EKİM/OCTOBER 2023 • SAYI / ISSUE: 43-ÖZEL SAYI- • ISSN: 2630-6220

# TÜRKİYE İLETİŞİM ARAŞTIRMALARI DERGİSİ

## TURKISH REVIEW OF COMMUNICATION STUDIES (TURCOM)

MARMARA ÜNİVERSİTESİ YAYINEVİ

**Türkiye İletişim Araştırmaları Dergisi • Turkish Review of Communication Studies**
6 Aylık Hakemli Dergi • Biannually Peer-Reviewed Academic Journal
Ekim ÖZEL SAYISI /October SPECIAL ISSUE 2023 • Sayı/Issue: 43 - ISSN: 2630-6220

**Marmara Üniversitesi Rektörlüğü Adına İmtiyaz Sahibi • Owner**
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**Özel Sayı Hakem Kurulu / List of Referees**

# Editörden

### Ekim 2023: Bilimsel Araştırma Projeleri Özel Sayısı

Türkiye İletişim Araştırmaları Dergisi olarak yayınladığımız 43. sayımızı, medya ve iletişim çalışmaları alanlarında gerçekleştirilen bilimsel araştırma projeleri ve bu projelerden üretilen makalelere ayırdık. Özel sayımızda üçü İngilizce ve biri Türkçe yazılmış olan dört makaleyi sizlerle buluşturmaktan mutluluk duyuyoruz. "Dijital Dünyada Hayatta Kalmak: Türkiye'deki Suriyeli Göçmenlerin Dijital Okuryazarlığı" başlığıyla Haldun Narmanlıoğlu ve Serkan Bayrakcı tarafından kaleme alınan makale, TÜBİTAK tarafından desteklenmiş bir projenin çıktılarını tartışıyor. TÜBİTAK tarafından desteklenen bir başka proje kapsamında yazarlar Müge Öztunç, Ahmet Suerdem ve Umur Bedir, "Türkiye'deki Üniversitelerde Bilim İletişiminin Kurumsallaşması: Üniversitelerin Merkezi İletişim Birimleri Üzerine Nitel Bir Analiz" başlıklı makaleleriyle sayımıza katkıda bulundular. Sayımızın üçüncü makalesi olan "Korunma Motivasyonlarını Etkileyen Faktörler ve Mesaj Çekiciliğinin Rolü: COVID-19 Bağlamında Bir Araştırma" başlıklı çalışma, İzmir Bakırçay Üniversitesi Bilimsel Araştırma Projeleri Koordinatörlüğü tarafından desteklenmiş olup, Tuncer Asunakutlu, Ali Emre Aydın, Derya Karanfil, Ümit Kuvvetli, Tahsin Aydoğan, Seren Düzenli Öztürk ve Tuğba Yılmaz imzasını taşıyor. Son olarak Emet Gürel, Azra K. Nazlı, Büşra Çetin ve Neslihan Özmelek Taş tarafından kaleme alınan "Ceo Markalamaya Yönelik Bir Araştırma" makalesi, Ege Üniversitesi Bilimsel Araştırma Projesi Koordinatörlüğü tarafından desteklendi. Uluslararası nitelikte ve kaliteli yayıncılığı önceleyen TURCOM olarak, alanımızda gerçekleştirilen bilimsel araştırma projelerini önemsiyor ve bu çalışmaların çıktılarını akademik dünyayla buluşturmaktan memnuniyet duyuyoruz. Özel sayımıza makaleleriyle katkıda bulunan yazarlara ve kıymetli değerlendirmeleriyle karar süreçlerimizi kolaylaştıran hakemlere çok teşekkür ederiz.

Doç. Dr. Alparslan Nas<br>Baş Editör

## Editor's Introduction

### October 2023: Special Issue on Scientific Research Projects

Turkish Review of Communication Studies is dedicating this special issue to articles stemming from scientific research projects in media and communication studies. We are pleased to announce the publication of this issue, which includes a total of four articles, three of which are in English. In "Surviving in the Digital Space: Digital Literacy of Syrian Immigrants in Turkey", Haldun Narmanlıoğlu and Serkan Bayrakcı discuss the outcomes of their project, which was funded by TÜBİTAK (The Scientific and Technological Research Council of Türkiye). Müge Öztunç, Ahmet Suerdem, and Umur Bedir contributed to our special issue with their article, "Institutionalization of Science Communication in Universities of Türkiye: A Qualitative Analysis of Central Communication Units", which is also supported by TÜBİTAK. The third article of this issue is written by Tuncer Asunakutlu, Ali Emre Aydın, Derya Karanfil, Ümit Kuvvetli, Tahsin Aydoğan, Seren Düzenli Öztürk and Tuğba Yılmaz; "Factors Affecting Protection Motivations and the Role of Message Appeal: A Research in the Context of COVID-19", and is funded by İzmir Bakırçay University Scientific Research Projects Unit. Finally, Emet Gürel, Azra K. Nazlı, Büşra Çetin, and Neslihan Özmelek Taş contributed to the special issue with "A Research on Ceo Branding", which was funded by Ege University Scientific Research Projects Unit. Being an internationally focused journal, we prioritize quality academic publications and gladly share the outcomes of scientific research projects with the academic community. We would like to thank the authors for their articles and the referees for their valuable peer review.

Assoc. Prof. Alparslan Nas
Editor-in-Chief

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Türkiye İletişim Araştırmaları Dergisi / Turkish Review of Communication Studies • Yıl/Year: 2023 • Sayı/Issue: Özel Sayı/Special Issue
ss/pp. e1-18 • ISSN: 2630-6220 • DOI: 10.17829/turcom.1309961

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

Haldun NARMANLIOĞLU*
Serkan BAYRAKCI**

**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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The research of this article received Ethics Committee Approval in accordance with the decision of Marmara University Social Sciences Research Ethics Committee dated 10.17.2022 and numbered 2022-76.

**Makale Geçmişi / Article History**
**Gönderim / Received:** 05.06.2023
**Kabul / Accepted:** 10.08.2023

**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 statistically 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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Türkiye İletişim Araştırmaları Dergisi / Turkish Review of Communication Studies • Yıl/Year: 2023 • Sayı/Issue: Özel Sayı/Special Issue
ss/pp. e19-44 • ISSN: 2630-6220 • DOI: 10.17829/turcom.1308989

**ARAŞTIRMA MAKALESİ / RESEARCH ARTICLE**

# Institutionalization of Science Communication in Universities of Türkiye: A Qualitative Analysis of Central Communication Units*

## Türkiye'deki Üniversitelerde Bilim İletişiminin Kurumsallaşması: Üniversitelerin Merkezi İletişim Birimleri Üzerine Nitel Bir Analiz

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**Abstract**

In contemporary policy documents and academic literature, the significance of institutional actors, particularly universities, in the communication and interaction processes between science and society is increasingly emphasized. This study aims to explore the science communication activities carried out by central communication units of universities in Türkiye, the distribution of these activities among sub-units within universities, the priorities and motivations for such activities, and the problems encountered in the institutionalization of science communication. Using a qualitative research method, semi-structured in-depth interviews were conducted with senior officials from 20 public and foundation universities in Türkiye, and a thematic analysis approach was utilized to analyze the coded data. The results indicate that while there are noteworthy differences between public and foundation universities, central communication units prioritize routine and one-way science communication activities categorized as PR and Marketing, while Public Engagement and Public Affairs activities involving dialogue are carried out to a more limited

* This article is an output of the project titled "Institutional Communication Activies of Universities in the Context of Public Engagement With Science" and numbered 220K306, supported by the Scientific and Technological Research Council of Turkey (TÜBİTAK) 1002 Short Term R&D Funding Program.Permission for the study was obtained from the Istanbul Aydın University Social Sciences Ethics Committee Commission with a decision dated May 26, 2021, and numbered 2021/6.

