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"Towards a more pleasant social atmosphere: Not with your Smartphone but with each other"

An investigation of the relation between own mobile phone Behavior and Acceptance of the use by others in Public Social Settings

Maaike Geerdink

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<u>Master Thesis</u>

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UNIVERSITY OF TWENTE.

Maaike Geerdink

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Supervisors:

First supervisor: Dr. Mirjam Galetzka
Second supervisor: Dr. Anna Fenko

Abstract

This study aims to investigate the relation between own mobile phone behavior and the degree of acceptance of the same behavior of others. Why are we annoyed by the use of mobile phones in public social settings while we, at other moments, also perform this behavior ourselves? Two perspectives are taken into account, the Offender (person deciding to use a mobile phone in a public social setting) and the Victim (person in the companionship of a mobile phone user). Related individual motivations and external drivers, e.g. descriptive and injunctive norms, for the offender's own mobile phone use in public social settings are examined. In addition the victim's degree of (overall and behavioral) acceptance and related feelings towards other people's mobile phone use are studied. A focus group and online survey provide insights into both perspectives of the research. Results show a significant positive correlation between own behavior and overall acceptance indicating that the more mobile phone use, the higher the overall acceptance. Furthermore, there is a strong negative correlation between both variables and injunctive norms. Consequently, clarifying the injunctive norms related to mobile phone use in public social settings is recommended for influencing people's mobile phone behavior and at the same time the degree of acceptance of the use by surrounding others.

Executive Summary

This research aims to answer the research question 'To what extent is there a relation between own mobile phone Behavior and the Acceptance of the same behavior by others?' Mobile phones have become a part of our lives and due to the wireless connectivity, the mobile user has the ability to be in constant contact, regardless of location. Since, people have the ability to communicate wherever and whenever they want, public places are commonly populated with the private lives of mobile individuals. However, the use of mobile phones in public (social) settings might cause negative side effects for surrounding others. Consequently, this study aims to provide solutions for influencing mobile phone use in public social settings by focusing on the motivations and the annoyances of mobile phone behavior.

To answer the research question drivers for (public) mobile phone behavior and reasons for disapproval should be discovered. By discussing different theories on (public) mobile phone behavior and acceptance a conceptual framework is established. It was found that individuals can be both 'the user' and 'the annoyed friend' and therefore two perspectives are taken: The Offender (person deciding to use a mobile phone in a public social setting) and the Victim (person in the companionship of a mobile phone user). The Offender's own behavior is influenced by internal (individual motivations) and external drivers (descriptive- and injunctive norms). The Victim's degree of acceptance (overall and behavioral) is determined by injunctive norms and feelings.

To discover more specific information related to motivations, feelings and acceptance of mobile phone use in public social settings, a focus group interview was conducted. The conceptual framework was improved with the new insights gathered from the focus group.

A survey research was performed to test the conceptual framework and to discover a possible relation between the Offender and Victim.

Results show a significant positive correlation between own behavior and overall acceptance indicating that the more mobile phone use, the higher the overall acceptance. Furthermore, findings show a strong negative correlation between both variables and injunctive norms. Therefore, clarifying the requested standards of (mobile phone) behavior will decrease the use and at the same time the acceptance of mobile phones in public social settings which will result in a more social atmosphere, with each other, without mobile phones.

Preface

This master thesis that is lying in front of you is the final proof of competence for obtaining the Master of Science (MSc) degree in Communication Studies (CS), with a specialization in Marketing Communication, from the University of Twente located in Enschede, The Netherlands.

The research topic 'Mobile Communication in (Public) Social Settings' is a topic that really interests me. However, thanks to my family I came up with the current research question. During an usual Monday evening family dinner my father was annoyed with our mobile phone use at the table. We all agreed that during a social moment, in this case dinner, it is not decent to use a mobile phone and therefore we put out personal devices away. However, during dessert, my father was the one grabbing his phone and showing us a movie he received earlier from colleagues. At that moment I was wondering why are people annoyed with other people's mobile phone use but at the same time do the exact same thing at another moment. Therefore I want to thank my family, especially my father, for inspiring me to come up with an interesting research topic.

Several persons have contributed academically, practically and with support to this master thesis. I would therefore firstly like to thank my head supervisor Mirjam Galetzka for all her time, valuable input and support throughout the entire process and especially during the SPSS part of the research. Nevertheless I also want to thank my second supervisor Anna Fenko for her time and helpful input.

I also would like to thank all the participants of the Focus Group interview for their time and for sharing personal opinions, motivations and experiences related to mobile phone behavior. Also a special thanks to all the respondents for taking the time to fill in the survey.

Finally, I would like to thank my parents, sister, Jelle, family and friends for being helpful and supportive during my time studying Communication Studies at University of Twente.

Maaike Geerdink

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1. Introduction

Imagine it is a Friday night, finally weekend, and you are meeting with some friends to have a few drinks in the café in town. You are really looking forward to catch up with the latest gossips and stories and to have an enjoyable night together. The drinks are ordered, the snacks are on the table and everybody is talking and laughing with each other. You are having a good time! However, after a while one of your friends is grabbing her telephone from her purse and starts to check the device. While the conversation continues your friend is laughing and focusing on her mobile phone. As you are telling about your new job, another friend also is checking his Smartphone. While he pretends to pay attention to your story, also his focus is on the mobile phone. You are getting somewhat annoyed by this behavior as the mobile phones remain on the table and become part of the social setting. Furthermore, the devices receive more attention than the stories and conversations between you and your friends. Irritated by the circumstances you empty your glass and look around. You are questioning yourself whether or not it is approved or accepted to address the irritations experienced due to this disruptive behavior? As you do not want to complain to your friends about the situation, and you are aware of the fact you sometimes also use the device during comparable moments, you accept the state of affairs and also grab your mobile phone from your purse. A pleasant night with friends have turned into a night with friends distracted by their mobile phones.

'Mobile phones are silent elements in the social world until they are engaged by the mobile phone user or activated by someone calling in' (Palen, Salzman & Youngs, 2000).

By illustrating the situation, the context of the current research is made visible in plain language. It is about disruptive (mobile-phone) behavior in a public social setting. Such a

setting or other (public) 'place' used to comprise a physical space and the people within it (Turkle, 2011). However, 'What is a place if those who are physically present have their attention on the absent?' (Turkle, 2011, p.155). Besides the irritations from bystanders, businesses might also experience some negative effects from this behavior as guests pay less attention to the present situation and therefore might order or buy less due to the mobile phone distraction. Some businesses have experienced this problem and have introduced a technique to influence this behavior. For instance a restaurant in Los Angeles, Eva, offers a 5% discount on the bill when customers hand in their Smartphones in the beginning of the evening. It is intended by the business to let people enjoy each other without interruptions from mobile devices. This example indicates that there is a (social) problem and as handing in these personal devices cannot be implemented everywhere, other solutions are required to tackle this problem. Consequently we will present some possible solutions for this social problem by focusing on the motivations and at the same time the irritations of mobile phone use in public social settings. It is intended to discover a possible relation between individuals own mobile phone behavior and the degree of acceptance of the same behavior of others. This research will investigate the motivations for mobile phone use in public social settings and simultaneously the reasons for annoyance related to the use of these devices by others.

1.1 The Smartphone as a key 'social object'

Communication is recognized as a fundamental part in personal relationships (LaReu, Mitchell, Terhorst & Karimi, 2010). The essence of communication, sharing information between sender and receiver, remains at all times the same, however the communication methods (face-to-face, email, letters etc.) and related devices are still developing and changing (LaRue et al., 2010). For instance, the introduction of the mobile phone expanded communication possibilities, still the innovation of the Smartphone has significantly increased

the methods for exchanging information (LaRue et al., 2010). The mobile phone has become a small computer you can carry in your pockets, it has become a Smartphone (Busk, 2011). A Smartphone can be described as a mobile phone with built-in applications, i.e. video player, MP3 player, television camera, with the ability to access the internet (PCMAG.com, 2009). A variety of studies demonstrate that Smartphones and/or mobile phones have become a part of our lives, and for many, the device has become as important as wallets (Hakoama & Shotaro, 2012; International Telecommunication Union, 2004). Statistics of the CBS (2011) show a significant (50%) increase in mobile internet users in the Netherlands[1]. More than 40% of the people in the Netherlands make use of mobile internet via their Smartphones, which demonstrates the large amount of people making use of mobile phones on a daily basis.

The mobile phone has become such an important aspect of a user's daily life that it has moved from being a mere 'technological object' to a key 'social object' (Strivastava, 2005). The wireless connectivity of the mobile phone promotes its everywhere use and as a result the mobile user is in constant contact, regardless of location (Campbell & Kwak, 2011; LaReu et al., 2010). Consequently, being connected these days depends not on our distance from each other but from available communications technology, which we most of the time carry with us (Turkle, 2011). Turkle (2011) demonstrates that being constantly connected brings new anxieties of disconnection as people 'feel like a death' when their phone is lost. 'Whether or not our devices are in use, without them we feel disconnected, adrift' (Turkle, 2011, p.16).

1.2 Mobile Phone Behavior

Accordingly, Oulasvirta, Rattenbury, Ma & Raita (2011) pose that mobile devices are habit-forming and therefore people might be using them anywhere anytime, also in public places. 'The form of habits we identified is called a checking habit: brief, repetitive inspection of

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[1] http://www.cbs.nl/NR/rdonlyres/C80FA519-21C2-4421-A52B-BE47E543CC80/0/pb11n067.pdf

dynamic content quickly' (Oulasvirta et al., 2011, p. 1). Oulasvirta et al. (2011) stated that checking habits constitute an important part of the behavior driving smart-phone use. A blog of the NRC next (2011) compares email checking to the habitual behavior of smoking; people do not (sneaky) leave a (public) social situation to smoke a cigarette anymore, nevertheless they sneak away to check for new (email) messages or social media updates. Also a later article called "Socialbesitas" in the NRC (2013) recognizes the checking habit. Wood and Neal (2007) explain habits as repeated responses that come to be cued by recurring features of contexts without mediation by a cognitive representation of a goal. This was supported by Neal et al., (2012) stating that habits are activated outside of awareness by context cues with minimal influence of goals. The research of Neal et al. (2012) suggests that strong habits are actually influenced by recurring triggers in the performance context. Additionally, Oulasvirta et al. (2011) explain that the checking habit is triggered by a variety of different cues outside the device as situations and emotional states (boredom). These cues can be described as the drivers for smart-phone usage (also in public places) and therefore these signals should be identified in order to influence disruptive mobile phone behavior.

1.3 Social Norms

A significant concern is that the use of a mobile phone in public challenges norms for behavior around others (Campbell & Kwak, 2011). As social norms for behavior in public settings often conflict with those for phone conversations (Palen et al., 2000), mobile phone use in public presents as many challenges as opportunities and therefore is an interesting area of social science research (Campbell & Park, 2008). Several researchers have investigated the effects of public mobile phone behavior but most studies focused on related safety risks like the effects on driving abilities or pedestrian injury risks (Byington & Schwebel, 2013). Only a few studies focus on the possible social effects of mobile communication in public.

Different researchers indicate that individuals are irritated by other people's mobile phone use in public (particularly voice calls) (Sutter & Holtgraves, 2013; Katz, 2006; Ling, 2004). By using mobile phones in public people are socially removed from the physical surroundings and the people in them through the use of communication technology (Gergen, 2002 in Campbell & Kwak, 2011). Then, mobile communication in public can disrupt (new) social encounters by serving as a barrier between the user and copresent others. Also a report of Ofcom (2011) shows that Smartphones are encroaching on 'traditional' social situations as high percentages of users indicate the use of mobile phones during socializing with others (51%) or meals (23%). In order to change this disruptive mobile phone behavior, social norms should be considered. According to Campbell (2007) the uncertainty surrounding norms for mobile phone use in public stems from the conflicting nature of private and public space. This assumes that people are uncertain and unaware of norms related to public mobile phone behavior. Therefore, these norms should become clear in order to influence mobile phone behavior and stimulate pro-social behavior in public social settings.

Given the rapidly increasing use of mobile internet by young adults and the irritations related to public mobile communication of copresent bystanders the present study aims to investigate to what extent there is a relation between own mobile phone use and the degree of acceptance of the same mobile phone behavior of others. The focus will be on public social settings. Internal drivers (e.g. individual motivations), and external drivers (e.g. descriptive and injunctive norms) for own mobile phone behavior in public social settings are identified. Furthermore feelings towards other people's mobile phone use and the degree of acceptance are examined. A focus group and online survey are performed in order to gather more insights into public mobile phone behavior and acceptance. Eventually, this research aims to investigate a possible relation between own mobile phone use and the degree of acceptance of

the same behavior of others. Why are we annoyed by the use of mobile phones in public social

settings while we, at other moments, also perform this behavior ourselves?

2. Literature

2.1. Public Mobile Phone Behavior

Mobile phones are described as part of the social world as communication is always involved and due to its mobility communication is possible at times and places which was unlikely in the past (Palen, Salzman & Youngs, 2000). As a result people have the opportunity to carry and use their mobile devices wherever they go, in social or professional, in public or private settings. This study focuses on public mobile phone behavior, especially the use of mobile devices in public social settings. Literature shows that the social context and geographical environment cause people to behave and feel differently about using mobile phones (La Reu et al., 2010; Turner et al., 2008). It is suggested that people prefer mobile phone conversations in relatively open public locations (street/shops) since people have the ability to physically isolate themselves from others and therefore are less likely to become distracted by their presence (Ruback et al., (1989) in Turner et al., 2008). As a result phone calls in relatively fixed settings (public transportation, bars, restaurants) tend to create a greater negative effect as bystanders are 'forced' to listen to others' conversations as they have no option to physically isolate themselves (Turner, 2008). However, Turner et al. (2008) also found positive affective responses towards mobile phone use in (social) fixed settings in which the purpose is social interaction (e.g. bars, restaurants). So, besides open public areas, people are less disturbed by mobile phone use at locations that are used to socialize and communicate. Altogether, the social context of the phone call might influence whether intrusions are perceived as enjoyable or frustrating.

