

NOMOPHOBIA IN THE CONTEXT OF DIGITAL CAPITALISM: A RESEARCH ON THE IMPACT OF META SOCIAL MEDIA NOTIFICATIONS

Eda Sidi Ali Jaavar

Assoc. Prof. Dr. Gülşah Başlar

*Department of Radio and Television, Marmara
University. Türkiye*



This work is licensed under a
[Creative Commons Attribution-
NonCommercial 4.0
International License.](https://creativecommons.org/licenses/by-nc/4.0/)

Published on: 10 Mar. 2024

Abstract

In the digital age, the intricate interplay between individuals and smartphones has evolved into a complex phenomenon. The term "nomophobia" emerges as a conceptual framework, encapsulating the profound impact of technology on digital societies. Investigating nomophobia necessitates a critical exploration of notifications within the context of digital capitalism and consumption, unveiling the intricate web connecting nomophobia, notifications, and applications. This thesis undertakes an examination of big data in the realm of digital

capitalism, scrutinizing how technology companies manage voluminous datasets. Emphasizing the significance of data in digital capitalism, the focus lies on how Meta Technologies harness this invaluable resource. The primary objective is to comprehend the intricate relationship between nomophobia and notifications, shedding light on the interplay between data, consumption patterns, and participant motivations. The theoretical underpinning encompasses the historical roots of digital capitalism, nomophobia, and

notifications, providing a comprehensive overview.

The research methodology involved in-depth interviews with 10 participants, followed by qualitative analysis. Findings revealed similarities between participants' data and investigated dynamics of nomophobia and notifications within the domain of digital capitalism. Qualitative analysis delineated six overarching themes: Meta users of notifications, nomophobia and mobile phones, fear of losing internet connectivity, notifications, data and Meta applications, conversations, and concerns. Additionally, a prominent theme of consumption and advertising emerged. The thesis underscores the intricacies of nomophobia and notifications, exploring big data within the context of digital capitalism. Nomophobia validates the symbiotic relationship between notifications and digital capitalism, accentuating the pivotal role of big data.

Keywords: Nomophobia, Notifications, Digital Capitalism, Meta Applications.

* Introduction

The term "Nomophobia" refers to an abnormal fear of being separated from smartphones, the internet, and

social media applications. This condition has become increasingly prevalent in today's era, stemming from the excessive use of technology such as the internet, smartphones, notifications, and social media applications. The close relationship between individuals and modern technology has led to the emergence of Nomophobia. Therefore, this thesis aims to examine and analyze Nomophobia while also exploring the concept of digital capitalism.

A relationship exists between notifications from Meta applications and susceptibility to Nomophobia (Antonio et al., 2020:1). This connection encompasses specific adverse effects contributing to Nomophobia and necessitates detailed research to identify the key factors contributing to Nomophobia. These factors also highlight the importance of other elements such as the internet and smartphones. The excessive use of the internet and participation in Meta social media platforms have provided companies with access to user data.

Users have benefited from services provided to them under "Privacy Policy" standards in exchange for providing data to companies. In this context, the significance of digital

capitalism has become intertwined with Nomophobia due to the direct impact of notifications, the internet, smartphones, and Meta social media applications on users. As a result of these effects, users spend long hours staring at smartphone screens and watching advertisements.

The research addresses topics such as the impact of Meta notifications, nomophobia and smartphones, fear of losing internet connectivity, and notifications. Additionally, the study discusses Meta data and applications. Within these topics, the study focuses on notifications and their mechanism of influence on users with the aim of understanding the relationship between them and nomophobia, the internet, and smartphones. In the same context, the study connects these topics with digital capitalism.

*** Research Problem**

This study examines the topics of Nomophobia and digital capitalism. Both Nomophobia and digital capitalism intersect with Meta platform applications for social communication, notifications, smartphones, and the internet. These topics represent fundamental areas of research and

analysis. The research questions of the thesis are as follows:-

1- Do notifications affect Meta users due to their use of smartphones and Meta platform applications?

2- What is the nature of the relationship between smartphone notifications, Meta applications, and nomophobia?

3- How are Meta applications exposing users to nomophobia?

*** Distinctive Contribution of this Study**

The primary advantage of this study lies in the unique topic it addresses. No prior academic study has thoroughly explored the relationship between notifications and their impact on Meta users, nor the connection between these notifications, nomophobia, the internet, and smartphones. Herein lies the primary advantage of this study, as it diverges from other studies related to nomophobia by elucidating the intricate relationship between notifications, the internet, and nomophobia, and their collective impact on Meta users. This distinct focus on notifications underscores the authenticity and novelty of the study, offering valuable insights into an underexplored area of research.