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**Makale Geçmişi / Article History**
**Gönderim / Received:** 02.06.2023
**Düzeltme / Revised:** 06.08.2023
**Kabul / Accepted:** 17.08.2023

extent. The primary motivation behind universities' science communication is meeting specific institutional strategic goals rather than creating public benefit. Furthermore, institutionalizing science communication in universities has been hindered by personnel and budget constraints in communication offices, the lack of institutional autonomy, and undefined duties and authorities of these units under the legal regulations of the higher education system.
**Keywords**: Science Communication, Universities, Public Engagement, Institutionalization, Türkiye

**Öz**

Güncel politika belgelerinde ve akademik yazında, bilim ve toplum arasındaki iletişim ve etkileşim süreçlerinde kurumsal aktörlerin, özellikle de üniversitelerin önemi giderek daha fazla vurgulanmaktadır. Bu çalışma, Türkiye'de üniversitelerin merkezi iletişim birimleri tarafından yürütülen bilim iletişimi faaliyetlerini, eğer mevcut ise üniversiteler içinde iletişim birimi dışında kalan diğer alt birimlerin hangi bilim iletişim faaliyetlerini yürüttüklerini, iletişim birimlerinin bilim iletişiminde önceliklerini, motivasyonlarını ve bilim iletişiminin kurumsallaşmasında karşılaşılan sorunları ortaya koymayı amaçlamaktadır. Nitel bir araştırma yöntemi kullanılarak, Türkiye'deki 20 devlet ve vakıf üniversitesinden üst düzey yetkililerle yarı yapılandırılmış derinlemesine görüşmeler yapılmış ve kodlanan verilerin analizinde tematik analiz yaklaşımı kullanılmıştır. Sonuçlar, kamu ve vakıf üniversiteleri arasında dikkate değer farklılıkları göstermekle birlikte, merkezi iletişim birimlerinin Halkla İlişkiler ve Pazarlama olarak sınıflandırılan rutin ve tek yönlü bilim iletişimi faaliyetlerine öncelik verdiğini, diyalog içeren toplumun bilime katılımını ve kamusal faaliyetleri içeren etkinliklerin ise daha sınırlı ölçüde yürütüldüğünü göstermektedir. Üniversitelerin bilim iletişiminin ardındaki temel motivasyonun ise kamu yararı yaratmaktan ziyade belirli kurumsal stratejik hedefleri karşılamak olduğu görülmektedir. Ayrıca, üniversitelerde bilim iletişiminin kurumsallaşması, iletişim ofislerindeki personel ve bütçe kısıtları, kurumsal özerklik eksikliği ve yükseköğretim sisteminin yasal düzenlemeleri kapsamında bu birimlerin görev ve yetkilerinin tanımlanmamış olması nedeniyle engellenmektedir.
**Anahtar Kelimeler**: Bilim İletişimi, Üniversiteler, Kamusal Katılım, Kurumsallaşma, Türkiye

## Introduction

Universities are not only responsible for generating scientific knowledge but also play a crucial role in establishing links between science and society. They can organize science communication activities for their own benefit or to benefit the public by bringing science and society closer. Since the mid-2000s, universities worldwide have diversified and professionalized their communication activities to enhance their reputation and brand image (Schäfer & Fähnrich, 2020). Universities have started to allocate more resources to communication, intensified their media relations, and started to use social media more effectively. These activities can be based on traditional science communication or participatory approaches that involve the public in scientific processes and encourage dialogue. Public engagement of science (PES) aims for societal benefit, organizing public events that are research-related and conducting activities that facilitate interaction with society by collaboration. This research focuses on the role of universities and their institutionalized communication units in science communication, employing a qualitative approach.

The study focuses on universities in Türkiye, which traditionally have not been considered at the forefront of scientific knowledge production and where mechanisms regulating the relationship between science and society were established later than in Western countries (Dursun, 2010, p. 23). We aimed to investigate the prominent science communication activities carried out by the communication units of universities, how these activities are organized between the communication unit and other sub-units within the university, the motivations prioritized in these activities, and the current problems regarding the institutionalization of science communication in universities. For this purpose, in-depth interviews were conducted using semi-structured questions with officials from the central communication units of 20 foundation and public universities in Türkiye. The interview data were analyzed thematically, and categories were identified under four main themes and interpreted with their sub-categories.

The communication strategies developed by universities within the framework of institutional strategies heavily influence today's dominant understanding of science communication (Bauer & Gregory, 2008), as well as the media coverage of scientific topics (Horst, 2013; Sumner et al., 2014; Vogler & Schäfer, 2020) and the media activities of individual scientists (Marcinkowski et. al, 2014; Bauer & Jensen, 2011; Marcinkowski & Kohring, 2014). Institutional science communication studies are relatively limited in the existing science communication literature and despite their importance, have gained prominence only after 2009 (Schäfer & Fähnrich, 2020, p. 140). Science communication literature in Türkiye mainly focus on the problems of science journalism (Erdoğan, 2007; Koloğlu, 1997; Öztunç, 2020; Utma, 2022), and the role of traditional (Dursun, 2021) and online media (Bedir, 2020) in science communication. However institutional science communication and science communication activities of universities attracted a very limited scholarly attention. While there are studies on web-based corporate communication activities (Gökler & Onay, 2020; Çoban & Tüfekçi, 2015) of universities in Türkiye, there are very few studies that specifically focus on science communication in the context of universities (Burakgazi, 2017; Ozdemir & Koçer, 2020); and none of them are based on systematic field research.

This study makes an important contribution to the science communication literature in Türkiye in terms of addressing the roles and challenges faced by university communication units. Furthermore, it is anticipated that the research can guide for decision-makers and practitioners in improving the role, function, and effectiveness of universities and central communication units in science communication within Türkiye.

## Conceptual Framework

Demands and opinions advocating for an enhanced role of universities and research institutions in fostering interaction between science and society, as well as promoting engagement with diverse segments of society, have been highlighted in various policy documents since the early 2000s (European Research Advisory Board, 2007). Although 'Public Engagement' (PE) is a very flexible term that encompasses a range of approaches, goals, and activities, some of its basic assumptions remain constant: Accordingly, mutually supportive relationships between science and society are important for the advancement of scientific knowledge and the betterment of society. Furthermore, effective establishment of such relationships is best attained through extensive and diverse interactions or engagements between the two entities (Burchell, 2015). Collaborative initiatives with industry and non-governmental organizations for societal benefit, organizing public events that are research-related, and conducting activities that facilitate interaction with society, such as science cafés, can be regarded as part of the domain of PE (Süerdem et. al, 2023). In this regard, PE diverges from the traditional concept of science communication, which predominantly involves one-way communication from scientists and scientific institutions to society, aimed at enlightening society with scientific knowledge.

On the other hand, under the influence of neoliberal Higher Education reforms, including the automatization and professionalization of management (Mejlgaard et. al, 2012) and the increasing commercialization of higher education and competition for students, knowledge, and financial resources (Aquilani & Lovari, 2008; Engwall, 2008; Rowe & Brass, 2008; Autzen & Weitkamp, 2019), universities are increasingly turning to non-scientific audiences.

For universities and research organizations, interacting with the media is also becoming important to attract the attention of politicians, policy makers and increase social influence (Peters et al., 2008). For these reasons, universities today are expanding and diversifying their communication efforts, while at the same time allocating more resources to communication and intensifying their relationships with media and journalists (Rowe & Brass, 2008). They have also become more strongly involved in public relations (PR) (Borchelt & Nielsen, 2014; Autzen, 2014; Vogler & Schäfer, 2020), branding (Chapleo, 2011; Bélanger et. al, 2014) reputation management (Melewar et. al, 2018), and interacting with various target audiences through online and social media (Duke, 2002; Linvill et. al, 2012; Lo Presti et. al, 2020). Under such conditions, communication with different segments of society, especially industry, has become a 'third mission' (Laredo, 2007) and a structural part of the scientific production process (along with education and research) rather than an external duty or ethical responsibility for universities and other research organizations (Polino & Castelfranchi, 2012).

In the past, science was independent and not accountable to social actors as it was more closed to communication, yet this new approach allowed society to interact with science and science to be accountable to other segments of society with the Public Engagement with Science (PES) approach. However, the organizational shift in science communication has been criticized from different angles by different researchers. The most common criticism is that the forms of corporate strategic communication based on self-promotion, publicity, and public relations (PR) are incompatible with the public interest requirements of science communication and that this leads to exaggerated representations of science in the media (Nelkin, 1987; Bauer & Gregory, 2008; Bauer, 2008; Sumner et al., 2014; Weingart, 2017). However, certain scholars hold the viewpoint that the mediatization of scientific institutions may pose a threat to academic autonomy, as it could potentially result in an increased emphasis on sensational topics and heightened visibility pressure on academics (Marcinkowski et al., 2014, p. 3).

