

# **THE DARK SIDE OF SOCIAL MEDIA: WHY IS SOCIAL MEDIA SO ADDICTIVE?**

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## ABSTRACT

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Title The Dark Side of Social Media: Why is Social Media so Addictive?	
Subject Digital Marketing & Corporate Communication	Type of work Master's thesis
Date 27.4.2023	Number of pages 73 + appendix
Abstract <p>Social media has become a significant part of our daily lives. Social media has many benefits, but it also comes with drawbacks and negative consequences that have not been studied as much.</p> <p>The aim of this master's thesis is to explore the dark side of social media and to focus on one of them - social media addiction. The aim of the thesis is to find out which factors in social media cause social media addiction and what are the negative consequences of social media addiction and other dark sides of social media on an individual, group as well as societal level.</p> <p>This master's thesis includes a comprehensive literature review and findings from a qualitative study conducted in the form of semi-structured interviews. As the theoretical part of the thesis and the interviews show, social media giants have built their platforms in such a way that it is easy to get hooked. In many cases, the features of these platforms are built so treacherously that users may not even notice the addictive functions themselves.</p> <p>Excessive use of social media has been found to have several negative consequences, which can appear as sleep or other physiological problems, various kinds of pressure such as appearance pressure, career or financial pressure, feelings of inadequacy, fear of missing out (FoMO), reduced performance at work or school, and lack of presence in relationships, among others.</p> <p>The study also presents possible ways to reduce social media use as well as how to prevent social media addiction.</p>	
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## TIIVISTELMÄ

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Tiivistelmä <p>Sosiaalisesta mediasta on muodostunut huomattava osa jokapäiväistä elämäämme. Sosiaalisella medially on paljon hyötyjä, mutta sen mukana tulee myös haittapuolia ja negatiivisia seurauksia, joita ei ole tutkittu vielä niin paljon.</p> <p>Tämän pro gradu -tutkielman tavoitteena on tutkia sosiaalisen median haittapuolia ja pureutua tarkemmin yhteen niistä – sosiaalisen median riippuvuuteen. Työn tavoitteena on selvittää mitkä tekijät sosiaalisessa mediassa aiheuttavat riippuvuutta ja mitä haitallisia seurauksia sosiaalisen median riippuvuudella sekä muilla sosiaalisen median haittapuolilla on niin yksilö-, ryhmä- kuin yhteiskunnallisellakin tasolla.</p> <p>Tutkielma sisältää kokonaisvaltaisen kirjallisuuskatsauksen sekä havaintoja kvalitatiivisesta tutkimuksesta, joka toteutettiin puolistrukturoitujen haastattelujen muodossa. Kuten tutkielman teorettisesta osuudesta ja haastattelusta käy ilmi, sosiaalisen median jätit ovat rakentaneet alustansa niin, että niihin jää helposti koukkuun. Monesti näiden alustojen ominaisuudet on rakennettu niin salakavalasti, ettei käyttäjä välttämättä edes itse huomaa addiktoivia toimintoja.</p> <p>Liiallisen sosiaalisen median käytön on havaittu aiheuttavan useita negatiivisia seurauksia, jotka voivat näyttäytyä muun muassa uni- tai muina fysiologisina ongelmina, erilaisina paineina, kuten ulkonäköpaineina, urapaineina tai taloudellisina paineina, riittämättömyyden tunteena, paitsi jäämisen pelkona (FOMO), tehokkuuden heikkenemisenä töissä tai koulussa sekä läsnäolon puutteena ihmissuhteissa.</p> <p>Tutkimuksessa esitellään myös mahdollisia toimenpiteitä ja tapoja sosiaalisen median käytön vähentämiseen sekä someriippuvuuden estämiseen.</p>	
Asiasanat Sosiaalinen media, addiktio, someriippuvuus, ongelmallinen sosiaalisen median käyttö, sosiaalisen median käänöpuoli, FOMO	
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# 1 INTRODUCTION

Social media is constantly developing, and new platforms are created. That brings us more benefits and opportunities in many sectors in life. However, as most things, also social media has another side to it – the dark side. In the individual level the dark sides of social media are for example appearance pressure, sleep problems, depression, anxiety, cyberbullying, concentration problems and social media addiction – just to mention a few. (Seldon et al., 2019).

Previous research made about the dark side of social media and social media addiction is still relatively limited compared to the bright side of social media. However, the topic has started to be presented more and more in the media, which is good – the more awareness the subject gets and the more debate around the topic, the better. Helsingin Sanomat (2013) stated that until a few years ago, it was thought that there was no link between social media and mental disorders in young people. But now it has finally been realized that there is a connection, and that the problems are especially bad with young women. (Storås, 2023).

Excessive use of social media as well as other dark sides of social media often causes other problems especially in an individual level, but the individual effects often have more far-reaching consequences also to the whole society. The negative consequences are often related to mental health issues, which almost always mean that more resources would be needed in the health care sector as well as other public organizations. Social media has also other dark sides that are harmful from the organizational perspective, such as disinformation, privacy issues (criminal) and fake news. (Allcott & Gentzkow, 2017).

What is especially concerning, is the extent to which people, especially young people, spend time on social media, and the negative effects it will have on them as well as on society in the long term. Children need to be protected from the dark sides of social media and their consequences. Social media is constantly made to be more addictive by for example launching new features. The addictive features of social media platforms are often designed in a way that we don't even realize which features are addictive. Meta Platforms Inc. and other social media giants, such as TikTok, Snapchat and Google were sued by its home county's school board for making their social media platforms addicting and increasing

the mental health crisis. (Rosenblatt, 2023a). At least some Meta's employees, including Chief Executive Mark Zuckerberg and some engineers knew about the harmful effects of social media on young children and teenagers. Even though they knew about the negative effects, they discarded the information. This information is from an older law suite which was sealed from the public but just recently revealed. (Rosenblatt, 2023b).

For today's adults and older generations, it is more likely to have the ability to view social media and its dark sides more critically than younger generations, since they have the perspective also from the time when there was no social media. Also, a child might easily believe in content he or she sees in social media, even if the content was fake, since the ability to look at things more critically, might not been developed yet. (Ricci, 2018).

This master's thesis aims to explore the dark sides of social media, the reasons why social media is so addictive and what factors contribute to it. The study clarifies the background reasons for social media addiction as well as the tactical decisions and functions that are causing social media addiction, which have been created by the social media giants themselves. This thesis topic is socially relevant and important because it has wider consequences also to the whole society. It is therefore beneficial for individuals but also several public organizations. The aim is also to raise the awareness and discussion around the topic among e.g., parents, decision makers, schools, health care sector and other public organizations. It is important that all the stakeholders understand the severity of the possible harmful effects and circumstances of social media, and that there will be more ways, resources and actions made in order to avoid and treat the negative consequences. This thesis might also be especially beneficial for those who work in the public sector with younger generations who have been grown up with social media (millennials, gen z, gen alpha).

The research questions of this master's theses are:

- What is the dark side of social media?
- Why is social media so addictive and what features are causing it?
- What are the consequences of social media addiction on an individual, organizational, and societal level?

Social media addiction is one form of behavioral addiction and although it has not yet been classified as an official illness, its disadvantages and negative consequences have been recognized. When the use of social media is so excessive that it is interfering with one's life tasks and relationships negatively, we can talk about social media addiction. However, social media addiction should not be confused with normal social media use. One's social media use shouldn't be considered as an addiction if the behavior is explained by another disorder, or if the behavior is done because of a voluntary choice, or if the behavior doesn't cause any harm nor impairs performance of other tasks. (Kosola, 2020).

This thesis also presents the attitudes and consequences of social media addiction in an individual, group as well as societal level. Nevertheless, social

media addiction is socially much more accepted than many other addictions, such as addiction to alcohol or drugs, and thus is not discussed publicly that much nor taken that seriously. Social media is constantly created to be more and more addictive, and because of the addicting features are made so treacherously, we don't always even notice them ourselves. (Koski-Jännes, 2005a; Uski, 2016). This thesis also presents tactics for decreasing social media use and introduces ways to prevent and treat social media addiction.

Chapters 2, 3 and 4 of this thesis form a comprehensive literature review, which consists of the following main topics: social media, the dark side of social media and social media addiction. In this thesis both social media as well as the dark side of social media are introduced in the form of a honey framework, which helps to understand the relationship between the building blocks of both concepts.

Chapter 5 introduces the data and methodology part of the study. Based on the nature of the research questions of this thesis, qualitative research method in the form of semi-structured interviews was chosen. The goal of this qualitative research was to find out others' experiences, thoughts and observations of social media use, the dark side of social media and dig deeper on the topic of social media addiction. The purpose was to learn from the interviewees their own perceptions on the topic: why social media is so addictive. The data was collected via recorded interviews, which were then transcribed. Judgement sampling was chosen as this research' sampling method. The interview data was analyzed by using the thematic analysis method. After the transcriptions was done, the data was reorganized by the three main themes of this study: social media use, dark side of social media and social media addiction.

Chapter 6 presents the findings of the study as well as the analysis of the qualitative research organized according to the three main themes: social media, dark side of social media and social media addiction. And finally, the conclusion part presents the conclusions of both the theoretic study as well as the qualitative research. It also provides concrete suggestions for action, particularly for organizations – what they could do differently to support individuals from social media addiction and other dark sides.

In this thesis a machine translation tool called DeepL Translator has been used to translate a few terms and expressions of the researcher. More advanced AI tools, such as ChatGPT, have not been used because the thesis process was started already at a time when there were no clear guidelines for their use in academic writing.

## 2 SOCIAL MEDIA

Definition of social media is very complex and there are several definitions used about it. Social media is often seen as creation and exchange of user-generated content as Luxton, June and Fairall (2012) describe it, but it is usually also used for developing and maintaining relationships with others as Blackwell, Leaman, Tramosch, Osborne and Liss (2017) define it. Social media includes also virtual communities where one can create individual profiles which can be set either public or private. Social media platforms can be accessed for different types of activities, such as interacting with real-life or internet friends, meeting others based on shared interest, chatting, creating or sharing images or getting to know other people also dating-wise. (Bányai et al., 2017).

### 2.1 Honeycomb framework of social media

Kietzmann, Hermkens, McCarthy and Silvestre (2011) have created a honeycomb framework to illustrate the definition of social media, which can be seen below in FIGURE 1. The honeycomb model is one way to define social media from the perspective of user experience. It describes social media through seven building blocks: sharing, presence, conversations, identity, relationships, groups and reputation. (Kietzmann et al., 2011). The writers specify the blocks as follows:

“These building blocks are neither mutually exclusive, nor do they all have to be present in a social media activity. They are constructs that allow us to make sense of how different levels of social media functionality can be configured.” (Kietzmann et al., 2011)

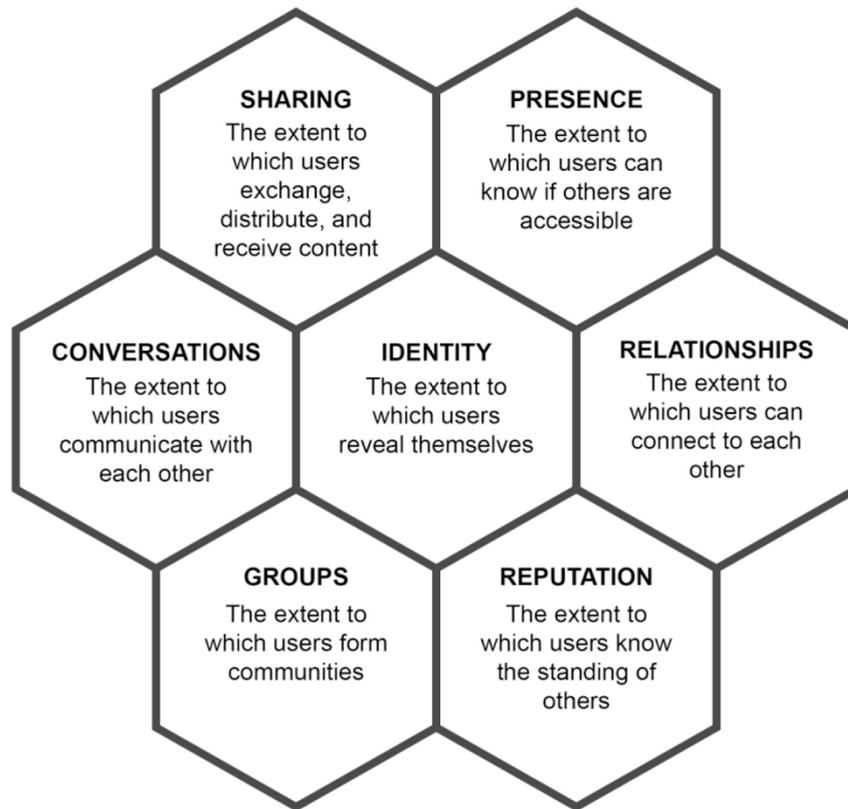


FIGURE 1 Honeycomb framework of social media (Kietzmann et al., 2011)

### Sharing

The sharing block is about the content that the users exchange, distribute and receive via social media. The type of content depends on the aims of the platform, e.g. in YouTube the content type is video whereas on Instagram it is images and videos. (Kietzmann et al., 2011).

### Presence

Depending on the social media site, the users can share their own information but on the other hand get others' information about their whereabouts – either in real life (by location) or in virtual life by status, such as available or hidden. (Kietzmann et al., 2011). Some sites, such as Facebook or Instagram show other users whether you are online and accessible for conversation. In some social media apps, such as Snapchat, it is possible to share other users one's location in real life. The presence status enables simultaneous communication with other users (Baccarella et al., 2018) which makes the interaction more influential by being more intimate and immediate (Kaplan & Haenlein, 2010).

### Conversations

Social media applications almost always have some kinds of ways to communicate and react to others' posts via for example comments, replies, likes, reacts and direct messaging. Many social media sites have originally been designed for the users to communicate with each other, either individually or in groups. There are

tons of different reasons for the conversations to happen, for example to meet similar people, to find love or friends, to build one's self-esteem, to discuss about new trending topics, to get one's message heard or to participate in discussion of environmental, political or economic issues. (Kietzmann et al., 2011).

### **Identity**

Identity block symbolizes how much information users reveal about themselves. The information can be for example name, age, gender, profession, or location. It depends a lot on the platform what kind of personal information is typical to share. Some social media platforms are more built around identity than others. In those it is more likely to set up a profile and use one's real name, whereas in other platforms it is more common to use a nickname, or it is not even necessary to set up a profile. (Kietzmann et al., 2011). As an example, in LinkedIn the information revealed on oneself is mostly focused on education and work experience – kind of as an electronic CV. In LinkedIn it is typical to reveal real and recognizable information about oneself, e.g., real name, image, companies, and positions one has worked for as well as educational information, such as schools and degrees one has accomplished. As a contrary in YouTube, it is more common to use a nickname and not really share much personal information about oneself when creating a profile – if even creating one.

### **Relationships**

Relationships building block is all about how the user can relate with other users on social media – how they interact and share information. This means that at least two users connect with each other by e.g. having a conversation, sharing objects or becoming friends or connected in the platform. (Kietzmann et al., 2011). In Facebook it is more common to connect with people who are already known from real life whereas in LinkedIn it is more typical to connect with people due to professional relationships e.g. with who they work with and to whom they work for. (Baccarella et al., 2018).

### **Groups**

The users can create and join different groups in social media that are built on a shared interest or practice. Different groups and communities are very common in Facebook. Groups can be open to anyone, closed – when entering the group requires an approval, or private – when accessing is only possible via a received invitation. In the closed groups, users can share content that is only visible for other members of the group. It is also possible to organize private events among the group members. (Kietzmann et al., 2011).

### **Reputation**

Reputation often means different things in different social media platforms, but usually it means trustworthiness of people and their content. The reputation of the user is often measured by for example number of followers or the nature of comments of one's followers. Reputation of content, such as videos or images, is

usually measured by e.g. likes, view counts, thumbs up/down or ratings. (Kietzmann et al., 2011).

Each social media platform is more focused on some building blocks of the honeycomb model than others. For example, Facebook is mostly focused on relationships block, LinkedIn is focusing mostly on the identity block and YouTube is more focused on the sharing block. In addition, it is stated that social media communities that don't value that much identity, neither value that much relationships. (Kietzmann et al., 2011).

