# Phone Use, Offline Neglect, and Reachability: A Qualitative Study in Denmark, Lithuania, and Spain

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# Телефонна употреба, офлайн пренебрегване и достъпност. Качествено изследване в Дания, Латвия и Испания

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#### **Abstract**

The use of smart technology (ST) has dramatically increased in recent years, with smartphones and tablets affording use in all locations and for innumerable purposes. Consequently, we relate differently to our surroundings – a condition we refer to as 'offline neglect'. This paper reports the results of a qualitative, small-scale project investigating how informants from three European capital cities, Vilnius, Lithuania, Madrid, Spain, and Copenhagen, Denmark, perceive the changes associated with ST-induced offline neglect in the daily navigation of their physical and social environments. Our informants were generally quite verbose about the unwanted side effects of excessive phone use, especially on social relations. Nevertheless, most informants reported experiencing trouble with limiting their ST use although they did point to avoidance strategies. Based on our data, we introduce and discuss the concept of 'reachability' as crucial to understanding the effects of ST use on the social environment.

*Keywords*: smart technology, offline neglect, occasional phubber, distractions, joint attention, self-control, reachability

#### Резюме

Използването на смарт технологии (СТ) се увеличи драстично през последните години, като смартфоните и таблетите позволяват да бъдат използвани на всички места и за безброй цели. Следователно, ние се отнасяме по различен начин към заобикалящата ни среда — състояние, което наричаме "офлайн пренебрежение". Тази статия разкрива резултатите от проект, осъществен с качествен метод в малък мащаб, изследващ как информаторите от три европейски столици, Вилнюс, Литва, Мадрид, Испания и Копенхаген, Дания, възприемат промените, свързани с предизвиканото от СТ офлайн пренебрегване в ежедневната им навигация в техните физическа и социална среда. Нашите информатори като цяло бяха доста многословни относно нежеланите странични ефекти от прекомерната употреба на смарт телефон, особено върху социалните отношения. Въпреки това повечето информанти съобщават, че изпитват проблеми с ограничаването на употребата на СТ, въпреки че посочват стратегии за тяхното избягване. Въз основа на нашите данни ние въвеждаме и обсъждаме концепцията за "достъпност" като решаваща за разбирането на ефектите от използването на СТ върху социалната среда.

*Ключови думи*: смарт технология, офлайн пренебрегване, случаен игнорант, съвместно внимание, самоконтрол, достъпност

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# Phone Use, Offline Neglect, and Reachability: A Qualitative Study in Denmark, Lithuania, and Spain

More than ever, people connect to the Internet to seek information, engage socially, and take pleasure. The result is that we engage differently with our physical and social surroundings. For instance, ST use changes how we attend to our children while they play on the playground (Kildare & Middlemiss, 2017), how we behave in natural environments (e.g. Schilhab, Stevenson & Bentsen, 2018; Schilhab & Esbensen, 2021; Schilhab, 2021; Balling, Schilhab & Esbensen, 2022) and in traffic (e.g., Choudhary & Velaga, 2017; Oviedo-Trespalacios, Haque, King, & Washington, 2016), how we handle contact with strangers in the doctor's waiting room (Kushlev et al., 2019), and how we socialize with family and friends at dinner (Radesky et al., 2014; Moser et al., 2016).

Increasingly, ST users experience a mindset of constant interconnectivity recently termed 'online vigilance' (Johannes, Veling, Dora, Meier, Reinecke, & Buijzen, 2018; Klimmt, Hefner, Reinecke, Rieger, & Vorderer, 2018), as part of being permanently online and permanently connected (PO/PC) (e.g. Vorderer et al., 2016). Consequently, Furst, Evans, and Roderick (2018) documented that when college students self-reported checking their phone for messages more than 39 times a day, they also reported disruption to their ability to concentrate on homework. Online vigilance leads to multitasking and social media use, which appears to disrupt work processes and concentration on the task at hand (Bellur, Nowak, & Hull, 2015; Kuznekoff & Titsworth, 2013; Schilhab, 2017a). Thus, as ST use leads to increased attention to the screen the flip side is the simultaneous withdrawal of attention from the immediate surroundings. Przybylski and Weinstein (2013) showed that frequent ST use taps the attentional resources we normally allocate to others nearby, deflating conversations (see also Nguyen & Fussell, 2016; Turkle, 2015; Abeele et al., 2019). A mindset we here want to introduce is the term 'offline neglect', the state of unintentionally neglecting the surroundings due to increased online vigilance.

We suggest that offline neglect may be viewed as the new reality of social contact in the physical world (e.g. Seiler & Kidwell, 2016; Gui & Büchi, 2019). With increased smartphone use e.g. browsing news, looking up bus tables, engaging in work-related communication, entertainment, and social media activity, offline neglect becomes the hidden passenger of PO/PC. In this paper, we ask to what extent increased offline neglect occurs without ST users noticing. And if they do, how do they self-regulate? Are average ST users comfortable with the ST-induced changes and how do they perceive the PO/PC shift? While most ST users may be

unaware of their inattention to their surroundings at the moment, they may nevertheless become aware of offline neglect from the absentmindedness of fellow ST users (Aagaard, 2016).