A study of Höflich (2006) found different situations in which the use of a mobile phone is perceived to be a particular nuisance by individuals of different European countries. The results indicate that settings with a communal focus (theatre, classrooms etc.) are perceived as particularly inappropriate for talking on the mobile phone, whereas those with a central focus

(street, parks, sidewalks) were more acceptable (Campbell, 2008; Höflich, 2006). 'Conceivably, talking on the phone in focused settings may be viewed as problematic because it removes the user from the communal involvement and intrudes on the involvement of copresent others' (Campbell, 2008, p: 72). Therefore, using mobile devices in unfocused settings might be more acceptable as there is no collective engagement to interrupt (Campbell, 2008). The findings of Campbell (2008) show that people with a collective orientation tend to be more tolerant of mobile phone use in settings without a central focus. At the same time increased levels of individualism were related to intolerance for use of the technology in focused settings or those that typically involve a communal level of attention (Campbell, 2008).

Table 1: Table from Hoflich (2006):

'Situations where the mobile Phone is perceived to be a 'particular nuisance' (n=400)'

Table 1
Situations where the mobile phone is perceived to be a "particular nuisance" (n=400).

In the cinema, theatre or museum	92.0%
At official events (e.g. a lecture)	91.5%
In churches	89.6%
In waiting rooms (e.g. at the doctor's)	70.8%
In restaurants	57.5%
At social events (e.g. a party)	47.5%
At work	41.8%
In public transport (e.g. bus or train)	37.5%
In bars or cafés	34.4%
At sports events	29.5%
In other people's houses	27.1%
In shops	25.0%
In one's own home	18.3%
In waiting areas (e.g. railway stations)	14.0%
In the street	8.1%
In public parks	7.0%
In pedestrianized areas	6.0%

The current study will focus on public social settings, which in this case are primarily bars and cafés but also restaurants. The study of Höflich (2006) shows that there are significant percentages (34.4%, 57.5%) of people describing mobile phone as a nuisance in these particular, rather communal, settings. Therefore, it can be assumed that people perceive these locations as communal social settings in which mobile phone use will, to some extent, disrupt a collective engagement and therefore cause a particular nuisance. However, why do people

use mobile phones in public settings? The next paragraph will discuss individual motivations

for (public) mobile phone use.

2.2 Individual Motivations

Since mobile phone use is described as habitual behavior (Oulasvirta et al., 2011) users are most likely not aware of their own actual mobile phone activities. As habits are activated outside the awareness by context cues (Neal et al., 2012), these contextual triggers should be identified in order to discover what motivates people to use mobile phones. These triggers can be external (descriptive norms) but also internal (individual motivations). Consequently, this paragraph will discuss the internal triggers or individual motivations for mobile phone use to gain a deeper understanding in the drivers of mobile phone use.

2.2.1 Instrumental and Intrinsic motives

Ling and Yttri (1990, 2002) have identified three primary uses for mobile telephony: (1) safety/security (intrinsic use), (2) microcoordination (instrumental purposes) and (3) hypercoordination (expressive purposes). Safety is often one of the main reasons why parents want their children to have a mobile phone (Campbell, 2005). Palen, Salzman and Youngs (2000) also found that business or job-related reasons (instrumental use) together with safety and security reasons (intrinsic use) are the main initial motivations for mobile-phone acquisitions. This was also addressed by Leung and Wei (2000) who found that instrumental uses of the mobile phone are more frequent and these instrumental motives are much stronger than the social or intrinsic uses of the mobile phone. Peters and Ben Allouch (2005) supported these earlier findings as they found that the initial perceptions and expectations of the participants to use the new mobile communication technology were organized more around instrumental use. Also Walsh, White and Young (2008) found that the mobile phone has become more than a tool for communication as it have replaced some traditional devices (camera, mp3 player, diary etc.). This is supported by the findings of Ofcom (2011) that indicate that since the Smartphone, both teens and adults execute less other activities as

watching television, using a computer read books or printed newspaper etc. As a result, today mobile phones, in particular Smartphones, are used for various (instrumental) purposes. However, in time not only instrumental motives but also intrinsic reasons turn out to be important for using new mobile communication technology (Peters & Ben Allouch, 2005). Though, after gaining personal experience, actual nature of use frequently differs from initial predictions as the mobile devices become integrated in users' lives (Palen et al., 2000; Peters and Ben Allouch, 2005).

2.2.2 Maintenance of relationships

'The benefits of being always connected, to be accessible at all times and places make technology-enabled people almost automatically adapt the new mobile communication technology into their daily life' (Peters & Ben Allouch, 2005). So besides using the device for instrumental purposes, the social benefit of mobile communication technology should not be underestimated. Since the mobile phone enables users to be connected and accessible at all times and places, it is also frequently used to maintain social contacts (Campbell, 2005; Ling and Yttri, 1999, 2002). The mobile device has become an essential instrument for organizing social life. 'The ability of the mobile phone to directly contact a person allows (young) people even more flexibility and spontaneity in their lives' (Campbell, 2005, p.4). Lai and Katz (2012) state that the widespread use of personal mobile communication technology has been ascribed to human beings' initial need to be in contact. This was also suggested by Turkle (2011) who found that individuals have a need to connect, which is a 'reason' for texting while driving. Furthermore it is found that mobile communication is used not merely for task direction and information exchange but in highly social ways such as keeping-up-to-date about one's social circle, signaling others of one's existence, engaging in gossip and other grooming behaviors, monitoring social control over others (Lai & Katz, 2012). This was also

addressed by other researchers indicating that maintenance of relationships is one of the most important functions of mobile phone contact between friends. (Hall & Baym, 2011; Katz, 2008; Ling & Yttri, 2002). It is found that simply using the mobile phone with close friends affects how people perceive their obligations to maintain those relationships (Hall & Baym, 2011). For instance when mobile phones are used in close friendships, people are steered towards increased expectations of connectness and availability (Katz & Aakhus, 2002). Peters and Ben Allouch (2005) discovered that over time initial gratifications, like permanent access and social interaction, appeared to become less dominant while gratifications as fashion/status and entertainment became more noticeable. Apparently, the initial gratifications are met by the new mobile communication technology (taken for granted) and new gratifications are sought (Peters & Ben Allouch, 2005). Also Lai and Katz (2012) emphasize that people currently view their mobile communication devices as an important element of style and fashion, that is, people appropriate mobile technology for their varied social positioning purposes. Mobile phone use for expressive purposes, or hypercoordination (Ling & Yttri, 1999, 2002) can demonstrate and reinforce social networks and its use is at least partially influenced at the micro level through interaction in personal communication networks (Campbell, 2007). Different studies indicate that adolescents tend to regard the technology as fashion and use the mobile phone for expressive purposes (Campbell, 2007; Ling &Yttri, 1999, 2002). So, while cell-phones originated as business tools, these devices have evolved from their original purpose and are now largely used as personal communication devices (Aoki & Downes, 2003). The mobile phone is now an integral part of adolescents daily lives and turned from a technological tool into a social tool (Campbell, 2005).

2.2.3 Need for a private moment

Turkle (2011) advocates that people using a mobile phone, mark themselves as absent and signal their departure by putting a phone to their ear. This departure can also be announced in more subtle ways by glancing down at a mobile device during dinner or a meeting. This behavior indicates that people using their mobile phone in a social situation might need a 'break' or a moment for themselves and use their mobile device to signal this.

2.2.4 Sitting Alone

Goffman's (1963, 1971) studies on social interaction, explained in the study of Humphreys (2005) might be helpful in understanding how and why people use cellphones in public. Goffman (1963) provides nuanced understandings of norms for social interaction by observing behavior in public spaces. Even though during the time of Goffman (1963, 1971) mobile phones were non-existent, the results regarding normative behavior in public spaces might contribute to the understanding of mobile phone use in public. According to Goffman there are two types of individuals in public spaces: those who are alone (singles) and those who are with other people (withs), and both are treated differently by other (surrounding) people (Humphreys, 2005). For instance, singles might be thought of as unsociable as they are alone without friends. To compensate for being alone and feeling vulnerable in such situations, these 'Singles' use self-defense mechanisms to justify their singular presence in public spaces (Humpreys, 2005). Singles want to protect themselves from others by seeming occupied (drinking coffee, read a newspaper, play with your mobile phone) in order to avoid being approached and to legitimize their presence in the public place (Humphreys, 2005). So, the mobile phone is used in public as a protect mechanism for people who are alone. However, a 'With' might also experience the vulnerability of a 'Single' situation when he seems to be alone, for instance when the partner leaves for a moment (toilet visit, get money

etc). Besides that, when one with cannot participate in a crosstalk (one of the with's is in a conversation with someone else (in person or on the phone)) he/she tries to occupy himself (read the menu, grab the mobile phone etc.) to avoid feeling awkward (Humphreys, 2005). Though, opposed to a crosstalk with a third person physically approaching, a chat on the phone may lead to social anxiety on the part of the person left out of the phone interaction (Humphreys, 2005). 'During this stage people engage in a number of self-defense mechanisms to alleviate the anxiety and vulnerability of suddenly becoming a single and feeling left-out' (Humphreys, 2005, p: 814). As a result grabbing your mobile phone in order to strike an attitude in these situations can be one of these self-defense mechanisms.

All in all, this early study indicates that a mobile phone in public is mainly used serving as a self-defense mechanism to avoid experiencing uncomfortable feelings. However, it should be taken into account that since the study of Goffman (1963, 1971) numerous innovations have changed the mobile phone into the Smartphone which resulted in a major increase in users. As a result, there are most likely numerous other motives for (public) mobile phone use available that should be investigated.

2.3 Descriptive and Injunctive Norms

Besides individual motivations, there can also be external triggers stimulating mobile phone use in public social settings. Since, the use of mobile phones cause negative side effects for surrounding others, social norms occur (Biel & Thøgersen, 2007). When these external cues or social (descriptive and injunctive) norms are identified, mobile phone behavior can be influenced. Accordingly, this paragraph will explain the importance of clear guidelines for (mobile phone) behavior and enlighten the concepts descriptive and injunctive norms.

2.3.1 Social Norms

'In the world of paper mail, it was unacceptable for a colleague to read his or her correspondence during a meeting, however in the new etiquette turning away from those in front of you to answer a call or text message has become close to the norm' (Turkle, 2011, p.161). These days, it is rather challenging to participate in acceptable mobile phone use around others while norms for public settings often conflict with norms for interaction during a phone call (Campbell, 2008). Even though in some countries (e.g. Japan) there have been attempts to regulate mobile phone usage in public (restrictions in restaurants and public transport), the tension between remote and copresent social interaction has not yet led to the establishment of any social norms (Strivastava, 2005). 'Social norms evolve to regulate social life' (Biel & Thøgersen, 2007 p. 94). Social norms occur when individual actions cause negative side effects for others and serve the function of restricting egoistic impulses in favor of collective outcomes (Biel & Thøgersen, 2007). Overall social norms can be described as rules and standards recognized by members of a group that guide and/or constrain social behavior without rules or regulations (Biel & Thøgersen, 2007). Palen, Salzman and Youngs (2000) explain that due to the relative 'new' existence of the social norms around mobile phone use, behavioral standards are still evolving. Also Campbell (2007) poses that there are

somewhat uncertainties surrounding norms for mobile phone use in public. It is found that norms affect human behavior systematically and significantly but only in situations where the norm is salient (focal) for the individual -the focus theory of normative conduct- De Kort, McCalley & Midden, 2008). 'Norms should motivate behavior primarily when they are activated' (Cialdini, Reno & Kallgren, 1990, p. 1015). So, individuals are most likely to conform to the norms when normative considerations are salient at the time of action (Mollen et al., 2013). Consequently, as opinions about appropriate mobile phone use show a discrepancy, these social norms should become more clear in order to influence behavior. Originally, Cialdini et al. (1990) discovered two types of norms, descriptive and injunctive, each reflecting a separate source of human motivation. These two types will be explained in the following paragraphs.

2.3.2 Descriptive Norms

A descriptive norm refers to what most people do in a particular situation and motivation for action comes from seeing what other people do (Cialdini et al., 1990; De Kort et al., 2008). So, these type of norms refer to (perceptions of) the behavior of most others (Mollen et al., 2013). Mollen et al. (2013) describe different studies that indicate that descriptive norms are especially effective in situations that are unfamiliar, uncertain or ambiguous. Activating this norm will endorse social proof, 'If others do it, then this must be the right thing to do', people will follow the 'examples' given at that location. So the behavior of others can stimulate own behavior.

However, the study of Cialdini et al. (1990) found that activating a descriptive (littering) norm only encourages pro-social behavior in already 'clean' environments. In addition, Keizer, Lindenberg & Steg (2008) discovered that signs of disorder (broken windows, litter etc.) induce other (types of) disorder and pretty crime (Broken Windows Theory) (Wilson &

Kelling, 1982). Consequently 'clean' environments, no litter, no mobile phones, are essential for activating descriptive norms. In the current study, signs of disrespect or disorder would be other people playing with their mobile phones. Seeing that an environment without mobile phones is not very realistic these days, you cannot forbid people to use their mobile phone in public, this type of norm activation is rather complicated for influencing mobile-phone behavior in public places. Even though, in the current context it might be difficult to activate descriptive norms, identifying these external triggers might add extra value in providing a solution for disruptive mobile phone behavior.

Literature shows that people feel more comfortable receiving than making calls in the presence of others, and that people are less annoyed by others using mobile phones in public locations where they themselves feel most comfortable making and receiving calls (Turner et al. 2008). 'Negative effective responses to public mobile phone use by others may then influence our own public mobile phone behavior' (Turner et al., 2008, p. 211). Also Mak, Nickerson and Isaac (2009) declared that usage frequency is affected positively by the attitudes towards acceptance of mobile phone use in public places. This assumes that seeing other people using a mobile phone in public will stimulate an individuals' (mobile-phone) behavior. Therefore, seeing other people using a mobile phone can be a significant external trigger for own mobile phone behavior.

2.3.3 Injunctive Norms

An injunctive norm is defined as what the particular culture approves or disapproves and can be described as an ought norm (Cialdini et al., 1990; De Kort et al., 2008). This norm motivates action through the threat of promise of social sanction (De Kort et al., 2008). So these norms reflect (perceptions of) others' approval or disapproval of certain behaviors (Mollen et al., 2013). People conform to injunctive norms because there is a desire to build

and maintain meaningful relationships with others (Mollen et al., 2013). 'If we do what others approve of they must approve us too' (Mollen et al., 2013, p:263).