## 2.2 Social media in communication

Businesses were put rapidly under a lot of unexpected external pressure when COVID-19 started. It challenged especially smaller businesses to increase and adapt their social media use, even though for many of the organizations were not internally ready for such a big change so suddenly. Yet fear of being left behind from competitors as well as meeting customers' expectations on being present in social media drove also small businesses to start using social media. (Kwon, Woo, Sadachar, Huang, 2021). So sudden and big change for the smaller businesses however at that time might have meant lack of expertise or resources in the relevant area. Study made by Kwon, Woo, Sadachar and Huang (2021) nevertheless revealed that the external pressure as well as culture of learning and openness had a positive influence on the perceived usefulness of social media, and in addition also relieved the perceived barriers of social media. Thus, positively impacting on social media use intention. (Kwon et al., 2021).

Companies, organizations, and municipalities using social media platforms for branding but also communicating to their customers – current and potential. In 2022 the most popular social media platform among Finnish municipalities was Facebook by 99 %, second came Instagram by 93 %, and third YouTube by 83 %. When comparing to the previous year, the use of Twitter was decreased and the use of TikTok was increased. The use of TikTok is still relatively low; according to the same study, around 15 % of Finnish municipalities are using TikTok. (Association of Finnish Municipalities, 2022).

The purpose of social media is not only for entertaining or informing individuals but in addition it is also a very efficient, multifaceted, and beneficial way of marketing brands and organizations (Bhargava and Velasquez, 2021). Social media is used worldwide by over 4,48 billion people, which means over 56.8% of world's population today. Therefore, advertising through social media helps to reach tons of people. (Dean, 2021).

Most businesses get their revenue from the users who are consuming the company's product or service. Yet, for some businesses e.g., ad-based businesses, the user is not directly bringing in the revenue by consuming a product or service of the company, but instead it is *the attention* of the user that is the key for revenue. The attention of the user is then sold as a product to advertisers or other companies. Examples of communication channels that operate on ad-based

attention-economy business model are for example the more traditional channels such as: television, radio, magazines, and newspapers. More modern ad-based businesses are social media companies, such as Facebook, Instagram, Snapchat, YouTube and TikTok. Currently social media platforms are seen as the most influential and valuable ad-based businesses. (Bhargava and Velasquez, 2021).

Social media is free for its users (moneywise), but what they do pay for, is their attention. Since social media companies get money from the attention of the users by showing them ads of different brands and organizations, the companies need to keep the users interested by showing them content they like. Attention-economy businesses try to keep the users active and engaged on the platforms as long as possible with the help from algorithms, because the longer the user stays there, the more likely it is for the user to be exposed to and influenced by an advertisement. Thus, social media companies can charge the advertisers more and become even more profitable. (Bhargava and Velasquez, 2021).

Besides attention, the users of social media platforms are also paying for the companies' services in the form of revealing them a lot of information about him or herself. That actual price that is paid from the consumer's perspective is very difficult if not impossible to define, especially when we don't even know what that can mean for one's future. In today's world, people's data is being exploited commercially in many ways, and sometimes even misused. Competition law has not been able to anticipate or react quickly enough to this change. Smaller companies in the same industry have no chance of doing as well as these giants. Raeste and Sokala (2021) demonstrate this with the fact that in 1975, in the United States, 109 companies collected half of the profits of all publicly traded companies. Whereas now only 30 companies collect half of the profits. (Raeste & Sokala, 2021).

Even though social media is free of charge for its users, as mentioned before, the organizations with social media accounts still need to allocate money and resources to keep their channels updated and running by regularly posting content that is relevant, interesting, and up to date. (Larson & Draper, 2017). However, social media is very cost-effective way to market a brand or organization, which makes it good also for smaller businesses to utilize (Ciprian, 2015).

The goal of all kinds of media is to influence as many people's purchase decisions as possible, and many people in fact count on social media and make a purchase based on recommendations what they read on social media. According to Ciprian (2015) there are two main benefits of social media: to increase traffic and to increase exposure. In addition, social media benefits for organizations and brands are for example building brand awareness and brand equity, increasing traffic, generating new leads, and increasing sales, reaching new and targeted customers quickly, improving customer service and brand loyalty, providing product information, and collecting customer feedback. (Ciprian, 2015; Larson & Draper, 2017).

For many brands the main purpose of social media is also for communicating about the brand and communicating with its customers (Ciprian, 2015). Social media is a place to build a relationship with the potential or current

customer. It is not the place where the actual transaction happens, but instead is a useful tool that helps to measure different elements of customer interactions. (Holloman, 2014). In social media brands and organizations can interact and engage with its followers by Q&As, polls etc. For some companies, social media is more for networking and recruiting new employees or to perform a market analysis. However, whatever the case and the main reason is, it is important to choose the right and relevant platforms for each company according to what their goals are and what platforms are the best for reaching those goals. (Ciprian, 2015).

Most people who are using social media are there to connect with other people rather than companies. Thus, it might be difficult for companies to connect with people, because the people don't necessarily want to receive a lot of advertisement from companies. Therefore, it is extremely important for the companies to create content that is beneficial and valuable for the users in a long run. This way they are likely wanting to remain following the company or brand, and simultaneously the company or brand can build a long lasting and profitable connection with the potential or current customer via social media. (Larson & Draper, 2017). It has been studied that businesses that are active and share beneficial content on social media, have also seen a development in their business (Ciprian, 2015).

Marketing and advertising digitally through social media make it possible to target relevant audience more carefully than the more traditional media platforms, such as radio, TV, outdoor advertising, magazines, and newspapers. And what is maybe the most important and beneficial thing about digital marketing, is that it enables to measure the actual results much better and more specifically than the more traditional media platforms. This helps to improve the results continuously by learning what works well and what doesn't and adjusting the activity further based on actual data. (Larson & Draper, 2017).

The results of social media marketing can be measured with ROI (return on investment) and different KPIs (key performance indicators). ROI shows the sales received from the cost of making a sale, where the cost can be for example a marketing cost. ROI can be calculated in the following way:

$$\text{(Money gained from the activity - cost of the activity) / cost of the activity} = \text{ROI}$$

In case you want to know ROI in percentage, ROI must be multiplied with 100. Relevant social media KPIs to be used are for example awareness, reach, traffic, and engagement. (Holloman, 2014). Even if the reach would be modest, it doesn't necessarily mean bad results from the company's point of view, because even if the reach is not that high, but the audience is targeted well, there might still be a large return on investment. Again, it depends on the company's goals what should be measured and which KPIs followed. (Larson & Draper, 2017).

User-generated content (UGC) means content, such as images, videos, posts or reviews that are posted by individual people on social media or other online environment about a brand or its products. The benefits of UGC are that brands get free content that they can reshare in their own social accounts or other channels. According to Narangajavana Kaosiri, Callarisa Fiol, Moliner Tena, Rodríguez Artola and Sánchez García (2019) UGC is seen as reliable search method when it comes to searching for trustworthy and instant information

about recommendations because users share their own experiences and interact with others online voluntarily and independently. They also specify that:

“Recommendations from real-life friends via social media can improve the level of trust.” (Narangajavana Kaosiri et al., 2019).

Online brand communities (OBC) are also a good way for brands to engage with consumers. According to Bowden, Conduit, Hollebeek, Luoma-aho and Solem (2017) consumers want to be part of online brand communities (OBCs) because that way they create and/or co-create value for themselves and/or others by engaging with brands, that are relevant to themselves and others. Nevertheless, it is good to note that OBC-based engagement is not always positive or supportive for the brand’s desired image or position. (Bowden et al., 2017).

According to Karjaluoto, Munnukka and Tiensuu (2015) consumers’ brand engagement in social media is beneficial because it helps to build brand loyalty and increase word-of-mouth (WOM) as well as increase sales. In addition, it has a positive effect on share of wallet (SOW). (Karjaluoto et al., 2015). SOW means the amount of money that a consumer is spending on a particular brand rather than its competitors (Kenton, 2021).

With brands and organizations being in social media, there are also some risks and unintended social media consequences, such as social media crises as well as communities’ negativity spreading on brands. One of the most dangerous risks brands might face in social media is to get in the middle of social media firestorm. (Scholz & Smith, 2019). Pfeffer, Zorbach and Carley (2014, p. 118) define online firestorm as:

“- - sudden discharge of large quantities of messages containing negative WOM and complaint behavior against a person, company, or group in social media networks.”

Social media firestorm is likely to be triggered if there is a perception by consumers that a company has violated moral norms. According to Scholtz & Smith (2019) 61% out of accusations of moral violations are resulting to business-targeting firestorms. It is good to note that online firestorms are usually led by small but loud communities whereas most people often remain silent. In a situation of social media firestorm, managers should take action by reacting fast, respond respectfully and keep the content positive in order to keep good relations with stakeholders. Some studies say that it is important to take action in disputed issues whereas others claim that taking part in these conversations is not always necessary or even recommendable. Therefore, brands and organizations should carefully consider which conversations should they react to by participating and which ones not. In addition, they should compare and assess different response strategies case by case. On some occasions, it might often even be better not to react than to participate in the conversation, because that might quickly escalate to something worse and even get viral. (Scholtz & Smith, 2019).

## 2.3 Social media use in Finland

According to a survey on “Use of information and communications technology by individuals” by Statistics Finland 69 per cent out of 16-89-year-old-people, were using social network services in 2020. The following year, in 2019, the number was 61 per cent whereas in 2015, the number was 58 per cent. The increase in 2020 was exceptional. The highest relative increase was among the two oldest age groups, where the number of social network service users increased from less than 200,000 people to over 300,000 people among 65–74 years old and from 45,000 to more than 75,000 among 75–89 years old. It is likely that the restrictions due to covid-19 shifted social networking online as well as motivated older people to learn new social media skills. (Official Statistics of Finland, 2020).

According to the survey made by Statistics Finland, in 2020 the most used social network service among 16-89-year-olds was Facebook, which was used by 58 per cent of the age group. (Next was WhatsApp by 50 per cent – but in this thesis it is not considered as social media). Instagram came third by 39 per cent. (Official Statistics of Finland, 2020). However, these numbers don’t tell which of the social networking services were used the most *by time*. If we compare what was the most used networking application among the respondents, 36 per cent mentioned WhatsApp being the most used app whereas Facebook was mentioned by 32 per cent. The younger respondents used WhatsApp and Instagram more often than Facebook, whereas among older respondents Facebook was named as number one. (Official Statistics of Finland, 2020).

However, it is very important to note that this survey was made only for people aged 16–89 years old and thus does not cover teenagers under 16-year-old, children nor elderly people who are over 89 years old, even though many, especially in the younger groups are very likely to use social media and social network services. Social network services include for example WhatsApp, but that is not considered as social media. This thesis will be focused on social media sites and applications, therefore excluding e.g., WhatsApp, unless otherwise mentioned.

When having a look at the active social media user numbers worldwide, in January 2022 (illustrated below in TABLE 1), there were around 2,958 million monthly active Facebook users, about 2,514 million monthly active YouTube users, approximately 2,000 million monthly active WhatsApp and Instagram users, approximately 1,051 million monthly active TikTok users, about 635 million monthly active Snapchat users, around 445 million monthly active Pinterest users and around 556 million monthly active Twitter users. (Statista, 2022). In addition, there are approximately 875 million LinkedIn members in 2022 (Oberlo, 2022) and 43 million BeReal. members (Thinkimpact, 2022).

TABLE 1 Most popular social media sites or applications worldwide in 2022  
(Source: Statista, 2022; Oberlo, 2022; Curry, 2022; Thinkimpact, 2023)

Social Media / (social network service)	Users worldwide, in millions
---	------------------------------

Facebook	2,958
YouTube	2,514
(WhatsApp)	(2,000)
Instagram	2,000
LinkedIn	875
TikTok	1,051
Snapchat	635
Pinterest	445
Twitter	556
BeReal.	43

### 3 DARK SIDE OF SOCIAL MEDIA

Social media has several benefits, and it brings a lot of different opportunities for many – in individual, group, and societal level. However, as almost everything, also social media has another side to it. As Baccarella, Wagner, Kietzmann and Mccarthy (2018) mention, many technological innovations, such as social media, are not *either or*, as in *good or bad*, *helpful or unhelpful* but instead have both bright *and* dark sides simultaneously. (Baccarella et al., 2018). Bright side of social media is discussed and researched a lot, but dark side of social media has just lately been started to receive more research attention. This chapter introduces the dark side of social media – what harmful effects and consequences has social media brought up and why? Is there a way to deal with them or even avoid them?

#### 3.1 Honeycomb framework of dark side of social media

Besides of the honeycomb framework of social media, there is also a similar framework for dark side of social media functionality with the honeycomb model introduced by Baccarella et al. (2018), which is illustrated below in FIGURE 2. It has the same building blocks as the honeycomb model for social media (sharing, presence, conversations, identity, relationships, groups and reputation) but this framework examines the subjects from a different angle – the negative impact of the social media might have in one’s life in the form of building blocks. (Baccarella et al., 2018).

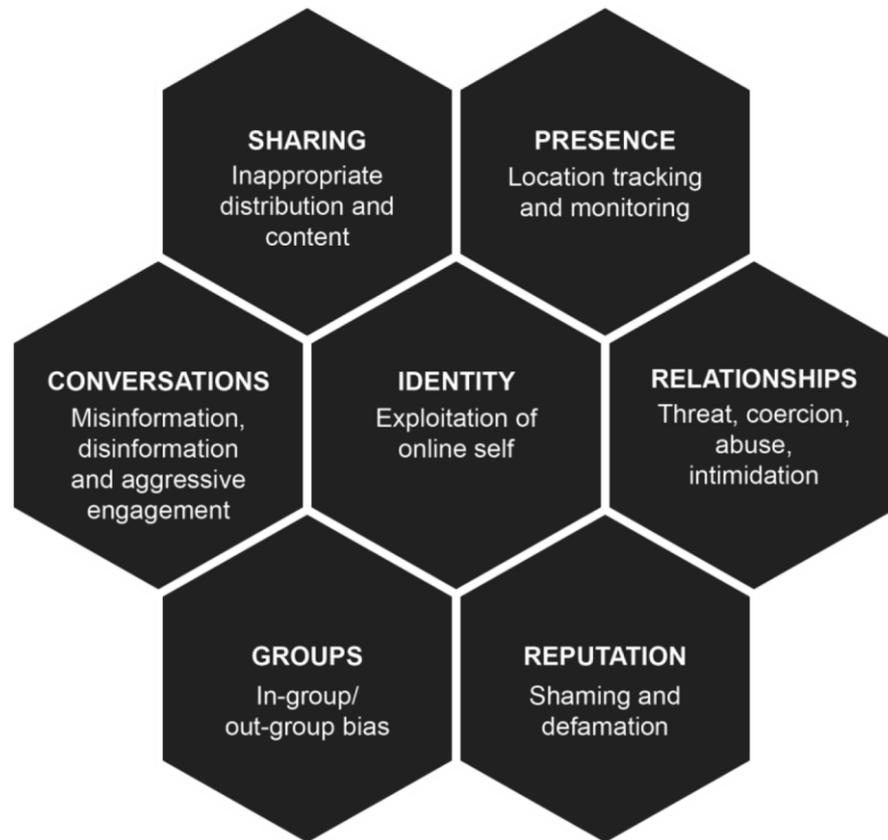


FIGURE 2 Honeycomb model of dark side of social media functionality (Baccarella et al., 2018)

**Sharing**

The dark side of the sharing block is that people might share inappropriate or private content forward and content which they don't have a permission from the holder to e.g., intimate images or videos or a song on the background of a video of which one doesn't have the right to use because of not having paid copyright fees. These both can lead to severe consequences. There is a risk for both parties – the one who shares the content but also the one who is consuming the shared content. (Baccarella et al., 2018).

**Presence**

The dark side of the presence block is that others can see one's location and availability information from social media. Those can be tracked without one knowing or without the user's permission and thus, one might become a target of stalking. (Baccarella et al., 2018).

**Conversations**

As explained before, social media applications almost always have some kinds of ways to communicate and react to others' posts via for example comments, replies, likes, reacts and direct messaging. The dark side of the conversations block might be that the conversations might sometimes be unnecessary and

aggressive, even though the social media sites have rules and moderation controlling the users' behavior. People might misinterpret something and write about it or then just spread wrong information on purpose. (Baccarella et al., 2018). The so called "online witch hunts" mean that one who has an unpopular opinion is being attacked online by groups who have another opinion about the subject. In some cases, these have led to very bad scenarios e.g. when someone innocent is wrongly blamed a crime one didn't commit but the word is spread very quickly on social media and might lead even to death threats. (Baccarella et al., 2018). People receiving WOM (word-of-mouth), or other socially transmitted communication are said to prioritize negative rather than positive messages. Negative messages tend to have more emphasized and convincing (Powell et al., 2021).