Therefore, we here focus on how offline neglect, understood as the unintentional withdrawal of one's attention from the surroundings to the screen, is perceived by typical ST users. First, we explore what constitutes offline neglect at the level of the individual; to what extent average ST users are aware of effects, and whether they invent strategies to increase self-control. Second, we explore how common ST users perceive offline neglect in fellow ST users.

It is worth considering to what extent offline neglect differs from 'phubbing', a term that coins the act of ignoring or excluding someone in the immediate social environment by attending to one's phone instead of engaging with the person present (Pathak, 2013). Phubbing has been problematized in scholarly literature for example about child care and parental responsiveness (Abels et al., 2018), ostracising (Chotpitayasunondh & Douglas, 2018), and Pphubbing – partner phubbing and relationship satisfaction (e.g. Roberts & David, 2016; Cizmeci, 2017, see also Garrido et al., 2021).

In most analyses, phubbers are considered to exert problematic phone use, fear of missing out (FOMO), addiction to the internet, or self-control issues (e.g. Chotpitayasunondh & Douglas, 2016; Franchina et al., 2018; Halfmann & Rieger, 2019; Latifa et al., 2019). The research literature also focuses on the exclusion mechanisms related to the position at the receiving end – the so-called phubbed (about the social pressure to react, see Ling, 2016; Halfmann & Rieger, 2019).

However, the phubbing literature has to a lesser extent examined the experience of what we here term the 'occasional phubber or phubbee', individuals who along with the societal switch towards ST use have come to implement smartphones in daily life and in that capacity are likely to have multiple experiences with both positions (see however Thompson, 2017). We assume that typical ST users use phones for a variety of reasons in various contexts including diverse social settings and therefore may hold experiences of the position of occasional phubber and phubbee. Their experiences are typical of the times when ST use changes how we engage with our physical and social surroundings and can provide insight into how people *deal* with unintentional offline neglect in themselves and others. This sheds light on the level of awareness regarding emerging addictive behaviors in individuals without outspoken problematic phone use. It may also help us better understand what drives 'full-time' phubbers into problematic phone use and may reveal specific strategies that could be pursued when occasional phubbers feel the need to control their phone use (see also van Velthoven et al., 2018).

Contrary to the phubbers described in the literature, we hypothesize those typical smartphone users with the occasional experience as both phubber and phubbed are neither too obsessed with nor too detached from their phone. Such informants may be better able to reflect on the attentional changes following increased ST use. To enhance the likelihood of recruiting individuals sharing reflective thoughts on offline neglect, we narrow in on informants who at a mature age have experienced social relations both before and after the massive change in ST use. Since offline neglect pertains to social relations which likely involves practices at the level of families and communities (e.g. Hefner et al., 2019), we wonder whether individuals with different nationalities demonstrate local interpretations about how they use their phones and what is considered to be unwanted withdrawal of attention (see Rainie & Zickuhr, 2015, for an exploration of American norms). Our main focus is to explore the subjective feelings associated with the urges and motivations driving offline neglect, thus demonstrating what online vigilance is used for as well as the subjective experience of being neglected as part of the offline surroundings. Moreover, we aim to unfold to what extent and in which conditions the occasional phubber is aware of her behaviour and whether she feels inclined to exert kinds of self-control.

#### Research methods

This paper reports the results of a qualitative, small-scale project investigating how average ST users with different national identities and adult experiences of social relations before and after the onset of massive ST use, perceive their own and others' offline neglect.

We wondered to what extent individual ST users reflect on norms and values, especially those that are place- and nation-specific. Therefore, we interviewed smartphone users from three European capital cities: Copenhagen, Denmark, Madrid, Spain; and Vilnius, Lithuania, filling the need for studies in the area of mobile devices that include people of different nationalities in their sample (Hooper, & Zhou, 2007). Denmark, Spain, and Lithuania represent a high, medium, and low pro-capita income level in the European economic context, with 47.50, 25.00, and 13.13 euros GDP per capita, respectively (Eurostat, 2018). As for rates of mobile internet use: Denmark has 88%, Spain has 80%, and Lithuania has 62%, (aged 16 to 74), (ibid).

Interviews are useful instruments for reporting speakers' perspectives but may also be conceived as rhetorical acts reflecting both individual memories and collective aspects shared in a speaker's social world (Atkinson & Sampson, 2019, p. 64).

Given the lack of existing research concerning the long-term effects of ST use on perceptions and reactions (especially concerning distractions), personal ST habits, and others' mobile habits, this study was exploratory.

We conducted semi-structured interviews in which responders were urged to elaborate, give examples and introduce their concerns (Aull Davies, 2008). We aimed to acquire knowledge of speakers' views of how and what they read on their mobile devices, their mobile habits (and their self-reported judgments of those), and their perspectives on others' mobile habits, including their judgments about good and bad manners regarding phone use.

The sample included five persons in each country and a balance of genders (8 males and 7 females). Subjects had to have a maximum of 3-4 years of university study and were between 35 and 50 years old, to exclude digital young students from the sample and to include adults active in digital environments, but not born into the new technologies. Informants were proficient active smartphone users, reading on their mobiles several times per week. They also had at least one account on a social network, and were able to make online purchases, (for example, movie or bus tickets).

