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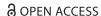
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Asylum-Related Migrants' Social-Media Use, Mobility Decisions, and Resilience

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ABSTRACT

The article examines asylum-related migrants' social-media use along their asylum journeys. In total, 2,454 migrants from 37 countries answered a semistructured survey conducted in Jordan; Turkey; Iran; and in the European "hotspots," Lesvos, Greece, and Lampedusa, Italy. Of the respondents, 83% used at least one social-media service in their current locations, 55% acknowledged that social media makes their asylum-related life easier, and 51% responded that social media helped them decide where to move to in Europe. Migrants' socioeconomic and demographic differences, social capital, and future views explain their social-media use in relation to their mobility decisions and resilience.

KEYWORDS

Asylum; migrant; mobility; social media; social networks; refugee

The Internet and social media have become important and effective communication and interaction tools. The fast spread of information and communication technologies (ICTs), especially the Internet, smartphones, and social media, impacts people's lives including during migration (e.g., Dekker et al., 2016; Thulin & Vilhelmson, 2014). These technologies transform and facilitate international migration networks (e.g., Dekker & Engbersen, 2014; Kaufmann, 2018; Thulin & Vilhelmson, 2016), for example, by delivering over long distances relevant information about locations, often via social networks maintained on social media (e.g., Vilhelmson & Thulin, 2013).

In the decade following 2010, millions of people from Africa, the Middle East, and Asia migrated to or toward Europe to seek asylum and better livelihoods. For many, the journey was long and dangerous and may have included (and may still include) stays for months or even years in locations on the way to the migrants' desired destinations. These destinations may change, and the temporary transit countries can become destinations themselves. Millions of people are still on the move. Many flee distressing circumstances such as war and persecution in their home countries, and others may leave due to difficulties related to the economy or the inability to fulfill their dreams. In practice, many reasons combine in asylum-related migration (e.g., Migali et al., 2018).

Scholars acknowledge that ICTs, especially social media, are important in asylum seekers' and refugees' lives (e.g., Borkert et al., 2018; Dekker et al., 2018; Gillespie et al., 2018; Merisalo & Jauhiainen, 2019); for instance, ICTs relay formal and informal information about travel routes and places to live and enable migrants to create and maintain necessary networks while traveling

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toward their destination (Dekker et al., 2018; Dekker & Engbersen, 2014). Despite the increased interest in digital migration studies (e.g., Leurs & Smets, 2018), the literature lacks extensive survey-based findings concerning asylum-related migrants' social-media use, especially in relation to their mobility and resilience.

In this article, we study asylum-related migrants' social-media use and its connection to their mobility decisions and resilience, in particular, in relation to their socioeconomic and demographic background, social capital, and views of the future. Merisalo & Jauhiainen (2019) define "asylumrelated migrants" as migrants who left their country of origin (a) to seek asylum and whose asylum process is ongoing (i.e., asylum seekers; see Goodwin-Gill, 2014); (b) with the aim of seeking asylum (i.e., "soon-to-be asylum seekers"); (c) to seek asylum but whose requests for asylum were rejected and who did not return to their country of origin (i.e., irregular migrants; see Düvell, 2012); and (d) were not accepted for asylum according to the Refugee Convention (UN General Assembly, 1951) or did not receive similar protection status but were admitted by national authorities (i.e., refugees). This definition corresponds to the heterogeneity of asylum-related migrants who were at our study locations either for a short time or for an extended period.

We collected the quantitative survey data set for this research from 2,545 respondents from 37 countries in Africa, the Middle East, and Asia. The data were gathered (see Section Data and Methods) in five essential transit and/or host countries for asylum-related migrants: Greece, Italy, Jordan, Turkey, and Iran. Hundreds of thousands of asylum-related migrants entered Europe through the hotspot islands of Lesvos, Greece, and Lampedusa, Italy, during the decade beginning in 2010 (ECRE, 2016; Mentzelopoulou & Luyten, 2018). Due to the war in Syria, millions of Syrians escaped to Turkey and Jordan. In 2019, 3.6 million of these migrants lived in Turkey and more than 0.6 million lived in Jordan (UNHCR, 2019). Iran has a long history of hosting Afghans. In 2018, one million Afghan refugees and 1.5 million to 2 million undocumented Afghans and Afghan passport holders lived in Iran (UNHCR, 2018).

In this article, we ask to what extent (a) asylum-related migrants use social media in and outside refugee camps and reception centers; (b) social media facilitates asylum-related migrants' mobility decisions; and (c) social media relates to the resilience of the studied asylum-related migrants (i.e., to what extent they acknowledge social media as an important tool that makes their lives easier). We scrutinize how migrants' gender and age (to represent their demographic background), place of origin and education (to represent their socioeconomic background), and individual views on the future correspond to the extent of their social-media use, mobility decisions, and resilience. Furthermore, we test how social capital, in terms of social relations and trust (e.g., Bourdieu, 1986; Putnam, 2000), connects to these topics. We use a deductive approach to test a group of hypotheses within our extensive data.