In addition, there are automated bots that distract and spam conversations with fake advertisements or raffles. Yet even these tools can be tricked and taught by users into participating into questionable conversations, e.g. making racist statements. (Baccarella et al., 2018).

### **Identity**

Even though users may usually decide how much and what kind of personal information they share with others about themselves, social media platforms are built in a way that they attract the users to share as much as possible. The dark side of this functionality is that the user is no longer in control of one's own identity and what information is being shared of oneself. This might lead to several kinds of safety and privacy risks. Especially younger people and children are worried about the lack of privacy and protection. There is also discussion about the social media platforms having privacy settings that are difficult to change:

"A report commissioned by the Belgian Privacy Commission stated that the largest social media platform, Facebook, does not provide appropriate control mechanisms concerning user data. It highlights that Facebook's default privacy settings are so difficult to find and change that the automatic and common outcome is behavioral profiling by the platform." (Baccarella et al., 2018)

### **Relationships**

The dark side of the relationships block include for instance cyberbullying, cyber stalking and cyber harassment. (Baccarella et al., 2018). According to Luxton et al. (2012) cyberbullying usually means that one is constantly and intentionally set as the target of bullying, harassment, threats or humiliation over the phone or internet, via e.g., instant messaging, social networking sites, texting, or email. The victim as well as the bully are usually children or adolescent. When it comes to cyber stalking or harassment, the victims are often adults but the action itself is usually pretty much the same as it is in cyber bullying. (Luxton et al., 2012).

Online space, such as social media platforms are favorable environment for cyberbullies. In some social media applications, such as Jodel, one remains anonymous. In applications where one needs a profile, it is possible to make fake profiles and practice cyber bullying, harassment and stalking without revealing his or her real identity.

Online harassment is a form of cybercrime. It includes for example intimidating, stalking, bullying, extortion, or harassment online. It is estimated that 10–40% of the youth have experienced cyberbullying and 40% of the cyberbullies are saying to do that for fun, maybe because of jealousy. That might be due to the fact that the ones who are using a lot of social media, often think that others' lives are happier and better than their own. (Baccarella et al., 2018). According to another source, 41% of social media users have personally experienced bullying in social media, and 62% from them thinks that it is a significant problem. (Uski, 2019).

### **Groups**

The dark side of the groups block is when people define themselves through social grouping, which means that their own beliefs are strengthened by other group members. At the same time the ones who don't believe in the mutual things are left out and their beliefs and thoughts are being diminished. *'Ingroup love and outgroup hate'* is a term, which means that people exclude others from conversations and groups and at the same time lose empathy and curiousness for them. According to Baccarella et al. (2018) there are often many split discussions about race and gender equality (or inequality) because of this matter. (Baccarella et al., 2018).

Extreme groups and communities might be risky and even dangerous for vulnerable people. These groups can for example support and promote beliefs and behaviors which normally would be unacceptable by most people, but more vulnerable people might be influenced by these questionable online communities. Examples of these can be for example suicide, anorexia nervosa or deliberate amputation. (Luxton et al., 2012).

### **Reputation**

The dark side of the reputation block is that one's reputation can be destroyed in seconds – whether individual's or organization's. A huge risk has to do with sharing inappropriate content online. That may ruin the reputation of the sharer oneself or others related to the content being shared. It doesn't really matter whether the content posted is true or false because the more shocking the content is, the quicker it tends to get viral and harm one's reputation. Yearly many businesses and politicians are forced to resign as a result of having posted offensive, false or absurd content in social media. According to Baccarella et al. (2018) some users who have posted such content have told not to have thought thoroughly the actual reason for posting. They might have been highly emotional, misjudged who might be in the audience or then might have been under the influence of intoxicants. Whatever the reason has been, the action is likely to ruin one's reputation and have even severe, long-term consequences. Therefore everyone should pay attention to their status online and think about the possible consequences in advance before posting anything. (Baccarella et al., 2018).

## 3.2 Additional dark sides of social media

Besides of the honeycomb model presented and explained thoroughly above with its different blocks, there are also several other dark sides of social media of which some can be put under one or many of the earlier presented blocks, these are for example fake news, manipulation, trolls, appearance pressure, grooming, addictive use, physical technostress, and the list goes on. According to Seldon et al. (2019), social media influences one's mental and physical health. That can appear as stress, depression, varying mood, having anxiety, getting sleeping disorder patterns or social media addiction. (Seldon et al., 2019).

### **Fake news**

Fake news are untruthful news articles that seem authentic and are difficult to separate from real news (Allcott & Gentzkow, 2017). Fake news is something that is not what it purports to be (Fitzpatrick, 2018). Fake news is made incorrect on purpose and might mislead the reader. Fake news is often produced by publishers that seem real and are difficult to part from real publishers because their names usually resemble real news publishers. Fake news is often shared on social media where they might get quickly viral. According to Allcott & Gentzkow (2017) there are two main reasons for fake news. The first motivation is about money. Articles shared on social media often aim at receiving remarkable advertising revenue from the readers who click on the news articles that lead to the original site. The other main reason for producing fake news is more ideological - aiming at favoring and advancing e.g. political candidates when it is close to the election time. (Allcott & Gentzkow, 2017).

### **Manipulation and persuasion via algorithms**

Manipulation of media and news has been happening already for centuries (Fitzpatrick, 2018) and using social media as a tool for spreading propaganda and disinformation has become more common (Rogers & Niederer, 2020). From 16-24-year-olds 84% have seen unreal or suspicious information or content in social media. The study was made for 16 to 89-year-old people, and in total almost 62% of them responded the same. Around 19% of them told to have checked the truthfulness of the subject by following or participating an online conversation about the matter. (Suomen virallinen tilasto, 2021).

Because of social media algorithms, the user of the applications is not seeing everything that is being posted on social media, (even if one would scroll down the feeds all the way), but instead the platforms' algorithms anticipate what news articles and other posts interest the user and keep showing posts according to that. This is manipulating one's thoughts because she or he might get only one or some perspectives of an issue but not all of them which again might and probably will influence one's thoughts and decision making. Social media manipulation includes for example the use of fake followers and with that - manipulating public opinion. (Fitzpatrick, 2018; Rogers & Niederer, 2020). Studies also show a positive correlation between social media news and political persuasion, and

according to Diel et al. (2016) social interactive uses of social media lead to political persuasion even though it has not been political. (Diehl et al., 2016; Kim et al., 2019).

Algorithms play a key role also in other markets, such as financial markets, where stocks and shares are traded between algorithms. Algorithms can study a massive amount of data about people's behavior online and even their mood. One of the most interesting algorithms used and benefitted by investors is Twitter. The algorithm studies Twitter users' mood and opinions towards certain companies and constantly updates itself accordingly. However, it is good to remember that algorithms don't always work in the best possible way, since they are programmed with the data from past and not the future, since that is impossible to predict. (Raeste & Sokala, 2021).

### **Trolls**

Trolling on social media mean when one is posting inappropriate or questionable content and then waiting for someone to react it. The objective of trolls is to provoke online communities intentionally, disturb normal conversations, relationships, or reputations rather than awake constructive discussions. Their motivation is also to pick a fight on the internet just for fun and without any reason. It is common to see e.g. in online forums, anonymous social media application Jodel, comments on YouTube and blogs, but it might happen also within organizational contexts. (Baccarella et al., 2018).

### **Hate towards brands and organizations**

Anti-brand communities are built upon mutual hate or dislike of a brand, and to practice that, social media is the perfect arena for it. The intention of anti-brand communities is to harm the brand in question, and in fact they are in a way co-creating brand meaning and competing with the brand itself who is working hard on building and strengthening a certain brand image. Anti-brand communities can be found among all kinds of consumer brands, but they are also popular within other types of brands, such as team sports and especially among professional soccer. Anti-brand communities harm the brand in question by for example sharing content like links, images and comments that are harmful to the brand and its fans. Due to quick development of social media and mobile technology, social media platforms are often used also for creating anti-brand movements. (Popp et al., 2016). The members of anti-brand communities are together focusing on opposing for example the brand's values and identity. Anti-brand communities are driven by brand hate, and that is seen via several negative emotions, such as disappointment, fear, shame, and anger. (Powell et al., 2021).

### **Appearance pressure**

One dark side of social media are appearance pressure, that has become popular especially among younger adults and teenagers after many different social media applications, such as Instagram and Snapchat introduced quick photo-editing tools and filters, that quickly change the appearance in selfies. The feature of different filters changes the appearance by for example making eyes look bigger, lips more filled, skin smoother, higher cheekbones and a narrower nose. Plastic

surgeons are on the best vantage position in witnessing how photo-editing is negatively influencing on people's self-esteem and body image (Fagan, 2020). A Finnish plastic surgeon Heikki Kupi told in an article published by Iltalehti about an alarming phenomenon that people have started to come to the plastic surgeon reception showing these filtered images of themselves and hoping to get the same results with plastic surgery. In some of the cases this is caused by a body dysmorphic disorder. (Siivonen, 2020). Body dysmorphic disorder (BDD) is a mental disorder where one is obsessively convinced that his or her appearance is ugly or somehow faulty or malformed. One can spend hours and hours in front of the mirror obsessing about his or her appearance and the nonexistent or slight imperfections while trying to hide or fix them. (Fagan, 2020; Huttunen, 2018). The thought can be directed to any body part but usually to one that is visible to others. Some people who are suffering from this disorder are trying to fix the problem at a plastic surgeon but instead of going to a plastic surgeon, they should rather see a psychiatrist or psychotherapist. This is because usually one who is suffering from this disorder will not be happy to the result and still continue worrying about his or her appearance, which might lead to a constant loop of plastic surgery. Plastic surgery obviously isn't cheap and continuous surgeries might also risk one's financial situation. In addition, there is always risk associated with plastic surgery, each time. (Huttunen, 2018).

According to Kupi, appearance pressure is an issue of different aged people, but going to the consultation with filtered images is more common among younger adults, because they are the ones more likely to use social media. Obsession can be talked about when it is starting to influence one's function in personal life or work. Kupi also mentions that appearance pressure resulted by social media is not a new thing; it became popular about ten years ago when Facebook became more popular. (Siivonen, 2020).

Dysmorphia has also been mentioned when talked about filters. It has even been given its own term: '*snapchat dysmorphia*' (Medical News Today, 2020; Fagan, 2020). Snapchat dysmorphia is talked about when people are aiming to look like their filtered version of themselves (Medical News Today, 2020). Photo-editing and selfies have set new beauty standards. In addition, it has been claimed that Instagram, Snapchat, and other apps with filters, can make users to lose touch to reality and how they really look like, since they start to expect to look similar in real life. (Fagan, 2020).

Obviously, it is unlikely that a mental disorder like body dysmorphic disorder (BDD) would only be caused by social media, but instead certain personality traits such as perfectionism, genetic factors or rejection sensitivity might influence developing the disorder. At the same time social media might influence making people more vulnerable. (Fagan, 2020). Social media engagement is high among adolescent girls and currently even one of the most popular leisure activities among adolescent (Bányai et al., 2017; McLean et al., 2015). Social media use might have negative consequences for body image and even lead to eating disorders. According to a study made by McLean, Paxton, Wertheim, and Masters (2015) girls who were regularly sharing images of themselves on social media

were more likely to suffer from higher overrating of weight and body shape, dietary restraint or eating concerns, body dissatisfaction as well as assimilate that a thin body type is ideal compared to girls who didn't. The study also showed that girls who shared selfies or other photos of themselves in social media, had a higher engagement in investing in and manipulating those images. (McLean et al., 2015). The filtered selfies might have an impact on one's self-esteem and make one feel insufficient for not looking the same in real life. The filtered images can even act as a trigger to body dysmorphic disorder. Teens who manipulate their images are usually also more worried about their body image. In addition, teens who suffer from BDD often search for aesthetic validation from social media. (Medical News Today, 2020). It has been studied that especially younger women feel appearance pressure caused by social media. According to Åberg et al. (2020) social media platforms, especially Instagram, cause social comparison, especially among younger women.

"The tendency to compare oneself to others causes more appearance-related pressure and makes women more vulnerable and dependent on other people's opinions on social media." (Åberg et al., 2020)

Because social media platforms are used by such huge crowds, it also means that there is great potential to affect in the users' opinions. Although social media is creating appearance pressure, it has in fact also become an important venue for addressing and challenging different norms by e.g., celebrating body diversity and advocating self-acceptance. (Åberg et al., 2020). Lately many organizations have also started to pay more attention in diversity by setting goals to increase it (Flory et al., 2021). However, this is just a good start and only time will show if this will be continuous and not only quick trend for many. A good example of a company supporting body positivism is Dove, which has been among the first beauty companies in fighting against unrealistic media imagery and including body positive messaging into their ads. They have done it for example by showing more realistic and versatile bodies and revealing how in many companies' ads models' faces are being photoshopped to look as "perfect" as possible. Dove Self-Esteem Project's mission is:

" - - to ensure the next generation grow up enjoying a positive relationship with the way they look - helping girls to raise their self-esteem and realise their full potential." (Dove Self-Esteem Project, n.d.)

Many influencers and celebrities have also fought against appearance pressure by showing more realistic content of themselves on their social media. Some are showing more content of themselves without makeup or more realistic images of their body. Some social media users are addressing on how Instagram users often don't show the whole truth about themselves and reveal how certain poses, clothes or filters enable to "hide" something that one is insecure about. Some influencers are awakening discussion about taboos or social norms such as female body hair. The discussion isn't only restricted to appearance pressure but extend to also other issues. Many influencers, celebrities and other social media

users have in fact have started to share information about for example their mental health problems more openly on social media. (Auvinen, 2018; Fisher, 2017; Patel, 2019; Rotonen, 2020; Vanninen, 2020).

### **Technostress**

Technostress means stress from information and communication overload which is caused by information technology (IT). Technostress can be caused by for example new programs, systems, applications, and ways of working with smart phones and other devices. (Lee et al., 2013; Salo et al., 2019). Technostress often decreases well-being by causing concentration and sleep problems and having a negative effect on one's identity and social relations (Salo et al., 2019).

### **Grooming**

Gunawan et al. (2018) define grooming as the following way:

“Online child grooming is defined as a process to approach, persuade, and engage a child, the victim, in sexual activity by using the Internet as a medium. Perpetrators approach the victim to build not only sexual but also emotional relationship.”

Social media has enabled for predators to reach children more easily. The online environment makes it very easy to pretend something else than one is in real life. Online child grooming is a crime, that has a negative effect on the child's life psychologically, physically, emotionally psycho-socially and behaviorally. (Gunawan et al., 2018).

Even though each case is unique and might differ on type, duration and intensity depending on the offender's behavior and characteristics, there is still a certain pattern to be seen usually these online grooming cases. The pattern consists of six steps which may or may not appear one after another:

The first step is friendship forming stage, in which the perpetrator tries to get to know to the child and find out e.g., his or her name, age and location. In addition, the predator tries to get a picture of the child to confirm that the person in question really is a child. The second step is relationship forming stage, where the perpetrator and the child are discussing about the child's school, family, hobbies, and other interests to make the child to believe that they have formed a relationship. The third step is called risk assessment stage, where the perpetrator is trying to make sure that the child is alone and that nobody is seeing his or her conversations. The fourth step is exclusivity stage, where the perpetrator tries to get the child to completely trust himself/herself and might even talk about love. The fifth step is sexual stage where the perpetrator and child talk about sexual activities. The sixth and last step is conclusion stage where the perpetrator tries to set up a meeting with the child in person. (Gunawan et al., 2018).

### **Harmful challenges**

TikTok is full of different challenges that engage the other users to participate in the challenges. The challenges vary a lot from fun to dangerous, and the most dangerous ones can even lead to death. Lately there has been a popular challenge in TikTok called the Benadryl challenge, which encouraged people to take 12-14

pills of the allergy medication which is six times more than the recommended dosage. The goal is to get hallucinations on video that they could then post on TikTok. A 13-year-old boy did the challenge with fatal consequences; he took the pills and started having seizures. In the hospital his parents were told that their son would never wake up. The boy died six days after. (Watson & Hassan, 2023).