On the contrary, it has been argued that PR should not be reduced to mere propaganda, as highlighted by (Autzen & Weitkamp, 2019, p. 475). Moreover, proponents of PR and other strategic communication approaches assert that they can contribute to the advancement of science communication by extending its reach to a broader and more diverse audience (Roberson, 2020, p. 2). Additionally, criticism has been raised against universities and scientific organizations for primarily engaging in one-way communication activities, such as issuing press releases, while neglecting more interactive forms of communication such as consensus conferences, open days, web-based communication, etc., which provide the public with a platform to participate in scientific processes and share their perspectives (Carver, 2014; Claessens, 2014). Nevertheless, it is worth noting that some research organizations, which have adopted a more structured and professionalized approach to their communication activities, have started to embrace symmetrical communication practices such as science cafés and public lectures. These initiatives aim to foster connections with various stakeholders including businesses, civil society organizations, local authorities, decision-makers, and journalists (Autzen, 2014).

In recent years, a number of studies have examined what kind of public communication activities universities and research institutes engage in, the factors that influence the level of these activities, the motivations behind them and their target audiences (Rowe & Brass, 2011; Aquilani & Lovari, 2008). In this regard, a notable finding emerging from the literature is that universities are progressively dedicating more resources to public communication efforts and factors such as the overall size of the university, the size of the staff and budget allocated to public communication affect the level of activity (Neresini & Bucchi, 2011). On the other hand, the country and specialization also affect the PE frequency of the scientific organization (Entradas et al., 2020; Entradas & Bauer, 2017).

Several indicators signify the development of PE culture and the institutionalization of science communication within universities and research organizations. As defined by Aquilani & Lovari (2008), the institutionalization of communication activities entails the seamless integration and alignment of these functions with the existing values, norms, and structure of the organization. Moreover, several factors can be seen as indicators of the institutionalization of PE, such as duration of establishment of the communication office within the organization, the name under which it was established, whether external services are outsourced, the presence of a communication director in the senior management team, and the level of direct involvement and engagement of the Rector or other senior managers with the communication unit. Additionally, the diversification of internal and external target audiences and communication channels, strategic planning of the communication office along with its own budget, and the degree of autonomy granted to the communication office by legal regulations of the higher education system can all be important indicators of the institutionalization of PE (Aquilani & Lovari, 2008, pp. 1133–1136). Maintaining autonomy within the organization appears as a significant challenge for communication departments, as they face pressure from senior management (Claessens, 2014, p. 4).

On the other hand, the training and experience of communication unit staff within institutions (Watermeyer & Lewis, 2017), systematic monitoring and evaluation of the impact of PE activities and the target audience (Neresini & Bucchi, 2011), science communication training for academics (Claessens, 2014), and the establishment of science communication research and training programs by universities (Bucchi & Trench, 2014) are all significant indicators. Watermeyer and Lewis (2018) conducted research on communication staff at universities and identified that there is a lack of standardization in terms of duties, titles, knowledge, and skills required for communication staff. Furthermore, they found that communication staff are often young, inexperienced, and are inadequately compensated and qualified for their roles.

Furthermore, the role of central communication units in the public communication efforts of universities and how communication activities are distributed among different sub-units within the institution is a crucial issue (Rowe & Brass, 2008). University media and communication offices have varying degrees of regulation and control policies for PE activities, ranging from strict to lenient governance. As a result, the role of media offices in organizing science communication activities may vary depending on their location, size, scope within the university, as well as their historical context and position in the national and international higher education landscape.

Rowe and Brass (2011, p. 17) also posit that universities are adapting to more flexible approaches in their public communication, particularly with the proliferation of social media and digital communication channels. This trend is evident in recent research projects such as the 'Mobilization of Resources for Public Engagement' (MORE-PE), which spans 10 countries and seeks to understand the evolving dynamics of science communication within universities. MORE-PE categorizes the interaction of universities with the public into three levels: central level (involving the central communication unit of universities), meso level (encompassing research institutes within universities), and micro level (comprising individual academics). Indeed, this research distinguishes itself from other studies by its specific focus on the central level, its inclusion of universities in Türkiye which have relatively less literature available.

Science communication has been integrated into public policies in developed countries since the 1980s. In contrast, in Türkiye, the understanding of the importance of establishing the link between science and society has only started to be included in various policy documents since the mid-2000s (Dursun, 2010, p. 23). Since then, The Scientific and Technological Research Council of Turkey (TÜBİTAK), as the responsible body for science communication in the country, has played a pioneering role in promoting science communication education, fostering science journalism, establishing science museums, and organizing activities such as café scientifique, science technology festivals, and competitions. TÜBİTAK has also provided support to various institutions, particularly municipalities and universities, to bolster science communication efforts (Ozdemir & Koçer, 2020, pp. 380–386). Furthermore, some prominent public universities in Turkey, such as Middle East Technical University (METU), Istanbul Technical University (ITU), and Ankara University, have taken the lead in institutionalizing science communication activities (Burakgazi, 2017, p. 253). The sole study that examines the public communication endeavors of universities in Turkey, using a quantitative approach and systematic field research, was published in 2023. This research, undertaken by Süerdem et al. encompassing 92 universities, reveals that the central communication units of these universities prioritize science communication activities that align with the institutions' strategic goals and are classified under public relations and marketing. Simultaneously, they engage less in activities fostering interactive dialogue between society and science (Süerdem et al., 2023, p. 377). This current study, carried out within the same project, endeavors to further delve into the outcomes of the earlier research by employing a qualitative methodology. This unique approach provides valuable insights and contributes to the understanding of science communication in the context of universities in Türkiye.

## Method

This study employs a qualitative approach to analyze the role and challenges of central communication units in Turkish universities in the field of science communication. The aim is to investigate the types of science communication activities carried out by universities and their central communication units, as well as whether there are other units responsible for science communication within the university and how coordination is established among these units. Furthermore, the study examines the primary motivations for engaging in science communication activities and the institutional challenges faced in executing these activities.

The current study included in-depth interviews with communication department of 20 universities and data collected from June to August 2022. This article is an output of the project titled "Institutional Communication Activies of Universities in the Context of Public Engagement With Science" and numbered 220K306, supported by the Scientific and Technological Research Council of Turkey (TÜBİTAK) 1002 Short Term R&D Funding Program. Permission for the study was obtained from the Istanbul Aydın University Social Sciences Ethics Committee Commission with a decision dated May 26, 2021, and numbered 2021/6. In this study, interviews conducted via Zoom were recorded and transcribed. The data were systematically coded using a thematic approach to derive meaning, with main categories consistently constructed and interpreted, along with sub-categories. As an exploratory analysis was employed in the interpretation process, instead of a rigid set of procedures with strict rules, emphasis was placed on identifying underlying meanings, themes, and patterns to address the main research questions, (Altheide et. al, 2008). The themes discovered played a significant role in defining the observed phenomena (Fereday & Muir-Cochrane, 2006).

During the interviews, the heads of central communication departments of the selected universities were asked open-ended questions related to the four main topics: science communication activities, distribution of duties on communication activities within the university, importance and motivations of science communication activities, and barriers in communicating science. These topics were the focus of the research, as outlined in Table 1.

**Table 1.** Interview Topics and Corresponding Questions

| Topic | Questions |
|---|---|
| **Communication Activities** | What kind of activities do you carry out in this office?<br>What communication activities do you usually carry out to announce scientific research?<br>Which communication activities were organized by which units and how (by using activities list). |
| **Distribution of duties on communication activities within university** | Which other units are responsible for communication activities at your university?<br>What are the communication activities that are carried out by other units within the university, and which activities are typically assigned to this unit?<br>Are science communication activities mainly the responsibility of this unit or other communication units at the university? |
| **Importance and motivations of Science Communication** | What are the primary motivations behind the implementation of science communication activities at your university?<br>To what extent is the implementation of science communication activities considered important in alignment with your university's mission?<br>How would you characterize the role of your unit and other communication units within the context of fulfilling your university's mission? |
| **Communication Unit' barriers in communicating science** | Is your unit able to obtain adequate resources, such as budget and personnel, to support your science communication activities?<br>How would you assess the quality, scope, and or frequency of your science communication activities? Do you believe they are the desired level?<br>Have there been any unintended outcomes of your science communication activities, such as increased workload or negative feedback? |

## Research Sample

Sample selection was conducted using a quota approach, considering the proportion of public and foundation universities out of all universities in Türkiye. The cities where the universities are located were also considered in the sampling process. The study included a relatively homogeneous population from 20 universities in the sample, with 8 (40%) of them being foundation universities and 12 (60%) being public universities. This sample size was determined based on the concept of code saturation, as proposed by Hennink and Kaiser (2022). Code saturation refers to the point in qualitative research where new data no longer yields additional insights or themes, indicating that data collection is sufficient to answer the research questions or achieve the research objectives. By including 20 universities in the sample, we aimed to ensure that they have enough data to reach code saturation and obtain comprehensive insights from the population. The inclusion of both foundation universities and public universities in the sample may also contribute to the diversity of perspectives and experiences within the population, enriching the findings of the qualitative study. Furthermore, 35% of the sample universities were in Istanbul, as shown in Table 2.

