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Who's using who?

How mainstream social media is designed to get users hooked

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Declaration

I hereby declare that this B.A thesis entitled **“Who’s using who?: How mainstream social media is designed to get users hooked”** was carried out by me for the degree of Bachelor of Arts in Communication Design in English under the guidance and supervision of Prof. Emily Smith and Dr. Sarah Goodrum, University of Applied Sciences Europe, Campus Berlin, Germany.

The interpretations and examples are based on my reading and understanding of the original texts and are not published anywhere else as far as I am aware. The other books, articles, and websites, which I have made use of are acknowledged at the respective place in the text.

Research Student

Carl Sebastian Björkman

A handwritten signature in black ink, reading "Carl Sebastian Björkman", is written over a horizontal line.

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Abstract

This dissertation investigates how social media is designed to be addictive, so the users invest as much time as possible on the platforms. The modern human is not necessarily too weak for appealing online technologies, because they are indeed built on purpose to be habit-forming. The topic of internet and smartphone abuse is relevant because it is such a new and substantial problem. The conclusion is reached by combining two approaches: how the industry is constructed and how the social media apps are designed to take advantage of human characteristics, such as narcissistic or escapist behavior. The user, whose existence should never be strictly divided into online and offline, gets comfort in either receiving dopamine-rewarding 'Likes' or mindlessly sinking into the platforms' infinity-scrolls. Social media is designed so that both the active and the passive individuals wish to check the app continuously. Carefully designed algorithms make the seemingly unsystematic content relevant enough, so that closing the app becomes hard. The very key finding in the thesis is that mainstream social platforms are not selling communication, but purely online advertising. Simultaneously as active online users and virtual marketing is growing exponentially, so are depression and loneliness among users, especially the younger ones. A combination of multiple analyses shows that social media per se is neither good nor bad, but if the user is not cautious, the outcome will easily be baneful.

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Introduction

This bachelor thesis will examine a growing problem, which I argue everyone is aware of but very few actually worry about: the addictiveness of social media platforms. The challenge is to remain objective towards the topic, because we are all involved. I, myself, am a heavy user of several different social apps and websites and could not say with a straight face that I'm not dependent on them. I am not alone with this standpoint: social media is a modern global phenomenon that has integrated within the last decades deeply into our every-day lives. It is thus historically an entirely new concept and it will take generations to understand what it in the end did to us.

Social media certainly has a lot of advantages: mainly keeping the contact between distant friends and relatives. I am interested in knowing if there are any further benefits, or if we in fact are just blindly obeying the underlying designs and scrolling endlessly through the apps for nothing. My goal is to shine light on the parts of social media, that is intentionally habit forming. Ultimately the relevance of this thesis might be to help myself and others to understand and moreover reflect on why we want to glance at the phone every second minute.

Social media as a topic is immense, but the thesis question enables me to go through many aspects more briefly. For example, is it important for this dissertation to mention algorithms and shortly explain what their purposes are, rather than analyzing the technical parts deeply. Exactly how the algorithms are built up is irrelevant for the thesis question. There is, however, one key term of this thesis which need to be explained further here in the introduction. I'm drawing quite harsh conclusions in Chapter 1.3 about the *user* in general, who can be anyone of 2 billion people. This is my response to the book series *Why We Post*¹, which has worked as the main source of research, even though the entire series is not that visible in the text. In this book

1 General link to the whole series *Why We Post*, where the books are presented individually as well
University College London, "Why we post," accessed 30.4.2019, <https://www.ucl.ac.uk/why-we-post/research-sites>

series nine anthropologists spent a year living in nine communities around the world, researching the role of social media in people's everyday lives. These separate monographs were written during 2016 and 2017 in specific field sites in Brazil, Chile, China, England, India, Italy, Trinidad, and Turkey. After I read the introductions, conclusions, and selected chapters, I drew conclusions of the general behavior of a social media user.

Many aspects of social media have naturally been left outside this thesis, not because they are unconnected, but rather because they don't contribute anything to answering the question. The first concept that's been cut out is the difference between the social platforms. In my opinion and approach, Facebook, Snapchat, and Instagram are all the same. The designs and content might vary slightly, but ultimately they are equivalent: mainstream platforms where users socialize. Another big segment is the posts themselves. In this research, it is uninteresting who is posting what from where. The importance lies in the action; what makes a person active online? Thirdly and lastly, I am ignoring influencers and freelancers, who are using social media as a platform for displaying their work and network professionally. If one's income depends on Instagram, of course the app will be open constantly, but for a genuine reason than simply killing time.

The thesis systematically approaches the question of how mainstream social media are designed to make us addicted from diverse angles of incidence, which are combined in the conclusion to the dissertation. A consistent viewpoint towards the media throughout the thesis is that social media is neither good nor bad. But if a social medium in itself is neutral, what makes it so harmful? What are the specific design solutions, that make an online social platform habit-forming and addictive?

CHAPTER ONE

Demystification of social media

Before being able to evaluate and criticize the structure of social media, it is necessary to point out the cornerstones. Firstly, what is social media, according to a media theoretical point of view? Are the online platforms hypermodern unique inventions, or do they share the same foundations as classical medium, such as for example printing? Secondly, where does social media come from? How far back in history can the term social media be traced and what is the situation today? Thirdly and lastly, who are the users? Are every country, community and culture behaving completely unsystematically or is there a universal system between online and offline behavior?

The first chapter of the thesis will give an over-all picture of the terms which are used throughout the work. When the *users* are mentioned, who or what are they referring to? The aim of the chapter is not to examine the fundamental subjects of social media down to the core, but rather mapping them out.

1.1 Defining a social medium

Defining social media in a few simple words is not feasible because of the characteristic of media in general. The Canadian philosopher and media theorist Marshall McLuhan unwraps and explains this issue in his archetypal scholarship *Understanding Media: The Extensions of Man* (1964).² His first declaration is that the content of any chosen medium is always another medium. McLuhan explains this as a chain of different media. He clarifies this with an example of a printed message on a piece of paper. The first part of this media-chain is the print itself, which is the content of the telegraph or printer. Secondly, is the content of the print written words on the paper. Speech is the content of words and lastly, is content of speech a process of thought. The final piece of the chain, a thought, is in itself nonverbal.³ The very nature of a medium, no matter which one, is consequently rather complex. A written message on a note can be traced to a nonphysical and nonverbal notion.

When splitting and dividing the chain of a media, the outcome is consequently fragmentations.⁴ Social media works in the same way and should therefore not be treated any different, even though at first sight it is located in a virtual place. In other words, as McLuhan argues, an online platform should not be separated to a virtual ‘other’ world parallel to our ‘real’ world.⁵ In the end an online communication tool is very similar to the traditional telephone: a conversation taking place between two users.⁶ According to Daniel Miller in the book *Social Media in an English Village* from the series *Why We Post*, is it crucial for understanding and valuation that social network sites do not take place in another mystical world, but in the middle of our everyday lives.⁷ The value of it, and any medium, is its extension: how can the medium

2 Marshall McLuhan, *Understanding Media: The Extensions of Man*. ed. W. Terrence Gordon (California: Gingko Press, 2003)

3 Marshall McLuhan, “The Medium Is the Message,” in *Understanding Media: The Extensions of Man*. ed. W. Terrence Gordon (California: Gingko Press, 2003), 19-20.

4 *Ibid.*, 19.

5 Elisabetta Costa et al., “Academic Studies of Social Media,” in *How the World Changed Social Media*, *Why We Post* (London: UCL Press, 2016), 11.

6 Daniel Miller, “Welcome to the Glades,” in *Social Media in an English Village*, *Why We Post* (London: UCL Press, 2016), 2.

7 *Ibid.*

improve us as humans? The very outcome or product of the medium, is secondary. A clarification to this argument is McLuhan's view on the automatization of machines: "Many people would be disposed to say that it was not the machine, but what one did with the machine, that was its meaning or message. In terms of the ways in which the machine altered our relations to one another and to ourselves, it mattered not in the least whether it turned out corn-flakes or Cadillacs."⁸ I would argue that the value of social media is the extension it gives us, not how it is being used. The extension is the reach into a virtual milieu, which should not be seen as a distinction from the offline world.⁹ A medium has the capacity to spread the human senses to new locations. Simple and clear examples of extensions to the human body are telescope to our sight and a megaphone to our speech.

If the importance is the allowance to reach out further than the real world can, is that the definition of a social medium? McLuhan believes that simply looking at the place or the usage of a medium is not enough. The claim is that the nature of the medium, doesn't matter which kind, should not be overshadowed by its technical form.¹⁰ Breaking social media into written posts, memes and pictures does not say anything about it. Analyzing the very content in detail does not bring us nearer to the media. McLuhan explains that if he wanted to analyze what the printing technique did to social psychology during its rise in the 16th century, looking into typography would lead nowhere. He reasons that a more general approach to the medium would show the outcome he is looking for: printing created individualism and nationalism. According to McLuhan, the content is not relevant in the value of the medium.¹¹ Neither is the content, I would argue, when discussing social media.

The content of social media is naturally communication, which is determined by how users think, act, and write in real life. If a group of friends talk about football and soap operas down at the pub,

8 McLuhan, "The Medium Is the Message," 19.

9 Elisabetta Costa et al., "What is Social Media?" in *How the World Changed Social Media, Why We Post* (London: UCL Press, 2016), 15.

10 McLuhan, "The Medium Is the Message," 19-20.

11 Ibid., 30-31.

they will most likely do the same online. According to Dan Miller, social media simply enables us to create and maintain social relationships more effectively.¹² I would argue that social media follows McLuhan's theory that any given media does not make us less human or in any way post-human.¹³ A social medium gives the user the ability to expand, share, and receive content in new forms.