### **Selling and buying illegal substances**

The drug sell has been shifted from the streets to online, into the dark web but also social media platforms. Some people, including teens and even children are using social media for buying or selling drugs or other illegal substances. The platforms that support anonymity, such as Jodel and Snapchat, are favorable platforms for doing that. Yet, drug dealing is also done openly on other social media applications, where teens are often using certain slang, emojis or code language known to refer to certain substances. Many parents or other adults around those teens would probably not even realize those being code words if they saw these conversations. In addition, encrypted messengers are used for drug dealing, which makes it more difficult for parents or authorities to find out. Previously it was more common to buy the substances from some friends or friends' friends, whereas when purchasing them online via social media or other anonymous platform, the sellers can be whomever they claim to be, which includes more risks, especially for teens and children. Also, the substances might be something else than what they are claimed to be. The threshold for talking to strangers is lowered by the internet and social media, and anonymity is likely to help lower it even more. In social media there is also a lot of content that is favoring alcohol and drug use. (Ocean Recovery, 2023).

### **Prosuicide behavior**

There is claimed to be more and more evidence that social media may influence on prosuicide behavior. Due to the fact that internet removes geographical barriers, which eases the communication between people, prosuicide social media sites might form a new risk to more vulnerable people who probably wouldn't otherwise be exposed to that kind of material. (Luxton et al., 2012).

## 4 SOCIAL MEDIA ADDICTION

The previous chapter introduced dark side of social media in its many dimensions. One of the harmful effects on top of the already mentioned is addiction to social media, which this thesis will take a closer look at and therefore it has its own chapter. First this chapter will explain the definition of social media addiction and explain the difference between substance and behavioral addiction. Then it will describe how different types of addictions are seen in the Finnish society today as well as introduce tactics to cause and prevent social media addiction.

### 4.1 Definition

The term addiction is often more well-known and used when talking about substance addictions. Substance addiction includes a chemical substance, such as alcohol, nicotine, drug, or another intoxicant. Even though addiction is often more familiar to people when talking about intoxicants, it has recently become better understood that one can become addictive to also other objects than a chemical substance. In fact, people can become addictive to almost anything – for example food, sex, work, training, gambling, internet, social media, shopping, or people – just to mention a few. (Griffiths et al., 2005; Raento & Tammi, 2013, 7). When talking about an addiction where one is dependent on a particular *activity* rather than a *substance*, we talk about behavioral addiction. In behavioral addiction the object that gives the immediate satisfying feeling is an activity, whereas in substance addiction the object is a chemical substance. Both substance addiction and behavioral addiction involve a strong need or compulsion to the object one is dependent on.

World Health Organization (WHO) defines disorders due to addictive behaviors or substance use as following:

“Disorders due to substance use and addictive behaviours are mental and behavioural disorders that develop as a result of the use of predominantly psychoactive substances,

including medications, or specific repetitive rewarding and reinforcing behaviours.” (World Health Organization, 2021a)

Nowadays the term addiction is used quite a lot in everyday life. Normal habits and routines are part of everyday life and even make life easier, whereas an addiction makes everyday life more difficult because it takes over other things. Whenever a habit starts to interfere with other life tasks, it has become a problem, and when the habit is negatively affecting oneself or the close ones, it has developed into an addiction. In other words, addiction has been developed once a habit or routine has become an obsession and when one has lost control of the situation. (Raento & Tammi, 2013). Loss of control refers to the continuation of an activity despite conscious attempts to stop or reduce it. The activity, in this case, the use of social media, continues even if it no longer brings any pleasure. The activity, in this case the use of social media, continues even if it is no longer enjoyable. Instead, motivation changes to prevent the negative consequences of quitting, such as irritation, anxiety, and depression. (Tanner et al., 2020).

Excessive use of internet is nowadays seen as an addiction because it shows to have same criteria than other addictions. Social media addiction is one form of internet addiction and is categorized as a behavioral addiction. (Uski & Lampinen, 2016). FIGURE 3 below demonstrates social media addiction in relation to other types of addictions.

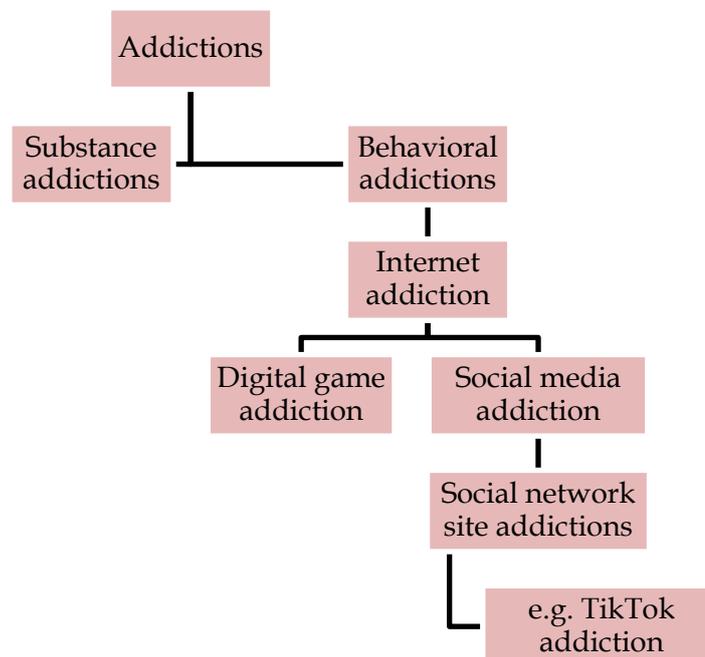


FIGURE 3 Social media addiction in relation to other types of addictions (Tanner et al., 2020).

The time spent in social media can be active by posting or passive by just following others and scrolling feeds. When one is posting constantly something

on social media and is not able to be without post something can be seen as social media addiction. Someone might be addicted on social media also when he or she is scrolling down feed on Instagram or Facebook, checking on snaps on Snapchat or watching videos on TikTok without being able to stop. It is often challenging to see the line between healthy or normal social media use and problematic social media use. (Uski, 2016).

More and more people are sharing personal content online, and although most people can use social media without problems, for some, using social media might lead to social media addiction. (Blackwell et al., 2017; Uski & Lampinen, 2016). Social media use can be viewed as a continuum with controlled social media use at one end, social media addiction at the opposite end, and problematic use in between the two. Once social media use is under control, it is not so captivating and there are not difficulties to stop. For problematic social media users, the activity can be described as high consumption and they experience occasional difficulties in controlling their social media use. At the extreme end of the continuum is social media addiction, which is a harmful and uncontrollable pattern of behavior. It causes significant harm to an individual's well-being in the longer term. (Tanner et al., 2020).

At the same time, it is difficult to know how much time on social media is normal and how much is too much, since today so many things are happening through social media. It might also be hard to even for the individual to notice how much and how often she or he is checking social media applications or sites in a day. (Uski, 2016).

Referring to Blackwell et al. (2017) social media addiction can be talked about when one is unable to control his or her social media use and when it is interfering with other life tasks as well as decreasing the individual's well-being due to excessive use. Uski (2016) defines that when the time spent in social media is so excessive that it is harmful for the individual and the ones around him or her, we can talk about social media addiction. When one is not able to put social media out of sight even though the people around him or her are asking to or when one should be doing something else. (Uski, 2016). It has been argued that the symptoms of problematic use of social networking sites remind the symptoms of behavioral addictive disorder and substance use, for example in an occasion when one is having a relapse when trying to quit. (Meshi et al., 2020).

Usually, addictions are being formed very treacherously and this is also the case with social media. In many cases, the behavior is at first bringing joy in one's life and being practiced for the pleasure. However, the situation might switch so that the behavior is done to push aside negative feelings. The faster the substance or behavior gives a satisfying effect, the easier it is to be developed as an addiction. The problem is that it might often be difficult to notice that a behavior has become an issue even though it might happen relatively quickly. (Koski-Jännes, 2005a; Uski, 2016). For someone who has a behavioral addiction it is very difficult to discontinue the activity even though he or she would like to stop it and regardless of the activity potentially causing a lot of harm. It is still typical to continue that activity because the self-control has been weakened when it comes to

that activity one has become addicted to. (Koski-Jännes, 2005a; Koski-Jännes, 2009).

Even though behavioral dependences don't involve use of intoxicants, in neurotransmitter level, the reaction that behavioral addictions produce in the brain, is comparable to a reaction that is produced by a chemical in substance addiction. In fact, functional neuroimaging studies have pointed out that in internet addiction, the same areas of the brain are being activated than in other behavioral or substance addictions. In addition, the same molecular pathways are associated with internet addiction as well as substance addiction. In both cases, a neurotransmitter, "the feel-good hormone" called dopamine is being released. (Bhargava and Velasquez, 2021).

Dopamine level in the brain is in fact increasing in all addictive activities (Koski-Jännes, 2005a). Behavior that makes one feel good, lures the person to get back among the same behavior or action to get that same satisfying feeling out of it. Dopamine is in central of learning as well as when good or bad behavioral models are being developed. Dopamine makes the person receive a reward for action, and once the reward is being repeated, they shape the action to a more permanent way of doing that action by becoming a habit – regardless of the behavior itself being good or bad. (Stammeier, 2019). The constant repetition of a certain activity makes the brain's reward system less sensitive, which results that the amount of activity must be constantly increased or prolonged to achieve the same rewarding experience. The ability to refrain from receiving an immediate reward, is a key factor that regulates an individual's goal-oriented behavior. The frontal lobes of the brain play a key role in regulating inhibition. They are the last of the cortical regions of the brain to develop, and that happens during adolescence and early adulthood. As a result, young people are more prone to impulsive behavior and the development of addictions than adults. (Tanner et al., 2020). Even though dopamine is a "feel good" hormone, it also has a darker side – it makes us unsatisfied, makes us to want more and do better. Dopamine is also behind all kinds of addictions and even makes one to take stupid risks and sometimes also ignore moral. Dopamine doesn't reward from the activity itself but instead it rewards from wanting something and make us sometimes even take huge risks that usually are not even worth it. (Stammeier, 2019).

A good example of this is the feeling of satisfaction we get when we post a picture or a story. In fact, it's not even the social rewards, such as likes themselves that are necessarily the greatest source of enjoyment or dopamine dose, but it is the anticipation of it. The amount of dopamine in the brain is increasing already when one is anticipating a potential reward, such as likes or comments. And then the application gives us a little dose of dopamine every now and then, when someone likes, reacts, or comments on our post. This prompts many to post again in the hope of another dose of dopamine. The social reinforcement feedback circle is ready, and it exploits people's vulnerability. (Raeste & Sokala, 2021; Tanner et al., 2020).

According to Koski-Jännes (2005a) behavioral addiction has been compared to obsessive-compulsive neurosis. Compulsion, repetition, and the fact of how

much they both interfere and dominate other things in life are characteristics that they both have in common. Both are also difficult to get rid of, despite the disadvantages they often bring to the one who is suffering from either obsessive-compulsive neurosis or behavioral addiction as well as the people around him. Addiction begins as impulsive, unconsidered activity and develops into a compulsive habit as the brain adapts to the substance or addictive activity. When talking about addiction, it is not possible to postpone the experience of pleasure. At the same time with obsessive-compulsive disorder, one is not able to adapt his or her behavior appropriately for the environment. (Koski-Jännes, 2005a).

However, even behavioral addiction and obsessive-compulsive disorder are said to have things in common, they also have many differences. In behavioral addiction, the performed activity gives pleasure whereas obsessive-compulsive behavior includes short, schematic, and repeated action, which by themselves don't give pleasure but instead are performed in order to avoid assumed negative consequences from happening. That is why someone who is suffering from obsessive-compulsive disorder is likely to feel anxious or even panicky if he or she is prevented from doing his or her typical rituals. When a person suffering from a behavioral addiction is prevented from performing the addictive behavior, that person usually feels angry and frustrated. Even though both conditions are related to achieving a goal, the ways to accomplish them usually vary a lot. In addition, obsessive-compulsive behavior doesn't involve increasing tolerance and withdrawal symptoms, which in comparison are relevant for addictions. (Koski-Jännes, 2005b).

Behavioral addictions are very rarely visible from one's habitus to others compared to substance addictions because behavioral addictions are often found in all levels of society, and they are not likely to cause sliding down the social ladder as for example drug addiction usually does. Yet many behavioral addictions still might have severe consequences, such as financial or health problems. Most addictions have many things in common and one of them is often shame and trying to secretly practice the activity one is addicted to. In addition, it is common to isolate oneself from others who don't have similar problems. Because behavioral addiction very often doesn't show to others, it makes the issue even more complex and severe because others can't even try to interfere with it. (Koski-Jännes, 2005b). It has been studied that some addictions are more common on one gender than the other. For example, intoxicant addictions as well as gambling addiction and online gaming addiction are more common for men whereas shopping addiction and social media addiction are more common for women. (Koski-Jännes, 2005b; Su et al., 2020). All in all, many studies have shown that when looking at addictions in general, the ratio of addictive men to addictive women is 10:1 (Koski-Jännes, 2005b).

The International Classification of Diseases (ICD) is the world's international system and a diagnostic tool for classifying injuries, diseases and causes of death. ICD is maintained by World Health Organization, and it is important because it makes the data collection, reporting and decision-making easier. In addition, it helps to make the data comparable and sharable between countries over

time. (World Health Organization, 2019). Even though behavioral addictions have become more recognized recently, there is still a lot of work to do and improvements to be made.

In the latest edition of International Statistical Classification of Diseases and Related Health Problems (ICD-11), World Health Organization (WHO) describes disorders due to addictive behaviors as following:

“Disorders due to addictive behaviours are recognizable and clinically significant syndromes associated with distress or interference with personal functions that develop as a result of repetitive rewarding behaviours other than the use of dependence-producing substances. Disorders due to addictive behaviours include gambling disorder and gaming disorder, which may involve both online and offline behaviour.” (World Health Organization, 2021b)

This means that the only behavioral addictions that have officially been identified as diseases in ICD so far are gaming and gambling disorder. (World Health Organization, 2021b). Thus, social media addiction is not officially classified as a disorder – at least not yet, even though it might have negative and even serious consequences on some peoples’ lives and is debated if it should be categorized officially as a disorder.

In addition, the process is slow, complicated and it takes time whenever something is added in the ICD system. Currently Finland and many other countries are following ICD-10. To illustrate, it took over 10 years for WHO to prepare the newest revision ICD-11. It was published in 2018 and it will replace the current version (ICD-10) on January 1<sup>st</sup> in 2022. However, it seems that in Finland the new revision is probably not replacing the old one until Finland’s Health and Social Services Reform is ready and in place. As a comparison, ICD-11 will include around 55,000 codes for diseases, injuries, conditions and causes of death whereas the corresponding number in ICD-10 was around 14,000. (Pihlava, 2018).

Another used system for mental disorder classification is called Diagnostic and Statistical Manual of Mental Disorders (DSM-5). (DSM Library, 2021). Social media addiction is also not currently included in that system. From non-substance or behavioral addictions, gambling addiction is nowadays included in a section of Substance-Related and Addictive Disorders in DSM-5. It has previously been in a section called Impulse-Control Disorders Not Elsewhere Classified. Charles O’Brien, M.D., who is the chair of the DSM-5 Work Group on Substance-Related and Addictive Disorders justifies this change as following:

“The idea of a non-substance-related addiction may be new to some people, but those of us who are studying the mechanisms of addiction find strong evidence from animal and human research that addiction is a disorder of the brain reward system, and it doesn’t matter whether the system is repeatedly activated by gambling or alcohol or another substance – – In functional brain imaging – whether with gamblers or drug addicts – when they are showed video or photograph cues associated with their addiction, the same brain areas are activated” . (Moran, 2013)

Although social media addiction is not officially classified as a disorder according to the ICD or DSM, there are some other indicators, such as PSMU (Problematic Social Media Use), which’ purpose is to define and facilitate the

identification of social media addiction. FIGURE 4 illustrates PSMU, which is a 6-point scale consisting of six domains of addiction: salience, mood modification, tolerance, withdrawal, conflict, and relapse. (Griffiths, 2005; Kuss et al., 2013). This shows that problematic social media use has similar features than other types of addictions, since the six components are common to all types of addictions.