*** Theoretical Part a Historical Perspective of Nomophobia and Meta Applications**

The term "nomophobia" first emerged in the United Kingdom in 2008, stemming from a study conducted by the British Royal Mail administration aiming to unveil anxiety disorders associated with excessive mobile phone usage. The study found that 53% of mobile phone users in Britain experienced potential fear of losing their mobile devices, with indications of anxiety including mobile phone battery depletion and loss of internet connectivity. These findings identified the loss of a mobile phone, battery depletion, and loss of internet connectivity as indicators of anxiety, collectively encompassing symptoms of nomophobia. Thus, the term "nomophobia" was coined, reflecting the fear of being separated from one's mobile phone (Bhattacharya et al., 2019:1).

Nomophobia represents a contemporary phenomenon closely linked to the digital and technological advancements of the modern era, manifesting effects ranging from fear to anxiety. As societies become increasingly dependent on digitalization, smartphones have

become essential tools for communication and accessing information. Nomophobia significantly reflects the anxiety and tension individuals experience when disconnected from the online world and social networks, as individuals develop an increasing dependency on their smartphones for interaction and integration. Continuous interaction with the virtual world establishes a connection between individuals affected by nomophobia and their engagement with digital media. Smartphones are evolving into interaction and communication networks that influence individuals' psychological and social well-being. Excessive reliance on smartphones can lead to social isolation and limited interaction with reality, with some individuals finding it challenging to disconnect from the virtual world even during basic human activities such as sleep. It is evident that nomophobia arises from individuals' interactions with the digital world and their attachment to smartphones. Meta applications further encourage individuals to maintain constant connections with the virtual world, thereby impacting the balance of their psychological and social health. These

increasingly modern connections exacerbate sensitivity to nomophobia, intensifying their impact on individuals (Antonio et al., 2020:1).

On October 28, 2021, Facebook underwent a rebranding, adopting the name Meta Technologies. Formerly known as Facebook, Meta Technologies is a multinational technology company headquartered in Menlo Park, California. Founded in 2004 by Mark Zuckerberg and colleagues, the company initially focused on social media and electronic networks. It gained renown for creating the social media platform Facebook, which has become one of the most widespread and influential platforms globally. Meta Technologies owns four applications: Facebook, Messenger, Instagram, and WhatsApp. In addition to its core product, Meta embarked on transforming the interaction with digital content by venturing into virtual reality through the acquisition of Oculus VR. Furthermore, Meta entered the augmented reality technologies field, aiming to seamlessly integrate digital information into the real world. The company's mission revolves around creating a "metaverse" where users can interact, communicate, work, and participate in events using

interactive technologies such as virtual reality and augmented reality, envisioning a more interactive and interconnected online experience surpassing traditional social media platforms. Meta Technologies continues to push the boundaries of technological innovation, exploring new methods of artificial intelligence, interactive experiences, and fostering connections in the digital realm, significantly impacting how people communicate, share information, and interact with technology in the modern digital landscape (Meta, 2021).

*** Research Methodology**

In this study, a qualitative method has been selected to accomplish the research objectives and address the study's inquiries. The qualitative approach enables a comprehensive and detailed exploration of all aspects related to the research subject, facilitating an accurate and thorough depiction of the phenomenon under investigation. Moreover, the qualitative method aids the researcher in delving deeply into the research problem or various elements of the research topic, allowing for a nuanced understanding.

Qualitative methodology focuses on providing precise

information about the components of the research problem, emphasizing the extraction of opinions from natural sources, which is a significant characteristic of this approach. Additionally, the explanatory approach inherent in qualitative research is particularly suitable for addressing social issues (Al-Mahmoodi, 2019).

By employing a qualitative method, researchers can comprehend the dimensions of contemporary social issues and predict their potential evolution over time. Consequently, the qualitative method is deemed appropriate for examining contemporary human phenomena and forecasting their behaviors in the future, especially within the humanities and social sciences domains where an explanatory framework is fitting. This methodological approach is inclined towards observing reality as it is, necessitating direct examination of reality in its authentic form, and placing emphasis on in-depth interviews and robust expressions to provide comprehensive insights (Siboker, I., Najahi, N. 2019).

