

# *CONSEQUENCES OF STUDENTS' FACEBOOK USAGE*

Data Science in Research, Business and Society

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*23<sup>th</sup> Feb. 2022*

*Word count: 3749*

Paper written by me, Adam. However, the data gathered from the interviews mentioned, have been produced in collaboration with: Claudia Cristescu, Magnus Jahn, Maja Matczewska and Sigurd Meedom. Collaboratively produced empirical work are available in the appendix (except Reddit data scraping)

# Introduction

Social networking services (SNS) have become essential to the daily lives of modern societies, and social media consumption is one of the most popular online activities. In 2020, over 3.6 billion people were using social media worldwide, a number set to hit almost 4.41 billion by 2025 (Statista Research Department, 2021).

The (SNS) products that include media that can be viewed, commented on, and, most important, shared have become an indispensable activity in people's lives. Social Media can be quickly defined by dividing the concepts. The term media refers to content in audio, text, video, which are published and shared online. The social part allows users to share content and communicate with each other. People use technology to stay informed, compare and buy products and keep in touch with family and friends. However, it is also possible to follow individuals who are not a part of one's immediate social sphere. The downsides? Humans have evolved to be incredible social beings, and we are pretty attentive to the behavior and status of others. Through tribal communities and thousands of years, we have been tuned to be quite aware of the people in our surroundings and our relation to those people (Sapiens, 2014). The ability to find one's position in a hierarchy of individuals is in psychological terms called the social comparison and interpersonal skills. With social media interpersonal skills, one could argue that we default to comparing ourselves with others to the extent that the latest mental health statistics can only indicate are increasingly harmful to us (Allcott, H)

In this context, we were interested in how social media affects students' ability to deal with daily stresses and, further, strictly how social media might affect their moods and what short-term effects this might have. Also, being students, we found that we had a unique perspective on how technology may affect our peers and each of our daily academic lives. Since adolescents enrolled in educational institutions are expected to be attentive and aware, a sort of rope pulling effect occurs between the institutions and social networking services to engage the daily lives of teens enrolled in educational institutions.

Research on the topic shows that collective personal experience pointed toward how students' moods might be affected, resulting in lower satisfaction in one's productivity due to the distraction of social media. A lower satisfaction could, in turn, affect one's self-perception and, thereby, one's mood.

**Final research question** How do students perceive the short- and long-term effects daily usage of Facebook have on their emotions?

## Methods

### Study design – Epistemology

This study examines the relationship between Facebook usage and university students' moods. Thus, we investigated why people used Facebook and how they used it, and we also wanted to know how they felt after using it.

The research design was mixed method and was based on a semi-structured interview guide and data scraping.

The epistemology behind the study was rooted in a moderate social constructivist framework (Creswell, 2008). Whereby we considered the participants' answers to our questions as the truth.

We constructed a semi-structured interview guide (Appendix A) for gathering our data.

We found the semi-structured interviews to be a great fit – since it encourages a less formal and more comfortable setting for the users and, in turn, more precision in the data collection. Thus, the respondents could open about more sensitive issues they were experiencing regarding their Facebook usage. Furthermore, after the interview, our researchers noted attention to detail regarding the interviewer's body language and tone of voice.

Our framework was inductive from Braun and Clarke (2006). The findings were interpreted, drawing upon behavioral psychology and social psychology perspectives.

We interviewed five university students at ITU in Copenhagen. We choose interviewees with different cultural backgrounds and of both sexes to get a heterogeneous sample.

The sample size was increased with observational data that was scraped data from an anonymous forum on the social media platform Reddit.

Which, as a result, provided us with a better sense of qualitative data? It was used to insert into each transcription to compare previous and future data. To better understand how people feel about this topic, we collected data from Reddit, given that the population of our research was going to be small after all. This made our research a mixed-method approach, and the intent was to leave the research with a more considerable potential for generating new ways of understanding the complexities and contexts of the experience of Facebook usage by students.

### Organizing the interview (the qualitative data)

The purpose behind the interviews was to gain a rich qualitative insight into the subjective experiences regarding FB usage. The interviews were performed in such a manner that each group member interviewed a person each. To increase the validity of our study, all the participants in the interview where all had a unique cultural background. This is since students from Denmark might be more likely to have their own standards of using Facebook, while this may not be representative at large. A tactic to create a calmer environment to reduce the subject's tension was done by asking introductory questions that we already had information about before starting the interview, an example of such questions: *"Do you use any social media platform?"*, *"Can you explain in a few words why you use Facebook and what are you looking for?"*. Each interviewee made mental field notes relating to the posture and tone of the subject for which probing questions followed, a sample of these types of questions include, *"Can you say something more about [subjects previous answer] while using Facebook?"*, *"Can you give a more detailed description of how you interact with Facebook?"*. After each interview we prioritized to gain feedback and debrief each participant by asking how they felt during the interview which helped us our intuition in interpreting the interview data.

## Interviewing and interpreting the data

The interview environment where in focus - one participant was seated next to his classmates on the hallway of the university - the interviewee politely asked the participant if it would be okay for him to move to the other end of the hallway, away from his classmates. An important advantage that controlling the interview environment like this gave us was to decrease the likely of the participants to feel they were being judged by their peers. Since we were interested in knowing about the student's emotional state post FB-usage we need to investigate causalities regarding their actions. To get a grasp of this we investigated the reasons for usage (*i.e., triggers causing them to open FB*), the process and substance of their actions while using FB (*behaviours while using FB*). and mood change

Starting with raw data and from there on grouped in 4 different themes from which codes were created.