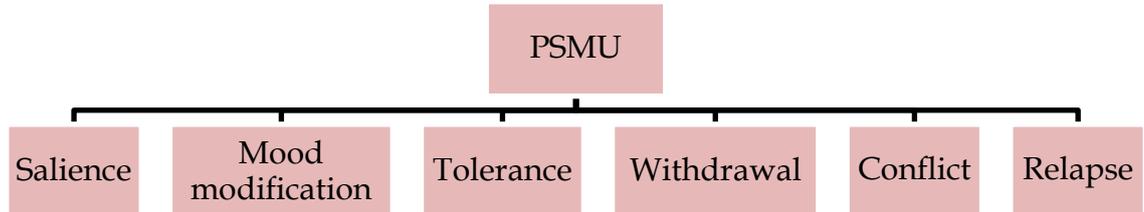


FIGURE 4 Problematic Social Media Use Indicators  
(Griffiths, 2005; Kuss et al., 2013)

By *salience* it is meant that the subject to addiction, in this case social media use, becomes the most important thing in one's life. It takes over his or her feelings, behavior, and thoughts. An example about problematic social media use is FoMO - when one is afraid of being left out of something. *Mood modification* refers to the subjective experience what is felt when doing the addictive action, e.g., one might feel relaxation, more energetic or numbing own emotions when using social media, depending on the situation. *Tolerance* means a process in which one needs a greater number of activities that maintain the addiction to achieve the same emotional state than before. A person addicted to social media often feels the need of getting even bigger audience or posting even more often than before in order to feel good. *Withdrawal* symptoms occur when the activity is stopped, and unpleasant feelings or even physical symptoms take over. Problematic social media user may feel irritated in case she or he is made to stop using social media. When we talk about *conflict*, we can refer to conflict with person's own mind or with others. If a person keeps constantly prioritizing the immediate pleasure of addiction over other personal and shared goals, this often leads to internal conflict and arguments in a relationship. If someone is constantly browsing social media, for example at a dinner table, not being present or neglecting household chores, it often causes arguments in the family or relationship. Internal conflict can arise if the user is aware that he or she is no longer in control of own social media use, and would like to stop or reduce it, but do not feel able to do so. The last component, *relapse*, refers to the tendency, even after a long break, to fall back on the same old pattern of behavior, which can suddenly lead back to the undesirable starting point. A problematic social media user may have managed to take a break or cut down their use of social media significantly for a while, but soon find themselves again spending as much time on social media as before to the extent that it is causing harm. (Tanner et al., 2020).

Why would it be important to officially categorize social media addiction as a disorder and add it to the ICD and DSM? When an addiction is officially identified as a disorder, also the society has the responsibility to offer cure for it.

Now when most behavioral addictions are not officially diagnosed, the society also don't necessarily need to take action. As a result, many might be left without the needed help. In addition, adding social media addiction to the ICD, it would also be good from the statistics point of view and further research because it would help to report, share, and compare the data between countries. (Sarvas, 2019).

## 4.2 Background reasons

The development of an addiction to intoxicating substance or activity requires that the mental or physical state that it brings, is satisfying in one way or another. The quicker the substance or activity gives the satisfying effect, the easier it is to become addicted to it. Yet individual factors also have an influence. Addiction can be developed because of hereditary factors or social learning experiences in childhood and adolescence but also at an older age, for example as individual's reaction to stress or different kinds of life crises. Genes or environmental factors might influence forming an addiction, but they don't do that as their own - additionally the formula always needs a repeated consumption of the activity or substance. (Koski-Jännes, 2005a; Koski-Jännes, 2009).

The aimed state of addictive activities can be very different for different people and different addictions, but also for those at different stages of the same addiction. The goal state can vary from regulation of mood to wanting to experience something extreme. It can even be trying to normalize a disturbed state which appears by withdrawal symptoms. Formation of addiction is associated with different neurological changes in the brain. Besides the neurochemical and physiological changes, also beliefs of the substance or activity being somehow supernal and the thought of other alternatives not being suitable are also maintaining the addiction. (Koski-Jännes, 2009).

Blackwell et al. (2017) state that it is likely that extroverts (also spelled extraverts) use social media. Extroverts are using social media to improve their social connections. In addition, it is claimed that extroverts have addictive tendencies. On the other hand, social media has opened another kind of world for introverts, who in real life might not be so socially active, but who can express themselves in a different way via social media. It has also been studied that introverts tend to become addicted more easily. (Simojoki, 2019).

Blackwell et al. (2017) also argue that attachment style may have something to do with the use of social media, because they claim that:

*“Anxiously attached people are insecure in relationships and often seek reassurance.”*

This behavior might lead to seeking feedback from social media. Anxiously attached people might also gladly keep up with relationships through social media to avoid awkward pauses and have more time to think what to say compared to a situation in real life. Yet it is unclear whether anxious attachment is related

to addiction. Some studies claim that insecure attachment is linked to internet addiction whereas another study found no correlation between social media addiction and different attachment styles. (Blackwell et al., 2017).

Another personality trait that is argued to have a connection to excessive social media use and internet addiction is neuroticism. People high in neuroticism might use social media platforms because they wish to get feedback and reassurance from others but also because it might be easier for them to communicate via a screen rather than face-to-face. (Blackwell et al., 2017). People share personal content via different social network sites, e.g., in form of image, text or video, to present themselves and maintain their personal relationships in a way that they feel good about themselves and how they wish others to see them. (Uski & Lampinen, 2016).

One concept highly linked to excessive social media use and social media addiction is Fear of Missing Out (FoMO) (Przybylski et al., 2013; Blackwell et al., 2017; Uski, 2016). The ones who tend to live through others online suffer often from fear of missing out, which again leads them to excessive social media use. (Baccarella et al., 2018). FoMO as the term describes, means fear that one is missing out on something, but it includes also avoiding negative feelings, such as loneliness and feeling bored. The person who is in fear of missing out feels anxious and irritated if she or he cannot participate in or see what is happening on social media. (Uski, 2016). Przybylski, Murayama, DeHaan and Gladwell (2013) define FoMO as a fear of the fact that others might be getting rewarding experiences from something which one is absent. FoMO includes also the desire of being constantly involved with what others are doing. (Przybylski et al., 2013).

Social media is about connecting with others but also about creating new forms of social life. (Uski, 2016). During COVID-19 restrictions, people couldn't meet each other in real life as most of them would normally do, so it is normal that the use of social media has been increased in these past few years. In Finland, around 98% of youngsters use the internet on their smartphones. Smartphones are strongly associated with problematic use of social media and can be seen as an enabler and predisposing factor for social media addiction, since social media is always available – wherever and whenever. (Tanner et al., 2020).

### **4.3 Tactics for causing social media addiction**

As described earlier in this paper, for some businesses, ad-based businesses for instance, the key factor that brings in the revenue for the company is *the attention* of the user rather than an actual product or service. (Bhargava and Velasquez, 2021). Because of the attention being the key for success for these kinds of organizations, the crucial and always urgent question is how to catch people's attention? And once they have caught the attention; how to keep it "top of mind" and how to constantly improve their action?

According to Raeste and Sokala (2021) digital change, people becoming addicted to digital services and the political system being too slow to react to the

change are talked a lot about, yet for many, it is too difficult to understand the whole picture. While many industries, such as travel, airline and hospitality industries have suffered considerably from the impact of COVID-19 pandemic, others have actually benefitted from it – Meta, Google and Apple have benefitted from people moving to work remotely and using their computers and phones even more than before. Because these few IT companies have grown so gigantic, they have all the power when it comes to setting rules or prices on the market. (Raeste & Sokala, 2021).

In the book *50 most dangerous companies* the authors Raeste and Sokala (2021) rank Facebook (Meta) as fourth most dangerous company in the world. Meta knows us frighteningly well – it knows what we like, dislike, our weaknesses, and our network. It knows even before us what we want to buy next. It can guide us but is doing it so discreetly that we might not even notice. In addition, Facebook's algorithm is designed to engage users to spend as much time on the platform as possible, which in turn is addictive. (Raeste & Sokala, 2021).

According to Bhargava and Velasquez (2021) social media organizations design their platforms in a way that the users become addicted to the platforms. The writers introduce three often used design ways that are making the applications addictive. The first design way is to utilize so called 'slot machine effect' or intermittent variable rewards. Intermittent variable rewards or variable reinforcement is claimed to be much more effective way to reward compared to predictable and consistent reward method. This means rewards that differ by their frequency as well as its significance. (Bhargava and Velasquez, 2021). Intermittent variable rewards are more effective because the irregularity of a reward has been found to reinforce a particular behavior more strongly than rewards that are fully predictable. When one is being rewarded by an activity on a regular basis, the value of the reward is decreasing more easily. Irregular rewards provide an incentive to continue the activity, as it can occur at any time. In contrast, the absence of a regularly received reward is quickly noticed, and thus the activity is often stopped if there is no reward received. (Tanner et al. 2020).

Examples of intermittent variable rewards are in Twitter the loading logo of the platform when opening the app. One might think that this is just due to slow internet or performance of the app even though it is said to be a way to generate intermittent variable rewards. Another example are social media feeds, where the content is only partly shown, so that the user is more likely to scroll down more to reveal it as a whole due to curiosity. He or she will probably continue scrolling and 'feed the curiosity' by hunting for more variable rewards. Pull-to-refresh feature is used in many social media apps. It is mimicking the slot machine's motion but also its variable reward schedule. (Bhargava and Velasquez, 2021). Another example is Facebook, which doesn't reward us too often or regularly, because research has shown that irregular rewards actually feel more rewarding than regular, logical and expected rewards, and thus make it more addictive – just like the occasional win from a slot machine. Therefore, some of one's posts gain a better reach and engagement than others. (Raeste & Sokala, 2021).

Secondly the social platforms are built upon design features that are utilizing the users' desire for psychological tendencies and needs, such as social validation and mutuality. An example of this method are Snapchat's snapstreaks. Snapstreaks are snaps (image or video sharing) between another connection, where they must send snaps back and forth with another snapchat user (=snap-chatter) within a day. In case a snap is not shared in 24 hours, the streak ends. Teens might feel a lot of pressure in maintaining these snapstreaks. In a similar way Facebook's like button or Instagram's double tap or heart button utilize social reciprocity and social validation. (Bhargava and Velasquez, 2021). Like button, and after some time the reactions button, enable Facebook to target its users material that evoke emotions and was thus addictive. Likes show what friends like which creates hierarchies of friends and one's whole network. (Raeste & Sokala, 2021).

Thirdly, mutual design way between many platforms is weakening the natural stopping hints by for example adding the feature of infinite scrolling. If there would be a bottom of the page, a natural stopping cue, where one should need to choose if she or he would click onto the next page, he would have to make an actual decision to either continue and click or stop using the app at that time. Now the platform is making the decision to continue scrolling and consuming the content of the social media platform on the behalf of the user. By adding the infinite scrolling feature to many apps and social media sites, this kind of opportunity to make a decision was removed, because when scrolling continuously, one doesn't get interrupted by getting to the end of the page, but the scrolling just continues, until he or she decides to do otherwise. Therefore, it is easier to get immersed in the continuous scrolling, and treacherously become addicted without even noticing. (Bhargava and Velasquez, 2021; Raeste & Sokala, 2021).

Push notifications are another feature that are causing social media addiction. Notifications are real time messages that pop up to the phone screen with visual message with a sound. Social media companies are trying to catch and keep the user's attention by sending notifications to the phone. Social media companies also keep launching new features, such as TikTok filters or Whatsapp's new emojis for the curious users to try out. (Tanner et al., 2020).

The more social media apps are used, the more the companies get information on what works well and what doesn't. They test for example which fonts, background colors or audio are maximizing the engagement and which ones are minimizing frustration. And with this information, they adjust, improve, and tune these apps according to make the users to use them even more and become even more addictive. (Bhargava and Velasquez, 2021).

Because of the addictive tendency of social media and the ethical issues about addicting users to social media, there is no doubt that social media addiction is a serious problem and that it should be well addressed to social media companies, public health authorities, policymakers, educators, and parents. (Bhargava and Velasquez, 2021).

Even though people, at least adults, are usually aware of the possible harmful impacts that social media might cause, the users still tend to continue using

them despite of the possible negative consequences in the short and long run. Even social media executives themselves are said to admit that they know about the harmful effects that their platforms might cause to the users. A lot of people, including both customers and employees, have born in at a time that they are digital natives and unaware of any other kind of life than social media being strongly part of everyday life. In addition, adults who are not necessarily the same generation, have yet also already become used to social media and the things related to it such as having conversations online, building communities and self-expression. (Baccarella et al., 2018).

Both how often social media is used during a day as well as the time spent on social media are predicting the problematic use of social media. People who are using social media over five hours a day are more likely to become addicted to it compared to people who are using less social media. Besides the time invested into social media, also emotional investment counts – in case social media has become a part of one’s identity, it has an impact on becoming addicted to social media. (Tanner et al., 2020).

#### 4.4 Attitudes and consequences

Addictions might cause various harming consequences in an individual, group and societal level. All those three can be viewed separately, but often the individual consequences influence also in group level and eventually accumulate to the societal level, as FIGURE 5 illustrates. Therefore, addictions need to be considered also together as kind of a process. Thus, it is also clear that all kinds of addictions, including social media addiction, should be taken seriously (Uski, 2016).



FIGURE 5 Consequences of addictions in different levels

##### 4.4.1 Individual level

The symptoms of social media addiction are often like other behavioral addictions and closest to the symptoms of internet addiction. The symptoms that may occur are for example fatigue, lack of concentration, restlessness, anxiety, irritation, and low mood. (Uski, 2016). Social media addiction is often linked to other mental health problems such as depression, compulsive behavior, and ADHD. Addictions are risk factors for forming other types of addictions because of the neurobiological changes in the reward system. Depression has been highly linked to problematic social media use; depressed person often uses social media

for seeking social support and relief from stress, which is a risk factor of getting addicted to social media. (Tanner et al. 2020). Low self-esteem has also been connected with problematic social media use. In addition, collecting likes might be harmful for one's self-esteem since it is a form of seeking validation. (Simon, 2021).

Sleep issues and lack of sleep have also been linked to social media addiction. Sleep problems are often creating other kinds of problems related to health and wellbeing. Excessive social media use and heavy smartphone use is likely to cause neck, shoulder and back pain as well as impacting on our posture and cervical spine by creating so called "text neck" or "tech neck". Pain might occur also in arms, wrists, and fingers. A study made for young adults showed that intense use of smart phone was causing neck and shoulder pain as well as tingling and numbing hands and fingers (Tanner et al., 2020).

The excessive use of social media is especially problematic to kids than it is to adults since their brain is still developing. In addition, they are often not mature to think critically enough and are more naïve. The reward system starts to develop faster and be more activated once we reach adolescence. In case the children are using too much social media, their reward system might get overstimulated and increase their reward responsiveness. (Ricci, 2018).

Social media addiction has been linked to weak school performance – if one is spending too much time in social media and not focusing on studies, it will be most likely to have a negative impact in academic performance. In addition media-multitasking has been connected to weak academic performance via for example having trouble with attention and memorizing things. Besides academic performance, social media addiction has also been linked to weak work performance. The availability of smart devices together with the lack of self-control might lead to scrolling social media during workdays. (Tanner et al., 2020).

#### **4.4.2 Group level**

Social media addiction has also consequences on a group level. Studies have showed that the participants who have been spending a lot of time on Facebook experienced depression because they had compared themselves to others. On social media, you can compare yourself in two different ways – to those who are doing better than you or to those who are doing worse than you. Another study was researching how the participants were comparing themselves to others on Facebook, Twitter, Snapchat and Instagram, and the studies showed that people who tend to compare themselves to the ones who are doing better than themselves, are likely to have symptoms of depression. (Tanner et al. 2020).

When the addict tries to hide the addiction from others, the problem tends to remain personal, which makes others rather not to interfere with, even if they know about the problem. The loved ones are usually the first ones who experience the use being problematic. Thus, not only the individual's own defense mechanisms but also the reactions of the environment are deepening the addiction. (Koski-Jännes, 2009).

Excessive social media use is often influencing on relationships negatively and causing problems. Studies have showed that there is a link between relationship commitment and one's use of social networking sites. According to a study made by Lenne, Wittevronghel, Vandenbosch and Eggermont (2019) 60% of participants, including both men and women, experienced commitment issues in their relationship because of social media. The participants felt that especially the exposure to the possible alternative partners in social media had a negative effect to the relationship trust and commitment. The more social media was used, the more negative feelings were experienced. (Lenne et al., 2019).

Study made in the USA showed that excessive social media use and loneliness are correlated. Feeling lonely was experienced almost 30% more often than feelings of self-kindness or mindfulness among people who used social media excessively. (Barry & Wong, 2020).