Since both the preferred age range and the 'lower' level of education may appear as 'delicate' private matters which potential informants may be reluctant to share and difficult to acquire knowledge about beforehand, informants were recruited by recommendations and the snowballing method through both real-world and social networks. Apart from the above selection criteria, we welcomed typical ST users with various biographical and demographical backgrounds such as occupation, marital status, family, social relations, living area, and working situation.

Interviews were conducted in late 2017 and 2018 and interviewees were first approached by email. The study was introduced using few and highly general terms to avoid priming interviewees into particular moral positions about phone use that would contaminate our material.

The interview guide was developed in English and translated into Danish, Spanish, and Lithuanian. It covered four broad themes <sup>1</sup>: (1) basic mobile phone–related questions, such as "In which conditions do you read and look up information on your phone? Where are you, and what do you do?"; (2) personal mobile habits, such as "Do you sometimes turn off your mobile, silence it, or intentionally leave it behind? In which situations? please expand"; (3) strategies for reading and sharing texts, such as "Have you experienced any differences in general in how you read while reading on screen versus on print?"; and (4) mobile habits of others, such as

<sup>&</sup>lt;sup>1</sup> The current study is an outcome of the COST-action E-READ initiative (2014-2018) a European reading research network. Therefore, part of the study was aimed particularly at reading activities. These results form the subject of a separate article.

"Do you have any opinions about what counts as recommendable mobile habits?" The semi-structured interview was organized using flexible, open-ended questions to allow for the unobstructed expression of subjective experiences (Kvale & Brinkmann, 2009).

Interviews were recorded and lasted between 35 and 120 minutes. They were conducted in a quiet place during the day in either private homes or workplaces.

All interviews were recorded on smartphones or tablets placed in front of the researcher and interviewees using a licensed version of the software recorder App AVR Pro; the researcher also took contemporaneous notes. Interviews were transcribed and anonymized afterward. In the paper, first names starting with D refer to Danish informants, first names starting with L refer to Lithuanian informants, and first names starting with S refer to Spanish informants. All interviews were finally translated into English and reviewed by native-speaking translators.

When conceiving of the study, we hypothesized that national differences in our informants' socioeconomic status, their Internet availability and costs of connectivity, and the public discourse regarding mobile dependence would likely exist and influence their positions on phone use. Early analysis of the material revealed that how individuals perceive changes in their attentional focus resulting from ST use seems not to follow from nationality. Hence, transnational comparisons were rendered irrelevant. Instead, we chose to examine how subjects perceive and handle changes to their attentional focus as a result of ST use. Transnational comparisons of reading habits form the subject of a separate article (Levratto, et al., 2021).

#### Results

To gain trust and simultaneously establish whether our informants did represent the assumed time typical ubiquitous ST user, we began the interviews by asking interviewees to sketch everyday situations in which they use their phone for reading, detailing answers about the situation, what the purpose of use was and how they felt while reading. We assumed that if they could attest to frequent use, they would be in a better position to later reflect on what they perceived to be the proper code of conduct when engaging with smartphones in the company of others. Hence, the initial questions are used to frame and unfold the context for the extensive and versatile use of smartphones and to situate assumed moral dilemmas resulting from the occasional phubber and phubbed position.

Initial analysis of our data revealed that three reasons for the time typical excessive use of the phone materialize across informants. These are 1) unintentionally induced habits due to the multifunctionality of the phone 2) phone use as time to waste, and 3) phone use to disengage from the current situation.

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Also, our material revealed that across informants, an awareness of excessive use seems

to crystallize and that our interviewees invent individual strategies to counter excessive use. In

light of the perceived agony many of our informants associate with the need to control their

excessive phone use, they seem intriguingly vocal about the irritation when facing problematic

phone use by others.

In the following, we present our informants' reflections on these categories.

Habitual phone use

Informants provided many examples of their frequent use of their phones. According to

"Sabrina", phones are easy options to turn to on the spot "The truth is that [I am] everywhere!

In the doctor's queue, waiting for the train....or maybe when I'm bored, I pick up my cell phone

and look at it."

As the literature has often emphasized (e.g., Balling, Begnum, Kuzmičová, & Schilhab,

2019; Kuzmičová et al., 2018), smartphones' multifunctionality and accessibility likely drive

their frequent use. One informant explained how these drivers may translate into implicit

routines of when to check the phone—for example, in the afternoon, just before going home,

or as stated by another informant, "Sebastian", when waiting in subways or for the bus:

The first thing I do is open the phone to see if I have [anything?] 'urgent' [to attend

to] on WhatsApp or in my personal account mail, and then in the work mail. And

if there is nothing important or I see that it is secondary, then I automatically go

to Facebook, since Facebook is my interface with reality. (Sebastian)

Informants also referred to habits that are made possible merely as a result of the

accessibility offered by the phone.

I've got such a funny habit of checking my pension. I have an app for that, so I

just check interest rates, how much it has increased since yesterday, and stuff like

that. It's a really bad habit! I check it every day! (Ditley)

The phone's multifunctionality provides opportunities for a vast array of its uses to

eventually become habitual (for a discussion about using the phone habitually, see Schilhab,

2017c). New habits are also introduced in the wake of new functions offered.

