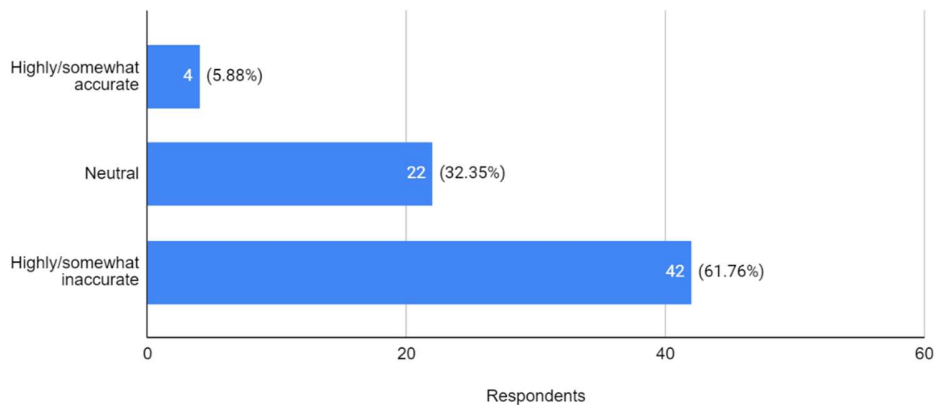
### Accuracy rating: Covid-19 was deliberately created by a state government in a laboratory in order to control world population

Sample size: 68 respondents



### Accuracy rating: Covid-19 vaccines can cause infertility

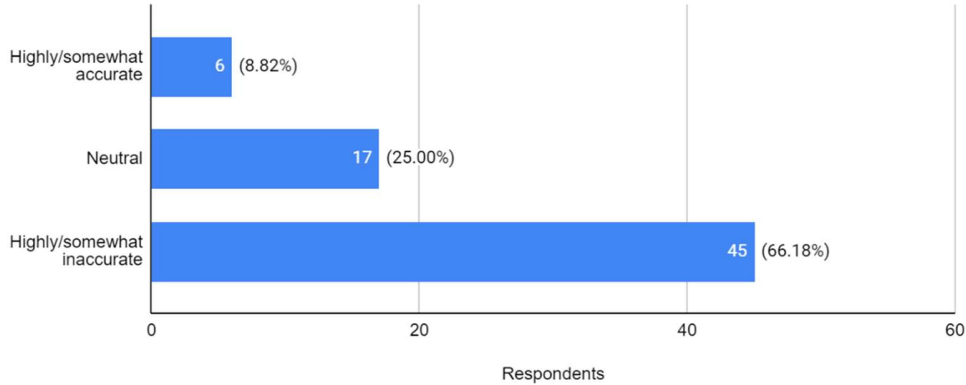
Sample size: 68 respondents



Some statements were related to the Ukraine-Russia war. When the respondents were asked to determine if the statement “the government of Ukraine organized the crimes in Bucha and Irpin because they wanted to get aid from the Western countries.” is true or false, 66.2% of the respondents estimated that the statement is not or is likely not true. 25 % of the respondents chose the option “neutral.” Only 8.8% of the respondents estimated that the statement is likely or it is true.

Accuracy rating: The crimes in Bucha and Irpin, Ukraine were staged by the Ukrainian government in order to order to receive Western aid

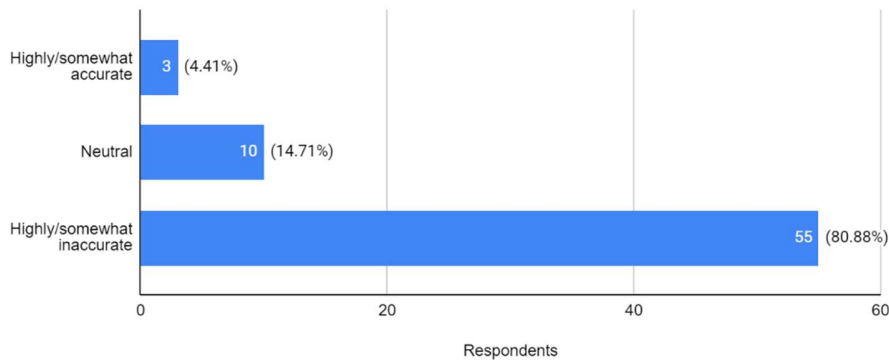
Sample size: 68 respondents



When measuring prejudices against Muslims refugees, the respondents were asked to determine if the statement “most of the Muslim refugees from the Middle East are likely involved in crimes and terrorist attacks” is true or false. The vast majority were critical of the statement (80.9%) and estimated that it is not true or is likely not true. 14.7% of the respondents chose the option “neutral,” and 4.4 % thought that the statement was true or likely to be true.