The qualitative method can be characterized as an in-depth inquiry grounded in data and precise

information about a specific phenomenon or subject over a defined period. One of the primary objectives of the qualitative method is to draw practical conclusions that can be objectively interpreted, aligning with the real data of the phenomenon. Therefore, accurate data collected through qualitative methods are instrumental in expressing the nature of the phenomenon under study and facilitating descriptive interpretations based on the data (Alhaddad, 2019).

Within the qualitative methodological framework, data serve to elucidate the phenomenon under study, allowing the researcher to delve deeper into its intricacies. Furthermore, the methodology of the qualitative method necessitates a comprehensive description of the phenomenon before a sufficient amount of data is collected, preventing premature conclusions about the study's data, which is a fundamental aspect of qualitative research (Hardhan, 2018).

In this study, all data were collected through in-depth interviews as part of the qualitative research method. In-depth interviewing, considered one of the qualitative research methods, facilitates interaction between the researcher and

research participants, enabling the researcher to pose a series of questions about the research topic in personal interviews. These interviews help in understanding participants' perspectives on the topic and identifying their concerns, thereby allowing participants to provide their views in response to the questions posed during these deep personal interviews (Knott et al., 2022).

*** Research Sample**

This study employed the snowball sampling method to select participants. Given the limited number of available research samples, the snowball sampling method was deemed appropriate. Participants were selected randomly and through other methods utilizing this approach. In the snowball sampling technique, initial participants were chosen randomly, and subsequently, they were asked to recommend other individuals who might be interested in participating in the study. Through this iterative process, several snowball samples were selected based on criteria such as gender, age, education, and geographic location, which were deemed suitable for the snowball sampling method.

Snowball sampling is a data collection method that relies on

participants' social networks. It allows for the gradual expansion of the sample size by adding new participants based on recommendations. This method is particularly useful in situations where accessing specific populations is challenging or when identifying the target population beforehand is difficult. It enables greater diversity in the sample and can be valuable for investigating non-structured or completely unknown social phenomena (Mack et al., 2005: 7).

The research participants consist of students from Marmara University in Istanbul, Turkey. This selection was made because the author of this study is a graduate student at Marmara University. All participants were recruited from student clubs at Marmara University, and participant selection was based on this criterion. Communication and coordination with participants regarding the study topic and interview arrangements were established accordingly.

Table 1. Research Participants and Demographic Information

Participant ID	Gender	Age	Academic major	Geographic Location
P1	Male	31	Radio, TV and Cinema	Istanbul, Turkey
P2	Female	21	Chemistry	Istanbul, Turkey
P3	Female	29	Economics	Istanbul, Turkey
P4	Female	29	Chemistry	Istanbul, Turkey
P5	Female	27	Geography	Istanbul, Turkey
P6	Female	26	Islamic Economics	Istanbul, Turkey
P7	Male	22	Public Relations	Istanbul, Turkey
P8	Male	23	Radio, TV and Cinema	Istanbul, Turkey
P9	Male	25	Chemical Engineering	Istanbul, Turkey
P10	Male	24	Capital Markets	Istanbul, Turkey

Detailed personal interviews were conducted with 10 individuals selected based on specific criteria including gender, age, education level, and geographic location, as clearly outlined in Table 1. The research sample was chosen in accordance with these predefined criteria to ensure diversity and representation within the participant pool.

Furthermore, demographic data was collected from all participants involved in this study. This information was gathered through an electronic survey created on the Google Forms platform, which facilitated the collection of demographic data for research participants.

Demographic variables such as age are crucial for gaining a comprehensive understanding of research participants, while education level assists in determining their cultural backgrounds and academic

qualifications. Additionally, knowledge of participants' faculties aids in identifying their areas of expertise, distinguishing specific academic disciplines, and recognizing their accomplishments.

Table 2. Monthly Income and Phone Brand

Participant	Monthly Income	Phone Brand
P1	2000-5000 TRY	Apple
P2	2000-5000 TRY	Xiaomi
P3	2000 TRY	Apple
P4	15000 TRY	iPhone 14 Pro
P5	2000-5000 TRY	iPhone 14 Pro Max
P6	2000-5000 TRY	Samsung
P7	5000-10000 TRY	Apple
P8	2000-5000 TRY	Galaxy S21 FE
P9	2000-5000 TRY	Samsung
P10	2000-5000 TRY	iPhone 11

The monthly income data provides a broad perspective on participants' financial status and is examined in conjunction with the smartphone brand they use. This information is valuable for understanding participants' engagement with smartphones, which are regarded as indicators of social media and internet usage. By considering these indicators alongside participants' characteristics, insights can be gleaned into their smartphone usage habits, internet usage patterns, and interactions with social media applications. This relationship is further elucidated in Table 2.

