The smartphone as a lifeline:
the impact of digital communication technologies
and services on refugees’ experiences
during their flight

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Abstract

The complex political situation in the Middle East in the last few years caused the biggest refugee crisis that Europe has faced after the World War II. Thousands are fleeing war, persecution and extreme living conditions with the only aim to surmount the long distance between the battlefield at home and the “safe haven” of Western Europe.

Just a few years before the refugee crisis, the Arab Spring, or the “Facebook revolution”, proved that social media has the power to unite, coordinate and mobilize communities and catalyze social change. Therefore, this thesis aims to explore whether digital technologies and services have an impact on the mass flight of refugees towards Europe, one of the major social movements in the recent history.

In order to do that, this study scrutinizes the relationship between the existent and emerging psychological and physical needs of a refugee in flight and the uses of digital technology and its features on the road. In order to investigate the “refugee experience” during flight, a qualitative approach is adopted in the form of ten in depth interviews with eleven refugees settled in the Netherlands. Later on, thematic analysis is in order to identify the main themes in refugees’ responses.

Guided by the Uses and Gratifications model, which puts an emphasis on the social and psychological context in which the media is being consumed, the analysis confirms that digital technologies and digital tools play a substantial role in the refugees’ journeys. The results show that refugees turn to their smartphones, mobile applications and social media in order to gratify a broad specter of social, organizational, emergency and diversion needs. Providing the functional opportunities to contact their families and friends, to organize their trip in terms of accommodation, smuggling, administration and navigation, to react in emergency situations and to kill time when needed, digital technologies and services contribute to alleviating anxiety, stress, sorrow and disorientation.

Keywords:
refugee crisis, refugees’ journey, refugee experience, uses and gratifications, digital technology and services, social and psychological needs
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I. Introduction

One of the major catalysts of global social and communication changes in our contemporary world is the constantly rising influence of digital technologies. Both web-based devices and Internet itself facilitated the quick appearance and wide adoption of social media platforms where “individuals and communities share, co-create, discuss, and modify user-generated content” (Kietzmann, Hermkens, McCarthy, & Silvestre, 2011, p. 241). Such a ubiquitous trend creates a technologically dominated climate where digital services are “used anyhow, anyplace, anytime.” (Livingstone, 2004, p.76). Being such a prominent factor, this new way of communication drew the attention of scholars towards researching the impact of new technologies on the communication habits of people. This rapidly evolving field and the novel forms of new technology consumption call for adequate and up-to-date academic investigation.

To date, research has mainly focused on the use of new media technologies by populations that are relatively easy to reach, such as young children (Donoso & Ribbens, 2015), students (Jacobsen & Forste, 2011; Margaryan, Littlejohn, & Vojt, 2011), young and older adults (Hargittai, & Hinnant, 2008; Correa, Hinsley, & De Zuniga, 2010). However, not much attention has been paid to how digital technologies and features are being adopted by a-typical populations.

One population group that is currently under the spotlight of major political, social, and economic discussions and that may be substantially influenced by and connected to digital technology is the group of refugees. All media coverage has drawn its attention towards the mass influx of migrants to Greek and Italian shores and the chaos on the currently “closed” Balkan borders, defended with walls, police and even armies (Mohdin, 2016). Having been put through threats of smuggling and trafficking with the only goal to cross those sealed borders, the refugees, who succeeded to reach their end-destination, usually have a lot of stories to tell. Their experiences often combine emotions such as stress, grief, sadness and even joy of reaching safety, which could be easily seen in the numerous photographs of reporters around the world published every day. Those scenes show plain moments of the refugees’ journey which, in turn, are much more complicated in reality. Somewhere in the background, not entirely visible for the public, digital technologies and services are also being part of the pictures, interfering with those daily experiences of migrants. However, in order to understand the relevance of topic of this study on the role of digital technology in the refugee’s journey, a brief overview on the story behind the most recent refugee wave towards Western Europe is needed.

The uncontrolled migration of people fleeing war, persecution and low life quality to Western Europe is labeled by the media as a “refugee crisis” and is caused mainly by the complex political situation in the Middle East region and the political and economic instability
in North Africa and Western Balkans (BBC, 2016). In its mid-year report on global refugee
(2015a) trends the United Nations Refugee Agency (UNHCR) concludes that in 2014 and 2015
the highest number of refugees is coming from Syria, with Germany being the country with the
largest number of asylum applications (p. 10). Moreover, according to the UNHCR statistics,
the number of resettlement submissions from Europe and MENA (Middle East and North
Africa) doubled in the last two years (UNHCR, 2015b, p. 3). The continuing imbalance in Syria
has turned out to be “not only the largest refugee and internal displacement crisis, but also the
largest protracted refugee and internal displacement situation of the decade” (UNHCR, 2015c,
p. 1). The lack of indications that the civil war in Syria is moving towards a peaceful solution,
the recently erupted confrontation between major world political actors and the Islamic State as
well as the low possibility of finding good work and living conditions in the neighboring
countries are indicated as the main reasons for the Syrian mass flight towards West (Kingsley,
2015; Flemming, 2015). Nevertheless, the current refugee wave consists not only of migrants
fleeing war and political persecution (as it is the case with refugees coming from Afghanistan
and Eritrea) but also economic dissatisfaction – the refugee wave was joined also by a large
number of citizens from Western Balkans (Kosovo, Albania) and Africa (Nigeria, Mali, Sudan)
fleeing an environment of low life standard and poverty (Eurostat, 2015; Koelbl, Kuntz, &
Mayr, 2015).

All the above-mentioned trends of the current refugee situation in Europe lay in the
ongoing and constantly deepening instability in the Middle East, and Syria in particular, the
reasons for which are rooted in the Arab Spring in 2011. The mass protest movements against
the regime of the President Bashar Al-Assad turned into a civil war that caused the death of
thousands civilians (Rogers, Gritten, Offer, & Assare, 2016). Furthermore, as even before the
outbreak of the contemporary domestic and external conflicts, Syria played the role of a
“cockpit for regional rivalries” by competing for regional dominance with Turkey, Iraq and
Saudi Arabia (Carpenter, 2013, p.3). This situation intensified with the appearance of the
Islamic State and its expansive military activity in Syria and Iraq. As a result, the country is torn
between an internal crisis and foreign threats, thereby becoming the new international
battlefield, where US, Russian and European air forces are currently conducting military
operations against the Islamic State. Along with the Syrian crisis, the present-day conflict in
Afghanistan and the deteriorating human rights situation in Eritrea are the main causes of the
biggest refugee wave after the World War II (Laub, 2015).

1.1. Scientific relevance and research questions

Despite the impact of the above described refugee crisis and the major social and
political concussions that the world has experienced in the last two decades, scholars have not
yet thoroughly investigated the phase of refugees’ journey towards their destination (BenEzer & Zetter, 2015). At the same time, the increased use of digital tools inspired a number of studies on new communication technology’s specifications, uses and implications. Moreover, compared to the numerous studies on typical population groups, the amount of academic research on digital technology uses of populations in extreme or a-typical circumstances appears to be limited – by now scholars have investigated the impact of digital tools on patients’ health behavior (Jenssen, Mitra, Shah, Wan, & Grande, 2016), communities with HIV risk (Broaddus et al., 2015; Sun, Reboussin, Mann, Garcia, & Rhodes, 2015), prisoners (Ribbens & Malliet, 2015), etc. As for the refugee studies, the existing research covers mainly the digital behavior of settled refugee communities in different countries with regard to integration (Komito, 2011) and digital storytelling production (Salazar, 2010). However, academic scholars have not yet connected the stage of flight accompanied by a number of “powerful life-changing events that greatly influence whoever experiences them” (BenExer & Zetter, 2015, p. 297) to the values that digital technologies may have to these events on refugees’ road to a better life.

Despite the lack of academic research, there are numerous indications that digital technologies play a pivotal role during refugees’ flight. In their news coverage traditional news media outlets focused their attention not only on the political and social dilemmas that the current refugee wave triggered. They also dug deeper into the personal experiences of refugees as individuals, emphasizing their opinions, struggles and desires. Moreover, an interesting trend can be traced across different major newspapers. A recurrent, yet new and unusual focal point was the fact that refugees were actively using smartphones on their journey to search for routes, transport and accommodation, to exchange information for border patrols and to keep in contact with their families and friends (Brunwasser, 2015; O’Malley, 2015; Habekuß & Schmidt, 2015). The fact that refugees own a smartphone and use it extensively is a matter that intrigued journalists and inspired them to research this phenomenon, which, in fact, was also noticed and questioned by Donald Trump, businessman and one of the leading candidates for the 2016 US presidential elections:

“First of all, why are people in a migration having cell phones? It's sort of strange. Who's paying for those cell phones? Where are they coming from? Who are they calling? These are people — can you imagine, many, many, many cell phones. Where do they get cell phones? Who pays their monthly bill?”

(RRW News, 2015)

The increasing attention to this fact is due to the proclaimed social anti-immigration accusations stating that owning relatively expensive technology does not correspond to the overall image of refugees as “unskilled” and “too poor” (O’Malley, 2015). Those general social
claims derive from and are strongly connected to the media representation of asylum seekers as a whole – refugees are often portrayed negatively as threatening, “economically undesirable”, and as “unwanted invaders” (Parker, 2015; Lueck, Due, & Augoustinos, 2015).

Contrary to this negative image, the 2015 European refugee crisis attracted the world’s focus not only with its political context and the substantial and continuously growing number of asylum seekers in Western Europe, but also with its inevitable dimension of tragedy. The International Organization for Migration estimated that migrant deaths in the Mediterranean Sea routes are approximately 3500 for the first 10 months of 2015 (IOM, 2015). Border control, fences, push-backs, human trafficking, finding casual labor and other numerous impediments on the road are concerning factors that refugees usually cannot plan in complete detail beforehand. Hence, getting back to the news media focus on the role technologies play for refugees, it could be assumed that keeping in contact with families and friends both in their home country as well as with other refugees on the road could be also a crucial aspect of their daily experiences during their flight.

On the whole, combining the two contemporary phenomena outlined above, namely – the refugee crisis and the ubiquitous impact of digital technologies, this master thesis will try to fill the gap in the research of new media and technology use by refugees. Accordingly, the goal of this master thesis is to explore what the social and psychological needs of refugees behind their usage of digital technology and services are during their journey towards Western Europe. In order to do that, the following research questions were formulated:

RQ: What is the impact of digital communication technologies and services on refugees’ experiences during their flight?

RQ1: What organizational and psychological needs emerge during the refugees’ journey?

RQ2: How are digital technologies and services used by refugees during their journey?

This study provides answers to these questions by examining refugees’ views and attitudes towards digital communication technologies and its features. This was achieved by conducting in-depth interviews with refugees on their individual experiences with those tools during their journey. The main goal of the study is to understand the use and importance of new digital services and technologies in the context of refugees’ individual stories and experiences in the course of their flight. As such, this study generates findings on the needs of refugees to opt for a particular digital service.

Hence, a research on refugees’ experiences with mobile technologies could contribute to the field of refugee studies by providing valuable understanding on how their needs and
motivations to use smartphones and social media relate to their background experiences, the psychological and physical impediments they encounter on the road and their ultimate goal to finding “save haven” in a Western-European country. Such findings could contribute to migrant policies of supranational organizations (such as European Commission) and national governments, as well as provide valuable finding for non-profit organizations dealing with migrants’ issues. Based on insights of refugees’ flight experiences and media use, they could develop strategies on resettlement of refugees, minimize the human trafficking threats, establish new forms of migration control and provide assistance to people in exile.

1.2. Thesis layout

As explained in the introduction, the goal of this research is to explore the impact of digital technologies on the refugees’ journey towards West. In order to investigate this topic, the thesis is structured in the following manner:

Chapter II. aims to provide the necessary theoretically foundation for further data analysis. It begins with clarifying the main theoretical concepts that are embedded in the research question. After that it integrates the main research models and past research findings that will guide this study. Finally, it scrutinized the uses of social media as an organizational tool in the context of the Ukrainian protests and the Arab Spring.

Chapter III. explains the methodology. It provides justifications on why qualitative approach was chosen and in-depth interviews were conducted. It also clarifies the sampling, provides list of respondents and, finally, explains the method of analysis and, namely, the thematic approach.

Chapter IV. presents and discusses the results according to the Uses and Gratifications model.

Chapter V. concludes the research by providing some practical implementations of the findings, the limitations of the research and suggestions for future research.
II. Theoretical framework

The media and technology use by refugees could be understood and evaluated only in the necessary theoretical context. As mentioned in the introduction, it has not yet been academically investigated how and whether social media and smartphones could affect refugees’ experiences during the stage of their flight. Hence, this study will begin with an overview on the term “refugee” and the characteristics of the flight as a phase of the migration experience, the social and psychological needs for media use explained by Uses & Gratifications framework and the additional organizational component of social networks and new technologies contributing to the contemporary political movements.

2.1. The refugee and the flight

To begin with, it is crucial to conceptualize the term “refugee” by providing an overview on its political and socio-cultural background, and, ultimately, by putting an emphasis on the flight and its part in the refugee experience. Having an in-depth theoretical understanding of who the refugees are, their motivations to escape their home country and the phase of the flight itself is essential for further and adequate investigation of their personal experiences with digital tools and features.

2.1.1. The term “refugee”

To begin with, World War II and the following exacerbated international relations during the Cold War triggered massive migration processes. In order to justify and initiate any action of support and protection towards forcibly displaced people, the international law needed a proper definition of the “refugee” concept since the “refugee” had already existed as a social classification and a global legal issue. (Goodwin-Gill & McAdam, 2007; Malkki, 1995). The establishment of the United Nations High Commissioner for Refugees (UNHCR) in 1950 fulfilled the international necessity of a non-political institution providing “emergency assistance and permanent solutions” to refugees’ problems (Loescher, 2001, p. 36; Goodwin-Gill & McAdam, 2007). The legal definition of the term “refugee” appeared shortly after in the Convention relating to the Status of the Refugees issued by the United Nations conference in 1951. It describes the “refugee” as someone who

“owing to a well-founded fear of being persecuted for reasons of..."
race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality, and is unable to, or owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it (p.14).”

The document was brought into force in 1954, over half a century ago, but the legislations and the definitions introduced in the Convention still serve as a foundation stone for the international refugee law. However, the Refugee Convention confined the refugee definition to displacement forced by events in Europe before 1951. These restrictions were removed by the 1967 Protocol to the Convention (Loescher, 2001; Crisp, 2001). Thus, rooted in this statement, UNHCR obtained the status of the world’s largest humanitarian organization assisting and maintaining refugees’ needs throughout the biggest “man-made” political, economic and humanitarian crises of the 20th and 21st centuries (Malkki, 1995; Goodwin-Gill & McAdam, 2007).

