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ARAŞTIRMA MAKALESİ / RESEARCH ARTICLE

Surviving in the Digital Space: Digital Literacy of Syrian Immigrants in Turkey

Dijital Dünyada Hayatta Kalmak: Türkiye'deki Suriyeli Göçmenlerin Dijital Okuryazarlığı

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Abstract

Turkey is one of the countries hosting the largest number of Syrian immigrants in the world. Integration of Syrian immigrants is one of the problems Turkey has to overcome. Many studies around the world show that digital communication tools can be used effectively by immigrants in many integration processes such as language learning, learning about culture and socialization. In this study, which was carried out as a project of The Scientific And Technological Research Council of Türkiye (TÜBİTAK), we aimed to determine the digital literacy levels of Syrian immigrants, which is a prerequisite for their integration by using digital tools. We applied a digital literacy scale adapted to Arabic to Syrian immigrants. The study, which was conducted both online and face-to-face, investigated the general digital literacy status of Syrian immigrants and their digital literacy levels according to variables such as gender, age, education level, income level, access to the internet, and Turkish citizenship status. Both at the general level and at the level of all variables, the digital literacy of Syrian immigrants was determined to be "Below Average / Weak". Especially in European countries, public policies have started to be established to increase the digital literacy levels of isolated groups such as immigrants. In order to overcome the immigrant integration problem in Turkey through digital communication, public policies should be established to increase the digital literacy levels of immigrants.

Keywords: Migration, Immigrants, Digital Literacy Scale, Turkey, Syrian Immigrants

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Öz

Türkiye dünyada en fazla Suriyeli göçmene ev sahipliği yapan ülkelerin başında gelmektedir. Suriyeli göçmenlerin entegrasyonu Türkiye'nin önünde aşması gereken problemler arasında bulunmaktadır. Dünyada yapılan birçok araştırma dijital iletişim araçlarının göçmenler tarafından dil öğrenme, kültür hakkında bilgi sahibi olma ve sosyalleşme gibi birçok entegrasyon sürecinde etkin kullanılabildiğini göstermektedir. Türkiye Bilimsel ve Teknolojik Araştırma Kurumu (TÜBİTAK) projesi olarak gerçekleştirilen bu çalışmada Suriyeli göçmenlerin dijital araçları kullanarak entegrasyon sağlamaları için gerekli ön şart olan dijital okuryazarlık seviyelerini belirlemeyi amaçladık. Suriyeli göçmenlere Arapça'ya uyarlanmış dijital okuryazarlık ölçeği uyguladık. Hem online hem yüz yüze gerçekleştirilen çalışmayla Suriyeli göçmenlerin genel dijital okuryazarlık durumları ve cinsiyet, yaş, eğitim seviyesi, gelir seviyesi, internete erişim biçimleri, Türk vatandaşlığı durumları gibi değişkenlere göre dijital okuryazarlık seviyeleri araştırıldı. Hem genel düzeyde hem bütün değişkenler düzeyinde Suriyeli göçmenlerin dijital okuryazarlıkları "Ortalama Altı / Zayıf" olarak belirlenmiştir. Özellikle Avrupa ülkelerinde göçmenler gibi izole grupların dijital okuryazarlık seviyelerinin yükseltilmesine yönelik kamu politikaları oluşturulmaya başlanmıştır. Türkiye'de de göçmen entegrasyonu sorununu dijital iletişimle aşmak için göçmenlerin dijital okuryazarlık seviyelerini yükseltecek kamu politikaları oluşturulması gerekmektedir.
Anahtar Kelimeler: Göç, Göçmen, Dijital Okuryazarlık Ölçeği, Türkiye, Suriyeli Göçmenler

Introduction

As a migration route country, Turkey has been both a destination and a transit country for immigrants for many years. Immigrants living in Turkey are part of an invisible mass "struggling to survive" within the social hierarchy (Altıntaş, 2014, p. 256). The biggest immigration wave in the history of Turkey, was experienced right after the Syrian civil war. In past immigration flows, immigrants stayed in Turkey for a certain period of time and then left, but in time a permanent refugee population was formed (İçduyu & Toktamış, 2005). The immigration flow from Syria is also expected to create such a permanent population. According to data gathered from the Presidency of Migration Management, there are a total of 3,559,041 Syrian immigrants in Turkey (Predicency of Migration Managament, 2023). According to the Ministry of Interior, 230,998 Syrians have acquired Turkish citizenship as of April 2023 (NTV, 2023).