#### **4.4.3 Societal level**

As mentioned earlier, social media might cause a wide range of problems for individuals. But what does that mean in the bigger picture? The problems that social media causes to an individual, such as mental health issues need to be solved by offering healthcare. According to MIELI Mental Health Finland, the yearly costs of mental disorders in Finland has been estimated to be approximately 11 billion euros, and 53,2 % of disability pension is being paid due to mental health issues. Preventing and managing mental health issues are important for both public health as well as the economy. However, in Finland only half of the people in need of mental health problems are getting the help they need because it is expensive and the lack of resources on the whole health sector in Finland. From a societal point of view, this means more resources and more costs in the health care sector. Since there is already a lot of pressure and lack of resources in the health care sector, it is not ideal that social media makes people feel even worse. (MIELI, 2023).

Besides increasing the pressure and direct costs on the healthcare sector that comes from the care itself, social media addiction and the other dark sides also have a more long-term effect; it takes its toll by increasing the costs on the whole economy in the long run. When people, especially young people, are suffering from mental health problems, that effects on their school and work performance and many of them might drop out from school or working life which again increases costs and lack of resources in the labor market. (MIELI, 2023).

Just a few years ago that there were still some doubts if there is a correlation between social media use and mental health issues, whereas now there is enough studies to prove that there in fact is a clear connection between the two. The researchers have started to understand that social media is causing mental health issues to young people and especially for girls. After Instagram was published in 2010, also mental health issues have drastically started to increase. This might arise questions: are mental health issues just talked more openly in social media than they have been before? Could it be so that social media has given people the courage to talk more about mental health problems? Unfortunately, those cannot

be the only reasons, because the figures speak for themselves by showing that mental health problems are on the rise among young people. In addition, suicide rates have increased in the US – both actual and attempted. (Storås, 2023).

People want to believe and trust the public sector organizations, but in case they have had bad experiences from one public sector organization or have received bad service from one of them, it creates distrust to the whole public sector. Thus, they are more likely to judge that public sector organization and maybe also other public sector organizations in the future. This is the so-called vicious circle of distrust. On the contrary, in case one gets good service and feels that she or he can trust a public sector organization, one is more likely to trust that organization also in the future. He or she is then also more trusting towards other public sector organizations. This is called vicious circle of trust. As an example, if one seeks help for social media addiction from the public health care sector, and doesn't receive it, he or she is more likely to think that the public health care system is not trustworthy, and probably doesn't believe to get the help needed from them in the future either. Whereas if there was help more easily available, that would create trust in the public health care sector as a whole, and thus the image of other public or societally provided services would be better. In addition, fake news and disinformation create distrust towards governments in some countries. (Canel and Luoma-aho, 2019).

Addiction is a controversial subject – on the other hand, it gives an immediate satisfaction and pleasure to the individual but at the same time it creates harm and social resentment. Addiction causes feelings of shame and guilt especially in societies where self-control is valued. Losing control brings out feelings of shame, guilt, and inferiority. These feelings make addicted person deny his or her own problems. The addict will try to prove himself as well as others that he can control himself even though that ability has clearly been lost already by far. (Koski-Jännes, 2009.)

The term addiction is used quite often today when referring to different things. However, many use the term also in a playful and consciously over-exaggerative way. When one is openly telling to have an addiction to for example candy, he or she is probably joking and not serious about it but rather making fun of losing self-control. On the contrary when one is really addicted to something, he or she usually tries to hide it as well as possible. (Raento & Tammi, 2013, 7.) Raento and Tammi (2013) state that a person who is suffering from an addiction struggles to talk about it openly, because in a Finnish and Lutheran culture losing control is associated with shame and fear of being judged (Raento & Tammi, 2013, 7).

Griffiths (2005) argues that all kinds of addictions are part of a biopsychosocial process and that they all have many things in common. The things in common may have influence on how an addictive behavior should be treated as well as how the public reacts to this kind of behavior. Yet according to Raento and Tammi (2013), people's attitude towards different targets of addiction varies a lot and different addictions are being reacted differently. For example, addiction to work or exercising is almost inevitably seen much more positively than addiction

to heroin or alcohol. Nicotine and alcohol addictions are seen harmful to both individual and society. Drug addiction causes a lot of fear and resentment. (Raento & Tammi, 2013, 7). However, this is not the attitude and reaction towards all addictions. One can be addicted to work or training but those might be seen as positive habits for others. Therefore, it might be difficult to draw a line between a positive dedication versus harmful addiction to something. Although what might first seem positive dedication might later become harmful and consume resources of both individual and society in the long run. (Raento & Tammi, 2013, 7-8).

Some addictions as well as the substances or behavior causing them are legal and being seemed acceptable. On the contrary, some of the addiction causing substances or behaviors are illegal and punishable. Some might even require involuntary treatment (Raento & Tammi, 2013, 9). Addiction is often thought to be a problem for only certain kind of people, somehow special individuals, but the origin and development of an addiction is also influenced by the broader social reality, which we live in. A society which is characterized by loneliness, breaking of traditions, alienation, and uncertainty about future perspectives is especially sensitive to developing addictive behavior. Behavioral addiction is being deepened by its favorable environment. However, these different environmental or hereditary factors do not develop into addiction by themselves without individual's own contribution and repeated reliance to the substance or activity. (Koski-Jännes, 2009). The number of repetitions needed varies a lot depending on the individual, and can be influenced by age, heredity, social pressure to continue or limit activity, and the amount of protective and stressful factors in the environment (Tanner et al., 2020).

The society is encouraging us to use technology and be more efficient with the help of it. However, people should become more aware of the potential negative effects of it. (Ricci, 2018).

"To some extent it's like wine: it's OK to use a little bit, but when it becomes too much it creates problems. When we use technology we need to create boundaries around its use." - Dr. Turel (Ricci, 2018).

## **4.5 Tactics for decreasing social media use and addiction**

As previous chapter explained how organizations are treacherously making us more addicted to social media, it is making it harder and more complex to getting rid of social media addiction. And since they do it so well, we often don't even realize of becoming addicted to social media until it has already developed as a problem. However, it is possible to get rid of social media addiction. For some people it might be quite easy but for others it is extremely difficult and requires hard work and a lot of dedication (Koski-Jännes, 2009). Even though no addiction is fun, social media addiction is one of the easiest to get rid of (Simon, 2021).

Hiding the addiction, practicing it secretly or lying about it are usually common behavior for all types of addictions – including social media addiction. Admitting having a problem, saying it out loud and communicating it more openly to another person or people around you, usually helps to reduce the need of hiding and lying about the problem. It might also motivate to act and become a better version of yourself. (Simon, 2021).

#### 4.5.1 Motivation for change

FIGURE 6 below illustrates the process of motivation for change, which can be seen as a cycle. First of all, getting rid of addiction requires acknowledging and admitting of being addicted. Secondly, he or she needs to have a desire to change the addictive behavior as well as decide to take action in order to get rid of the problem. A crucial phase is that one starts to honestly examine himself or herself, think about the reasons for wanting to get rid of the addiction and in addition observe in what situations and how often the desire arises. (Koski-Jännes, 2009).

In the *pre-contemplation phase* one doesn't really recognize the risks of his behavior but might even think that others have a problem rather than him. In this phase the person is not ready to make a change and is usually defending his own actions. The loved ones are worried and encouraging the person to get help for the addiction. (Päihdelinkki, 2021).

In the *contemplation phase* the person is starting to recognize the need to do something about his problem but at the same time he is gambling with the short time benefits that he is experiencing. On the other hand, he wants to change but on the other he is not ready to give up his old habits. This phase is usually lasting a long time. (Päihdelinkki, 2021).

The third phase is called *preparation phase*: the person is either already decreasing the behavior or planning on changing it after a while. In the preparation phase a well-made plan should be set as priority.

Next, it's the *action phase* when one is looking for ways to help to change the behavior and is ready for the change (Päihdelinkki, 2021). Once one has acknowledged that he or she has a problem with social media use and even addiction, and once he or she has decided to want to get rid of, there are different ways to start the process of getting rid of social media addiction. According to Uski (2016), the best way to prevent a severe social media addiction is to acknowledge when the use of social media starts to interfere life by limiting it and trying to consciously change own behavior. In addition, he or she needs to think of other pleasant and meaningful things to do which would replace the old and harmful habits. (Uski, 2016).

After the action phase comes *maintenance phase* when the person is changing his behavior and learning new ways to behave as well as new values. In this phase one already recognizes triggers that could result to relapse and is battling against it. One needs to create an action plan for how to act differently in a situation when the desire arises. New habits should be practiced long enough in order them to become more permanent replacements for the old habits. (Koski-Jännes, 2009; Päihdelinkki, 2021).

In the *stabilization phase*, the new habits and behavior are set to place. In this phase the person is free from the harms that addiction has previously caused him. (Päihdelinkki, 2021).

A *relapse* in case of social media addiction could be for example using social media more than it was planned after the decision to decrease it had been made. Completely quitting is more common on other kinds of addictions than social media addiction, such as alcohol, as usually people who are addicted to social media might not completely stop using it, since it is part of so many things nowadays. Instead of completely quitting social media use, one could significantly decrease it so that it is not bothering other tasks of life. (Päihdelinkki, 2021).

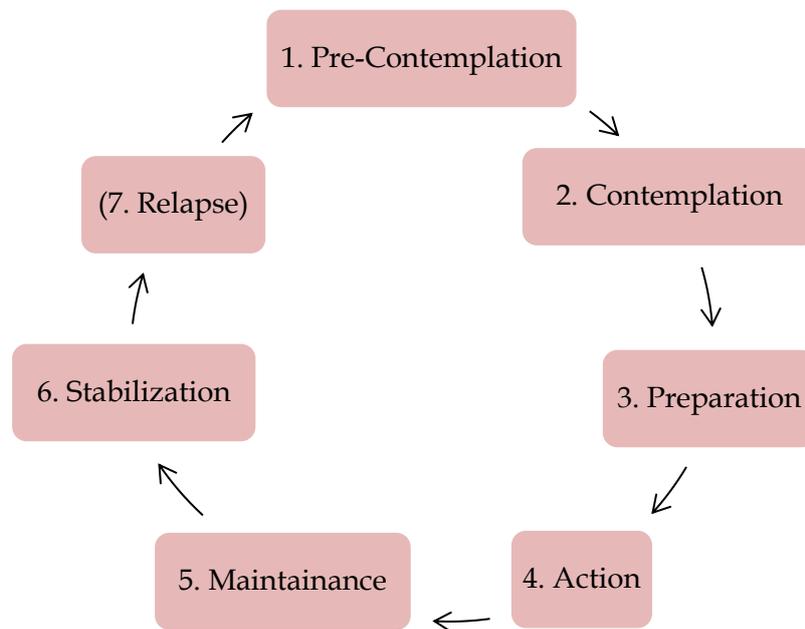


FIGURE 6 Motivation for change (Päihdelinkki, 2021)

#### 4.5.2 Ways to prevent and treat social media addiction

According to Hunt, Marx, Lipson and Young (2018) limiting social media has many positive effects such as decrease in loneliness, depression, anxiety, and fear of missing out. The authors suggest that limiting social media use to 30 minutes per day might improve one’s well-being significantly.

As parents talk to their children about the harms of alcohol or drug use, they should also be talking about the downsides of social media usage. The reason why it is problematic should always be explained as understanding the reason is often much more motivating to make a change and thus efficient. Parents should also make boundaries for their children’s social media use, and this is also what The American Medical Association recommends. Parents should create rules and goals about their children’s social media use so that they meet the values of the family. Parents should also act as a good example to their kids by not looking at their phones too much, and especially not in dinner table or when the

family is spending time together. Parents should also educate their kids about the downsides of social media and its potential threats, e.g., cyberbullying and the risks of sharing personal information or images of themselves. People should also face the consequences of their own actions and take responsibility by defining what is good for them. (Ricci, 2018).

As previously mentioned, notifications are one thing that are making social media more addictive. Seeing notifications on the screen are making it difficult to resist to open them even when doing something important, and they are also triggering the reward system of our brain. Thus, turning off notifications is one way to avoid becoming addicted to social media or to help to get rid of social media addiction. Another way to avoid social media addiction is to check the social media sites only on desktop and not phone, as the phone is so easily accessed and makes social media addictive and appealing. In addition, the social media sites don't have that great desktop versions than the applications for the phone. With the limited desktop versions, one probably won't feel the same need to use the social media sites as much. Another way to restrict own social media and phone use is to set it to airplane mode or do not disturb mode occasionally. (Simon, 2021).

It has been studied that when one has one or more people as support, he or she is more likely to succeed in getting rid of an addiction. Getting help from outside is also a good option for seeking support for the journey of getting rid of an addiction. That can be for example therapy or peer groups, which might be very helpful to many addicts. (Koski-Jännes, 2009). Some addicts might also succeed on their own. It is important to understand one's own influence and to identify in what areas one needs help with. (Koski-Jännes, 2009).

There isn't yet enough research of what kind of treatment should be used for social media addiction, but since social media addiction is a behavioral addiction and part of internet addiction, the interventions for internet addiction might be helpful also for problematic social media use. Methods used for internet addiction have been for example group interventions based on cognitive behavioral therapy or psychoeducation. Group interventions have worked well when it comes to treating internet addiction. As the person who is suffering from one addiction, might easily become addicted on other things, it is crucial that the treatment takes into consideration also other types of possible addictions and problems such as depression and anxiety as well as their causal connection. (Tanner et al., 2020).

Peer support is a common form of treatment for addiction. Peer support means sharing information and experiences with others who are struggling with the same type of problem. It aims to help both yourself and others. Peer support usually takes place in peer support groups. As the term tells peer support group or mutual-aid groups emphasizes the concept of community behind it. Some groups are guided by a professionally trained person, some by a volunteer without a professional qualification, while others are run by a person who has been through the peer support process themselves. However, the professionally-led-models have received some critique and have been seen as a weakness since the

role of the guide has an unequal effect on the group dynamics, for example in the interaction between members. (Niemi, 2017).

One way to treat problematic social media use could be Acceptance and Commitment Therapy (ACT), which is a type of cognitive behavioral therapy methods that focuses on accepting and dealing with the negative feelings and thoughts, symptoms, or circumstances that the problematic social media use has caused. (Tanner et al., 2020).

Some people are taking pauses of social media to become more conscious on how addictive he or she has become of it. Taking a time off from social media might help one to realize how addicted one has really become on social media (Uski, 2016). Social media fasting means completely refraining from using social media for a while. However, at least one study showed that that is not always the best way. According to the researchers of the study, the participants had withdrawal symptoms during the study period – they were feeling bored and strong need to use social media, and more than half of them ended up using social media regardless of the fasting period. According to Tanner et al. (2020) the study showed that social media has become part of our everyday lives and completely stopping using social media might not give the desirable results. One might get rid of the downsides of social media by completely abandoning it, but at the same time he or she is also giving away all the positive effects that social media brings. (Tanner et al., 2020). Some social media influencers who partly or fully work with social media, are showing an example by taking pauses from social media and talking openly about its effects Yle is showing a TV show *'Pause'* where six influencers are removing their social media applications for two weeks. In the documentary the influencers describe their feelings and the impact that the break from social media had on their lives. (Yle, 2022).

Some companies, such as DNA, have been involved in campaigning for the responsible use of smart devices, even though they themselves sell smart devices as well as internet. "A 'smart free day' (älyvapaapäivä) was held on 2<sup>nd</sup> of October 2022, encouraging people not to use their smart devices all day but instead focus on other things, such as being present. (DNA, 2022).

In case one is addicted to social media, some sources are advising to delete the social media applications. If that however sounds too extreme there are also applications to restrict the use by setting time limits to the applications. Screen time means the time spent on a phone, pad, TV, computer, game console or other electronic device. It can be controlled from phone's settings or an application by defining a time limit for applications or a time of the day after the device cannot be used. (Kaye et al. 2020; Apple, n.a.) There are also many other applications that will notify and control the use of social media as a help to limit the use of the applications or phone (Uski, 2016). In addition, there are applications available which work like a timer and help to concentrate on a task for a certain amount of time.

## 5 DATA AND METHODOLOGY

This chapter will introduce the research method, data collection method and data analysis used for this thesis.

