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Young people as empirical experts of participatory research in the age of information disorder

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Abstract

The main question discussed in this article is: how can young people, as empirical experts, inform methodologies in studying digital media literacy? The discussion is rooted in a study based on youth consultation organized in Finland in May 2021. The youth consultation was organised to help researchers of the European ySKILLS project from three countries (Belgium, Czech Republic, and Finland) to plan a study on disinformation, conducted in the autumn of the same year. The youth consultation consisted of two parts: an online survey used as a qualitative research tool and an open semi-structured discussion. The results of the youth consultation were used to provide recommendations to researchers in the ySKILLS research project. Particularly useful was information on young people's lack of understanding of algorithm-based communication and commercialisation on social media, which led to suggestions for additional thematic questions for the ySKILLS study. Overall, the findings suggested that young people could serve as empirical experts and advisors, particularly during the planning stages of research on the use of digital media to address not only questions related to digital media content but also to digital media infrastructure. The results suggested the importance of considering the next step in cooperation with youth in participatory research, such as co-designing research

methods for the digital future and consulting young people as experts in the proposal phase.

Keywords: Young people, Participatory research, Empirical experts, Information disorder

Introduction

The field of participatory research *with* children and youth rather than *on* them has been increasingly based on the children's rights and empowerment discourse (e.g., Bradbury-Jones & Taylor, 2015; Fargas-Malet et al., 2010; Livingstone, 2021; Lundy et al., 2011; Pienimäki, 2019). The significant challenge for researchers to develop strategies that respect young people's right to be consulted and taken into account was noted approximately 25 years ago (Morrow & Richards, 1996). Around the same time, it was suggested that empowerment through participation can be perceived as the end result of youth participatory research practices (Barry, 1996). There has been a lot of emphasis since then on empowering youth through participatory research, but less attention has been paid on collaborating with young people as consultants to increase the validity and robustness of the research (e.g., Bradbury-Jones & Taylor, 2015; Pienimäki & Kotilainen, 2018). In our article young people in the research are recognized as *empirical experts* on their own digital experiences assuming that their everyday expertise on digital cultures can affect the research process in multiple ways (e.g., Pienimäki & Kotilainen, 2018). Young people mostly perceive and use digital technologies as valuable resources in their everyday lives (De Leyn et al., 2019). That is a reason why their expertise and knowledge about the digital world can be useful for professional researchers to identify various new phenomena within it. Previous studies demonstrated that children and youth live at the centre of digital information through daily activities, for example, social media communication and digital games (e.g., Smahel et al., 2020). Therefore, valuing young people's voices and experiences as significant sources to inform research methodologies in digital life studies is essential.

The idea of engaging young people as researchers of their own digital experiences is becoming more prevalent in the field of media education (Williamson et al., 2019). However, the methodological perspective that perceives young people as consultants or experts in the digital sphere is only emerging in youth participatory research. The present study aims to contribute to this area considering young people as empirical experts in the research planning phase. The following research question was posed for this study:

> How do young people as empirical experts inform the methodologies in studying digital media literacy on information disorder?

This study was based on a *youth consultation* that took place in May 2021 in Finland. The consultation was designed to inform methodological applications in the ySKILLS research (hereafter, *actual ySKILLS study*) planning process. The *actual ySKILLS study* aimed to obtain information on young people's capacities to cope with information disorder, more specifically, disinformation in social media communication on cyberhate. It was carried out later in the autumn of 2021 in three countries (Belgium, Czech Republic, and Finland) as a sub-study within the European ySKILLS (Youth Skills) project. The ySKILLS project is funded by the European Union (EU's) Horizon 2020 programme and it provides a holistic, child-centric approach to the research on the use of the internet based on young people's rights to 'participation, information, freedom of expression, education, play, and protection from harm'(https://yskills.eu/).