1.2 The rise of the tech giants

In order to understand how immense the social media platforms have become, it makes sense to see the origin of them. For this thesis, an anthropological approach is used, which does not start when the technology was invented or launched. The authors Elisabetta Costa et al. in *How the World Changed Social Media* in the book series *Why We Post* unanimously argue that the birth of social media was 1999, when the first platforms became established as a significant part of a large society.¹⁴ Before this point in history the development of the internet started to change the separation between public and private media. At the end of the 1980s, email could be sent to a group or a message in a chat room forum. In the beginning, these groups were still rather small, including not more than a few hundred people at maximum. This scale is still too small to be defined as the first large-scale mainstream social media. The platforms kept on developing, so that users could eventually form their own online social relations and communities.¹⁵ The question of the beginning of social media relates to media theorist Friedrich Kittler's viewpoints on digitalization of media.¹⁶ He argues that the digitization of individual media erases the differences between them. Sound, image, voice, and text are all reduced and transferred into interfaces on screens. Inside the

12 Daniel Miller, "How English is social media?" in *Social Media in an English Village, Why We Post* (London: UCL Press, 2016), 7.

13 McLuhan, "The Medium Is the Message," 31-32.

14 Costa et al., "Academic Studies of Social Media," 19-20.

15 Costa et al., "What is Social Media?," 9-11.

16 Friedrich A Kittler, "Introduction," in *Gramophone, Film, Typewriter*, trans. by Geoffrey Winthrop-Young and Michael Wutz. (California: Stanford University Press, 1986), 1-2.

computers themselves, everything becomes numbers, so any medium could suddenly be translated into any other. Kittler states that sharing, storing, and receiving information becomes easier than ever before, because of the new numerical system.¹⁷ The digitalization and combination of content made it possible for social media platforms to be born.

The history of social media begins in Korea with the enormous success of the platform Cyworld. It launched in 1999 and in five years almost all young Koreans used this social media site. It was built up on online relationships, which the users were obliged to constantly develop. As the authors from *Why We Post* see it, did this platform create a particular online subculture which only appealed to Korean Society. This is why it did not have a global success.¹⁸ This new social medium created a possibility for the users to show and define relationships and to which community they belonged to.¹⁹ The core idea of modern social media was born here: an individual interacting, rather than to everyone, to a specific group with networking members. Social media began as group media: more public than private, but no longer entirely open to the public, as with tv and radio.²⁰

Cyworld was the ideal technology for establishing and spreading the norms of life and society, because it was controlled. The Koreans were under pressure of normality and knew what should and should not be shared and said online and offline.²¹ It became essential for Koreans to have a socially acceptable online profile. Forty years before the birth of Cyworld, McLuhan argued that the reason behind a new successful medium is just a rising demand. He wrote: "Nobody wants a motorcar till there are motorcars, and nobody is interested in TV until there are TV programs. This power of technology to create its own world of demand is not independent of technology being first

17 Kittler, "Introduction," 1-2.

18 Costa, et al., "Academic Studies of Social Media," 12-13.

19 Razvan Nicolescu, "Conclusion," in *Social Media in Southeast Italy: Crafting Ideals, Why We Post* (London: UCL Press, 2016), 186.

20 Miller, "How English is social media", 2.

21 Nell Haynes, "The extraordinary ordinariness of Alto Hospicio" in *Social Media in Northern Chile, Why We Post* (London: UCL Press, 2016), 186.

an extension of our own bodies and senses.”²² Social media became quickly so popular, that it was above being simply a trend. It grew and became a significant part of a culture, like the TV and motorcar once did. This is essential for the thesis because it points out that just by existing as a technology, social media has an attractive force.

Globally social media really took off from developments of platforms in the US. The first mainstream social sites to have a massive infiltration and influence on societies worldwide was Myspace, which was founded in 2003.²³ There were other platforms launched at the same time, but they didn’t spread as globally as Myspace. It became quickly extremely popular amongst teenagers, so another platform, LinkedIn, designed for professional and business networking, was founded. Focusing on only a niche market gave birth to dating sites like Grindr and Tinder a few years later.²⁴ Facebook was founded a year later than Myspace but had a less smooth start. Co-founder Mark Zuckerberg with a few fellow Harvard students launched *www.TheFacebook.com* in February 2004, and by the end of the year they reached one million active users. Myspace at the time had five times more. With strategic business and design plans Facebook surpassed Myspace in 2008 as the most-visited social media website. Four years later it became the largest social network in the world, with more than one billion users.²⁵ Facebook managed to keep the platform interesting for users’ everyday habits, which arguably is the key for its success. It provided the user with opportunities for liking, commenting, conversing, and engaging in other friends’ Facebook walls, which felt like normal daily communications.²⁶ Today there are 2.38 billion people registered on the platform and the number is constantly growing.²⁷ I believe this number demonstrates McLuhan’s statement on how a technical demand can

22 McLuhan, “Challenge and Collapse,” in *Understanding Media: The Extensions of Man*, ed. W. Terrence Gordon (California: Gingko Press, 2003), 99.

23 Costa et al., “Academic Studies of Social Media,” 14.

24 Ibid.

25 Mark Hall, “Facebook American Company,” *Encyclopedia Britannica*, 2012, accessed 30.4.2019, <https://www.britannica.com/topic/Facebook>

26 Nell Haynes, “The extraordinary ordinariness of Alto Hospicio”, 188.

27 Dan Noyes, “The Top 20 Valuable Facebook Statistics – Updated April 2019,” *Zephoria Digital marketing*, 2019, accessed 30.4.2019, <https://zephoria.com/top-15-valuable-facebook-statistics/>

turn something into becoming both mainstream and essential.

Alongside the enormous success of Facebook, several alternative platforms found their space to be invented. In the top from a chronological order of Western social media are Twitter (founded 2006), WhatsApp (2009), Instagram (2010), Snapchat (2010), and WeChat (2011).²⁸ As a demonstration of the division between the platforms, a survey done by PEW Research Center is used (figure 1). The Research Center collected data from US adults and showed that the median American user reports that they use three of the eight major platforms that the Center measured in this survey from 2018.²⁹ Noticeable is that PEW Research Center chose to include the video-sharing site YouTube in the survey, even though they don't see it as a traditional social media platform.³⁰ I agree with this approach, because personally I see YouTube as a video platform. There is an ongoing discussion online whether YouTube is in fact a social media, because users have the possibility to log in, post content, comment, and connect on the platform. In my opinion the main focus is watching videos, therefore, this thesis will follow the Center's approach. The main focus of all the platforms will be Facebook, which is according to the survey the supreme social network site.

1.3 The universal user behavior

In today's world, everyone seems to be a social media user, but every user is definitely not the same. This chapter will define what a user is, rather than who. McLuhan had a very grim view on the user of any media. It is worthy for the argument to keep in mind that this was said years before the internet was even invented.

28 Costa et al., "Academic Studies of Social Media," 14-15.

29 Monica Anderson and Aaron Smith "Social Media Use 2018," Pew Research Center, 2018, accessed 30.4.2019, <https://www.pewinternet.org/2018/03/01/social-media-use-in-2018/>

30 Ibid.

When we are deprived of our sense of sight, the other senses take up the role of sight in some degree. But the need to use the senses that are available is as insistent as breathing—a fact that makes sense of the urge to keep radio and TV going more or less continuously. The urge to continuous use is quite independent of the “content” of public programs or of the private sense life, being testimony to the fact that technology is part of our bodies. Electric technology is directly related to our central nervous systems, so it is ridiculous to talk of “what the public wants” played over its own nerves. This question would be like asking people what sort of sights and sounds they would prefer around them in an urban metropolis! Once we have surrendered our senses and nervous systems to the private manipulation of those who would try to benefit from taking a lease on our eyes and ears and nerves, we don’t really have any rights left. Leasing our eyes and ears and nerves to commercial interests is like handing over the common speech to a private corporation, or like giving the earth’s atmosphere to a company as a monopoly.³¹

McLuhan explains that the modern human has a direct personal relationship with electric technology and is easily shepherded by it. I understand this regardless of the user’s personal background, there is an underlying humane will to be escorted by the medium. Once a person is introduced to a technical medium, a will to blindly follow it without thinking further is born. The user’s personal background is not essential. The Canadian-American sociologist Erving Goffman backs up this argument with similar theories about essential humanity.³² He explains that all communication takes place within a cultural genre and whatever we do within any technologies is always a reflection of ourselves. Goffman does not look down on social media per se but claims that it only gives the user new capacities. He recognizes that spending time in an online social media platform is simply part of what the human race is doing in modern times.³³

I argue that if social media according to Goffman is just what people do these days, then the very act of posting online is neutral. It

31 McLuhan, “Challenge and Collapse,” 99-100.

32 Costa et al., “What is Social Media?,” 8.

33 Ibid.

is just an action that a modern person does. Author Jolynna Sinanan in *Social Media in Trinidad: Values and Visibility* in the series *Why We Post*, argue that the post as a content is not neutral because it is a product of the individual user.³⁴ The user, the individual, is a product of a culture. The shared content on social media reflects deeply specific norms of the society that produced it.³⁵ This cultural reproduction happens without the user even being intentionally aware of it. The users highlight their own cultural values and ideas and create their own particular community online.³⁶ The interactive nature of social media is important because it provides a platform where social scripts are not only defined, but also actively discussed and criticized.³⁷ The way an individual social media user behaves should be seen from a broader context, rather from a strictly psychological point of view. The online posts are driven by culture and society itself, rather than just one user's own ego.³⁸ Combining the statements of McLuhan, Goffman, and Sinanan indicates that the online user is a reflection of their own individual background.