*** Discussion of Findings**

*** Effects of Meta Notifications: Perspectives**

This study aims to understand the effects of Meta company's application notifications on users and the phenomenon of nomophobia. Additionally, it seeks to comprehend the nature of the relationship between smartphone notifications and Meta applications and investigate their association with nomophobia among Meta application users. In this context, the study addresses the issue of digital capitalism. Notifications from Meta social media applications influence Meta users, potentially leading them to experience nomophobia. Smartphones and Meta applications contribute significantly to users experiencing nomophobia. During in-depth interviews, participants were asked to silence their phones and refrain from checking them, and at the end of the interviews, they were queried about the impact of abstaining from phone usage for a certain period. It was observed that participants experienced negative effects when staying away from their smartphones and applications. Since Meta notifications were disabled for all participants, they were unable to use their smartphones and Meta

applications for an extended period. This inability to use smartphones and Meta applications may contribute to a fear related to phone and internet usage.

Table 4. Effects of Notifications on Meta Users

Participants	Notifications Status	Frequent META Apps
P1	Turned off	Instagram, Whatsapp, Facebook
P2	Turned off	Messenger, Instagram, Whatsapp
P3	Turned off /Turned on	Whatsapp, Instagram
P4	Turned off	Messenger, Instagram, Whatsapp
P5	Turned off	Facebook, Instagram, Whatsapp
P6	Turned off	Instagram, Whatsapp, Facebook
P7	Turned off	Messenger, Instagram, Whatsapp
P8	Turned off	Whatsapp, Instagram, Messenger
P9	Turned off /Turned on	Messenger, Instagram, Whatsapp
P10	Turned off	Facebook, Instagram, Whatsapp

In Table 4, the notification status of the research participants' smartphones is clearly delineated, along with the specific Meta applications utilized by each participant. Notably, it is evident that the notifications for Instagram, WhatsApp, and Facebook applications are turned off for the first participant, and this trend is consistent across all participants in the study.

Table 4 underscores a discernible relationship between Meta applications for social communication and notification settings. Participants in the study have corroborated this relationship, indicating a correlation between smartphones, Meta applications for social communication, and resultant concentration

disruptions. The data presented in Table 4 vividly illustrates the effects of notifications and the usage patterns of Meta applications among all participants. Consequently, the data underscores the notable relationship between notifications and Meta applications, highlighting their collective impact on the participants' smartphone usage behaviors.

Table 5. Internet and Phone Anxiety

Participants	Internet Usage (GB)	Expression of Internet Anxiety	Observed Internet-Free Periods	Observed Phone-Free Periods
P1	2-8 GB	Expressed anxiety	Noted	Noted
P2	10-15 GB	Expressed anxiety	Noted	Noted
P3	10-15 GB	Expressed anxiety	Noted	Noted
P4	10-15 GB	Expressed anxiety	Noted	Noted
P5	8-10 GB	Expressed anxiety	Noted	Noted
P6	10-15 GB	Expressed anxiety	Noted	Noted
P7	10-15 GB	Expressed anxiety	Noted	Noted
P8	10-15 GB	Expressed anxiety	Noted	Noted
P9	2-8 GB	Expressed anxiety	Noted	Noted
P10	2-8 GB	Expressed anxiety	Noted	Noted

Ana-Paula and Yildirim (2015) introduced the Nomophobia Measurement Questionnaire (NMP-Q), which gauges three dimensions to evaluate nomophobia: smartphones, loss of internet connection, and social media applications. In the course of conducting in-depth interviews, these three dimensions were observed among research participants, and interview questions were juxtaposed to evaluate the extent of cellphone fear among participants. Through meticulous observation and thorough

interviews, it was ascertained that these dimensions were affirmed among participants, as evidenced by indicators pertaining to smartphones, social media applications, and internet usage.