**Table 2**. Participants

| | University Name | University Type | City/Region |
|---|---|---|---|
| 1 | Antalya Bilim University | Foundation | Antalya/Mediterranean |
| 2 | Bilkent University | Foundation | Ankara/Central Anatolia |
| 3 | Haliç University | Foundation | Istanbul/Marmara |
| 4 | Istanbul Aydın University | Foundation | Istanbul/Marmara |
| 5 | Istanbul Bilgi University | Foundation | Istanbul/Marmara |
| 6 | Izmir University of Economics | Foundation | Izmir/Mediterranean |
| 7 | Rumeli University | Foundation | Istanbul/Marmara |
| 8 | Üsküdar University | Foundation | Istanbul/Marmara |
| 9 | Kırklareli University | Public | Kırklareli/Marmara |
| 10 | Marmara University | Public | Istanbul/Marmara |
| 11 | Mersin University | Public | Mersin/Mediterranean |
| 12 | Muğla Sıtkı Koçman University | Public | Muğla/Aegean |
| 13 | Ondokuz Mayıs University | Public | Samsun/Blacksea |
| 14 | Pamukkale University | Public | Denizli/Aegean |
| 15 | İstanbul University | Public | Istanbul/Marmara |
| 16 | Sakarya University of Applied Sciences | Public | Sakarya/Marmara |
| 17 | Selçuk University | Public | Konya/Central Anatolia |
| 18 | Kahramanmaraş Sütçü İmam University | Public | Kahramanmaraş/Mediterranean |
| 19 | Tekirdağ Namık Kemal University | Public | Tekirdağ/Marmara |
| 20 | Gazi University | Public | Ankara/Central Anatolia |

The interviews for this study were conducted with communication staff in the central communication units of universities. These individuals held positions such as director, deputy director, communication coordinator, or communication consultant, and had knowledge about the structure and functioning processes of the communication unit as well as the overall communication activities of the university.

To organize the interviews, the researchers first sent an official permission request for the research to the relevant universities through the Rectorates. The sample selection was limited to the universities that responded positively to the official request, and guidance from the rectorates was also sought in determining the interviewees.

After making the necessary arrangements, the researchers conducted face-to-face interviews with the pilot university. Subsequently, the other interviews were conducted between July and August 2022 using the “Zoom” platform, and they were recorded for later analysis. This approach allowed for flexibility in conducting the interviews, as it eliminated the need for in-person meetings and facilitated data collection from different universities within a specific timeframe.

## Results

### Science Communication Activities

Within the scope of the research, the science communication activities of the universities were classified under four main functions (Süerdem et al., 2023), namely Public Affairs, Public Engagement, Public Relations and Marketing, and the frequencies of the activities that the communication units declared in the interviews are shown in Figure 1.

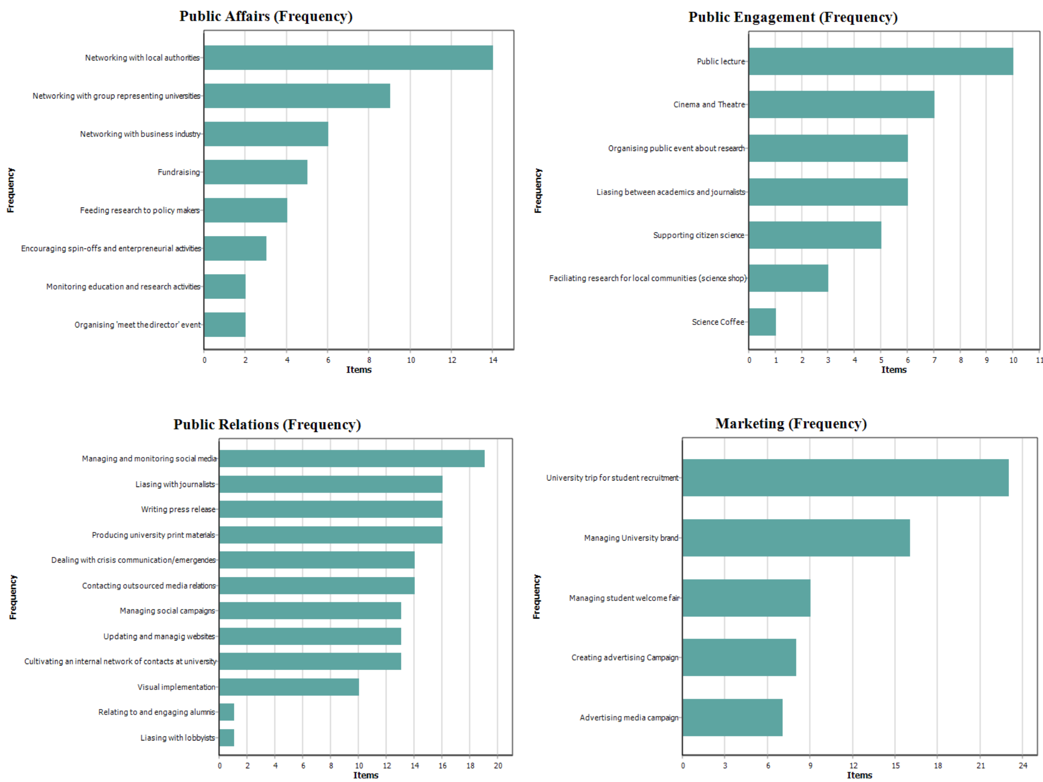


**Figure 1.** Science Communication Activities by Communication Functions

Findings show that, the most frequently reported science communication activities carried out by the communication departments are classified under the category of public relations (Figure 1). It is notable that all the interviewed universities primarily engage in public relations activities. Marketing activities rank second in terms of frequency, encompassing activities such as student recruitment, university brand management, and organization of orientation events for new students, which are commonly reported.

In recent years, the proliferation of foundation universities in Türkiye, particularly in Istanbul, has intensified competition among institutions for both financial resources and attracting students. This has led to an increased emphasis on science communication activities rooted in public relations

(PR) and marketing (M), guided by corporate strategies, within the foundation university sector. As a result, central communication units of foundation universities have exhibited more substantial development in terms of budget allocation, human resources, institutional autonomy, organizational capacity, and diversity of activities compared to their public university counterparts.

The most common activity performed by the communication units of both public and foundation universities is the preparation of press releases. The preparation of press releases is guided by two main criteria: the scientific research should have popular content and should benefit society. These seemingly contradictory reasons highlight that current and popular topics of interest to society are prioritized in the selection of research for press releases.

*"If we are confident that the topic will remain relevant and generate interest for 2-3 days, we refrain from making additional social media posts for at least one day. If the rector explicitly indicates that the topic will remain relevant, we continue to share the same new."* (Public University)

Indeed, besides selecting popular scientific topics that can generate public interest, universities also consider criteria such as the academic impact of the shared research and the recognition of award-winning or supported projects. This indicates that universities prioritize topics that can increase their visibility by capturing the attention of stakeholders beyond the scientific community, and that can enhance their institutional reputation by sharing successful projects.

*"When our professors receive awards or national/international funding like TÜBİTAK or Jean Monet we contact with them for conducting interviews or creating news articles… We contact directly with them, and we produce news."* (Public University)

By actively promoting these accomplishments, communication units can increase the visibility and reputation of the university. This strategic approach contributes to build a positive image for the university and highlighting its excellence in research and academia.

In public affairs activities, interactions are commonly observed with local governments and other organizations representing universities, as depicted in Figure 1. However, it is widely acknowledged that universities do not engage in lobbying activities, and they have relatively limited attempts to influence public policy, political and bureaucratic processes based on scientific evidence. When combined with the lack of motivation to actively shape public policies, it can be inferred that universities consciously refrain from endeavors aimed at exerting influence on political decision-making processes. Contrary Universities' position in Türkiye, in Europe, universities engage in lobbying activities to influence EU policy makers (Paulissen et. al, 2022), thus, universities are not only the main actors producing knowledge but also play an active role in political decision-making processes in the democratic process.