Studies show that Syrian immigrants tend to form a permanent population in Turkey. For example, in a study on Syrian immigrants, 1074 out of 1156 respondents (approximately 93%) stated that they wanted to become citizens of the Republic of Turkey (Akın & Bozbaş, 2020). It is obvious that the vast majority of immigrants will not be able to obtain Turkish citizenship. It is known that the political and military turmoil in Syria is difficult to resolve immediately. Even if all problems are solved, the return of immigrants is among the issues that can be addressed in the very long term.

Therefore, the integration of immigrants, as long-term guests, is among the problems facing Turkey. Looking at the different countries affected by the wave of migration following the events in Syria, it is seen that the problem of integration has become one of the important interests of academia. Many studies around the world have focused on understanding the relationship between digital communication technologies and integration of immigrants (Khoja, 2020; Alencar & Tsagkroni,

2019; Drolet & Moorthi, 2018; Ayón et al., 2018; Kaufmann, 2018; Fisher, 2018; Maitland, 2018; Leurs, 2017; Andrade & Doolin, 2016). Digital communication, which has important potentials for solving the problem, has been increasingly researched in recent years. Studies have shown that digital communication is an important resource for different dimensions of integration for immigrants.

Many governmental and non-governmental organizations, including the Ministry of Interior, the Ministry of Family Labour and Social Services, the Turkish Red Crescent, and the Presidency of Migration Management are working on immigration issues. There is a need for science-based information and knowledge for legislators, administrators and practitioners who are developing projects in many areas such as health, security and integration for immigrants.

This study was conducted within the scope of The Scientific And Technological Research Council of Türkiye (TÜBİTAK) project titled "Investigation of Digital Literacy and Digital Citizenship Levels of Syrian Immigrants in the Context of Integration", under Innovative Solutions Research Projects Support Program in Social Sciences and Humanities (Project Number: 122G140)

Our purpose is to determine the digital literacy level of Syrian immigrants. Thus, we aimed to produce information for the development of more effective, faster and more economical policies based on digital technologies for the integration of Syrian refugees.

Immigrants and Digital Communication

According to research on Syrian immigrants in Canada, learning the official language, finding a job, increasing education and experience, and social integration are the problems faced by immigrants. Unlike other immigrant groups, Syrians are increasingly utilizing social media to overcome these problems (Drolet & Moorthi, 2018).

Similar results have been found in studies conducted in European countries, which are the final destination of many Syrian immigrants. In a study conducted by Khoja (2020) on Syrian immigrants in Sweden, it was determined that families let their children watch Netflix series in different languages for integration and allowed them to watch Youtube to improve their foreign languages. In addition, families make use of educational videos on Youtube so that their children do not forget their mother language. Political content, documentaries and educational programs are among the content that immigrants follow most on the internet. It has been revealed that while in their homeland, immigrants had media consumption habits mostly based on cable and satellite television, they consume more internet content after becoming immigrants.

According to Alencar and Tsagkroni (2019), who conducted research on immigrants in the Netherlands, immigrants have intensive information needs. For immigrants, new communication technologies are not only a source of information for understanding the system in the host country, but also an important part of cultural integration processes. According to study, immigrants in the Netherlands learn about culture by building bridges with local communities through social media. According to Khoja (2020) digital communication is a way for immigrants to cope with the new social environment in which they settle. It is a fundamental part of immigrants' daily life. Digital

media consumption is important both to stay in touch with those they left behind and to define their position in the host country. The digital world supports different aspects of immigrants' integration processes.