Codes used in the thematic analysis			
Reasons for using FB	Triggers to use FB	Behaviour while using FB	Immediate- and post usage mood changes

In our scraping of a Reddit post regarding why 845 individuals quit their FB usage. A sentiment analysis was made of the several different comments

## Data cleaning and ethics (the quantitative data)

During the classification of our scraped data, we applied a critical technical practice (CTP) based on ethical concerns regarding the possibility that the qualitative data which was rich on information could be used to aggregate a specific person's identification. By sorting out any information's that could be used to reidentification our CTP was based on intentional data scarcity which included not collecting names, age, addresses and estimation of geographical locations of the anonymised reddit data. In choosing which information's to exclude we limited the precision of our studies.

Demographic variables and geographical data could potentially have helped us in the social psychological studies of the subjects and hidden trends might have appeared, but this could also challenge the ethics around our research, even though it could have strengthened the findings. The subreddit submission: *Why did you stop using Facebook?* . . . scraper that I have made could be improved by also collecting the replies on each of the comments on the submission. The submission in the r/ask subreddit has 845 comments in total from which 431 comments were collected. This is due to the fact that Reddits comment system is based on 'threads' where each comment on a submission post can have several replies. Very much alike a tree that has many branches, the point from where they originate can be considered as the submission post, 'the original comment' ("Why did you stop using Facebook?") and then each anonymous user is able to state their opinion or reactions to that - the most popular ones being those with the highest scores or with a lot of comments (*i.e. threads*). Often the comments with high scores on a submission post can very much indicate the number of comments that it has. Scores are a quantitative metric that all Reddit content uses and therefore we thought it would be important to include as well. Hence, collecting the comments with the highest scores first had the richest information and.

Exactly how the methodology functioned and helped us gather both

## Findings

### Reasons for using FB

The use case of Facebook for most of our interview subjects varied from using functional tools to gather information or wanting to look at their friend's posts. The most common elaboration that followed was that Facebook is an excellent place to gain personally relevant information from the interviewed subjects. There were multiple cases in which friends and news were central in the subjects' reasons to use Facebook. A statement that stood out was the importance of Facebook to give out reliable information regarding the pandemic.

*"Probably. Mostly it was last year during lockdown when I was browsing through my newsfeed and every day at 10:30 my government posted the new statistics regarding Covid cases ... "* (Continued in paragraph regarding Immediate- and post usage mood changes)

Being interested in gaining information related to friends, news and or consumer-related: Personal practical information and news related to pandemic restrictions were also quite common statements. Another subject that had recently moved to another country was interested in finding an apartment using Facebook.

### Triggers to use FB

Our interview data showed that the most common trigger for starting FB usage for where an social interest. These included the users' benefits from features such as groups, events, and messages. Analyzing the themes from both the interview subjects' statements and data scraped subjects' comments, they both had the same types of interactions the same reasons to use FB. For example, they need to be updated with different events organized in their network or by the groups where they are members and to communicate with friends.

*"Mostly messenger for texting friends and for forming groups on Facebook and stuff like that to make things easier. But also, sometimes just mindless scrolling when I have five minutes and I don't know what to do with it. I check my newsfeed so mostly for a practical reason."*

The keyword 'friends' was predominant in 10 statements from our interviews, which indicated that the social part of Facebook was a powerful urge for users to initiate their usage. However, it was much clearer after doing the thematic analysis on their behaviour perception that some of the subjects also stated that their usage often ended in negative. Nevertheless, some of the themes in the participants' triggers also included being bored. As one subject stated his perception of behaviour while in this state:

*"The alternative is standing looking into thin air, so it's just an instinctive reaction just open my phone",*

However, the statements regarding boredom was not scares in the interview data and was a general pattern among being interested in what friends where up to.

### Behaviour while using FB

Many participants stated that they clearly started their Facebook usage because of an interest in their social sphere. However, at the same time, most of them later also acknowledge that they did not see most of their friends' posts while using the news feed. [could have been nice to ask them how that made them feel]

*"... the main thing I do on Facebook is to communicate with my friends on messenger and through my affiliate groups. So, if the newsfeed just faded away, I wouldn't be bothered. But if the groups faded away, I would be really!?"  
(annoyed)"*

*". . . I really don't look at my friends' posts [stutters]. Only rarely [stutters] mainly only what FB serves me, the popular content or whatever."*

Some of the interview subjects stated

Furthermore, how mindlessly scrolling, reading articles, or staying updated on the news affects their mood is presented in the following paragraph.

### Immediate- and post usage mood changes

The subjects perception regarding mood changes while browsing, seemed to correspondent well with their statements most of the time when asked about short-term changes. Most subjects agreed that it was common during their Facebook to have mood changes (positive and negative), one example from a interview participant is stated such as

*"I've been angry when I've seen the retardment of other people on social media".*

But when it came to the long-term implications of the mood changes resulting from their Facebook behaviour, none of them had perceived any long-term changes. This was an unexpected finding. Only one subject was considerate of the possibility of long-term mood changes, the rest were not compliant with this assumption. The same subject that mentioned using FB to stay informed about the pandemic also described emotional implications of his usage in the following way

*". . . and I became really anxious because I was really following the news and at some point when it became very dangerous because there were about over 30,000 cases a day, it was just overwhelming at some point when you just read this piece of information."*

A sustained anxious behaviour is correlated with negative moods and can lead to a decline in overall mental health (Smith L, 2020). Nevertheless, one of our interview participants by the end of the interview started to open more about the of capability was decreased after watching others more skilled, which meant that usage of FB for some had an immediate and short-term effect on their mood.