Critical digital media literacy in the age of information disorder

Fake news has been widely discussed publicly and in academic settings as one of the most serious challenges in today's information landscape (Damstra et al., 2021; Kim et al., 2021). However, it has been argued that the term 'fake news' does not sufficiently capture the complexity of current information pollution, and some authors have proposed the terms as 'information disorder' or 'information crisis' to characterise the situation (LSE Truth, Trust and Technology Commission, 2018; Wardle & Derakhshan, 2017). Wardle and Derakhshan (2017) described information disorder based on degrees of falseness and intention to cause harm. They defined misinformation as information that is false but not created with the intention to cause harm, disinformation as false information deliberately created to cause harm, and malinformation as information based on reality and used to inflict harm on a person, social group, organisation, or country. The London School of Economics (LSE) Truth, Trust and Technology Commission (2018) used the concept of information crisis and argued that it originated from profound changes in the media ecosystem. They classified the information crisis into five 'giant evils': a) confusion regarding what is true and who to believe, b) losing trust in even trustworthy sources, c) access to potentially infinite information but lack of agreed upon facts on which to base societal choices, d) irresponsibility and lack of accountability and transparency of social media platforms, and e) citizens disengagement from established structures and losing faith in democracy. Similarly, Huguet et al. (2021) outlined the problem with the quality of the information in public discourses caused by the rapidly changing media and technology ecosystem.

Changes in the media system create challenges for digital media users of all ages related to the credibility, trustfulness, veracity, and overall quality of information. Digital media platforms, such as Facebook, Instagram, YouTube, TikTok, and Twitter, and search

engines, such as Google, are the dominant actors in the current information landscape, and they are the main distributors of publicly available information curated through invisible algorithmic operations (Carlson, 2019; Kotilainen et al., 2021; LSE Truth, Trust and Technology Commission, 2018; Ptaszek, 2021). Pre-digitally established truth filters, such as editorial infrastructures of legacy media, are undermined by the business strategies of platform companies, who do not guarantee that the content they offer to users is real or truthful (Carlsson, 2019; LSE Truth, Trust and Technology Commission; Frau-Meigs, 2019).

In this way organized digital society is calling for critical digital media literacy to sustain democracies (Carlsson, 2021; LSE Truth, Trust and Technology Commission, 2018). Digital literacy along with media literacy has been proposed as solution for creating order in these crises (Buckingham, 2019; Carlsson, 2019; Hobbs, 2018; Livingstone, 2021). Citizens' critical thinking and the ability to distinguish between what is fact and what is true is important to build their capacities to navigate the complex information environment. Furthermore, recent literature argues that citizens' ability to deal with emerging information disorder should not be separated from their ability to understand digital media infrastructures, business logics of dominant digital media platforms, and invisible operations of algorithmic content personalisation (Carlsson, 2021; Frau-Meigs, 2019; Haider & Sundin, 2019; Ptaszek, 2019). Algorithmic awareness has recently been noticed in the focus of scholars interested in media education (Hobbs, 2020; Kotilainen et al., 2021; Ptaszek, 2019) and it is considered equally important to the ability to assess individual information sources (Gran et al., 2020; Haider & Sundin, 2019). Following these authors, in the age of information disorder, merely fighting fake news by promoting content-related media literacy is insufficient, as Mizukoshi et al. (2021) argued, it is also necessary to address digital infrastructure-related media literacy.

Youth involvement in participatory research on their own digital experiences

In today's dynamic digital world, researchers aim to comprehend a wide range of new phenomena, with particular attention to young people's digital experiences. Youth participation can inform professional research in this area, especially in investigating the same age group and their digital cultures (Pienimäki & Kotilainen, 2018). From the perspective of youth empowerment, previous studies show that participation is important for exercising young people's self-determination and ability to make choices and decisions in their lives (Percy-Smith & Thomas, 2010; Pienimäki, 2019). One may assume that this also involves the ability to make reasonable choices and decisions in digital cultures. Youth participatory research has intensified in recent years due to the rapid development of digital technologies and their challenges as well as innovative research approaches to

digital media use, digital skills, and media education (Livingstone, 2021; Stoilova et al., 2020; Sukk & Siibak, 2021). Researchers have increasingly emphasised the role of young people in informing and evaluating research, with the goal of realising children's right to participate and improving digital policies from a youth perspective (Coleman & Weston, 2018; European Commission, 2021; Livingstone et al., 2021). The youth consultation discussed here belongs to the same framework promoting children's rights; however, the focus is better science rather than merely youth policies. Young people were invited to take part in research as empirical experts as agents of knowledge regarding their own digital lives (Mallan et al., 2010). They were perceived as respectable participants who know more about and better understand some dimensions of the constantly changing digital spheres, including consequences of the information disorder, which they could have been experienced in their everyday lives. Although there is a growing interest in involving young people as co-researchers in studies on their digital experiences, participatory research with underaged youths, particularly related to information disorder or 'fake news,' is scarce (e.g. Bruinenberg et al., 2021; Literat et al., 2020). Our study aimed to contribute to research in this area.