According to research in the context of social integration of immigrants in Europe, digital technologies play an important role in learning about the information and integration needs of immigrants as well as the expectations of local communities (Fisher, 2018). According to research by Leurs (2017) in the Netherlands and Kaufmann (2018) in Austria, digital technologies can promote immigrants' exchange of information, intercultural communication with the host community, and connections with networks of family, friends and refugees in both home and host countries. According to Dekker and Engbersen (2014), social media helps immigrants to maintain connections with strong and weak ties and build new systems of bonding, which is key to the integration process.

As a geographically remote example, according to a study conducted in New Zealand (Andrade & Doolin, 2016), new communication technologies play a role in supporting immigrants' social cohesion in the host country while preserving their own identity. However, in order to advance integration through the digital communication environment, it is necessary to have a certain level of digital communication skills, i.e. digital literacy, and to be able to actively utilize the possibilities and opportunities of the digital communication.

Also, when we look at the literature, there are many studies on "digital literacy of immigrants", which is the subject of this study. For example, the research conducted by McLean (2011) focuses on the digital literacy of Caribbean adolescent immigrants in the USA. Torralba (2015) focused on the digital competencies of Latino immigrants in California. A study by Gilhooly and Lee (2014), also in the US, examines the role of digital literacy practices on immigrant settlement.

It is seen that similar studies on digital literacy have been conducted on different immigrants from the Middle East. For example, in a study conducted by Traxler (2018), the digital competencies of Palestinian immigrants in different countries were investigated. In the study, the needs and opportunities emerging within the framework of digital literacy were discussed. In the study conducted by Reichel, Siegel, and Tudela (2015) in Spain, Bulgaria and the Netherlands, the concept of digital literacy was directly associated with integration.

Syrian Immigrant Studies in Turkey

When we look at immigrant studies in Turkey, it is seen that the interest of academic studies has shifted in this direction, especially after the influx of Syrian immigrants. In the literature, there is no research on the practices of immigrants in the digital world in general and on immigrants and digital citizens in particular. Studies on Syrian immigrants are limited to a certain number of themes.

Some of these include studies that deal with migration from a security perspective (Korkmaz, 2017;Ebrem, 2019), foreign policy-oriented studies that address the issue of migration, especially

in the context of relations with the European Union (Kuz, 2015; Gençer, 2016; Sağnıç, 2017), descriptive studies that deal with immigrants in terms of demographic characteristics, religion, sect, daily life practices (Öztürk, 2017; Doğdu, 2021; Açıkel, 2019), and studies that address the health and education problems of immigrants (Akalın, 2016;Kultaş, 2017;Akgün, 2016;Seyitömer, 2019).

When we look at the first period studies in the literature, it is seen that Syrian immigrants are evaluated as guests and temporary, and accordingly, research on problems that are considered urgent (especially security) is concentrated.

The recent increase in the number of "integration" themed studies in the literature shows that immigrants are considered permanent in academic acceptance. The research conducted by Öznay (2019) focused on the comparison of the integration process of Syrian Arab refugees and Syrian Turkmen refugees. The research released by Ataşçı in (2019) focuses on the problems with regards to the integration process. The study identifies problems in the fields of education, health, housing and nutrition as important obstacles into the integration process. Erşekerci (2020) compares integration policies in Sweden, Germany and Turkey and focuses on education policies. The study by Yılmaz (2021) focuses on the school integration of Syrian children in Turkey. However, none of these studies include topics such as digital communication and digital literacy.

Surviving in the Digital Space: Digital Literacy

The rapid change and transformation in digital technologies that pervade the whole structure of life forces digital competencies to change as well. Today, digital knowledge, skills, competence and competency are often used interchangeably, especially in everyday language. According to an OECD (2001) report, the concept of competence is defined as more than having skills and knowledge. The report defines competence as the ability to perform complex tasks using different psycho-social resources such as attitudes, skills and ethical values.

An important definition on the subject is found in the The European Qualifications Framework for Lifelong Learning report published by the European Commission: Education and Culture (The European Qualifications Framework for Lifelong Learning 2008). According to the report, knowledge is the totality of facts, principles, theories and practices related to a field, while skills are the ability to use knowledge in the field of application and problem solving. Skills can belong to the cognitive domain, such as logic, intuition, creative thinking, or to the practical domain, such as the use of materials and tools. The report defines competence as completely different from knowledge and skills. Accordingly, competence is the ability to use social and methodological skills, knowledge and skills effectively both in personal and professional development and in business life.