Table 6. Dimensions of Nomophobia and Its Effects on Meta Users

Participants	Notification Status	Frequency of Meta Usage	Internet Data Usage	Smartphone Usage
K1	Turned off	Facebook	2-8 GB	Observed
K2	Turned off	Messenger	10-15 GB	Observed
K3	Turned off / Turned on	Instagram	10-15 GB	Observed
K4	Turned off	Whatsapp	10-15 GB	Observed
K5	Turned off	Facebook	8-10 GB	Observed
K6	Turned off	Instagram	10-15 GB	Observed
K7	Turned off	Messenger	10-15 GB	Observed
K8	Turned off	Whatsapp	10-15 GB	Observed
K9	Turned off / Turned on	Messenger	2-8 GB	Observed
K10	Turned off	Facebook	2-8 GB	Observed

The loss of internet connection serves as a significant indicator of nomophobia. Furthermore, the inability to maintain mobile phone connectivity and the incapacity to communicate through social media applications also serve as indicative factors. Table 6 presents the notification statuses of participants' smartphones. Participant P1 has opted to disable notifications for the Facebook application, while P2 has done so for Facebook Messenger. During the study period, Participant P3 chose to disable Instagram notifications, subsequently re-enabling them after the study concluded. Participant P4 has disabled WhatsApp notifications, and Participant P5 has

disabled notifications for the Facebook application. Notably, all participants in this study have disabled notifications for smartphones, Meta applications, and the internet for extended durations, as illustrated in Table 6.

*** Nomophobia and Mobile Phones**

Nomophobia, defined as the fear of being without a mobile phone, was introduced and expounded upon in the second section of this thesis within the theoretical framework. In this context, the focus is directed towards the dimensions and effects of nomophobia on the participants of this study. As previously delineated, nomophobia encompasses three dimensions: the fear of losing one's smartphone, the fear of its battery running out, and the fear of losing internet connection. Each of these dimensions will be elucidated under respective headings, accompanied by the perspectives of the participants and the presence of these indicators within them (Sudip et al., 2019:1).

In general, experiences of mobile phone loss serve as indicators of nomophobia. The scale developed by Ana-Paula and Yıldırım (2015), illustrating the impact of mobile phones on individuals' lives, aligns with this concept. According to this

scale, the psychological and emotional ramifications of excessive mobile phone use and addiction are closely intertwined with the lack of access to mobile phones. The Nomophobia Measurement Questionnaire (NMP-Q) assists in identifying and analyzing the fear and anxiety associated with mobile phone loss. Several participants (P1, P2, P3, P4, P5, P7, P8, P9, P10) demonstrated their fear of losing their mobile phones by recounting previous experiences of such incidents. For instance, Participant P1 expressed the challenges of working without a mobile phone and articulated the difficulties associated with functioning without it. These accounts underscore the challenges inherent in separating from mobile phones. Additionally, Participant P1 mentioned strategies for coping with the fear of mobile phone loss, a phenomenon supported by research conducted by Kumar, which emphasizes that smartphones influence social relationships and induce psychological harm, thereby acting as indicators of nomophobia (Kumar et al., 2021:1).

This concept underscores that nomophobia arises as a consequence of excessive reliance on smart devices and is a byproduct of the interaction

between technological devices and individuals. Consequently, nomophobia is primarily associated with the overuse of smartphones and is contingent upon situations precipitated by smartphones. Within this framework, participants' responses can be categorized within the realm of mobile phone indicators, which constitute the crux of nomophobia. The responses presented in this section reflect participants' associations with smartphones, which are regarded as indicators of nomophobia, as well as with internet and social media applications (Antonio et al., 2020:1).

*** Fear of Losing Internet Connection**

Fear of losing internet connection is considered one of the fundamental indicators of nomophobia. Individuals affected by nomophobia find it challenging to disconnect from the internet, reflecting their complete dependence on technology. Research in this field has corroborated the psychological effects on users resulting from their reliance on technology. In this context, the internet assumes a significant role in nomophobia and can have a profound impact on individuals' mental well-being. Therefore, the internet should be

recognized as a critical indicator of nomophobia (Çırak et al., 2022:1).

According to the Nomophobia Questionnaire (NMP-Q), which evaluates the fear of losing one's mobile phone, the fear of losing internet connection, and the fear of being unable to perform tasks such as video calls and messaging on social media applications, most participants in this study exhibited symptoms of nomophobia. They demonstrated an inability to fully detach from their mobile phones and experienced anxiety over loss of internet access and social media platforms. This underscores their struggle in coping with the indicators associated with nomophobia (Correia, Yıldırım, 2015:1).