*"I mean, like, the short term is that you're excited, right? Like you're excited you're entertained? Or the meaning contained? Really? That was Spartan up like it's probably love your mood and improve your mood, right? I don't know mmm. Sometimes I look at picture and be like, that cross is really good or they look really pretty. And I'll be called sad."*

*“ I think it prevents you from doing like projects and building things because you will believe that only high quality things are worth anything. ”*

In general, perceived long-term effects were vague, and either did not resonate with them or only confused them. One subject, however, made a profound realization during an interview, namely, that his use of FB had become some kind of mental stimulation tool when he experienced boredom. He stated

### Scraped Reddit data

However, the scraped data was processed through the same thematic analysis as the semi-structured interview data, with the scraped dataset being 862 data points (431 comments and scores).

*“I stopped using FB because I started hating relatives and casual friends. Sometimes you simply don't need to know how stupid aunt Judy is. ”, scored 493*

*“It would rather think that I have ignorant friends and friends and family than know I have ignorant friends and family. ”, scored 183*

Other independent findings that contributed to our understanding of the usage's implications in regard to the themes were categorized. Each classification of statement represents a keyword. Since many user statements included words such as 'friends' 'family', why did 69 out of the 431 comments include the word friends? Fifty out of the total comments favoured "family" and criticized. Sixty-seven of the comments had the word "Facebook". 52 comments had the letters "FB" (Facebook abbreviation). The numeration of the mentioned keywords helped us in further understanding the popular trigger that was, a social interest by the Reddit users' comments.

*“I couldn't really handle hearing people's constant opinions and the arguments that go along with those opinions, especially when it's your family or friends. I understand that everyone is not going to feel the same way about everything, but it comes down to being respectful. I was genuinely embarrassed about some of the things that people posted. Now, I figure it's out of sight out of mind. Plus I really hate when people are seeking attention or fishing for compliments. Or people that post about how “perfect” their relationship is. The more people hype up their relationship on social media, I can't help but to wonder how things actually are behind closed doors. I might be a bit of a cynic but there are just some people that hype up their life on social media to appear perfect when in reality it's not. ”, scored 18*

Similarly, to how one of our interviewed subjects stated the he sometimes got discouraged and started to doubt himself due to comparing himself to content from users that weren't actually

## Limitations and implications

In general to summarize the research findings. Starting with the interview data regarding the students behaviour and mood changes. The students moods where affected on a short-term while the usage was ongoing. The affects of the mood changes where apparent - according to their self-evaluation, which our epistemological lens accepts as truth – the negative emotions where one of either angry, sad or anxious. In addition the data scraped Reddit comments which had the highest scores also stated frustrations regarding the Facebook usage. While the scraped Reddit data was anonymous the validity

of those findings can only be used to say something general about individuals' opinion of Facebook and their own personal reasons behind the usage and end of it.

The methodological strength in the study could have been increased by first working out the observational data based on the scraped data rather than starting with the interviews. Since first using the larger dataset to find commonalities and trends that would specify themes and codes that the interview would be based on would be better. Interviews are usually used to fill out holes after a rich data collection. The reason being to limit the likelihood of bias from three steps. Namely, the asking researchers ability to be self-critical and as objective as possible is a large challenge. Also, participants answering regarding social desirability.

1. Researchers' ability to remain neutral and not let the probing questions interfere too much with the subjects' considerations and responses. Another aspect is for the researcher to remain objective in their recollection of the interviewee, should the field notes be lost or likewise
2. Since the main pillar in the qualitative aspect of our research lies on the participants self-evaluation this is not regarded as a highly valid way of data gathering, since the participants own biases and defences are interfering with the data collection. The social desirability bias is the tendency to underreport socially undesirable attitudes and behaviours and to over report more desirable attributes (Perinelli and Gremigni, 2016).
3. When creating the themes and interpreting the data there also is a human component which means that there is a possibility for a subjective researchers bias to sneak it's way into how the findings will result

The semi-structured interview provided an opportunity for the interviewers to increasingly follow up on sensitive that our respondents were experiencing and in lead the researchers to learn more about answers to some questions and the reasons behind the answers (Kvale, S. (2010)). This current study didn't account for demographic variables since this may have showed differences in behaviour

The two different triggers coded in our thematic analysis were processed and categorized regarding behavioural theories on motivation. The main trigger for most of our participants being a social interest for FB usage was categorized as being an intrinsic motivation factor, while being bored was categorized as being extrinsic. In fact, this begs the question of how much this study adds to the existing research literature previously mentioned.