### 5.1 Qualitative research method

Research methods are tools for obtaining and analyzing data usually for empirical research, and research methods can be either qualitative or quantitative. The method chosen depends on the research questions and topic. Qualitative research method is a good method when exploring the reasons behind one's behavior. It also helps to bring out the perceptions of the situations as well as enables to take into consideration the factors of one's past and development. (Hirsjärvi & Hurme, 2015).

Based on the nature of the research questions of this thesis, qualitative research method and more specifically semi-structured interviews were chosen for the method. According to Hirsjärvi and Hurme (2015) interviews are a flexible research method and are therefore suitable for many types of studies. The interview situation is a direct interaction between the interviewer and interviewee, which allows for the data collection to be directed in that situation. Interviews also make it easier when the purpose is to find out respondents' motivations behind their answers and to provide illustrative examples. In addition to linguistic responses, non-linguistic cues are also provided during the interview, which often help to understand the answers and their meanings better. (Hirsjärvi & Hurme, 2015).

The research questions of this master's thesis are:

- What is the dark side of social media?
- Why is social media so addictive and what features are causing it?
- What are the consequences of social media addiction on an individual, organizational, and societal level?

## 5.2 Data collection

As all research methods, interviews have their drawbacks. The disadvantages of interviews include sources of error; the interviewee may consciously or unconsciously give answers that are more socially accepted than the actual situation, thus compromising the reliability of the interview. There are also errors on the part of the interviewer. (Hirsjärvi & Hurme, 2015).

There are two opinions on whether interviews or surveys are more appropriate for emotional and sensitive topics. The topics of the dark side of social media and social media addiction might be sensitive for some people. Nevertheless, interviews were chosen as a research method because in that way the interviewer can learn the interviewee's thoughts, perceptions, experiences, and feelings about the subject. (Hirsjärvi & Hurme, 2015).

The goal of this qualitative research in the form of semi-structured interviews was to find out others' experiences, thoughts, and observations of social media use, the dark side of social media and dig deeper on the topic of social media addiction. The purpose was not to investigate nor interpret whether one is addicted to social media, but rather to learn their own perceptions on the topic: why social media is so addictive.

For sampling method judgement sampling, also called purposive sampling, was chosen for this research. In judgment sampling the participants for the interviews are chosen based on the knowledge of the researcher about the studied subject. (Perla & Provost, 2012). The chosen interviewees had to be familiar with social media as well as been using social media several applications or platforms for several years. As illustrated below in the TABLE 2, eight people of age of 24–39-year-old including both men and women were interviewed. The purpose was not to compare the experiences of men and women, thus the share of men and women interviewed wasn't that relevant for this study. The interviews were done over the phone, and they were recorded. The interviewees had been asked a permission to participate in a recorded interview. The interviews lasted approximately from 28 minutes to 69 minutes depending on the person. The data was collected via recorded interviews, which were then transcribed. In the transcription part some filling words such as “um” were left out from the transcriptions.

TABLE 2 Information on the interviews

<b>Interviewee</b>	<b>Age (years)</b>	<b>Duration of the interview</b>
<b>A</b>	33	36 min 12 s
<b>B</b>	32	65 min 26 s
<b>C</b>	30	69 min 19 s
<b>D</b>	33	65 min 05 s
<b>E</b>	24	32 min 41 s
<b>F</b>	30	41 min 09 s
<b>G</b>	32	28 min 46 s
<b>H</b>	39	57 min 04 s

### 5.3 Data analysis

In this thesis the interview data was analyzed by using the thematic analysis method. After the transcriptions were done, the data was reorganized by the three main themes of this study: social media use, dark side of social media and social media addiction. Braun and Clarke (2006) define thematic analysis method in the following way:

“Thematic analysis is a method for identifying, analysing and reporting patterns (themes) within data.”

According to Braun & Clarke (2006), there are six phases in the thematic analysis. First the interviewer needs to familiarize oneself with the data. The interviewer should transcribe the data if necessary. Then he or she should read and re-read all the interviews carefully and try to actively find meanings and patterns from the data. The second phase is generating initial codes. This means coding all the interesting parts systematically throughout the whole data set and gathering all the relevant data for each code. The codes chosen should be relevant to the research question(s) and topic. The third step is searching for themes. In this phase the codes are grouped into potential themes, and all data relevant to each theme is being collected. In step four, the themes are reviewed: one should check if the themes work in relation to the coded parts as well as the whole data set. Then thematic map of the analysis should be created. In the next step it is time to define and name the themes. This part is an ongoing analysis to refine each theme's specifics and overall story from the analysis. This way it is easier to define and name the themes. Finally, in the sixth step it is time to create the report.

After the interviews had been performed and recorded, each of the narratives were transcribed one by one. This was done question by question and unnecessary words such as “like”, “um” were left out of the transcriptions. After the transcriptions had been done, all of the recordings of the interviews were deleted. The interviews were held in Finnish as it was the mother tongue of all the interviewees, but the transcribes were then translated into English.

## 6 RESULTS AND ANALYSIS

This chapter introduces the findings of the semi-structured interviews in a thematic way. The interview questions are presented in the appendix (see Appendix). The results of the interviews are presented in the thematic way and the themes chosen follow the same topics as this thesis: social media and its use, dark side of social media and social media addiction. The main themes are then divided into sub-themes, which help to clarify the results part.

### 6.1 Social media use

This chapter will introduce the reasons why and how much the interviewees use social media.

#### 6.1.1 Reasons for social media use

Most of the interviewees defined social media as a tool for communicating and interacting with others via profiles, expressing themselves or their own thoughts by creating content or meeting people online. Many of them regularly use applications or platforms such as Facebook, Instagram, Twitter, Snapchat, TikTok and LinkedIn. A few of them mentioned also Yodel, YouTube, Pinterest and BeReal. Six out of eight interviewees were wondering whether WhatsApp should be counted as social media or not, and that is not very surprising, since there is not only one clear definition for social media, and because some of WhatsApp's features and the way it is being used among some people are quite close to certain social media apps, e.g., the status story function where one can post content that is visible to other connections for only 24 hours – similar than Instagram stories.

*“I wouldn't define something like WhatsApp as social media, because it's maybe more of a private thing. I think of it (social media) more as of platform, where something is published for everyone to see.” (Interviewee E)*

“But then maybe I think WhatsApp is also counted as social media – there are group chats and features similar to those other apps. And you can use it a bit like social media with your family, so maybe it's a bit the same, just a different audience.” (Interviewee A)

“I'm not sure if WhatsApp counts as social media or not, the line is probably a bit blurry... I see that it can be used as social media, maybe especially among children and younger people.” (Interviewee H)

Also, some people have wide groups on WhatsApp where they share content such as videos and images. However, since the status content is only visible for the ones who have the phone number saved on the phone's address book (and vice versa), usually WhatsApp isn't counted as social media.

The results show that social media is used for many different reasons depending on the person. The interviewees use social media for example for entertainment such as watching cat videos or funny memes. It is also used for communication, being social, following old and current friends' lives including the ones who live further away to follow what is happening in their lives. In addition, social media is used for information search, e.g., about political matters and social issues; for getting more understandable and interactive picture on the subject. Social media is used also when being bored or when traveling via public transportation. For some people it has formed as a habit – by automatically opening social media applications. It can also be used out of curiosity by following celebrities and influencers as well as finding inspiration, work opportunities and for entertainment. In social media there are also groups and communities where people share useful information for example about children's car seats.

“I also follow some fashion influencers, jewelry sellers and for example Miss Finland or Miss Universe winners – – but as counterbalance I also follow news channels and for example Ukraine's president Volodymyr Zelenskyi, so very wide scale, because I want to be up to date on everything that's happening.” (Interviewee B)

“To communication and to collect information e.g. on jobs, companies or products. And equality issues and things like that, which I'm interested in – politics and stuff like that. I like to get information about such things explained by other people. Entertainment too, and some kind of inspiration for life, to see how life could be lived.” (Interviewee C)

One interviewee has a good metaphor for social media: fast food – in the past she read blogs and magazines, but nowadays she gets similar information and content from social media. Now she doesn't need to read long text but rather watch images and videos and read just short captions.

“...And since there is a lot of political or social content on Instagram nowadays, I get the feeling that even though I read Hesari (Helsingin Sanomat), Instagram gives me a grassroots level of social phenomena or global phenomena about what is happening. It's of course a mainstream media, which presents the topics in a certain way, but it's where people get to interact with that topic, what kind of discussions and ideas it raises and how people defend their own opinions on social issues etc.

All of the interviewees tell that they use Instagram. One of them describes that Instagram is a very broad platform by having everything from food recipes to interior design to social discussions and influencers' fashion posts.

### 6.1.2 Time spent on social media

When the interviewees were asked about their screen time, whether they have followed it, some said to get weekly reports about it and following it, some told that they are aware of the reports but don't really pay attention to it, one didn't know where to find it, and one told to follow it and in addition having set restrictions on time spent in social media applications:

"Yeah, I always check when the notification comes, whether it has increased or decreased a lot, and I have set a block in some apps, that I can only use it for an hour a day, for example, but it doesn't really work because you can reject the block and go there (into social media app) anyway. It notifies that your daily time is full but gives you options to skip it (and continue the use) for 15 minutes or skip it completely. I have set an hour (daily) on Instagram, 20 minutes on Facebook, half an hour on TikTok, an hour on WhatsApp, and 20 minutes in a Snapchat, but weell...that hour is up pretty quickly. Like in Insta and WhatsApp the time is used quite fast. (Interviewee F)

The average time spent on social media varied between interviewees. Many told it to be around four hours daily, but one used it only one hour daily and one used it for five hours. The interviewees were also asked how they feel about the amount that they spend on social media. Some of them felt quite frustrated on themselves, since on their own opinion they spend too much time on social media, and some of that time could be used in a more useful way. Most of them felt that they spend way too much time on social media and that time could be spent much better on something else. One even described the time spent on social media being meaningless.

"I think it (5 hours/day) is a lot, but especially on some days I feel it's a lot when I haven't had any other tasks to do, for example I haven't worked or studied at all and still I've been there for so many hours. (Compared to) some days when I've had work, and even if the number of hours (spent on social media) was the same, it doesn't feel as bad because I've been somehow efficient and not just spent my whole day on the internet." (Interviewee B)

"My screen time is about 4 hours a day, e.g., last week average 4h screen time in general, but social media about 2,5 hours daily. Well, it's damn much now when looking at it. Like what else you could use those 16 hours for - in a more useful way?! - - like should the weekly 16 hours be spent so that you would spend even 2 hours from it by going to the gym?" (Interviewee F)"

"Well, too much... In Instagram way too much...I mean it's super much, I'm guessing like 4 hours, this is so embarrassing, but probably 4 hours. - - it (screen time notification) always comes every Monday, so yeah I always check it, especially always that percentage of how much it has decreased or increased, so that's something I check." (Interviewee G)

Many of the interviewees mentioned that they don't even realize how much time they spend in social media. Some also mention that when they are scrolling social

media, they don't even recognize what content they have consumed, because it is so automatic. Many of them also tell that scrolling social media happens so automatically and even unconsciously – that they often don't even notice that they have opened social media but rather awaken after an hour or two wondering where has all the time gone.

One mentions that whenever she has some independent tasks that require more concentration, she has automatically opened social media, to escape there. But in case there is a work task that requires full concentration on other people, then she is always present and don't even think of social media. Another interviewee described being in social media also during workdays and responding to personal messages, but mentions that in her previous job she couldn't really do that, so it depends a lot on the nature of the work and position – when one works more independently, there might be more slots and micro breaks spent in social media, compared to when one works for example with customers or other people.

## **6.2 Dark side of social media**

This part will describe what dark sides of social media the interviewees have experienced on individual, group and societal level.

### **6.2.1 Individual level**

As mentioned in the beginning of this thesis, social media has several benefits, but unfortunately it also has a dark side. Here the harmful effects of social media have been divided into individual level, group level and societal level, but often in the long run the effects influence on many, if not all levels. The interviewees pointed out several negative effects on all three levels.

Like Tanner et al. (2020) stated, also the interviews showed that social media was noted to have physiological effects such as negatively effecting on one's sleep. Even though physiological effects are individual level effects, in the long run they might influence on one's overall health, which again in the bigger picture might have an influence also on societal level.

*“Yes, it influences on my sleep. If I start looking at my phone or these social media channels, it's a bit of a break for myself and my brain, and I just easily steal that time a day from the time I should be sleeping, so I'm aware of it and I've consciously decided to do it, but my sleep suffers from it – that's quite clear.” (Interviewee D)*

*“Well of course it takes a devastating amount of time...I don't know what kind of effects being online all the time has on your eyes and your body, like physical symptoms because in a way social media is racing to be out there more and more.” (Interviewee B)*

## 6.2.2 Group level

On the group level, social media was found to distort reality and create feelings of inadequacy. It causes fear of missing out, comparing oneself and one's life with others as well as create a lot of pressure in many areas of life, such as on body image, career, lifestyle, financial pressure, pressure on relationships and building a family.

“ - - Things are not what they look like, and as an adult I understand that it is not real, but when people share things that are mainly so cool and everybody is at nice places, it makes you feel that your own life is worse than others, and it causes inferiority complex and distorted reality.” (Interviewee H)

“When I was a student and a little younger, I felt that there was a lot of pressure if someone posted on social media what school they had applied to and with what grades. That made me easily compare myself to others, and I noticed that it messed up my mind or thoughts.” (Interviewee E)

Nevertheless, it depends on the person what kind of content creates pressure to whom, and that is probably correlated with one's current life situation. The person who feels pressure might not relate with the content about going on a vacation abroad or other situation because he or she doesn't see it possible to experience similar activities in the near future than the one who has posted, because of for example financial situation or different life situation. Whereas for someone who is also doing similar things or seeing it possible in the near future, the situation might be different and sees it as positive - brings positive feelings, whereas for someone traveling and doing other fun things seems to be “out of reach” and not possible to experience in the near future because of a family situation or financial situation, that person might feel negative pressure about it.

“ - - But I don't feel pressure if someone is on a trip or doing cool stuff.” (Interviewee D)

As seen from the literature review, also many of the interviewees told that social media has caused arguments in their relationships with friends or spouses. The arguments have usually been about the lack of presence that the excessive use of social media is causing. The comments about extreme social media use have usually been mutual, so that both parties of the relationship have pointed out each other that the time could be used more usefully by for example investing into the relationship, the present time together or sleep rather than scrolling the phone.

One of the interviewees pointed out also the dangerousness of social media challenges. Some social media challenges may have serious consequences and in worst case even lead to death. This is a threat especially among children since they might not always understand the consequences of their own actions.

“...in TikTok someone had received a challenge and then some elementary school aged kids had done it and had like died at it, so I think that young people get the worst influence. And then these beauty standards also give bad influence, and through that (they) start to change themselves and it might get bad when we talk about for example eating or body image.” (Interviewee E)

It has been recognized that people can be abused on social media, both children and adults, and that on social media people can pretend to be anyone they want. One mentioned that someone online could be a scammer or leaking personal material about you via social media all over the internet that you wouldn't want to be shared. He also pointed out that he doesn't like to share a lot of information on social media because he doesn't want to be in a situation where he has shared something that he might regret later.

"I don't like to share my own things on social media, or I rather see that as a risk that sometimes e.g., a job opportunity could be ruined by because of what I have shared in social media." (Interviewee H)

As Baccarella et al. (2018) stated, it doesn't matter whether the posted content is true or false because the more shocking the content is, the faster will get viral and harm one's reputation – individual's or company's. That is scary and might have long-term consequences. Thus, everyone should pay attention to the possible consequences in advance before posting anything. One should post and share only material that he or she is willing to keep there, because everything you post online, will stay there, and can be found afterwards.

### 6.2.3 Societal level

There is a lot of disinformation across internet and social media. A few pointed out discussions and other kind of shared content about COVID-19, vaccines as well as the Russian invasion of Ukraine in 2022. In case there is disinformation shared between a lot of people, it can be seen as a threat to the society by many of the interviewees. Security issues were also pointed out:

"Information security. A friend of mine got stalked by some guy on social media and nowadays she's got some basic cell phone instead of a smart phone because of that. Even if you've heard those (things happening), you don't think it's that likely to happen. Then from societal perspective, there is disinformation; lack of source criticism, tinfoil hat stuff, and claims that are not based on any facts; on social media someone might say anything as truth, and spread that disinformation as the truth..." (Interviewee C)

And as Luxton et al. (2012) stated extreme groups and communities might be risky and even dangerous – especially for the vulnerable people. A few of the interviewees also mentioned having noticed racism, bullying and discrimination on social media.