In addition, as stated in the introduction, the largest part of the refugee wave in 2014 and 2015 was fleeing war and persecution. Economic migrants also joined the mass wave resettling to Europe. The term “economic migrants”, however, has not yet been officially documented, except in the 1990 UN convention where economic migrants are broadly referred to as “migrant workers”, and namely - as people working in a foreign country (UN General Assembly, 1990). In this thesis, the reason to flee largely subordinates to the use of digital communication technologies and services whilst being in a state of flight, e.g. on the way passing through different countries to Western Europe. The refugees driven to flight by economic dissatisfaction also opt for undertaking the journey of the mass wave towards Europe and, therefore, are also included in this study. However, the incentive to flee could create specific needs on the road and lead to various deprivations, which will be discussed in the next subchapter.

2.1.2. The “refugee experience”

Refugee studies deal primarily with refugee policies and rely on relatively scarce theoretical base that, nonetheless, endeavors to provide a coherent conceptualization of the term “refugee” and the existing empirical examples (Black, 2001; Malkki, 1995). Being a Jewish escapee during the World War II himself and having experienced the scope of forced displacement caused by war, political instability, famine and diseases within this time period Murphy (1955) was the first to seek an explanation for the transformation of a person from a
“decent law-abiding citizen to an outlaw minus papers” (p.28). Therefore, Murphy (1955) is the first who in his book “Flight and Resettlement” not only delineates the flight of a refugee as a definite stage of the state of exile, but also scrutinizes it from a psychological angle, thereby paying attention to individual motivations to flee, experiences on the road and mental consequences. Even without providing an exact definition to the terms “flight” or “resettlement”, by scrutinizing details from his own experience Murphy manages to carry out the necessary distinction between both stages, which proved to be fundamental for further academic research on migration and displaced populations.

Building upon those grounds, Stein (1981) introduces the concept of the “refugee experience” by appraising the refugee populations as “recurring phenomena with identifiable and often identical patterns of behavior and sets of causalities” (p. 321). Stein, however, stepped not only on Murphy’s general distinction between flight and resettlement, but also on the sub-phases of the “refugee experience” as defined by Keller (1975, as cited in Malkki, 1995). These phases include “perception of a threat; decision to flee; the period of extreme danger and flight; reaching safety; camp behavior; repatriation, settlement or resettlement; the early and late stages of resettlement; adjustment and acculturation; and residual states and changes in behavior caused by the refugee experience” (Stein, 1981, p.320). As this thesis deals entirely with refugees’ journey, it is noticeable that neither Keller nor Stein focused their attention to analyze this particular stage in detail since the “refugee experience” is seen to be formed equally by all the aforementioned phases. What is to be noted is that in Keller and Stein’s frameworks the flight phase is assumed to be attended by psychological trauma caused by experiences of guilt because of leaving home and homeland, feelings of invulnerability induced by being a survivor from the danger, and aggressiveness and determination to reach safety, which is enhanced by the previous two factors (Stein, 1981).

2.1.3. The stage of flight

The stage of flight is grounded in the research questions as the main factor that contextualizes refugees’ motivations for digital media consumption. The analysis of this phase from the “refugee experience” (Stein, 1981) is largely based on the seminal work of Egon Kunz on the phase of flight. Moreover, Kunz’ kinetic model of refugee movements tries to determine different patterns of refugee behavior, thereby borrowing elements from Lee’s migration model (see Figure 1). Simply put, the model explores the motivations to leave the home country. Lee (1966) calls them “push and pull” factors that complement each other in the individual’s decision to leave his home. More specifically 1) “push” factors exist in the country of origin and force individuals to flee (e.g.: war, disaster, economic and political situation) and 2) “pull” factors held by the destination point attract individuals to emigrate (e.g.: better economic
situation, political system). The migration itself happens during the phase of “intervening obstacles” between the starting and ending point and consists of extreme physical suffering due to the high degree of danger on the road.

![Migration Model](image)

Figure 1. Lee’s migration model (Lee, 1966)

Standing on Lee’s model, Kunz (1973) develops his aforementioned kinetic or motivational model. As follows, there are two types of refugee movements based on the idea of the initial “push” out of the country of origin – anticipatory and acute. Contrary to the voluntary migrants who leave their country with the desire to pursue economically and socially better life, the anticipatory refugees are forced to flee their homes against their will because of an upcoming crisis or danger. These refugees usually have sufficient financial and educational status and leave their country of origin prepared for the journey before the emergence or escalation of the domestic political situation. The second group, the acute refugee movements, arise from the “push” of a political crisis or a natural disaster and emerge usually as a mass flight (Kunz, 1973; Kunz, 1981; Stein, 1981). Both types of movements differ substantially in the way the trip is organized, how information for the route is gathered and, how the plan for the flight is determined (based on refugees’ financial situation at the moment of departure they could choose the cheapest way to reach their destination which is not always the safest, or a more expensive and faster and safer way.). Anticipatory refugee movements are usually harder to be traced, since their flight is planned prior to the outbreak of an emergency “push” factor, thus, potentially faster, safer and not always illegal (Pedraza-Bailey, 1985; Meda, 2016). Acute refugees, however, need to rely on quickly gathered information, which may or may not exist before their departure, without an organization in sight (Meda, 2016; McAuliffe & Jayasuriya, 2016). The scope of the refugee wave, the subject of this study, allows us to expect the forming of both types of refugee movements. The rapid developments of the political situation in the Middle East created conditions that, possibly, conceived both acute (victims of sudden danger) and anticipatory (profited by a steady enhancement of the domestic instability) refugee movements (McAuliffe & Jayasuriya, 2016; Yazgan, Utku, & Sirkecci, 2015).

Finally, Kunz (1981) also distinguishes between two groups of refugees based on their attitude towards their flight and homeland, namely – reactive fate-groups and purpose groups
Reactive fate-groups are normally “refugees of wars, caused by sudden revolutionary changes and expulsions” (Kunz, 1981, p. 44). Purpose refugee groups, however, flee because of their personal political or religious beliefs that are opposite to the official ideology and regime in their home country. Bringing the theory closer to this study, the forcibly displaced people from Syria range over the whole specter of reasons to escape – from being opponents of the ruling regime or members of religious minorities, through escaping war and immediate threat, to escaping military service (Mironova, Alhamat & Whitt, 2015).

At this point, it is important to emphasize that in order to answer the research questions this thesis will use the term journey as a synonym for Kunz’ phase of “flight” and Keller’s stages of “the period of extreme danger and flight” and “reaching safety”. Furthermore, this research focuses mostly on experiences of the refugee during the particular phase of migration from their home country to their desired destination, which begins with leaving the country of origin, goes through the actual journey towards the end destination, and ends with settlement.

2.1.4. Social and psychological needs of refugees

The refugee’s journey is often accompanied by psychological and physical experiences, which could be equally gathered before fleeing their homes and during the journey itself. The sudden change of their typical environment and the extreme conditions on the road often inflict suffering and distress among migrants. The main causes for such psychological trauma could be acute physical events encountered during the flight – e.g. scarce food or water supply, seeing or being close to death, lack of shelter, isolation, torture, separation from family (Malkki, 1995; Moreno & Gibbons, 2002). However, as Malkki (1995) argues, “although many refugees have survived violence and loss that are literally beyond the imagination of most people, we mustn't assume that refugee status in and of itself constitutes a recognizable, generalizable psychological condition” (p. 510). Due to the fact that refugees groups divide into acute and anticipatory depending on the “push” factors that forced them to flee, it can be assumed that their journeys often take different course with diverse impediments to be surmounted and, accordingly, various mental impacts to be endured (Kunz, 1973; Meda, 2016).

Scholars have investigated thoroughly the psychological aspect of the migration experience, however, to a large extent focusing on post-traumatic stress disorder (PTSD) and depression among resettled refugees and concluding that pre-migration experiences have a more significant impact on their mental health (Kinzie, 2006; Moreno & Gibbons, 2002; Rasmussen et al, 2012; Savin et al., 1996, Slewa-Younan, 2015). Still, not much attention has been paid to the impact of the above-listed events on the road on the psychological condition of the migrants and, as well, the social and psychological needs that are inseparable part of the journey itself.

Yet, even in the context of PTSD research, some scholars agree that separation from
family in exile is a common factor for most refugee populations that has a strong implication on the later emotional state of the individuals (Ganesan, Fine & Line, 1989; Rousseau, Mekki-Berrada, & Moreau, 2001). Extended separation from family and relatives often results in trauma which is enhanced by the lack of news from home and guilt for leaving (Rousseau, Mekki-Berrada, & Moreau, 2001).

Mazetti (2008) speaks about “factors of vulnerability” which connects personal characteristics with migration and the factors that derive from being in a state of displacement. For example, transcultural stress is seen as one of the major risk factors for the mental health of migrants. Such “cultural shock” could be experienced not only during the acculturation process of settlement in the destination country, but also on the road when already being abroad. Relevant elements inducing deprivation and stress could be the lack of knowledge of the local language, cultural differences (in terms of racist and discriminative prejudices targeting migrants), and disorientation in an urban or rural area (Kinzie, 2006; Mazetti, 2008).

Furthermore, refugees often seek for social support in the group they are travelling with to overcome isolation (Mazetti, 2008). Next, extreme living conditions (e.g.: lack of food and water, lack of shelter, low or high temperatures) affect not only the physical existence but also cause psychological effects leading to suffering and anxiety (Mazetti, 2008; Refugee Health, n.d.).

Another aspect that should be taken into consideration for this research which is a relevant prerequisite for discovering refugees’ needs on the road is the constantly changing international situation regarding asylum seekers in Western Europe. Alongside with the lack of sufficient refugee accommodation facilities in some countries that could handle the immigration flow (e.g.: Bulgaria, Greece), the situation of refugee crisis in Europe caused numerous changes in refugees legislations in the European countries. These include amongst others closing borders, establishing of immigrant quotas that involves further resettlement of asylum seekers, and, thus, preventing them from arriving in the desired country (Christides, 2016). Such a scenario should also be considered as a significant part of the journey when examining in depth refugees’ personal needs for up-to-date news and information and assistance on the road.

A thorough understanding of the main terms “refugee” and “flight” and the social and psychological needs that are experienced by migrants on the road gives sufficient foundation to begin to understand the types of usage of digital technology by refugees. However, we still need a theory that specifically explains media attraction. Hence, the next section deals with the Uses and Gratifications framework which ties together the needs of refugees in flight with their exposure to digital technologies and services.
2.2. Digital communication technology and services: a Uses & Gratifications approach

2.2.1. Uses and Gratifications theory

Based on claims of the journalistic articles on the topic, as explained earlier, it can be assumed that refugees use smartphones and communication features quite actively out of specific needs that are developed in the course of the exceptional events happening while traveling. That is why, the Uses & Gratifications framework seems like an appropriate and exhaustive approach to investigate the functional interdependence between needs enhanced by episodes experienced on the road and refugees’ personal digital media behavior. Moreover, the U&G model puts a great emphasis on the social and psychological context in which media (content) is being consumed – individual’s background is primordial to their choice media and further interaction with it (Katz, Blumler, & Gurevitch, 1973; Ruggiero, 2000; So, 2012). In obedience to those U&G foundations, refugees’ personal stories, psychological state and extreme conditions during their journey could be crucial presupposition of their attitude towards and the uses of digital media and its services.

By providing useful mechanisms for examining the media uses of children (Cohen, Levy, & Golden, 1988), college students (Diddi & LaRose, 2006; Wang, Tchernev, & Solloway, 2012) and immigrants (Hwang & He, 1999), the U&G framework proved to serve as a flexible model, applicable to various populations, albeit, to date, not much research has been made on deviant populations. In this regard, Lev-On (2012) suggests that a thorough research on uses and gratifications in crisis situations could be pivotal. Specifically, in such emergency circumstances “the degree of uncertainty is heightened” which leads to media playing a pivotal role in “alleviating anxiety” and “dealing with crisis” by being the transmitter in creating, receiving and exchanging information (Lev-On, 2012, p.101).

In this respect, as stated in the research question, this study investigates refugees in a state of flight, or individuals experiencing atypical, often traumatizing crises and a change of environment.

Simply put, the U&G theory explains “the way in which individuals use communications among other resources in their environment, to satisfy their needs and to achieve their goals” (Katz, Blumler, & Gurevitch, 1973). According to the model, their personal social and psychological needs motivate individuals to choose media content in order to achieve particular gratifications. In other words, the social and psychological context in which media is being consumed preceeds the individual media usage and activity and, respectively,
gratifications sought and obtained from this media experience (Katz et al., 1973). Figure 2 provides an overview of the model applied to the current research.

Figure 2. U&G model.

According to Rubin (2009) individuals make their decisions to use a particular medium and opt for specific content based on both their past background and current situation. In this line of thought, Palmgreen & Rayburn (1979; 1982) argue that the existing motivations to choose a particular media content predict the actual usage of and attitude towards media itself and, ultimately, the gratifications received. Such an emphasis on the relation between sociocultural constraints, current needs and media usage is what makes this framework applicable to the current research on refugees’ digital media uses, as it could allow to establish a relationship between their media behavior and the context of their past digital habits, reasons to flee and experiences and emotions during their flight.

Additionally, it is important to note that researchers distinguish the gratifications sought before using a particular media from the gratifications obtained after consuming the chosen media content. In particular, the satisfied needs are closely linked to the presence of “functional alternatives”. As a result, if gratifications remain unachieved, the media consumer might consider opting for substitutes or additional media content in order to fulfill the expectations of the active audience (Ball-Rokeach, 1985; Palmgreen, Wenner, & Rayburn, 1980). Such a gap between expectations and obtained gratifications has to be taken into consideration when investigating atypical populations that may experience diverse needs which may remain insufficiently gratified or, in contrary, even expanded and enriched by the existing functions of the digital technologies and services. As an example here could serve the taking photos option of the smartphones which could only contribute to making memories or sharing experiences online, but also for preserving digital copies of important documents.
2.2.2. The “participatory” audience

The rapid technological advancement of 21st century transformed the media itself and, respectively, the ways it is being consumed. Hence, it is equally important to underline another crucial pillar of the U&G framework. The U&G paradigm conceptualizes audience as active and “goal-oriented” in its media use (Katz, Blumler & Gurevitch, 1973). In relation to digital media, Livingstone (2013) claims that the modern media ecosystem facilitates the appearance of a new “participatory audience”. Thus, “long interconnected through every-day practices, now also connected through technological convergence” (p. 27) audiences have faced the challenge to adapt to and interact with a variety of technological innovations, social media platforms and other web-based communication services (Livingstone, 2013). Hence, in a digital environment of increased interactivity users’ actions and participation online require high media engagement. In addition, Ruggiero (2000) takes into account that the environment of rapid technological developments adds new dimensions to the research of relationship between the media content and audiences’ perceptions such as the two-way interaction between the user and the media, the new forms of control that a user has over media selection and, with the rise of Internet, the ability to create content not restricted by time and location. In sum, the high interactivity of new technologies puts audiences in charge of making active decisions about what means of communication to opt for and what content to consume and/or produce.