## Conclusion and future work

Beginning with the semi-structured interview data. Some people reported no or little negative experiences with FB, but the common denominator for these people was that they mainly used FB as a tool to connect with people alike, organize different kinds of things, and stay connected with family. On the other hand, people who reported negative experiences appeared to have mostly engaged in debates or discussions or had been exposed to the spread of misinformation or hate. It seems quite obvious that the two groups have had different emotional experiences while using FB. One seems to nurture connectivity and community, the other disunity and hate. The longitude of the study was not profound enough to validate the long-term effects of the students daily Facebook usage, to gather further information on their behaviour a longitude spanning multiple months and following each



subject with weekly interviews. This would result in a much larger sample size and raw text data for the inductive interpretation that would in turn have not been a reason for scraping unprecise data from an anonymous forum. Increased longitude and larger qualitative data sample.

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# Appendix

## **Overview**

Python script

Data scraped Reddit comments

Semi-structured Interviews

# Python script

## Subreddit comments - data scraper

*23/02/2022*

```
import praw
from praw.models import MoreComments
import pandas as pd

url = "https://www.reddit.com/r/ask/comments/r8n9i8/why_did_you_stop_using_facebook"

# read only praw instance
r = praw.Reddit(client_id="45b11Dce-rpqMwRa1UecZA",
```

```

        client_secret="M0iq4f-qsmTr3y_jtMAK75CuxwngxA",
        user_agent="Wistoft2410")

# change the url variable to the given submission (subreddit post) that you want
submission = r.submission(url = url)
subreddit = r.subreddit("ask") # locating the subreddit that I'm interested in scraping

# technical data
print("reddit object: ", type(r))
print("subreddit post object",type(submission.comments),"\\n")

# domain insight :
print("subreddit titel: ", subreddit)
print("submission url: ", submission.url)
print("submission author: ", submission.author)

# practical information about the subreddit post
print("submission id: ", submission.name, "\\n")
print("total comments: ", submission.num_comments)
print("total score: ", submission.score, "\\n")

'''
# displaying specific data been located
print("Display Name: ", subreddit.display_name)
print("Titel: ", subreddit.title)
print("Description:", subreddit.description)
'''

'''
# testing
hot_posts = r.subreddit('ask').hot(limit=10)
print("hot posts: ", hot_posts)
'''

print("check point 1")

num = 0
comment_dict = []
# fetching all the relevant comments
for top_submission_comments in submission.comments:
    if isinstance(top_submission_comments, MoreComments):
        continue
    num += 1
    print(".....", "\\n")
    print("com num: ", num)
    print("user id: ",top_submission_comments.id)
    print("parent id:",top_submission_comments.parent_id,"\\n")

```

```

print(top_submission_comments.body)

# appending
comment_dict.append(top_submission_comments.body)
pass

print("check point 2: ", "total comments: ", num)
print("check point 2: ", "total comments: ", comment_dict)

# testing
print(com_dict)

# create pandas raw dataframe
df = pd.DataFrame(com_dict)

# skip first row due to invalid 'bot' comment
df = df.iloc[1:, :]
df

# adjust this variable to be either '1' or '0' in relation to export format for the dataframe
csv_or_not = 1

if csv_or_not == 0:
    file_name = 'subreddit_data_3.xlsx'
    df.to_excel(file_name)

elif csv_or_not == 1:
    file_name = 'subreddit_data_3.csv'
    df.to_csv(file_name)

```

## Data scraped Reddit comments

## Qualitative and quantitative raw data

*23/02/2022*

Sample of 431 comments relating to the subreddit submission, “*Why did you stop using Facebook?*” | Access complete dataset [here](#)

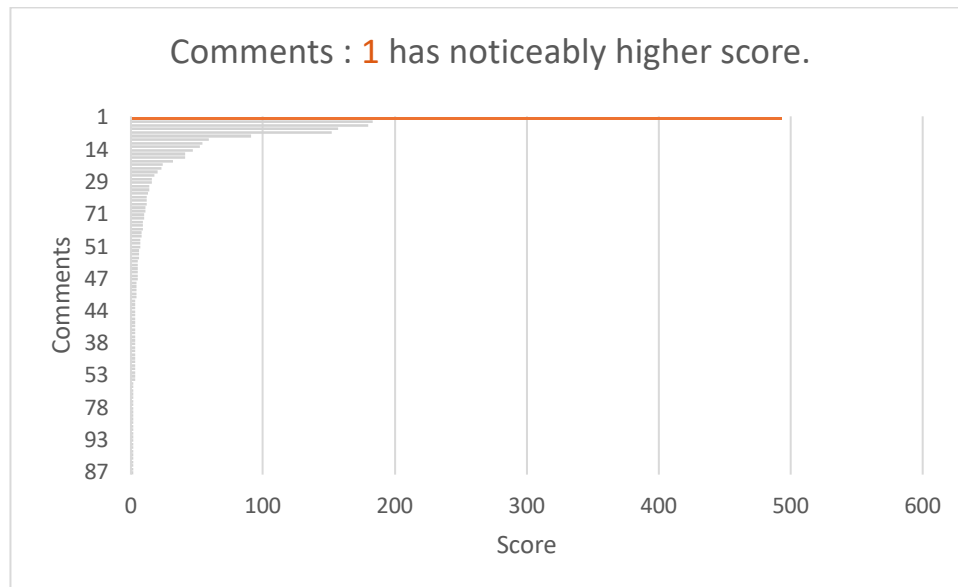


Figure 1: Min: 2, Med: 2, Max: 492

#### Subject 6 (comment 1):

*“I stopped using FB because I started **hating relatives and casual friends**. Sometimes you simply don't need to know how stupid aunt Judy is.”, scored 493*