In this article, we first discuss the relevant literature related to asylum-related mobility and resilience with regard to social media use, social networks and social capital, and then present our hypotheses. Second, we introduce our research data and methods. Third, we present the results of the statistical analysis and answer the research questions and hypotheses. Finally, we draw conclusions from the research and suggest further research topics.

Background literature and hypotheses

The Internet's role in migration decision-making has become crucial. Deciding when, how, and where to migrate depends on available information about the possibilities in a potential location (Vilhelmson & Thulin, 2013). In migration studies, asylum-related migrants' mobility decisions and their relation to the Internet and social-media use are underexplored, especially with extensive data (cf. Zijlstra & Van Liempt, 2017). Merisalo and Jauhiainen (2019) showed how digital divides diminished during asylum-related migration: Many asylum-related migrants started to use the Internet on their journeys even if they had not used it in their countries of origin. Moreover, during those journeys, the differences in Internet use in terms of socioeconomic background and age decreased (but remained) and in terms of gender disappeared. However, the share of Internet users is different along the asylum-related journey.

Social media facilitates international migration networks (Dekker & Engbersen, 2014). Migrants and nonmigrants, through their social networks, are able to produce and maintain social capital, the added value gained from social networks (e.g., Ellison, 2007). Dekker et al. (2018, p. 1), who studied Syrian asylum migrants (who had recently gained refugee status in their destination country, the Netherlands), noticed that asylum-related migrants develop—with the help of social media-strategies for their migration to validate rumors from social media and unknown sources. In sum, the social-media information from existing social networks becomes essential (see also Zijlstra & Van Liempt, 2017). In particular, weak relations and bridging social capital are important for gaining new information (Granovetter, 1973; Putnam, 2000), which is essential for organizing asylum-related migrants' journeys (Dekker & Engbersen, 2014). In line with this, Dekker et al. (2018) noticed that migration as a collective effort decreases migrants' dependency on ICTs. Twigt (2018) argued that for Iraqi refugees in Jordan, digital connections "not only provide a space for hope and optimistic ideas of futures elsewhere but also help to sustain one's experience of immobility" (p. 1).

The indisputable importance of the Internet and social media for migrants and migration networks (e.g., Dekker et al., 2018; Dekker & Engbersen, 2014; Merisalo & Jauhiainen, 2019) leads us to presume that social media (its multiple platforms for multiple purposes) is highly utilized by asylum-related migrants. This leads to our first group of hypotheses (H) on the extent of social-media use among asylum-related migrants:

H1a: The majority of migrants use social media (at least some of its most widespread platforms), but location- and origin-specific differences exist in their social-media use.

H1b: Social-media use differs in regard to migrants' socioeconomic and demographic backgrounds (excluding gender).

Digital connections provide a space for migrants to seek a (positive) future elsewhere (Twigt, 2018), so we assume that

H1c: Migrants' uncertain views of future increase their probability of using social media.

Because migration in a group with acquaintances decreases migrants' dependency on the Internet and smart phones (Dekker et al., 2018) and because (especially bridging) social capital is important for achieving new, valuable information for migrants to organize their journeys (Dekker & Engbersen, 2014), we hypothesize that

H1d: Migration in a group and possessing social capital decrease migrants' probability of using social media.

Vilhelmson and Thulin (2013, pp. 209, 214) explored the role of the Internet in the migration decisions of young Swedes. According to their survey in Sweden (in 2009 with 750 respondents), half of the participants believed that the Internet influenced and facilitated their decision to move and one third reported that the Internet had affected their choice of destination. Most migrants developed "Internet-based communication practices" that integrated the Internet and Internetbased practices into their migration decision-making process and prospective migration intentions. Along that line, Thulin and Vilhelmson (2014, p. 399) noticed that the role of the Internet differs along the migration process, in particular, in the early inspirational phase. Virtual practices expand the spatial, social, and temporal horizons of migration and offer access to insider information (Thulin & Vilhelmson, 2016). Even though unparalleled in its effectiveness, the Internet is only a tool for sharing information and boosting interaction in social networks, which are important drivers for international migration propensity (Düvell, 2018; Migali et al., 2018).

Dekker and Engbersen (2014) noticed that social capital decreases the risks and costs related to migration, and people would rather move to places where they already know someone. Social media offers unofficial "insider knowledge" that makes potential migrants "streetwise" when considering their future migration decisions (Dekker & Engbersen, 2014, p. 401). However, asylum-related migrants whose migration is still incomplete (temporarily inside or outside refugee camps and reception centers) are in a special position regarding international migrant networks. Mobile technologies facilitate the mobility of asylum-related migrants by shaping, for example, their decisions on routes, destinations, and modes of travel (Zijlstra & Van Liempt, 2017). Technologies provide practical help, but asylum-related migrants also face technology-related problems along their journeys (Latonero & Kift, 2018). This discussion leads us to the second group of hypotheses regarding asylum-related migrants' mobility decisions. First, nearly a decade ago, half of young Swedish migrants agreed that the Internet facilitated their move decisions (Vilhelmson & Thulin, 2013) and that social media has a versatile impact on mobility decisions (Dekker & Engbersen, 2014); therefore, we hypothesized that

H2a: The majority of migrants agree that social media facilitates their mobility decisions.