"Racism and discrimination can be seen in social media – discrimination against dark-skinned people can be seen, and during this war, I have noticed that Russians citizens have been sort of blamed for it, although it is not the fault of every Russian, and you can't start discriminating against all Russian citizens. And I have noticed that in TikTok there are quite brutal videos and people take a stand on such things." (Interviewee E)

Many social media platforms and applications are based on personal profiles and self-branding, and algorithms often make the content of profiles with a lot of

followers more visible. One of the interviewees told her own experience about a flea market application, where one would think that all its users are on the same level:

"What has annoyed me lately is that the importance of profiles has grown – that the one who can brand himself well, sells well. It's not like an online flea market where the products speak for themselves, but you can buy credits and visibility. You can start to follow them and the more followers and likes, the more the algorithm will push it up." (Interviewee D)

## 6.3 Social media addiction

This chapter will describe the interviewees' thoughts about social media addiction; when does social media use become an addiction, the interviewees' own relationship with social media use, the addictive functions of social media as well as the communication about social media addiction.

### 6.3.1 When does social media use become an addiction?

The difference between problematic social media use and social media addiction is quite narrow. One interviewee demonstrated the difference with an example between problematic gambling and gambling addiction:

"Well, the problem gamblers do it a lot, and so it results to harmful consequences, since they are losing more (money) than should, but they can still control that behavior by choosing what they play and when they play. And a gambling addict will play anything in any case, roughly speaking. So, the gambling addict spends the last money on gambling, but the problem gambler can go and buy bread, because that's his last money. – Well, I guess it could be that in problematic social media use, it takes too much one's time, and with social media addiction you stay browsing all the videos in the world even though you've already seen them, until your battery runs out." (Interviewee H)

### 6.3.2 Relationship with social media

When interviewees were asked about their own relationship with the use of social media, the answers varied quite a lot. Some saying it causes feelings of frustration or controversial feelings while others described the relationship being healthy despite the excessive time spent on social media.

"I get frustrated and disappointed on myself that I could have spent the time by doing something else (than social media), something smarter and then I also think why I didn't have the time to do this and that even though I had time for social media, so sometimes it feels selfish that why did I spend all my valuable time on this. And it feels kind of scary how much time I spend there and how much I enjoy it – after all the final feeling is negative when I have spent two hours there. So, you have kind of exited from your own reality, but it hasn't even given a good feeling." (Interviewee B)

"Nowadays I rarely post any (feed) posts, and then there becomes kind of a threshold that I don't even think about posting anything. But stories I post more in the moment,

if I for example see something funny or nice or cool... I don't know, not a very deep strategy with it." (Interviewee A)

One interviewee was describing the relationship with social media use in an interesting way through dopamine:

"Well, it's excessive for sure, but it's pretty much normalized, the excessive use. Maybe (it is) mainly that I always need to have some source of dopamine on hand. For example, I might watch a (TV) show in the morning before work and listen to music while I'm working. And sometimes I even listen to a podcast if I don't need to concentrate or use any words myself, so it doesn't distract me. And almost always while I'm driving, I listen to music or a podcast. (Those are) not social media but I'm rarely ever just quiet anywhere." (Interviewee C)

Many interviewees mentioned to sometimes have tried to decrease their social media use. Some told to have just decide to put their phone away in order to not use it. One who earlier told that she is restricting her social media use with applications described its success in the following way:

"It worked fine at first, but because I know I can bypass it, I do it quite often. Then you just fool yourself when nothing happens. It makes me feel like a failure because I couldn't even control it, but I guess it still helps to reduce the amount of use even if you ignore it. But sometimes I think that if I fill up my WhatsApp quite quickly, I should open it if someone has sent me a message, I should check it." (Interviewee F)

### **6.3.3 Addictive functions**

Many of the interviewees were aware that platforms are built to be addictive via for example algorithms, notifications, and well targeted social media advertising.

"Certain phenomena become unconsciously popular through social media as it feeds content through algorithms – it's scary how social media shapes thoughts and lifestyles without us even noticing." (Interviewee D)

The interviewees had also noticed social media to be addictive by suggesting content that interests its users in an endless loop, and many described their use of social media to be even obsessive.

"TikTok is a bit of a weird black hole where you just slip in and become aware after two hours. And I've noticed that for example in Facebook, if you click on a video, it automatically offers the next one, and then I always end up watching some random videos." (Interviewee A)

### **6.3.4 Communication about social media addiction**

It was worrying to find out that only a few of the interviewees had heard of social media addiction being discussed in public, let alone ways to try to overcome it. On the other hand, the interviewees may not have felt it was an issue they needed to explore if they did not feel addicted to social media themselves. But many would probably still know of ways or places to contact in the case of a substance addiction, such as alcohol or drug addiction. A few of them brought up that it would be great if schools taught more about social media in general and its dark

sides because social media is changing constantly and so quickly that not all adults can even keep up with it if not using social media that much themselves. One of them mentioned about that some addictions, such as addiction to social media or coffee are socially accepted unlike some other addictions, and thus are not discussed that much.

One of the interviewees brought up that she has heard a lot of discussion around the subject and encouragement to decrease social media use but have not really told how to tackle the problem:

“I just feel like there's a lot of talk about how we should limit our use of social media, but no one ever tells us how... It was just in Hesari (Helsingin Sanomat) that young people's PISA results have crashed down in Finland, that Estonia went ahead of Finland. And young (Finnish) people are just spending time in social media and no longer read books that would actually teach them something. So maybe in this kind of discussion, but then there are no practical tips.” (Interviewee D)

The interviewees were also asked if they had noticed any ways that organizations had encouraged to decrease social media use. One told about the “smart-free day” campaign by DNA, and a many told to have seen some influencers share content about taking a pause from social media or talking about other downsides of social media, e.g., appearance pressure. Some of the interviewees told to have seen some documentaries on TV about social media and to have discussed about the subject sometimes casually with friends based on the documentaries. With this in mind, this also supports the idea that it would be great if social media addiction and other dark sides of social media was discussed more publicly, for example in the media and schools, as this would raise awareness and increase communication around the issue and its consequences.

It is worrying that today children are spending so much time in social media and a lot of children are not doing things they should be doing such as playing or spending time outside. And as Tanner et al. (2020) mentioned, young people are more prone to impulsive behavior and the development of addictions than adults. Therefore, it is likely that a lot of children will become addicted to social media and suffer from its negative consequences.

## 7 CONCLUSIONS

Social media is part of our everyday lives and an important tool of communication from an individual, community and societal perspective. Social media cannot be avoided, and it is therefore very important to understand its complexity and consequences – both positive and negative. This master's thesis addressed the downsides of social media, focusing more specifically on one of its areas: social media addiction. Addiction as a concept is well known, but is usually associated with alcoholism or drug use, when in fact one can be addicted to anything – e.g., work, gambling, food, sex, sports, or social media.

The goal of this master's thesis was to explore the dark sides of social media, the reasons why social media is so addictive and what factors contribute to it. The aim was also to raise the awareness and discussion around the topic among e.g., parents, decision makers, schools, health care sector and other public sector organizations in order to understand the severity of the negative consequences of social media, but also to act before the situation gets worse.

As the qualitative study and the theoretical part showed, excessive use of social media has a wide range of negative effects, such as sleep issues, appearance pressure, career pressure, financial pressure, poor efficiency at work or studies, negative effects on relationships due to lack of presence – just to mention a few. And as Bhargava and Velasquez (2021) point out, social media is constantly made to be more and more addictive, and because of the addicting features are made so treacherously, we don't always even notice them ourselves.

Social media's disadvantages and negative consequences have been recognized broadly, yet not criticized in a similar way than drug addiction, for instance. Problematic social media use and social media addiction should be taken seriously, talked about more and found solutions to prevent it. Because social media is addicting and it is unethical that the social media companies are making the users addicted to it, social media companies themselves, public health authorities, policymakers, educators, and parents should be well addressed to. (Bhargava and Velasquez, 2021).

The interviews also revealed that many of the interviewees were aware that social media addiction exists and were not surprised about it, but many of them

had not heard of the problem being discussed publicly in the media for example. The interviews also showed that social media addiction should be discussed more since almost all interviewees told not to know any place where to advise a person who is suffering from it. It would be good to highlight the factors that cause addiction, so that we would be more aware of the moments or functions of the applications that cause it. When there is awareness that a function is created to be addictive (e.g., slot machine effect and constant scrolling), many people might have a different attitude towards their own social media use and would maybe like to consciously limit the time spent there, e.g., by setting time limits for themselves on social media apps and platforms. This will also make us more aware of how much time we spend on social media. As Uski (2016) says that taking a break from social media might help to realize how addicted one has become to social media.

The harmful effects of social media, or what additional harmful effects might be caused in the long term have not even been fully considered. Gen Z and gen alpha have lived their entire lives in the social media era, so what the actual impact of the excessive social media use on an individual, community, and societal level is going to be, will be revealed to us in the future. We already now know that there is questionable content downloaded to social media all the time, and regardless of the age recommendations, people including children are exposed to that, which for some viewers, has led to horrible and even permanent incidents, such as death. Therefore, it would be crucial for the society to react already now to the excessive use and harmful effects of social media, by for example having it part of the curriculum and teaching about it at schools in a preventive sense, as often people may not wake up until something has already happened.

It is great to see that influencers whom especially many younger people follow and keep as their role-models, are talking about the downsides of social media. Especially teens will probably take the downsides of social media into consideration more seriously when hearing them from their role models or people who they can relate to rather than their parents. Also, some companies and organizations are taking part of the discussion by holding campaigns that are raising the awareness and acting against the harmful effects that social media is causing, such as Dove with its self-esteem project and Real Beauty campaign or DNA with its 'smart-free day' campaign. Companies should also develop a crisis communication plan in order to act as soon as possible if something unwanted is happening that is related to their brand or products. They should also think of ways how to prevent those kinds of incidents from happening in the future.

As mentioned, children cannot yet think as critically as adults and often believe what is said and shown in social media to be true (Ricci, 2018). They might not consider what TikTok challenges or other content are dangerous and might have severe consequences. Parents not knowing about the potential dark sides of social media is a huge risk. Parental awareness of the downsides of social media should be greatly increased, because children are exposed to who knows what, and parents may not even know what kind of content their children are exposed to. This could be done via public sector organizations, but also employers could

take more responsibility by informing about social media addiction as well as other downsides of social media and their harmful effects. They should think how they impact on others' social media use. Sustainability is an important topic for many companies and organizations. Besides the environmental sustainability, they should also think about the social aspect of it, and how they could support the social sustainability and take more social responsibility.

There are age limits on social media, but many parents still allow their children, who are younger than the age limit, to use social media. For many parents, it might be a controversial subject, because some parents may feel pressured by the fact that their children's friends might also be in social media, and fear that their own children will be left out if they don't let them join the social media platforms. Adults don't only suffer from FoMO themselves but might feel FoMO also for their children. It is still relatively difficult to estimate what the potential side effects will be as these modern children grow up. (Baccarella et al., 2018).

In order to some concrete actions to be made for preventing and treating social media addiction at an organizational level, social media addiction would probably first have to be classified as an official illness. Once something is classified as an official illness, it still takes some time for something to happen. It would therefore be particularly important to react now, before the situation gets worse. Many therapists are aware of substance addictions, such as alcohol or drug addiction, and are educated on how to treat those, but behavioral addictions, such as social media addiction, might be fairly new concepts for many health care professionals, which makes it difficult for them to understand the problem as a whole and thus are not always able to be helpful. On contrary, in peer groups the other attendees are suffering from same or similar challenges, which might make it easier to share thoughts and be more open about the problems.

When the issues such as social media addiction are on an individual level, the organizations and social media companies don't have that much pressure to act, but when the individual issue has started to evolve into bigger groups, the negative consequences are multiplied and are even affecting the society by e.g. increased resource needs. Then the organizations and companies probably also feel more pressure and don't have much more choices than to act.

Organizations should prepare for the consequences of dark side of social media with allocating more resources to the mental health care side. Already now the situation in Finland is pretty bad when it comes to resources in the health care sector (MIELI, 2023). In case one is suffering from mental health problems, it is already now difficult to get help in time. Seeking help can in itself be a major struggle for many - one might even feel shame about it, and if the individual finally gets the courage to seek help for themselves, and doesn't get help easily or quickly enough, or feels that he or she is not believed in or not taken seriously enough, it's a total turn off. The odds of them bothering to seek help again are pretty low after that, because it is a sensitive topic for many. Yet, it would be extremely important to get help for mental health problems as soon as possible; even some "first aid" to prevent the situation from escalating and getting worse.

Finland already has very limited resources in the health care and mental health care sectors, but policy makers should weigh up what will have a long-term consequence and what will impact what in the future (MIELI, 2023). If people are going to be on disability pensions at such a young age because of mental health illnesses, what will the economic outlook be in 10, 20 or even 50 years' time? However, simply increasing resources is unlikely to help or get us very far. Instead, we should address the root cause of the problem: reducing the negative effects of social media, and decreasing the harms of social media and the addictive factors causing social media addiction.

Meta, Google and other big social media organizations benefit from the situation because there is not really competition that would be scaled to their size (Raeste & Sokala, 2021). Thus, they can decide what kind of algorithms work in the best way, and by doing so, they guide the users to make content that is supported by the algorithms. This applies to both individuals and companies. Social media companies should take more social responsibility and intervene by promoting transparency and treatment of mental health problems as well as develop ways to prevent and reduce the negative consequences of social media. They have the power to decide what is shown in their platforms and what kind of content is given visibility and thus what is feeding the algorithms. They can also directly influence how addictive platforms are constantly built and since they know how to do that, they should also know how to build them to be healthier for the users. The gigantic players also have the resources to develop new tools and other ways to reduce social media addiction, if they just wished to do so.

## **7.1 Limitations of research**

There are some limitations of this research. The research was executed on eight people's interviews, which does not mean that the responses and implications could be generalized. Yet, the aim of this master's thesis was to find out what are the dark sides of social media and why is social media so addictive. The sample size in this thesis was enough to describe commonly observed experiences on dark sides of social media and social media addiction as well as what consequences there could be on an individual, organizational, and societal level. This study responds in the subjects in a general level. Nevertheless, if the subject was to be explored in more detail, the research could be pursued with a more extensive quantitative study.

The qualitative research of this thesis included millennials and gen z participants. It might have been better to include participants only from one age group or only one gender but as the qualitative research sample size was smaller, this type of exclusion decision wasn't made.

## 7.2 Further research suggestions

There are many suggestions for further research for this thesis. For the future research suggestion, it would be interesting to compare how different age groups; gen x, millennials, gen z and gen alpha, experience social media addiction by conducting quantitative research, because all the four mentioned age groups have lived in a different phase of digitalization and social media era. Also, different genders' experiences could be compared.

Further research could also take a deeper look into the drawbacks of social media or, for example, the pressure on several life areas that it causes. It could investigate and whether users' income, marital status, family situation etc. correlate with the pressure social media creates. In addition, further research suggestion could be focusing on the ones who are addicted to social media and wider quantitative research could be made for those in order to get even deeper understanding on the causes and possible methods for help from their perspective.

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## **APPENDICES**

### **APPENDIX: Semi-structured interview questions**

#### **Question 1**

How would you define social media?

#### **Question 2**

Which social media platforms do you use regularly?

#### **Question 3**

On average, how much time do you spend on social media daily? What thoughts does that arise to you?

#### **Question 4**

Why do you use social media?

#### **Question 5**

How would you describe your relationship with social media and social media use?

#### **Question 6**

Do you think you use too much social media? What in your opinion is too much?

#### **Question 7**

Are there any downsides of social media? If yes, what?

#### **Question 8**

Has other people ever commented on your social media use, or have you commented on someone's social media use? In what kinds of situations?

#### **Question 9**

Has your social media use been interfering your... e.g., studies/work, relationships, mental health, body image, sleep, or other; what and how?

#### **Question 10**

Do you find social media addictive? In what way?

#### **Question 11**

Have you ever tried to decrease your social media use? If yes, how, and how did you succeed?

#### **Question 12**

Have you noticed any functions that are making social media more addictive?

**Question 13**

Have you noticed any ways of how organizations are trying to decrease social media use?

**Question 14**

Do you know any methods to help how to get help for social media addiction or problematic social media use?

**Question 15**

Have you discussed about social media being addictive with others?

**Question 16**

Have you noticed ways of consumers/communities/organizations discussing about addiction? Where/how?