The *Why We Post* -authors Jolynna Sinanan and Daniel Miller both agree when trying to define a specific online user group, that it is actually the culture that should be expressed.³⁹ Therefore, there will automatically be an amount of generalizations included and sometimes crossovers with stereotypes.⁴⁰ I am cautious when using these terms, because it may easily lead to wrong assumptions and interpretations. Sinanan and Miller, however, explain that human kind is grown up and taught how to act mainly by observing how the rest of society is behaving. This is the reason why people are and can be categorized by subjective terms such as “typical”, “normal” or “characteristic.” These are by no means fixed rules and many people have a tendency

34 Jolynna Sinanan, “Conclusion: Social Media through Ethnography,” in *Social Media in Trinidad: Values and Visibility*, *Why We Post* (London: UCL Press, 2016), 206.

35 Ibid.

36 Haynes, “The extraordinary ordinariness of Alto Hospicio,” 190-191.

37 Ibid., 188.

38 Sinanan, “Conclusion: Social Media Through Ethnography,” 200.

39 Daniel Miller and Jolynna Sinanan, “Conclusion,” in *Visualising Facebook: A Comparative Perspective*, *Why We Post* (London: UCL Press, 2016), 202.

40 Ibid.

to interpret or neglect their norms of their own society.⁴¹ Sinanan and Miller clarify that even though social media promotes freedom, the users do not automatically determine their own values. They work more like carriers and promoters of their culture's values. We share what we are and therefore personify and express a specific culture.⁴² The cultural differences between users cause different approaches to social media: some experience it as a place they live in, other as an integrated tool for everyday usage. The user's life should not be differentiated between an online and offline, because they are happening simultaneously.⁴³

One major similarity between real life and the virtual one is the groups people engage with. Social media does not automatically connect communities from different economic or political backgrounds, because most individuals do not use the platforms to seek new connections in our world. It is the community values and the same social script which makes users identify with one another.⁴⁴ Social media is ultimately not some kind of advanced technology that humanity has never seen before, even though it might come across like it. In summary, what a social network site does to the users around the world is to add nuances to social life and new aspects to focus on.⁴⁵ The online user is nobody distinctive, simply an advocate of the person's personal culture. This statement of generalization is valuable for the thesis, because it unites everyone on an online social platform. I argue having the capacity of turning billions of individuals into numbers, like cattle, has an enormous impact on the industry. The next chapter will explain why the social media businesses want to do so.

41 E Gabriella Coleman, "Ethnographic Approaches to Digital Media," *Annual Review of Anthropology* 29 (2010): 487-505, <http://techstyle.lmc.gatech.edu/wp-content/uploads/2011/11/0000005936-annurev.anthro.012809.104945.pdf>

42 Miller and Sinanan, "Conclusion", 203.

43 Miller, "How English is social media?", 192.

44 Haynes, "The extraordinary ordinariness of Alto Hospicio," 180.

45 Nicolescu, "Conclusion," 185.

CHAPTER TWO

The business behind profitmaking platforms

The previous chapter explored the foundation of social media: what it is, where it comes from and who is using it. It is simultaneously a highly complex phenomena that deeply reflects humanity, and a modern technology which simply demonstrates different cultural behaviors. A brief introduction to the growth of the platforms was presented in the previous chapter and will hereby be analyzed further. Social media companies are businesses and every business want to see financial growth. Even though there are exceptions, the goal of a company is to earn more money. How exactly is this goal reached in the industry of social media? Does it follow a business to customer or business to business mentality? What are the tools and tricks to win revenue from a platform that in the one hand appears to be completely free? All the cynical theories about internet security which are too bias for an academic text, are left outside this thesis. One thing is nevertheless certain: social network sites want everyone to participate and to share as much as possible about themselves in their online profiles.

2.1 Expensive free-of-charge social media

Mark Zuckerberg predicted very wisely how to turn the platform into a lucrative business. Two years after the launch of the platform there were enough active users for the interest of advertisers. Together they saw the opportunity for companies to reach out and create new customer relationships. This kind of direct consumer engagement had not been possible before Facebook. After a few successful campaigns more companies began using the social network for marketing and advertising.⁴⁶ Even after Facebook became the biggest social media platform, WhatsApp still had more active user engagement. For Zuckerberg this meant growth opportunity, future prospects, behavioral data, contact lists, and keeping the app from competitors, so he bought WhatsApp for 19 billion dollars in 2014. Blog content manager and writer Ryan Barone explains that the financial value in social media is less about direct revenue and more about future possibilities.⁴⁷ He predicts that Zuckerberg will strategically use the growing demand of online communication and in no time win the billions back. The open source data collector Statista shows a very clear growth of social media (figure 2), based on information obtained from eMarketer.⁴⁸ The chart predicts a continuous increase of social network users, which businessmen like Zuckerberg can turn into capital.

Christian Fuchs, Professor and Director of the Communication and Media Research Institute and Director of the Westminster Institute for Advanced Studies, has gathered information about online marketing and revenue in *The Online Advertising Tax: A Digital Policy Innovation*.⁴⁹ Fuchs establishes a critical theory of digital media and divides social internet forums into two groups: non-profit vs. corporate platforms that use targeted advertising for earning capital. The

46 Hall, "Facebook American Company"

47 Ryan Barone, "Why is WhatsApp Worth \$19B? How do Free Apps Make Money?" iD Tech, 2014, accessed 30.4.2019, <https://www.idtech.com/blog/why-is-whatsapp-worth-19b-how-do-apps-even-make-money>

48 Statista, "Number of Worldwide Social Network Users Worldwide from 2010 to 2021 (in billions);" 2019, accessed 30.4.2019 <https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users>

49 Christian Fuchs, *The Online Advertising Tax as the Foundation of a Public Service Internet A CAMRI Extended Policy Report* (London: University of Westminster Press, 2018)

non-profit ones are public service internet platforms, which are run and maintained by civil organizations. The benefit of these are that they serve in the public interest, which can question and challenge the power of the huge pro-profit companies.⁵⁰ The size of revenue involved in the mainstream online media industry is, however, immense. Fuchs is concretizing this fact with numbers and making an important announcement.

Google and Facebook are among the world's largest transnational corporations. In the 2017 Forbes ranking of the 2000 biggest global companies, Google/Alphabet came 24th with an annual profit of 19.5 billion US dollars.² With a profit of 9.5 billion US dollars, Facebook was in 119th place.³ Neither company sells communication services; what they sell is online advertising. In economic terms, it is thus inaccurate to refer to Google and Facebook as communications companies. Rather, they are two of the world's largest advertising businesses.⁵¹

Fuchs is critically representing the largest online platforms in a more correct and honest way. It is not by coincidence that Zuckerberg insisted from the very beginning that it is forbidden for Facebook users to adopt a false identity. He argued that transparency is necessary for forming personal and social relationships, but the story has more sides to it. Knowing exactly who the users are is extremely valuable information for businesses that are looking to connect their products with consumers.⁵² A mainstream social media is the terrific place for marketers to conquer. Facebook is the new billboard next to the free highway full of users.

50 Christian Fuchs, "The Rise of Online Advertising," in *The Online Advertising Tax as the Foundation of a Public Service Internet A CAMRI Extended Policy Report* (London: University of Westminster Press, 2018), 2.

51 Fuchs, *The Online Advertising Tax as the Foundation of a Public Service Internet A CAMRI Extended Policy Report*, 4.

52 Hall, "Facebook American Company"

2.2 Aggressive conversion in advertising

Even though the platforms are completely free for the users, they pay with their online appearance. Companies used to profit from apps by either selling them like any other one-time purchase product or using the “Freemium” models: allowing the users to download it but charging for extra features.⁵³ However, this business model has been renewed because of marketing money. The profitability of Google and Facebook have had an enormous impact on the whole advertisement industry. Fuchs supports this argument by referring to two major studies in global advertisement. According to data collected by Ofcom (Office of Communications), the British regulatory body for media, global advertising increased by 23.0% between 2011 and 2015. This equals a growth of 70 billion euros; an increase from 290 to 360 billion euros.⁵⁴ Fuchs compares these numbers with a study by World Advertising Research Center (WARC), which estimates the 2015 volume of global advertising to be around 480 billion euros. This shows that different sources may provide different data, depending on the research approach. However, both the studies show a clear trend in world-wide advertisement between 2011 and 2015; newspaper and magazine advertising’s part of the total volume falling sharply, and online advertising’s share rising strongly.⁵⁵ Another similar study (figure 3) by WARC shows that this is not a local phenomenon, but in fact a world-wide occurrence.⁵⁶ Even though the presented chart is very constricted; presenting data from only 5 rich western countries, it shows a clear resemblance. The trend to advertise online is world-wide and largescale. I consider that the coeval growth of users, marketers, and advertising money is undeniably linked. Without trying to sound mistrustful I draw a conclusion that the world is being more and more ruled by social media money.

Another growing trend that cannot go unmentioned is the internet itself. The percentage of internet usage increased globally from

53 Barone, “Why is WhatsApp Worth \$19B? How do Free Apps Make Money?”

54 Christian Fuchs, “Introduction: Public Service Internet Platforms and the Online Advertising Tax,” in *The Online Advertising Tax as the Foundation of a Public Service Internet A CAMRI Extended Policy Report* (London: University of Westminster Press, 2018), 3.