Accuracy rating: Most Muslim immigrants from the Middle East are likely to be involved in criminal/ terrorist acts

Sample size: 68 respondents

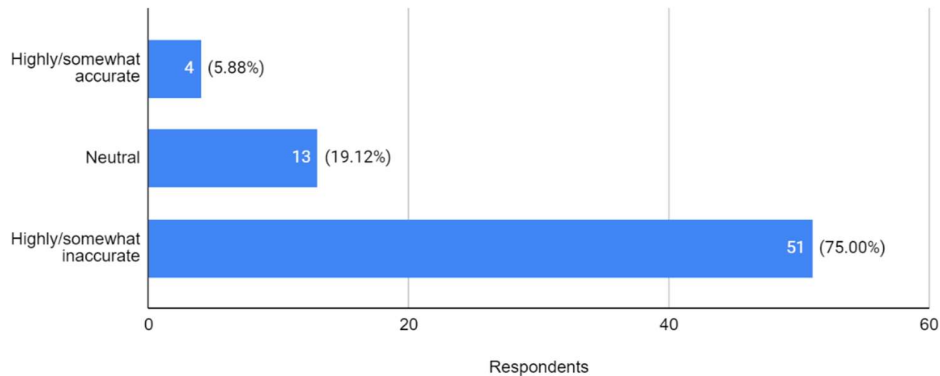


The respondents were also critical towards the statement about global warming: “global warming is not real but the global elite uses it as an excuse to control global natural resources” – 75% of the respondents estimated that the statement is not or is likely not true. 19.1% of the

respondents chose the option “neutral,” and only 5.9 % thought that the statement was likely to be true.

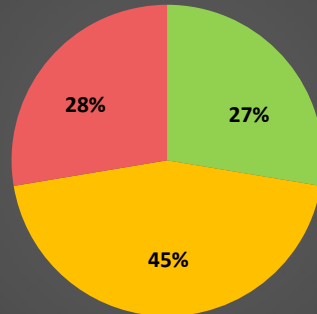
Accuracy rating: Global warming is not real, but it is used as a pretext by Global elites to control global resources

Sample size: 68 respondents



Finally, participants were presented with a short text about the war in Ukraine and were asked to choose between 5 answer options, two of which were correct and three were wrong. Based on their answers, respondents were placed in one of the 3 categories (in order to give each category sufficient consistency, since there were too few responses for many of them) – high critical media reading ability, medium critical reading ability and low critical media reading ability. 21 % of the respondents had high critical media reading ability, 34 % had medium critical media reading ability and 21 % had low critical media reading ability. The rest of the respondents could not be determined based on the answers. Interestingly, the score for high and low critical media reading ability was nearly same, and the score for low media reading ability was fairly high (more than a fifth of respondents), which in our view might be explained by the relatively high sample and varied background of the respondents (68 respondents). Most people had medium critical media reading ability, as expected.

## Critical Reading Skills



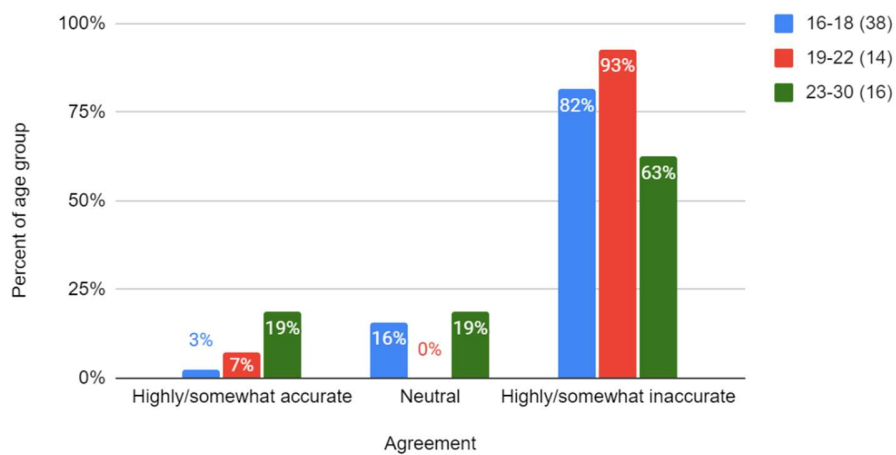
■ High (2-3) ■ Medium (0-1) ■ Low (0>)

## 5. The Influence of Socio-demographic Factors on Agreement with Fake News

### Agreement with fake news by Age Group

#### Agreement with fake news by age group

The size of each group is indicated in brackets.