2.2.3. Dependency and deprivation models

Second, additional models that constitute and extend U&G theory which serve as supplementary frameworks for a research on refugees’ media use are the dependency and deprivation models that argue that specific living conditions could “form high levels of attachment to media” (Ruggiero, 2010). In this regard, the need to understand the social reality and the constant changes in one’s environment requires high levels of media exposure. Put differently, according to Ball-Rokeach’s (1985) account, “the capacity of individuals to attain their goals is contingent upon the information resources of the media system” (p. 487). Therefore, the obtained satisfaction from goal achievement results at a certain degree of media dependency (Ruggiero, 2010). What makes this model especially suitable for the current research is the claim that the level of media dependency rises when changes or conflicts in the societal climate are present (Ball-Rokeach & DeFleur, 1976). In such a case, the dependency on media resources is intensified by the strong need to understand and orientate in the reconstructing reality and to align with the ongoing social transformations and challenges. To add on that, the deprivation theory sheds light on how the changes in their sociocultural conditions can lead an individual to feeling deprived, and, respectively, to undertake certain
actions in order to reacquire the losses (e.g.: social movements) (Walker & Pettigrew, 1984). Therefore, this model could be applied not only on individualistic level but also in the emerging outcome of new media usage for social organizational purposes, which will be scrutinized in more depth in the next subchapter.

2.2.4. The attraction of smartphones and mobile applications

After touching upon the theoretical foundations of the U&G theory, it is time to bring the focus back to the main concepts of this research, and namely – digital technologies and services. Previous studies based on U&G framework aimed their attention to a large extent at traditional media, such as television, radio and print media, and video games (Albarrán et al., 2007; Bantz, 1982; Elliott, & Rosenberg, 1987; Lucas & Sherry, 2004; Palmgreen & Rayburn, 1979; Rubin, 1983). However, as already implied, the digital era added new dimensions to media usage and, in parallel, multiple new fields for research on motivations to use and gratifications such as Internet itself, smartphones, social media websites, mobile applications (Leung & Wei, 2000; Przybylski, Rigby, & Ryan, 2010; Stafford, Stafford, & Schkade, 2004; Wei & Lo, 2006; Quan-Haase & Young, 2010). Interestingly, the main motivations for digital media use do not differ substantially from the ones typical for the traditional media content. Hence, the most common needs could be summarized and they are: 1) cognitive (or information seeking); 2) entertainment; 3) interpersonal communication (or relationship maintenance, social connection); 4) diversion (escape boredom, pass time); 5) surveillance (acquire information about events, society and civic engagement) (Palmgreen, Wenner & Rayburn, 1980; Rubin, 1983; Ruggiero, 2000). Nevertheless, additional distinctive motivations emerge when examining smartphones, mobile applications and social media.

As seen, different types of media evoke different motivations resulting in specific media use. Therefore, as this thesis investigates the digital technologies usage by migrants during their journey, the Uses and Gratifications framework should be applied on the smartphone in the first instance, as journalistic articles point out clearly the exceptional role of those devices for refugees’ journey. Even during the early years of the mobile phone expansion, in their study on uses and gratifications of the mobile phone, Leung & Wei (2000) emphasize that mobility, immediate access and functionality are the most frequent motivations for cellular phone use, however the gratifications sought differ with regard to the individuals’ demographics and occupation. On this basis one uses mobile phones for instrumental (e.g. business related communication) or social reasons (e.g. keeping in touch with family and friends). Later on, in their study Wei & Lo (2006) expand the findings of Leung & Wei and conclude that cellphones satisfy affection gratifications by playing a crucial mediating role in relationships with family and friends through diminishing hindrances as, for example, geographic proximity. Accessibility
and social utility gratifications, as well, emphasize the significant place of the instant access characteristic for maintaining social relationships and facilitating community belonging.

A smartphone, however, adds new dimensions to the simple and well-known mobile phone usage – this device provides much more opportunities than simply making calls and texting. In their study among Korean smartphone users Joo & Sang (2013) conclude that goal-oriented motivations influence individual choice for a particular device. Through providing room for customization and various functions the smartphone serves as a tool to fulfill needs such as enhancing daily productivity, socialization, amusement, communication facilitation and information acquisition (Jung, 2014). As a result, the smartphone is being used predominantly for its communication (e.g.: social media applications, messengers) and information (e.g.: browsers, maps) functions to achieve those gratifications, sometimes a few with one utility (Jung, 2014).

The assortment of available mobile applications serves as the main criteria for the evaluation of the smartphone functionality. “Apps are often multi-modal (several features at once) and operate across platforms generating a dynamic experience for the user rather than providing a static, unidirectional function” (Gerlich, Drumheller, & Babb, 2015, p. 71). Moreover, applications functions range over entertainment (e.g.: games), information (e.g.: social media, news media applications), communication (e.g.: messengers, social media) and localization (e.g. maps) with continuously augmented features. Being dynamic and interactive, the usage of mobile applications produces typical for traditional media “disengaged” gratifications such as “escape, relaxation and habit” as well as “engaged factors” like “entertainment and arousal” (Gerlich et al., 2015, p. 74).

Those functional dimensions of mobile applications overlap to some extent with the main motivations for social media use, especially having in mind that social media applications (e.g.: Facebook, Instagram, Twitter) along with various messengers (e.g.: Facebook Messenger, Whatsapp, Skype, Viber) are enjoying the highest popularity among smartphone applications users worldwide (Statista, 2016; Nielsen, 2015). Currently mobile applications of the most used social media websites possess almost the full specter of the functions that are typical for their online versions. They are “interactive platforms via which individuals and communities share, co-create, discuss, and modify user-generated content” (Kietzman et al., 2011). Thus, closely linked to Gerlich’s notion, Whiting & Williams (2013) emphasize ten main motivations of social media usage – social interaction, information seeking, pass time, entertainment, relaxation, expression of opinions, communicatory utility, information sharing and surveillance. In fact, previous academic research assumes that the motivations to use social media platforms predict the actual usage of and user’s attitude towards social media features and, finally, the gratifications received (Kietzman et al., 2011; Quan-Haase & Young, 2010). In the context of social media applications, various findings show that typical motivations for user-
generated media use include not only the above-mentioned main motivations for media use (community building, information consumption, entertainment, self-expression) but also needs that derive from personality characteristics such as narcissism (Leung, 2013), shyness and loneliness (Leung, 2013; Ryan & Xenos, 2011), extraversion (Correa, Hinsley, & De Zuniga, 2010; Shao, 2009). With regard to media with user-generated content Shao (2009) identifies three main media usages – consuming, participating and producing, or, put differently, “interacting with the content and other human being” (p. 18).

To sum up, the U&G framework seeks to evaluate the media behavior and preferences by being “grounded on the assumption that individuals select media and content to fulfill felt needs or wants” (Papacharissi, 2009, p. 137). It seems like a model that allows being easily adapted to the research of motivations and usage not only of traditional media but also of new digital media forms and features. That is why, the previous research of U&G would be necessary to contextualize the analysis of interviews that will be conducted with refugees on the topic of their particular needs and experiences with digital technology in atypical circumstances on the road.

Next section deals with one specific function of social media – as an organizational utility. Being an interactive platform that facilitates community building and boosts information flow, social media recently was proved to be a paramount element of social change.

2.3. Social media as an organizational tool

As seen in the previous subchapter of the theoretical framework, the Uses & Gratifications model touches mainly upon the general communication, information and entertainment dimensions of media consumption, but leaves out more specific elements of digital technology usage. At this point it is worth repeating that U&G approach could be pivotal in researching populations in crises and emergency situations (LeV-On, 2012). In the light of the mass flight to Western Europe, it would be essential to examine closely the functions that digital features have in the context of political participation and social movements by emphasizing one more aspect of digital media usage – its functions as an organizational tool.

The appearance of digital technology influenced media consumption via low-cost, fast and multifunctional features that facilitated information distribution, interpersonal communication and the access to multiple ways of entertainment. Moreover, social media in particular serve as platforms for building “virtual communities” where the members do not need to be geographically close in order to form a like-minded association united by interests, opinions and sense of inclusion and belonging to a collective (LeV-On, 2010). In this sense, LeV-on (2010) introduces the concept of “organizational hubs” to describe social media use
for organizational purposes by a variety of groups. More specifically, organizational hubs are
defined as “easily accessed focal points to which organizers, activists, and sympathizers can
converge to coordinate their efforts” (p. 1223). Hereby, Lev-on (2012) suggests that building up
on the “sense of community” that derives from organizational function of social media would
back up a research on populations in crisis or conflict circumstances.

Lev-on’s framework provides further theoretical grounding to the research of Tudoroiu
(2014), who studied social media usage during the Arab Spring. The “Arab Spring” itself
erupted in 2011 in Tunisia and spread rapidly in the Middle East and North Africa (MENA).
The wave of ubiquitous social discontent challenged the authoritarian regimes and the current
form of governance in those countries, showing willingness for democratic reforms and causing
political instability in countries like Libya, Algeria, Tunisia, Egypt and Syria. Scholars,
however, focused their attention not only on the socio-political impact of the revolutionary
wave, but also on a relatively new phenomenon - the central role of social media as catalyst of
events and enhancer of political activism. Hence, digital technologies gave rise to a brand new
model of political communication in developing countries which consists of three elements –
the satellite television channels such as Al-Jazeera with more diverse and sometimes politically
disloyal agenda-setting, the unlimited expansion of Internet, and the growth of citizen
consumption of the accessible digital technology (Tufekci & Wilson, 2012). Tudoroiu (2014)
argues that in such a political context social media act as a “tactical tool for mobilization,
communication and coordination” and as “an instrument for revolutionary contagion”. For
instance, the elements of social media contribute to a “collective action” when put in the
political context of a particular social unrest (Wolfsfeld, Segev, & Sheafer, 2013) or, in this
case, the use of social media features could facilitate the coordination and interaction between
individuals participating in the mass refugee wave. By using web-based applications that were,
by the time of the Arab Spring, not a subject of governmental control in comparison to the
traditional media, the activists initiated actions, orchestrated the protests and shared up-to-date
information. In addition, social media facilitated the information sharing and, thus, created not
only internal communities but also a cross-national bridge for participation to a certain cause
(Chen, Ping & Chen, 2015). This is strongly reminiscent of the news coverage on refugees’ use
of digital communication technologies. In fact, Bariagaber (2013) in his study on Eritrean
refugees confirms that globalization and modern ways of communication give access to 1) an
unlimited source of information for the journey, which, in return, could be used for constructing
informed opinions by anticipatory refugees and 2) existent information prior to leaving that
gives the benefit of imitation of the experience of others, minimizing the amount of potential
mistakes that could be made. Simply put, “the greater the diffusion of information, the more
individuals in closed societies tend to consider exile an option” (Bariagaber, 2013, p.4).
What concerns Syrian refugees, in the last few years Facebook turned into the main platform for information exchange as regards every single aspect of the refugees’ journey and needs on the road. Facebook groups created by and for refugees turn into meeting points for former, current and future refugees where all kind of valuable insights about the journey circulate – from contacts of smugglers and hotels to tips on how to pack your flight luggage. The easy access to all the necessary information facilitates the online community through enhancing communication between former and future refugees, current refugees who form travel groups for the road, and, as well, being a platform for mutual help (Ensor & Samaan, 2015).

In addition, new technologies constantly introduce new digital features that boost and transform interpersonal communication and accelerate the information flow. Research on the Arab Spring show that the extensive use of Facebook and Twitter by the demonstrators on the Tahrir square increased the participation rate on the first day of the protest, that social media served as a connection tool between the activists and their friends and relatives, and that the technological features benefited the documentation of the protest and the process of spreading information (Tufekci & Wilson, 2012). In this sense, it is easy to explain why the protests in Egypt were labeled as “Twitter revolution” and “Facebook revolution” by the media – social media was transformed into a powerful tool to organize, mobilize and unite the masses.

Researchers have made similar observations in relation to the Ukrainian anti-governmental protests from 2013. Here, organizational social media usage “facilitated the real-time mobilization needed for a rapid and sometimes spontaneous action” (Bohdanova, 2014, p. 135). Thus, activists on the Maidan Square could exchange information on sudden clashes between police and activists, on army and protesters relocations and on current domestic and international political reactions. Likewise, social media served as the only media tribune or “organizational hub” where decisions could be made on the level of “grassroots self-organization by “ordinary” citizens” where civic roles were being distributed (medical and supply troops, guards, and spokespeople) and leaders appointed (Onuch, 2015).

The presented theoretical background gives the necessary foundations for answering the posed research questions and to examine further the refugees’ needs on the road and their projection onto digital media and services use.

This chapter focused first on providing an overview of the main social and psychological needs of the refugee experiencing the stage of flight. Second, the Uses and Gratifications framework explains how those needs can turn into motivations for media use and later, into actual usage of specific digital media (smartphones) and services functions. The U&G approach makes it possible to analyze the media exposure in the context of the refugee crisis and, more specifically, the refugees’ personal emotions from the traumatic episodes before and
during their journey (Ruggiero, 2000). Finally, the additional dimension of social media as an “organizational hub” and the examples from the Ukrainian protests and the Arab spring to a large extent illustrate how members of a threatened population could interact, mobilize and initiate a mass movement despite the political, economic or ideological pressure. In this case: the mass refugee flight from war and human rights crises towards the desired Western “safe haven”.

II. Research design and argumentation

3.1 Method

3.1.1. Qualitative research

As explained in the previous section, this thesis aims to determine the role of digital technologies and services in refugees’ experiences during their flight to Europe. As this study identifies, describes and explores behavioral constructs of a non-typical social phenomenon, a qualitative approach was employed. As Boeije (2010) puts it, the purpose of the qualitative research method is to “discover the meaning that people award to their social worlds and to understand the meaning of their social behavior” (p.12). The previously determined main research question and the two sub-questions presuppose a detailed investigation of refugees’ uses of digital technology and features in the context of their personal stories and private experiences and needs deriving from their journey. Hence, the room for flexibility during the results analysis after conducting a qualitative research seems more applicable to these goals. Moreover, as stated in the previous section, past academic research on refugees’ media preferences and uses during the stage of flight is lacking. Therefore, the nature of the current research is entirely exploratory, seeking for interpretation of the collected, being guided only by the relevant theoretical concepts explained above. In this regard, a quantitative research with its deductive approach is decided to be a not entirely suitable method at this stage of investigating the topic due to the scarce existing theoretical foundations. Also, even though the strictly individual perceptions of the matter in such extreme conditions as the stage of flight do not allow generalization of the findings yet, what would be a central goal in an quantitative approach (Creswell, 2013).

3.1.2. In-depth interviews

The specific qualitative approach chosen to research this topic is the semi-structured in-depth interview, which provides the opportunity to explore motivations and experiences of refugees in detail (Rubing & Rubin, 2005). Or as Boeije (2010, p.63) argues: “The goal of the interview is to see a slice of the social world from the informant’s perspective (…).” As the research aspect in this thesis has not yet been academically examined, in-depth interviews seem most appropriate for a first research on this topic as they carry “maximum explorative power” and provide room for adaptation to both the interviewer and interviewee in order to gain richer and thorough aspects of the discussed topics (Boeije, 2010, p. 32). Moreover, qualitative
interviews and their inductive approach are the most appropriate method to explore a rather unknown or underinvestigated topic, especially concerning sensitive issues as is the case in this study (Coombes, Allen, Humphrey, & Neale, 2009). The flexible interview design gives the opportunity to change the course interview and adapt it to individuals’ reactions, responsiveness and level of openness (Rubin & Rubin, 2005).