55 Fuchs, “The Rise of Online Advertising,” 8.

56 *Ibid.*, 10.

6.5% to 43% between 2000 and 2015. One of the main reasons is the development and integration of the mobile phone. In 2016 there were more than seven billion mobile cellular subscriptions, and the number has constantly been increasing.⁵⁷ In my opinion McLuhan's statement from Chapter 1.2 can be applied here as well: the reason behind a new successful medium is solely a rising demand.⁵⁸ After the first neighbor had a smartphone connected to the internet, soon everyone in the neighborhood had to have one! I argue that online-marketers will definitely find a way to be part of such a success. Affirmatively writes Professor Fuchs that it is by no coincidence that there has been, with the smartphone demand, a significant rise of mobile advertising.⁵⁹ He informs that in the ever-growing online marketing, mobile advertising is the new leading subcategory. According to studies by previously mentioned World Advertising Research Center (WARC), mobile advertising was 9.5% of the global advertising expense in 2015. This number was only comparable with 0.1% ten years before.⁶⁰ That is around 1000% growth in a decade, which is explosive. The drastic change in the global advertising industry can be evidenced by the social media apps in smartphones. There is without a doubt a link between the growing trend of social media users, internet, smartphones, and the towering numbers in advertisement. For the thesis question: *How mainstream social media is designed to get users hooked*, this connection is assuring that the social media companies indeed are succeeding. The next subchapter presents how the platforms are operating to earn more.

57 Bobby Lau Chik Chuon et al., "Smartphone usage and increased risk of mobile phone addiction: A concurrent study," in *International Journal of Pharmaceutical investigation* 7, no 3(2017): 2, doi: 10.4103/jphi.JPHI_56_17

58 McLuhan, "The Medium Is the Message," 24.

59 Fuchs, "The Rise of Online Advertising," 7-8.

60 Ibid.

2.3 Greedy algorithms feeding on relevance

Social media platforms are not only providing communication services and selling online advertisement, but also pushing and arranging everything based on algorithms. For the paying marketers the platform does not only include a virtual place for commercials, but also a collection of data about the users and their habits. There have been a lot of suspicions and theories around this topic. This is the focus of the discussions in the book *The Datafied Society: Studying Culture through Data* by Evgeny Morozov, who is one of the most outspoken critics of Silicon Valley.⁶¹ He builds up his argument by stating that data collected for financial purposes was used by banks long before technology companies. The principle of algorithms has its origin in the banking industry much more than in the tech industry. Data was and is collected for determining whether a person is a trustworthy customer and eligible for a loan.⁶² The difference from today's situation is only the accessibility of information according to Morozov.

Obviously, there is [today] far more data generated about lifestyle by individuals. This is in part because we have shifted to a society where devices can easily generate data. That data is useful for all sorts of purposes, but I don't think that if an insurance company could have grabbed that data 80 years ago, they wouldn't have grabbed it. Nothing has changed in the epistemic assumptions of how capitalism operates that made companies suddenly realize that data was valuable. It was always valuable but very hard to grab before.⁶³

Morozov has a pessimistic viewpoint on algorithms, mainly because the driving factor for their existence is money. He would therefore not trust companies to represent public services, because the data is usually privately-owned. Decision-making has a big potential to be biased and unfair, and if the data is not an open source that one can examine, how can it be trusted, he asks? If a country, corporation or individual

61 Evgeny Morozov, *The Datafied Society: Studying Culture through Data*. ed. Karin van Es and Mirko Tobias Schäfer (Amsterdam: Amsterdam University Press, 2017)

62 Morozov, "Opposing the Exceptionalism of the Algorithm," 246.

63 Ibid.

cannot be trusted, the data may be carefully manipulated.⁶⁴ I believe that being a bit paranoid about social media is healthy. However, one should not let that turn into obsessive behavior and fear constantly being spied on. It is good to be consciously aware of what algorithms are doing, but everything in moderation.

Manipulating, directing, and managing user behavior is essential for the sales numbers. It is in the social media companies' greatest interest to keep their customers, the paying marketers, satisfied. However, the social media platforms do not want to bore, annoy, or scare the users with too much advertising which would cause them to log out. There must be a certain relevance and balance in the news-feed, to keep the user interested and engaged. Consequently, unique built-in algorithms are used to deliver content to every individual user. Nothing that appears on a platform is there by accident, but carefully managed by certain criteria and priorities.⁶⁵ This is relevant to the topic of the thesis because it shows that the platforms indeed are designed to be as controlled as possible by the social media companies. I argue a governed milieu would also make the users more controllable. A direct example to illustrate this issue is the online search bar. It is controlled by algorithms so that when the user is typing, it immediately suggests a complete search query.⁶⁶ Showing the relevance and explaining the algorithms existence without demonizing them, builds on the thesis argument that social media is designed to make us habituated.

The biggest platforms such as Facebook, Instagram, Twitter, and LinkedIn are all built slightly differently, depending on strategy. In most cases, *relevance* is the leading factor for the user, which can be estimated from the user's personal identity, online behavior, and content engagement. This information is valuable for the companies and marketers, so they can appear to the right audience in the most suitable way. The rule online is straightforward: the more a company's page followers engage with the content, the more they continue to appear in

64 Morozov, "Opposing the Exceptionalism of the Algorithm," 247.

65 Christine Warner, "This Is Exactly How Social Media Algorithms Work Today," Skyword, 2019, accessed 30.4.2019, <https://www.skyword.com/contentstandard/marketing/this-is-exactly-how-social-media-algorithms-work-today/>

66 Ibid.

the users' feeds and the feeds of their friends.⁶⁷ This attitude motivates activity from both the companies and the users, which of course favors the growth of the social media platform. A more active milieu will attract more users, that will push more companies to conduct business with the platforms. It cannot be a coincidence that such a forceful strategy is happening simultaneously as global advertising and internet usage increase together. Social media is programmed to be followed and the secluded algorithms are the traffic controller. However, there are many more design solutions involved, to lure people in and keep them occupied.

67 Warner, "This Is Exactly How Social Media Algorithms Work Today"

CHAPTER THREE

Exploiting human vulnerability

Mainstream social media is, money-wise, free of charge for the users, who end up paying with their personal time and information. The likes and the clicks are worth everything for the marketers, who have to rely on the platforms' underlying algorithms. The more actively a company behaves online, the more it appears for the users and the bigger the chance of an interaction. The companies want to earn more money, but what is the user's interest? Earlier in the thesis in Chapter 1.3, I explained that a user will behave in similar patterns online as well as offline. Socially this means that they will be more engaged and less energetic users. Passive and active behavior occurs naturally everywhere. A successful platform should therefore be designed to please both types simultaneously. BBC's Panorama in the summer of 2018 did a documentary regarding the topic, where the journalist Hilary Andersson interviewed some top designers from the field. With the help of the results of the documentary this chapter investigates how the online environment creators are using human psychology for their benefit. How is the harmless social media user trickled into staring at the screen for a maximum time?

3.1 Promoting narcissistic behavior

Posting and sharing pictures of oneself constantly gives an egocentric impression. Narcissism is, however, often considered as a personality trait, rather than a severe clinical disorder. Diagnosed narcissists hold over-ambitious and unstable views on their talents and uniqueness, which are being maintained with self-centered and exhibitionistic thoughts and actions.⁶⁸ Social media does not by itself make a user into a mentally unbalanced narcissist, but it feeds an attention-seeking habit extremely easily. According to Alan J. Gow and Becky Phu, authors in the journal *Computers in Human Behavior*,⁶⁹ the most noticeable solution to grab the user's attention is the *Like* button. It was introduced by Facebook in 2009 to encourage users to interact more with each other's posts and pictures.⁷⁰ The button signals approval of the content and became such a big success that it has ever since been used widely all over internet.⁷¹ On different sites, the like function takes form of thumbs-up icons, hearts, and retweets, but means practically the exact same thing.⁷² Due to all the platforms both counting and showing the "likes," it has turned into a form of online social currency. This numeric representation of social acceptance allows the content to be evaluated: this post has more likes than that, therefore it is better. Unsurprisingly, this drives users to start comparing not only their posts but also the overall online image of themselves with others.⁷³ As a concept this is nothing new: humans have always evaluated themselves by examining others, because it directly influences the self-image. There are two different ways a person can relate oneself with others: upward and downward

68 Skyler T. Hawk et al., "Narcissistic adolescents' attention-seeking following social rejection: Links with social media disclosure, problematic social media use, and smartphone stress," in *Computers in Human Behavior* 92 (2019): 66, <https://doi.org/10.1016/j.chb.2018.10.032>.

69 Alan J. Gow and Becky Phu, "Facebook use and its association with subjective happiness and loneliness," in *Computers in Human Behavior* 92 (2019), <https://doi.org/10.1016/j.chb.2018.11.020>.

70 Ibid., 151.

71 Hall, "Facebook American Company"

72 Hilary Andersson, "Social media apps are 'deliberately' addictive to users," *BBC NEWS Technology*, 2018, accessed 30.4.2019, <https://www.bbc.com/news/technology-44640959>

73 Matthias R. Hastall et al., "'Likes' as social rewards: Their role in online social comparison and decisions to like other People's selfies," in *Computers in Human Behavior* 92 (2019): 76, <https://doi.org/10.1016/j.chb.2018.10.017>.

social comparison. According to further analyzes by Skyler T. Hawk et al. in the journal *Computers in Human Behavior* by a large group of authors,⁷⁴ the outcome can for both comparisons be either positive or negative. “Upward” means a self-evaluation with superior others, which reflects in either inspiration and admiration or as envy and bitterness. The opposite comparison: “downward”, may express itself as either pride or pity.⁷⁵ The like button is unquestionably feeding this fundamental human behavior of competing with each other.