It could be argued that universities have a democratic right to actively participate in shaping the views of citizens and political leaders and utilize their influence for the public good. For instance, research conducted in various countries has shown that universities have played an active role in informing public opinion and policymaking through research, public engagement, and policy advocacy. There are also growing calls for academics (Rowe & Brass, 2008; (Gardner et. al, 2021) and universities (McCowan et. al, 2021) to step beyond their traditional roles and influence policy more actively through advocacy and activism. This argument holds relevance in the context of Türkiye, where the role of universities in guiding public opinion and policymaking may be influenced by political, and social factors that require further investigation and understanding.

From a science communication perspective, it is crucial for universities to actively engage in political decision-making processes to effectively fulfill their multifaceted societal functions, which encompass teaching, research, and service provision to promote development. However, in Türkiye, the issue of university autonomy has historically faced challenges and has not been favorably viewed by political circles. The autonomy and powers of universities in Türkiye have remained considerably more limited compared to other countries (Çelik, 2014). After the 1980 coup d'état, with the 1982 Constitution, and since then, all governments have intervened in universities. As a result, universities have been unable to actively participate in political processes as institutions that are sometimes directed by politicians rather than influencing politics.

On the other hand, existing literature shows that universities can contribute to the productivity growth of firms and local systems (Acs et. al, 1994; Varga, 2001). In Türkiye, activities related to this area are predominantly carried out by public universities located in Anatolia, as indicated in Table 3. These public universities are found to be more actively involved in local development activities and exhibit a sense of responsibility towards local development. They also collaborate more extensively with local governments and companies engaged in local production. In contrast, foundation universities support policymakers intermittently through research in comparison to public universities. Notably, during the pandemic period, foundation universities have been more proactive in providing research outputs to bureaucratic institutions.

While there were some notable differences between public and foundation universities in terms of public engagement (PE) and public affairs (PA) activities, public universities, similar to foundation universities, predominantly pursued institutional strategic goals such as enhancing their public reputation, legitimizing their publicly funded budgets by publicizing their research outputs, rising in national and international university rankings, attracting high-achieving students, and promoting faculty research activities.

**Table 3.** Public Affair Activities by Foundation and Public Universities

| PA | Government | Private |
|---|---|---|
| Networking with local authorities | 8 | 6 |
| Networking with the business industry | 5 | 2 |
| Networking with groups representing universities | 3 | 6 |
| Fundraising | 3 | 2 |
| Encouraging spin-offs and entrepreneurial activities | 2 | 1 |
| Monitoring education and research activities | | 2 |
| Feeding research to policymakers | | 4 |

In general, PE and PA activities, which prioritize establishing connections with stakeholders such as civil society, alumni, other universities, local governments, and especially political decision-makers in relation to scientific processes, are not accorded as much prominence as marketing and public relations activities, or these areas are not explicitly included in the job descriptions of universities' communication units.

When evaluating PE activities, notable examples include 'public lectures', 'cultural events', 'social events organized to share research', and 'supporting citizen science', although these activities may be fewer in number compared to other activities. Given the increasing importance of PE in science communication today, this study specifically analyzed the PE efforts of university communication units. Table 3 presents the reasons why PE activities are not included in science communication efforts by universities. The most significant reason identified is that there is no expectation from the communication units of universities, as PE activities are not included in their job descriptions. These units are typically expected to focus more on press releases or communication practices and provide technical support to other units and faculties. This suggests that the activities of central communication units in universities are generally limited to one-way communication. The majority of central communication units are not involved as key actors or decision-makers in the organization of PE activities.

**Table 4.** The Reason not to Focus on Public Engagement Activities

| Category | Code | Case | Cases % |
|---|---|---|---|
| The reason not to focus on public engagement activities | Communication department is only in charge of the announcement | 8 | 40% |
| | The approaches of the acdemics and the Communication offices are different | 3 | 15% |
| | Academics don't care about public engagement | 2 | 10% |
| | Lack of communication faculty | 2 | 10% |
| | Turkish society is not interested in science | 2 | 10% |
| | Science is too complex for public engagement | 2 | 10% |

The communication units of some universities, on the other hand, argue that society has no such expectations from universities and emphasize that the main purpose of the university is academic impact.

"*As a communication office, we are not inclined or motivated to intervene in the relationship between society and science. Our focus is on other priorities, and we have limited time for such interventions. However, if by "science communication" you mean making research accessible to the general public, we may consider it if we believe it can contribute to the university's brand. With the extensive volume of high-level and detailed research conducted at our institution, (…) it is not feasible to publicize all our research. Our main evaluation criteria revolve around citations, impacts, and academic conferences, which prioritize academic impact rather than communication with society*." (Foundation University)

Additionally, during the interviews, some challenges related to academics were also identified, albeit in a smaller number. These challenges included differences between the priorities of academics and the communication office, as well as academics being less open to engaging with society.

### Distribution of duties on communication activities within university

The coordination between departments within universities can play a crucial role in shaping science communication practices and clarifying the role of science communication within the institutional structure.

**Table 5.** Coordinated Units

| Category | Code | Cases | Cases % |
|---|---|---|---|
| Coordination with other departments | Rectorate | 8 | 40% |
| | IT Department | 6 | 30% |
| | All faculties | 5 | 25% |
| | R&D Unit | 5 | 25% |
| | Department of health culture and arts | 5 | 25% |
| | General secretary | 4 | 20% |
| | Students Clubs | 4 | 20% |
| | Alumni Office | 3 | 15% |
| | Career Center | 3 | 15% |

Based on the results of the study, it can be concluded that the central communication units collaborate closely with senior management (the Rectorate and General Secretariat) to carry out their science communication activities. They also work in conjunction with the IT department, particularly in situations that require technical support such as website updates. Additionally, they frequently request information from faculties and R&D departments to stay informed of scientific research and activities taking place at the university, which they then publicize. Furthermore, the central communication units maintain frequent contact with student clubs, cultural and arts departments, and sporting organizations to promote and announce cultural, artistic, and athletic events and activities happening on campus.

**Table 6.** Other Units That are Responsible for Science Communication Activities

| Category | Code | Cases | Cases % |
|---|---|---|---|
| | Head of health culture and sports | 8 | 40% |
| | Rector | 8 | 40% |
| | Faculties | 8 | 40% |
| | Careers center | 6 | 30% |
| Science Communication is other units' responsibility | R&D Department | 6 | 30% |
| | Alumni association | 5 | 25% |
| | Technology office | 3 | 15% |
| | Student affairs | 2 | 10% |
| | IT department | 2 | 10% |
| | Deanship | 2 | 10% |
| | Education Center | 2 | 10% |

Some science communication activities within universities are carried out by other departments independent of the central communication unit. For instance, PE initiatives such as science festivals, science competitions, citizen science events, and exhibitions may be managed by Health, Culture, and Sport Departments. Interactions and lobbying efforts with decision-makers, local authorities, journalists, industry, and other universities are often conducted through the Rectorates. On the other hand, comprehensive and high-quality communication activities that involve direct interaction and cooperation with society and other stakeholders may fall under the purview of senior management and other units. In some universities, the distribution of communication activities may be flexible, allowing faculties, R&D centers, and technology offices (meso level structures) to independently conduct studies and activities to promote the research conducted within their own structures to the society, apart from the central communication units. It has been also observed that the IT department can be more active in the management of the university's corporate website than the communication departments. Additionally, alumni association communicate with alumni and organize events.

Consequently, R&D centers, technology offices, faculties and institutes, student' clubs, head of health, culture and sport, and rectorate can communicate science. Additionally, scientists and researchers also communicate science by using social media or their own possibilities (Bedir & Öztunç, 2023). The main responsibilities of many central communication units, particularly in public universities, may be limited to routine and one-way communication activities.

## The Motivations to Communicate Science

The research also sheds light on the purposes and motivations behind universities' science communication activities. Table 7 presents the most frequently recurring codes and sample remarks on this topic.