Due to different circumstances in our respondents' places of origin and study locations, we expect that

H2b: Location- and origin-specific differences exist among the migrants who agree that social media facilitates their mobility decisions.

Because we expect socioeconomic and demographic differences in the respondents' social-media use (see hypothesis H1b), we also expect that

H2c: Migrants' socioeconomic and demographic backgrounds (excluding gender) influence whether migrants agree that social media facilitates their mobility decisions.

In addition, since digital connections provide a space for migrants to seek a (positive) future elsewhere (Twigt, 2018), we assume that

H2d: Migrants' uncertain views on the future increase their probability of agreeing that social media facilitates their mobility decisions.

The literature shows that social networks and social capital have a versatile impact on migrants' move decisions (e.g., Dekker & Engbersen, 2014; Düvell, 2018; Migali et al., 2018); therefore, we assume that

H2e: Social capital increases migrants' probability of agreeing that social media facilitates their mobility decisions.

Finally, we are interested in whether social networks via social media can help asylum-related migrants cope with difficulties—that is, build their resilience for managing their stressful circumstances (cf. Hutchinson & Dorset, 2012; UNHCR, 2018). In fact, Twigt (2018) noticed that transnational digital connections are important for asylum-related migrants, whose lives are often occupied by long periods of waiting, hope, and anxiety. Furthermore, Bacigalupe and Cámara (2012) argued that ICTs facilitate the transformation of family networks into transnational networks that help families find "resilient ways to confront the difficulties posed by immigration" (p. 1425). Moreover, Chan (2015) noticed that (mobile phone–based) online communication is positively connected to bonding social capital (i.e., gains related to strong social relations), to bridging social capital (i.e., gains related to weak social relations; Putnam, 2000), and to subjective well-being. Thus, we examine whether social media makes the lives of asylum-related migrants easier during their journeys. Furthermore, we explore the relationship between social-media use and trust. These discussions lead us to the third group of hypotheses:

H3a: The majority of migrants agree that social media increases their resilience, but location- and origin-specific differences do exist.



H3b: Migrants' socioeconomic and demographic backgrounds (excluding gender) are connected to resilience if migrants agree that social media influences their resilience.

H3c: Migrants' uncertain views of the future and social capital increase the probability that social media has an impact on the migrants' resilience.

H3d: Migrants use social media to overcome their distrust toward (people in) their living environments.

Data and methods

We gathered the data for this study through face-to-face surveys in five countries. The specific locations were three refugee camps in Lesvos, Greece (inside and outside the open and closed camps in December 2016); one refugee camp in Lampedusa, Italy (outside the island's only closed camp in June 2017); five major locations for asylum-related migrants in northern Jordan (outside the closed refugee camps in March 2017); 12 locations for asylum-related migrants in the Gaziantep, Istanbul, and Izmir provinces in Turkey (outside the refugee camps in April-May 2018); and four locations in Iran (inside and outside four semiopen and closed refugee camps in October 2017).

We controlled the sample with available information of the potential respondents' demographic characteristics (age, gender, and ethnic distributions). However, precise information on migrants did not exist in every study location. In such cases, the sample design was based on onsite observations. The asylum-related migrants who responded were at least 15 years old in Iran and at least 18 years old elsewhere.

The survey was available in eight languages (Arabic, Dari, English, Farsi, French, Somali, Sorani Kurdish and Urdu). It included about 80 questions, of which approximately 10 were about the Internet and social-media use. The survey structure was mostly the same in each location, but it also contained location-specific variations. One author of this article (Jauhiainen) led and was involved in gathering surveys at these study locations. Jauhiainen and the research assistants, including some asylum-related migrants, handed over the survey form to a migrant, who completed it and gave it back. The study purpose was explained, and the respondents' anonymity and confidentiality were guaranteed. Their participation was voluntary with the right to cease participation at will. Very few migrants declined to answer, and in these cases, they were busy or meeting with other people. All ethical guidelines for conducting research were strictly followed.

In total, 2,454 respondents from 37 countries answered the survey. Among the participants, 100 were from Lampedusa (Italy), 503 were from Lesvos (Greece), 445 were from Jordan, 762 were from Turkey, and 644 were from Iran. The data from Jordan and Turkey included respondents from Syria, and the data from Iran included Afghans from Afghanistan or those born in Iran. The data from Lesvos and Lampedusa included respondents mainly from African (45% in Greece, 63% in Italy) or Middle Eastern countries (23% in Greece, 4% in Italy): Africans who responded to the survey in Lesvos were mainly from Algeria (11.7%), Congo (10.3%), Cameroon (5.2%), or other countries in Africa (minor shares). Among the respondents from the Middle East, most were from Syria (6.2%), Iran (6.0%), Iraq (5.2%), or "Kurdistan" (5.0%). In addition, among the respondents in Lesvos, 7.6% were from Afghanistan and 7.0% were from elsewhere in Asia. However, 18% of the respondents in Lesvos did not disclose their origin. Among the respondents in Lampedusa, many were from Africa including Cameroon (10.0%), Côte d'Ivoire (10.0%), Guinea (9.0%), Nigeria (9.0%), Somalia (8.0%), and other African countries (minor shares). Furthermore, 4% originated from Syria; 33% did not disclose their countries of origins.