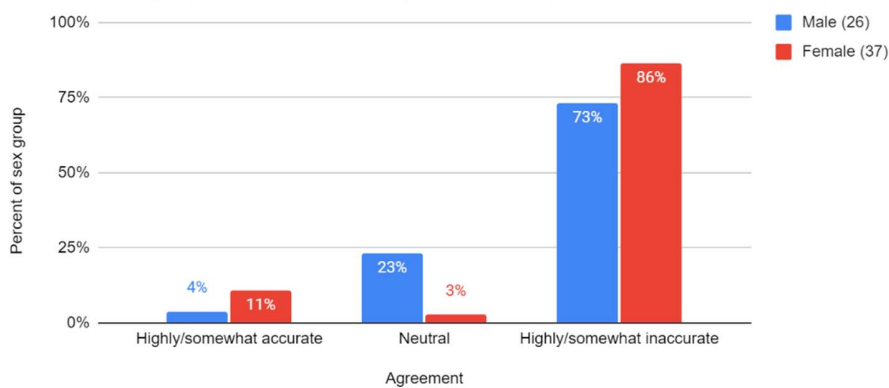
When comparing the correlation between agreement with fake news by age group, the agreement seemed to be highest among the oldest age group (23-30). As many as 19% agreed

with the presented fake news, whereas with younger age groups the agreement was much lower at 3 % (16-18) and 7% (19-22). The age group of 19-22 were most critical of fake news with 93% disagreement.

## Agreement with fake news by gender

### Agreement with fake news by sex

The size of each group is indicated in brackets. (Total: 63, five respondents didn't indicate their sex.)

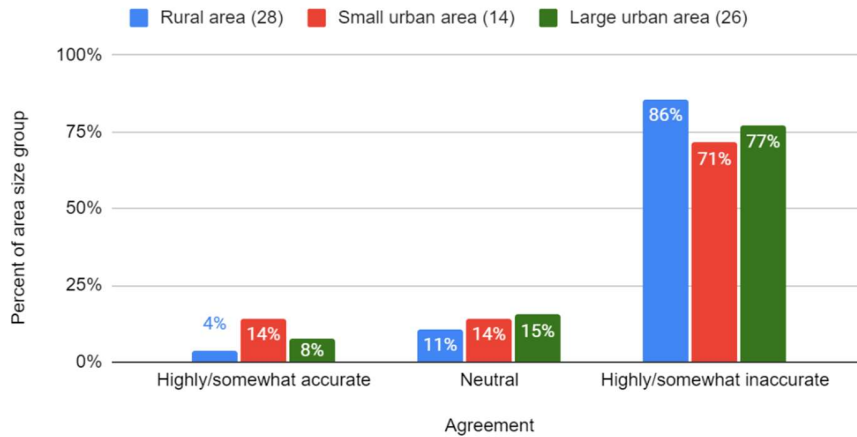


There was no major difference between genders in terms of the agreement with fake news, except that more men had a neutral or undecided attitude and a higher proportion of women were critical of fake news. However, a higher proportion of women were also in agreement with the fake news (11% for women and 4% for men).

## Agreement with fake news by Area of Residence

### Agreement with fake news by size of area of residence

The size of each group is indicated in brackets.

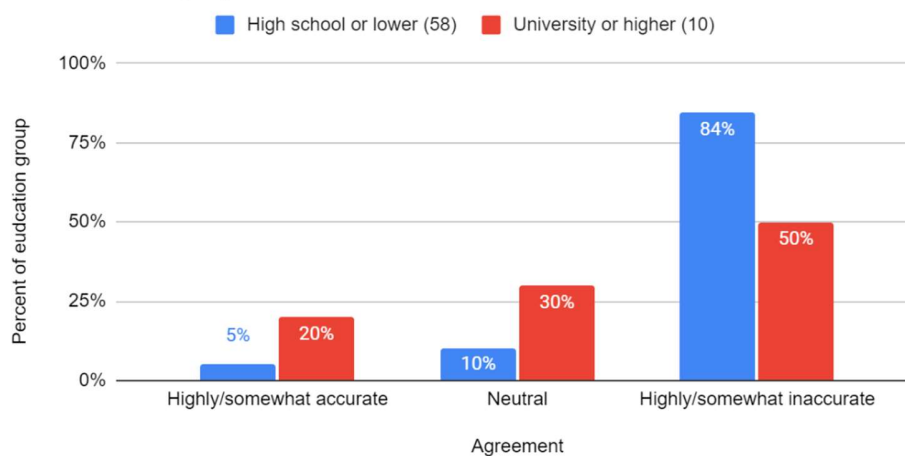


There was very little difference in the agreement to fake news based on the area of residence, only a slightly higher number of those living in the rural areas seemed to be more critical of fake news. However, as there are not vast differences between living areas in Southern Finland, we consider this as not very relevant.

## Agreement with fake news by Level of Education

### Agreement with fake news by level of education

The size of each group is indicated in brackets.