The semi-structured interview consists of personal questions that “are likely to refer to structuring of subjective experience, internal state, or consciousness that has considerable history and development, and needs to be seen in the context of that history as well as of the individual’s general character” (Witz, Goodwin, Hart & Thomas, 2001, p. 196). The interviews were guided by a previously designed topic list and conducted in the manner of the “responsive interviewing” (Rubin & Rubin, 2005).

The central point of the “responsive interviewing” approach is “obtaining interviewees’ interpretations of their experiences and their understanding of the world” (Rubin & Rubin, 2005, p. 36). Therefore, the interview guide adhered to a specific structure. The main questions first aimed to draw the general scope in order to ask for details later. Further sub-questions were asked that guided the course of the interview into particular direction, follow-up questions and probes were also implemented in order to achieve an adequate reflection on the interviewee’s responses.

The research instrument of interview was a previously determined topic list of questions that relates to the posed research questions and is grounded in the main concepts delineated in the theoretical background chapter. The interviews started with general questions on refugees’ background and stories from the flight. Based on their personal stories, the next questions focused on certain moments of their journey in order to determine the actual needs they had on the road and the digital technologies and services place in their day-to-day experience. The last set of questions usually aimed to summarize their general thoughts on the matter.

The main blocks of the topic list included questions about personal background of refugees, their reasons to flee their home country, the hindrances they encountered on the road, their individual perceptions and uses of digital communication technologies. Probes were also used in order to accentuate on relevant details of interviewees’ responses and follow-up questions were posed in order to encourage the participants to focus on a particular statement (see Appendix A).

However, the structure of the topic list was not always followed in practice. Due to the high sensitivity of the topic, it was noticed that some respondents were reluctant or avoided to elaborate on particular relevant details. Therefore, the structure was changed in some instances in order to allow touching upon as many necessary aspects as possible.

The pre-interview preparation included careful questions wording and cultivating responsible and respectful attitude towards interviewees’ stories (Hermanovicz, 2002).
Considering the fact that the respondents might have limited knowledge in English, the sentences phrasing had to be simple and clear. The high sensitivity of the topic was taken into account prior to meeting the respondent and, therefore, too specific questions on painful matters were avoided.

3.2. Units of analysis and operationalization

In order to gain accurate, rich and detailed insight on refugees’ personal backgrounds, thoughts, memories and beliefs, ten in-depth interviews were conducted with eleven refugees who joined the last refugee wave to Western Europe from 2014 on. As this research focuses on exploring the patterns in refugees’ motivations to use digital tools and, hence, the actual ways of interacting with its services, the initial intention included the interviewees to be recruited on the basis of their reasons to flee their home country (in other words, refugees with diverse background) so that a variety in the collected data of personal stories could be achieved. Given that the refugee population is relatively difficult to reach and hesitant to engage in research due to their precarious (legal) situation, the respondents were recruited via a combination of “purposive sampling” and snowball sampling (Silverman, 2011) Following criteria were used as a guideline to sample respondents: refugees with various countries of origin with sufficient knowledge of the English language, who fled their home-countries in the last two years, joined the mass refugee wave to Western Europe. Snowball sampling was instructive to select more suitable respondents: several refugees themselves suggested new potential respondents or, when unable or reluctant to participate themselves, provided contacts of people who they thought will be of help for the research. However, due to lacking institutional assistance and limited access to a broader refugee population, most of the participants are with Syrian origin.

As already noted, refugee communities are typically hard to reach. Conducted at the peak of the refugee crisis in Europe and, thus, being among a number of academic initiatives, the current research faced difficulties with reaching the Netherlands’ refugee population. At first, contact was established with some of the major organizations dealing with refugees in the Netherlands, such as Dutch Council for Refugees and Central Agency for the Reception of Asylum Seekers, as well as with camps in the Southern Netherlands, which could provide access to reception locations where the interviews were intended to be conducted. Asylum facilities where refugees are being accommodated during the course of the complicated administrative and legal procedure to obtain asylum status and work permit could be a suitable interview setting and also facilitate the “snowball sampling” among residents. However, due to the high number of academic and journalistic requests by that time, (and because of privacy issues), few organizations were prepared to accommodate the research. A second strategy was therefore initiated by turning to the communication channel used to reach out to refugees: the Refugee
Start Force community. Refugee Start Force platform on Facebook endeavors to “match refugees with local professionals and companies in the region based on skill sets and expertizes” (Refugee Start Force, n.d.) by building a bridge between immigrants and Dutch society.

3.2.1. Data collection

The interviewees were contacted on Facebook and, based on their current residence, conducted in an informal setting (most frequently at Openbare Bibliotheek Amsterdam). However, the format of the interview had to be changed a few times due to not anticipated circumstances. One of the interviews was conducted with two respondents at once with respect to their own wishes and also in order to benefit of the presence of a second potential respondent willing to cooperate.

Additionally, four meetings were discarded due to respondents’ reluctance to share their story or because of not fitting into the pre-determined sample (e.g.: refugees fled before the eruption of the mass wave in a semi-legal way, insufficient knowledge of English).

Most of the interviews were recorded and later transcribed verbatim. Yet, one of the interviews was not recorded due to the wish of the respondent to remain completely anonymous. During the course of this interview notes were taken on the most important details of the conversation. Those summary notes also served as a subject of analysis as they included the relevant aspects of the interviews’ answers and, thus, contributed to the process of analysis. As it was the first conducted interview, note taking helped to identify the most important moments that could be further scrutinized (Boeije, 2010; Rubin & Rubin, 2005).

3.2.2. Ethics and confidentiality

Past research on mental health of refugees identified “the stage of flight” as the most psychologically traumatizing period from the whole “refugee experience”. Saturated with various episodes such as separation from home and family and emergency situations, the story of the flight itself even in the context of their media uses could be assumed to be a rather sensitive topic. Therefore, the process of data collection and analysis follows the main codes of ethics of the qualitative research (Miller, Birch, Mauthner, & Jessop, 2012). First, the researcher omits asking insensitive follow-up questions causing emotional distress or negative reactions and, by doing this, alleviating potential secondary victimization of those respondents who had experienced traumatizing life events. Second, the confidentiality of data is ensured in case of the will of the interviewees to hide their identities.

The ethical principles of autonomy, beneficence and justice understand the respondent as an individual who independently can give his consent for matters such as participation in the
research, confidentiality of their personal data and revealing his identity (Orb, Eisenhauer, & Wynaden, 2001). Reflecting on the vulnerability of the refugee population in the society, the interviewees were asked to give their written and verbal “informed consent” to be recorded, to remain anonymous and to provide the data from the interview for academic purposes (see Appendix B).

3.2.3. List of respondents:

As the majority of the respondents preferred to remain anonymous, their names and current places of residence are not revealed. Only five out of eleven respondents were willing to provide their names for the research, however, with the aim to avoid confusion in the results section and ensure the privacy of their personal details, all the names were decided to be hidden and pseudonyms are used instead. Hence, the following list of respondents was created:

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Age</th>
<th>Origin</th>
<th>Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent 1</td>
<td>21</td>
<td>Aleppo, Syria</td>
<td>former Law student</td>
</tr>
<tr>
<td>Respondent 2</td>
<td>25</td>
<td>Damascus, Syria</td>
<td>former Economics student</td>
</tr>
<tr>
<td>Respondent 3</td>
<td>24</td>
<td>Aleppo, Syria</td>
<td>former Economics and Business Administration student</td>
</tr>
<tr>
<td>Respondent 4</td>
<td>24</td>
<td>Aleppo, Syria</td>
<td>former English literature student; English language teacher</td>
</tr>
<tr>
<td>Respondent 5</td>
<td>24</td>
<td>Al-Salamiyah, Syria</td>
<td>former student</td>
</tr>
<tr>
<td>Respondent 6</td>
<td>24</td>
<td>Damascus, Syria</td>
<td>former Business Administration student</td>
</tr>
<tr>
<td>Respondent 7</td>
<td>27</td>
<td>Aleppo, Syria</td>
<td>former Archeology student</td>
</tr>
<tr>
<td>Respondent 8</td>
<td>28</td>
<td>Iraq</td>
<td>Chemistry teacher</td>
</tr>
<tr>
<td>Respondent 9</td>
<td>19</td>
<td>Aleppo, Syria</td>
<td>former High School student</td>
</tr>
<tr>
<td>Respondent 10</td>
<td>23</td>
<td>Aleppo, Syria</td>
<td>Control Engineer graduate</td>
</tr>
<tr>
<td>Respondent 11</td>
<td>27</td>
<td>Deir Ez-Zor, Syria</td>
<td>English literature graduate; English teacher</td>
</tr>
</tbody>
</table>

Table 1. List of respondents.

3.2.4. Data analysis

The transcripts will serve as subjects for thematic analysis based on the principles of the Grounded Theory. However, an important notion must be made: even though the process of analysis of both methods is similar (includes data coding), the initial goals of thematic analysis and Grounded Theory differ to a considerable extent. Even though both methods search for patterns across the collected data, the Grounded Theory approach initially aims to produce a
new theory out of the data analysis without being necessarily bound to previous theoretical findings, in other words – the goal is to create a “theory grounded in data” (Braun & Clarke, 2006, p. 80-81). At the same time, thematic analysis is applied in compliance with previous research and concepts and, thus, seeks to establish a connection between the theoretical concepts and the patterns that emerged from the data analysis. The outlined concepts in the theoretical background section could serve as relevant “sensitizing concepts” to give “general sense of reference and guidance in approaching empirical instances” (Blumer, 1954, p.7) that guided the coding process. Sensitizing concepts in this thesis are as follows: socio-cultural background, “push” and “pull” factors, experiences on the road, social and psychological needs, contact with family/friends, organizational needs, orientation, finding accommodation/transport/routes, uses of smartphones/mobile application/social media, gratifications sought/obtained.

Furthermore, in order to find patterns and contradictions main themes in the interviewee’s answers, the collected data were coded. As already mentioned, the first phase was the transcription of the interviews. Next, as the amount of transcribed textual data was substantial, the open coding was conducted simultaneously with the transcription process.(McLellan, MacQueen & Neidig, 2003). After some of the main patterns were already visible, axial coding was applied which merged some of the codes into more general themes that were closely linked to the sensitizing concepts that derive from the theory. This process was accompanied by constant comparison between the determined categories across the data that allowed identifying the main similarities and differences. Finally, the selective coding process outlined a few major themes, which, later, framed the findings. As a result, the data was systematically interpreted with the help of the theoretical background (Corbin & Strauss, 2014).
II. Results and discussion

The main goal of this study is to examine the role that refugees assign to digital technologies such as smartphones and various mobile services such as different types of applications in their experiences during their journey. In strong relation to the main concepts described in the theoretical framework chapter, the following section presents the main themes and sub-themes that were identified during thematic analysis in compliance with the pre-determined sensitizing concepts.

The collected data was analyzed through constant comparison; therefore, the extracted mutual themes are grouped under general common denominators (themes). Next, the elicited sub-codes were presented as constitutive parts of the main themes. Those findings were proved and illustrated through providing examples in forms of quotations and paraphrasing extracted from the transcriptions from the conducted interviews.

The diversity in the respondents’ experiences resulted in different motivations, uses and attitude towards digital technologies. The theoretical implications of these responses in their responses will be discussed in the end of this chapter.

4.1 Personal background

As already explained in the previous chapter, ten interviews were conducted with eleven refugees between 19 and 28 years who arrived in the Netherlands in the last two years during the course of the ongoing Middle East crisis. All of the respondents joined the current refugee wave as a result of the eruption of destabilizing political and military actions in the region in 2014 or 2015. Most of them are Syrian citizens, former residents of Aleppo or Damascus, the country’s biggest cities and industrial, cultural and educational centers. Only one of the respondents is an Iraqi citizen.

4.1.1. “Push” and “pull” factors

The answers of the respondents allowed several common reasons for choosing the path of the flight to be identified. Lee’s migration model (1966) here serves as the best framework for classification of the main arguments that justify the refugees’ decision to enter the stage of “intervening obstacles”, a stage with high intensity of various, often polar emotions. Therefore, the determined reasons could be divided into two types of factors, namely the “push” and “pull” factors that affected their choice to flee their country of origin. The decision to flee is often influenced stronger by the “push” factors, while, in turn, the “pull” factors are the ones that,
according to some of the stories, usually emerge after the choice to leave home was already made.

4.1.1. “Push” factors

According to Lee’s (1966) account, the “push” factors are the ones that trigger internal and external displacement, and are namely the reasons to flee. As those factors serve as their main motivator to leave home and familiar environment, the respondents’ answers outlined several of them as the most frequent justifications for their decision. The political situation in Syria, the war confrontations and the outcomes of the war projected onto the daily life serve as prerequisites to the flight and, later on, during the flight itself, boost traumatic psychological experiences.

As anticipated from the introduction, most refugees point out the war itself as the central factor for coming to such a decision. The “dangers of the war” such as urban bombings and battles on the streets force them to flee, as even walking to work or university becomes life threatening (Respondent 2 and 3). Additionally, Respondent 9 shared that he got injured in the chest with shrapnel in front of his house and, as a result he acquired “a phobia from the sounds” of bombins, which made his departure urgent. As the Respondent 2 puts it, the complicated circumstances create “difficulties of living” such as insufficiency of basic goods such as water and food supply, lack of electricity. As a lot of the respondents were students by the time of the war, they reported that eventually universities closed due to the heavy military actions and they could not finish their studies. The obligatory military service was pointed out as one of the main reasons for fleeing the country, mainly due to the fact that all of the respondents are male and between 18 and 28, age suitable for military entrance. Respondent 5 expressed his primary concern regarding being military recruitment: “They want take me for [in the] army and I don’t know how to kill.”

Two of the respondents belonged to Ismaili, a religious minority targeted from each side of barricades. “You are Ismaili, you got to die. It’s as simple as that.” (Respondent 2).

All the reasons to flee are also experienced as primordial factors that contribute to psychological distress and enhance traumatic emotions as nostalgia, anxiety and guilt for leaving their families and friends while already in flight.

4.1.1.2. “Pull” factors

The interviewees, however, gave only two reasons for fleeing that are related to the destination country. As the results showed, the end-destination was not always clear in the time of departure from home. Hence, the respondents did not provide diverse reasons to flee. A couple of them were aiming for continuing their studies in universities abroad as the ones at home did not function well anymore. Searching for safety, offered by European countries, was
the more universal reason that “pulled” Syrians and Iraqis towards West. In other words: a peaceful environment where the life, daily activities and future are possible.