Among the respondents, 61% were male and 39% female. In the refugee camps in Lesvos and Lampedusa, the vast majority of asylum-related migrants were men; this disparity is reflected also in the gender bias of the data (Lesvos, 93% male; Lampedusa, 86% male). The respondents' age distribution in the total data is as follows: 8% were 15-18 years old, 43% were 19-29 years old, 38% were 30-49 years old, 8% were 50-64 years old, and 2% were 65 years or older. Among the

respondents, 70% had urban origins and 30% had rural origins. Approximately 20% of the respondents had a university education (university degree or had attended university for at least some years), and the rest had a lower level of education.

We selected the following questions and prompts as dependent variables in the analysis:

In Lesvos/Lampedusa/Turkey/Jordan, which of the following applications have you used? Skype, YouTube, Snapchat, Facebook, Instagram, Twitter, WhatsApp, Viber and LinkedIn" (we recalculated an additional variable to show that a migrant used at least one of the above-mentioned social-media services); Information and interaction in social media helped/facilitated my decision to come to Europe/Turkey; During my journey to Europe/Turkey, the use of social media was important for me; In Lesvos/Lampedusa/Iran/Jordan, the use of the Internet and/or social media makes my life easier/In Turkey, information and interaction in social media makes my life easier; and Information and interaction in social media facilitate my decision regarding where I will move to in Europe.

For the prompts, participants could answer "I agree," "I don't know," or "I disagree."

We used the following as explanatory variables: study location (Lampedusa/Lesvos/Turkey/ Jordan/Iran); origin (country, area, and rural or urban); gender, age, and education (completed university degree or attended university for at least some years/other). In addition, we included a question about respondents' future plans ("I see my future positively") and four about the respondents' social capital: (1) "During my journey to Europe/Turkey/Iran, I made friends"; (2) "I am in contact with other people elsewhere in Greece (Italy)" or "I am in contact with Afghan people elsewhere in Iran/In Turkey" or "I am in contact with other people from my country of origin living elsewhere in Turkey"; (3) "In Lesvos/Lampedusa, I am together with at least some of my family" or "In my current place in Turkey/Iran, I am together with at least some of my family"; and (4) "In Jordan/Lesvos/Lampedusa/Iran, I trust people who try to help me". To respond to these prompts, respondents' were given the following answer choices: "I agree," "I don't know," and "I disagree."

The data had some limitations. The analysis considered the dependent retrospective questions—"Social media helped/facilitated my decision to come to..." and "During my journey to ... , the use of social media was important for me" (see the whole question above)—includes only respondents who left their countries of origin after 2009 because the Internet was not widely available before 2010 in many countries in Africa and the Middle East. Thus, considering these questions, we excluded all data from Iran because almost all Afghan refugees who responded to the survey in Iran migrated to Iran before 2010. In addition, there is no data from Jordan about the retrospective questions. The question, "Which of the following applications you have used?" was left out of the Iran questionnaire; the prompt, "Social media facilitates ... where I will move in Europe," was left out of the Iran and Jordan questionnaires. Only respondents from the Turkey data with plans to go to Europe and all respondents in Lesvos and Lampedusa (see Table 1) were included in the analysis concerning the item, "Social media facilitates my decision regarding where I will move in Europe." Furthermore, we have no data from Turkey about the item, "I trust people who try to help me" (see Table 3). Among the explanatory questions, we have no corresponding data from Jordan considering the questions of social capital (social relations). Thus, the analyses that use the social capital-related questions as explanatory variables exclude the data gathered from Jordan. Several values (i.e., nonanswers to questions) are missing because not all respondents answered these questions. To illustrate such limitations, we present the number of respondents (N) in each analysis separately. There is no precise demographic information from every study location, so the data could have some biases for which we were unable to control. However, based on onsite observations, our sample was as representative as possible.

Regarding the validity of the research, some respondents might have had difficulty understanding the questions. To address this, the survey contained clear questions asked in simple language, and the vast majority of the respondents could use their mother tongues (because of the language versions available). Each language version was checked for readability by at least two independent language editors. The respondents did not expect to gain anything from the survey, so they had no motivation to give other than truthful responses. The questions regarding the respondents' plans and decisions to migrate farther were the most uncertain as such migration had not taken place (yet); their decisions could change (possibly many times) during their ongoing journey. In addition, it is important to notice that some questions (especially those concerning social-media use and the importance of social media during the journey) may have had significant relevance for a respondent regardless of whether she or he was an asylum-related migrant. The surveys were designed for individuals. However, it is possible that some of the respondents reach social media via their social relations (such as older people through younger family members) and that this affected some responses. Moreover, outside of our scrutiny is the significance of social media itself as a specific communication channel compared with other ICTs. Acknowledging these limitations, we stress the importance of gaining knowledge on asylum-related migrants' social-media use, migration decision-making, and resilience within the context of our study locations and even more broadly.