The proliferation of digital age technologies has contributed to the widespread prevalence of nomophobia in an interconnected world dominated by social media platforms. The study conducted by Ana-Paula and Yıldırım (2015) highlights the escalation of nomophobia among young people, illustrating the nexus between the internet, smartphones, and nomophobia. This finding aligns with the indicators of smartphones and internet elucidated under the headings

"Nomophobia and Smartphones" and "Nomophobia and Internet." These headings underscore the overarching theme of nomophobia, contextualizing the findings within this thematic framework. When analyzed in conjunction with nomophobia studies, participant responses affirm the impact of smartphone and internet indicators on participants, contributing to the phenomenon known as nomophobia. The study demonstrates that participants exhibit symptoms of nomophobia when they excessively utilize smartphones and the internet (Gonçalves, S., Dias, 2020:1).

*** Notifications**

In the theoretical framework of the thesis, notifications have been defined and their relationship with the participants is elucidated. Notifications are regarded as a pivotal topic in the thesis, and understanding participants' responses is crucial for establishing the relationship between notifications, smart devices, Meta applications, and nomophobia. In this context, notifications are delineated as a service that connects application developers with users through smart devices, prompting users to visit applications, read news, and access the latest updates within the application.

Notifications are categorized into two main types: application-to-person and person-to-person notifications (Amazon website).

Meta's notifications within its applications can be assessed in terms of clicks. An increase in the number of clicks on notifications serves as an indicator of the success and effectiveness of notifications in encouraging user interaction with applications. Clicks signify the interaction between notifications and applications, reflecting how swiftly users respond to notifications immediately after receiving them. Therefore, the efficacy of notifications can be evaluated based on the number of clicks. Notifications typically comprise concise content limited to 120 characters, designed for quick presentation to users. They often convey urgent news and updates related to applications (Meta's website).

As users click on notifications within Meta's applications, they tend to spend more time within the apps, leading to increased interaction with brands and targeted advertisements generated by smart algorithms. Consequently, the number of clicks serves as a standard indicator of user

interaction with notifications, directing them towards brands and applications. This process is highly systematic and precise, as spending more time in applications exposes users to numerous branded content marketed through targeted advertisements, enticing users to engage further with the apps. This phenomenon is corroborated by Gavilan's study on the interaction between brands and notifications (Gavilan, 2022:1).

In this context, targeted commercial advertisements become more refined as they are tailored to specific audiences based on algorithms. Notifications play a motivational role by delivering targeted advertisements for brand-specific products, directing users to the applications and prolonging usage time. Notifications appear to influence user behavior by encouraging navigation within these applications. Meta strategically targets its audience, and its economy relies on user attention. Consequently, notifications serve as a mechanism for capturing audience attention through artificial intelligence (AI).

*** Participants' Emotions**

At the conclusion of the in-depth individual interviews, participants

were questioned about their smartphone usage during these sessions. The objective was to gain insight into participants' sentiments, prompting them to describe their experiences of refraining from smartphone use throughout the interviews. Hence, participants were instructed not to utilize their smartphones until the interviews concluded.

In today's society, modern technology has become integral to human existence, with smartphones exerting a profound influence on human behavior. As technology advances, individuals develop emotional attachments to their smartphones, fostering a deep bond between these devices and their users. Given the prevalent communication facilitated by smartphones transcending geographical boundaries, such connections pose challenges to individual well-being in the 21st century (Gezgin, Ümett, 2021:1).

The final question posed at the conclusion of the in-depth personal interviews aimed to probe participants' sentiments regarding their abstinence from smartphone usage during the interviews. This inquiry sought to gauge the dimensions of nomophobia

among participants and confirm the presence of fear and anxiety when smartphones are not utilized. It aimed to identify the emotions experienced by participants when briefly separated from their smartphones. Describing these emotions assists in assessing the level of nomophobia among participants, as measured by the degree of concern and fear elicited when they lose access to their smartphones and are unable to engage in voice calls through social communication applications. These dimensions, when applied to all participants according to specific criteria of the Nomophobia Measurement Questionnaire (NMP-Q), can diagnose nomophobia (Correia, Yildirim, 2015:1).

Consequently, the sentiments expressed by participants (P1, P10, P5) prominently indicate feelings of fear and anxiety associated with nomophobia. Conversely, the feelings expressed by other participants (P2, P3, P7, P6, P8, P9, P4) vary to some extent but are indirectly linked to the fear and anxiety associated with nomophobia.