For example, producing and posting content on the internet and using social media platforms can be considered as skills. However, being aware of ethical and legal issues such as privacy, checking the appropriateness of content, cyberbullying or hate speech and acting accordingly is defined as competence.

The concept of digital literacy has been used in the literature since the 1990s within the framework of different competencies. According to Gilster (1997), who first used the concept, digital literacy is basically the ability to understand and use information accessed through computers. However, beyond this, it is a set of skills that includes the ability to solve different problems by evaluating the information obtained. Gilster's definition is considered by Bawden (2001, p. 23), as an adaptation of traditional literacy to the digital environment.

According to Eshet-Alkalai (2004, p. 93), if a definition of the new kind of literacy is to be made, it should center on the ability to survive in the digital age. Survival in the digital age requires not only the ability to evaluate information but also the ability to use technology. Martin and Grudziecki (2016) emphasize the concepts of ability, awareness and attitude in their definition. According to them, digital literacy includes the ability to find, use, manage and evaluate digital resources in line with these three characteristics.

According to Bawden (2001), definitions of digital literacy have been stuck in the information framework from the beginning, whereas digital literacy should be expanded to include knowledge of how technological devices work and even awareness of technology in general. Since the 2010s, various definitions have emerged in the literature in line with Bawden's suggestions.

For example, Hall et al. (2013) and Gourlay et al. (2013) include the functional use of information technologies as well as information within the definition of digital literacy. Similarly, Pegrum (2011) and Hockly (2012) defined people who can improve their skills with technological developments as digitally literate.

Over time, it is seen that the definitions of digital literacy have changed considerably by including new elements. In different studies, factors such as interactivity, self-control and flexibility are frequently emphasized. Due to the abundance of definitions resulting from the diversification of the definitions used, some researchers have created categories within digital literacies.

For example, Bacon and MacKinnon (2016) discuss digital literacy in 3 categories. "Basic Digital Literacy Skills" covers very low-level knowledge and skills such as computer usage knowledge and the ability to connect to the internet. "Digital Skills for the General Workforce" includes specific digital business skills in today's world where collaboration is essential. "Digital Skills for ICT Professions" describes more comprehensive and higher level knowledge and skills, including the ability to develop software, coding, project and product development.

Bayrakcı and Narmanlıoğlu (2021) define digital literacy as "whole of digital competences" and describe the general framework of digital literacy as follows. Digital literacy is to be able to use digital technologies purposefully, safely and effectively in many areas from learning to problem solving, from entertainment to communication, from citizenship practices to private sphere and to be able to produce and collaborate with digital technologies and to be able to evaluate digital technologies and process, and to be able to have an awareness and critical perspective towards digital technologies.

Methodology

Purpose of study and research questions

Our primary aim is to measure the digital literacy of Syrian immigrants living in Turkey and to reveal the differences in digital literacy levels according to various variables. To this end we sought the following descriptive and inferential questions:

- What is the digital literacy level of Syrian immigrants?
- What are the Syrian immigrants' behaviors regarding digital access, device and social media ownership?
- Do the digital literacy scores of Syrian immigrants show statistically significant differences according to the following demographic characteristics?
    - Gender
    - Age
    - Education level
    - Income level
    - Type of access to the internet
    - Turkish naturalisation status
    - The age of starting to use smart devices
    - The number and type of smart devices owned
    - The number and type of social media platform used

Fort this purpose we used, survey design, one of the quantitative research methods. Survey research provides a numerical description of the trends, attitudes or opinions of the universe and generalization to the universe by examining a specific sample from a universe (Fowler, 2008).