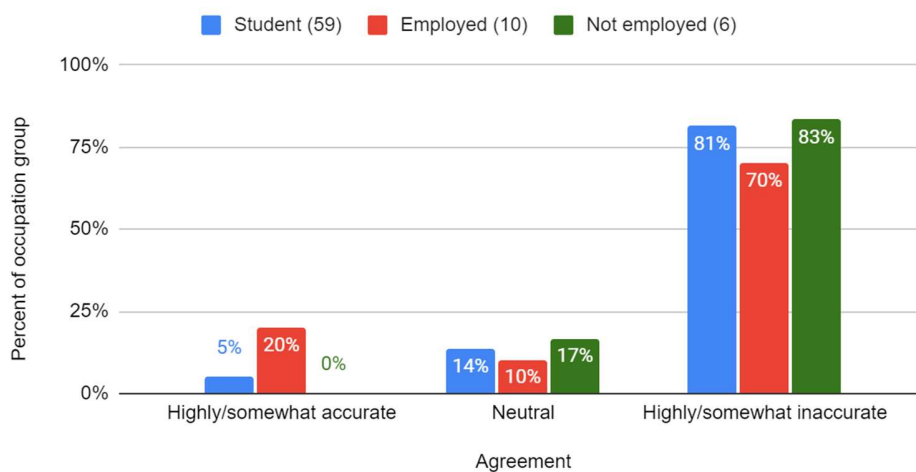


The correlation between agreement with fake news among the sample was somewhat confusing. The direct conclusion is that lower education level corresponds with higher critical attitude towards fake news. 84% of those who had only finished high school did not agree with the fake news, whereas only 50% of those who had a higher degree did not agree with fake news. Furthermore, 30% with those with a higher education degree were neutral / uncertain about the answers. This is quite a significant difference, which can most likely be explained by that most of the sample (56.6%) consisted of young people 16-18-year-olds, who would not have had time to attend any other education than high school. Therefore, the correlation to be drawn here is not very significant.

## Agreement with fake news by Occupation

### Agreement with fake news by occupation

The size of each group is indicated in brackets. (Overlap between groups is possible.)



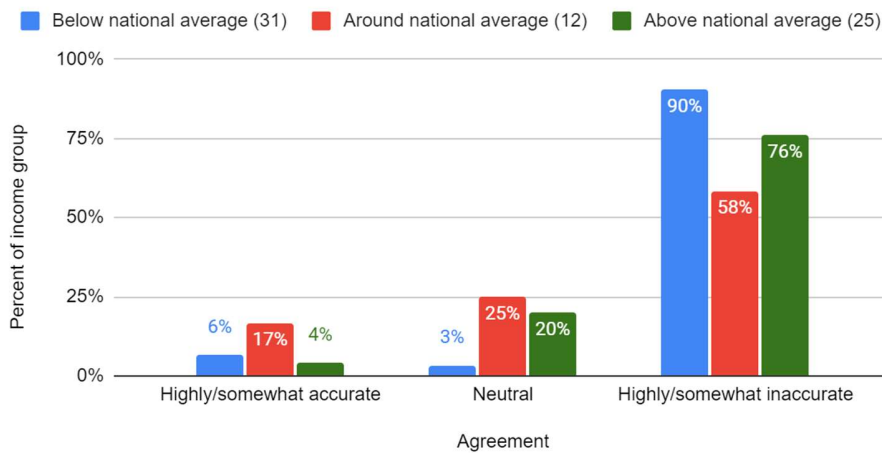
Agreement with fake news by occupation did not show significant differences, only the agreement rate with fake news was slightly higher (20%) among those who were employed, compared to 5% among students. However, the differences cannot be considered very significant.



## Agreement with fake news by Household Level of Income

### Agreement with fake news by level of household income

The size of each group is indicated in brackets.

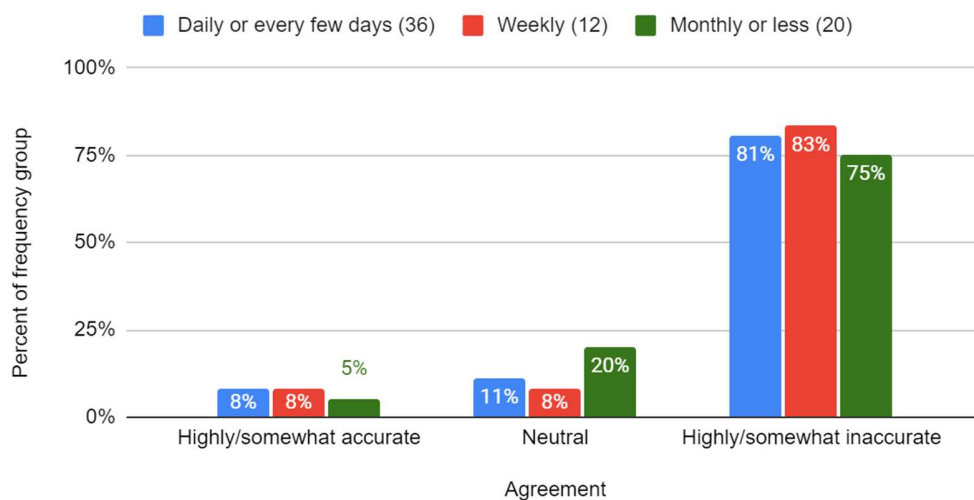


The lowest level of agreement with fake news was among those with the highest level of income (4%), the second lowest level of agreement was among those with lowest level of income (6%), and the highest level of agreement was among those with medium level of income (17% agreed with fake news). There was also more uncertainty among those with highest and medium level of income. Interestingly, 90% of those with lowest income level disagreed with fake news, whereas the number was 76% for those with highest level of income. The biggest correlation was that those with a medium level of income were significantly more prone to believe in fake news.