#### Subject 7:

*“It would rather think that I have ignorant friends and friends and family than know I have ignorant friends and family.”, scored 183*

#### Subject 8:

*“I kept my profile but deleted the app, so my Instagram is linked to it so photos I put there automatically get posted to FB but **I only kept it like that for family/friends that I don't have anywhere else**. Its just dull, it's boring and the premise of it has fallen short of what it could be to actually bring people who live far apart closer together. It's a shite company (I know insta is the same company) who do nothing to moderate abuse and hatred but ban people for using the word twat or arse for days because they can. Its a shitshow. I don't miss it at all”, scored 23*

#### Subject 9:

*“I couldn't really handle hearing people's constant opinions and the arguments that go along with those opinions, especially when it's your family or friends. I understand that everyone is not going to feel the same way about everything, but it comes down to being respectful. I was genuinely embarrassed about some of the things that people posted. Now, I figure it's out of sight out of mind. Plus I really hate when people are seeking attention or fishing for compliments. **Or people that post about how “perfect” their relationship is**. The more people hype up their relationship on social media, I can't help but to wonder how things actually are behind closed doors. I might be a bit of a cynic but there are just some people that hype up their life on social media to appear perfect when in reality it's not.”, scored 18*



Subject 10:

*"Not that exciting to use.", scored 47*

Subject 11:

*"I joined FB to find and catch up with old friends, to keep up with what my daughters and family were doing, and to explore what cool experiences others may have had that I'm interested in doing. What I got was pictures of peoples food, prayer requests and chain mail, and stupid questions like "what time does the Walmart open?". When all of the ads started I dropped out. It just wasn't for me.", scored 41*

Subject 12:

*"Misinformation tool...", scored 12*

Subject 13:

*"Too much politics and religion.", scored 12*

Subject 14:

*"I broke up with a girl. Started seeing her with pics of her new boyfriend and I wasn't over her yet. I decided I didn't want to put myself through that shit so I got off, that was 10+ years ago.", scored 10*

Subject 15:

*"Most people on Facebook cannot take criticism and don't welcome new, young, unpopular, and progressive ideas. Facebook is so crowded.", scored 32*

Subject 15:

*"Don't like my family and it's super toxic. I'm tired of seeing racist and sexist shit", scored 24*

Subject 16:

*"I got bored of it because it seemed only a small subset of my friends post on FB and their anger and righteousness got to me. I dropped FB and I dropped those friends. In the end it broke connections for me, not made them stronger. The law of unintended consequences!", scored 7*

Subject 17:

*"I never really used it. The whole idea of keeping in touch with "friends" through social media sounds like bullshit to me. I prefer to keep in touch with people in real life if they mean something to me.", scored 6*

Subject 18:

*"There were too many posts of what people were doing without me and it made me feel alone and low. I realised people would post things to make it look like their lives were better and to make them feel better about their lives. Just not great for mental health", scored 152*

Subject 19:

- “1. Too many ads and posts from companies. Not much from my friends..*
- 2. It reinforces interaction of any kind. If you disagree about a topic with a friend, it will alert you every time that friend posts something. It will probably be something I don't agree, making me engage again on a discussion.*
- 3. I prefer the anonymity of Reddit.*

*I still have my account, but disabled all notifications and removed the app from my home screen.”, scored 180*

Subject 19:

*“I began to realize how creepy it was that everyone, myself included, was constantly looking at pictures of people, their kids and their lives that I didnt even talk too. And then I realized people were doing that to me as well. The longer I have gone without it the more creeped out I get by it. I think it encourages obsessive and nosey behavior.”, scored 59*

Subject 20:

*“Too many stupid clickbait posts about 'guess what happens after man puts bread in toaster' type links. Quizzes about 'see which type of potato you are'. If I click on amazon to buy a new toilet seat I am inundated with adverts for months about half price toilet seat offers. Fighting through all the spammy bullshit I do get some useful information about what my friends are up to, but for the most part it's not really worth it”, scored 41*

# Semi-structured Interviews

## Qualitative raw data

*23/02/2022*

# Subject 1

Conducted October 12<sup>th</sup>, 2021. The interviewer will be denoted "I" and the interviewee "S"

I: This interview is about your emotions when you are using the Facebook application. So first, do you have Facebook and do you use it?

S: Yes, and Yes.

I: Could you briefly explain what you mainly use Facebook for?

S: Mostly messenger for texting friends and for forming groups on Facebook and stuff like that to make things easier. But also, sometimes just mindless scrolling when I have five minutes and I don't know what to do with it. I check my newsfeed so mostly for practical reasons.

I: Okay, how much time do you think you're using Facebook in a week.

S: in all? I don't know.

I: How much time do you think in a day

S: Maximum combined? About half an hour to an hour a day I think on Facebook plus messenger so that adds up to maybe four to seven hours a week.

I: Is there times you think that you are more on Facebook than usual?

S: When I'm traveling, when I'm taking the metro. Here I am reading something or I'm just mindless scrolling on my phone

I: When you're opening your Facebook application, what are your thoughts when you were opening What are your reasons to go into Facebook.

S: Normally because I'm bored, I don't really know what to do. The alternative is standing looking into thin air so it's just an instinctive reaction just open my phone check various stuff and check my notifications and then like just start scrolling a bit **without really thinking about it.**

I: Okay, so it's not for long you're not sitting at home at your computer and only checking Facebook.