Sample and population of the study

The population of the study consists of Syrian immigrants in Turkey. According to the data of the Directorate of Migration Management, there are 3,559,041 Syrian immigrants in Turkey as of April 2023 (Predicency of Migration Managament, 2023). Due to the difficulty of reaching the entire population, sampling will be used. A sample is a group of individuals or objects that have the qualifications to represent the population (Gravetter & Forzano, 2012; Kılıç, 2013). There are different opinions on the calculation of the sample size, for example, Kline (1994), Burns and Grove (2001) stated that the sample size should be at least 10 times the number of items in the scale, while Büyüköztürk (2002) and Comrey and Lee (1992) stated

that there should be at least 100 participants in the sample. In this study, 187 Syrian immigrant participants constitute the sample. Purposive sampling method was utilized as the sampling method. The sample of 187 Syrian immigrants was reached by snowball technique, one of the purposive sampling methods, with the guidance of Syrian students studying at Marmara University and native Arabic speaker scholarship students who were included in the research within the scope of TÜBİTAK project.

Instruments and data collection

The Digital Literacy Scale (DLS) developed by Bayrakcı and Narmanlıoğlu (2021) was used for study. Turkish version of DLS has been used in different academic studies such as determining the relationship between digital literacy and digital obesity (Demir et al., 2023), determining the digital literacy levels of undergraduate students in Izmir (Yoleri & Anadolu, 2022), and students in Eastern Anatolia (Kaya & Korucuk, 2022), investigating the relationship between digital literacy and positive psychological capital (Akyazı, 2022), and measuring the digital literacy levels of teachers (Şahin & Kalkan, 2022).

DLS adapted to Arabic, according to Hambleton and Patsula's (1999) suggestion, and used as data collection tool. Before the study, permission was obtained from Marmara University Social Sciences Research Ethics Committee. The 4-factor 23-item DLS adapted to Arabic and the form regarding the demographic information of the participants were applied face-to-face in Istanbul and online survey technique via SurveyMonkey platform in 1-28 April 2023. The items in the 23-item Arabic adaptation scale were prepared in the form of a 5-point Likert scale (strongly agree (5), agree (4), undecided (3), disagree (2), strongly disagree (1)). The collected data were subjected to descriptive and inferential analyses through SPSS 28.0 (Statistical Program for Social Sciences). The Cronbach's alpha, internal consistency value for reliability coefficient of the Arabic adaptation scale is 0.914 that shows the scale is reliable and has internal consistency.

Findings and Discussion

The demographic data of 187 Syrian people who participated in the survey are given below. According to the Table 1, 64% of the participants are male, almost half of the immigrants are aged between 21 and 30. The biggest part of the immigrants around 79% have not taken Turkish Citizenship. While the minimum wage in Turkey is officially 8500 Turkish Lira (TL), 57,2% of the participants have a monthly income below the minimum wage and 40,1% has below the 6000 Turkish Lira (TL). 34,1%of the Syrian immigrants are using mobile internet as connection status. 79% of the immigrants have started to use smart devices before the age of 17 also 39,1% of the participants have just one smart device.

Table 1. Demographic Features

Demographic Variables		Frequency	97,2%
Gender	Women	69	77,3%
	Male	118	75,6%
Age Group	16-20	24	75,0%
	21-25	43	58,0%
	26-30	29	30,7%
	31-35	18	24,4%
	36-40	12	23,3%
	41-45	16	17,6%
	Over 45	12	10,2%
Education Status	Primary/Secondary	12	5,7%
	High School	23	494,9%
	Bachelor's Degree	80	55.1
	Postgraduate	30	20.6
Monthly Income	0-3.000TL	43	23,0
	3.001-6.000TL	32	17,1
	6.001-9.000TL	32	17,1
	9.001-12.000TL	26	13,9
	12.001-15.000TL	19	10,2
	Above 15.000TL	16	8,6
Internet Access	Mobil	62	34,1
	WiFi	120	65,9
Turkish Citizenship Status	Yes	41	21.9
	No	129	69
	Continues	17	9.1
Age of Starting to Use Smart Devices	Less than 10 years old	27	18.6
	11-17 years old	88	60.6
	18-24 years old	36	24.8
	After the age of 24	31	21.3
Total Number of Smart Devices	One	56	39.1
	Two	33	23
	Three	24	16.7
	Four	17	11.9
	Five	9	6.2
	Six	4	2.8