## Agreement with fake news by Frequency of Reading News About Politics/Current Events

### Agreement with fake news by frequency of news reading

The size of each group is indicated in brackets.

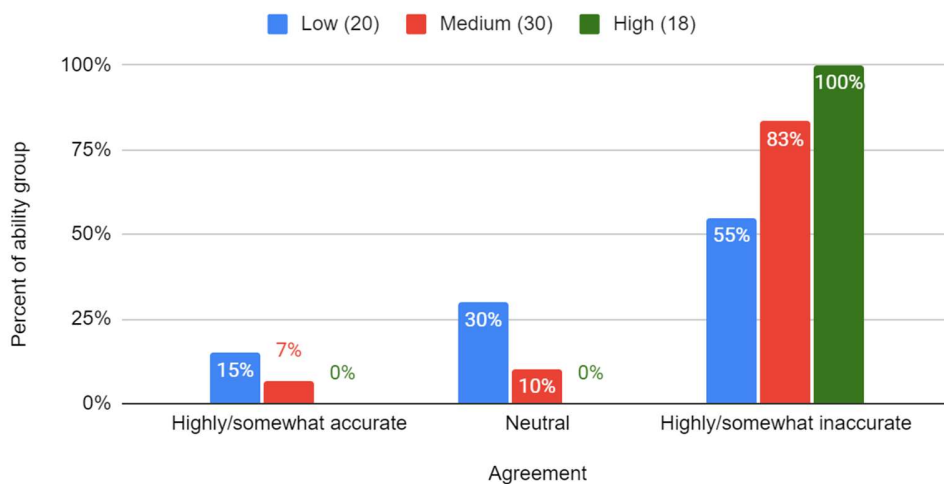


In terms of agreement with fake news, the differences between those who read news daily, weekly or monthly or less are quite small. Those who read news only monthly or less often exhibited a higher level of uncertainty (20%) and also the lowest level of disagreement with fake news as well as the lowest level of agreement with fake news, although these numbers were very similar between all groups. The main conclusion here is that those who read news less often had a higher level of uncertainty.

## Agreement with Fake News by Critical Reading Ability

### Agreement with fake news by critical reading ability

The size of each group is indicated in brackets.

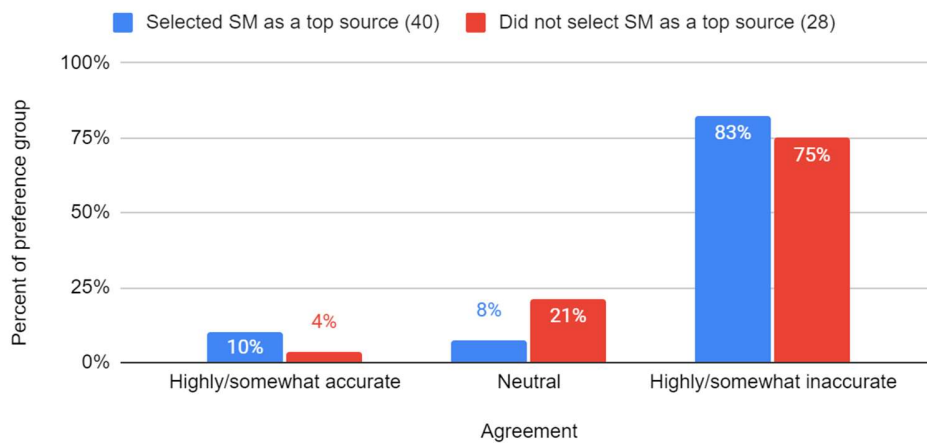


As could be expected, those with low critical reading skills had higher agreement with fake news (15% agreed with fake news, as opposed to 7% of those who had medium critical reading skills and 0% of those who had high critical reading skills). Similarly, 100% of those with high critical reading ability found the fake news inaccurate and 83% of those with medium reading ability. 55% of those with low reading ability found the fake news inaccurate. This graph above shows a significant correlation between critical media reading ability and agreement with fake news – the higher the critical reading ability, the lower the agreement with fake news.