Due to the competitive atmosphere on the social media sites, the user has an even bigger motivation to appeal in a positive manner for the world to see. This is not anything new in human behavior, because the first needs to be fulfilled after guaranteed survival are safety and social belonging, according to authors of *Computers in Human Behavior*.⁷⁶ Additionally, it is not only food and sex that are rewarding when obtained, but also social acceptance. Biologically we are built up to like being liked. Social acceptance is highly important and in today’s world takes the form of thumbs-up icons. It is therefore not by chance that a user with the slightest narcissistic tendencies wants to actively pursue and maintain a positive self-image. Amplifying and self-enhancing the image online is easy: sharing only appealing content, that will fish for the approval. Self-expression in the form of sharing photos, thoughts, feelings, life events, and current activities is getting here a supplementary meaning: grab attention.⁷⁷ An easy, yet effective way of doing so is the usage of selfies. Selfies can be alone, in small groups, everyday-casual or staged: they all work.⁷⁸ For hundreds of thousands of years of evolution, humans have adapted reading each other’s faces to better understand the other person.⁷⁹ Selfies feel

74 Hastall et al., “‘Likes’ as social rewards”

75 Ibid., 77.

76 Ibid.

77 Hawk et al “‘Narcissistic adolescents’ attention-seeking following social rejection,” 65-66.

78 Elizabeth Thomas Crocker and James E. Katz, “Selfies as interpersonal communication,” in *In the Beginning was the Image: The Omnipresence of Pictures: Time, Truth, Tradition*. ed. Ágnes Veszelszki and András Benedek (Bern: Peter Lang AG, 2016), 135.

79 Ibid., 132.

familiar and comfortable and everyone likes that, literally.

Yet as a tool of communication, selfies are also harshly criticized. They are seen outside the social media sphere as simply self-promotion, personal propaganda, and fillers of conversations.⁸⁰ This thesis will not take a stand whether selfies are good or bad, superficial or meaningful, because referring earlier to Goffman's argument, all communications are simply reflections of ourselves.⁸¹ The technology is neither good nor bad, just showing what human beings are doing in modern times.⁸² Selfies are quick, effective attention-grabbers, which are highly appreciated online. However, they do speak of a very shallow self-centered act, that social media gladly encourages. Exaggerating a self-portrait does not take a long time with modern techniques and will presumably receive more positive feedback. Not behaving self-important online is hard to restrain from even the humblest of individuals. The like button began to change the behavior of the users, in the platforms favor of course.

3.2. Killing boredom by escaping

The previous chapter is referring to a very active user, who is posting selfies and waiting obediently for the approving likes. However, not every user wants to make status updates or even in general directly interact with anyone on the social network sites. Passive users are simply lurking around doing nothing concrete in the online environment, indicating a motivation of escaping reality with the help of social media.⁸³ Like many examples in this thesis, escapism is nothing new for humanity. John L. Longeway explained the basics of escapism in 1990 in his article *The Rationality of Escapism and Self-deception*.⁸⁴

80 Crocker and Katz, "Selfies as interpersonal communication," 131-132.

81 Costa et al., "What is Social Media?," 8.

82 Ibid.

83 Mark D. Griffiths et al., "Passive Facebook use, Facebook addiction, and association with escapism. An experimental vignette study," in *Computers in Human Behavior* 72 (2017): 24, <https://doi.org/10.1016/j.chb.2017.01.039>.

84 John L. Longeway, "The Rationality of Escapism and Self-deception," in *Behavior and Philosophy* 18, no. 2(Fall/winter 1990)

Escapist” entertainment’s essential purpose is to draw us away from our everyday troubles, and, sometimes, to help us to fantasize ourselves as better, more important, and better off than we really are. Indulgence in such entertainment helps us avoid, temporarily, unpleasant truths that we must live with, and it is this escape from unpleasant reality that gives us the terms “escapist” and “escapism”.⁸⁵

This feels relevant in today’s public places, such as waiting rooms and busses, where people are just distracting themselves from boredom with the help of smartphones. It is important to point out that passive usage is definitely not automatically linked to an escapist behavior. There are several motivations that makes a socially active person inactive when logged onto a social platform. One reason is simply daily mood; a negative day generally discourages human interaction hence taking the form of social withdrawal.⁸⁶ As stated in Chapter 1.1, ordinary life should not be separated from the virtual world. According to Longeway, escapism is not something very odd, it is rather humane and understandable. He explains that a person who employs self-deception and escapist behavior is just keeping unpleasant thoughts and truths out of the conscious mind. Everyone does it to some extent and normally people are not stamped as escapists.⁸⁷ A social network site can work as a great medium to distract the brain from everyday uncomfortable situations, such as boredom. Killing time is more comfortable on the platform, especially for the passive user.

There is one very precise design solution which is perfect for wasteful time-killing, that changed the usage of internet. ‘The infinite scroll’ was designed so users could endlessly swipe down through the content without having to click on anything. It was designed by leading technology engineer Aza Raskin in 2006, which soon featured in many mobile apps and is now seen as highly habit forming. Raskin claims: “If you don’t give your brain time to catch up with your impulses you just keep scrolling.”⁸⁸ Social media provides a distraction from everyday life,

85 Longeway, “The Rationality of Escapism and Self-deception,” 1.

86 Griffiths et al., “Passive Facebook use, Facebook addiction, and association with escapism. An experimental vignette study,” 28.

87 Longeway, “The Rationality of Escapism and Self-deception,” 2.

88 Andersson, “Social media apps are ‘deliberately’ addictive to users”

which can take form in pastimes such as entertainment, relaxation, or escape. Using an online environment to avoid thinking about real life predicts excessive internet use.⁸⁹ Raskin admits that the infinite scroll is an innovation that feeds such an escapist habit and it keeps the user engaged far longer than necessary. He states: “It’s as if they’re [social media companies] taking behavioural cocaine and just sprinkling it all over your interface and that’s the thing that keeps you like coming back and back and back.”⁹⁰

Even though he feels guilty about being part of this, Raskin whitewashes the fact that many designers were driven by the big companies to create addictive apps. “In order to get the next round of funding, in order to get your stock price up, the amount of time that people spend on your app has to go up,” Raskin defends himself. “So, when you put that much pressure on that one number, you’re going to start trying to invent new ways of getting people to stay hooked,” he continues. The mission of the employed engineers that created social media apps was to make them maximally addictive.⁹¹ They managed extraordinary well, because the infinite scroll is a great solution for having a barely engaging user spend inefficient time on the platform. The ever-hungry marketers and companies are not complaining.

89 Griffiths et al., “Passive Facebook use, Facebook addiction, and association with escapism. An experimental vignette study,” 25.

90 Andersson, “Social media apps are ‘deliberately’ addictive to users”

91 Ibid.

3.3 Continuous habit-forming dopamine pushes

Aza Raskin is not the only one believing that social media is built on purpose to become addictive. Even one of the co-founders of the Facebook like button, Leah Pearlman, admits that, to her surprise, she herself started basing her sense of self-worth on the number of likes she got: “When I need validation - I go to check Facebook... I’m feeling lonely, ‘Let me check my phone.’ I’m feeling insecure, ‘Let me check my phone.’”⁹² This is nothing unexpected, because identical to good food, sex, and exercise, successful social interactions release dopamine. Dopamine is a chemical produced by our brain that gives the feeling of reward and motivates us to repeat an action. Social stimuli such as positive recognition from friends and messages from loved ones, activate this same neurological reward. Social media provides the user with a virtually unlimited amount of this social stimuli. Every notification: whether it is a text message, a like or a notification, has the potential to be a positive social stimulus and dopamine kick.⁹³ Due to our instincts, we are intently drawn to wanting it again. Former Google employee Tristan Harris adds that even the notification is designed to be as addictive as possible.⁹⁴ “Red is a trigger color,” Harris says. “That’s why it is used as an alarm signal.” He explains that when smartphone users glance at the phones, which can be up to hundreds of times a day, they are immediately confronted with small red dots beside or in the apps. The design is seductive because the red color triggers the user who often can’t resist tapping on it. Harris points out that it works, because red notification buttons and icons are the standard in most of today’s apps.⁹⁵

92 Andersson, “Social media apps are ‘deliberately’ addictive to users”

93 Trevor Haynes, “Dopamine, Smartphones & You: A battle for your time,” *Science in the News*, Harvard University, 2018, accessed 30.4.2019, <http://sitn.hms.harvard.edu/flash/2018/dopamine-smartphones-battle-time/>

94 Paul Lewis, “Our minds can be hijacked”: the tech insiders who fear a smartphone dystopia,” *The Guardian*, 2017, accessed 30.4.2019, https://www.theguardian.com/technology/2017/oct/05/smartphone-addiction-silicon-valley-dystopia?CMP=Share_iOSApp_Other&fbclid=IwAR2b58OSJ2U1_LKytnM7HAcyW2q4M0njlUtljbswO6f-Z8vVLTlDySa-K4s

95 Ibid.

“Social media is very similar to a slot machine,” says Sandy Parakilas, a former Facebook employee.⁹⁶ “There was definitely an awareness of the fact that the product was habit-forming and addictive,” he adds, even though his former workplace still remains quiet about that. The comparison with gambling makes perfect sense, because there is a human error in the release of dopamine neurons regarding reward-learning and addiction. It is called reward prediction error (RPE) and especially casino owners have used it for their advantage for years. When playing slots, there will be an intense eagerness while the wheels are still spinning and turning. This moment is just exciting enough for the activating dopamine neurons and giving the player a little sensation of reward. Just by playing the game itself, regardless of winning or losing, stimuli are given. Unexpected rewards increase the activity of dopamine neurons, which act as positive feedback signals for the brain. The slot machine player learns fast and an expected reward does not have any additional effect. When a loss occurs, dopamine activity drops. The casino owners make sure that the positive and negative outcomes are somewhat in balance, keeping the players’ brain engaged.⁹⁷

One of the founding presidents of Facebook, Sean Parker, admits openly that they are working in the exact same manner as the gambling industry. “The inventors”, he said, “understood this consciously and we did it anyway.”⁹⁸ Parker personally thinks that his company is abusing a weakness in human consciousness on purpose. The evidence points strongly towards social media apps taking advantage of this dopamine-driven learning strategy by keeping the user engaged as much as possible. It is not by accident that people check their phones at the slightest feeling of boredom. It has become a pure habit of unconsciously looking for that tiny virtual dopamine dosage bonus.⁹⁹ In many cases this habit starts looking like an obsessive–compulsive disorder, which ends up in an addiction that Chapter 4 will examine.