S: Very rarely. It is only for five minutes at a time **and then I figure out that it's also boring** to do and I found something better.

I: When you're looking just browsing on your Facebook when you say that you're just wasting kind of your time. Yeah. What are you actually looking at? Something specific or?

S: I see photos from friends and stuff like that. Usually I scroll right past that. Sometimes I click on articles I found interesting.

I: Usually, could also be for learning?

S: I wouldn't say learning mind. Maybe more informative as much more fun facts. More in the section of the lab Bible kind of articles and some interesting funny stories and stuff.

I: Okay, have you ever kind of experienced any mood changing while you're just browsing on your Facebook?

S: "I've been angry when I've seen the retardment of other people on social media". Oftentimes when I see an article and I think might be interesting to see what other people are commenting about it, and then I just read a couple weird useless comments that are pretty much just spreading hate. Then i can get a bit angry not to the point where I'm responding or anything because I don't really want to get involved with but I feel kind of hopeless.

I: So you're mostly kind of looking at what other are posting and then your mood can change by that.

S: Yeah, I don't, I barely respond. But I could also be happy if I see some posts from my friends for example if they did something nice or they they just passed an exam or something in that posting that makes me glad for them. That's also the other aspect but the mindless scrolling of random articles. It's usually gets me a little bit irritated, not super angry about

I: When you're seeing these posts and these negative kind of responses on post or anything. Do you think that your way of interacting on Facebook have changed since you're reading all of this stuff? Or do you think when you're reading something you can get the emotion that you are not going to look at Facebook anymore because it can only irritates me more? Or do you think it doesn't have any change?

S: That's a good question. I don't think it changes too much how I interact with facebook, but because my mood-changes are so short and, and small that it doesn't really affect my everyday life that much. Yeah, so it's, I don't really think it changes too much. When I encounter those comments, that means to be a little bit mean, I always click away from that post because I know that, I'm just going to spiral down the rabbit hole of stupid comments on the subject, that really don't matter.

I: So you're saying that when you're looking at these negative posts and stuff, it only changes your mood short term, so that you don't have anything for the long term. You don't think that it may change you mood long term.

S: It may will affect but that's hard for me to kind of notice, because that would be a gradual, small, long term change where it's much easier for me to notice "okay, that comment makes me mad or that post makes me happy or that post makes me proud of something".

I: Super, then I don't think I have any more. So, thank you for the interview. Have a nice day.

## Subject 2

Transcription of an interview with a Danish student in his twenties – conducted October 13<sup>th</sup>, 2021. The topic of the interview is about how the use of social media, Facebook in this case, could change the way we deal with negative emotions in our daily life. We have decided to interview a handful of students to get some insight on this topic. From now the interviewer will be denoted "I" and the interviewee "S"

I: Okay, so what are the social media platforms you use?

S:I use LinkedIn. A lot. And I use Facebook somewhat. And Twitter. Okay, meanly Nice. Yeah.

I: And on Facebook, can you briefly tell me what you spend your time doing?

I mean, sounds trivial. I do a lot of martial art videos, like just the feed that arrives. I mean, a lot of groups, like, the main thing I do on Facebook is communicate with my friends on messenger and through my affiliate groups. I mean, yeah, so. So if the newsfeed just fades away, I wouldn't be bothered. But if the groups faded away, I would be really really?

I: Yeah. Nice. Yeah. How much time a week do you think you use? Facebook? Facebook?

S: I mean, probably a lot. I probably like 10 hours a week or something. Okay. Yeah. But it's not like, big stretches is more like, one minute. And then like an hour later, one minute and very short bursts in sections

I: So to kind of fragmented throughout the day?

S: Yeah, exactly. Yeah, exactly. It's not no, like, large large stretches, but fragmented.

I: Okay. Yeah. And there are times where you think more about Facebook than usual.

S: I don't think I think about Facebook. I mean, I sometimes think about the content on it. And suddenly, my friend had this post, or I know this post exists, or whatever I have to get be friends with us on Facebook. Have you come to know them now? Mm. Hmm. I don't really think about Facebook. No, no. Yeah,

I: I totally get it. Yeah. Can you briefly explain the process you go through when using Facebook? What's your trigger when you go on it? And what are you looking at?

S: I mean, whenever there's a notification, I usually see them. So one, one way I interact with Facebook is by seeing the business application, and then clicking on it and being like, Oh, it's this information or this thing? There's also I use it a lot for events. So whenever I have concern, and I'm concerned about an event, like, when is when is this event going? When is this party happening? Where is it? Oh, shake it up. So it's, we use it a lot as a lookup system. Yeah. And that's what prompted me to go on Facebook. Yeah. And then sometimes I'm just bored, and just [pause] not be bored. So I get it.

I: Yeah, definitely. I think many people are in that situation. Yeah. What What are you looking at? When when browsing you kind of went in?

S: Groups [pause] yeah. content and feed to some extent, right. Upcoming Events, things that are happening, my friends have you don't do look at my friends posts. Very only rarely, like mon manages whatever. Facebook serves me. The popular, yeah, popular, or whatever?

I: Yeah. So what kind of pops up on that?

S: Right now? It's a lot of the videos about like, restoring old items. I couldn't live watching those. Like, they'll be like, Oh, we have this bread knife that will be reconstructing or this. Oh, yeah. That was that kind of content. Right.

I: Craftsmanship?