Phone use as time to waste

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Apart from their multifunctionality, what kind of reasons do informants offer when

requested to discuss their reasons for the extensive use in more detail? "Dyveke", who is also

the mother of two younger children, stated that she often brings the phone when tucking them

in, as she then finds herself in a kind of waiting position or 'waste of time'; "When they're lying

down and they want you to be in their room, and you're sitting there in the corner and pretending

you're not looking at your phone... stupid habits."

Dan, who works in real estate and therefore has many work-related uses of his phone,

explains how easily the frequency of checking the phone increases as a result of it merely being

at hand and offering appealing content.

If you've got five minutes to spare and you have time to stare into space, then

often, you're looking down because you've got your phone in your hand. And

then what do you look at? When you've got those five minutes. Well, it could be

news, it could be things online, it could be a lot of stuff. Whatever pops up,

whatever has a little red thing to click, yeah, whatever to put your mind to rest.

You get messages all the time. (Dan)

Following the 'waste of time', this informant notices that the appeal arises from

'something' always happening on the phone. "Dyveke" agrees, referring to how she uses the

phone when arriving home from work "When you come home and you just need a cup of coffee

and just to sit and look through your emails or something, or what's happened in the world or

... it's a way for me to unwind."

Another informant, "Ditlev", expanded on how the threshold for when the phone is the

better choice depends not only on boredom but also on other circumstances:

I sometimes [use the phone], but not when I'm bored. Then I'll come up with

something else to do. But if I sit and wait or get stuck in some situation, all I have

to do is pick it up. (Ditlev)

When feeling bored, this informant typically avoids using the phone, only turning to it

when preferred options are excluded. He describes how he'd rather pick up a magazine to read

in a waiting situation, pointing to his last visit to the hospital waiting room, for which he even

prepared:

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I had brought my glasses because I knew I would have to sit and wait, and then I picked up a garden magazine and read a bit from it. It's far from my general interest, but I thought it could provide a bit of stimulation. (Ditlev)

This informant seems to be taking action against the phone as a concrete mediator of time to waste. Nevertheless, most informants agree that *boredom* and *spare time* frequently drive them to use their phones. According to "Sabrina" "Normally, when I have some spare time, the first thing I do is look at Facebook, but if I have more free time, then yes, I start some game...".

Sabrina also noted that she now often prioritizes reading on the phone over reading a book. Another informant shared this experience, describing how she used to read Facebook or Instagram before she realized that this activity was disrupting her sleep.

The point at which people feel bored and reach for their phones—and why—differ among informants. One informant "Dicte" described her compulsive need to check her phone with her need to keep her hands busy, as she would do when crocheting "It is just like: what should I do with my hands right now? It's to keep my hands busy, I think. But if I don't bring that [crocheting] or a book, then I'll pull out the phone."

The same informant mentioned how other changes have encouraged her to check her phone more frequently. She used to bring books along during her one-hour commute to and from work. Her current bag is too small to accommodate this kind of reading material but easily holds her phone. The tension is interesting as the shift from reading a printed book to reading digitally is followed by a decrease in tactility and physical materiality (Schilhab et al., 2018; Hillesund et al., 2022).

### Phone us to disengage

Some informants further specified how they check their smartphones in a desire to remove their thoughts from their current situations. For example, one respondent "Serafin" revealed that his difficulties resisting checking the phone are caused by his resentment for his work. As he explained "The phone is an escape. I am entertained by seeing a picture of a friend or some video. ... But if I'm with friends or my girlfriend, I don't touch the mobile."

He views the phone as a distraction, emphasizing that it is not a matter of relaxation but disconnection. Serafin's attitude also reveals that the phone may ameliorate feelings of loneliness "If I am at work, bored, and I want to do something else, I use the mobile. But to relax? Not at all...a lot of brightness, a lot of light..."

These observations are shared by another informant "Lukas", who also uses the phone to avoid thoughts of work "No, sometimes I use [the phone] for a couple of minutes to get

distracted or take a break from an annoying task."

Phones have much to offer for escaping unwanted situations or avoiding taking an interest in the present. One informant "Dicte" explains how that even happens in front of the

television "Sometimes, if I'm watching something on TV and it's not keeping my concentration

or capturing me, I might have a look at my phone or use it to check my email or Facebook or

something like that."

Another respondent described how addiction to updates about gossip, for example,

escalated while he was single as if the incessant access to Facebook gave him a sense of social

inclusion. One respondent "Sebastian" described how he reads gossip on Twitter and Facebook

as a way to 'run life in front of him'.

The phone may also be used as a way to maintain 'sanity', putting up barriers when in

the unwanted company. One respondent "Sebastian" explains that plugging his ears to avoid

distractions is a common procedure in public "I am usually very annoyed by parasitic noises,

for example, people who say nonsense and do not contribute anything. So, most of the time I

wear my earphones to play some background music and have some isolation."

However, sudden use of the phone that seems to break away from the current situation

is not exclusively tied to boredom or a desire for distraction. The phone may also assist in

controlled 'breaks' from the current situation. One informant pointed to how she may resort to

her phone to solve things that puzzle her.