The next paragraph will explain that public mobile-phone use is disapproved by society. Therefore activating this norm will stimulate pro-social behavior as people want to maintain meaningful relationships with surrounding others and try to avoid disapproval and sanctions. Furthermore, communicating normative messages will more likely prime or make salient already existing beliefs about the acceptability of a certain behavior, as people are already likely to hold these injunctive normative beliefs (Mollen et al., 2013). Consequently, as injunctive norms are not situation specific and more related to the social consequences of behavior, this study might focus on the activation of injunctive norms to motivate pro-social behavior.

2.4 The Irritations of Public Mobile Phone Behavior

Given that mobile phone use is habitual behavior, using the device has become a routine of behavior that is repeated regularly and tends to occur subconsciously (Oulasvirta et al., 2011). However surrounding people might feel annoyed with this disruptive behavior. This indicates that mobile phone behavior, in public social settings, has a rather negative social impact. A recent survey conducted by mobile giant Nokia in 2003 found that a staggering 89% of mobile users believe that people need to adopt better 'mobile etiquette' (Strivastava, 2005). 'Life in a media bubble has come to seem natural which resulted in the end of a certain public etiquette: on the street, we speak into invisible microphones on our mobile phones and appear to be talking into ourselves' (Turkle, 2011, p.16). This paragraph will explain why individuals are besides users, at the same time, also annoyed by the use of personal mobile devices by others in public settings.

2.4.1 General explanation for Irritations

As mobile devices are 'placeless', they enable people to communicate wherever and whenever they want (Turner, Love & Howell, 2008). The popularity of mobile phones have resulted in an increased use of these mobile devices in public places. These days people have the possibility to communicate with one another through mobile phones anytime in public places as restaurants, sidewalks, restrooms, public transportation etc. (Mak, Nickerson & Isaac, 2009). 'In this new regime a train station (like an airport, a café or park) is no longer a communal space but a place of social collection: people come together but do not speak with each other' (Turkle, 2011, p.155). Turkle (2011) illustrates that each and everybody is tethered to a mobile device and to the people and places to which that device serves as a portal. Consequently, public mobile phone use will result in the establishment of simultaneous public and private spaces (Ling, 2004; Mak, Nickerson & Isaac, 2009; Palen, Salzman &

Youngs, 2000). The personalization of public space is a key social consequence of the shift from the age of traditional mass media to today's age of personal communication technology (Campbell & Park, 2008). Accordingly, public places are commonly populated with the private lives of mobile individuals.

2.4.2 Uncomfortable Feelings

 Strivastava (2005) explains two main areas of complaint for public mobile communication that stand out: (1) Mobile loudness: mobile users speaking (more loudly) about private issues and (2) Synchronous space: the complexity of having to manage two sets of geographic locations and social environments, simultaneously. This second major complaint is related to the 'Absent Presence' effect in which people should spend attention between two locations at the same time, the environment and the mobile phone (Gergen, 2002 in Campbell & Park, 2008). People are physically present but mentally and socially elsewhere (Gergen, 2002 in Campbell & Park, 2008). As a result, individuals shut themselves off from copresent others while plugged into their mobile life (Campbell & Park, 2008). Copresent others might feel left out, even though they might respect the private space of the other. Ling (2004) for example found that a public mobile phone conversation will force copresent others to the uncomfortable position of involuntary eavesdropping (Ling, 2004). Hearing someone else's telephone conversation can lead to a unique form of embarrassment for the other, and for the whole situation (Ling, 2004). Others will respect the others' private space and private moment but the related behavior towards this situation is rather uncomfortable. So, even though you respect the other's privacy, the person not engaging in the conversation might feel left out. This was also addressed by Humphreys (2005) who explains that if a partner answers the cellphone in a social situation and he/she engages in a new exclusive interaction, the former with often show signs of anxiety or annoyance at becoming a 'Single' with its related

vulnerabilities. Consequently, it can be suggested that people not engaging in a public mobile phone conversation will respect the other's private space, and act in accordance, even if they experience uncomfortable feelings. So even though people are not comfortable with others' behavior (calling or using the phone in a social situation), individuals still respect other people's actions by pretending they are not listening and acknowledging social norms of privacy. Also Busk (2011) provides an explanation for the negative perceptions for public mobile phone use but she includes texting. Busk (2011) explains that people more or less have some idea about the time period for the interaction with the cell phone. But when it comes to Smartphones, people do not know exactly what is going on, or which kind of interaction is being performed (Busk, 2011). This uncertainty with the other's mobile phone behavior seems to be bothering us. Maybe this is because when someone holds a phone, it can be difficult to know if you have that person's attention (Turkle, 2011). 'A parent, child, partner or friend glances down and is lost to another place, often without realizing that they have taken leave' (Turkle, 2011, p.161). To some extent this is related to the need-to-listen effect explained by Sutter and Holtgraves (2013) as in these situations other people also feel left out and uncertain as they do not know what to expect. Busk (2011) indicates that time and talking about Smartphone actions ('I just need to check my email') might positively influence these social situations as other people will know what to expect. Consequently, transparency about mobile phone behavior in a public setting might positively influence the negative associations with that particular behavior.

2.4.3 Acceptance

2.4.3.1 Overall Acceptance

There exists a common perception that mobile phones are annoying when used in a public space (Monk, Carroll, Parker & Blythe, 2004). For instance, Pinchot et al., (2011) and Bajko

(2012) found that a significant amount of business meeting participants feel its rude to answer a cell phone during a face-to-face meeting. Even though these researchers investigated mobile phone perceptions in a business setting, other researchers discovered the same negative perceptions towards public mobile phone behavior for social situations (Sutter & Holtgraves, 2013; Busk, 2011). Sutter and Holtgraves (2013) found that public mobile phone conversations are perceived negatively and proposed the following possible explanations: (1) conversations are viewed negatively simply because of the existence of negative associations with mobile phones, (2) because one is exposed to only one side of the conversation (need-to-listen-effect) (Sutter & Holtgraves, 2013). To put it briefly, the use of mobile phones in (public) social situations is generally not accepted.

2.4.3.2 Behavioral Responses

Responses towards others' mobile phone use indicate to some extent a degree of acceptance. Humphreys (2005) discovered some responses to cellphone calls as reading a menu or book, drink your water or coffee, eat your food, look out the window, look at other people and play with your own mobile phone. People engage in these activities to bite the time as they feel uncomfortable when their partner is engaged in another conversation (Humphreys, 2005). Furthermore Humphreys (2005) found that these actions will help to create a 'private space' in which the partner can have a conversation as it will give the impression one is not eavesdropping on the cellphone conversation. Besides Humphreys (2005) also Strivastava (2005) explains several responses (move to neutral place, move head downward, move or turn upper body away from others, present body language that show you are not listening) towards a ringing mobile phone that show that people respect privacy (of themselves and others) in a public setting, or create a private environment within a public one.

The above shows that using a mobile phone in a public social settings is not approved as people feel uncomfortable and engage in several activities to bite the time. However, as

surrounding people attempt to create a private space for the mobile phone user, the use of mobile devices is to some extent already accepted. In conclusion, even though people experience negative feelings and related uncomfortable behaviors signalize approval, mobile phone use in public social settings is generally accepted behavior.

2.5 Other factors influencing attitudes towards public mobile phone behavior

Castells et al. (2007) describe individualism as the defining characteristic of the new mobile society. In addition, Campbell (2008) suggests that individualism, as a personality disposition, will have a great influence on one's attitude about mobile phone behavior.

Age was also found to be an influence on people's attitudes towards mobile phone behavior. Younger respondents are more frequent users and are more likely to agree to the acceptance of mobile phones in public places (Mak et al., 2009; Walsh et al., 2011). Hakoama and Shotaro (2012) studied the cell phone manners of 488 college students and discovered that those who owned a cell phone at a younger age, 15 or younger, were less careful to turn off/silence their phones when they should. Also findings of Ofcom (2011) indicate that younger age groups are more willing to use their phone in all situations, compared to the older age groups. Turner et al. (2008) also noticed a significant increase in negative affect towards pubic phone calls with older participants. So younger users are more eager to use the device in private and public situations and more willing to accept the use of mobile phones by others. This indicates that the differences in behavior is driven by the differences in social etiquette between younger and older age groups (Ofcom, 2011).

Hakoama and Shotaro (2012) discovered that people who were twenty years and older viewed others' mobile phone behaviors as not very positive but evaluated their own behavior much better compared to the general public's cell phone manners (Hakoama & Shotaro, 2012). This was also addressed by Palen, Salzman and Youngs (2000) who investigated new cell phone users' initial perceptions of seeing other people using a mobile phone in public and discovered surprisingly negative and strongly felt reactions. Particularly mobile phone use while driving and usage in public places like restaurants was disapproved (Palen, Salzman & Youngs, 2000). However, after some weeks of using a mobile phone almost all participants no longer cared about others opinions and forgot the magnitude of their first reactions (Palen,

Salzman & Youngs, 2000). This shows that people do see the inappropriateness of using a mobile phone in public and disapprove this behavior but when they become users themselves the social benefit of the mobile phone seems more important than the actual social environment. Therefore, individual mobile phone experience can influence people's attitudes on mobile phone use in public.

Finally, it was found that females are associated with more frequent use of mobile phones (Mak et al., 2009; Walsh et al., 2011). In addition, Turner et al. (2008) reported that public mobile phone use was gender-dependent and may be related to personal space boundaries between males and females. It was found that males reported a significant higher negative effect towards public mobile phone conversations compared to females (Turner, 2008). So also gender differences might influence one's attitude about mobile phone behavior.
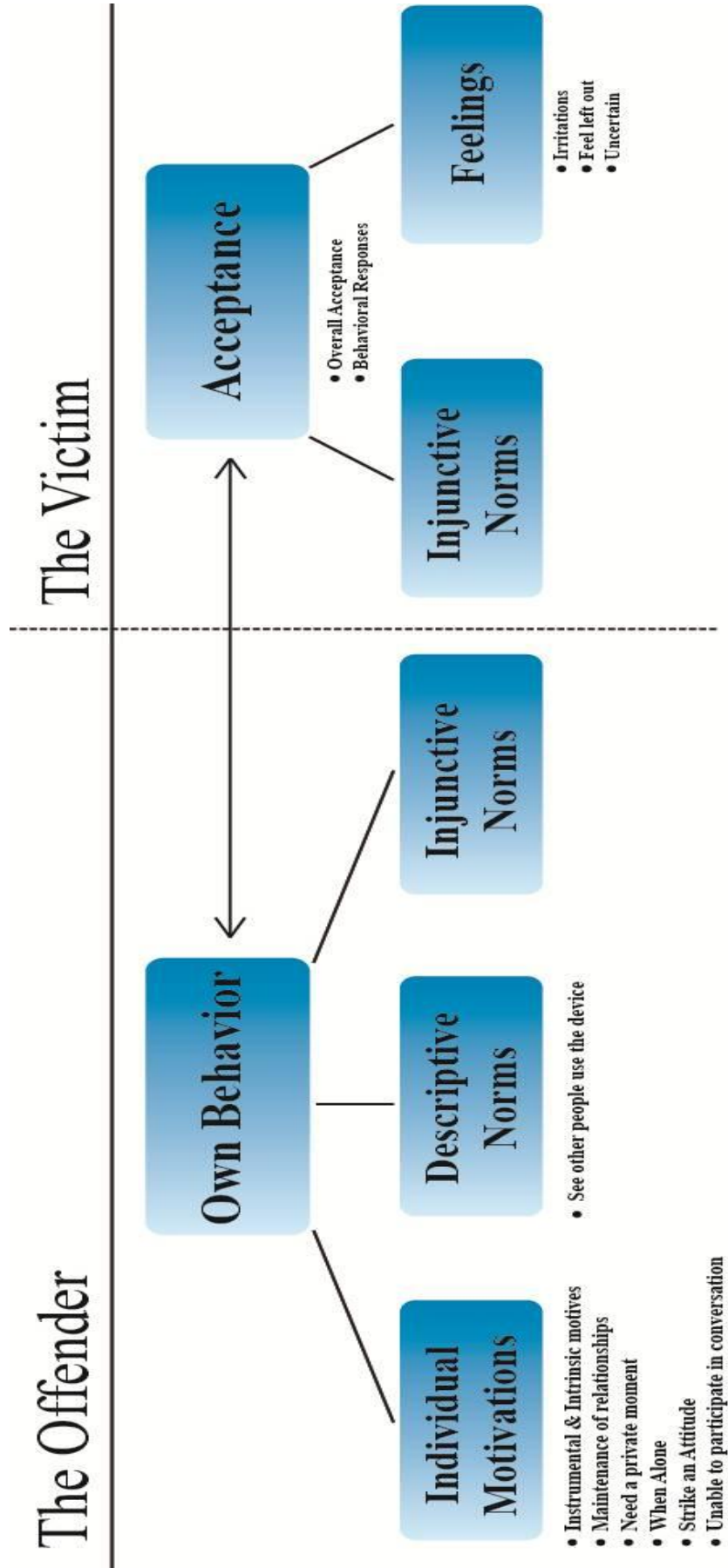
2.6 Conceptual Framework

Discussing the literature has provided some useful insights into mobile phone behavior in public social settings. By examining all the information it has become clear that there are two sights of the study. On the one hand there is 'The Offender', or the person who decides to use a mobile phone in a public social setting. On the other hand there is 'The Victim' who can be described as the person not using a mobile phone in the company of a person using the device in a public social setting. Individuals can be both Offenders and Victims, it depends on the decision to use or not to use a mobile phone in a public social setting.

The Offender's tendency to use a mobile phone, or *Own Behavior*, is influenced by *Individual Motivations* as: *(1) Instrumental & Intrinsic Motives, (2) Maintenance of Relationships, (3) Need a private moment, (4) When Alone, (5) Striking an Attitude, (6) Unable to participate in conversation* Besides that, *Descriptive Norms* or (perceptions of) the behavior of most others, influence people's mobile phone behavior. *Seeing other people using the device* is found to be a significant environmental trigger. In addition, *Injunctive Norms* or (perceptions of) others' approval or disapproval of certain behaviors can also influence people's mobile phone behavior.