The broader perspective on youth research shows that engagement of youth is possible at all stages, including research design, method selection, data collection, data interpretation, and dissemination of results (Bradbury-Jones & Taylor, 2015; Coyne & Carter, 2018). Young people can be involved in participatory research in different capacities, such as interviewing each other and being authors or co-authors in publications and conference presentations (Bradbury-Jones & Taylor, 2015; Mallan et al., 2010; Pienimäki & Kotilainen, 2018). Several researchers focusing on the participatory approach have called for children and youth to take a part in study planning, arguing that co-planning serves to realise children's right to participation by involving them in generating recommendations (e.g., Bradbury-Jones & Taylor, 2015; Morris, 2016).

Youth involvement as co-researchers has been criticised due to their lack of research competence. However, as it is argued by some authors, it is more important for young people to have the capacity to form their own views rather than prove their research capacity (Bradbury-Jones & Taylor, 2015; Lundy et al., 2011). Young people's opinions should be valued as those of experts on their own lives (Bradbury-Jones & Taylor, 2015; Fargas-Malet et al., 2010). This is especially crucial in the digital sphere, where the older generation cannot effectively advise the younger generation. Inter-generational barriers can be overcome by working with young people as co-researchers (Kellet et al., 2004) and digital divides can likely be overcome by dialogue with young people as experts on their own digital experiences. This would reduce the risk of ambiguity in adult researchers' interpretations, improving data quality and overall research robustness (Bradbury-Jones & Taylor, 2015). Furthermore, young empirical experts require protection from potential

harm as much as young peer researchers or study participants. Ethical considerations and child protection are paramount in research involving young people, regardless of the context or their role in the study (Bradbury-Jones & Taylor, 2015; Pienimäki & Kotilainen, 2018).

Overall, youth participation in professional academic research can be perceived as transformative, critical research with the goal of changing society through the impact of young people and their voices (Morris, 2016; Pienimäki & Kotilainen 2021). This approach is the foundation of the present study based on youth consultation. As for professional researchers, it was our aim to gain a deeper understanding of youth digital cultures in an effort to identify appropriate themes and methods for conducting ySKILLS research. It was expected that youth would contribute to the research process in a methodological sense, providing an understanding of what to ask and how to collect data on their everyday practices online.

Methodological approach: Consultation design

Youth consultation was organised in Finland in May 2021 with the aim to help researchers from three countries to plan the *actual ySKILLS study* conducted in October and November 2021. The *actual ySKILLS study* sought to acquire information on young people's capacity to cope with information disorder. It was focussing on the following research questions:

> How do young people cope with mis- and disinformation online?
>
> How do young people differentiate fact from fiction and truth from false?
>
> What are the epistemic processes underlying young people's decision-making processes?

The *actual ySKILLS study* was designed in three stages using mixed methods research. The first two stages were based on quantitative data collection methods. At first, an online survey was conducted, where participants were asked to fill out a questionnaire assessing several aspects of media use, focusing mainly on news consumption. The second stage was a fictional at-risk situation, where both reliable news sources and sources with disinformation were presented using a mobile application developed for the purpose of this research. Young participants were asked to answer questions about these sources. They were prompted on their own mobile devices to interact with information presented to them. The third stage used qualitative data collecting methods, and students were invited to participate in focus groups to discuss their experiences during the second stage.