The analytical methods for data analysis included descriptive statistics, cross-tables, chi-square tests, and logistic regression. We changed the categorical variables to binary dummy variables for the logistic regression analyses. We used Hosmer-Lemeshow tests to ensure the goodness of fit for the tested (logistic regression) models. In addition, we used Nagelkerke R2 to estimate variations in the results.

Results

Extent of social-media use among asylum-related migrants

Here, we first examined the asylum-related migrants' general social-media use (i.e., the migrants' use of any social-media service, including Facebook, YouTube, Instagram, LinkedIn, Twitter, Snapchat, Skype, WhatsApp, and Viber) and separate use of each of these services. The survey results indicate that 83% of all asylum migrants (respondents from Greece, Italy, Turkey, and Jordan) used at least one of the nine studied social-media services (Table 1). However, significant differences exist between the study locations: In Lampedusa, Italy, only a slight majority (52%) of the respondents used any of the nine studied social-media services; whereas, the percentage of social media users was considerably higher in other study locations (78% in Jordan, 85% in Greece, and 90% in Turkey) (Table 1). In addition, the logistic regression models show statistically significant differences between the origins of the migrants with respect to the use of different social-media platforms excluding Facebook. Especially, African origin decreases the probability of using (any) social media within the model (Table 2). These results confirm H1a, which states that the majority of migrants use social media, but location- and origin-specific differences exist.

The results show that asylum-related migrants more than 50 years old mainly use WhatsApp (54%) and Facebook (30%); whereas, people less than 30 years old actively also use YouTube, Instagram, and Viber (Table 1). However, in relation to social-media use in general (use of any studied social-media service), the logistic regression model (which also includes socioeconomic and other sociodemographic variables, views on the future, and social relations) shows that younger age clearly increases the probability of using social media (Table 2). Furthermore, an urban background is clearly connected with social-media use (Tables 1 and 2): Those having an urban background were 3.5 times more likely (than those having a rural background) to use Instagram (and approximately 2.5 times more likely to use Facebook and WhatsApp) (Table 2). A similar pattern exists in education with social-media use (Tables 1 and 2). A comparison of the logistic regression models shows that people with university education were approximately two

Table 1. Social-Media Use of Asylum-Related Migrants and Results of Crosstabs and Chi-Square Tests

(V) %	A) Skype	B) YouTube	B) YouTube C) Snapchat	D) Facebook	E) Instagram	F) Twitter	G) WhatsApp	H) Viber	l) LinkedIn	J) Any of the SoMe services	K) SoMe facilitated my decision to come to SL	L) During my journey to SL, SoMe was important for me	M) At SL, SoMe makes my life easier	N) SoMe facilitates my decision about where I'll move in Europe
All	6 (1781)	27 (1782)	8 (1782)	53 (1783)	16 (1782)	8 (1782)	64 (1782)	15 (1782)	4 (1781)	83 (1810)	42 (889)	56 (894)	55 (2154)	51 (719)
Greece 8	8 (476)	26 (477)	7 (477)	68 (478)	15 (477)	11 (477)	50 (477)	28 (477)	3 (476)	85 (503)	49 (204)	58 (205)	43 (423)	47 (435)
Italy	4 (100)	4 (100)	20 (100)	26 (100)	1 (100)	2 (100)	12 (100)	3 (100)	2 (100)	52 (100)	55 (64)	55 (65)	51 (92)	54 (93)
Turkey	2 (200)	38 (760)	(200)	26 (760)	20 (760)	8 (760)	(092) 62	2 (200)	4 (760)	90 (762)	38 (621)	56 (624)	(84) (8)	61 (191)
Jordan	6 (445)	14 (445)	10 (445)	40 (445)	14 (445)	7 (445)	66 (455)	18 (445)	4 (445)	78 (445)	ı	ı	67 (377)	1
Iran	ı	ı	ı	1	1	ı	1	ı	ı	ı	ı	ı	44 (584)	1
Chi sq.	6.870	106.070	27.050	102.307	25.687	11.101	231.923	135.487	1.279	102.270	11.849	0.251	120.105	10.767
P-value	0.076	0.000***	0.000***	***000.0	***000.0	0.011*	0.000***	***00000	0.734	***000.0	0.003**	0.882	0.000***	0.005**
2) Gender														
Women	2 (634)	19 (634)	7 (634)	39 (634)	11 (634)	3 (634)	72 (634)	9 (634)	2 (634)	84 (635)	40 (285)	54 (293)	55 (840)	54 (131)
Men	8 (1096)	32 (1097)	9 (1097)	63 (1098)	20 (1097)	11 (1097)	(1097)	18 (1097)	5 (1096)	84 (1119)	42 (591)	57 (588)	55 (1268)	50 (573)
Chi sq.	24.076	34.212	1.335	88.278	23.615	37.075	25.664	27.965	8.979	0.000	0.491	0.657	0.001	0.604
P-value	0.000***	0.000***	0.248	***000.0	***000.0	0.000***	0.000***	0.000**	0.003**	0.990	0.517	0.417	0.974	0.437
3) Age														
<19	4 (115)	31 (115)	8 (115)	62 (115)	18 (115)	4 (115)	50 (115)	19 (115)	4 (115)	85 (118)	30 (56)	44 (59)	50 (184)	39 (62)
19–29	9 (820)	34 (821)	12 (821)	59 (822)	23 (821)	12 (821)	65 (821)	17 (821)	5 (820)	87 (838)	40 (455)	56 (453)	58 (932)	51 (397)
30-49	4 (657)	21 (657)	4 (657)	51 (657)	10 (657)	6 (657)	70 (657)	12 (657)	2 (657)	83 (660)	46 (301)	61 (305)	56 (785)	57 (211)
50 or more	3 (148)	10 (148)	3 (148)	30 (148)	4 (148)	2 (148)	54 (148)	10 (148)	2 (145)	64 (149)	36 (59)	48 (59)	45 (213)	48 (21)
Chi sq.	17.527	52.915	42.979	46.971	62.915	31.311	24.373	12.750	13.526	51.732	6.263	8.253	15.206	6.604
P-value	0.001**	***0000	0.000***	***000.0	0.000***	0.000**	0.000***	0.005**	0.004**	0.000***	0.099	0.041*	0.002**	0.086