The aforementioned “push” and “pull” factors are important to be highlighted in order to be able to understand the main motivating factors for leaving home to undertake such a journey. Hence, it could be concluded that this stage of flight is charged with exceptional significance, being the most crucial phase of their pursuit of better life conditions. Opting for such a hazardous act requires a certain level of determination to reach the end destination by all means. Experiencing an extreme period of uncertainty and unpredictability but pushed forward by worsened life conditions at home and the desired image of stable future ahead, the further results show that the digital technologies and services is one of the main means that provide the necessary assistance during the journey used to satisfy existing and emerging needs.

Kunz’s (1973) kinetic model, in fact, is grounded exactly in the reasons to flee. Based on the “push” factors, Kunz divides the whole refugee population into two groups, those being the “anticipatory” and “acute” refugees. Kunz relates the domestic crisis in a country and the dangers of the war to factors that most frequently form “anticipatory” refugee movements. They usually consist of people who, even under life-threatening conditions, took the time to plan their journey thoroughly in terms of gathering money and organizing their routes. “Acute” refugees, however, flee because of a sudden natural disaster or extreme escalation of a military conflict. Therefore, it could be assumed that majority of the respondents belong to the “anticipatory” refugee group that took care of all the necessary tasks prior to departure. Respondent 1, however, had to leave a day after he lost his car and could take only the most necessary items with him, thus, according to Kunz’s model, belonging to the “acute” refugee movements. However, later in the section of organizational needs it is to be confirmed once more that most of the “anticipatory” refugees prepared themselves for the upcoming road.

4.1.2. Place of digital technology in daily life before the flight

The introduction and theoretical framework pointed out that the digital technological innovations of the last decades were quickly adopted world-wide and became an irreplaceable component in a number of daily activities.

When asked whether they have a past experience with digital technologies, all the participants gave a positive answer. Such an unanimity, however, is probably to a great extent due to the fact that all the respondents are representatives of Generation Y, also widely known as “digital natives”. In support of this hypothesis, Respondents 1, 7 and 11 implied that technologies were have always been an important part of their lives. Respondent 7, for instance, shared: “[…]since we are children we [are] used to use computer[s], even laptops when they […] spread”. He also mentioned that Internet brought Google and social media platform in his
life. Most of the respondents highlighted also social media (Facebook in particular) as the main digital tool they used before leaving and added instant messaging applications (Whatsapp, Skype) and navigation services to the main things they had turned into a habit and used actively.

Respondent 1, however, introduces an additional insight on this topic. His observations led him to the conclusion that before 2010 not everyone knew “what is [the] Internet”. He pointed out the revolution that erupted the same year as the main catalyst of Internet dissemination.

“Q: (...) Why is that?
A: Because everybody want[s] to contact with his family. Him[they] want Internet, so like... like, my grandfather.
Q: Really? He as well?
A: [laughs] ...now has Internet. So he can... He didn’t have Internet from about 5 years ago, because he didn’t need [it]. But now he want[s] because for contact with me or for contact with my father or something like that.”
(Respondent 1)

Genuinely, the high penetration rate of Internet and online services was eloquently demonstrated during the Arab Spring. Hence, “the Twitter revolution” served as a really good illustration of the unconventional power of social media and instant communication in the field of social change (Tufekci & Wilson, 2012). Respondent 2 had witnessed similar developments but, through describing the media situation in the country as highly dependent on authorities, he underlines Facebook as the platform for getting balanced information.

“Yes, I had a Facebook account long ago, but since the war started in Syria, it was really hard to get right info, because the government’s TVs are propagandising for the system and the opposition, which is, let’s say, the Gulf countries, they [also] have [a] big media channel, it’s called Al Jazeera. (...) I think Facebook, mainly in Syria, is the most popular way to get news.”
(Respondent 2)

All of the responses on this topic delineate a couple of digital technology and services uses, although not elaborated in depth in this particular stage of the interview. Contact with families and friends emerged as the most wide-spread pre-flight uses of such tools.

Furthermore, respondents used this technology for the purposes of navigation, information gathering and leisure activities. In fact, all those aspects covered the specter of most common needs for media use (cognitive, entertainment, social connection and diversion) being
in line with the previous theoretical research on behavior with media content (Rubin, 1983; Ruggiero, 2010).

4.2. Needs on the road and uses of digital technology and services

This sub-chapter deals with the basic needs that emerge in relation to refugees’ journey itself that serve as the main motivations for digital technologies and services usage. As those motivations are found to directly reflect on media behavior of refugees and, as a result, evoke certain media uses, the section does not separate motivations from usage. On the contrary, the analysis established the inseparable relation between the needs that arise during refugees’ journey towards West and the specific digital media usage. Therefore this section aims to answer both sub-questions that frame the research simultaneously, and namely:

RQ1: What organizational and psychological needs emerge during the refugees’ journey?
RQ2: How are digital technologies and services used by refugees during their journey?

Lev-on (2010) suggests that the Uses and Gratifications framework would be worth applying on populations in crisis situations as the media would gratify atypical needs. The needs that arise in such emergency circumstances such as the flight itself are often unique and have unusual implications on the individual’s attitude towards media and its content. In this regard, the theoretical background put an emphasis on the fact that U&G model considers media usage as strongly linked to individual’s social and psychological needs (Palmgreen & Rayburn, 1979; 1982). Therefore, according to the U&G model, this section presents the main themes (needs) that emerge from the road experiences of refugees and immediately links them to the solutions provided by digital technology and services, as both aspects are scrutinized together. Previous findings on predominant needs of refugees in flight were used here as guiding concepts, in particular Mazetti’s (2008) “factors of vulnerability” such as separation from family and friends, disorientation, transcultural stress, etc. These are scrutinized under the main needs satisfied through media usage – social, psychological, organizational needs and the need of diversion. Through determining their personal experiences and needs, the actual uses of digital technologies and services are identified and explained when previous theoretical research when applicable.

An important remark must be made here: the time period in which the journey is situated and, as well, the main phases of the trip are crucial for the refugee experience itself. First, travelling in 2014, when the mass flight was in its initial stage, created the necessity of taking additional precautions when crossing the borders as refugees faced the danger of being caught and arrested by local authorities. However, the international arrangements from 2015
reduced some of those dangers by “legalizing” the journey to a certain extent. Respondents report an active involvement of border police (in Greece and Turkey, in particular) by, in certain cases, facilitating the smuggling process. The assistance provided by non-governmental organizations such as the Red Cross and the Red Crescent also reduces the uncertainty rates among migrants by giving out food and drinks, providing the necessary information, offering shelter and, in some cases, transportation.

Second, the respondents reported three different routes of the flight. Most the interviewed refugees opted for the main route to the Netherlands through the Balkan countries by entering Europe by sea from Izmir, Turkey, and crossing the borders of all countries on the way on foot. Three respondents, however, shared the first phases of the journey until Greece but later on, they took the decision to illegally arrive to the Netherlands from Athens, Greece, by using fake identity documents. Only one of the respondents chose the “alternative” – the cheaper route through Northern Africa, crossing the sea by boat to Italy and the rest of the countries on the way on foot.

Those facts are strong prerequisites to the main impediments the refugees encounter on the road, respectively, the needs that arise from those problems and the solutions that digital tools provide. Therefore the results discuss the main social motivations to maintain social distant social relationships and to form a community, the organizational needs to plan the journey in advance and on the road in terms of routes, navigation, accommodation, administration and contact with smugglers, need to alleviate emergency situations and diversion needs of killing time and creating memories. The digital technology and services uses aim to gratify those needs and therefore, proved to be strongly related to the identified needs, are also incorporated in the sub-sections.

4.2.1. Social needs

“[On the road] I missed my parents. [...] I missed my friends. I missed my house. And I’m still missing them.” This confession of Respondent 9 leads to the understanding why leaving home and family behind is considered the most psychologically traumatic part from the “refugee experience”. Even if not mentioned directly, the feelings of sadness, home-sickness and the strong sense of connection to the home front were strongly apparent in the interviewees’ responses.

“My life... I think, it's finished. Because really, I had [a] great life in Syria.”
(Respondent 4)
“If I’m going to die [...], ok, I’m gonna die. So that’s all. What’s gonna happen after that? [...]. So I’m going to die and that’s all. I’m not going to feel anything after that. So... but in the middle of the sea I was thinking about if I... If something happen[s] now, what’s gonna happen to my mother or to my family, and [...] my friends. [Which] one of my friend[s] is going to be more sad, [...] the most saddest one in the world about if I die or something.”

(Respondent 3)

However, in refugees’ experience, this separation can be conceptualized in two major dimensions – separation from home and family and losing a friend/group on the road. The extracted codes that cover the gratifications sought/obtained and the actual digital media usage differ substantially among these subdimensions.

4.2.1.1. Contact with family

The relation of an individual with its roots usually reflects substantially on their psychological state in different stages of life (Rousseau, Mekki-Berrada, & Moreau, 2001). Finding themselves in a situation highly saturated with uncertainty and unpredictability was found to evoke polar reactions in the respondents regarding their contact with loved ones. Half of the respondents felt the strong need to get in touch with a member of their family during each phase of the journey, when the other half preferred to avoid contacting home until they reach their end-goal.

Respondents 1, 4 and 9 expressed the most distinctive need for keeping a constant connection with their families. Being struck by shrapnel in front of his house himself, Respondent 9 stressed multiple times the degree of danger in Aleppo because of the active military actions. Leaving them in the center of the war left him with sadness and guilt, which he expressed quite eloquently in the following way:

“I left my father and mother and they are old persons. And I am their only son. They need me. They need me a lot. But I had to go... [...] I couldn’t stay anymore. I was concerned about my father more than about myself.”

(Respondent 9)

Similar signs of distress showed Respondent 1 from Iraq and Respondent 4 from Al-Sallamiyah, Syria, whose families remained in the war zone threatened by bombings and gradually worsening life conditions. Despite experiencing exceptional physical and psychological hindrances, those respondent were mainly concerned by the insufficiency of
news from home and the guilt of being away and of providing them extra reasons for fear and anxiety.

The second group of respondents demonstrated similar feelings of sorrow and pain when talking about their home front. However, they took a diametrically opposite decision – not to contact them along the way. Fleeing Syria in the 2014, in the early stages of the mass flight towards Europe, Respondent 4 serves as an example. He had to undertake a journey on his own in times when NGOs such as the Red Cross were not providing assistance and aid to migrants yet. His “journey was different than others” and consisted of episodes such as crossing Macedonia on foot and risky border crossing. When asked whether he contacted his family on the road, he replied that he did not want to worry them. Same argument was expressed by Respondents 2, 3 and 11, who both chose to absolutely hide their journeys from their families:

“When I fled from Syria, like, no one from my family knows that. Because they were in Egypt, so I don't [tell] them, because I don't want them to be so worried [...] about me or something. So, I was just thinking: "I'm gonna do it by myself", then I can [tell] them, when I arrive in Netherlands.”

(Respondent 3)

“Every time my family called, if I tell them the truth, they're going to be really scared. So, they just call me: "Where are you?" and I say: "I am at the hotel."

(Respondent 2)

Both respondents, however, did not completely break the connection with home during this period. They realized the importance of introducing someone else to their experiences and, therefore, shared every single step of the way with a friend of them, “like my best friend” who would be “the only one who knows the truth” (Respondent 2). In case of a sudden danger during the flight, the “best friend” would pass the needed information to his parents if needed.

As seen, the need to contact home and family had a significant impact on refugees’ psychological conditions. Thus, this factor influenced preeminently their behavior with mobile phones. All of the respondents who carried a mobile phone with them in the first instance bought a SIM card in the country they arrived in and searched for coverage in order to be able to call. Another solution was to search for Wi-Fi connection wherever possible.

“I could buy the Turkish SIM card in Mytellini to reach my family in Turkey and I told them that “I'm here. I reached here and I'm going to continue”.

(Respondent 6)
In addition, Respondent 1 lost his charger in Turkey and travelled all the way without having a personal phone. Nevertheless, according to his words, the minute he arrived in a “safe” country, he bought a charger and used the Wi-Fi in a café in order to contact his family and share updates on his location with them after eight days of complete silence.

It is important to note that refugees often spend only a short time in country on the way. However, all of the interviewees noted buying a SIM card as a paramount priority task when arriving in a new country. Four of them linked that activity with the need to call their families and, thus, obtain affection gratifications through using their phones out of social reasons. By doing this, they alleviate anxiety and share personal achievements (Wei & Lo, 2006). As for mobile applications usage, neither of the respondents outlined a specific digital tool they used for establishing a connection. Skype was rarely used as a communicatory platform as it requires a stable Internet connection that is lacking on the road.

4.2.1.2. Creating and maintaining social relationships

Having a companion or a “trustworthy” group on the road is one of the main psychological needs of the refugees. The majority of the interviewees were always travelling in a group of people who often shared the same struggles and goals as them. Even though the theoretical framework does not explicitly investigate the role social relationships for the psychological experiences during the course of flight, the sub-theme of creating and maintaining social relationships was identified. The identified codes that constitute this sub-theme are sense of community, socialization, sense of isolation and loneliness.

Respondent 2 implied that he gathered his travel group both online and offline. According to his words the offline process happened coincidentally in Turkey – he could recognize the accent of people coming from Al-Sallamiyah, his hometown, whom he met in hotels, on the streets, etc. Digital features, however, played a significant mediating role for finding future group members – after he shared with them the fact that he left Syria, his friends gave him contacts of their acquaintances with whom Respondent 2 decided to call and “get together”. In fact, the respondents often emphasized the fact that they travelled with close friends, as Respondent 6 did.

“Most people go in families or groups or something. It's very rare to have someone alone. Even if he's alone, during the journey he'll meet someone who will be a friend or something.”

(Respondent 6)
Additionally, Respondent 4, for example, reported that he even saved his closest friends from being deceived by smugglers on the border between Macedonia and Serbia and from being caught by the police as it happened with the rest of the group. Such an act indicates that even at risk, showing responsibility to the well-being and goal of their fellow travellers is one of the strongest emotions, even put above survival instinct in some situations.

Contrary to the positive influence of the social environment on refugees’ mental health, the sense of isolation and loneliness could be enhanced in case of losing a fellow traveller or their group. This is the only context in which the importance of having a mobile phone is highlighted when speaking about talking with other refugees. The significant role of a companion’s presence during the journey was emphasized multiple times by almost all of the respondents.

"Most people go in families or groups or something. It's very rare to have someone alone. Even if he's alone, during the journey he'll meet someone who will be a friend or something.”

(Respondent 6)

All of the respondents confirmed this quote – every single one of them crossed the borders in groups formed in the beginning of the journey or in groups joined later. Therefore, all of the interviewed refugees highlighted the fact that they were not alone during journey and, therefore, it could be concluded that the support provided by the group of friends of the road is essential for their motivation and determination to reach the goal. Being accompanied in such a crisis by someone sharing same experience reduces psychological stress and increases confidence. Therefore, finding themselves alone in a brand new unknown area, lacking social support could intensify development of negative feelings, fear, anxiety or stress.

“You need, like, to speak with your friends. If you lost your friend, uh, you can call him in the road. Yeah, "I'm here." and you will see him again.”