The Victim's *Acceptance (Overall and Behavioral)* of the Offender's *Behavior* depends on *Injunctive Norms* and *Feelings*, e.g., *Irritations, Uncertainty and Feeling left out.*

As more or less all individuals use a mobile phone, but do not appreciate the use of others in a social setting, it might be interesting to investigate to what extent there is a relation between own Behavior and Acceptance (of the same behavior executed by others). The findings of the literature review are constructed in Figure 1.

Figure 1: Conceptual Framework

The Offender

Own Behavior

Individual Motivations
- Instrumental & Intrinsic motives
- Maintenance of relationships
- Need a private moment
- When Alone
- Strike an Attitude
- Unable to participate in conversation

Descriptive Norms
- See other people use the device

Injunctive Norms

The Victim

Acceptance
- Overall Acceptance
- Behavioral Responses

Injunctive Norms

Feelings
- Irritations
- Feel left out
- Uncertain

3. Pre-test: Focus Group

The current research aims to identify a possible relation between a Victim and Offender of mobile phone use in order to provide solutions for influencing people's mobile phone behavior in public social settings. Literature was found about public mobile phone behavior: individual motivations (internal triggers) and social norms (external triggers) for own mobile phone behavior and acceptance and feelings towards others mobile phone use. Even though several motivations for mobile phone use were recognized, more specific information is required regarding motivations for use during public social events or meetings. Furthermore, more information should be found regarding the degree of acceptance and related feelings towards others' mobile phone use. In order to require more insights about people's views and behaviors of mobile phone use during public social events a focus group interview was conducted. The focus group interview should provide more insights into the contextual triggers and the social influence of public mobile phone behavior in communal social settings.

3.1 Participants

The focus group consisted of 8 persons between 18 and 25 years. All participants were owners of a Smartphone and used the device for several years. Seven females and one male participated in the focus group interview. The interview took place at a neutral location with an informal ambiance. The aim was to discover different perceptions, feelings and motivations for mobile phone use in social (public) settings. Furthermore it was intended to discover possible techniques for reducing public mobile phone behavior in social environments.

3.2 Focus Group Interview

In order to gather realistic reactions and opinions, some creative techniques were used for the focus group. The study of Colucci (2007) was used in order to gain inspiration for conducting an effective focus group interview involving some activity oriented questions. The first part of the interview was about the participant as a 'victim' of others' mobile phone behavior. It was aspired to gather individual opinions, feelings, thoughts and behaviors when the companionship is playing with the mobile phone. A short story about the circumstances was told and a picture of the actual situation was shown in order to stimulate the participants to imagine the situation and to gather realistic reactions and feelings.

In the second part of the interview, it was aimed to discover related behaviors when the social partner leaves (visit the toilet, go to the bank etc.). How do the participants behave in a social public setting when they are alone for a moment. The situation was explained and all participants were asked to write individually their reactions or behaviors on a note and fold it. The researcher gathered all the notes and all the answers were discussed 'anonymously' in a group discussion.

The third part focused on gathering actual opinions about mobile phone behavior in public social settings. Participants were shown several pictures of social settings in which two or more people use their mobile phone at the same time. It was intended to discover perceptions, related norms and possible solutions for mobile phone use in public social settings.

Furthermore the third part confronted the participants with their own behaviors and aimed to discover the exact moments individuals use their mobile phone in a public social setting. What motivates the participants to grab their mobile phone while in a café with friends. The eight focus group members received a green and a red card, meaning 'I agree' or 'I do not agree'. Several statements or situations were explained and all participants answered by holding their red or green card. The answers, motivations and personal opinions were discussed within the group.

3.3 Analysis of the Focus Group answers

In order to collect as much information as possible the focus group interview was recorded. A mobile phone was placed in the middle of the group in order to record all questions, answers and remarks of the participants. This situation, (the use of) a mobile phone in a social situation, was also a central topic in the focus group discussion. Therefore the device on the table might have supported the participants' familiarity of the described situations during the

interview. The complete interview was typed out and all answers from different participants were marked with a number. For instance Mark said that he never uses his mobile phone, Mark is number 8, so his answer was marked by p8; 'I never use my mobile phone' (p8). In order to organize the complete interview, all answers were structured into different themes. The main themes were gathered from the literature, which are also shown in the conceptual framework: *Individual motivations, Descriptive norms, Injunctive norms, Own Behavior, Feelings* and *Acceptance (Overall and Behavioral).* The remarks/citations from the focus group participants related to these subjects were divided under these themes, and if possible organized under the sub-themes of these main topics. However, also new themes were constructed from the new received data. This way, all answers from the participants were systematically divided under different themes. The results are shown in the next paragraph.

3.4 Focus Group Results

The results of the focus group interview show insights into mobile phone behavior in public social settings. The interview enlightened that all participants agreed that due to the easiness and the diversity of the Smartphone, people have become more social in the virtual world but instead less social in the real world. Results suggests that mobile phone use in public social settings is perceived as anti-social and unacceptable. Nevertheless, participants all agree on the contribution to this behavior and feel confronted with their own actions. This assumes that people are both Victim (do not like others to use their mobile phone in public social settings) and Offender (all participants use their mobile phone in public social settings) of this behavior. By discovering more in-depth insights into public mobile phone behavior in social settings, the first conceptual framework can be improved with additional information. An overview of all concepts of 'The Offender' perspective is provided in Table 2 and of 'The

Victim' perspective in Table 3. A complete overview of the focus group findings can be found in Appendix 1.

Table 2: Conceptual framework (literature) and additional findings from focus group interview from 'The Offender'

The Offender *(The person using mobile phone in public social setting)*			
Own Behavior			
Individual Motivations		**Descriptive Norms**	**Injunctive Norms**
Maintenance of relationships	Check phone for (expected) messages from friends/family	Environmental cues:	
Time for yourself	Check device when you have private moment	*Mobile phone on the table*	Higher tendency to use mobile phone when it is on the table
Instrumental function	Check the device to search/show information	*WIFI sign*	Indicating that internet use is accepted
Use the device when Alone	Use the device when you are (a moment) alone	*Like our Facebook sign*	Indicating that people are allowed to use their mobile phone
Strike an attitude	Use device to feel more at ease un uncomfortable situations	Social Factors:	
Unable/Unwilling to participate in (group) conversation	Not able or willing to participate in the conversation	*Other people in the environment using mobile phone*	Seeing other people using their mobile device will stimulate own use
Silent moments	Use device when there is no topic of conversation	Ambiance:	People should behave social in public (social) settings and therefore should spend (more) attention towards the social environment instead of their mobile phones
		A busy and enjoyable ambiance might minimize the use of mobile phones	

Table 2 shows that intrinsic and instrumental motives are combined in only one concept being 'Instrumental function'. It was found that searching for information and showing others pictures or movies from the device are significant reasons for grabbing your mobile device in public social situations.

'When you tell something about someone, and the other does not know who that person is, you have the possibility to search for that person on the internet and show the others a picture of him/her, but you need your phone for that action'(p6) 'Everything has become so much

easier, you don't have to ask anymore, you can search for everything by yourself, it is just easy, and that's why you might use your phone much more often than necessary' (p4).

As no intrinsic reasons and numerous instrumental motives for public mobile phone use were mentioned during the focus group interview, only instrumental function is used in the study as an individual motivation.

Other discovered individual motivations for mobile phone use were unwillingness to participate in a conversation (e.g. *'I use it when the topic of conversation does not interest me, or someone tells the same thing over and over again'(p1))* and use during silent moments when there is no topic of conversation.

Additional descriptive norms were found to be a mobile phone on the table (e.g. *'Even though you do not want it, when your phone is in sight your thoughts are with your phone instead of at the conversation, and when your phone is in your jacket or purse you will not be distracted by the device'(p8)*), a WIFI sign, a 'Facebook Like' cue and the ambiance of the environment (e.g. *When the ambiance is not as pleasurable, it might stimulate mobile phone behavior'(p1)*).

Findings indicate that respondents perceive that in public (social) settings people should pay attention to the (social) environment, which could be formulated as an injunctive norm. Respondents feel that mobile phone use in public is anti-social and unacceptable but also admit that they all contribute to it. *'In the past you would start a conversation with a stranger, now everybody is busy with themselves and their telephones, and the worst thing is, I do the exact same thing'(p3).*

Since the focus group participants did not mention style and fashion as a motivation for mobile phone use, using the device for expressive reasons or hypercoordination is not used as an individual motivation in the current study.

Table 3: Conceptual framework (literature) and additional findings from focus group interview from 'The Victim'

The Victim		
(The person not using a mobile Phone in the companionship of someone using the device)		
Acceptance		
Overall Acceptance	***Behavioral Acceptance***	
	Active Response:	*Passive Response:*
	❖ Give a sarcastic remark ❖ I would give a reaction	❖ I look around and try to ignore the others' (mobile phone) behavior
Feelings	***Injunctive Norms***	
❖ *Feel left out* ❖ *Curiosity* ❖ *Uncertainty* ❖ *Irritations*	People should behave social in public (social) settings and therefore should spend (more) attention towards the social environment instead of their mobile phones	

Table 3 shows that acceptance is divided in two subgroups: overall acceptance and behavioral acceptance. Additionally, focus group findings show that behavioral acceptance again should be divided in two different sub-divisions: active and passive responses. Reactions related to action are giving a sarcastic remark (e.g. *'I would give a sarcastic remark about her behavior like 'very pleasurable what you are doing right now' (p8)*) and give a reaction to the other's mobile phone behavior (e.g. *'I would ask what she is doing and what is so important?'(p4)*). Besides that, a more passive response is look around and try to ignore the other's mobile phone use in a public social setting.

'*When my friend grabs her phone for a moment, I would not immediately 'attack' her, I first would wait, ignore the behavior and look around' (p8). 'I would wait for a moment but when it takes longer I would become frustrated and give a reaction on her behavior' (p7).*

An additional feeling related to others' mobile phone use in public social settings was found to be curiosity (e.g. *'There are so many things you can do on your Smartphone (twitter/Facebook/games etc) and it irritates me that you do not know what he/she is doing and what is so much more important at that moment than you' (p2)).*

4. Survey Research

As the literature and findings of the focus group indicate that people can be both Victim (people do not like others to use a mobile phone in social settings) and Offender (use the mobile phone for a moment) of disruptive mobile phone behavior, it might be interesting to discover to what extent there is a relation between these two concepts. For instance, how is it possible that all focus group participants do not endorse public mobile phone behavior but at the same time all admit that they participate in these disapproved activities? The current study will test the conceptual framework and aims to discover a possible relation between the Offender and Victim.

4.1 Participants

An online questionnaire was conducted to test the conceptual framework involving literature and focus group findings related to mobile phone behavior in public social settings. The main themes of the conceptual framework were also different sections in the questionnaire. The sample consisted out of 181 respondents, 136 females and 45 males with a mean age of 29 years (16–75 years, M=29, SD=12). The survey was spread via the social media (Facebook, Whatsapp and Twitter)

4.2 Method

First, the themes of the *Offender*, as also described in the conceptual framework were assessed in the survey.

     Individual Motivations for mobile phone use in public social settings were measured. These twelve *Individual Motivations* were; maintenance of relationships (expecting and sending messages), time for yourself (when you have or need a private moment), instrumental function (show and search information), strike an attitude, use when alone, unable and

unwillingness to participate in a (group) conversation, silent moments (no topic of conversation or conversation falls silent). Respondents were asked to indicate if they would use their mobile phone in a social setting (1=yes, 2=no).

The tendency to use a mobile phone in a public social setting *(Own Behavior)* was measured with 5 items. Respondents could indicate on a 4 points scale (1=never, 4=always) to what extent they would use their mobile device, keep their mobile phone on the table, feel a high tendency to grab the device, leave the phone out of their sight and prefer not to use their personal machine in a public social setting (α=.77).

Injunctive Norms of mobile phone behavior in public social environments were assessed. On a 4 points scale (1=completely disagree, 4=totally agree) respondents could specify to what extent they agreed with five behavioral statements related to mobile phone use in (public) social settings (α=.67). Examples of these statements are: 'A mobile phone should not be used during social occasions' and 'In today's society mobile phone use in public is already fully accepted' (reverse coded).

Descriptive Norms as drivers for mobile phone use in public social environments were measured with nine items. Respondents could indicate on a 4 points scale (1=completely disagree, 4=totally agree) to what extent a (1) mobile phone on the table, (2) a WIFI sign, (3) a Facebook 'LIKE' sign, (4) other people using mobile device, (5) an enjoyable ambiance, (6) mobile phone out of sight, (7) environmental signs approving mobile phone use, (8) no other people using the device and (9) an uninviting ambiance would influence own mobile phone use in public social settings. Four of these items (phone out of sight, an enjoyable ambiance, no other people using mobile phone, environmental signs approving mobile phone use) resulted in a reliable *Descriptive Norm* scale (α=.60). The other items were used independently in the study.

The survey continued with measuring the items related to the *Victim.*

Feelings towards others' mobile phone use were measured. Respondents could indicate on a 4 points scale (1= completely disagree, 4= totally agree) to what extent they would experience feelings of anger, uncertainty, curiosity, happiness, loneliness and to what extent they would feel left-out, irritated and second-choice (α=.74).

Three sub-dimensions of *Acceptance* were measured. Thirteen items were used to measure *Overall Acceptance* towards other people's mobile phone behavior in public social settings (α=.87). Respondents could indicate on a 4 points scale (1= not acceptable at all, 4= very acceptable) if they would accept someone to use a mobile phone in a public social environment. Examples of items are: 'Because you are at the toilet your friend grabs her mobile phone', 'There is an uninviting ambiance and therefore your friend grabs his phone' and 'Your social partner grabs her phone to show you something'.

Behavioral Acceptance, or responses towards others' mobile phone use, were also assessed. On a 4 points scale (1= I would never do that, 4= I would definitely do that) respondents could point out their behavioral reaction towards other people's mobile phone use. Two items measure the active response or say something of the others' behavior: 'I give a subtle remark' and 'I give a reaction' (α=.76). A more passive response was measured with one item, that is 'Look around' (trying to ignore the others mobile phone behavior). .
Two final questions were set to collect demographic data as gender and age. The format of the questionnaire is shown in Appendix 2.

5. Results

5.1 The Offender

5.1.1 Individual Motivations

Table 4 shows the percentages of respondents using their mobile device for different reasons.