Note. K and L include only respondents who left their origin country after 2009 and N includes, within the Turkey data, only respondents who have plans to go to Europe (since respondents who answered in Gr/It are already in Europe and thus are all included in the analysis). The presented values in the table are a percentage share (%) or a number (N) of those who answered the question "yes"/"I agree."

(=

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Table 2. Social-Media Use of Asylum-Related Migrants and Results of Logistic Regression Analysis.

J) SoMe

Vote. The models include only those observations that have data in all the variables in the model. Thus, A-F includes data collected from Greece, Italy, and Turkey. G and H include only respondents who left their origin country after 2009 and J includes, within the Turkey data, only respondents who have plans to go to Europe (respondents who answered in Gr/It are already in Europe and thus are all included in the analysis; no data from other study locations).

Table 3. Chi-Square Test for Trust Toward Aid Providers and Use of Social Media.

I trust people who try to help me (%), (N)	Do use social media	Do not use social media	Chi-square	<i>p</i> -value
l agree	78 (359)	22 (104)	10.563	0.005
I don't know	85 <i>(230)</i>	15 <i>(40)</i>		
l disagree	86 (188)	14 <i>(30)</i>		

Note. The chi-square test excludes Iran data because of no data about social media use and Turkey data because of no data about trusting people.

times more likely to (than others) use YouTube, Instagram, and WhatsApp and were approximately 1.5 times more likely to use Facebook (Table 2).

Furthermore, the survey statistics show that 84% of both men and women use at least one of the studied social-media services (Table 1). Gender is not connected with general social-media use (the use of any of the studied social media services). However, in comparison to women, a larger share of men use the studied social-media platforms except WhatsApp (Tables 1 and 2). In fact, the logistic regression models for the five most popular social-media services show that compared with women, the probability of men using Facebook, YouTube, and Instagram is almost three-fold, and the probability of men using Viber, more than five-fold (Table 2). WhatsApp does not follow this pattern: Even though the chi-square test (Table 1) shows statistically a significant difference in WhatsApp usage between women and men, the logistic regression model shows that WhatsApp is the only social-media service (of the five most popular services) that has no relationship to gender.

Presumably, the differences between men and women using social-media services is due to their different purposes for social interaction. Thus, H1b (Socioeconomic and demographic backgrounds clearly influence social-media use and people with university education and those from an urban background are more likely to use social media than others) is partly confirmed. In addition, younger people are more likely to use social media than older people. However, in regard to gender, general social-media use (use of any of the social-media services) for men and women is equal, but with the exception of WhatsApp, men are more likely to use the studied platforms.

Asylum-related migrants who see their future positively are by almost two-fold more likely to use YouTube than those who do not see their future positively. Thus, H1c (Migrants' uncertain views of the future increase their probability of using social media) is not confirmed. Regarding social networks, our results show that asylum-related migrants who made friends during their journeys were approximately 1.5 times more likely to use YouTube and Facebook (Table 2). Furthermore, those who were in contact with other people living elsewhere in their current country were almost two times more likely to use WhatsApp and Facebook than those who did not keep such contacts. Social media is thus an important medium for maintaining social contacts. Finally, those who were in the same place with at least some of their family were 30% less likely to use Facebook than those who were not in the same place as their family. These results indicate that bridging social capital (new friends) increases social-media use and that bonding social capital (family members) decreases social-media dependency on these journeys (cf. Dekker et al., 2018). Thus, the hypothesis H1d is confirmed: Migrating together with family members and bonding social capital decrease asylum-related migrants' probability of using social media (here statistically significantly only in relation to Facebook).