Uhm, that could be when we're at home watching TV and something, there's

something that shows up and stuff like that, and also, ... if you're at family events

and we start talking about something, you know, something that we start

discussing, and before you wouldn't just get the answer right away, now, well,

you've become too curious, I think, so you'll look it up. (Dagmar)

In this example, the phone is perceived to mediate a repository of knowledge (Sparrow

et al., 2011; Wilmer et al., 2017), and phone use occurs to satisfy curiosity on the spot (e.g.

Schilhab & Esbensen, 2021; Schilhab et al., 2020).

Avoidance strategies against excessive use

Sometimes phone use has developed out of proportion. To counter excessive use, informants subject themselves to particular rules to gain time off from their smartphones. One

informant explained that she places it physically far when she needs to concentrate.

It's not close to me, then. It's not logged on. It's just lying there. And then

sometimes, I'll think about why I'm actually using it and then turn it off if I need

to relax....I don't put it in another room, but I don't put it...uhm...I don't

necessarily put it on silent, but...uh...it'd not be like I have it close to me so that

I can tell when a pop-up message arrives. (Dicte)

Another informant. "Sofia" corroborated this picture "I keep my mobile out of

sight...when it is away from me, it worries me less." Other informants described various ways

to make the phone less appealing.

Well, I put it on silent, and I remove the vibration so it is as if the mobile phone

does not exist. ... The point is that I lose focus very quickly, so any little sound

will distract me ...

There, I am aware that I have to silence it to concentrate if I want to finish a task.

Yesterday, in my WhatsApp group with my parents and my sister, I had to tell

them that I left because I wanted to finish a task ... we were writing ...and I left

... I even put it upside down, meaning, so I could not see the screen ... because if

I see the WhatsApp symbol I'll look at it ... the truth is that I do not know how to

explain it ... but if I see it, I'll want to read. (Sabrina)

One informant "Ditlev" restricts the use of the phone by physically placing it in a

separate place "When I'm at work, I put my phone in my changing room locker. Then it can

stay there and make all the noises in the world until I get off work."

One informant, "Lukas" now working as an independent writer, has implemented

comparable strategies. Since his work is very much related to work on screens, he has made

similar restrictions to his use "It's the main tool for the Internet ... so it takes a large portion of

my day. But I try to do my writing work in the morning, so no Internet in the morning, only

after lunch." When asked to explain why it is important to remove the phone, the first informant

replied "Because I'm like, I'm not relaxing, not in my body or anything like that; I can feel it

physically."

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One informant reported on similar measures occurring in social situations. A

gentleman's club he is part of meets 20 times a year, with a membership of 15 people. They

often visit particular places together or go to concerts together. The club levies fines if its

members use the phone during shared activities; the informant agreed with this policy. Other

informants mentioned implementing actual rules for phone use when with their families,

whether rules about the frequency at which one is allowed to look at the phone at night or how

to behave at the dinner table.

Not every informant, however, reported that their phone automatically draws attention.

As a matter of choice, when watching television, Ditlev will not engage with two screens

simultaneously.

I do not want to. I'm not sitting with the television, both looking at it and doing

something on the phone. I don't do that. If I'm watching television, I do not need

to look at the phone. That's just the way it is. I know other people are using it

while watching... but then, I have to say, I think they are addicted to their phones.

They're afraid of missing what's happening on the phone when they're watching

a movie on the TV. I do not have such a relationship with my phone. (Ditley)

However, this informant did refer to situations in which the phone may actively mediate

addiction in a slightly different sense. Consider his negative attitude towards buying goods

through apps on the phone:

To restrain myself, because otherwise I can 'impulse buy' too much. I need to be

well-considered when I buy something, and therefore I need to do it on the

computer. Otherwise, I will impulse buy too much ... So, out of principle, I have

never bought anything on the phone.

Awareness and self-control

Many informants seemed aware of their unwanted use of the phone and pointed to

behaviours 'before' and 'after'. One informant had read several articles about the alienation of

society, the disproportionate consumption of information, and the frequency by which we grab

our phones today. She explained that little by little, she began turning her phone off. She

referred to a particular episode in meditation class, where the teachers said:

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When you are tempted to do something, prove to yourself that you can wait. For

example, if you feel hungry, wait a while to eat. If you don't, you will eat with

anxiety. The mobile is a portal to the universe ... it is great to have so much access

to information, but you have to know how to manage it; learn to eat the device, or

it is going to eat you. (Sofia)

Another informant "Dagmar" explained that the instant she realizes she feels uneasy co-

occurs with her automatically reaching out for her phone while waiting "I become aware of it

the minute I pick it up and start using it. Why am I even doing it? Because I looked at it five

minutes ago. Why am I doing it again?"

When asked whether the habit bothers her, she said she believes that her noticing her

phone use correlates with actual physical issues with her shoulder. On that account, she believes

she should avoid excessive clicking and swiping. So, her awareness is related to her contrasting

need to care for injuries related to too much swiping.