S: Yeah, exactly. Craft craft related things. And then obviously, the content in my groups will appear there. Yeah. So when people are posting or when, whether it be videos or, or text posts, that will appear.

I: Nice. Yeah, so what which posts they tend to go towards the most?

S: ... I mean, the videos and the pictures are attention grabbing, right? But the, like the ones that are important from your use of the text versus because they have the content I need, right? or event posts, really. So those are the ones that are important to me, but I just think I use the most time on videos.

Just because they're entertaining or non boring or whatever. Yeah. I guess that answers your question.

I: It does. It does.

I: Have you experienced any fluctuations in your mood while browsing?

S: No, I don't think so. I mean, sometimes you what you see we have like a video that's weird. Or like, uncomfortable. Yes. is usually removed by Facebook themselves. So no, I've really never In a mood, like in a different mood house, and what's your take with them before?

I: Yeah. Can you describe what kind of constant that is? And what is uncomfortable.

S: I mean, there were some gory elements a few years back with like pictures of really rude, ugly, like not ugly, gruesome elements. There's mainly been removed now. So no, nothing really striking.

I: Not lately.

S: No.

I: Okay.

I: Yeah. In which way does your mute mood like change? While going through?

S: It doesn't like that the thing it doesn't really. I mean, usually I'll be more happy once I've done because I'll have like, spent some time or gotten whatever information or read some posts and like, found that to be entertaining, right. And I never I'm really in a worst mood than before

I: Okay, yeah.

S: So for the better or neutral.

I: Yeah

S: No change. Right.

I: Okay. Yeah. Nice. Do you think it might have changed the way you interact while with using Facebook? If yes.

S: Right. So if I'm using Facebook differently now than I was in the past, and ...

I: more in the kind of sense of when your how your mood affects your Facebook usage. Do you think you interact differently? When you're in different mood?

S: Oh interesting. I mean, if I'm really pissed, really angry, I will go on Facebook at all. Okay. And if I'm rather happy, I probably won't, either. So it's more in like, middle like, not necessarily bored mood, right. But in a indifferent mood.

I: Okay. Yeah,

S: I'll be going on Facebook. Yeah, and, and so forth, right? Because we truly do something exciting or entertaining, right? I won't go on Facebook. good mood, I can go on Facebook.

I: How's that?

S: Because we usually be doing something else, right? Yeah. I'll be I'll be actively managing something else will actually be doing something else, or Hence, I won't have the time to do that. But then again, sometimes you just go on Facebook for like, half a minute, and then realise, oh, wait. There are people around me. I need to talk to them.

I: Yeah, yeah. Yeah, totally. Yeah, that's relatable. Yeah.

S: So that's, that's basically my mood, though. My Facebook use and my mood are related in that. If I'm very happy or very sad again, on Facebook, otherwise, I will.

I: Yeah, so kind of when you're bored.

S: Yeah, yeah.

I: Nice.

I: And what effects Do you think browsing Facebook have on your emotions? short term and long term? ... we talk about how it was some years back? It was different.

S: I mean, like, the short term is that you're excited, right? Like you're excited you're entertained? Or the meaning contained? Really? That was Spartan up like it's probably love your mood and improve your mood, right?

I: Yeah.

S: I think I think long term. [3 second pause]

S: I don't know mmm. Sometimes I look at picture and be like, that cross is really good or they look really pretty. And I'll be called sad.

I: Yeah.

S: ... persay. I'll be annoyed at myself. Like, yeah, see what happens. Right. You get David? dashing. I don't look dashing. That's uncomfortable. So that makes sense. Right?

I: Yeah.

S: But then again, I don't think it's a long-term thing, because I've gotten that picture like a week.

I: Okay. Yeah.

S: Umm. But I definitely think that it does something to that. That seeing both terribly and . . . well mainly really well-done things and literally don't think well, what are the things mainly indicate indicates to you that if you don't do it, if that quality, there's no need to do it at all? That's at least what I'm experiencing

I: So kind of like, it's a mirror that gets hold up.

S: Yeah, that if you're not, it's like a threshold. If you're not this good quality, then there's no need to do it.

I: Okay. Yeah.

S: Yeah. And that's a problem because the I don't have that I don't do anything. Really?

I: Yeah. Okay. That totally makes sense.

S: Yeah.

I: So for for short term. It's kind of like this more entertainment focused.

S: Yeah. Yeah. for the long term. It. I think it prevents you from doing like projects and building things because you will believe that only high quality things are worth anything.

I: Yeah. Yeah, that totally makes sense.

I: Thank you so much. Thank you.

I: Nice. *Fedt* [translation “cool” danish to english].

## Subject 3

Transcription of an interview with an Irish student in his twenties – conducted October 9<sup>th</sup>, 2021. The topic of the interview is about how the use of social media, Facebook in this case, could change the way we deal with negative emotions in our daily life. We have decided to interview a handful of students to get some insight on this topic. From now the interviewer will be denoted “I” and the interviewee “A”

I: Can you just briefly explain what you use Facebook for?

A: Uhm, mainly if I'm just bored, at home, and I have nowhere else to be or nothing else to do. I'll just scroll through it and... memes, \*laugh\*, random funny memes and just nerdy knowledge about Star Wars or Marvel or stuff like that, you know? That type of stuff.

I: So, you use it more when you have nothing else to do or if you are bored?

A: Yeah, bored or nothing else to be doing.