Social media in asylum-related migrants' mobility decisions

The results show that information and interaction through social media facilitate asylum-related migrants' mobility decisions during their journeys. Almost half (49%) of the asylum-related migrants in Greece (Lesvos) and 55% of the migrants in Italy (Lampedusa) and 38% of the migrants in Turkey, agreed that social media facilitated or helped their decisions to go to their respective current countries. Presumably, the lower percentage in Turkey is partly because many

Syrians had to flee quickly to a nearby neighboring country due to the war, and they did not have time nor the opportunity to use social media. In addition, regarding their future migration decisions, 47% of asylum-related migrants in Greece (Lesvos), 54% of the migrants in Italy (Lampedusa) and 61% of the migrants (among those who have plans to move to Europe) in Turkey agreed that information and interaction through social media facilitated their decision about where they would move in Europe. Thus, H2a (stating that the majority of migrants agree that social media facilitates their mobility decisions) is not confirmed even though a significant proportion of the respondents agreed that social media facilitated their mobility decisions (42% agreed that social media facilitated their decision to go to their current locations and 51% agreed that social media would facilitate their decision to choose where to move to in Europe). However, H2b (stating that location- and origin-specific differences exist among the migrants who agreed that social media facilitates their mobility decisions) is partly confirmed since the chi-square test shows that study location-specific differences exist among the migrants who agreed that social media facilitates their mobility decisions. However, the logistic regression models show that (within the model) origin-specific differences do not exist in regard to mobility decisions to current location (study location) but do exist in regard to future mobility decisions from the study location onward. Thus, social media has demonstrated a remarkable impact by facilitating asylum-related migrants' mobility decisions in general.

Interestingly, the respondents' gender, age, education, and (urban versus rural) background, which is clearly connected to their social-media use, did not explain social media's impact on the respondents' migration decisions at all. Thus, H2c (suggesting that socioeconomic and demographic backgrounds influence whether migrants agreed that social media facilitates their mobility decisions) is not confirmed.

Instead, migrants' positive views about the future ("I see my future positively") explain how social media facilitates a migration decision: Asylum-related migrants who agreed that they see their future positively were almost three times more likely (than those who disagreed on this) to report that social media facilitated or helped their decision to go to their current location. However, neither a positive nor an uncertain future view explains their future migration plans from the study location onward. Thus, H2d (stating that uncertain views on the future increase migrants' probability of agreeing that social media facilitates mobility decisions) is not confirmed.

Moreover, the logistic regression model shows that social relations acquired during the journeys (e.g., response to "During my journey to Europe, I made friends") and maintenance of those relations (e.g., response to "In Turkey, I am in contact with other people from my country of origin" or "I am in contact with other people elsewhere in Greece") influence the likelihood that social media will facilitate migrants' mobility decisions. Those who made friends, compared to those who did not make friends, were almost two times more likely to agree that information and interaction through social media facilitated their decisions on where they would move to in Europe. Thus, H2e is confirmed: Social capital increases the probability of utilizing social media for mobility decisions. Those who acquired new social relations during their asylum-related journeys were most likely to use social media in their migration decisions about their potential destinations. Thus, even though we generally agree with Dekker et al. (2018) that migration with a group can diminish migrants' dependency on ICTs, our results show that new social relations that asylum-related migrants develop on their journeys increase the migrants' likelihood to agree that social media facilitates their future decisions about where to move to in Europe. This is in line with Düvell (2018) and Migali et al. (2018), who emphasized the role of social networks in migration propensity, but our results go beyond this by emphasizing the role of social media use in facilitating migration decisions.

Social media and asylum-related migrants' resilience

Over half of the survey respondents in Greece, Italy, and Turkey agreed that social media was important for them while traveling to their current locations. There are no statistically significant differences in the responses between study locations or origins concerning the importance of social media while traveling. However, there are differences (between study locations and origins) in whether social media made life easier at the study location. This was expressed by two-thirds of Syrian asylum-related migrants in Turkey (68%) and in Jordan (67%). Also, slightly more than half (51%) of these migrants in Italy and fewer than half in Greece (43%) and Iran (44%) agreed that social media made their lives easier. Thus, H3a is partly confirmed: The majority of migrants agreed that social media made traveling easier, and a remarkable proportion of migrants—though not a majority—agreed that social media made life easier at the study location. The statistical differences in these responses between the study locations and origins presumably reflect their different circumstances.