Table 4:

Individual motivations: Percentages of respondents answering YES (I use my phone)

Item	Female (%)	Male (%)	Total (%)	χ^2
Want to show something	82.4	73.3	80.1	1.73
Need to search for information	75.7	77.8	76.2	0.08
Sit alone	71.3	46.7	65.2	9.10**
Send a message	66.2	55.6	63.5	1.65
Expect a message from friends/family	55.9	40	51.9	3.42
Have a moment for themselves	44.1	40	43.1	0.23
Are unable to participate in the conversation	14.7	13.3	14.4	0.05
Need a moment for themselves	15.4	4.4	12.7	3.69
Have no topic of conversation	11.8	6.7	10.5	1.30
Strike an attitude	13.2	2.2	10.5	4.37*
Are in a conversation which falls silent	11.1	0	8.3	5.41*
Are unwilling to participate in the conversation	7.4	6.7	7.2	0.02

*Note: N=181, *p<.05. **p <.01*

The results show that respondents primarily use their mobile phone during social occasions for instrumental reasons, that is to show others something from their mobile phone (80.1%) and search for information (76.2%). Besides using the device for its instrumental function, it is also used for maintaining relationships, that is sending messages to friends and family (63.5%). Finally it is found that the mobile phone is often used when people sit (a moment) alone (65.2%).

In addition, the findings indicate that a mobile phone is minimally used in social settings when people are unwilling to participate in a conversation (7.2%), when the conversation falls silent (8.3%), when there is no topic of conversation (10.5%) and when the device is needed to help people striking an attitude (10.5%).

Differences between men and women were significant as more females than males use the device when the conversation falls silent ($\chi^2(1)$=5.4, p <.02), when people sit alone ($\chi^2(1)$=9.1, p <.003) and to strike an attitude ($\chi^2(1)$=4.4, p <.037).

Table 5:

Mean (SD) scores and Independent Samples T-tests (df) on Own Behavior, Injunctive Norms, Descriptive Norms, Tendency use mobile phone when: Phone on table, Wifi sign, Facebook like, Other people are using device, Uninviting ambiance, Feelings, Behavioral Acceptance (Active and Passive) and Overal Acceptance as a function of gender

	Female	**Male**	**Total**		
	Mean (SD)	*Mean (SD)*	*Mean (SD)*	*t-test (df)*	*P*
Own Behavior	2.46 (.58)	2.20 (.62)	2.39 (.60)	-2.5*(179)	.01
Injunctive Norms	2.41 (.41)	2.48 (.54)	2.43 (.44)	.69 (61,3),	.49
Descriptive Norms	1.85 (.49)	1.84 (.46)	1.85 (.49)	-.15 (179)	.88
Tendency when device is on table	3.87 (.34)	3.64 (.49)	3.81 (.39)	-2.87** (59)	.00
Tendency WIFI sign	2.17 (.87)	1.98 (.87)	2.12 (.87)	-1.28 (179)	.20
Tendency Facebook Like	1.54 (.63)	1.69 (.76)	1.57 (67)	1.33 (179)	.19
Tendency others using	2.43 (.73)	2.04 (.67)	2.34 (.73)	-3.3** (80.68)	.00
Tendency uninviting ambiance	2.68 (.70)	2.44 (.73)	2.62 (.71)	-1.92 (179)	.06
Feelings	2.67 (.41)	2.56 (.40)	2.65 (41)	-1.65 (179)	.10
Active Response: (Subtle) Reaction	2.75 (.78)	2.66 (.76)	2.73 (.78)	-.74 (179)	.46
Passive Response: Look around	2.89 (.67)	2.64 (.74)	2.83 (.70)	-1.96 (69.53)	.05
Overall Acceptance	2.57 (.42)	2.59 (.41)	2.57 (.42)	.34 (179)	.74

Note: t-tests, N=181
$*p<.05$. $**p <.01$

5.1.2 Own Behavior

Findings indicate that the tendency to use a mobile phone in public social settings is not very high, yet also not low (M=2.39, SD=.6). As can be seen in Table 5, females (M=2.46, SD= .58) have a higher tendency to use a mobile phone in public social environments than males (M=2.20, SD=.62) (t(179) = -2.5, p <.013).

5.1.3 Injunctive Norms

Findings illustrate that respondents accept mobile phone behavior in (public) social environments to some extent (M=2.43, SD=.44). An independent samples T-Test showed no significant differences between men and women (t(61.3) = .69, ns).

5.1.4 Descriptive Norms

Results show that *Descriptive norms* (phone out of sight, an enjoyable ambiance, no other people using mobile phone, environmental signs approving mobile phone use) negatively influences own mobile phone use in public social settings (M=1.85, SD=.49). This means that when these cues are present, people feel less tended to use a mobile phone in social environments. Differences between men and women were non significant (t(179) =-.15, ns).

Nevertheless findings indicate that respondents feel a rather high tendency to use a mobile phone when the device is located on the table (M=3.81, SD.39). Females (M=3.87, SD=.34) feel significantly more tended to use a mobile phone when it is on the table compared to males (M=3.64, SD=.49) (t(59)=-2.87, p<.006).

Moreover, an uninviting ambiance (M=2.62, SD=.71) (t(179)= -1.92, ns) and a WIFI sign (M=2.12, SD=.87) (t(179) = -1.28, ns) have a diminutive influence on the tendency to use a mobile device in public social environments. However both environmental signs did not indicate significant gender differences. A significant difference between males and females was found for seeing other people using the device (M=2.34, SD=.73) (t(80,68) = -3.3, p<.001) as more females (M=2.43, SD=.73) compared to males (M=2.04, SD=.67) feel tended to use a mobile device.

Finally, a 'Facebook Like' cue (M=1.57, SD=.67) shows to have a minimal influence on the tendency for public mobile phone use. Also no significant gender differences were found (t(179)= 1.33, ns).

5.2 The Victim

5.2.1 Feelings

Findings illustrate that respondents experience more negative feelings with others' mobile phone behavior (M=2.65, SD=.411). Differences between men and women were found non significant (t(179)= -1.65, ns).

5.2.2 Acceptance

5.2.2.1 Behavioral Acceptance

5.2.2.1.1 Active Response

It is suggested that respondents would take some kind of action when their social partner is spending more attention to the mobile phone (M=2.73, SD=.78). No significant gender differences were found (t(179)= -.74, ns).

5.2.2.1.2 Passive response (Look around)

Results show that respondents (in the first place) would look around when their accompanying person is spending more attention to the mobile phone (M=2.83, SD= .70). Differences between men and women were non significant (t(69.53)=-1.96, ns).

5.2.2.2 Overall Acceptance

Table 6 presents the scores for the individual (overall) acceptance.

Table 6:

Degree of Acceptance: Mean (SD) scores and Independent Samples T-tests (df) on Overall Acceptance as a function of gender

Reason for use	Female	Male	Total	t (df)	*P*
Injunctive Norm					
Someone uses his/her phone in a social situation	2.24 (.68)	2.18 (.78)	2.22 (.70)	-.47 (179)	.64
Individual Motivations					
Your accompanying person uses his/her phone to send a message	2.78 (.62)	2.80 (.59)	2.78 (.61)	.20 (179)	.85
Your friend grabs his/her phone to show you something	3.43 (.59)	3.36 (.48)	3.41 (.57)	-.80 (91,01)	.42
Your friend uses the mobile device because you are at the toilet	3.40 (.67)	3.33 (.48)	3.38 (.63)	-.70 (105,56)	.49
Your friend is not able to follow the conversation between you and others	2.39 (.65)	2.38 (.68)	2.39 (.65)	-.11 (179)	.92
For a moment there is no conversational topic, therefore your friend grabs the mobile phone	2.21 (.66)	2.36 (.61)	2.24 (.65)	1.35 (179)	.18
Your social partner grabs his phone to check social media	2.29 (.73)	2.27 (.84)	2.29 (.76)	-.21 (179)	.83
Descriptive Norms					
Environmental Cues					
During a enjoyable evening your friend keeps on checking his mobile phone because the device is on the table	2.25 (.69)	2.29 (.63)	2.26 (.67)	.34 (179)	.74
Your friend observes a WIFI sign and uses her mobile phone	2.33 (.72)	2.40 (.69)	2.35 (.71)	.56 (179)	.57
Your friend observes a Facebook sign and uses his device	2.28 (.75)	2.40 (.69)	2.31 (.73)	.96 (179)	.34
Social Factors					
Because other people in the environment are using a mobile phone your friend also grabs his device	2.18 (.68)	2.22 (.67)	2.19 (.68)	.33 (179)	.74
Ambiance					
There is no enjoyable ambiance and therefore your friend uses her mobile device	2.23 (.72)	2.31 (.73)	2.25 (.72)	.67 (179)	.50
Other					
Your companion uses her mobile phone but explains why she uses it for a moment	3.35 (.66)	3.38 (.54)	3.36 (.63)	.23 (179)	.82

Note: 1=Not Acceptable at all, 4= Completely Accepted
*p<.05 **p<.01

The results are discussed on item level in order to determine dissimilarities in overall acceptance for different reasons of mobile phone use. For instance, are people more willing to accept others' mobile phone use when the device is used to pass the time when alone compared to when it is used to entertain when there is no enjoyable ambiance?

Findings indicate that in general mobile phone use is relatively accepted behavior (M=2.57, SD=.42). Mean scores indicate that overall, using a mobile phone in a social public environment is (more) accepted when people use it for its instrumental function, that is showing others something from the device (M=3.41, SD=.57), and use it when individuals are alone for a moment (M=3.38, SD=.63). Also, it is accepted to send a message (M= 2.78, SD=.61) although this amount increases when people give an explanation for the purpose of use (M= 3.36 SD= .63). In addition, the findings illustrate that descriptive norms are less accepted as reasons for mobile phone use. Finally, differences between men and women were non-significant (t(179)= .34, ns).

5.3 Correlations between Offender and Victim

This study aims to discover drivers for mobile phone use in public social settings and find out to what extent there is a relation between this *own Behavior* and the *Acceptance* of the same behavior of others. Pearson's Correlation test was executed to measure the correlations between own behavior, overall acceptance and all the other dependent variables. The focus will be on own mobile phone behavior and overall acceptance in order to discover a possible relation between these two concepts. Table 7 shows all the correlations between the different variables.

	Descriptive Norms	Tendency phone table	Tendency WIFI sign	Tendency Facebook LIKE	Tendency others	Tendency uninviting ambiance	Injunctive Norms	Feelings	Active response	Passive response	Gender	Age	Own Behavior	Overall Acceptance
Descriptive Norms	1	.19**	.33**	.22**	.30**	.26**	-.28**	-.13	-.03	.05	.01	.13	.32**	.20**
Tendency phone table		1	.31**	.05	.28**	.14	-.13	-.00	-.00	.09	.25**	.16*	.31**	.07
Tendency WIFI sign			1	.38**	.31**	.22**	-.07	-.03	.06	-.00	.10	.08	.23**	.06
Tendency Facebook LIKE				1	.26**	.07	.02	-.12	.06	-.07	-.10	-.01	-.09	-.01
Tendency others					1	.39**	-.11	-.04	.03	.10	.23**	.27**	.24**	.14
Tendency uninviting ambiance						1	-.22**	-.08	.00	-.03	.14	.44**	.28**	.23**
Injuntive Norms							1	.47**	.12	.04	-.06	-.25**	-.49**	-.61**
Feelings								1	.33**	.16*	.12	-.19**	-.20**	-.44**
Active Response									1	.06	.06	-.10	-.06	-.25**
Passive Response										1	.15*	.03	.06	-.18*
Gender											1	.19*	.18*	-.03
Age												1	.29**	.27**
Own Behavior													1	.32**
Overall Acceptance														1

Note. N=181
*p<0.05. **p <0.01*

5.3.1 Own Behavior

Pearson's Correlation test was executed to measure the correlations between own behavior and the other dependent variables. Table 7 shows significant positive, though rather weak, correlations between own behavior and descriptive norms ($r =.32, p =.00$), tendency to grab the phone when it is on the table (in sight) ($r =.31, p =.00$), tendency to use phone when there is an uninviting ambiance ($r =.28, p =.00$), tendency to use phone when you see others using the device ($r =.24, p =.00$) and tendency to use phone when there is a WIFI sign ($r =.23, p =.00$). This designates that a variety of environmental/social/ambiance cues to some extent

influence own mobile phone behavior. Subsequently, when these signs are present public mobile phone use will be stimulated.

Besides positive relations Table 7 also indicates some significant negative correlations. A significant rather strong, negative relation is between injunctive norms and own mobile phone behavior *(r = -.49, p =.00)*. This indicates that the more unclear the injunctive norms related to mobile phone use in (public) social environments, the more people will use mobile phones in these settings. Consequently, clear and understandable injunctive norms will minimize the use of mobile phones in public social settings.

There is also a significant relatively weak, negative correlation between own behavior and (others') feelings *(r =-.20, p =.01)*. This shows that when own mobile phone behavior increases or when mobile phones are used more frequent, the less other people would experience comfortable and positive feelings. So when individuals decide to use a mobile phone, surrounding others would experience uncomfortable feelings.

A significant positive correlation was found between own behavior and overall acceptance *(r =.32, p =.00)*. This relation will be discussed in detail in paragraph 5.3.3.

A significant weak positive correlation was also found between own behavior and gender *(r = .18, p =.01)*. Paragraph 5.1.2 already specified that females have a significant higher tendency to use a mobile phone in public social environments than males. Table 7 shows positive correlations between gender and tendency to use mobile phone when it is located on the table *(r =.25, p =.00)* and tendency to use when seeing others using the device *(r =.23, p =.00)*. Paragraph 5.1.4 also indicated that females feel significantly more tended to use a mobile phone when it's on the table and when they see other people using the device compared to males.

Finally, there is a significant positive, though rather weak, correlation between own behavior and age *(r =.29, p =.00)*. This indicates that mobile phone use increases with a higher age.

5.3.2 Overall Acceptance

Pearson's Correlation test was also executed to measure correlations between overall acceptance of other people's mobile phone behavior in public social settings and the other variables. Table 7 illustrates that there is a rather strong, though negative, correlation between injunctive norms and overall acceptance ($r =$-.61, $p =$.00). This designates that the more unclear the injunctive norms or standards of behavior, the higher the overall acceptance of mobile phone use in public social settings. More specifically, when injunctive norms become more clear, and people are aware of the standards of behavior, people will be more willing to disapprove other people's mobile phone activities in public social settings.