Another informant offered similar points about knowledge at odds with habit.

it's just that thing about satisfying your brain and keeping it activated with

whatever. Uhm. The fact that it doesn't make you relax at all, that's a different

story. Uh, I know a bit about all this stuff, and I'm aware that it's more disruptive

than helpful. (Dan)

One informant became aware of her self-described unwanted habit of pulling out the

phone for a distraction-related to her new child.

I think I noticed when I was on maternity leave with the one who is now four. ...

We talked about that in the group for new mothers. ... I'd realize I was ... when

you were going to play, the need to sit there and look at your phone ... yeah, I

was pretty... I think that's when that need arose ... and that's like, yeah, four years

ago, right? But I really had to think, right, now you're putting that on the shelf. ...

I'm on maternity leave, I am taking care of my baby... but there are... we talked

about that as well, that urge to look at my phone was suddenly there... something

weird, a habit. (Dyveke)

When others' mobile use is upsetting

On the issue of other peoples' mobile phone use, one informant explained how

thoughtless use has driven him to provocative behaviour, since he wants people to realize he is

annoyed with how lightly people dismiss the sharing that used to be central to being in others'

company:

If you're in the company of others and people are like, you know, sitting with their

phones ... then as a protest, I've chosen to log onto Netflix and watch a bit. Because

funny enough, it is not socially acceptable to sit and watch movies in others'

company, but it is okay to check Facebook... (Ditlev)

Why do people get upset about others' phone use? According to one interviewee,

"Serafin", others' phone use had led him to feel included or excluded "Every day, I go alone to

eat in the park ... because my colleagues during meals look at their mobile phones. It's like you

are with them but not with them, so I prefer to go alone."

The feeling of being excluded may be why it seems acceptable to use the phone to share

information with others but not acceptable to use the phone in ways that exclude single persons.

As one respondent put it:

I think it sends a bad signal to other people in the room. I have friends and

acquaintances who have a life on Facebook. They always have to check things,

and they're scared to miss out on stuff that happens in that world and what their

friends are doing and such. And, in the middle of a dinner, they will comment on

Facebook or have a look or something, and I'm just like, get a life, man. You're

with six or eight people who want you right now. And it seems like you don't want

them when you're spending time on Facebook. (Dagmar)

Agreeing with this viewpoint, another informant described the enraging effects on those

watching:

If you're spending time with others, and you're taking up other people's time,

well, then use that time reasonably. .. if you use the example of that [gentleman's]

club I hang out with, there's someone good at finding his phone, and he might be

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watching Formula 1 while we're actually out doing something else. And I find

that insanely rude. ... I mean, of course, some things are kind of an exception ...

if you find your phone more interesting than the people you're sitting across from,

well, then I find it better to part ways and find something else to do. (Dan)

Several other informants agreed that there are, of course, exceptions. For example, it is

acceptable to message your wife at the end of a social event to pick her up or to contribute

phone-based entertainment, as long as it is shared with other people. According to "Sebastian"

it is perfectly ok if "For example, if in the middle of a conversation, I use Wikipedia to answer

a question ... and this is an active and collective question, for example, let's see what that word

means."

One informant, "Ditley", articulated what is upsetting about people using their phones

in the company of others with whom they are supposed to interact "Well, it makes people

absent. I think that when you're together with someone in a social way, then you have to be

present. You don't have to be overly present, but you need to be reachable."

Another informant elaborated on this opinion about what is at stake when people are

unreachable, focusing on the impact on the social relation:

To me, it's about taking an interest in the people you're with and in what they're

saying and how they're doing ... and a lot of the communication we use, that's

the non-verbal kind. And you don't notice it if you're buried in a mobile phone.

Uh, for example, during dinner. Because you can't always tell just from the tone

of voice or intonation and so on how the person feels. But you get it when you

look at the person. (Dicte)

This also means that we have implicit rules about when it is acceptable to use the phone

and when it is not. "Dan" summed up one way to put these rules "Leave it in your pocket if

you're taking up other people's time."

**Discussion** 

Overall, our respondents largely confirm the ubiquitous use of smartphones. Phones are

used for endless purposes, from buying clothes and accessing news to playing games. The

smartphone is also frequently used as a remedy supporting social contact and as a medium from

which to seek both encyclopedic information and instructional videos. On many occasions, the

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phone is used habitually. The multifunctionality of smartphones like instant access to facts; readily available gossip; graphical perspectives on interest rates and so on can be viewed as providing entirely new niches of interest for directing the typical user's attention. These attention niches ground why and how ordinary phone users become occasional phubbers.

According to our informants, at times their need and dependency on smartphones could be conceptualized as 'filling' time. This particular concept is diverse, however, and could be broken down in detail to show how the smartphone has become a mediator in our handling of difficult situations in life. Although some respondents claimed that they check their phones when they feel bored, multiple responses revealed that the concept of 'boring situation' covers situations where people find themselves in need of a break from tedious work or other people's presence, circumstances they resent, and situations where they feel stuck.

Although we often describe the smartphone as an attention magnet—as one respondent formulated, 'whatever has a little red thing to click'—we ought to discuss the drive underlying the need for distracting attention in different situations. This will help us contextualize and thus better understand the nature of (occasional) phubbing. It also sheds light on the conditions of the life of the individual in modern society and helps elucidate underlying factors like depression and loneliness (e.g. Ivanova et al., 2020).