## Participants' agreement with fake news by main source of information

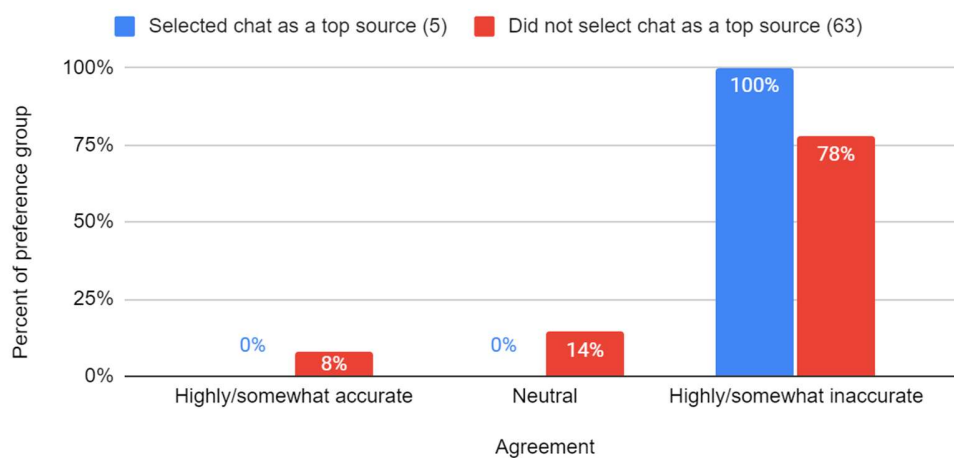
### Agreement with fake news by preference of social media as a top source of information

The size of each group is indicated in brackets.



### Agreement with fake news by preference of online chat groups as a top source of information

The size of each group is indicated in brackets.

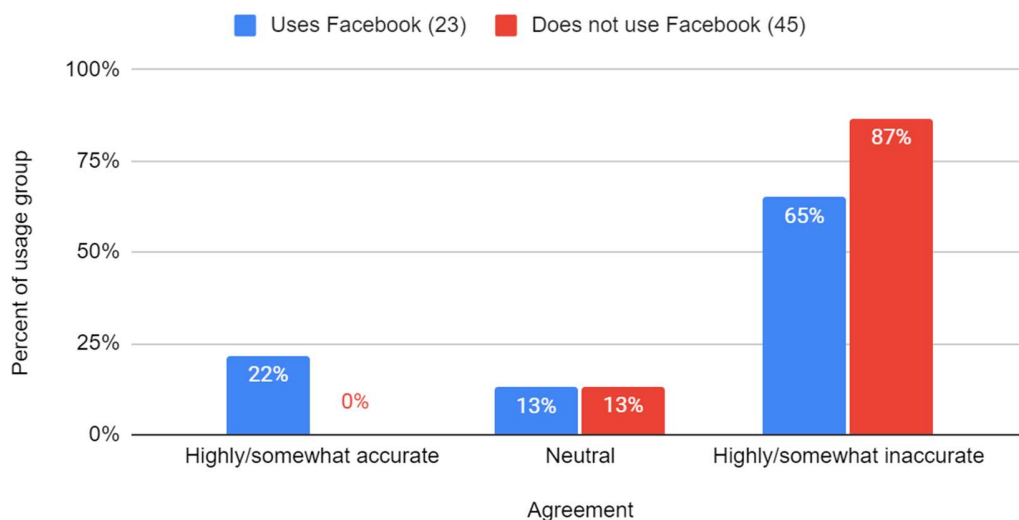


It seems that those who selected social media as a top source of information were more prone to agree with fake news (10% vs 4% of those who did not select social media as a top source of information), but also those who selected social media as a top source had higher disagreement with fake news (83% vs 75% of those who did not select social media as a top source of information). The differences here are not very notable, however. Whereas for those who selected chat groups as a main source of information, surprisingly their disagreement with fake news was the highest (100% vs 78% of those who did not select social media as a top source of information). It is difficult to understand the reason for this fairly notable difference, as the presumption is that those who use chat as the main information source would be more prone to believe fake news, but this does not seem to be the case.

## Participant agreement with fake news by Facebook use and TikTok use

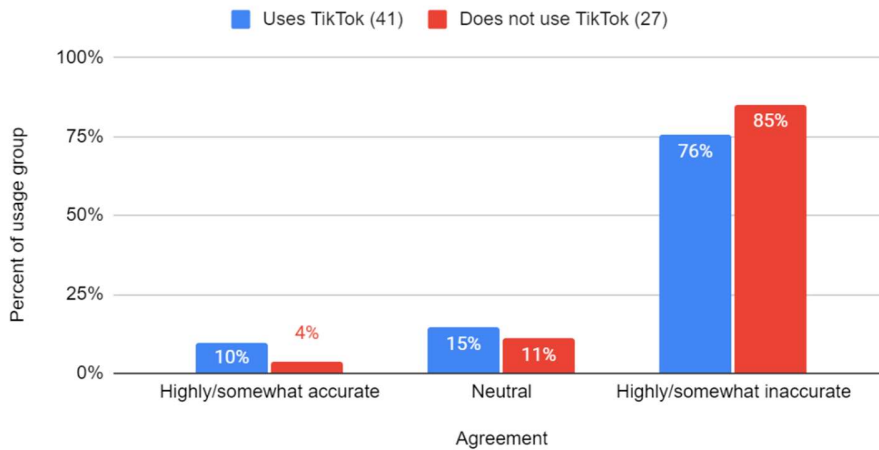
### Agreement with fake news by Facebook use

The size of each group is indicated in brackets.