	Frequency	Share in Social Media Platforms	Social Media Ownership of Participants

Social Media Platform	WhatsApp	171	19,6%	97,2%
	YouTube	136	15,6%	77,3%
	Instagram	133	15,3%	75,6%
	Facebook	132	15,2%	75,0%
	Telegram	102	11,7%	58,0%
	Twitter	54	6,2%	30,7%
	TikTok	43	4,9%	24,4%
	Snapchat	41	4,7%	23,3%
	LinkedIn	31	3,6%	17,6%
	Pinterest	18	2,1%	10,2%
	Reddit	10	1,1%	5,7%
	Total	871	100,0%	494,9%
		Frequency	**Share in Devices**	**Device Ownership of Participants**
Device	Smart Phone	155	37,3%	89,6%
	Laptop	88	21,2%	50,9%
	Computer	49	11,8%	28,3%
	Smart TV	38	9,2%	22,0%
	Tablet	35	8,4%	20,2%
	Smart Watch	28	6,7%	16,2%
	Mobile Phone	22	5,3%	12,7%
	Total	415	100,0%	239,9%

According to table, it can be said that nearly each of the Syrian immigrants use WhatsApp, and around 75% of them use YouTube, Instagram and Facebook. LinkedIn as professional network is not so popular a social media platform around immigrants in Turkey. 17,6% of the participants are using Linkedin. Pinterest and Reddit are the least preferred social media platforms of immigrants. Moreover, smart phone and laptop are most preferred technological devices. 89%of the Syrian immigrants have a smart phone and half of the participants have laptops. On the other hand 12,7% of participants has not a smart device, they just have mobile phone.

To determine digital literacy levels of the Syrian immigrants in Turkey, particiapants's scale scores are calculated. The Arabic version of the digital literacy scale scores are ranged between 23 (minimum) to 110 (maximum). The mean scores of digital literacies of the Syrian immigrants are normally distributed with a mean of 78,4 out of 110 and a standard deviation of 14,4 (78,3±14,4). The scores are evaluated according to Digital Literacy Levels and Score Ranges (Bayrakcı & Narmanlıoğlu, 2021) and a sample of 187 Syrian immigrant participants' mean 78,4±14,4 out of 110 digital literacy level is *"Below Average/Weak."*

Many factors caused changes in digital literacy levels of immigrants. The table shows variables and the digital literacy scale scores of the Syrian immigrants in Turkey.

Table 2. Literacy Scale Scores

Demographic Variables		Mean ±sd
Gender	Women	76,88 ± 14,03
	Male	79,31 ± 14,74
Age Group	16-20	78,92 ± 10
	21-25	77,44 ± 10,2
	26-30	83,1 ± 14,06
	31-35	83,67 ± 16,58
	36-40	81 ± 15,35
	41-45	74 ± 16,19
	Over 45	64,92 ± 21,18
Education Status	Primary/Secondary	78,17 ± 12,69
	High School	78,65 ± 11,79
	Bachelor's Degree	78,41 ± 13,84
	Postgraduate	81,77 ± 13,02
Monthly Income	0-3.000TL	78,41 ± 10,86
	3.001-6.000TL	79,81 ± 14,22
	6.001-9.000TL	77,41 ± 16,28
	9.001-12.000TL	84,1 ± 15,36
	12.001-15.000TL	77,69 ± 11
	Above 15.000TL	80,67 ± 7,88
Internet Access	Mobil	76 ± 14,12
	WiFi	79,29 ± 14,51
Age of Starting to Use Smart Devices	Less than 10 years old	84,86 ± 12,06
	11-17 Years	80,51 ± 11,98
	18-24 Years	79,81 ± 13,01
	After the age of 24	69,46 ± 16,86

In the literacy, device ownership, access the internet and social media are related issues in the context of the digital literacy (Ahmed & Roche, 2021). The table below shows the device and social media ownership and their digital literacy scores.

Table shows that Syrian immigrants with smart device have higher digital literacy score than those without. To understand this difference is statistically significant or not the independent samples t-test is used. The scores are normally distributed thus we used parametric tests (t test for two independent and ANOVA for more than two independent groups) to understand differences are significant or not. All differences and comparison analysis results are given under the table.