In addition a significant negative correlation was found between overall acceptance and feelings ($r =$.-44, $p =$.00). This shows that the more people experience negative and uncomfortable feelings towards others' mobile phone use, the higher the overall acceptance. So even though people are not at ease with others' mobile phone activities, the behavior is accepted.

Significant negative correlations are also found between overall acceptance and active behavioral responses ($r =$-.25, $p =$.00) and passive behavioral responses ($r =$-.18, $p =$.02). This indicates that when people do not respond active (give (subtle) remark) nor passive (look around) towards others' mobile phone use, the overall acceptance of other people's mobile phone behavior is high.

Finally, descriptive norms ($r =$.20, $p =$.01) and tendency to use phone when there is an uninviting ambiance ($r =$.23, $p =$.00) are positively related to overall acceptance. This shows that when there are signs 'approving' mobile phone use or when there is no enjoyable ambiance, mobile phone use will be more accepted.

No significant correlation was found between overall acceptance and gender which indicates that males and females are more or less alike when accepting others people's mobile phone use in public social settings.

Finally, Table 7 shows a significant relatively weak, positive correlation between overall acceptance and age ($r =.27$, $p =.00$). This designates that the overall acceptance of other people's mobile phone use will be higher when age increases.

5.3.3 Correlation Own Behavior (Offender) and Overall Acceptance (Victim)

Pearson's Correlation test indicates a significant positive, though rather weak, correlation between own behavior and overall acceptance ($r =.32$, $p =.00$). This shows that when own behavior is high, people use their mobile device in public social settings rather frequently, the overall acceptance of the same behavior of others would also be rather high. More specifically, when people are frequent mobile phone users themselves, they will be more willing to accept the use of the devices by others.

As discussed above, both variables are strongly negatively correlated to injunctive norms. This indicates that unclear standards of behavior stimulate own mobile phone use and overall acceptance. So when injunctive norms become more clear, people will be aware of the requested behavioral standards and therefore personal use will decrease and individuals will be less willing to accept the use of others. Additionally, a decrease in use will result in more positive feelings of surrounding others which again will negatively influence the overall acceptance of other people's mobile phone behavior.

6. Discussion

The current study examined to what extent there is a relation between own mobile phone use and the degree of acceptance of the same mobile phone behavior of others. Why are we annoyed by the use of mobile phones in public social settings while we, at other moments, also perform this behavior ourselves? It was aimed to provide solutions for influencing mobile phone use in public social settings. By reviewing existing literature on motivations for mobile phone use (in public), annoyances related to this behavior and norms, a conceptual framework was constructed. In this framework two perspectives are illustrated: (1) *The Offender*, or the person deciding to use a mobile phone in a (public) social setting, and (2) *The Victim*, the person in the companionship of an individual using a mobile device while being in a (public) social environment. A focus group and an online survey were used to investigate a possible relation between the Offender and Victim, or between *own behavior* and *acceptance*.

Results showed a positive correlation between own behavior and overall acceptance. This indicates that the more people use mobile phones in public social settings themselves, the more people are willing to accept the same behavior of others. So the more frequent mobile phone use, the higher the overall acceptance. In order to create a more social atmosphere, people's own mobile phone behavior and related to that the overall acceptance of mobile phone use in public social settings should decrease. The current study recognizes several explanations for influencing own (mobile phone) behavior.

Results illustrated that *Injunctive Norms* are (negatively) related to own mobile phone behavior in public social settings. This indicates that clear and understandable injunctive norms will minimize the use of mobile phones in public social settings. When people are aware of the standards related to mobile phone behavior, and the norm is salient, the conflict between public and private space will be solved as desired behavior is clarified, which will result in a decrease in use of mobile phones in public social settings. Unclear norms around

public mobile phone use was also indicated by Campbell (2007) who explained that people have no 'guidelines' for correct mobile phone use in public. As a result every individual has created own standards for mobile phone use and behaves according to these personal principles. So, when public social places like cafés, restaurants etc. want to minimize the use of mobile phones by its customers, communicating the standards for mobile behavior might decrease the use of the devices and stimulate social manners. Future studies might investigate to what extent a salient injunctive norm will positively influence (decrease) mobile phone use in public social settings. A practical study including (injunctive) norm activation might provide innovative and useful insights into decreasing mobile phone use in public social environments.

Besides injunctive norms or personal standards the study found other drivers for mobile phone use in public social settings. For instance, *Individual Motivations* as maintaining relationships, striking an attitude, instrumental functions, unable/unwilling to participate in conversation, silent moments, use when alone and need for a private moment might stimulate individuals to use their mobile devices. Most people use the device in public social settings for its instrumental function: to show others something (pictures, movies etc.) from their devices or to search for information. So mobile devices can be seen as supportive participants of the conversation and therefore are viewed as part of the social ambiance. Besides that, the mobile phone is often used for sending messages to friends and family, to maintain relationships, which is in accordance with findings of earlier studies described in the literature review. Finally, the device is often used when individuals are alone which confirms that people feel vulnerable in situations where they are, seem or feel alone and to compensate for being alone use their mobile phone as a self-defense mechanism to justify their singular presence in public spaces (Goffman (1963, 1971) explained in Humpreys (2005)). All in all, findings show that the mobile phone in public social settings is mainly used for its numerous

instrumental and social functions and to compensate for being/seeming alone. Given the number of functions it provides it is no surprise that devices are integrated into young people's lives. Findings of Ofcom (2011) show that 81% of all Smartphone users and 60% of all the standard mobile phone users have their device switched on at all time. This shows that numbers of (young) people are extremely attached to their devices (Walsh et al., 2008). These people who are highly involved with their mobile phone are described as people who perceive mobile phone use as an integral part of who they are (self identity) (Walsh, White, Cox & Young, 2011). Consequently, in order to discover more specific internal drivers for mobile phone use (in public), future studies should focus on the relation between mobile phone use and self-identity.

Besides internal or personal drivers for mobile phone use in public social settings the current study discovered some external drivers or *Descriptive Norms* (see other people use the device, phone on Table, WIFI sign, Facebook sign and the ambiance of the environment). Results show that a significant amount of respondents have their mobile phone on the table and use it rather frequently when at a terrace with friends or family. However, a large amount of people answered they prefer not to use their mobile phone in these situations. Therefore it can be assumed that even though most respondents have their mobile phone on the table, and sometimes or often use the device in these situations, the largest part of the respondents do not want to use their mobile device while being on a terrace or public social environment. Since, people do not want to use the device, though use it rather frequently, the mobile phone on the table might be a significant environmental trigger for use. This assumption can be confirmed since it was found that all respondents feel a (high) tendency to use a mobile phone when the device is located in sight of its user. Also Pearson's Correlation test showed that a mobile phone on the table is positively related to own mobile phone use in public social settings. Besides a mobile phone on the table, an uninviting ambiance, a WIFI sign and seeing

other people using the tool are found to be external cues significantly related to own mobile phone behavior. On the other hand, the phone out of sight, an enjoyable ambiance, no other people using mobile phones and environmental signs approving mobile phone use negatively influence the tendency to use the mobile phone. This again confirms the significant influence of seeing a mobile phone (on the table or used by others) on own mobile phone use in public social environments. As the mobile phone in sight of its user is found to be a significant trigger for own mobile phone use, stimulating customers to keep their mobile phone out of sight (purse, jacket or pocket) might minimize mobile phone use in public social places. In order to test this finding, a practical future study might investigate the influence of mobile phones (on tables or used by others) on own mobile phone use.

In addition, this study showed a positive relation between gender and own mobile phone behavior. Results indicate that the tendency to use a mobile phone in public social settings is significantly higher for females. When a mobile phone is in sight (on the table or used by others) females feel a significant higher tendency to use the device. Since it was found that different environmental/social/ambiance cues stimulate mobile phone behavior, it can be suggested that females are more sensitive to these external signs. Consequently in relation with the literature (Mak et al., 2009; Walsh et al., 2011), results show that females are more frequent users of mobile phones in public social environments. Future studies might investigate the different influences of environmental cues on mobile phone behavior in public between males and females. Additionally, significantly more females compared to males use the device when they sit (a moment) alone and use the mobile phone to seem occupied. This suggests that males probably feel more comfortable when sitting alone as the use of males in these situations is significantly less compared to females. This assumption is supported by the significant difference in mobile phone use when the conversation falls silent. Again, females have a higher need to use the mobile phone in a rather uncomfortable situation. Future studies

might test the hypothesis that males feel more comfortable when alone in public (social settings) and therefore have a lower need to use a mobile phone compared to females.

Results also showed significant positive correlations between age and both behavior and acceptance. This illustrates that the higher the age, the more mobile phone use and the higher the acceptance. However, literature showed that younger users are more eager to use the device in private and public situations and more willing to accept the use of mobile phones by others. Since, the mean age of the current study is rather young future studies should focus on the differences in acceptance and behavior of mobile phones in public social settings between younger and older age groups.

Besides implications for influencing own mobile phone behavior, the study also explains approaches for influencing (decreasing) overall acceptance in order to create a more social atmosphere, without mobile phones, in public social settings. People believe that in today's society it is approved to use a mobile phone during social occasions and therefore this behavior is perceived as normal. This indicates that public mobile phone use in social environments is to some extent accepted. However, more than half of the respondents answered that it is not approved to use a mobile phone in the companionship of other people, which can be described as a social setting. Moreover, most people prefer a decrease in mobile phone use at public social environments. This indicates that even though mobile phone use in public social environments is in today's society generally perceived as normal accepted behavior, people do believe that a mobile phone should not be used in these situations.

A reason for not approving others' mobile phone use is related to the experienced negative feelings. When someone else is more busy with their mobile phone than with their social partner, most people would experience uncomfortable feelings and therefore do not accept or approve mobile phone behavior in (public) social settings. However, results showed that *Feelings* are negatively correlated to overall acceptance. This indicates that even though

people experience uncomfortable feelings, individuals would still accept others' actions. Literature indicated that people respect others' actions by pretending they are not listening and acknowledging social norms of privacy. So people do not act in line with their personal feelings and perceptions (the desired standard of behavior) but act in accordance with the social norms of privacy. This indicates the unawareness or unavailability of social norms of public mobile phone use.

That it is not approved to use a mobile phone in a social situation is besides uncomfortable feelings also supported by the finding that most people would respond actively by giving a (subtle) remark about the others behavior. This again designates people's disturbance towards mobile phone use in (public) social settings. A significant negative correlation was found between *Active Responses* and overall acceptance which indicates that that the more people are intended to take some kind of action by giving a (subtle) remark towards the others' mobile phone behavior, the less mobile phone use in public social settings is accepted. So individuals who immediately give a comment towards others' mobile phone use are those who do not accept public mobile phone use in public social environments. Instead, more passive responds can also designate that behavior is not accepted. The more people look around and try to ignore the others' mobile phone use, the less the behavior is accepted.

However, the use of mobile phones in public social environments is (more) accepted when people want to show others something from their devices and when individuals are alone for a moment. Furthermore it is generally accepted to use the device to send a message. Remarkably, the degree of acceptance increases when people give an explanation for the purpose of use. So, when people would explain why they need to use their mobile phone for a moment, the same behavior would be more accepted. Future studies should examine in a

practical study to what extent explanations of mobile phone actions would influence the degree of acceptance of mobile phone use by others.

That it is generally accepted to use a mobile phone in public social environments instead not preferred nor approved to use the device in the companionship of other people (which can be described as a social setting) due to related uncomfortable feelings and the minimal likelihood of ignoring the others' behavior, indicates that the injunctive norm is unclear. Results showed that *Injunctive Norms* are negatively correlated to overall acceptance. This indicates that clear injunctive norms will negatively influence overall acceptance. So, in relation to own behavior, clear injunctive norms will clarify the requested standards of behavior which will stimulate people to disapprove other people's mobile phone use in public social settings. Consequently, businesses should clarify the requested behavioral standards related to mobile phone use in order to influence mobile phone behavior and acceptance.

In conclusion, understandable injunctive norms are essential for influencing own mobile phone behavior and the degree of acceptance of the use by surrounding others. Clarifying behavioral standards related to mobile phone use in public social settings is of major importance for influencing people's mobile phone behavior. In addition, the clearer the injunctive norms, the less mobile phone use is accepted by surrounding others. So, noticeable behavioral standards of mobile phone use are required to create a more social atmosphere, without Smartphones, with each other.

6.1 Limitations

This investigation into a possible relation between own mobile phone behavior and the degree of acceptance of the same behavior of others also has its limitations. First, the sample consisted of 181 respondents from which 136 were females. This small amount of males (45)

in this sample might have influenced the results since it was found that females are more frequent users of mobile phones in public social environments. Future studies might increase the amount of males in the sample or focus solely on females since they are more frequent users.

It was aimed to discover motivations for mobile phone use in public social environments. However, since respondents are not in the described situation, they were asked to imagine being a public social environment. As respondents need to imagine being in a particular condition, and think of their own feelings and behaviors under these circumstances, the answers might not correspond with the actual situation. Though, all people can easily imagine themselves in the described position as it is a rather common and recognizable situation. So even though it is not a practical study, the familiarity of the described situation will positively influence the reliability of the answers. Yet future studies might execute a more practical fieldwork study and examine real responses and reactions in the field.

6.2 Future and practical implications

In order to reduce mobile phone use in public social settings and to influence acceptability of others' behavior, we recommend to clarify the injunctive norms around public mobile phone use. Instead of asking customers to hand in their Smartphones, like the example of restaurant Eva explained in the introduction, restaurants, cafés etc. should clearly communicate the standards of (mobile phone) behavior in order to decrease mobile phone use. As it is found that a clear injunctive norm minimizes own use, the standards of behavior should be communicated towards the customers in order to diminish the use of these devices. Since the study shows that there is no clear standard for behavior related to mobile phone use, people can still be influenced as they are not aware of the social 'rules' related to mobile phone use in public social settings. For example, use posters or small signs (on tables, on coasters etc.)

to indicate the injunctive norm that it is preferred not to use mobile phones when surrounded by others. Since people often use the mobile phone when they are alone, and it is also more accepted to use the device when alone, the focus should be on disapproval of the use in the companionship of others. Furthermore, the focal point should be on females since they are more frequent users compared to males.