96 Andersson, “Social media apps are ‘deliberately’ addictive to users”

97 Haynes, “Dopamine, Smartphones & You: A battle for your time”

98 Andersson, “Social media apps are ‘deliberately’ addictive to users”

99 Haynes, “Dopamine, Smartphones & You: A battle for your time”

CHAPTER FOUR

Mental affliction and social apps

Social media, arguably neither good nor bad, is releasing dopamine and wants the person to have the experience again. The risk for addiction is high, because social media is so easily accessible and accepted in modern society. We are used to both being and seeing other people hide behind their phones. I argue that very few would ever intervene in someone's Instagram scrolling. Even though the user's life should not be differentiated between online and offline, there is always the escape route from "real life's" uncomfortable situations such as boredom and waiting. Some of the inventors of the social media apps unanimously agree that social media is habit-forming and leads to complications. Marshall McLuhan predicted this long before the internet, but his warning words got outnumbered by the enormous amount of money that the advertisement industry invested in recent years. It would be easy to point fingers and blame social media for making people miserable, but that would argue against the general approach of this thesis: that every medium is neutral. However, I strongly argue that everyone, active, passive, and not even a user at all, agree collectively that there is more to add about well-being online. What are the consequences, and which are the biggest risk-groups for abusive social media usage? What do specialized designers and qualified psychologists have to add about the problem?

4.1 Real life effects from online over-usage

As stated earlier, social media platforms can be directly compared to a casino, however, the gambler can leave the slot machines, but the social media will travel throughout the day in the user's pocket. While there is nothing characteristically addictive about smartphones themselves, Facebook, Snapchat, Instagram, and other social media apps make it so much easier to log in and scroll away a brief moment in immense social environments.¹⁰⁰ As presented in Chapter 2, social media platforms, internet usage, and smartphone popularity are linked together and are growing in size. The smartphone has become the most dominant medium of information and communication technology, and the users are constantly becoming alarmingly dependent on it.¹⁰¹ Obsessive smartphone usage has reached the status of being a public health problem, which is impressive, since the launch of the first smartphone was only 10 years ago. Smartphone use can be problematic for some users, due to easy access, constant online connection, and the addictiveness of apps combined with personal psychological factors. The alerts, likes, and constant messages combined with the easy possibility of escaping daily life, makes the phone an even more problematic tool.¹⁰²

The specific issues arising from overuse of smartphones and the Internet are not fully understood, but include: (a) psychological effects such as poor memory, concentration and decision-making, anxiety, procrastination and sleep disturbance; (b) social effects such as negative impact on relationships and loss of sense of community; (c) physical effects such as harm from accidents, repetitive strain injury (RSI) and posture.¹⁰³

100 Haynes, "Dopamine, Smartphones & You: A battle for your time"

101 Chuon et al., "Smartphone usage and increased risk of mobile phone addiction: A concurrent study," 126. https://dx.doi.org/10.4103%2Fjphi.JPHI_56_17.

102 Georgina Powell, John Powell and Michelle H van Velthoven, "Problematic smartphone use: Digital approaches to an emerging public health problem," Sage Journals: 2018, accessed 30.4.2019, <https://journals.sagepub.com/doi/10.1177/2055207618759167>

103 Ibid.

Withdrawal from the addictive smartphone can increase anger, tension, depression, irritability, and restlessness.¹⁰⁴ A more severe and complex form of compulsion than phone addiction is internet obsession. Illinois Institute for Addiction Recovery places internet addiction in the list with opiates, alcohol, nicotine, and pathological gambling. The institute claims that internet addiction is described as an impulse control disorder, which can take form in a few different ways. Some Internet users develop an emotional attachment to online friends, virtual communities and activities they create on their computer screens. Other users spend endless hours surfing and researching topics of interest online or writing their own blogs.¹⁰⁵ Internet users can behave differently according to personal interests but end up with the exact same obsession and need. Regardless of which of these two internet-actions are practiced, the element of escapism is always present. However, not in sense of distraction from boredom, like in Chapter 3.2, but in protection. Professor John L. Longeway explains that when a person is incapable of processing negative things in life, one turns to escapism. Avoiding means protecting the ego from suppression and when it reaches deep enough, the person turns to self-deception and betrayal of truth. Longeway adds that it is absolutely natural to defend oneself by retelling an embarrassing story and stretch reality a bit in one's own favor. Bringing social support helps, because it is easier to believe in one's own authority when another agrees.¹⁰⁶ The internet and social media helps a person to truly lie to themselves, so that they can feel better. The escape of the bitter reality is a click away.

Collecting and embracing encouragement, in form of likes, from social media friends and followers is exactly what a user easily does on the platforms. It can help to build up a person's self-esteem, which is how an individual perceives their own self-worth, sense of pride, positive self-evaluation or self-respect. In the modern society, self-esteem is pushed everywhere: in schools, workplaces, and sporting

104 Chuon et al., "Smartphone usage and increased risk of mobile phone addiction: A concurrent study," 126.

105 Illinois Institute for Addiction Recovery, "Addiction: Internet," Illinois Institute for Addiction Recovery, accessed 30.4.2019, <http://www.addictionrecov.org/Addictions/?AID=43>

106 Longeway, "The Rationality of Escapism and Self-deception," 5.

teams, so it is not a surprise it is happening online as well.¹⁰⁷ For people struggling with social anxiety it can in fact boost the self-esteem, because the communication is not face to face. However, the virtual place is not always pleasant and uplifting. A lot of research has shown social media having very negative effects on self-esteem.¹⁰⁸ As stated earlier in the thesis, users can alter their images by making oneself look better online. This does not only apply for superficial narcissistic purposes but works also as a defense-mechanism for a user with low self-esteem. A part that the user doesn't like about him or herself can easily be fixed online. Gradually this alteration can lead to self-deception and pretending to be someone else. Understandably, this behavior leads to vast problems with self-image, feelings of inadequacy, and fear of disapproval.¹⁰⁹ Taken to the very extreme, it is called catfishing, which is a phenomenon where a person fabricates online identities with entire fake social circles. The aim is usually to trick a victim over a longer period of time into a romantic relationship.¹¹⁰ Catfishing, but also "regular" unhealthy internet misuse, results in problems with personal life, family affairs, academic, finances, and employment. These negative effects are characteristic of any addiction.¹¹¹ Trying to restore or maintain an improved online persona is a vicious circle which ultimately will hurt the user.

107 Sam Goldstein, "Self-Esteem," in *Encyclopedia of Child Behavior and Development*, ed. Jack A Naglieri, (New York: Springer, 2011), 1312.

108 Adam N. Joinson, "Self-Esteem, Interpersonal Risk, and Preference for E-Mail to Face-To-Face Communication," in *CyberPsychology & Behavior* 7, 4(2004): 472–478, <https://doi.org/10.1089/cpb.2004.7.472>

109 "Addiction: Internet"

110 The term *catfishing* is taken from an online platform where internet users can add content.

2Sweet&Naïve, "Catfishing," Urban Dictionary, 2013, accessed 30.4.2019, <http://www.urbandictionary.org/define.php?term=Catfishing&=true>

111 "Addiction: Internet"

4.2 The most exposed group

This chapter builds on the approach of Chapter 1.3, where the global users are not divided into different subgroups. All human communication takes place within a cultural genre and every outcome reached with the help of a technology is always a reflection of that culture. The technology is not the reason nor the result of the actions, rather just a helping hand.¹¹² This means users should not be generalized, because they are reflections of their individual backgrounds. There is, however, one massive worldwide subgroup independent of cultural background that act considerably similar; children and adolescents. Due to their limited capacity for self-regulation and weakness in the face of peer pressure, the youth are at higher risk when they experiment with social media. The age limit for most mainstream social networks globally is 13, because this is the minimum age for direct advertisement set by the Congress in the Children's Online Privacy Protection Act (COPPA). This law prohibits websites from collecting and sharing information from users younger than 13 years without parental permission.¹¹³ Despite the age limit, there are a growing number of children under the age of 11 registering in the mainstream media platforms. A study from 2018 made by Ofcom, the UK's communications regulator, shows that 18% of 8 to 11-year-olds across the UK have personal Facebook accounts. The poll also shows that less than a third of the parents who were aware of their child's social media activities, could state the correct age limit.¹¹⁴ This demonstrates how social media companies do not have an interest in advertising their limitations and regulations publicly. They want everyone's time, so marketers have to pay more. In Chapter 2.1, I explained Christian Fuchs's argument that mainstream social media is in fact selling online advertisement, rather than communication service.¹¹⁵ This means the more hooked users are, the better