Table 3. Comparison Analysis

Social Media Account Ownership			Smart Device Ownership		
Platform	**Ownership**	**Mean ±sd**	**Device**	**Ownership**	**Mean ±sd**
TikTok	None	77,71 ± 13,83	**Smart Watch**	None	77,34 ± 12,58
	Present	82,89 ± 10,57		Present	88,71 ± 13,17
Facebook	None	76,47 ± 12,51	**Laptop**	None	75,86 ± 11,88
	Present	79,75 ± 13,42		Present	82,04 ± 13,85
WhatsApp	None	83,33 ± 7,57	**Tablet**	None	77,24 ± 12,75
	Present	78,92 ± 13,34		Present	86 ± 13,05
Twitter	None	76,23 ± 12,72	**Smart TV**	None	77,05 ± 12,97
	Present	84,7 ± 12,59		Present	86,4 ± 11,76
LinkedIn	None	77,02 ± 12,7	**Computer**	None	76,71 ± 12,31
	Present	87,21 ± 12,46		Present	84,55 ± 13,93
Reddit	None	78,33 ± 12,59	**Smart Phone**	None	69 ± 16,29
	Present	90,5 ± 19,09		Present	80,1 ± 12,47
Pinterest	None	77,73 ± 12,8			
	Present	90 ± 12,25			
Snapchat	None	78,24 ± 12,75			
	Present	81,5 ± 14,65			
Telegram	None	75,38 ± 11,68			
	Present	81,49 ± 13,74			
YouTube	None	74,13 ± 14,9			
	Present	80,31 ± 12,53			
Instagram	None	76,81 ± 14,45			
	Present	79,63 ± 12,9			

Those with smarter device ownership are statistically significantly higher in terms of digital literacy scores than those with less. The average of those with at most one smart device is 72,52; the average of those with at least 2 smart devices is 83,2 (Independent Sample T Test).

There is a statistally significant difference between those with **smartwatches** and those without (88,7-77,3).

There is a statistally significant difference between those who have a **laptop** and those who do not (82,0-75,8).

There is a statistally significant difference between those with **tablets** and those without (86-77,2).

There is a statistally significant difference between those with **smart TVs** and those without (86,4-77).

There is a statistally significant difference between those who have a **computer** and those who do not (84,2-76,7)

There is a significant difference between those with **smartphones** and those without (80,1-69).

There is a statistically significant difference in digital literacy scores between those with less than 4 and those with 4 or more social media platforms used (80,4-74,3) (Independent Sample T Test).

YouTube users have significantly higher digital literacy scores than non-users (80,3-74,1).

Twitter users have significantly higher digital literacy scores than non-users (84,7-76,2).

LinkedIn users have significantly higher digital literacy scores than non-users (87,2-77).

Tiktok users have significantly higher digital literacy scores than non-users (82,9-77,7).

Pinterest users have significantly higher digital literacy scores than non-users (90-77,7)

Reddit users have significantly higher digital literacy scores than non-users (90,5-78,3)

Immigrants **aged 26-35** (83,2) digital literacy scores are statistically higher than aged over 46 (64,9).

There is a significant difference between those **who started using smart devices** after the age of 17 and those who started using smart devices before the age of 17 (81.5-75.8). Engagement with smart devices early ages are one of the leading factors in digital literacy.

There was **no significant difference** in digital literacy scores between those who use social media platforms **Instagram, Facebook, WhatsApp** and **SnapChat** and those who do not. Means of the scores of those social media users or not are close to each other.

Although there was **no significant difference** in digital literacy scores between **woman and man**, man's scores are higher than women.

Although there was **no significant difference** in digital literacy scores between **education level**, postgraduates' scores are higher than lower education level.

Although there was **no significant difference** in digital literacy scores between **monthly income level**, those with a monthly income of 12 000 TL and above scores are higher than other groups.

Although there was **no significant difference** in digital literacy scores in **internet access types.** Those who connect to the internet via WiFi have a higher score than mobile.

Although there was **no significant difference** in digital literacy scores in **acquisition of Turkish citizenship.** Those who acquired Turkish citizenship have a higher score than those who have not acquired.