**Table 7.** The Main Motivation of Science Communication

| Code | Cases | Cases % | Quotes |
|---|---|---|---|
| To promote and market the university | 14 | 70% | If you mean science communication, it can be if we think that the research can be understood by society and contribute to the brand of the University (Foundation University).<br>In the context of science communication, universities often engage in promotional activities to showcase their scientific research and generate interest among the public. The process of producing scientific knowledge is transformed into marketing materials by corporate communication teams, which are then shared with the public. The publicity unit of the university then utilizes these materials for physical dissemination. (Foundation University). |
| Accustoming society to science | 7 | 35% | The goal is to engage the public and disseminate scientific knowledge in an inclusive manner that can be easily understood and appreciated by people from various backgrounds. By promoting open and accessible science communication, universities can foster greater understanding, appreciation, and engagement with scientific research among the public (Public University). |

| | | | |
|---|---|---|---|
| To inform the public about researches | 7 | 35% | It seems that the rector of our university prioritizes research as a key goal and envisions our institution as a research-focused university. Considering this, effective science communication becomes crucial for promoting research projects and motivating new researchers (Public University). |
| To increase corporate reputation | 6 | 30% | When we communicate research projects or other activities, we emphasize that they were produced, researched, designed, or implemented at our university. This helps to create a strong association between the institution and the outcomes of the research, showcasing the university's expertise and image (Public).<br>If what you mean by science communication is that research can be understood by the public and can contribute to our university brand (Foundation University). |
| To encourage scientists | 4 | 20% | We need to know how much our academics value these activities. We have very well-known academics. We need to draw them into this circle. We hold a ceremony to encourage every successful work and share it with other academics. So, the main motivation is to encourage academics (Public University). |
| To attract qualified students | 3 | 15% | Now this is not a phrase I like to say, but we want to change the student profile. We want higher quality students. I mean, who doesn't want a higher-profile student? (Foundation University ). |
| To increase university ranking | 3 | 15% | University motivation for science communication YÖK indices and corporate image (Public University). |

It has been observed that the primary motivation behind science communication activities in universities is often driven by the promotion and marketing of the university brand. Table 7 presents evidence that science communication is commonly perceived as a marketing or PR tool. This suggests that the true meaning and significance of science communication may not be fully comprehended, and universities may not fully embrace their responsibility in fostering the interaction between science and society through their communication units. Furthermore, the emphasis placed by communication units on science communication for managing the university brand and enhancing its reputation also indicates a lack of institutionalization of science communication within universities.

Universities are also motivated by 'public interest'-oriented goals and motivations when engaging in science communication, including initiatives aimed at bridging the gap between science and society, informing the public about research conducted at the university, fostering collaboration between academia and society, and encouraging young scientists. In addition, universities may have goals based on their 'institutional strategy', such as enhancing their institutional reputation, attracting highly qualified students, promoting, and marketing the university, and achieving recognition in national and international rankings. Nevertheless, it should be noted that the distinction between public good-based motivations and institutional strategic goals is not always clear-cut, and often these two aspects can be intertwined. For instance, in many cases, public universities may prioritize motivations that are aligned with the public good, whereas foundation universities may place greater emphasis on institutional strategies, as evident in Table 8.

**Table 8.** The Motivations to Communicate Science

| The motivations to communicate science | Government | Private |
|---|---|---|
| Accustoming society to science | 5 | 2 |
| To encourage scientists | 4 | |
| To inform the public about the research | 3 | 4 |
| To promote and market the university | 3 | 3 |
| To increase corporate reputation | 1 | 5 |
| To increase the university's ranking | 1 | 1 |
| Science communication is a part of the job | 1 | 1 |
| To open the path for stakeholder relations | 1 | |
| If you are research university | 1 | |
| The integration of the student into the scientifical process | 1 | |
| To increase local value | 1 | |
| Being visible in mainstream and social media | | 2 |
| Science communication can negatively affect science | 1 | |
| To explain who we are to the public | | 1 |
| To explain new technologies | | 1 |

Public universities are often driven by a strong commitment to familiarize society with science and foster collaboration between academia and society. The communication units of these universities aim to bring the academic community closer to society and emphasize the importance of regional projects that engage the local community. These universities believe that society should not be alienated from science, and they emphasize the importance of regional projects that involve the people of the city.

## The Organizational Problems of Central Communication Units

Semi-structured in-depth interviews addressed the problems of central communication units of universities in Türkiye (Table 9).

**Table 9.** The Organizational Problems of Central Communication Units

| Code | Cases | Cases % | Quotes |
|---|---|---|---|
| Human resource is insufficent | 11 | 55% | We encounter challenges in coordinating our science communication activities due to the large number of faculties, institutes, and clubs within our university, totaling to approximately 17 faculties, numerous institutes, and over 180 clubs. With nearly 50 events taking place each day, it becomes crucial to manage the content of these events, including guest speakers, topics, relevance, and potential announcements, as well as coordinating the participation of distinguished guests such as the university rector, professors, ministers etc. However, with limited staffing resources of 5-6 people, it becomes challenging to effectively manage and produce rich content for all these events (Public University). |

| | | | |
|---|---|---|---|
| Dont have their own budget | 9 | 45% | The administrative and financial affairs of our communication unit are overseen by the coordinator's office, which directly reports to the rectorate. As a result, our unit does not have its own budget and requests for purchases or services are submitted directly to the rectorate for approval. However, the lack of an independent budget for our unit limits the level of interest and investment in science communication activities (Public University).<br>Often, commercial considerations take precedence over societal benefits in decision-making, leading to challenges in prioritizing public good-oriented goals (Public University). |
| Budget and employees are not adequate. | 7 | 35% | Due to bureaucratic procedures and internal assignments, the process of hiring new personnel for our communication unit can be slower, as it requires appointments and assignments for civil servants. In contrast, foundation universities may have more flexibility in making purchases and hiring personnel, which can result in differences in the efficiency of operations between public and foundation universities (Public University). |
| The rector's approach is the determinant factor | 5 | 25% | The reliance on the individual decision-making authority of the manager can lead to difficulties in an organizational framework. It is imperative to establish a structured framework that determines expenditure items and outlines a fixed staff structure for the press unit. The top management has a significant influence on the activities of the communication unit and top management constantly intervenes in them (Foundation University). |
| Employees are unqualified | 4 | 20% | In recent years, there has been a gradual shift in the perception of the power of communication within the university management. This change is partially attributed to our efforts in advocating for communication, as well as their own realization or relatively young age. As a result, the university has made efforts to hire experts and academic staff with communication backgrounds. On the other hand, it is worth noting that one of the hires has transitioned from another unit and the remaining staff in the communication unit primarily comprise of computer operators and personnel recruited from other departments, who has not a background in communication (Public University) |
| Interference can block our job | 3 | 15% | As an example, I noticed that sharing the achievements of students, rather than solely focusing on the accomplishments of professors, tends to generate more public interaction. I acknowledged this and expressed my intention to implement it. However, there has been a shift in the perception of social media as merely another promotional tool, or self-promotion, rather than a platform for professional communication. As a result, the level of autonomy and trust in our professionalism has decreased, and they have taken a more hands-on approach, dictating what and when to share. For instance, we now measure the duration of viewership, and regardless of whether we produce videos that are 10 minutes or 1 minute long, they are watched for an average of 2 minutes. Despite suggesting to not create videos longer than 2 minutes, our manager insisted on shooting a 10-minute video. As an employee, I felt unable to voice my concerns at that time, as he is our manager (Public University). |
| Don't have their own employee | 3 | 15% | The departure of our last graphic designer from the corporate communication team occurred two years ago. In accordance with the regulations of the Council of Higher Education (YÖK) in universities, vacancies are typically opened by the Council of Higher Education. Without a vacancy being granted by the Council of Higher Education, new appointments cannot be made. As academics, we are aware that our time here may be limited, as we may choose to leave in 2-3 years or even after just 1 month due to various factors. Our goal is to establish a robust institutional structure, train capable personnel, and ensure their continuity in the team. Although we have managed to recruit a photographer and an expert in live broadcasting from TRT (Turkish Radio and Television Corporation), it is not a permanent solution to hire professional (Public University). |

| | | | |
|---|---|---|---|
| Corporate communication is changing acording the managers | 3 | 15% | The organization and structure of institutional communication varies across different institutions, with some placing it under the deputy general secretaries, vice-rectors, or solely under the rector. However, I believe there should be a standardization in terms of defining the scope of activities, roles, and responsibilities of the communication unit. The constant circulation of staff and administrators, with administrators changing frequently and attempting to change the staff along with them, can hinder the institutionalization process. It becomes a contradiction when the communication unit, which is tasked with promoting institutionalization, struggles with its own institutionalization. It is evident that the unit is facing significant problems that need to be addressed for effective communication and institutional development (Public University). |

The findings from the interviews indicate that public universities are facing significant challenges in terms of personnel and human resources, as well as institutionalization of their communication units. One of the key problems identified by unit officials is the lack of a fixed budget allocated to communication units, forcing them to rely on other units with budgets for organizing events and procuring even basic equipment and consumables. This lack of financial autonomy can hinder the effectiveness and efficiency of the communication unit's operations. In particular, the absence of dedicated staff and budget in communication offices of public universities poses a major obstacle to their institutionalization. In such cases, staffing is often drawn from other units, and the lack of resources impedes effective science communication based on expertise.