(Respondent 4)

This statement summarizes one of the most basic needs refugees are experiencing on the road – being “always connected” and knowing that in case of emergency they will have the option to seek for help from the ones on whose help they rely on. The next section will see how exactly they use digital media in order to satisfy their desire for social support.

In contrast to using only the calling function of their mobile phones to reach their family, in the case of reaching out to their friends in times of need the respondents mentioned also instant messaging as the predominantly used feature of their smartphones. Whatsapp was
found to be frequently the chosen messaging application to “contact with some friend, if we lost him” (Respondent 1). Respondent 4 mentioned a different aspect – he found that social media and messaging applications could be crucial when trying to keep up with the group, the people “who follows you” and the ones who he was following. Interestingly, keeping in touch with friends abroad also emerged as the main purpose of the above-mentioned applications and smartphones in general. Respondent 3, for example, had a code arranged with his friend back in Aleppo that would allow him to send updates about his situation in a quick and clear way:

“When I send you a dot, that means, like, "I'm good", if I don't send you anything, like, that means "I'm dead" or something.”

(Respondent 3)

Smartphones and digital tools interfere also in those close relationships especially when situated in the non-usual circumstances on the road. Respondent 6 shared similar experience: not having a phone charger himself, he could rely on his friend to lend him one whenever they could find electricity to charge their phones on the way. The same interviewee remembered one more positive episode from his journey. In a temporary camp in Germany he asked whether he could use the Wi-Fi shared by another refugee mobile hotspot. This event provoked a conversation and, eventually, they continued their journey together. Digital media use could thus also be a source of bonding. Some of the respondents tried to maintain the relationship with the friends they left at home and the ones who already live outside Syria using Facebook and Whatsapp as a communication platforms.

Thus, the socialization and community building gratifications were obtained through the most common digital platforms usage for communication and various unconventional uses of mobile phones and their functionalities for community building. Thus, the current findings support the past research on U&G of mobile phones and digital media as being used primarily for social reasons (Park & Lee, 2012; Raacke & Bonds-Raacke, 2008; Whiting & Williams (2013). However, the code creation of social relationships was identified as an additional gratification obtained from using digital tools in an unconventional way.

4.2.2. Organizational needs

The second basic theme that emerged during the process of analysis was labeled as “organization of the flight” as the sub-themes, and namely the patterns of needs (mostly physical) and the related media uses, correlate with trip planning before and during the flight.
4.2.2.1. Pre-departure planning

When asked whether they organized their trip before leaving, the respondents gave contradictory answers but also made the important notion that a full and thorough organization of such a journey is not possible.

“You can't organize everything in this trip because it's not a vacation trip. It's like, very chaotic. So, we expected things to [...] suddenly happen.”
(Respondent 6)

“(…) there’s no information on Google on what’s going to happen to you.”
(Respondent 2)

As a result, the finding showed that half of the interviewed refugees did not find planning that was crucial for their future journey while back in their home countries. Respondent 2, for example, explained that he “didn’t have a place in mind or a plan in mind” since after university graduation he immediately had to choose to flee, as he would be recruited for the army immediately. Respondent 9 showed the same attitude to planning: “How did I organize it? I didn’t organize it. I just got out of Syria and then I would think about what I’m going to do”.

However, half of the respondents answered positively that they tried at least to gather information about what awaits them ahead, what to do and where to go. Respondent 4, in fact, underlined the importance of creating a plan before leaving. Being one of the “early” refugees, he could not rely on exhaustive information around details from the journey because, at the time of his flight in 2014, not many people were fleeing the country and, according to his notion, he was not able to obtain up-to-date information. “But you need to make, like, new your plan. Your own.”

Those who attempted to gather the necessary knowledge needed for the road reported two main ways for collecting information. First, the source for credible guidelines for the journey were people who fled in the past, a “person who’s done this procedure and knows the steps and what you can expect after that”, as said by Respondent 2. Respondent 3 and 11 also explained that he discussed his intentions to flee with friends on Facebook, who, by that time, had already experienced the flight itself. Therefore, they were able to share their “rules and instructions” which aimed to draw his attention to certain important moments awaiting him on the journey and also relieved some of the stress.

Second, the active presence of Facebook groups created from and for refugees in the life of the respondents was emphasized for the first time here, in the context of organizing the
trip prior to the flight. Facebook groups turned into a platform where not only information is shared but also required: “People ask before, yeah, about the road, about the weather, about the circumstances, about countries, new laws…” (Respondent 6).

Getting back to the Kunz’s kinetic model (1973) In contrary, the “anticipatory refugees” have the time to arrange their departure in terms of accommodation, transport and overall monetary cost of the journey. The “anticipatory” behavior of the respondents showed that both methods of trip planning are the first indicators that social media had not only facilitated communication and information acquisition, but both combined are contributing to the observed role of social media as an organizational tool, being a crucial foundation for building balanced opinions and, later, making informed decisions (e.g.: which route to take, how to travel, etc.) (Bariagaber, 2013; Lev-On, 2012). The trip planning is the first stage where the individual starts developing a sense of community and understanding what a being a refugee means. The informative Facebook groups contribute to the flow of vital information and play the role of a virtual meeting place of former, current and future refugees (Ensor & Samaan, 2015). The organizational nature of digital technology and social media was reflected in uses as navigation, finding accommodation, administration and contacts with smugglers.

When sharing their thoughts and opinions, the respondents often highlighted a couple of aspects that imply the strength of attachment to their smartphones. The following practical “requirements” emerged as not anticipated patterns in the interviewees’ attitude to their phones. At first, having a charger and also access to electricity to charge their phone was the first need after arriving at a camp, café or another place with electricity. In some instances, the plugs available were not enough for all the refugees, but the need of having a working phone so strong that people had to fight for it. In order to minimize such risks, refugees carried also a powerbank, often more than one, that ensured them with full battery. Second, as also mentioned a couple of times above, buying a SIM card in every country on the road was shown to be a common behavior. When getting into details from their journey, the respondents always clarified to have obtained a local SIM card in order to avoid disorientation and loss of contact with important people or organizations. Closely linked to having a SIM card is the access to a working Internet connection. “If you don’t have Internet, you will be in problem.” (Respondent 5). In the context of these basic technical requirements, the next sub-chapters explain whether and how the main organizational motivations resulted in the relevant media uses.
4.2.2.2. Navigation: GPS as the “best friend” on the road

The theme of experiencing disorientation in an unknown area is outlined by Kinzie (2006) and Mazetti (2008) as a substantial factor that could lead to psychologically traumatic consequences. Finding routes on the road and determining current locations were found to be one of the vital gratifications that were sought from smartphone and mobile applications usage.

All of the respondents agreed that finding their way around was their most frequent task on the road. Hence, they searched for and relied on multiple ways of guidance. Different decisive moments on the road were requiring orientation in the area around them. One eloquent example was mentioned by two of the respondents. In order to reach the coast in Turkey where the smuggling boat for Greece awaited for refugees, refugees were driven in the back of a truck without knowing where exactly they were heading for. “[It] was dark. I don’t know where I am.” (Respondent 5)

This experience of being locked in a truck with “no space to even move your leg” where you can “barely breathe” was highlighted as one of the most frightening for some of the interviewees. Therefore the first thing they did after arrival to the seacoast was to check their location.

“I wanted to know where I am, because where I am, means where they’re gonna send us. To which island.” (Respondent 2).

He also explained that the usage of all kinds of technology was forbidden by smugglers on the Turkish sea cost with the aim to avoid attracting attention of the sea patrols. However, Respondent 2 took the risk, dimmed the brightness of his phone and checked his current location. Another episode shared by Respondent 2 illustrates that the needs to avoid disorientation are satisfied in crisis situation are quite important. But not only emergency situations required navigation and orientation. After arriving in big cities such as Athens and Vienna, refugees need some further orientation about where their needed places are situated – such as airport, camps, etc.

After a thorough analysis of the data, it is easy to notice the high importance of all navigation services available on a mobile phone. GPS, for example, was described as “my best friend” on the road and the service that was used “a lot” in all the situations. Google maps was also characterized as the “first”, most essential, “definitely very important” application to have on a smartphone. Also, whenever they could find Internet, respondents 6, 7 and 10 downloaded offline maps of all the countries he passed through in order to be secure and to know what to expect, because “I just wanted to know where am I”.

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Only Respondent 4 reported to manage to cross the whole Macedonia on foot following the railroads without using any maps. “I don't ever need GPS and totally, I didn't use GPS in Macedonia, because I know my road.” However, he underlined multiple times the role of navigation in the flight of the migrants that undertook the same adventure an year after him.

Overall, as also implied in the theoretical background by Mazetti (2008), avoiding disorientation and localization are the main motivations that lead refugees to gratify GPS and Google maps with such a predominant role for their journey.

4.2.2.3. Accommodation

Being a refugee in flight often means to be uncertain whether the next night is going to be spent under a roof or outside, in the wild. The results from coding process showed that lack of shelter is one of the basic physical impediments on the road but not a major psychological need.

The interviewees reported various episodes from their own experiences. The most frequent accommodation types on the road turned out to be hotels, overcrowded camps and “open air”. As they had to spend around a month in Athens before leaving with the plane to the Netherlands, Respondents 3 and 4 even managed to sleep at their friend’s apartment. However, as almost all respondents agreed, having a place to sleep was not of such a high importance, as anticipated in from the previous research on traumatic mental experiences of refugees.

“When you are in the situation, you don't feel how bad you are. Or how bad you feel. You just want to reach your point... destination. [...] Sometimes we felt very cold, sometimes we slept outside, uh, in an open areas. [...] Especially people they don't have money, as I did. I didn't have money. And I can't afford being in hotels. And even if I want to find a hotel in the Mytellini, I couldn't. We asked, actually, but they were full. So, we slept near the [...] port on the ground in Mytellini, yeah.”

(Respondent 6)

“No one searched for his sleep when he has [...] for his road. [...] you want to go, like, further and further. So he won't think "Where I will sleep.". He will think "How much I will walk today?" or "Where I will be today?"

(Respondent 4)

However, finding accommodation was still perceived as a motivation to turn again to the information seeking function of smartphone applications and the smartphone itself. Google, for example, solved the inquiries of Respondent 3 about “the nearest hotel” in Athens. Here as
well, Facebook was used as a frequent source for acquiring information about details on the road. The “offers” in the groups by Syrian refugees included also accommodation options, as Respondent 1 confirmed:

“Yeah, somebody help us (...) on Facebook. Him say us “Go to this hotel” or anything like that. “Go to this hotel, it’s nice and cheap” and something like that...”

To conclude this section, it must be emphasized once again that the lack of shelter was not experienced as a distinctive physical need. Even when asked where they spent the nights and how they found accommodation, the majority of the respondents did not assert any special meaning to that phase of their journey. Nevertheless, this need could be added to the organizational motivations of the refugees to use digital technology as when in need of a shelter, their “assistant” was the again the smartphone in their pockets.

4.2.2.4. Transportation

All of the respondents shared a number of episodes about travelling across countries by boats, busses, trains, planes or on foot. However, even though finding ways for travelling emerged as one of the main themes as a need on the road, there were no significant uses of digital technology reported in this context. Respondent 6 and 7 explained that crossing the borders and some countries was well-organized – they had to only pass the border walking under the watch of police cars that even showed them exact path to walk. Respondent 8 pointed out the assisting role of the Red Cross who also provided cars and busses from one point to another, thus, contributing to the convenience of the refugees and relieve them from the necessity to, for example, surmount long distances and endure bad weather conditions.

4.2.2.5. Contact with smugglers

Crossing borders, however, was mediated not only by non-governmental organizations. Smugglers are the ones who played a central role in the success of the journey itself and this influence could be sensed from the interviews with the respondents who touched upon the topic of getting in touch with them multiple times.

Crossing the sea between Turkey and Greece was only possible by boat, a place which was provided only in return for money (around 1000-1500 euro). Since this episode was inevitable for most of the respondents, they had to undertake this risk. Therefore, establishing contact with a smuggler was a necessary step in order to have an insured place on a boat As
reported by the respondents, the streets of Izmir (the town of departure to Greece) were full of refugees heading West, therefore, the smuggling service was quite active.

“When him see some guys have bags, him say us “You want go?”. If I say him “Ok, how much?”. And him say us like 1000 euro. I say “Give me your number telephone, I can contact with you in the night” or something like that.”

(Respondent 1)

The respondents said that a simple asking around could provide you with contacts of smugglers, the only challenge, however, remains to find a reliable person. “You never see their faces or know their names” (Respondent 2). Respondents 6 and 7 agreed, adding that they have not seen the smuggler personally – third parties, often Syrians, were mediating the arrangements.

Same situation was encountered once again by the three respondents who reached the Netherlands by plane from Athens. In need for a fake ID and flight arrangements, they also had to search for a suitable person for that in a completely unknown city.

However, social media functions facilitated this process as well. As Respondents 2 and 10 shared, social media had a contradictory role in terms of obtaining reliable information about what to do next and who to contact. On the one hand, all Facebook groups were full of advices on the necessary steps and also of contacts of smugglers with proved reputation. Or as Respondent 5 described it: “I contact with somebody who go in Greece before me, ask him with who you connect, uh, with who you talk for the trip.” Some of them even provided their contacts themselves in a form of advertisement. On the other hand – “A lot of people on Facebook would say bad things to stop you from trying this journey. They would say “Don’t cross to Greece, they are going to return you back to Turkey.” (Respondent 2)

Nevertheless, even after the smuggler was found and chosen, the phone had to be “always on” so that the refugees could receive a return call about the date and time of departure. As it could be seen until now, the uses of the mobile phone for its initial functions to communicate and connect were pivotal for the success of the journey, in some cases even life-saving. Having a smartphone also gave the migrant a permanent access to the “organizational hubs”, or the Facebook groups, where communication, coordination and mutual help is offered by current and already resettled refugees united by (Chen, Ping & Chen, 2015; Lev-On, 2010; Tudoroiu, 2014).

4.2.2.6. Administration

Some of the most valuable possessions of a refugee in flight are their documents. Not only do they prove their citizenship, but also serve as evidence of their lives before fleeing their
countries. Keeping them in a safe place is the first and foremost responsibility of the refugees.
That is why, Respondent 3 and 11, for example, sent all his diplomas to a friends before leaving Syria. “Because in any time I maybe lose my house or the war is going to kill me.” (Respondent 3). Respondent 7, in contrary, had them sent by his sister after his arrival in the Netherlands.

In order to have their “lives stored”, the respondents showed the same pattern in their behavior in terms of using digital tools as an online storage of documents.

“Before I left Syria, I scanned all my documents. Uh, I save then on my mobile, my laptop, a flash drive, but the most ultimate way to save them was cloud services. Because I could lose my phone, my laptop, but cloud service is the most safe way.”
(Respondent 2)

Google Drive and e-mail were also used as backing-up services in case the documents were lost in one of the numerous dangers on the road. Or as Respondent 2 puts it “I do have my passport, when I left Syria, but if something happens and I lost it, at least I will have a picture with all the numbers and maybe they can contact the embassy or something. It's better than nothing.” In this sense, Respondent 4 shared his negative experience of leaving back his luggage with his passport in it in Macedonia when he had to run away from the police coming to arrest the group he was traveling with. Luckily, the photo of his ID and diplomas, however, served as a legitimate evidence of his Syrian nationality in front of authorities in the Netherlands.