It is noteworthy that gender does not explain social media's impact on the migrants' (self-perceived) resilience (e.g., participants reported that "social media was important for me" and "social media makes my life easier"). Even though chi-square tests show that age differences are statistically significant (Table 1), the logistic regression models, which also took respondents' origin, education, views on future and social relations into account, show that age is not a sufficient explanation. Instead, these models show that asylum-related migrants with university education were more likely than others to agree that social media was important for them (odds 1.8) during their asylum-related journeys and that social media made life easier (odds 1.5) at their current locations (Table 2). Thus, the H3b is partly confirmed: Socioeconomic (in terms of level of education) rather than sociodemographic differences are connected with asylum-related migrants agreeing that social media influences their resilience.

Furthermore, traveling asylum-related migrants who saw their future positively were almost two times more likely to respond that social media is important than those who did not see their future positively. It is important to note that migrants' opinions about the future are not connected to their opinion on whether social media makes life easier at their current locations. Thus, H3c in relation to views on the future is not confirmed; whereas, in relation to bridging social capital H3c is fully confirmed: Those who made friends during their journeys were over 3.7 times more likely to value social media as important during their travels. Along that line, those who were uncertain whether they had made new friends were over two times more likely to value social media as important compared with those who did not make new friends during their journeys.

Moreover, asylum-related migrants who were in contact with other people elsewhere in their current countries compared with those who were not in contact were almost two times more likely to agree that social media made life easier at their current locations. In addition, in contrast to those who did not make friends, those who had made friends during their asylum-related migrant journeys and those who were uncertain whether they had made friends were about twice as likely to agree that social media made their lives easier at their current locations. However, the model did not indicate a statistically significant relationship between asylum-related migrants who were in their current locations with some of their family and social media facilitating an easier life. Thus, according to self-reports, social media eases the lives of asylum-related migrants who made new social relations during their journeys or who were in contact with other people elsewhere in their current countries of living and thus need to maintain social networks via social media (cf. Bacigalupe & Cámara, 2012; Chan, 2015; Twigt, 2018).

Finally, we studied the connection between migrants' trust toward people who try to help them ("I trust people who try to help me") and social media use (Table 3). A larger share of migrants who do not trust people trying to help them (or who are uncertain about do they trust people trying to help them) use social media compared with the group who trust people trying to help them. The difference between these groups is only 8 percentage points (78% of those who trust use social media, whereas, 86% of those who do not trust and 85% of those who are uncertain use social media), but this is statistically significant. Thus, this result confirms H3d: Asylum-



related migrants use social media to enhance the trust deficit that they face in difficult circumstances in their living environments.

Conclusions

This research illustrates that social media is important for asylum-related migrants. Five out of six asylum-related migrants who participated in our survey used at least one social-media service. The use of most social -media services is gender biased: More asylum-related migrant men than women use Facebook, YouTube, Instagram, and Viber; however, an equal proportion of migrant women and men use social media in general and WhatsApp in particular. Further research should study potential gender-based differences in reasons to use social media during asylum-related migration.

Our results show that social media is important for maintaining social contacts for asylumrelated migrants and that making new friends on one's asylum-related journeys increases socialmedia use and that bonding social capital (presence of family members) decreases social-media dependency on these journeys (cf. Dekker et al., 2018). Furthermore, social media clearly facilitates asylum-related mobility for many asylum-related migrants, and bridging social capital is connected to this. Making new friends increases the migrants' likelihood to agree that social media facilitates future decisions about where to move to in Europe. Social media is a supportive tool that enables bridging social capital in migration networks and influences the mobility decisions of asylum-related migrants (cf. Düvell, 2018; Migali et al., 2018). Future studies should address the connections between social-media use, impact of social relations on countries of origin, and destination and migration decisions.

Our research indicates that social media use is relevant for the resilience of many asylumrelated migrants. In particular, social media is important for those asylum-related migrants who made bridging social capital (i.e., acquired new friends) during their journeys and makes life easier for those who are in contact with people elsewhere in their current countries of living and, thus, are physically distant from their social relations (cf. Bacigalupe & Cámara, 2012; Twigt, 2018). A better socioeconomic situation relates to having a better position to use social media to make asylum-related life easier inside and outside refugee camps and reception centers. More asylum-related migrants who lack trust at their current locations use social media than those who do not feel trust deficits in their current locations. Social-media use seemingly compensates for difficulties that asylum-related migrants face along their journeys (cf. Dekker et al., 2018). Future studies should continue to explore social-media use in relation to the migrants' resilience in different environments.

It was challenging to acquire extensive quantitative data on asylum-related migrants' social-media use along the different stages of their journeys. Nevertheless, we suggest scholars conduct surveys and collect comparative and longitudinal data on asylum-related migrants' social-media use along their journeys. Furthermore, we welcome in-depth qualitative studies to complement and further explain some of our findings (e.g., Zijlstra & Van Liempt, 2017; Dekker et al., 2018; Gillespie et al., 2018). Social media and the Internet are very important for asylum-related migrants. Global, national, and local authorities and NGOs dealing with asylum-related migrants should implement policies and practices that facilitate asylum-related migrants' access to and use of social-media.

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