The lack of institutionalization of communication units in public universities can be attributed to several factors, according to communication professionals interviewed in this context. One key factor is the absence of clear definitions and delineations of communication units and their areas of responsibility within the Higher Education Council (YÖK) law and related regulations and legislation. Without official recognition and defined roles, it becomes challenging to employ qualified communication personnel and adequately address the needs of these units. The absence of official recognition also contributes to the ambiguity surrounding the mandate of communication units. As a result, these units often find themselves responsible for a wide range of tasks, including protocol work, official correspondence, call center operations, photography, and camera work. This lack of clarity hampers the ability of communication units to establish themselves as dedicated and specialized entities within public universities.

The problems that have mentioned by interviews, highlight the challenges that central communication units in public universities often face in becoming autonomous institutional structures that operate independently and strategically. The authority and areas of responsibility of communication units may be determined by the personal approach, vision, and priorities of the current rector and administration, rather than being guided by a clear communication strategy. In the context described, it has been observed that the allocation of budget and personnel to the central communication unit in public universities is contingent upon the priorities of the current university management. When there is a management structure that recognizes the significance of communication activities, the communication unit may receive increased resources. However, these resources may be withdrawn when there is a change in management, resulting in instability and inconsistency in the university's communication efforts.

However, considering the other findings of the study and considering that foundation universities prioritize their strategies based on institutional goals and the success of the university, the budget and staffing challenges faced by public universities become apparent as a significant obstacle to the establishment of effective science communication practices. Public universities, despite their willingness and entrepreneurial approach towards creating social and regional benefits, often encounter difficulties in terms of budget allocation and staffing for their communication units. Addressing these budget and staffing issues is crucial in overcoming the obstacles to the institutionalization of science communication in public universities and enhancing their ability to engage effectively with the wider community and promote the benefits of scientific knowledge and research.

Moreover, despite the efforts of central communication units to work in coordination with various units within the university, ensuring effective information sharing and coordination can be challenging, particularly in newly established universities. The frequent changes in the roles and organization of newly established faculties or the central communication unit itself may further exacerbate these challenges. This can result in difficulties in maintaining a seamless flow of information and coordination among different units, which can impact the effectiveness and efficiency of communication efforts. It is essential to establish robust mechanisms for information sharing, coordination, and communication within the university, including clear lines of communication, standardized procedures, and well-defined roles and responsibilities to overcome these challenges and ensure smooth coordination among various units involved in science communication activities. This would help to enhance the effectiveness and impact of science communication efforts in the university setting.

In some of the foundation universities that were part of the interviews, it was observed that the communication units, which were granted autonomy, emphasized their central position in overseeing and coordinating all communication activities of the university. They are responsible for managing relationships with various stakeholders in alignment with the communication goals and strategies of the university. Consequently, these units are tasked with creating a common language in communication and have responsibilities and authorities that entail liaising with all units within the university and managing these relationships in line with the communication objectives. This centralized approach enables the communication units to play a pivotal role in facilitating effective communication throughout the university and ensuring consistency in messaging and branding, thereby contributing to the overall institutional communication efforts.

Another challenge highlighted is the composition of communication staff, who are mostly seconded from different departments of the university and lack professional training or background in communication. Institutionalization of science communication can also be evaluated through various factors such as the expertise and training of the staff working in the communication units (Watermeyer & Lewis, 2017), systematic monitoring and evaluation of the impact of PE activities (Neresini & Bucchi, 2011), science communication training for academics (Claessens, 2014), and the availability of science communication research and training programs within universities (Bucchi & Trench, 2014). However, the study reveals that the communication units in foundation universities encounter difficulties such as understaffing and being assigned non-communication related tasks. Furthermore, despite cooperation between communication units and academics, media training is almost non-existent. These units are primarily responsible for publicizing research and facilitating press interviews but lack the capacity to manage the relationship between academics, society, and the media due to their workload and the differing priorities of the university administration. Another indicator of the lack of institutionalization is the varying names given to central communication units, such as 'Corporate Communication', 'Communication Office', 'Press and Public Relations', and 'Marketing and Promotion', revealing the lack of national standards regarding the structure, duties, and functioning of these units.

## Conclusion

In the last four decades, there has been a growing recognition of the importance of universities in communicating scientific knowledge to audiences beyond the traditional scientific community. This recognition has led to the inclusion of communication as a fundamental mission for universities, alongside formal education, and research (Laredo, 2007, p. 446). As the role of universities in bridging the gap between science and society continues to gain significance globally, this study highlights a notable lack of well-defined standards for defining, managing, and organizing communication functions within Turkish universities. In this sense, one of the most crucial findings of the study is that universities communication units are primarily responsible for publicizing research and facilitating press interviews but lack the capacity to manage the relationship between academics, society, and the media due to their workload and the differing priorities of the university administration. R&D centers, technology offices, faculties and institutes, student' clubs, head of health, culture and sport, and rectorate are the main department that communicate science or work in coordination with communication units. Furthermore, the study also identifies insufficient institutionalization of central communication units in these universities.

The main difference between foundation and public universities is that foundation prioritize their strategies based on institutional goals and the success of the university, the budget and staffing challenges faced by public universities become apparent as a significant obstacle to the establishment of effective science communication practices. Public universities, despite their willingness and entrepreneurial approach toward creating social and regional benefits, often encounter difficulties in terms of budget allocation and staffing for their communication units.

To address this issue, an effective strategy would be to give greater emphasis to the communication functions of universities within the existing laws and regulations governing higher education. This can be achieved by explicitly recognizing the role of universities in promoting PE and delivering societal and scientific benefits. Policy documents should also acknowledge the duties, responsibilities, structure, organizational autonomy, and financial autonomy of central communication units.

Additionally, it is crucial to establish new training programs in science and society studies within universities. These programs would equip communication staff with the necessary knowledge and skills to effectively engage with diverse audiences and facilitate meaningful interactions between science and society. Furthermore, providing science communication training to existing communication staff would enhance their ability to effectively communicate complex scientific concepts to non-expert audiences.

By implementing these initiatives, universities can enhance their communication efforts and better fulfill their mission of disseminating scientific knowledge beyond the scientific community. This would result in increased public understanding and engagement with scientific advancements, fostering a more informed and scientifically literate society.

This study contributes to the field in terms of revealing the current role, motivations, and problems of universities in science communication by investigating Universities' communication units. Drawing on the outcomes of the present investigation as a crucial actor, it is thought that promoting both theoretical and practical research activities to advance the current role of universities as key players in science communication, fostering citizen science practices, and augmenting the involvement of communication units in this domain would enhance public engagement with science and reinforce institutionalization of science communication. Such initiatives could provide a solid foundation for an effective exchange of knowledge and dialogue between the scientific community and the wider public, leading to a more inclusive and informed society.

The present research focuses solely on the role of central communication units within universities, omitting the analysis of scientific organizations external to universities or meso-level structures such as research institutes or faculties. Consequently, future studies investigating this dimension of science communication will yield substantial contributions to the literature on institutional science communication in the Turkish context.

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Türkiye İletişim Araştırmaları Dergisi / Turkish Review of Communication Studies • Yıl/Year: 2023 • Sayı/Issue: Özel Sayı/Special Issue
ss/pp. e45-73 • ISSN: 2630-6220 • DOI: 10.17829/turcom1308978

**ARAŞTIRMA MAKALESİ / RESEARCH ARTICLE**

# Korunma Motivasyonlarını Etkileyen Faktörler ve Mesaj Çekiciliğinin Rolü: COVID-19 Bağlamında Bir Araştırma*

## Factors Affecting Protection Motivations and the Role of Message Appeal: A Research in the Context of COVID-19

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**Öz**

COVID-19 salgını bağlamında tasarlanan iletişim içeriklerinin, bireylerin korunma motivasyonları ve davranışları üzerindeki etkisinin tespit edilmeye çalışıldığı bu çalışma, COVID-19 salgınının olumsuz sonuçlarından kaçınmada bireysel önlemlerin öneminden hareketle, bireylerin korunma

* Bu çalışma, İzmir Bakırçay Üniversitesi Bilimsel Araştırma Projeleri Koordinatörlüğü tarafından GDM.2021.005 nolu proje kapsamında desteklenmiştir.