“Q: What if you didn't have it [the photos] on your phone...?
A: I would not be Syrian. Anymore.”
(Respondent 4)

Past research, however, does not describe thoroughly the use of applications and other digital tools as online storage of valuable items (files). However, the findings of this research outline the theme of the administration needs as one of the codes that results in a specific and practical digital tools usage. The above-described measures to store data were taken with the aim to increase the sense of confidence, to be sure that the most precious belongings will still exist in a digital form even if lost in extreme situations.

4.2.3 Emergency

The following section focuses on how digital technologies were also sought to provide solutions to emergency situations that refugees encounter on the road. Having in mind that the neither the needs during the stage of flight nor the digital media usage were thoroughly
academically researched, Lev-on’s (2012) inclination that emergency situations could create exceptional media uses is especially relevant here. As already mentioned, the Middle-Eastern crisis and the European migrant legislations of that time opened the floodgates to refugees in 2014 and 2015 and by doing this created a pattern in the preferred routes. The analysis showed that the main patterns in the digital media uses in emergency situations emerge from particular phases of those routes, mentioned repetitively by all of the respondents. Those isolated events are used to frame the findings in the following sub-sections. Some of the motivations to turn to digital technologies in such extreme circumstances are identified to be the same as those in the previously described needs but put in a atypical crisis context they obtain a different meaning.

4.2.3.1. The boat experience

"The safest, kind of, way was going by boat. It costs money and there’s the danger of drowning."

(Respondent 2)

This statement contradicts the prevalent assumption that reaching the European coast by boat is the most dangerous phase of the refugees’ journey. Therefore, the level of anxiety among refugees prior to and during the boat trip is reported to be the peak point of psychological stress of the journey. Albeit the distance between the Turkish coast near Izmir and the first Greek island is not substantial, numerous dangers may occur that may cause sinking and, respectively, would force the refugees to swim to the nearest coast. The respondents provided several examples. Respondent 1 and 5 both reported that the engines of their boats broke right after departure. After two failed attempts, Respondent 9, also had to swim back to save his life. Respondent 11 was trying to reach the Italian coast with 700 other refugees in a boat for 40 people.

The survival in those situations is in most cases in the hands of refugees themselves. As it was in the Respondent 1’s experience – the waves were flooding and drowning the boat, hence, the refugees used their shoes for emptying water out of it.

"So, three hours just danger, just everybody is horror, everybody is just “My god, my god”. [laughs] Yeah. When it’s finish three hours and when we’re in the Greece, we were say (...) “Thank for God!”

(Respondent 1)

All the refugees suspected that crossing the few kilometers to Greek soil would be the most frustrating part of their journey. The only way they could prepare is ensure themselves that
they will have the opportunity to call for help. Although the smugglers usually did not allow any usage of phones during the night journeys in order to avoid being noticed because of the screen light, Respondent 2 and 10 said that they still managed to check their location. Although he could not remember the name of the application, Respondent 9 reported to have used a “friend tracking” tool when in the rubber boat, with which his friends could follow his movements.

”. "Because if, God forbid, the rubber boat somehow got flipped or something, they know that we are drowning. They can call the [border] police, the healthcare […] to help us. But what I heard is that […] they were receiving calls, but they were not helping.”

(Respondent 9)

The respondents who crossed the sea to the Greek islands Lesbos and Kos pointed out that Turkish and Greek coast guard boats were observing the smuggling process from both sides without interfering. Therefore, a couple of respondents said that they had all the numbers of coast guards stored in their smartphone in case of emergency. As Respondent 6 explained: “These numbers are quite important. We use them for emergency.” Respondent 2 confirmed that statement:

“When we were on the boat, on my mobile phone, I had the coast guard for Greece and the coast guard for Turkey on my mobile. And I fortunately had a water-resistant mobile, so even if I go down in water, I can still call. And it was the safe mobile for the group. Everybody turned their mobile off, except me. And, of course, it's a lot like, let's say, "safer" to know that if something goes wrong, we can call the coast guard maybe.”

The opportunity to establish contact with authorities and Red Cross’s volunteers was an essential factor that could alleviate part of the stress and provide confidence. “I take all the number of the police in Turkey and in Greece, and all of my family and many groups on Facebook (…). You have to send them on Whatsapp your (…) location in the sea. So I'm always stay in contact with them.” (Respondent 3)

Together with location and instant messaging applications, Respondent 7 reported two other useful tools that accompanied his journey, though he could not remember their names. First, he used an application that showed whether the sea is calm and the day is suitable for undertaking the risk for travelling. Second, an application “like a Walkie-Talkie” with chatrooms created and managed by volunteers from the Greek shore answered any emerging questions and reacted to emergency situations. “And actually that helped to save a lot of lives.”
The last few arguments showed that having a mobile phone with access to Internet is obviously essential for the road. Not only do the stored contact provide a way out of emergency situations, but also the applications for localization (such as Google Maps), information retrieving (for weather conditions) and instant messaging turned out to gratify the needs to escape extreme situations, adds on feelings of confidence on the road and, once again, mitigates anxiety and stress.

4.2.3.2. Other dangers on the road

However, crossing the sea was not the only danger that refugees encountered on the road. The high degree of uncertainty was present on each step as, according to Respondent 3’s account, that it is not certain whether “that guy [is] going to [steal from] you or going to kill you”.

In such situations the presence of mobile phone could provide an emergency exit by giving the opportunity to make quick calls to the person that could offer help. An illustration of that function is the story shared by Respondent 7. After arriving to Mytillini, Lesbos Island, Respondent 7 gave an interview to a BBC reporter, who gave him his e-mail as a gesture of help in case of emergency. Later on, already in Serbia, the interviewee and his group of 11 people were driven to an abandoned place in the woods. “We don't have GPS, we are just offline, we don't have anything.” Being the only English-speaking refugee in the group and, therefore, the only one who could negotiate, he felt the responsible for his group or as he put it: “If something bad happens to all of us, I will be the one to blame.” He managed to convince the drivers to get them to another station where he charged his phone and sent an e-mail to the BBC reported he had met in Greece.

“I sent him every detail that I know, and the time, and the place, and what happened to us, where we are going, what they promised us, just in case we disappear. And he replied but it was maybe one day later and we were in another country. Safely, thankfully. And, uh, but he showed that he care. Actually, I appreciate that... that he responded.”

The interpretation of the episodes described especially through the last two sections leads to the conclusion that having a smartphone with Internet access gives sense of security and safety on the road. The communicatory function of the phone provides solutions in emergency situations by being the transmitter of calls for help. More specifically, it allows refugees to establish contact not only with their loved ones but also with authorities, organizations offering aid and assistance and trusted friends or people. Respondent 4 summarizes that with the following statement: “And if someone want to make a problem with you and you don't have a
mobile phone, you will be afraid. The mobile phone make you [feel] more safer.”

The theme of avoiding emergency explains, in a way, why the stage of flight was named by Keller (1975, as cited in Malkki, 1995) “period of extreme danger and flight”. Refugees have to conquer all kinds of extreme situations where not only their personal belongings could be lost or stolen, but also their lives could be threatened. Those moments of acute fear, in some instances even fear of death, is a major factor that contributes to Mazetti’s (2008) “factors of vulnerability” as having a significant influence on refugees’ mental health. Therefore, they turn to their smartphones as the one media that provides the necessary alternatives to escape, save themselves or find help. Mobile applications (such as messengers and e-mail utilities), as seen, are used for information sharing, instant communication, localization – all being common digital technology and media uses put in the context of atypical circumstances that manage to gratify the needs to feel safe and invulnerable.

4.2.4. Diversion

The last need that emerged as a common concept merging various digital media uses is diversion from distress and anxiety. The road to a better life seems to be laid with numerous impediments and incredible psychological pressure. However, some of the respondents reported to have used their smartphones also just for pleasure. Past research on U&G of the mobile phones and applications puts diversion in the foreground as one of the most frequent needs for media use. The results from this research confirm that even in crisis situations, refugees find time to behave with digital services in a more “superficial” way – creating memories, killing time, escaping boredom are the sub-codes that were identified when analyzing refugees’ attitude towards digital technologies.

4.2.4.1. Preserving memories

The results already showed at least partly the amount of negative emotions that refugees experience on the road. However, most of the respondents managed to find moments of joy and also stamp them in their memories with photos from the road.

Arriving successfully in Greece, for example, is one of the happiest moments in a refugee’s journey. As Respondent 6 described it: “The half of the journey is the sea, but the sea is not that big. Europe is big. But it's land, so it's safer than the sea, so this is why they [refugees] would be very glad to reach that place.” Having reached a place with coverage and Internet, the refugees use the time to take a picture of the moment, happy, “smiling”, with their friends and families.
Respondent 2, 6, and 11 mentioned that a lot of times during the night they were not allowed to use their phones. However, every time they managed to steal some time, while spending their day in big cities like Vienna or Munich, they took a photo as a “nice memory from the way” (Respondent 1). Respondent 5 added: “It’s a dangerous moment, but when I see it again, it’s funny.”

Thus, inspired by joyful feeling of sudden relaxation or just being in a calm and safe environment, the refugees turned to their phone’s function to take photos with a new motivation – to photograph the positive moments, usually following moments of danger and stress.

4.2.4.2. Passtime

Avoiding boredom is one of the most common characteristics of a smartphone. The available applications facilitate killing time and the daily life of some of the respondents is not an exception. While spending time in Athens waiting for the right plane to take him to the Netherlands, Respondent 2 had a lot of free time, which he had to kill. Therefore, he started playing games and watching movies with the help of mobile application such as Popcorn and Netflix. “I’m an addict for TV series and I watch[ed] everything like Friends, How I met your mother, Game of Thrones…”

But not everyone shared the same attitude to killing time on the road. Respondents 4, 6 & 7 explained that such a journey requires high level of focus and also is often very physically exhausting, hence, spending time playing games and losing time was not acceptable to them. Respondent 9 put forward another practical argument for not playing games:

“With playing games, you will use your battery. And, uh, if you lost your battery, it's the most precious thing that you have on your journey. So no, avoiding games.”

Even though diversion was identified as a common pattern in the respondents’ needs on the road, it was not gratified with the same importance as, for example, every single organizational aspect on the road described in the previous sub-section. Still, it can be concluded that refugees use their smartphones and the mobile applications installed on them with entertainment purpose in order to pass time and avoid boredom.

4.3. General attitude towards the role of digital technology on the road

Digital devices and its tools apparently have a substantial impact on the course of the respondents’ journey, on their emotions and mental balance. The above-mentioned needs were identified as strongly influenced by the existing functions of media and mobile phones.
Therefore, this section presents the overall attitude of the respondents towards digital technology and services and, thus, answers the posed main research question: *What is the impact of digital communication technologies and services on refugees’ experiences during their flight?*

When asked to summarize the role of digital technologies in their daily life on the road, the respondents provided surprisingly opposite answers. On the one hand, they saw their devices as an inseparable part of their journey and, even, their survival on the road:

“(...) I wouldn’t be here in Netherlands. I would be able to do it by myself without my mobile.”

(Respondent 9)

“(...) it's a part that we needed in the normal life, then, of course, in such situations. It is a part that you can't abandon. Like, if someone in a group have access to the mobile and Wi-Fi, then it's ok, but can you imagine a whole group without anything?”

(Respondent 6)

On the other hand, when asked if they could imagine their journey without their smartphones, Respondents 6, 7 and 11 answered with “Yeah, it can be done, of course.” and with “No, it's [the smartphone] not that important”. They explained their views with the fact the most of the people are travelling in groups, so they are not under risk of experiencing isolation and solitude. For them, the “sense of community belonging” can be noticed also offline when group has a mutual goal and supports the individual in extreme situations.

4.4. Theoretical implications

The last decade witnessed how digital communication services, social media for instance, rapidly invaded the private space of the individuals and how they were transformed into a global tribune for empowering of different kinds of social movements. The results from the data analysis in this research showed that the refugee crisis is not an exception.

The results section addressed the two research sub-questions and, hence, tried to first provide an overview of the respondents’ background in order to establish the connections between the needs of the refugees during their flight to Western Europe and their behavior with smartphones and digital services. Five main themes were derived after data analysis and namely: personal background, social needs, organizational needs, emergency and diversion.

First, the theoretical framework described the flight itself as stage of extreme danger and “intervening obstacles” (Lee; 1966; Murphy, 1955, Stein, 1981). Even though the
individual experiences of the refugees differ to a substantial extent, the flight itself, in general, was found to be accompanied by a number of physical and psychological impediments that reoccurred across the respondent’s stories – such as crossing borders, lack of shelter, the boat experience. Hence, the pattern in the experiences created a pattern in the basic social and psychological needs emerging during flight. The findings of this research in some instances correspond with the “factors of vulnerability” described by Mazetti (2008), that according to his and Kinzie’s (2006) notion, strongly affect the mental health of the refugee populations. The basic themes of social, organizational and emergency needs included parts of those traumatizing factors and namely: separation from home and family, disorientation in an unknown area, lack of shelter, and, thus, confirmed that those factors affect directly the refugees’ experiences.

Second, when applied to the current refugee crisis, the Kunz’s (1973) kinetic model could be perceived as rather confusing. The initial “push” factors (war, military service, extreme living conditions) were common for most of the respondents, except for the ones who reported to have fled quickly without extensive consideration. Therefore, in the research sample the “anticipatory” refugee group who fled war and bad living situations is supposed to take time to prepare for the flight in terms of information and organization. However, the same “anticipatory” refugees reported that not all of them found the pre-departure organization of the flight essential for the road. However, this notion underlines the importance of initiating the flight itself and, respectively, the role of digital technologies and services in satisfying migrant’s needs.

The Uses and Gratifications model successfully guided the main part of the analysis (see Figure 2). Suggesting that media uses could only be understood in the relevant social context, the findings combined the specific motivations of refugees and their behavior with digital media (Katz, Blumler, & Gurevitch, 1973). When summarizing the findings from the previous sub-section, it is obvious that, even if not acknowledged or realized by the respondents themselves, digital technologies have a constant presence in their daily activities on the road. The attention that they pay to have their phones anytime at their service is noticeably high. The broad specter of gratifications obtained and various uses of both smartphones and applications in the respondents’ individual experiences confirms the strong relation between the emerging social, organizational and psychological needs on the road and the diversity of smartphone and application uses. Therefore, the deprivation model, described by Walker & Pettigrew (1984), was proved to be especially relevant for this research, as the constantly reconstructing reality around the refugees enhances feelings of distress, anxiety and uncertainty. This interrelation forces them to change their media behavior in order to satisfy all the existing and emerging needs, as seen especially the example in organizational and emergency needs sections. Ball-Rokeach’s (1985) dependency model, which implied that the changes in the environment results in a higher need for adaptation to the transformations with the help of media, was also
partly supported by the findings. Even though the majority of respondents showed high intensity of digital technology usage with various functions, some of them reported to not have used mobile phones on the road but still managed to complete their journey.