#### Smartphone use blocks inclinations to take control

When people express a need to become distracted, which is inherent to the urge for little red things to click, it demonstrates that they find themselves caught in states they for some reason want to escape. Thus, when the phone attracts attention, it is just as much a statement about the other options to which one could pay attention. That is, if people use their smartphones to avoid tasks at work, this is not necessarily a result of the phone being irresistible but could also result from the work being unbearable. Another possibility is the need to clear the mind before reapplying attention to the task at hand. In either case, the causes of switched attention are hidden in the circumstances, and the smartphone is just instrumental to the shift.

We can extrapolate this interpretation to classroom situations. When students lose interest in classroom activities and switch to surfing social media or other irrelevant, screen-based activities, they may have several reasons. Our informants reported using their phones when they need to wind down, relax, disconnect, reorient, check Facebook, wait, and want to waste time. These reasons are all related to the desire to shift from one state of mind to another. The desire to break from a particular unwanted situation is essential to the human experience. Who hasn't experienced episodes of being scolded or shamed where the release of one's

attention from the particular reprimand was a relief? We can also all agree that at times others' talk (e.g., lectures) may be difficult to mentalize and relate to (Schilhab, 2017b; 2018), which also applies to tasks for which we have no motivation (e.g., Sood & Jones, 2013). In these cases, we need to use directed attention and inhibit compulsive and irrelevant thoughts to execute the mental work in question. <sup>2</sup>

Although our respondents' use of the smartphone prompts reports of desires to escape, it is highly likely that students attending lectures before the age of smart technology would have found themselves feeling similar desires (e.g. Zhang & Zhang, 2012). For them, daydreaming and wandering minds may have been the more common way to obtain relief (Smallwood & Schooler, 2006; Irving, 2016, Christoff et al., 2018). The underlying point is that things happening in the mind as a result of using the phone often seem more entertaining than the things that would happen in the mind without the phone (e.g. Risko et al., 2012; see also Basu et al., 2018).

This is not to imply that frequent smartphone use has no effect. For example, since the phone provides an easy outlet for the need to redirect attention, it increases expectations of an easy way out of annoying mental states. When, as one respondent stated, the phone soothes restless hands, the need to find new activities diminishes. The accessibility of the phone may decrease her desire to crochet, just as many of our respondents reported a decrease in the number of books they read.

Hence, the abundant use of the phone to rescue the mind from unwanted tasks risks fostering an expectation that the phone will mend uneasy minds. Having the phone ready at hand may worsen the ability to cope with unwanted situations, like being in the company of annoying people or listening to tedious lectures. The point is that if the physical phone affords ways for phone users to redirect their attention from situations they feel uncomfortable about, they may seldom get to the point where they deal with the problem mentally. Very concretely, if one successfully breaks away from resentful work using the phone, one may take longer to find a more suitable working situation. Likewise, solving an uneasy situation using the phone is only a temporary solution—and depends on always having the phone within reach. If students, for example, resort to the use of smart technology when asked to do tedious mental

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<sup>&</sup>lt;sup>2</sup> Attention is traditionally divided into directed and effortless attention, depending on the subject's degree of internal control (Chun, Golomb, & Turk-Browne, 2011). Directed attention is used for mentally demanding tasks, for example when understanding depends on the construction of mental models, as in problem-based learning (PBL). By contrast, effortless attention is used to detect what is going on in the environment. Directed attention is closely related to executive functioning (Diamond, 2013), which is well-known to predict success in life (Vestberg, Gustafson, Maurex, Ingvar, & Petrovic, 2012).

work such as unlocking a mentally demanding problem, they may never eventually crack the code needed to fully comprehend. This effect adds perspective to the widely accepted suggestion that cognitive deficits are associated with problematic phone use (Lee et al., 2014; Hadlington, 2015; Bian & Leung, 2015). Using the smartphone to rescue the mind may lead to undesirable cognitive lapses.

Such considerations may also apply to youngsters seeking to hide in Facebook updates or using smartphones for music at family events. Teenagers often understandably feel uncomfortable at family dinners and birthday parties, because they feel excluded. However, redirecting attention to their phone offers fewer chances to learn the dynamics of such events and how to handle differences among people.

## Self-imposed regulations to avoid excessive use

Many of our informants reported often overusing the phone as a form of retreat. They also described how they negotiate the darker side of using their phones. Several described habits and rules they self-administer to regulate their use. Many of these suggestions and self-imposed restrictions concern physical displacement to avoid further use. The implication is that the mere physical presence of the phone will unavoidably animate further use (for similar situational self-control strategies, see Duckworth et al., 2016). Also, digital self-control behaviours afforded by the apps were applied (e.g. Lyngs et al., 2019).

Interestingly, the informants described many ways in which one may realize that one's personal use of the phone has increased beyond what might be considered healthy. For example, shifts in the level of awareness are attributed to the public debate around smartphone use, and mothers on maternity leave participate in ad hoc exchanges on the use of smart technology. One informant referred to strategies she learned from attending a meditation class. Another became aware of a thoughtless habit of reaching for her phone while her shoulder ached. Hence, the ways that increase awareness of the putative downsides of smartphone use are quite common.