In addition, as it is found that a mobile phone in sight of its user (especially when located on the table) stimulates own mobile phone use, restaurants, cafés or other social public locations that prefer minimizing mobile phone use should prevent the device becoming in sight of its customers. Therefore it should be communicated that it is preferred not to place a mobile phone on the table. For example kindly ask customers to keep their mobile devices in their purses or pockets. Instead of only public social locations, this can be applied to all kinds of environments or situations.

In order to effectively communicate standards of behavior and activate social (injunctive) norms, environmental cues should be used (De Kort et al, 2008; Krupka & Weber, 2009). 'Drawing subjects' attention to the likely behavior of others or to others' prescriptions for appropriate behavior both increase the frequency of pro-social behavior to very similar extends' (Krupka & Weber, 2009, p:314). Since it was found that norms exert an influence on behavior only when they are primed with cues from the environment (Krupka & Weber, 2009), future studies should test the actual influence of environmental cues on mobile phone behavior. A practical study should find out to what extent norm activation by using environmental signs influences mobile phone use in public social settings. Explicit norm activation should be used as it is more direct and clear and therefore has a stronger effect than implicit norm activation (De Kort et al., 2008). However, when a future study wants to focus on mobile phone users above 20 years, both explicit and implicit norm activation can be effective (De Kort et al., 2008).

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8. Appendix

Appendix 1: Focus Group Results

The results of the focus group indicate that public mobile phone behavior is evaluated as unacceptable, anti-social and terrible. However, at the same time this behavior is indicated as confronting and recognizable as personal stories and experiences are being told.

'By seeing this poster you are confronted with your own behavior, I realize that I also contribute to this terrible ambiance'(p8).

All participants agreed that mobile phone use in public social settings is unacceptable but also admit they all participate in this undesirable behavior. This suggests that the results of the focus group will provide considerable insights into people's mobile phone behavior in public social settings as all participants are performers of the disliked behavior. As explained above, the answers of the focus group participants are dived in different themes. The main themes arise from the literature and can be described as factors that stimulate mobile phone behavior in public. The topics under the main themes also arise from the literature but most are new collected sub-themes from the focus group interview. All themes describe motivations, behaviors or perceptions towards mobile phone use in social public settings.

Individual motivations

Maintenance of relationships: Expecting messages from friends and family
The first motivation for mobile phone use found was maintenance of relationships. Focus group participants point out that using the mobile phone for organizing social life is one of the main motivations for its use. Furthermore it was indicated that when participants expected a (important) message of family, friends, work etc, more attention is spend to the mobile phone.

'Even though we are together here in a social setting, I did check my phone a moment ago because I expected a message'(p6) 'And that cannot wait for a moment?'(p7) 'Well, when I expect something, I do pay much more attention to my phone'(p6).

Time for yourself: Use the mobile phone to escape for a moment

Besides expecting important messages of family or friends, it was found that when individuals have no possibility to check their mobile phone for a while, because they are at work etc., the first thing they do during the coffee or lunch break is check their phones.

'It has gone so far that when I am at work and I have my lunch break, I am glad I can check my phone and my messages and Facebook etc., since I have no opportunity during the day'(p1)

So when people have a moment for themselves, they check their mobile phones and show a sign of activity in their virtual social world. This finding confirms the literature of Turkle (2011) stating that people might use their mobile phone to mark themselves as absent and signal their departure by glancing down at a mobile device during dinner or a meeting.

Instrumental function: Variety of functions that make life more easy

Participants of the focus Group addressed that a significant reason to grab your Phone is when you are telling something you might want to show others 'evidence' or other images etc. of your story.

'When you tell something about someone, and the other does not know who that person is, you have the possibility to search for that person on the internet and show the others a picture of him/her, but you need your phone for that action'(p6)

The internet access on mobile phones has made life easier as you can find and search all information you need by yourself.

'Everything has become so much easier, you don't have to ask anymore, you can search for everything by yourself, it is just easy, and that's why you might use your phone much more often than necessary' (p4).

This instrumental function of the mobile phone can also stimulate immediate action. For instance when the conversation enlightens topics that require action: Congratulate a friend, send an important email etc.

'When I hear something, that it's someone's birthday or something, and I want to congratulate this person, then I will grab my phone'(p1)

Using the device when you are alone or to strike an attitude

As the literature shows that singles use mobile phones to compensate for being alone (Humphreys, 2005), the focus group aimed to test these findings. Singles want to protect themselves from others by seeming occupied (drinking coffee, read a newspaper, play with your mobile phone) in order to avoid being approached and legitimize their presence in the public place (Humphreys, 2005). Consequently, the participants of the Focus group were provided with a situation in which they were in a café with a friend, and the friend is visiting the restroom. The question was asked, what would you do? All participants answered that they would grab their phone.

'I would grab my phone, take a zip of my drink, and smoke a sigaret' (p1) 'I would grab my phone and put it away when he/she is coming back'.

Furthermore it was found that participants grab their phone as they want to strike an attitude in a social environment.

'I will grab my phone as I do not want to sit 'alone', I try to hide myself or show the people that I'm not alone or something, otherwise I look so alone, with my phone it seems I'm busy with something and I do not feel so alone'(p2). 'Yes to strike an attitude in a social environment' (p2/p4). 'You can feel very uncomfortable when you sit alone and a mobile phone can hide this feeling'(p7) 'When you play with your phone it looks like you are not bored or do nothing and look around'(p2).

The participants confirmed the literature on public mobile phone use and made clear that in an social setting, it is rather difficult to feel comfortable when being alone for a moment. As a result the mobile phone is used as a social element or self-defense mechanism to show others you are not really 'alone'.

'I think you use your phone to strike an attitude when you are alone, because there are so many other people, and you do not want to bother them so you also do not know where to watch or how to behave and a mobile phone will give you the attitude you need at that moment'(p6).

Unable/unwilling to participate in conversation

Literature found that when one With cannot participate in a Crosstalk (one of the With's is in a conversation with someone else (in person or on the phone)) he/she tries to occupy himself (read the menu, grab the mobile phone etc.) to avoid feeling awkward (Humphreys, 2005). However, opposed to a Crosstalk with a third person physically approaching, a chat on the phone may lead to social anxiety on the part of the person left out of the phone interaction (Humphreys, 2005). The focus group interview aimed to test this theory. Participants were asked to imagine themselves in a café with some friends and different questions were asked. First it was found that all participants would use their phone one or several times during the evening. Furthermore it was asked if the interviewees could describe the moments in which they might grab their mobile phone. Answers showed that when one is unable or unwilling to participate in the conversation the mobile phone would be used.

'When I do not follow the topic of conversation'(p2) 'I use it when the topic of conversation does not interest me, or someone tells the same thing over and over again'(p1)

Furthermore it was found that when participants did not participate in a conversation, a sound or light from the mobile phone will stimulate people to check the device.

'When I'm not participating in the conversation I will check my phone'(p3) 'When I'm in a conversation and I would see this I would at the same time check my phone and continue the conversation'(p7) 'It would really catches my attention' (p1/p7/p2/p5)

Silent moments: No topic of conversation

Besides the unwillingness or unableness to participate in a conversation silent moments, moments when there is no topic of conversation, was also addressed as a motivation for mobile phone use.

'During silent moments or you have nothing to talk about anymore' (p8)

Injunctive Norms

People in public (social) settings should pay attention to the (social) environment

A poster with different images of groups of people (partners, friends, groups, colleagues etc.) in public social environments playing with their mobile phones are shown to the focus group participants. While the poster is observed by all participants several first reactions are given. *'Oh this is terrible'(p2) 'Now you see how bad it really is'(p7) 'This should not be acceptable'(p5) 'If I see it like this, I feel really bad'(p5) 'This is really bad, but this is reality' (p8/p7).* These spontaneous reactions to the poster indicate that the participants evaluate this behavior as anti-social, and terrible but at the same time very confronting and recognizable as personal stories and experiences are being told.

'By seeing this poster you are confronted with your own behavior, I realize that I also contribute to this terrible ambiance'(p8). 'When you see these images you think this cannot be happening, this is reality but this cannot go any further' (p4) 'You are confronted with your own behavior, and that makes you more conscious about your individual actions'(p1).

Furthermore participant's opinions were asked about public mobile phone behavior and all agreed about the negative influences on people's social behaviors.

'It has a bad influence on people's social behavior'(p5) 'In the past you would start a conversation with a stranger, now everybody is busy with themselves and their telephones, and the worst thing is, I do the exact same thing'(p3) 'Some people enter a bus and cannot even say hello to the bus driver because they are busy with their phones, amazing'(p3) 'I went shopping last week and a female almost bumped at me since she was so busy with her phone' (p5) 'I hate it when people make a phone call and everybody can hear the conversation'(p4)

All participants agreed that this behavior is anti-social and unacceptable but also admit that they all contribute to it. These findings suggest that people evaluate this behavior as anti-social, as minimal attention is spend towards the social environment, which can be described as an injunctive norm. This norm indicates that people in social public settings should behave social and therefore attention should be spend to the (social) environment instead of the mobile phone. Even though participants agree on this standard of behavior, results show that real behavior is not in accordance with this standard. As people want to behave according to

this norm but all admit they behave differently, it can be suggested that this norm is not salient.

Environmental cues (Descriptive norms)

The focus group participants explained that according to their opinions public mobile phone behavior is more stimulated than reduced. *'I have never seen anything that stops or tries to reduce public mobile phone behavior, rather strange actually now I think about it'(p8) 'Using your phone in public is more stimulated than reduced as companies communicate: go to our website or like our Facebook page'(p8)*. As participants describe that mobile phone behavior in public is more stimulated that reduced, this section will describe possible environmental cues that trigger people to use the mobile phone in public (social) settings.

Mobile phone on the table

'It was found that when the companionship has the telephone on the table, people more often also place their mobile phone on the table instead of in their jacket or bag.

'If the other person also has the telephone on the table I will also lay my smartphone on the table'(p4/p8) 'When my bag is on the other side of the table I will place my phone on the table, but I will turn it around'(p6) 'When I expect an important message or call I will place my mobile on the table, but I will also turn it around'(p3).

In the answers it is often explained that the participants will turn the phone around when it is placed on the table. Motivations for this behavior were asked and it was found that participants do this to 'protect' themselves from being distracted by their mobile phone.

'With the Iphone you immediately see all the incoming messages and when you see this you are more tended to read them immediately and send a reaction' (p4) 'When you see these messages you read these messages, even though you do not want to read them, you will read them when you see them'(p1). 'Exactly, and when the phone is turned around you are not bothered by these messages, you will see and read them later'(p4). 'It is just automatic or habitual behavior'(p1) 'When your mobile phone is out of sight you will not check your mobile phone as much' (p4). 'Even thought you do not want it, when your phone is in sight your thoughts are with your phone instead of at the conversation, and when your phone is in your jacket or purse you will not be distracted by the device'(p8). 'I really think that when

your phone is out of sight you will not grab the device as much'(p5/p1) 'When your telephone is on the table, you will check it much more'(p3)

So the answers of the participants indicate that a mobile phone on the table is a significant trigger for mobile phone behavior. Users protect themselves by turning their phone around except it will not completely keep their attention from the device. Furthermore it was found that in the first place the mobile phone will not immediately be placed on the table but when the device is used for a moment it most of the time will stay on the table. However, the influence of the behavior of others should not be underestimated.

'It depends what the others do'(p4) 'When you are in a café with a friend and your friends checks his phone for a moment, then I often also will grab my phone, but when you are in a conversation and there is no phone in sight, the phone most of the time will stay in the purse or jacket' (p4).

WIFI
One of the Focus Group participants mentioned the WIFI sign as a possible trigger for mobile phone use. Even though the other participants did not agree, the WIFI sign was mentioned as a significant trigger when they were abroad.

'WIFI only has an influence on my behavior when I'm on holiday'(p7). 'During my trip to Australia we went from WIFI place to WIFI place to keep in touch'(p3).

Even though participants did not evaluated the sign as a trigger for mobile phone use, the WIFI symbol might address the descriptive norm that internet use at that location is accepted.

Like our Facebook
Also the 'Like our Facebook' sign of businesses is revealed as a possible sign to use your mobile phone. However people will most likely not Like the page without a reason. For instance when photos are taken and placed on the page or there are special offers available etc. then people have a reason to Like the Facebook page.

'But also Like our Facebook, when I see this I will search for the café or restaurant where I am at that moment'(p4) 'But it depends, you do not do this for no reason, for example when

foto's are taken during the evening and these will be placed on the Facebook than I will Like the Facebook ,or when special information or offers are placed on the page, I have a reason to Like it'(p5). 'I totally agree, I will not like a Facebook page of a business for no reason'(p4).

As with the WIFI sign, businesses communicating to like their Facebook signal that internet use is accepted behavior.

Social Factors (Descriptive norms)

See other people in the environment using their mobile phones
Literature suggest that seeing other people at the same location using a mobile phone signalizes to some extend the approval and acceptance of that behavior which will stimulate own use (Turner et al, 2008;Mak, Nickerson and Isaac, 2009) So, seeing other people using a mobile phone in public will stimulate an individuals' (mobile-phone) behavior. The findings of the Focus group interview also indicate that seeing other people at the same location with a mobile phone unconsciously will stimulate people to grab and check their own mobile phones.

'When you are in a café or terrace and nobody is busy with their phone you will not think about the device, but I think that when you see someone with a phone it will unconsciously stimulate you to also grab that thing' (p7).

Biel and Thøgersen, (2007) also found that situational factors or environmental cues might determine the social rules or social norms at a specific location. 'Since behavior often take place in a social context, the behavior of others is likely to influence which behavioral decision an individual takes' (Biel and Thøgersen, 2007, p.97). This assumes that when you see other people in the same setting using their mobile phone, you are more likely to also use your mobile phone. So, by observing others, social rules or norms are inferred (Biel and Thøgersen, 2007).

The Ambiance of the Environment (Descriptive norms)
Furthermore, the ambiance in the café might also influence mobile phone behavior. Participants disclose that when it is very busy and there is an enjoyable ambiance at the location the mobile phone will be used less.