The *actual ySKILLS study* was expected to benefit from the *youth consultation*, which was

organised as a separate study itself. The *youth consultation* was held in a city setting in Finland, at a university teacher training school with the total of 900 students. Besides primary, secondary, and upper secondary education, this school provides research activities and teacher training on a university level. All students and their parents are informed in advance that they may be invited to participate in research on a regular basis. Nevertheless, students involved in this study were briefed on research process at the beginning of the consultation and informed that they were invited to participate as experts/consultants for upcoming research.

The youth consultation drew a total of 16 ninth-grade students (15-16 years old). Two face-to-face meetings (2 x 45 minutes) in the school auditorium were arranged with them during an English class. Data were collected during these meetings in two stages: (1) an online survey as a qualitative research tool (Braun et al., 2021) was combined with (2) an open semi-structured discussion. In both stages of the consultation, participants were encouraged to use English and Finnish languages. Students' own mobile phones were used to collect data for the survey, and the mobile version of SurveyMonkey was used as the platform. The online survey contained only open-ended questions, highlighting topics related to information disorder, such as news sources, sharing news and information online, perceptions of source reliability, and also questions related to tracking, attention directing, and commercialisation in social media platforms. The group discussion with all 16 participants together was conducted immediately after they completed the online questionnaire. The discussion was mainly a reflection on their survey answers. The discussion was led by researchers involved in the *actual ySKILLS study*. The discussion was recorded and later transcribed verbatim. Finnish texts were translated into English. Word clouds were used as visual representations of word frequency to analyse the results of the online survey and a qualitative thematic analysis was applied to analyse data collected during the discussion.

Findings based on the youth consultation

Based on the results of the *youth consultation* it was possible to provide recommendations for all three stages of the *actual ySKILLS study*. First, the results of consultation identified a list of online platforms where young people prefer to share information (Figure 1), which was used later for the quantitative survey in the *actual ySKILLS study*. Second, the results regarding opinions on unreliable news sources revealed the digital media platforms that was later included in the fictional at-risk situation, where news sources and sources with disinformation were presented (Figure 2). Third, an additional thematic section was added to the focus group interviews, with questions regarding various aspects of algorithm-based social media communication and business logics.

The results of *youth consultation* came into light for researchers in the autumn, when the

actual ySKILLS study not only revealed the significance of the suggestions made during the consultation, but the data highlighted similar trends in young people's online experiences.

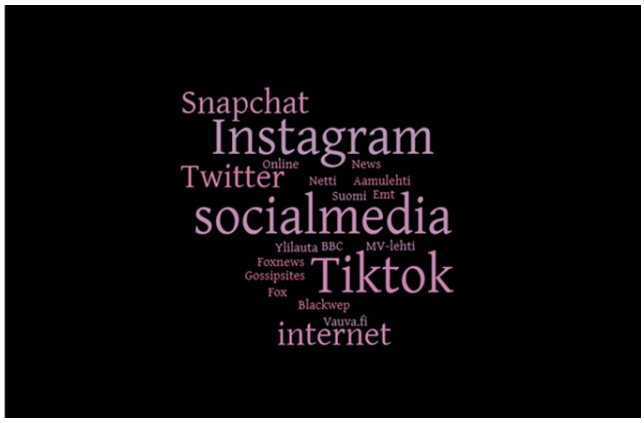
As mentioned before, a *youth consultation* yielded recommendations related to digital platforms on which young people prefer to share information. According to the results of the online survey, WhatsApp, Snapchat, and Instagram were the most frequently mentioned platforms for sharing information, followed by TikTok, Twitter, Redid, and Hangouts, as shown in the word cloud (Figure 1).

Figure 1.
Digital platforms preferred for sharing information

This information was later also used for the first stage of *actual ySKILLS study* during the preparation of the questionnaire for quantitative survey. Furthermore, based on this finding Instagram, TikTok, and Twitter were considered as platforms for presenting news in second stage of *actual ySKILLS study* organised as fictional at-risk situations on mobile application. Preliminary results of focus group interviews conducted as third stage of *actual ySKILLS study* revealed similar trends for preferred platforms for sharing information online among Finnish respondents (N=71).

Youth consultation provided several platforms as answers to the question: In your consideration, what are the most unreliable sources of news of the latest events? (Figure 2).