Conclusion

Ten years have passed since the influx of Syrian immigrants affected many countries, especially Europe. Millions of people have left their homeland and dispersed to different countries. The

migration issue, which has been discussed around problems such as security, health and shelter for many years, is now being addressed with a more integration focused dimension. Both legislators, administrators and academia are spending more efforts on integration.

Conventional measures such as rehabilitation centers and integration programs are not sufficient for such a large influx of immigrants. Today, immigrants' survival in the host country is largely dependent on their ability to survive in the digital space. Access to digitized information facilitates individuals' participation in both the national community in which they live and the global online community. Immigrants across different geographies are increasingly using digital communication to maintain old ties and socialize in the host country. Digital communication is an important opportunity for political participation, socialization, economy, education and self-development. In addition, digital communication offers immigrants the opportunity to "speak" and "be heard". Various studies around the world reveal that immigrants find the chance to express themselves through digital communication.

Hosting the largest number of Syrian immigrants in the world, Turkey has had to mobilize its material resources and manpower. In its political relations, especially with the European Union and the Middle East, the immigrant issue is high on the list. Utilizing the opportunities offered by digital communication technologies within the framework of integration is of great political, social and economic importance.

According to the results of our research, the digital literacy of Syrian immigrants is "Below Average/Weak." Although there is not a big difference, as in many digital literacy studies, the scores of male participants are higher than those of female participants. When analyzed by age groups, there are no significant differences in the 16-45 age range. However, the digital literacy scores of immigrant participants over the age of 45 are dramatically lower than other age groups.

There is no significant difference between the education level of immigrants and their DLS scores. However, as expected, Postgraduates have higher levels of digital literacy. The digital literacy of Primary/Secondary, High School, and Bachelor's Degree level participants was close to each other. For a more detailed analysis of this result, different research data such as face-to-face interviews are needed.

When the monthly income variable is analyzed, total digital literacy scores are quite low at all income levels. However, it was observed that there was a partial increase in the digital literacy level of participants earning over 12,000 Turkish Liras.

In terms of the way they connect to the internet, participants who prefer WiFi more than those who use mobile connections have higher digital literacy scores, although not much higher than those who use mobile connections. This is thought to be related to the participants' ability to connect to the internet in a public place.

When the DLS scores were analyzed according to the period of starting to use smart devices, it was seen that the digital literacy levels of those who started to use devices in the early period were higher than all subsequent periods. Although the situation is generally similar in the sub-dimensions,

it can be said that there is a significant and inverse relationship between the period of starting to use smart devices and the level of digital literacy. Participants who started using smart devices after the age of 24 had very low digital literacy scores.

There was no significant relationship between social media use and digital literacy. The scores of social media users and non-users are close to each other. This is thought to be because social media such as Instagram, Facebook, WhatsApp and SnapChat are now very common and do not require much skill for their use at a standard level.

The analysis conducted on the basis of the variable of digital device ownership in the research is in line with the OECD's basic report. In the basic report on the digital divide by the Organization for Economic Co-operation and Development (OECD), of which Turkey is a member, digital device ownership is listed among important indicators. There is a significant difference between those who own digital devices such as SmartTVs, computers and tablets and those who do not. Participants who own digital devices have much higher digital literacy scores. According to the study, there is no difference between immigrants on Turkish citizenship status. Both citizens and non-citizens have low digital literacy scores.

The most important result of the research is that the digital literacy of Syrian immigrants is "Below Average/Weak" at all variables (gender, age, education level, income level, type of access to the internet, Turkish naturalization status, the age of starting to use smart devices, the number and type of smart devices owned, the number and type of social media platform used). According to this result, it is necessary to increase the digital literacy levels of immigrants in order to benefit from the digital communication environment for integration. In countries such as Spain, Bulgaria and the Netherlands, public policies have been developed to raise the digital literacy levels of isolated groups, including immigrants (Reichel et al., 2015). In order to overcome the problem of immigrant integration through digital communication, Turkey needs to implement public policies to improve the digital literacy levels of immigrants.

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