'I think that when it is very busy and there is a pleasurable ambiance I most likely will not grab my phone compared to when there are no people around me'(p7) 'When the ambiance is not as pleasurable, it might stimulate mobile phone behavior'(p1) 'The ambiance of the environment has in my opinion a considerable influence' (p7)

This indicates that when there is no enjoyable ambiance, people will be more willing to use their mobile phone. This assumes that the more pleasurable the evening, which includes the ambiance, the less mobile phones are used.

Feelings and Perceptions (victim)

Irritations: The degree of conversation participation influences irritations towards mobile phone use
Focus group participants were asked how they would feel when they are together with some friends in a café and one of them will grab his/her phone. Participants feel less left out when one of the friends grabs the phone in a group compared to a situation when they are with only one friend.

'When there is a conversation in a group, and you are telling something and someone will grab her phone, that will still annoy me' (p5). 'Within a group you can have different conversations, and when one of my friends does not participate in a conversation and grabs her phone, it won't bother me'(p5) 'I think it matters whether you participate or nor participate in a conversation'(p2) 'When you are in a conversation with someone and he/she grabs the mobile phone, that will definitely annoy me'(p5)

So, due to the different conversations that might take place in a group, people might feel less irritated as one of the group members grabs his/her phone. It can be assumed that the degree of participation in a conversation can influence the irritations towards grabbing the mobile phone (full participation more irritation).

Feeling left out (second choice)
Literature already addressed people's uncertainty related to someone else's mobile phone behavior. It was found that people not engaging in a public mobile phone conversation will respect the others' private space, and act in accordance, even if they experience uncomfortable feelings of loneliness, embarrassment and awkwardness. In the focus group a situation was explained, (imagine you are in a café and your associate grabs his mobile

phone), and participants were asked to describe their first reactions to the situation: How would you feel? All reactions were rather negative and instead of uncertainty, feeling left out or 'second choice' were central answers given.

'I would have the feeling I have a more pleasant time when I go sit somewhere else as I would feel very annoyed, alone and uncomfortable with my friends' behavior. I would feel like I'm an outsider myself' (p6). 'I would feel irritated, and also feel left out, an outsider, not important anymore' (p4).

Curiosity

Focus group participants were provided with a list of emotions and had to choose related emotions to a situation in which the friend is paying more attention to its mobile device. Most frequent answers chosen were: unsociable, irritated, ignored, uncomfortable, an outsider, annoyed, lonely, curious, alone, feel left out. Hence it can be assumed that there are a significant amount of negative associations with public mobile phone behavior. From the list, curiosity was the only 'positive' association which was chosen some times. As the literature explained that with Smartphones people do not know exactly what is going on or what kind of interaction is performed the participants were asked to explain curiosity.

'I choose curiosity since I would be very curious what is so much more important at that moment than a conversation with me. You are with me but you are more busy with your phone, than I would like to know what is so much more important'(p2) 'There are so many things you can do on your Smartphone (twitter/Facebook/games etc) and it irritates me that you do not know what he/she is doing and what is so much more important at that moment than you'(p2)'Yes it would be completely different when someone tells what he/she is doing, at that moment you know it is not personal and that it is just something he/she has to do, and you also have a time indication which will positively influence the social ambiance'(p8).

Uncertainty

In relation with curiosity, also a feeling of uncertainty arises when other people pay more attention to their mobile device. As the Smartphone has a variety of functions people do not know exactly what is going on, or which kind of interaction is being performed (Busk, 2011). This uncertainty with the others' mobile phone behavior seems to be bothering us. Busk (2011) indicates that transparency about mobile phone behavior in a public setting might

positively influence the negative associations with that particular behavior. This suggestion was examined in the focus group interview and results show that transparency of actions and a time indication will minimize feelings of uncertainty.

'Yes it would be completely different, at that moment you know it is not personal and that it is just something he/she has to do, and you also have a time indication which will positively influence the social ambiance'(p8).

(Behavioral) Acceptance
Look around (and ignore the behavior)
The focus group participants point out that in the first place others mobile phone behavior will be ignored and they would just look around and wait until the associate is finished.

'When my friend grabs her phone for a moment, I would not immediately 'attack' her, I first would wait, ignore the behavior and look around'(p8). 'I would wait for a moment but when it takes longer I would become frustrated and give a reaction on her behavior'(p7)

Other answers provided from a ranking also indicated that participants in the first place would look around, wait, ignore the others behavior or grab their own phone, but after a couple of times a hint or comment is given. The influence of the amount of times a smartphone is used on personal behavior was also emphasized.

'It is a difficult situation, when he/she constantly checks the mobile phone during the evening than I would rather go somewhere else, go home, but I would not mind if he/she only checks the smartphone a couple of times'(p1,p3,p8).

Participants were asked to imagine a pleasurable situation with associates in a café in which one of your friends grabs the mobile Phone and plays with the device for a while. Most participants would continue with the conversation and ignore the behavior but would be bothered or annoyed with the friends' behavior.

'It does depend whether it is a onetime action or not, if he or she continues with these actions I would be more frustrated then when she grabs it for a moment and put it away again' (p3)

'It would also help if he/she explains what she is doing, oh sorry I have to answer my mother, then I know what she is doing'(p6)

The participants make clear that an explanation for the mobile phone behavior would help them to accept the others' actions on the device.

Take action: Give a (sarcastic) reaction
All respondents answered that they would give a reaction about the behavior.
'I would give a sarcastic remark about her behavior like 'very pleasurable what you are doing right now' (p8)''I would ask what she is doing and what is so important?'(p4)

So, participants agreed on giving (sarcastic) comments about the annoying behavior. Though, participants did mention that the type of companionship will influence their behavior and reaction.

'My reaction would also depend on the person with whom I am in the café, for instance I would ignore this behavior of a classmate or 'old' acquaintance but with a close friend I would take action on the behavior'(p1) 'I would also ignore this behavior of 'vague' acquaintances and say to myself this is the last time I met with him/her'(p7)

Appendix 2: The Questionnaire

http://www.surveymonkey.com/s/8GKTFCW

Mobiel Telefoongebruik in Sociale Situaties

Beste respondent,

Alvast bedankt dat u even de tijd wil nemen om deze vragenlijst in te vullen. Deze enquete is deel van mijn afstudeeronderzoek van de opleiding Communicatie Wetenschappen aan de Universiteit Twente. Het zal ongeveer 5 tot 10 minuten van uw tijd in beslag nemen. De vragen zullen gaan over uw ervaringen met mobiele telefonie en dan vooral over het gebruik ervan tijdens sociale gelegenheden.

Ontzettend bedankt voor uw deelname aan mijn onderzoek!

Groetjes Maaike Geerdink

| 11% |

Volg.

Mobiel Telefoongebruik in Sociale Situaties

1. Op welke momenten pakt u uw mobiele telefoon wanneer u in gezelschap bent van anderen? (familie, vrienden, collega's etc.) Kies welke van de volgende antwoorden op u van toepassing zijn (meerdere antwoorden mogelijk).

Ik pak mijn telefoon als....:

☐ Ik vrienden/familie een berichtje wil sturen ☐ Ik even iets wil laten zien

☐ Ik even tijd voor mezelf heb ☐ Het gesprek stilvalt

☐ Ik een berichtje verwacht van vrienden/familie ☐ Ik mezelf een houding wil geven

☐ Ik geen zin heb om deel te nemen aan een gesprek ☐ Er geen gespreksonderwerp is

☐ Ik alleen zit ☐ Ik even een moment voor mezelf nodig heb

☐ Ik niet kan meepraten met het gespreksonderwerp ☐ Ik iets moet opzoeken

☐ Anders namelijk

[   ]

| 22% |

Vor.   Volg.

Mobiel Telefoongebruik in Sociale Situaties

2. Stelt u zich voor u zit gezellig op het terras, geef s.v.p aan in hoeverre u het eens bent met de volgende stellingen.

Als ik op het terras zit......:

	Nooit	Soms	Regelmatig	Altijd
Pak ik mijn telefoon	○	○	○	○
Ligt mijn telefoon op tafel	○	○	○	○
Heb ik snel de neiging om mijn telefoon te pakken	○	○	○	○
Laat ik mijn telefoon uit het zicht (tas/broekzak)	○	○	○	○
Pak ik liever mijn telefoon niet	○	○	○	○
Irriteer ik mij aan omstanders die met hun mobiele telefoon bezig zijn	○	○	○	○

33%

Vor.   Volg.

Mobiel Telefoongebruik in Sociale Situaties

3. In hoeverre bent u het eens met de volgende stellingen:

	Helemaal Oneens	Oneens	Eens	Helemaal Eens
Een mobiele telefoon hoort men niet te gebruiken in gezelschap	○	○	○	○
In onze maatschappij is het de normaalste zaak dat mobiele telefoons gebruikt worden tijdens sociale gelegenheden (diner, verjaardag, feest etc.)	○	○	○	○
In het algemeen mag een mobiele telefoon tijdens sociale gelegenheden gebruikt worden	○	○	○	○
Men hoort een mobiele telefoon niet te gebruiken in het openbaar	○	○	○	○
Mobiel telefoongebruik in het openbaar is in onze maatschappij al volledig geaccepteerd	○	○	○	○
Ik zou graag zien dat er minder mobiele telefoons gebruikt worden in sociale openbare gelegenheden (café, terras etc.)	○	○	○	○

44%

Vor.   Volg.

81

4. In hoeverre komen de volgende situaties overeen met uw eigen gevoel of gedrag. Welke situaties zorgen ervoor dat u eerder geneigd bent uw mobiele telefoon te gebruiken?

Ik ben eerder geneigd mijn mobiele telefoon te pakken wanneer....:

	Helemaal oneens (Totaal NIET geneigd om mobiele telefoon te pakken)	Oneens	Eens	Helemaal eens (Heel erg geneigd om mobiele telefoon te pakken)
Ik mijn telefoon op tafel zie liggen	○	○	○	○
Ik een WIFI bord zie	○	○	○	○
Een café of restaurant vraagt om hun Facebook pagina te 'Liken'	○	○	○	○
Ik andere mensen met een mobiele telefoon zie	○	○	○	○
Er een gezellige sfeer is	○	○	○	○
Mijn telefoon uit het zicht is (tas, broekzak etc.)	○	○	○	○
Ik signalen uit de omgeving zie die mobiel telefoongebruik toestaan of accepteren	○	○	○	○
Er niemand om me heen met de mobiele telefoon zit	○	○	○	○
Het niet zo gezellig is	○	○	○	○

56%

Vor. Volg

Stel u voor u zit op het terras met een vriend/vriendin en hij/zij heeft meer aandacht voor de mobiele telefoon dan voor u, hoe zou u zich op dat moment voelen? (Zie afbeelding)

6. In hoeverre komen de onderstaande gevoelens overeen met uw gevoel op zo'n moment?

	Helemaal oneens (Zo zou ik me totaal niet voelen)	Oneens	Eens	Helemaal eens (Zo zou ik me zeker voelen)
Het maakt me niets uit	○	○	○	○
Ik word boos	○	○	○	○
Ik voel me onzeker	○	○	○	○
Ik word nieuwsgierig	○	○	○	○
Ik voel me buitengesloten	○	○	○	○
Ik word blij	○	○	○	○
Ik voel me geïrriteerd	○	○	○	○
Ik vind het niet zo erg	○	○	○	○
Ik voel me tweede keus	○	○	○	○
Ik voel me eenzaam	○	○	○	○

67%

6. Wat zou u doen wanneer uw gezelschap meer aandacht heeft voor zijn/haar mobiele telefoon dan voor u?

Als iemand in gezelschap zijn of haar mobiele telefoon zou pakken dan....:

	Zou ik zeker doen	Zou ik waarschijnlijk doen	Zou ik misschien doen	Zou ik niet doen
Kijk ik met hem/haar mee op het scherm	○	○	○	○
Kijk ik een beetje om me heen	○	○	○	○
Plaats ik een subtiele opmerking	○	○	○	○
Pak ik ook mijn telefoon	○	○	○	○
Probeer ik het gedrag te negeren	○	○	○	○
Zeg ik hem/haar er iets van	○	○	○	○
Loop ik weg	○	○	○	○
Zou ik gewoon doorgaan met het gesprek	○	○	○	○

Anders, namelijk:

[   ]

[▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬] 78%

[Vor] [Volg]

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7. In hoeverre vindt u het acceptabel dat men in de volgende situaties een mobiele telefoon gebruikt.

	Helemaal Niet Acceptabel	Niet Acceptabel	Acceptabel	Helemaal Geaccepteerd
Iemand pakt zijn/haar mobiele telefoon tijdens een gezellig samenzijn	○	○	○	○
Je gezelschap pakt de telefoon om een bericht te sturen	○	○	○	○
Je vriend(in) pakt zijn/haar mobiele telefoon om je iets te laten zien	○	○	○	○
Omdat jij even naar het toilet bent pakt je gezelschap de mobiele telefoon	○	○	○	○
Je vriend(in) kan een gesprek tussen jou en anderen niet helemaal volgen en pakt zijn/haar telefoon	○	○	○	○
Er is even geen gespreksonderwerp en je gezelschap pakt de mobiele telefoon	○	○	○	○
Je gezelschap pakt de mobiele telefoon om Social Media te checken	○	○	○	○
Jullie hebben tijdens een gezellig avondje op het terras beide je telefoon op tafel liggen, daarom pakt je vriend(in) telkens weer even het apparaat om te checken	○	○	○	○
Je gezelschap ziet een WIFI bord en pakt daardoor zijn/haar telefoon	○	○	○	○
Op de tafel in het café staat 'Like onze Facebook pagina'. daarom pakt je vriend(in) even zijn/haar mobiele telefoon	○	○	○	○
Andere mensen op het terras zitten met hun mobiele telefoon, daarom vindt je gezelschap dat hij/zij ook wel even het apparaat mag gebruiken	○	○	○	○
Er is geen gezellige sfeer en je gezelschap pakt zijn/haar mobiele telefoon	○	○	○	○
Je gezelschap pakt de mobiele telefoon maar legt aan je uit waarom hij/zij het apparaat even moet gebruiken (bijv. Even mijn moeder een bericht sturen)	○	○	○	○

[▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬] 89%

[Vor] [Volg]

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8. Leeftijd

[   ]

9. Wat is uw geslacht?

○ Man
○ Vrouw

[▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬] 100%

[Vor] [Gereed]