## Agreement with fake news by TikTok use

The size of each group is indicated in brackets.



The correlation between agreement with fake news and using Facebook is quite significant. 20% of those who use Facebook agreed with fake news, and 0% of those who did not use Facebook agreed with fake news. Similarly, 65% of those using Facebook did not agree with fake news and 87% of those who did not use Facebook did not agree with fake news. The same trend can be seen in terms of TikTok users, however, the differences in percentages are slightly smaller.

In conclusion, there is some slight correlation between socio-economic position and agreement with fake news, in that those with the highest level of income were slightly less prone to agree with fake news. The level of education was not easy to compare, as the majority of respondents were in the age group 16-18 years, who have only attended high school to date. Therefore, the numbers between those with higher education and those with only high school education are not comparable. Also, those who read news less often had a higher level of uncertainty, but not necessarily the highest level of agreement with fake news. However, it was quite clear that there was a significant correlation between critical media reading ability and agreement with fake news – the higher the critical reading ability, the lower the agreement with fake news. Furthermore, the use of social media (Facebook and TikTok) seemed to correlate quite significantly with higher agreement with fake news.

Nevertheless, it should be kept in mind the exploratory nature of the study and the limited size of the survey sample.

## V. Analysis of the qualitative data

### 1. Youth online behavior

The experts interviewed for this report all noticed that Internet use has increased among young people over the past decade. The interviewees consider that the fact that young people are constantly checking their phones makes them less social and can cause youth to become addicted

to smartphones. They believe that the Covid-19 pandemic has led youth to be even more engaged with technology use, which can lead to riskier online behavior.

According to the youth theatre director, young people spend too much time on the Internet. He thought that during the Covid-19 pandemic many young people created a network of friends with the help of social media. Social media helped people feel more connected during the pandemic. The youth worker mentioned that most of the young people have their own smart phones and this is a reason for the increased Internet use in a post-Covid era.

Digital communication through social media is an important part of their social life: social media platforms, such as TikTok, Instagram, Snapchat and Facebook are popular among young people. TikTok, Instagram and Snapchat are the most popular platforms. One reason for this is the increasing number of smartphone users in the younger generation over the past decade.

The interviewees thought that young people are not always aware of the possible consequences when they are sharing their personal and sensitive information online with unknown people. The youth worker interviewed said that many young people are looking for social interaction on social media. Social media has given youth the possibility to instantly connect with others and share their thoughts through writing, photos and videos.

The youth worker interviewed thought that a reason why young people share private and sensitive information online is their social needs. According to her, many young people feel lonely and left out. That's why they often want to try to socialize with the popular, older people. She believed that it has always been a common phenomenon among youth.

Several interviewees said that they observed some problematic online and online-related behavior among young people. One interviewee mentioned a case where a teenage girl asked for the Instagram profile details of an older, adult man during a summer camp, which is quite inappropriate and can be risky. Once a teenage boy shared intimate photos with several teenage girls through Snapchat. Using social media excessively can make young people more likely to



share their personal details and information with people they do not know very well. These cases are examples of the risks associated with the use of online social networks in the post-COVID-19-era.

Another interviewee mentioned that young people do not have the ability to estimate the possible consequences of their online behaviour. According to the child protection worker interviewed, their clients are not aware about the possible consequences when sharing information online with others.

## 2. Impact of Covid-19 pandemic

Some experts believe that Covid-19 has greatly increased the time spent online by young people. The social worker does not believe that Covid-19 had much impact on the time spent online, as the young people she works with already used internet a great deal.

## 3. Critical thinking and fake news

There was some discrepancy among the interviewees in regards to their estimation of the critical thinking abilities of young people. The social worker and child protection worker believe that many young people are not interested in reading the news or finding reliable information and mostly use social media and rely on friends for information on current events. The social worker believes that young people in general have fairly low media reading ability. The child protection worker agreed that the groups of young people she works with do not have very high media literacy and they do not read news very often, and they do not have the experience to be critical towards media.

Schools should pay more attention to how much fake information young people encounter on social media and focus on how to be critical towards social media and find more reliable sources of information. The two other interviewees believe that young people have some media literacy skills, but that they could be better. According to the youth theatre director, young people's media literacy and critical thinking skills are better these days than in the past.

#### 4. Cyberbullying

According to the interviewees, many young people had experiences related to cyberbullying. The social worker estimated that almost 30% young people had experiences related to cyberbullying. The child protection worker mentioned that many of their young clients had problems with cyberbullying. According to the youth theatre director, young people often fall victims to online incidents such as cyberstalking or having false statements posted online in their name.

#### 5. Online gambling

Youth trainers said that they did not know much about possible gambling problems of youth, at least that was not a prominent issue in their groups. The child protection worker told that he did not have any experiences about clients with gambling problems, so based on his experience he did not see as a major problem among Finnish youth.