*** Nomophobia Indicators**

Distinct indicators exist that can reveal the presence of "nomophobia," and careful examination of these signs

enables the identification of individuals who may be affected by this phenomenon. Consequently, this study places particular emphasis on the Mobile Phone and Internet Indices as pivotal measures of nomophobia. The symptoms of nomophobia are observed within the context of individuals participating in the study, and a thorough analysis of these symptoms facilitates the identification of affected individuals. Therefore, this study specifically scrutinizes nomophobia symptoms, focusing on the Mobile Phone and Internet Indices. It has been observed that participants displaying these symptoms may encounter challenges in coping with mobile phone loss or internet disruption, which are reflected in their responses to interview questions. Analyzing these symptoms contributes significantly to understanding the relationship between nomophobia and the impact of losing these digital communication tools on participants' reactions (Sudip et al., 2019:1).

The Mobile Phone Index assesses the relationship between research participants and their smartphones, identifying any notable disparities between participants and their mobile devices. This atypical

relationship serves as both a general and specific reference for manifestations of nomophobia. Concurrently, the Internet Index plays a crucial role in providing valuable insights into the emotional states of research participants when they experience internet disconnection.

Nomophobia indicators have consistently been observed in all study samples tested in this research. Interviews conducted with participants, coupled with observations of their body language and analyses of their responses, have affirmed the efficacy of these indicators. The responses align seamlessly with the research hypotheses and accurately depict participants' situations without exaggeration or understatement.

This study has revealed that all participants utilize smartphones and have internet access. None of the participants could entirely refrain from using smartphones or permanently disconnect from the internet. Consequently, the Smartphone Index and Internet Index have emerged as two fundamental and definitive factors confirming the presence of nomophobia among the research participants.

*** Meta and Notifications**

In the second theoretical section of this thesis, titled "Meta Notifications and Targeted Advertisements," theoretical concepts regarding notifications and advertisements were introduced and discussed within the context of participants' relationships with smartphones and nomophobia. This section will present the findings derived from experimental research conducted on study participants, illuminating the significant impact of smartphones on behavior. The results provide insight, particularly into the profound effects of smartphone usage on shaping social interactions and emotional experiences, raising concerns about the omnipresence of smartphones in individuals' lives and their influence on various daily activities and decision-making processes (Çakmak, 2022:1).

The study has corroborated that all participants experience an uplift in their mood and engage more in social and health-related activities when they distance themselves from smartphones. However, it has also been observed that participants encounter challenges in staying away from their smartphones for extended periods, indicative of "nomophobia."

This phenomenon entails the fear of prolonged separation from smartphones, the internet, and applications, with participants expressing discomfort when temporarily losing access to their phones (Gonçalves, S., Dias, 2020:1).

Furthermore, all research participants encounter situations where they are impacted by notifications and find themselves compelled to disable them from the Notification Center on their smartphone screens. The utilization of Meta applications for social communication triggers alarm among participants due to notifications, subsequently affecting the study samples due to continuous usage of notifications through smartphones and Meta applications via internet connectivity, exacerbating the manifestation of "nomophobia" among the study samples. Consequently, there exists a tangible relationship where notifications, Meta applications, smartphones, and the internet collectively influence the study samples within a related context (Kumar et al., 2021:1).

*** CONCLUSION**

This study aims to comprehend the impact of notifications from Meta applications on users and the

phenomenon of nomophobia. It seeks to understand the nature of the relationship between smartphone notifications and Meta applications, examining this relationship in relation to nomophobia and within the framework of digital capitalism. Notifications play a significant role in connecting users to applications, facilitating immediate access to new messages and updates, thus increasing user interaction and engagement. As users interact with notifications in Meta's applications, they tend to spend more time within the apps, leading to heightened engagement with brands and targeted advertisements. Consequently, the number of clicks on notifications serves as a standard indicator of user interaction with brands and applications.

During in-depth interviews, participants were asked to silence their phones and refrain from using them, shedding light on how notifications affect users of Meta applications. The impact of participants distancing themselves from their smartphones and applications was observed. Since all participants disabled Meta notifications, they were unable to use their smartphones and Meta applications for an extended period,

which could correspond to a fear related to phone and internet usage, indicative of nomophobia.

Nomophobia, the fear of being without a mobile phone, was discussed in the theoretical framework of this thesis. Participants' experiences revealed that they exhibit all three dimensions of nomophobia: fear of losing the smartphone, fear of running out of battery, and fear of losing internet connection. Additionally, participants were questioned about the concept of nomophobia and its dimensions, as well as how government-imposed restrictions on social media and the internet during specific events are related to nomophobia.