Figure 2.
Most unreliable sources of news



As the word cloud illustrates 'social media' in general, and Instagram, and TikTok were identified as the most frequently acknowledged unreliable sources of news. It must be noted that Instagram was revealed as one of the top preferred platforms for sharing information as well as one of the top platforms perceived as unreliable information sources. These results supported the researchers' decision to focus on Instagram, TikTok, and Twitter as platforms for a fictional at-risk situation in the *actual ySKILLS study*. The *actual ySKILLS study* revealed a similar set of unreliable sources during focus groups interviews in Finland.

Based on the results of youth consultation, an additional thematic section about algorithm based social media infrastructure was included in the focus group interviews. During the consultation, young people were asked regarding their knowledge of certain elements of algorithm-based communication in social media, such as tracking and attention directing, along with a question on how social media make money. Young participants in the youth consultation identified various ways that social media track them, including 'hearing what I say even when my phone is on the table,' 'search history,' and 'follow my clicks.' In addition, they reported noticing techniques social media use to keep their attention, such as 'attractive content', 'communication with other users,' or 'notifications.' Similar findings emerged from the actual ySKILLS study in focus group discussions in Finland. However, preliminary analyses suggested age-related differences between eighth and ninth graders, with older students noticing these types of social media logic patterns more frequently and being able to explain them in more detail.

Most participants in the youth consultation identified advertising and subscriptions as sources of profit for online platforms. Some participants provided specific answers, such as, 'The more views or followers you get, the more money you have.' Some participants noted attention direction used by platforms: 'They make money from ads and new innovations that grab the user's attention.' However, several participants of youth consultation even did not understand the questions regarding tracking and

commercialisation on social media. Similar findings were observed in Finland in focus group interviews during the actual ySKILLS study, particularly the lack of understanding of the commercialisation of social media platforms. Only a few respondents mentioned 'selling our data' and 'collaboration of media companies' as profit-making activities of social media.

Conclusions

This case study was based on *youth consultation* with ninth grade students in Finland and examined how young people as empirical experts can influence methodologies in studying digital media literacy. The *youth consultation* aimed to help professional researchers involved in the European ySKILLS network gain a more profound understanding of youth digital experiences for developing themes and methodologies for the *actual ySKILLS study*, which focused on young people's capacity to cope with information disorder. However, this case study based on youth consultation may also provide insights for other researchers working on similar projects, where young people could be considered empirical experts on their digital lives. This study revealed that young people can contribute useful information during the planning stage of research, which may guide changes and additions to qualitative and quantitative methods. For the ySKILLS research, the consultation served as a valuable pre-study for deciding on final themes and data collection methods. The findings of the *youth consultation* expanded on previous studies arguing for the inclusion of young people as experts early in the research planning phase (e.g., Bradbury-Jones & Taylor, 2015). Young people made an impact on ySKILLS research and were valued as experts on their own digital experiences, with their views seriously considered in the *actual ySKILLS study*.

The *youth consultation* highlighted the challenges with digital infrastructure related media literacy among young participants. The results revealed differences in understanding algorithm-based social media communication and platform business logics. While some participants were able to precisely describe tracking, attention directing, and business logics of social media, others were unable to even comprehend the questions' meaning. To achieve immediate benefit, thematic questions for discussing social media platform logics were added to focus group interviews in the *actual ySKILLS study*. The preliminary results of the focus group discussions demonstrated that these new additions were important. Furthermore, the results helped incorporate themes related to social media infrastructure and commercialisation into the research agenda of the *actual ySKILLS study*. The initial analyses revealed that young people's understanding of algorithm-based communication was basic. Most respondents could describe how social media tracks them and keeps their attention; however, commercialisation seemed more difficult for young people to discuss.

In sum, the findings demonstrated that young people can serve as empirical experts and

advisors during the planning stage of research on the use of digital media to address digital content-related and digital infrastructure-related media literacy. This study utilized the expertise of young people to gain a better understanding of their digital cultures needed for further elaborating data collection methods for pre-planned international research project. The findings suggested that the next step in researchers' collaboration with young people should be delving deeper into methodologies to design methods for the digital future. As such, young people could be consulted from the proposal phase of research and can be named as experts as well as co-researchers.

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