#### 6. Training methods for preventing online risks

Even though the quality of media education is quite good in Finland, the experts stated that there should be more education about media literacy and online risks for young people in schools. According to the social worker, media literacy teaching should be more integrated with the different subjects in school. The interviewees thought that young people should be more aware about the risks of online social networks and of the possible consequences when sharing their personal information on social media.

Furthermore, some experts also stated that young people being able to access all content without filters online, allows them to see very shocking and disturbing things as well, and that affects them psychologically. There should be more discussion about this and possibility for young people to deal with the shocking things they see and experience online, as often they tend to be quite alone with these experiences.

## VI. Conclusions and recommendations

Based on the survey and interviews conducted for this research, there are many risks for young people regarding internet use and online behavior. Nearly 37 % of the survey respondents had shared their personal data (social security number, name etc.) via online with unknown people. Nearly 45 % of the respondents had shared intimate sexual content (photos or private information) with friends and partners online. Nearly 28 % of the respondents had experienced phishing or online harassment and nearly 20 % said that they had experiences about being a victim of online bullying. In other surveys conducted with the wider population in Finland, this number was around 34 %. Nearly 60 % also use social media as the main source of information and news. Even though they also use other news platforms, this number is quite high.

Even though the majority of the young people who responded to the survey did not agree with the false information given to a great extent (21% had high media literacy skills and 34% had medium media literacy skills) and seem to have a good grasp on where to find reliable information for general news, there is still a lot of false information on social media, which is one of the primary sources for news for young people. According to our survey, the use of social media (Facebook and TikTok) seemed to correlate quite significantly with higher agreement with fake news. Furthermore, it was quite clear that there was a significant correlation between critical media reading ability and agreement with fake news – the higher the critical reading ability, the lower the agreement with fake news.

As young people are eager to create connections through social media, they end up making connections with people who they do not know or who may present a false personality. Interviewees also thought that young people are not always aware about the possible consequences when they are sharing their personal and sensitive information online with unknown people. Respondents thought that schools should focus on teaching more about media literacy and online risks, especially related to social media use, and young people should be made more aware about the risks of online social networks and the possible consequences when sharing their personal information on social media.

According to our research, Finland is quite well known for its media literacy education. For example, the Finnish fact-checking organization Faktabaari (FactBar) employs different fact-checking methods at Finish schools and promotes research skills and critical thinking among school children. In Finland, media education is integrated in school education, where students study many different types of media. Many organizations offer supplementary training in media education and produce materials that support professional development. Furthermore, the Ministry of Education and Culture supports the promotion of media literacy by allocating resources and information guidance. Therefore, media education in Finland is ranked high in international statistics, but according to the experts there is still room for improvement, especially in schools.

According to the experts interviewed, there should be more education on the topic of media literacy, false information and online risks, as it is clear that young people in Finland rely heavily on social media and such channels not only for social connections but also for news and information. According to our survey, even though the majority of young people had at least medium critical reading skills (21% had high critical reading skills and 34% had medium critical reading skills), there were still as much as 21% of young people who had low critical reading skills. This is a fairly large number considering how much time young people spend online (nearly every day).

## 1. General recommendations on addressing online threats

### Improving media literacy

- Media literacy is already integrated in many school subjects, but according to experts this should be enhanced.
- Informing young people about the risks of use of social media in particular, as the rate of use is very high among the age groups surveyed and social media content has a great effect on young people's attitudes and opinions.

### Cyberbullying and online harassment

- More training and information in schools, libraries and other public arenas about cyberbullying and online privacy, as many young people share a lot of very personal information online.
- More attention should be paid especially to cyberbullying, as this is a very common form of bullying and harassment nowadays, and schools do not focus on it enough. Just as physical bullying, cyberbullying should be taken seriously by teachers and counsellors and addressed in schools with the students involved.
- More focus on discussion on processing the shocking and disturbing things that young people see and experience online; letting them express themselves and not having to deal with these experiences alone.

### Fake news

- More focus on where to find reliable information and how to develop critical thinking. Focusing especially on social media and the false and biased information that it can contain.
- Increase cooperation between schools and organizations such as the Finnish Society on Media Education on these topics.

- More opportunities to learn about media literacy for children from underprivileged backgrounds.

### Online gambling

- More focus on legislation which prevents online gambling for minors (which is already at a good level in Finland).

## 2. Recommendations for training programs and online platforms/games

- In order to reduce online threats, engaging tools such as a game on online threats and risks, demonstrating scenarios and stories about realistic online situations would be ideal, in order to encourage young people to learn.
- It would be important for such games to include information on how to handle and address online threats, whom to contact, and to make sure that young people know they can get help and they do not have to deal with these problems alone.
- It is important that such games address especially the use of social media, which has a great impact on young people's opinions and attitudes. This could be done by providing different scenarios and options on how to act, and showing the consequences of their actions, which are not always positive, nor insignificant.

## VII. BIBLIOGRAPHY

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