I: That makes sense. And how much time a week do you think you use Facebook?

A: Max 5 hours I'd say. Not even one hour a day. I don't know, maybe like 2-3 hours a week.

I: You've kind of answered this already, but are there times where you think about Facebook more than usual, other than when you are bored?

A: Not really, never. It's like if I've already gone through Instagram or Twitter, I then may go through Facebook. Like, if there is nothing else there (Instagram/Twitter). But I have been using it a lot more lately trying to get a house here in Denmark. I spend a good 20 minutes at least every morning, scrolling through, trying to find a house. These last few months have probably been the most I have used Facebook in the last few years, to try to get a house.

I: Can you briefly explain the process you go through when using Facebook. Like what is your trigger, what do you look at, and how long are your sessions?

A: Here is what I do. I literally just scroll, scroll, scroll, scroll... Cat! \*Laugh\*. Cute cat, I look at that for maybe a second or two, then move along. I follow a fair few cat-pages now. So, like, I will be stopping every now and then (to look at cat pictures), like especially on Instagram. But I guess Facebook would be more random Marvel, Lord



of the Ring, or Star Wars thing. That is what I mainly will be stopping to look at on Facebook. Besides that, not much. Unless, again, if I was looking for an apartment.

I: So, what is your understanding of why you use Facebook for these things instead of Googling it? (The movie facts and cats.)

A: Uhm, honestly because they've built up such a data bank of me at this stage that they know me... that it's faster than actually just Googling it. And like, it's something random that I wouldn't have thought of myself. So again, like, they just know me too well at this stage.

I: That makes sense.

I: So, have you experienced any fluctuations in your mood while using Facebook? What does it do to your mood when you use it?

A: Uhm, not much really, to be honest. Uhm... yeah not much, really. Or like, the odd boost of serotonin if it's a cat \*laugh\*. Or maybe just like a shock, if I see something I didn't know about – I'd be like wow \*laugh\*.

I: So, you look at it when you're bored, and then you just scroll through it. Does it change anything? Let's say you are bored, and then you don't use Facebook.

A: Oh, yeah like sometimes, what do you call it... it will grab my attention I suppose. Yeah, it grabs your attention. So instead of just concentrating on that I have nothing to do or such, I'm just, yeah...

I: So... this change we just talked about – the change in your mood. Do you think this change has changed the way you use Facebook? Like your initial way of using Facebook when you signed up and now?

A: Yeah, when I was younger... I think I have been on Facebook since I was about 12 years old. Back then it would have been talking to friends, you know, it was the only way to really talk to friends. Yeah, that's about it.

I: So, it sounds like it has changed from being a platform where you could connect with your friends, into now something like a stimulation box?

A: \*Laugh\* yeah... sh\*t.

I: What effects do you think browsing Facebook has on your emotions, short term, and long term, or like the way you deal with your emotions?

A: Damn. I honestly really don't have an answer for that. It is not something I have ever thought about, if you get me... No, I got nothing, really.

I: That's totally fine. It's just something extra. This is what we are trying to figure out – like, what's the effects short term and long term on your way to deal with negative emotions. We suspect it changes something.

A: Yeah, I see, I suppose it becomes a crutch really. Yeah, like literally, instinctively, if I have nothing else to be doing, then I will go to that (Facebook).

I: Well, I think that's it. I appreciate it, thank you again for doing this.

A: No problem. I am happy to contribute to science \*laugh\*.

## Subject 4

Maja: Hi! Do you consent to voice record your answers?

Janusz: Yes.

M: OK so the first question is: can you briefly explain what you use Facebook for?

J: I mostly use Facebook for its Messenger app and to browse through the feed on my Facebook, as well as I use a lot of Facebook groups and I believe that's it.

M: What's on your Facebook feed?

J: Various things. Like some news feed, some information from groups, some memes.

M: How much time a week do you think you use Facebook?

J: I use Facebook for about one hour a day so it's seven hours a week on average.

M: Are there times when you think about Facebook more than usual?

J: I don't think so.

M: What are you looking for while browsing Facebook?

J: When I'm browsing Facebook I'm not really looking for anything. It's how Facebook works is that you just browse through it and you even engage with feeds and news that you get or not - then you just scroll down further.

M: Which posts do you tend to go towards?

J: I really don't know.

M: Have you experienced any fluctuations in your mood while browsing?

J: Probably. Mostly it was last year during lockdown when I was browsing through my newsfeed and every day at 10:30 my government posted the new statistics regarding Covid cases and I became really anxious because I was really following the news and at some point when it became very dangerous because there were about over 30,000 cases a day, it was just overwhelming at some point when you just read this piece of information.

M: Do you think it might have changed the way you interacted with Facebook?

J: I guess that I became more addicted to it - I had an urge just to check it every day at that exact time, just to know what the statistics are.

M: What effects do you think browsing Facebook have on your emotions short-term and long-term? J:

Short-term - as I said previously - it made me anxious to some extent. And in the long term I'm unable to determine if it has affected me.

M: Does Facebook browsing affect your daily stress and your negative emotions? Does it make it better or maybe worse?

J: Currently I don't think it has any significant effect on my emotions, but as I said during lockdown it has a negative affect on my emotions, namely it made me anxious.

M: Do you think you use Facebook too much?

J: Honestly, I use other social media more frequently than Facebook so I would be much more concerned with being from Facebook.

M: Thank you.