112 Costa et al., "What is Social Media?", 8.

113 Gwenn Schurgin O'Keefe, Kathleen Clarke-Pearson and Council on Communications and Media, "The Impact of Social Media on Children, Adolescents, and Families," *Pediatrics – Official Journal of The American Academy of Pediatrics*, 2011, accessed 30.4.2019, <http://pediatrics.aappublications.org/content/127/4/800>

114 Sarah Young, "Social media being used by growing number of children under 11 despite age limit," *Independent*, 2019, accessed 30.4.2019, <https://www.independent.co.uk/life-style/children-social-media-use-age-limit-facebook-instagram-profiles-a8756096.html>

115 Fuchs, "The Rise of Online Advertising," 4.

it sells. A rather simple equation. A great group to target is people with poor self-control, low self-esteem, and high levels of neuroticism, because they are more likely to have a constant need of reassurance from other people through their smartphone.¹¹⁶ The average teenager is consequently the perfect target. This knowledge is nothing new for advertisers, who have been using the weakness of adolescents for years. According to a meta-analysis of 115 studies, including 428 effect sizes, and 32,486 individuals, done by a group of researchers for *Review of General Psychology* media has a massive impact on youth. There was a big shift happening between 1970 and 1980, when media started putting more focus on outer appearance.¹¹⁷ Sociocultural factors, such as TV, advertisement, music videos and magazines showed to have great impact on a young person's self-image.¹¹⁸ It would be foolish for advertisers to stop using this knowledge.

In 2018, a large study by PEW Research Center gathered data from teenagers between age 13 to 17 in the US, and showed a massive increase in smartphone ownership. The percentage of teens who have a smartphone or access to one was reported as 95% and just under half admit they are online daily.¹¹⁹ This high number is alarming, because constant connectivity can easily result in higher levels of stress and dependency on the smartphone and internet. One outcome of this is nomophobia, which is the anxiety of not being able to be reachable.¹²⁰ The survey from PEW Research Center (figure 4), however, fails to show that there is a crystal-clear effect of intensive smartphone usage.¹²¹ Minorities of teens describe that effect as mostly

116 Powell, "Problematic smartphone use: Digital approaches to an emerging public health problem"

117 Brittany Christine Gentile, Brena J. Dolan-Pascoe, Jean M. Twenge and Shelly Grabe, "Gender Differences in Domain-Specific Self-Esteem: A Meta-Analysis" in *Review in General Psychology* 13, (2009) accessed 30.4.2019, https://www.researchgate.net/publication/242526829_Gender_Differences_in_Domain-Specific_Self-Esteem_A_Meta-Analysis

118 Daniel Clay, Helga Dittmar, Vivian L. Vignoles Vignoles, "Body Image and Self-Esteem Among Adolescent Girls: Testing the Influence of Sociocultural Factors," in *Journal of Research on Adolescence* 15, (2005): 451–477.

119 Monica Anderson and JingJing Jiang, "Teens, Social Media & Technology 2018," Pew Research Center, 2018, accessed 30.4.2019, <http://www.pewinternet.org/2018/05/31/teens-social-media-technology-2018/50/>

120 Hawk et al., "Narcissistic adolescents' attention-seeking following social rejection," 66.

121 Anderson and Jiang, "Teens, Social Media & Technology 2018"

positive (31%) or mostly negative (24%), but the largest share (45%) says that effect has been neutral. The general reasons why social media is seen as positive is that it provides human connection, self-expression, support, entertainment, and easier access to information. The group that views social media as negative commented that it is used for bullying, drama, and spreading of rumors. Unrealistic views on others' lives, distraction, addiction, harming of relationships, and causing mental health issues was also mentioned by the teenagers.¹²² The opinions on social media are very mixed, which corresponds with the teenagers' well-being. In the next subchapter I will inspect deeper the negatively changing statistics in well-being that has occurred at the same time as social media has grown bigger.

4.3 A rising depression behind screens

Measuring well-being is very complex, because of all the different components that are interrelated in a person's life.¹²³ It would be easier to split the virtual 'other' world parallel to the 'real' world, but as stated frequently in the thesis; everything is connected.¹²⁴ The two often-considered main components of a subjective well-being are happiness and depression of which social media has a direct impact on both of them.¹²⁵ According to Kelly Wallace in *Journal of Abnormal Psychology*, there has been a rise of distress, depression, and suicidal thoughts and actions over the past decade, especially among young people.¹²⁶ Before jumping to conclusions, it must be mentioned that some health researchers are not convinced at all of the connection between screen time and mental health. One critical examiner

122 Anderson and Jiang, "Teens, Social Media & Technology 2018"

123 Gow and Phu, "Facebook use and its association with subjective happiness and loneliness," 151.

124 Costa et al., "Academic Studies of Social Media," 11.

125 Gow and Phu, "Facebook use and its association with subjective happiness and loneliness," 151.

126 Kelly Wallace, "Half of teens think they're addicted to their smartphones," CNN, 2019, accessed 30.4.2019, <https://edition.cnn.com/2016/05/03/health/teens-cell-phone-addiction-parents/>

is Robert Croesner, researcher in adolescent health and the chair of the Sociology Department at the University of Texas. “There really aren’t data that show a strong connection between these two things,” he says.¹²⁷ Croesner agrees that the increase in mental health issues are real and alarming, but thinks it is too easy to blame it on one thing. He explains: “I think we are living in a time of great uncertainty, where people are unsure about the future of the country but also their own futures... And that is anxiety provoking for anybody but it’s especially true for young people whose whole future is ahead of them.”¹²⁸ Croesner is not alone: Andrew Przybylski, an experimental psychologist at the University of Oxford, England, is even more skeptical and thinks it is unfortunate that there are speculations at all about effects from technology. He is blaming the rise on mental health on completely different factors, such as the opioid crisis.¹²⁹ The opposition towards these two critics is big and most researchers link accusingly social media for the rise of depression.

Psychologist Jean Twenge from San Diego State University has a few great counterarguments why social media is linked to the rising depression. With lots of evidence from the field of psychology, she articulates that in-person social contact is good for mental health. “Spending time on social media tends not to be in real time,” she says. “You’re not having a real time conversation with someone - usually you’re not seeing their face and you can’t give them a hug; it’s just not as emotionally fulfilling as seeing someone in person.”¹³⁰ A user can isolate oneself easily with an interactive phone app, still believing they are being socially active. It is not only the physical aspect that is missing, social media is also overwhelming in digits. Humans have evolved having social structures which contain around 150 individuals, but now we have 2 billion potential connections in our pockets.¹³¹

127 Patti Neighmond, “A Rise in Depression Among Teens and Young Adults Could Be Linked to Social Media Use,” NPR, 2019, accessed 30.4.2019, <https://www.npr.org/sections/health-shots/2019/03/14/703170892/a...-and-young-adults-could-be-linked-to-social-medi?t=1552639428102>

128 Neighmond, “A Rise in Depression Among Teens and Young Adults Could Be Linked to Social Media Use,”

129 Ibid.

130 Ibid.

131 Haynes, “Dopamine, Smartphones & You: A battle for your time”

Twenge believes that the rise of smartphone use is a significant factor on our well-being. She bases her argument on data collected by the National Survey on Drug Use and Health, and looks at survey responses from 200,000 adolescents aged 12 to 17 and 400,000 young adults aged 18 and over between 2005 and 2017 in the US. Twenge explains that by 2012 smartphones had become widespread, and that around that same time social media began to dominate young people's lives. A few years before that, in 2009, about half of high school seniors visited social media sites every day, which has now climbed to about 85% a decade later. The open source data collector Statista's graph (figure 2) in Chapter 2.1 shows a very similar increase in numbers in the global usage.¹³² Twenge shares that during this period the rate of individuals reporting major depression increased 52% in teens and 63% in young adults. Psychological stress rose by 71% among people aged 18 to 25 and death from suicide increased by 56% among 18- to 19-year-olds between 2008 and 2017.¹³³ I argue this numerical parallelism between the rise of depression and social media, indicates that they are connected. Other factors, such as earlier stated unsure futures and opium crisis, does undoubtedly have an impact. Completely denying social media's negative impact on a user's well-being is illogical, especially when taking in consideration the explosively growing numbers coming from the social media industry.

Psychologist Twenge adds that researchers can only point out correlations, not causes, and can therefore not claim with certainty that the evidence is watertight. However, the trend is large enough during a very short period of time that strong suppositions can be made.¹³⁴ The researchers naturally are not allowed to assume anything, but Sean Parker, one of the founding presidents of Facebook can give a more personal statement. Regardless of any psychological research, from his own experiences he states that the industry is trying to consume as much user time as possible. Parker confesses it is completely on purpose that they are misusing the defenselessness in human

132 Statista, "number-of-worldwide-social-network-users"

133 Neighmond, "A Rise in Depression Among Teens and Young Adults Could Be Linked to Social Media Use"

134 Ibid.

psychology.¹³⁵ Regardless of whether Parker’s aggressive claim is the absolute truth or not, social media with its negative addictive aspects has a significant impact on everyone in society. The online platforms are already deeply rooted in our societies and one should not deny their impacts. Marshal McLuhan compares the influences of what a widespread media has on our society with an analogy by psychologist C. G. Jung.