Being the only one to partly investigate the impact of new technology on refugees’ decision to flee, Bariagaber (2013) explains that through being connected via various digital services with other refugees and being permanently exposed to opinions, beliefs and advices refugees adopt certain imitating behavior that influences the decision to flee. The findings of the current research fully support Bariagaber’s notion. Participation in various Facebook groups prior to or after the departure and even prior to becoming “refugees” themselves was quick in building a set of necessary knowledge in the respondents’ minds and eventually resulted in pattern behaviour. Through gathering and evaluation of information about routes, directions, places and people, the respondents followed pre-determined by former refugees guidelines the, respectively, lead them to the Balkan or the Northern-African routes and, thus, join the refugee wave towards Europe.

Such an influence is strongly reminiscent of the role in social media in the discontent of the masses during the Arab Spring and the Ukrainian protests. Social media being the “organizational hub” where communities are being built and social movements are initiated (Lev-On, 2010). Even though not mentioned explicitly by the respondents, the online groups of refugees influenced the decision-making not only through exchanging information but also through spreading impressions and rumors from the flight itself and the arrival in the desired country, and by that, shaping the expectations of future migrants and current refugees in flight.

As for the specific motivations for mobile phones and digital tools usage, the findings did not differ substantially from the presented in the theoretical framework. Interpersonal communication was maintained successfully through calling and messaging family and friends, fighting the guilt of leaving and sorrow. However, creation of social relationships was a new emerging theme that was linked to the functionality of the smartphone for Wi-Fi dispersion. Diversion and entertainment was also successfully addressed in the research – some of the respondents used their phone for killing time while playing games and preserve memories in form of taking photos. Another theme, however, that was embedded in the topic guide and, therefore, was anticipated to emerge as a basic theme after the selective coding was applied, is the need of information gathering during the road. However, the sub-codes that emerged from the data analysis cover all the main needs, challenges and impediments that refugees encounter during their flight without outlining “need of information” as a separate theme. However, the information acquisition appeared as a sub-code for almost all the main themes. In fact, the need of information is playing the role of problem resolver for numerous impediments appearing in different stages of the flight, hence, it could be concluded that the information gathering plays a
central role in the refugees’ experiences in terms of routes, contact numbers, nearest accommodation, etc.

In sum, the refugee’s needs on the road and uses of digital technology were clearly delineated in this section and the sub-research questions answered.
V. Conclusion

The Arab Spring convinced the world that digital technological innovations are deeply embedded not only in the daily life of an individual but also are major influence on processes of social change. Therefore, this thesis aimed to determine the impact that digital technologies and services have on the most significant contemporary social movement, namely – the mass flight of refugees from Middle East and Africa towards Western Europe. In order to establish the role of mobile devices and digital tools in the refugees’ journeys, the study explored the connection between existent and emerging individuals’ social, psychological and physical needs on the road and their specific media uses. Thus, an answer to the main research question of the study was sought: **What is the impact of digital communication technologies and services on refugees’ experiences during their flight?**

A qualitative approach for researching refugees’ experiences and media behaviors was applied that allowed investigating patterns in this social phenomenon. The data was collected with the help of ten interviews with eleven respondents and, later on, coded and interpreted through thematic analysis. Albeit some contradictory insights were present, the results from the analysis was found to generally contain the main concepts delineated in the past research, and, in several aspects, even derived new findings on how refugees behave with digital technology and features in order to gratify their various vital needs on the road.

In general, the refugees’ journey was strongly influenced by the presence of the multi-functional smartphones and mobile technologies. Although some contradiction in the responses was present, the majority of the interviewees agreed that the smartphone is one of the most essential personal belongings that they have. This could be explained with a short summary of the findings of this study.

Guided by the Uses and Gratifications model, which puts an emphasis on the social and psychological context in which the media is consumed, and its complementary dependency and deprivation models, the research found a strong relation between existing and emerging needs of refugees on the road and their digital technology and services usage. Hence, four main needs on the road were identified: social needs, organizational needs, emergency and diversion. Some of them were interconnected by similar new technology and services uses but most of them substantially differed in the gratifications that were sought and obtained.

Having in mind that leaving home and familiar environment often leads to homesickness and even grief, the daily life of refugees was affected by the need to establish contact with their families and friends who remained in the center of an armed conflict. Therefore, the
smartphones in their pockets gave them the possibility to turn to the most basic communicatory function of the mobile phone and exchange short life updates.

Furthermore, in order to reach their end-destinations, the refugees needed to resolve organizational problems on every step on their journeys – from pre-planning the trip, through navigation through unfamiliar lands, finding accommodation on the road, administration (or preserving valuable documents), to negotiating the organization and the price of the boat trip to Greece (or Italy, or through borders) with the smugglers. The main pattern in the digital media uses that emerged on this stage of analysis is that social media served as a source of all kinds of flight tips and insights provided from and for refugees. Thus, social media played the role of an informative organizational tool that increased the sense of belonging to a community that shares similar goals and, thus, contribute to feelings confident for choosing the right path.

The high death rate of refugees in the sea could be a sufficient reason to explain why the emergency is a main dimension in the experiences of the refugees. Therefore, all the functions of the digital technologies and services could be combined to serve one purpose – to diminish the risk of being affected by unexpected dangers and circumstances (such as the boat trip, thieves, human traffickers, etc.), and just feel prepared and safer on the road. Storing contacts of local authorities and organizations, localization, instant messaging and information retrieving are the most common patterns in the respondents’ behavior with digital tools in the events of crisis.

Finally, diversion was also achieved through killing time by playing mobile games and watching movies. Making time for photographing the happy moments of reaching Greek soil after the extremely dangerous boat trip was also reported to

5.1. Practical implications

The findings of this thesis showed that the smartphones and digital technologies are actively present in the refugees’ journeys. Various mobile applications (such as Whatsapp, Facebook, etc.) are proved to serve as assistance tools that could facilitate the communication between refugees, between refugees and local authorities and between refugees and NGOs that provide humanitarian aid on key locations (borders, places of arrival) on the refugees’ route through the countries.

The non-governmental organizations dealing with refugees are namely the ones that could benefit from an in-depth understanding of the digital technology and services uses by refugees on the road and consider merging them into one instructive mobile application (or a different, innovative digital tool) created with the aim to provide communication channels and relevant up-to-date information for every step from the migrant’s journey. Such a platform could combine various services such as: emergency contacts (of coast guards, volunteers,
medical centers, local hotline services for refugees), routes and offline maps, information on accommodation and transportation options also available offline, instant communication with operators or volunteers, vital tips, etc. By providing such a broad specter of functions, such a tool could contribute to increasing the informed decision making in refugees and, also, to diminish risk factors on the road.

In fact, a similar project has been recently launched by Google and the International Rescue Commitee. “Crisis Info Hub” (https://refereeinfo.eu/) is a service that aims to provide “hyperlocal” information about asylum processes, necessary contacts and locations “in a lightweight, battery-saving way” available in a number of languages (Fuller, 2015). However, the service does not exist as a separate mobile application yet, which means that it cannot be accessed without a working Internet connection. The findings of this study also suggest that the opportunity of instant connection with aid workers on duty in arrival points or camps could be in some emergency cases (e.g. crossing the sea) also paramount – a function which “Crisis Info Hub” is still lacking.

5.2. Limitations

In general, this thesis extracted valuable insights on refugees’ experiences and needs on the road, as well as, provided interesting findings on their behavior with media. However, it is important to also address the main limitations that influenced the results of this study.

First, the initial intention to collect a sample consisting of refugees with various backgrounds was not fulfilled. Due to the described in the methodological section difficulties in the recruitment process and the limited access to a broader population (e.g.: in camps), the sample was reached through Facebook which already served as a prerequisite to the fact that the respondents were going to be active social media users. Moreover, in case of diversity in gender, age, origin and occupation, richer insights on refugees’ attitude and behavior with digital technology could be achieved.

Second, the insufficient knowledge in English language of some of the respondents created difficulties in the mutual understanding and interfered with the flow of the interviews. As a result, some of the respondents felt insecure in their language skills and were hesitant to elaborate in length.

Third, the high sensitivity of the topic was also experienced as an impediment during the process of data collection. The interviewees were often reluctant to talk on certain emotional matters, and, as a result provided insufficient data for analysis. Hence, some of the conducted interviews were discarded.
5.3. Future research

As mentioned in the theoretical framework, there is a scarcity in past research on populations of refugees in flight. Therefore, a thorough study on the patterns of the psychical and psychological refugee experience could provide the necessary conceptualization of the main phases of the flight and of also of the main social and psychological needs that refugees develop during their journey.

Furthermore, based on the limitations of this study outlined in the previous sub-chapter, another suggestion for future research would be to use both quantitative and qualitative approaches to investigate digital media uses by stepping on the findings from the current study. Thus, through conducting short surveys a broader sample would be reached, the patterns of needs and media uses would be delineated in a more credible way. The qualitative interviews would be conducted with the help of a translator with the aim to achieve understanding of the social context and experiences of a refugee in flight.
VI. References


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Appendix A

Preliminary topic guide to semi-structured interviews:

Introducing the research:

First of all, thank you a lot for taking time to participate in my research. I am Katerina Kondova and I am an MA student in Media & Business program in Erasmus University Rotterdam. My thesis research is on digital technologies and digital services usage by refugees during their journey. I would like to talk to you about your experiences on the road and about the specific role that smartphones and social media played in your journey.

I would like you to go through the consent form here that will give you an overview what the interview will be about, how the collected data will be used and the your rights as a participant. If you agree with everything please sign it.

Let me just summarize the consent form for you: since I am aware of that this topic is sensitive, you can refuse to answer any question and stop the interview whenever you decide. Also, this interview will be used explicitly for academic purposes. You have the right to remain absolutely anonymous if you would like to.

So, if you agree to be recorded, shall we begin?

1. Introductory questions/individual background

  • Can you tell me something more about yourself?
    o How old are you?
    o Where are you from?
    o What did you do back in your country?
    o Why did you flee from your country of origin
    o Were social networks and smartphones an active part of your life before having to leave your home-country? If so: How and with what purpose did you use them on a daily basis?

2. Experiences and needs on the road:

  • Could you guide me through the journey you have taken from your home country to here?
    o What were the main challenges and impediments you encountered on the road? *(If not mentioned, follow up with: experiencing state of uncertainty; finding accommodation, routes and transport; being away from home, family and friends; physical and psychological stress; keeping in touch with other refugees; legal status; etc.)*
    o What was the most hardest part of your journey?
  • Did you organize your trip in advance or did you have to leave quickly?
3. Digital technology and digital features usage

I would now like to talk about the role of media during your flight, such as smartphones, social networks, and the Internet.

- Did digital technologies and media play a role in organizing your flight before you left?
  a. If so, how did you gather the information needed for your flight? *(If not mentioned: participation in Facebook groups, determining end-destination,)*

- What was the impact of media and digital technologies during your flight?
  a. In terms of organization:
     i. Did you search for accommodation and transportation online?
     ii. How did you find your way in foreign lands? *(If not mentioned: localization and navigation applications)*
     iii. Did you store important documents on your phone or online? *(If so: With what purpose? Did digital copies of your document serve as legitimate proof?)*
  b. In terms of social needs:
     i. During the road did you keep in contact with your family and friends?
     ii. Did you also have to establish contact with other refugees on the road? *Follow up on both: What digital technology functions and tools did you use?*
  c. In terms of emergency situations:
     Did digital technology and services assist you in cases of emergency situation? *(If so, How exactly? (If not mentioned: emergency calls, information retrieving))*
  d. In terms of diversion:
     i. Did you also kill time with your phone? If so, in what way?
     ii. Did you also take photos during the road? If so, what moments did you capture?

- Do you experience any disadvantages of media and digital technologies during your flight?

4. Conclusive questions

- Could you summarize for me what media and digital technologies have meant for you during your flight?
- How do you think your journey would look like if you did not have access to mobile technologies and Internet during your flight?
- Do you think having a smartphone and access to social media played a crucial role for your journey and for reaching your end-destination?
Appendix B

CONSENT REQUEST FOR PARTICIPATING IN RESEARCH

FOR QUESTIONS ABOUT THE STUDY, CONTACT:
Katerina Kondova       Email: 431695dk@student.eur.nl
Address: Admiraliteitskade 40-520, 3063 ED Rotterdam
Telephone: +31616619051

DESCRIPTION
You are invited to participate in a research on the impact of digital communication technologies and services on refugees’ experiences during their flight. The purpose of the study is to understand what the refugees’ motivations and perceptions of using digital technologies and services are during their flight and how refugees use digital technologies and services on the road.

Your acceptance to participate in this study means that you accept to be interviewed. In general terms,
- the questions of the interview will relate to refugees’ experiences on the road and their thoughts on the role of the digital technologies and services in them.
- the observations of the interviewer will focus on establishing the impact of digital technologies on refugees’ experiences during their flight.
- Unless you prefer that no recordings are made, I will use a tape recorder for the interview.

You are always free not to answer any particular question, and/or stop participating at any point. Every time I want to accompany you in any activity (such as showing you material probes), I will ask you your permission again.

RISKS AND BENEFITS

A. As far as I can tell, there are no risks associated with participating in this research. Yet, you are free to decide whether I should use your name or other identifying information not in the study. If you prefer, I will make sure that you cannot be identified, by [measures that will be taken: pseudonym, general identification only mentioning age and gender, etc.].

B. I am aware that the possibility of identifying the people who participate in this study may involve risks for personal reputation, help, social relations, etc. For that reason—unless you prefer to be identified fully (first name, last name, etc.)—I will not keep any information that may lead to the identification of those involved in the study. I will only pseudonyms to identify participants.

I will use the material from the interviews and my observation exclusively for academic work, such as further research, academic meetings and publications.

TIME INVOLVEMENT
Your participation in this study will take approximately 45-60 minutes. You may interrupt your participation at any time.

PAYMENTS
There will be no monetary compensation for your participation.

PARTICIPANTS’ RIGHTS
If you have decided to accept to participate in this project, please understand your participation is voluntary and you have the right to withdraw your consent or discontinue participation at any time without penalty. You have the right to refuse to answer particular questions. If you prefer, your identity will be made known in all written data resulting from the study. Otherwise, your individual privacy will be maintained in all published and written data resulting from the study.

CONTACTS AND QUESTIONS
If you have questions about your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact—anonymously, if you wish—Dr. Wannes Ribbens, e-mail: w.ribbens@eshcc.eur.nl.

SIGNING THE CONSENT FORM
If you sign this consent form, your signature will be the only documentation of your identity. Thus, you DO NOT NEED to sign this form. In order to minimize risks and protect your identity, you may prefer to consent orally. Your oral consent is sufficient.

I give consent to be audiotaped during this study:

Name                      Signature                      Date

I prefer my identity to be revealed in all written data resulting from this study

Name                      Signature                      Date

This copy of the consent form is for you to keep.