The discussion on notifications underscores the significance of understanding their effects on individuals' mental health, productivity, and overall quality of life. Further research in this area is crucial to comprehending interactions in the digital age and managing technology use in a sustainable and positive manner amidst the evolving landscape of digital capitalism. As society becomes increasingly digitized, individuals grapple with the challenges of constant connectivity and the need

to strike a balance between technology use and personal well-being, highlighting the intricate interplay between technology, society, and human behavior.

* REFERENCES

- Al-Mahmoudi, A. (2019). *Scientific Research Methodology* (3rd ed.). Sana'a, Yemen: Dar Al-Kutub.
- Amazon Web Services. (n.d.). What is a push notification service? Amazon Web Services. <https://aws.amazon.com/ar/what-is/push-notification-service/>
- Antonio, M. (vd) (16 Jan 2020), "Nomophobia: An Individual's Growing Fear of Being without a Smartphone A Systematic Literature Review", *International Journal Of Environmental Research and Public Health*. <https://www.mdpi.com/1660-4601/17/2/580> (The Date of Entry: 16.01.2020).
- Bhattacharya, S., Bashar, M. A., Srivastava, A., & Singh, A. (2019). Nomophobia: No Mobile phone phobia. *J Family Med Prim Care*, 8(4), 1297–1300.

- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6510111/>
- Çırak, H., & Tuzgöl Dost, M. (2022). Nomophobia in University Students: The Roles of Digital Addiction, Social Connectedness, and Life Satisfaction. *Turkish Psychological Counseling and Guidance Journal*. Retrieved from <https://dergipark.org.tr/en/pub/tpdrd/issue/69218/1095905>
- Correia, P., Yildirim, C. (2015). “Exploring the dimensions of nomophobia: Development and validation of a self-reported questionnaire”, *Computers in Human Behavior Journal*. <https://www.sciencedirect.com/science/article/pii/S0747563215001806> (The Date of Entry: August 2015).
- Gavilan, D., & Martinez-Navarro, G. (2022). Exploring user’s experience of push notifications: a grounded theory approach. *Qualitative Market Research: An International Journal*, 25(2), 233-255. Retrieved from <https://www.emerald.com/insight/1352-2752.htm>
- Gezgin, D., Ümett, D. (2021) “An Investigation into the Relationship between Nomophobia and Social and Emotional Loneliness of Turkish University Students”, *International Journal of Psychology and Education Studies*. <https://dergipark.org.tr/tr/pub/pes/issue/62298/935923> (Retrieved on 21.04.2021).
- Gonçalves, S., Dias, P., & Correia, A.-P. (2020). Nomophobia and lifestyle: Smartphone use and its relationship to psychopathologies. *Computers in Human Behavior Reports*, 2, 100025. Retrieved from www.journals.elsevier.com/computers-in-human-behavior-reports
- Haddad, N. H. (2019). Descriptive and experimental methods. *Arab Academics Journal*, 26(7). Retrieved from <http://arabacademics.org>
- Haradhan, M. (2018, December 10). Qualitative Research Methodology in Social Sciences and Related Subjects. Munich Personal RePEc Archive. Retrieved from

- <https://mpr.aub.uni-muenchen.de/85654/>
- Knott, E., Rao, A. H., Summers, K., & Teeger, C. (2022, September 15). Interviews in the social sciences. *Nature Reviews Methods Primers*, 2. <https://www.nature.com/articles/s43586-022-00150-6>
- Kumar, K. A., Suresh, V. C., Sachin, B. S., & Poornima, C. (n.d.). The Relationship between Nomophobia, Mental Health, and Coping Style in Medical Students. Retrieved from <http://www.indjsp.org>
- Mack, N., Woodson, C., MacQueen, K. M., Guest, G., & Namey, E. (2005). *Qualitative Research Methods: A Data Collector's Field Guide*. Family Health International. Research Triangle Park, North Carolina Usa.
- meta. (2023). app-to-user notifications. Retrieved from [developers.facebook.com: https://developers.facebook.com/docs/games/build/legacy-web-games/gaming-services/appnotifications/](https://developers.facebook.com/docs/games/build/legacy-web-games/gaming-services/appnotifications/)
- Meta. (n.d.). App notifications. Facebook for Developers. Retrieved from <https://developers.facebook.com/docs/games/build/legacy-web-games/gaming-services/appnotifications/>