On the other hand, it is less clear whether the continuous public discourse about excessive phone use has major effects on the inclination to use phones excessively. Although some informants reported substantial changes concerning how they engage with their smartphones—such as no longer reading the smartphone before sleep—others appear to be less successful and even struggle to cope despite being fully aware.

Of course, there are individual differences, with few of our informants finding the distractions the phone affords easy to handle or unproblematic in any way (e.g., Schilhab,

2017c). They reported self-imposed regulations which suggest that they are already aware of measures to take to feel comfortable about their phone use.

### The need for reachability

The unresolved issue of managing one's private phone use is thought-provoking in light of how informants perceived other phone users' use as problematic. On this issue, informants almost completely agreed that, to a large extent, one should cherish the company of others, especially when attending social events like gatherings, parties, and dinners where other people have invested time and effort in you. Informants agreed that if we use mobiles in the company of others—for distraction, disconnection, and when feeling bored—it is like we are saying that they are less important than the phone or that we would like to disconnect from their company. Hence, our informants are fully aware of when they tend to become phubbees (e.g., Chotpitayasunondh & Douglas, 2016; Chotpitayasunondh & Douglas, 2018).

Although exceptions exist, as when expecting an emergency call or urgent texting, phone use is viewed as an unacceptable social act within the group of people interviewed for this article, demonstrating a lack of respect and caring for other people. As one informant put it, it is not necessary to be overly present in the company of others, but one should be reachable. What does reachability mean, exactly? One way to make sense of this notion is to stress an individual's ability to participate in the dynamics of the social event, which seems to depend on sustaining a kind of monitoring attention that is not dedicated to a particular task. Hence, you are perceived as unreachable if you are occupied by tasks from which others are excluded, as when reading updates or watching YouTube videos on a one-screen, one-user basis. The problem here is that you are not able to go with the flow of the party, listen, and contribute to conversations when appropriate. To be reachable seems to align with the well-known principle of joint attention that seems ingrained in human social activities. In developmental and comparative psychology, joint attention terms situations where a child and caregiver direct their attention to the same object or occurrence to align their experience of the world. Essentially, joint attention ascertains that we can communicate and develop a Theory of Mind (e.g. Schilhab, 2015a; Schilhab, 2015b; Stjernfelt, 2012).

Informants find the use of the phone for mutual purposes fully acceptable, like using the phone to retrieve encyclopedic entries to expand on common subjects or solve topics of discussion. The use of the phone to contribute actively to group dynamics is viewed as an asset. Thus, at stake is whether a phone user is ready for interaction (reachable) and whether that user is engaged by something on the phone that is shared in public.

Notable exceptions exist. One informant remarked that despite meeting the criterion of sharing, information about what is happening on Facebook is still viewed as untimely, probably because references to the activity taking place on the Internet seem to conflict with the criterion of being reachable in the present circumstances.

#### Conclusion

In the transnational, small-scale study reported here, we explored how ST users conceive of the attentional and behavioural changes that follow from their increasing use of smart technology. We were especially interested in the segment of the population aged 35 to 50, likely to have experienced the transition from no smartphone to daily smartphone use. We sought to interview subjects with a maximum of three to four years of post-high-school education to exclude the typical university student from our sample. Thus, we need to consider whether the perception of phone use presented here is a result of personal traits possessed by the informants of this limited sample or pertains to smartphone users in general.

We began our study with the hypothesis that perceptions about the effects of offline neglect would oscillate with national differences in internet accessibility and social habits. At an early stage of the analysis, this anticipation was rebuffed. Even though the interviews were conducted in three countries and by authors with three different nationalities, perceptions about the central themes were generally shared among informants. That said, we did find national differences related to the popularity of particular messenger services such as WhatsApp, which was used extensively in Spain, but more sparingly in other countries. Although our informants were expected to have experienced the transition from no smartphone use to daily smartphone use, we did not substantiate this assumption quantitatively. Hence, it is unclear to what extent the category of 'average ST user' did apply to our interviewees.

Despite these limitations, among informants, various shared opinions and conceptions about the impact of ST use on attention and behaviour seemed to materialize of importance to determine the conditions of citizens in today's society (see Thompson, 2017). First, not surprisingly, smartphones appear to have abundant use in a wide variety of settings that often become new habits, from checking social media when in transit from home to work to browsing particular sites after coming home from work. Our informants reported that phone use is often intended for relaxation, to take a break from undesired situations in work or social settings, and to kill time. However, this new way of navigating life is sometimes perceived to be unhealthy, so it comes with the sensation that individual-level countermeasures are necessary to cultivate. Our informants were generally quite verbose about the unwanted side effects of excessive

phone use, especially on social relations. Nevertheless, most reported experiencing trouble limiting their use or the side effects of others' excessive use. Their personal experiences with attempts to control their excessive use often emerged as a result of sudden insight. With the concept of reachability, one informant beautifully phrased why using smartphones when in the company of others may be perceived as problematic, as the user in this state loses contact with ongoing and present social dynamics.

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