Every Roman was surrounded by slaves. The slave and his psychology flooded ancient Italy, and every Roman became inwardly, and of course unwittingly, a slave. Because living constantly in the atmosphere of slaves, he became infected through the unconscious with their psychology. No one can shield himself from such an influence (Contributions to Analytical Psychology, London, 1928).¹³⁶

This becomes particularly relevant for today’s society when you substitute the word “slave” for “social media addict.”

135 Andersson, “Social media apps are ‘deliberately’ addictive to users”

136 McLuhan, “The Medium Is the Message,” 33.

Conclusion

Throughout the thesis I have been declining a statement whether social media by itself is neither good nor bad. I am supported with this approach by philosopher Marshall McLuhan, sociologist Erving Goffman, Professor and Director of the Communication and Media Research Institute Christian Fuchs, and socio-technology researcher Evgeny Morozov. We unanimously all agree on that the nature of a medium is more important than the content itself. The users and their behavior online are both secondary. The outcome of the thesis is not to judge the social media industry or attempt to feed the general paranoia that already exists. I am revealing the parts of social media that are designed to be habit forming on purpose.

Social media quickly reached a popularity, that made it bigger than simply a trend. It became a significant part of our lives and integrated fast into our cultures and societies. The mainstream platforms are inviting everyone to join, because their biggest interest is having the highest possible quantity of users. Pretending to be someone else online and hide behind a false identity is on most platforms forbidden. According to Facebook co-founder Mark Zuckerberg, transparency is necessary for forming personal and social relationships. I argue this is not even half of the truth, because it's extremely important for Facebook to know their users, so they can get most advantage out of the marketers. None of the mainstream social media companies are selling communication services but online advertisement. The platforms are carefully designed with algorithms, so the users get "the ultimately right content", which makes the marketers pay more and the user to stay engaged longer. Is this not a definite sign of habit-forming? The equivalent comparison between social media apps with gambling on slot machines proves that there is an addictive factor. Dopamine is released when using both of them and the feeling of reward motivates to repeat the actions. By using the psychological reward prediction error, the user wants to login continuously because of the tiny dopamine kick from anticipated rewards. The reward is of course likes, which have become the online-social-currency for approval. The design permits

users to get numerical feedback on posts and pictures, which easily results in narcissistic behavior. Even the notification on the apps is designed as red buttons, so the user gets triggered and has an even bigger urge to open the mobile app. The idea behind the likes is highly addictive and has huge impact on a person's self-esteem, especially if the user is not the mentally strongest. A great group to target is teens, because they usually have poor self-control, are emotional unstable, and deal with higher levels of neuroticism. The outcome is that they are more likely to have a constant need of reassurance from other people through their smartphone, which means more time spent online.

In my opinion the clearest and most dangerous part of social media is the promotion of escapist behavior. Due to people behaving differently, the apps are designed to satisfy different kinds of escapist activities. The bored or uncomfortable user can easily lose time thoughtlessly by consuming the infinity scroll. It is designed on purpose so that minimum effort is required when scrolling so fast through content, so the brain doesn't have the time to reflect on it. Another escapist behavior gives the depressed user an easy access to hide from reality behind a screen. Some people are just lurking around, while others create enhanced online versions of themselves. Even though the two different escapist behaviors, the scrolling and the hiding, are different actions and intentions, the outcome is doubtlessly obsessive and unhealthy. Nevertheless, intended by the designers behind the platforms.

Measuring well-being is very complex, and as a communication design student, I don't have the allowance to make any assumptions of my own. Yet the examples and surveys about mental health compared to the rising social media usage, show a sharp parallel curve. Addiction and depression are profitable for the social media companies, because any user's time online earns them money. It is a vicious circle that has become worryingly accepted in today's society. We are still in the very beginning of the social media era and have to be cautious with who's using who.

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List of figures

Majority of Americans now use Facebook, YouTube

% of U.S. adults who say they use the following social media sites online or on their cellphone

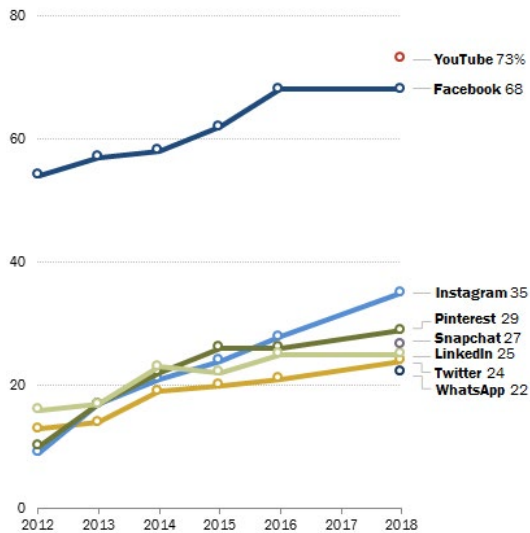


Figure 1.

Percentage of US adults who say they follow social media sites online or on their smartphones.

Source: Survey conducted Jan. 3-10.2018 by PEW Research Center

Note: Poll data not available for YouTube, Snapchat or WhatsApp before 2018

Anderson, Monica and Aaron Smith. "Social Media Use 2018." Pew Research Center. Last modified 2018. Accessed 30.4.2019. <https://www.pewinternet.org/2018/03/01/social-media-use-in-2018/>.

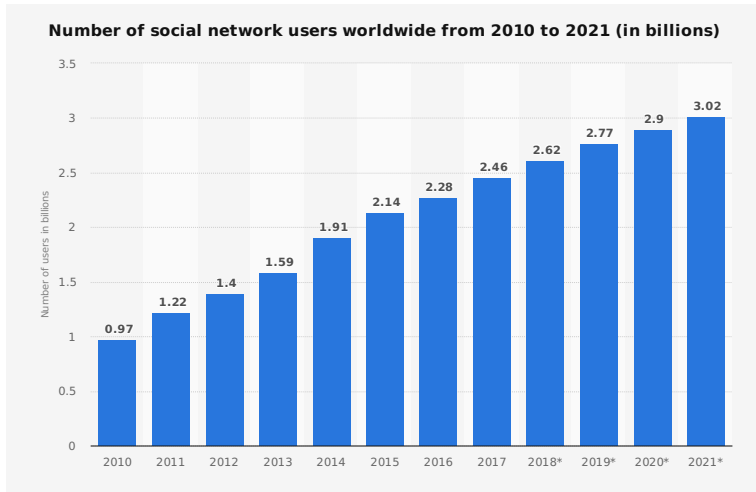


Figure 2.

Number of social network users worldwide from 2010 to 2021 (in billion)

Source: Survey conducted worldwide between 2010 to 2017 by eMarketer

Note: ©Statista 2019

Statista. "Number of Worldwide Social Network Users Worldwide from 2010 to 2021 (in billions)." Last modified 2019. Accessed 30.4.2019. <https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users>.

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	France	Germany	Austria	United Kingdom	USA
Newspapers and Magazines	21.9%	35.4%	46.91%	14.5%	13.8%
Broadcasting (Television and Radio)	34.3%	28.9%	32.1%	30.9%	46.4%
Cinema	0.7%	0.5%	0.4%	1.3%	0.5%
Outdoor Advertising	10.1%	5.6%	6.9%	5.8%	3.9%
Online	32.9%	29.5%	13.7%	47.4%	35.4%

Figure 3.

Share of percentage of total advertising revenue from various forms in selected countries

Source: Survey conducted 2015 by World Advertising Research Center (WARC)

Fuchs, Christian Fuchs. "The Rise of Online Advertising." In *The Online Advertising Tax as the Foundation of a Public Service Internet A CAMRI Extended Policy Report*. London: University of Westminster Press, 2018. 10.

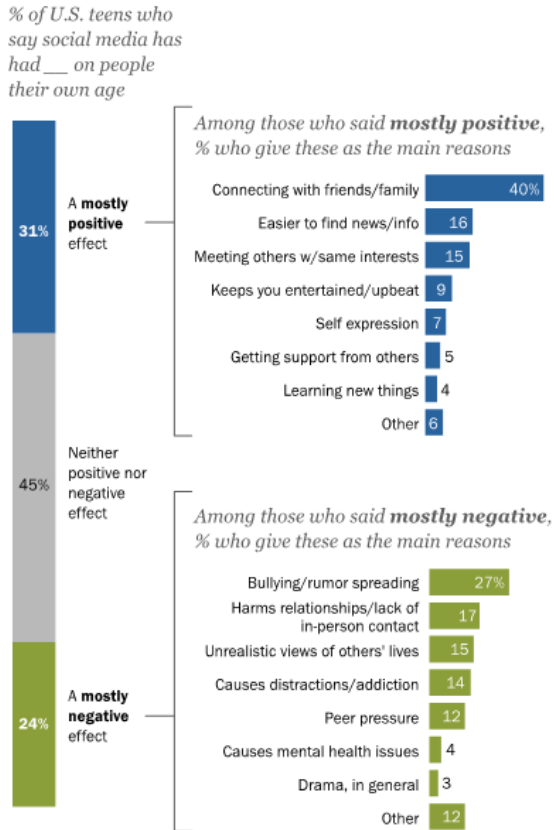


Figure 4.

Percentage of US teens' opinions on social media

Source: Survey conducted Jan. 3-10.2018 by PEW Research Center

Note: Respondents who did not give an answer are not shown. Figures may add up to more than 100% because multiple responses were allowed

Anderson, Monica and JingJing Jiang. "Teens, Social Media & Technology 2018." Pew Research Center. Last modified 2018. Accessed 30.4.2019. <https://www.pewinternet.org/2018/05/31/teens-social-media-technology-2018/50/>.