Bu çalışmanın bir kısmı, 4-5 Aralık 2021 tarihleri arasında düzenlenen VIII. Uluslararası Uygulamalı Ekonomi ve Finans Kongresi'nde (e-ICOAEF'VIII) özet metin olarak sunulmuştur.

Bu makalenin araştırması, İzmir Bakırçay Üniversitesi Girişimsel Olmayan Klinik Araştırmalar Etik Kurulu'nun 29.01.2021 tarihli 178 sayılı kararı gereğince Etik Kurul Onayı almıştır.

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**Makale Geçmişi / Article History**
**Gönderim / Received:** 02.06.2023
**Düzeltme / Revised:** 20.09.2023
**Kabul / Accepted:** 02.10.2023

motivasyonlarını artırmaya yönelik mekanizmayı anlamayı ve bu mekanizmayı harekete geçirecek iletişim süreçleri geliştirmeyi amaç edinmiştir. Bu amaç doğrultusunda yürütülen araştırma, iki ayrı çalışmadan oluşmaktadır. İlk çalışmada, çevrim içi olarak uygulanan anket aracılığıyla bireylerin korunma niyetini etkileyen motivasyon faktörleri incelenmiştir. İkinci çalışmada ise gruplar arası deneysel tasarımdan faydalanılarak laboratuvar deneyleri yürütülmüş, korku ve rasyonel çekicilik içerikli mesajların korunma motivasyonları üzerindeki etkisi ölçülmüştür. Elde edilen bulgular, algılanan şiddet, öz yeterlilik ve dışsal tepki etkinliğinin korunma niyetiyle pozitif ilişkisini ortaya koymaktadır. Ayrıca korku çekiciliğinin, rasyonel çekiciliğe kıyasla algılanan şiddet üzerinde daha güçlü bir etkiye sahip olduğu sonucuna ulaşılmıştır. Bulgular sayesinde halk sağlığı sorunlarıyla mücadeleye ilişkin iletişim süreçlerinin daha etkin kılınması için öneriler geliştirilmiştir. Bu bakımdan çalışmanın sonuçları, bireylerin korunma motivasyonlarının artırılmasına ilişkin stratejilere rehberlik edebilecek niteliktedir. Bu bağlamda sonuçlar hem bireylerin hem de toplumun sağlığı için önemli görülmektedir.

**Anahtar Kelimeler**: Korunma Motivasyonu Teorisi, Korku Çekiciliği, Rasyonel Çekicilik, COVID-19, Deneysel Yöntem

**Abstract**

This study examines the effects of the communication contents designed in the context of COVID-19 on individuals' protection motivations and behaviors. It aims to understand the mechanism for increasing the protection motivation of individuals and to develop communication processes that will activate this mechanism, based on the importance of individual measures in avoiding the negative consequences of COVID-19. The research carried out for this purpose consists of two separate studies. The first study examined motivational factors affecting individuals' intention to protect through an online questionnaire. The second study carried out laboratory experiments by making use of the between-groups experimental design, and the effect of messages containing fear and rational appeals on the motivation of protection was measured. The findings reveal that perceived severity, self-efficacy, and external response efficacy are positively related to the intention to protect. Additionally, fear appeal has a stronger effect on perceived severity than rational appeal. In the light of findings, suggestions have been developed to make the communication processes related to combating public health problems more effective. In this respect, the results of the study can guide strategies to increase the protection motivation of individuals. In this context, the results are considered important for the health of both individuals and society.

**Keywords**: Protection Motivation Theory, Fear Appeal, Rational Appeal, COVID-19, Experimental Design

## Giriş

İlk olarak Çin'in Hubei eyaletinin Vuhan şehrinde başlayan COVID-19 salgını, kısa bir sürede dünyanın çeşitli bölgelerine yayılmasına bağlı olarak Dünya Sağlık Örgütü (WHO) tarafından 12 Mart 2020 tarihinde pandemi olarak ilan edilmiştir (Al-Hasan, Khuntia, & Yim, 2020). 13 Ocak 2023 itibariyle, dünya çapında 670.537.126 vaka tespit edilmiş ve bu vakaların 6.724.736'sı hayatını kaybetmiştir (COVID-19 Coronavirus Pandemic, 2023). Ülkemizde ise aynı tarih itibariyle doğrulanmış vaka sayısı 17.042.722'ye ulaşmış, bu hastaların 101.492'si hayatını kaybetmiştir (COVID-19 Bilgilendirme Platformu, 2023). COVID-19'un yaygınlığı ve yol açtığı yüksek ölüm oranları, COVID-19'u dünya genelinde önemli bir sağlık ve sosyal sorun haline dönüştürmüştür (Ezati Rad, ve diğerleri, 2021).

Pandemilerin yayılımında temel etkiye sahip unsurlar arasında bireylerin algı, tutum ve davranışları yer almaktadır (Van Bavel, ve diğerleri, 2020). Aşı ve tedavi seçeneklerinin yokluğunda, salgının yayılımını durdurmada farmakolojik olmayan koruyucu tedbirler önem kazanmıştır (Cvetković, ve diğerleri, 2020). COVID-19 salgınından etkilenen ülkeler kapanma (okul ve işyerleri), hijyen ve sosyal mesafe kurallarının yer aldığı koruyucu tedbirlere başvurmuştur (Spurk & Straub, 2020). Hijyen ve korunma davranışları ile COVID-19'un büyük ölçüde önlenebildiği görülmüştür (Ezati Rad, ve diğerleri, 2021). Ancak bireylerin devamlı bir şekilde korunma davranışlarını sergilemedikleri, zamanla bu davranışlarda düşüşün gerçekleştiği bilinmektedir (Wong & Sam, 2010). Bu noktada, koruyucu davranışlara yönelik müdahale programlarının geliştirilmesi için bu davranışların sürdürülmesinde etkin olan süreçlerin tespit edilmesi önemlidir (Ezati Rad, ve diğerleri, 2021).

Geçmiş dönemde meydana gelen pandemiler, bulaşıcı hastalıkların yayılımını durduracak politika başarılarının halkın kişisel ve toplumsal risk faktörlerine yönelik algılarına bağlı olduğunu göstermiştir (Dryhurst, ve diğerleri, 2020). Bireylerin bir tehdit karşısında davranış ve tutum değişikliğine gitme nedenlerini anlamak amacıyla başvurulan teoriler arasında Korunma Motivasyonu Teorisi yer almaktadır (Rogers, 1975; Rogers , 1983; Floyd, Prentice-Dunn, & Rogers, 2000). COVID-19 salgınının küresel boyutta bir tehdit olduğu göz önüne alındığında, bu salgına karşı bireylerin davranış seçimlerinin incelenmesinde Korunma Motivasyonu Teorisi yararlı bir çerçeve sunmaktadır. Kuram boyutlarından algılanan şiddet, algılanan hassasiyet, öz yeterlilik ve tepki yeterliliğin, COVID-19'a yönelik korunma motivasyonu üzerinde anlamlı bir etkiye sahip olduğu gözlenmiştir (Al-Hasan, Khuntia , & Yim, 2020; Ezati Rad, ve diğerleri, 2021; Kowalski & Black, 2021). COVID-19 semptomları, bulaşıcılık yolları, yüksek riskli gruplar ile alınması gereken tedbirlere yönelik bilgilendirme amacı taşıyan kampanyaların yaygınlaşmasına (Demirtaş Madran, 2021) karşın, kampanyalardaki mesaj içeriğinin bireylerin korunma motivasyonu üzerindeki etkisini inceleyen araştırmalar kısıtlıdır.

Kampanyalardaki iletişim mesajlarının, gerek duyguları (örn., entübe olma; korku) gerekse bilgileri/işlevselliği (örn: vaka/ölüm oranları; istatistikler) yansıtan farklı mesaj çekiciliği (Kim, Jeon, & Lee, 2020; Lindauer, ve diğerleri, 2020) unsurlarını yansıttıkları görülür. Araştırmalar, farklı mesaj çekiciliği unsurlarının (duygusal ya da rasyonel çekiciliğin) sağlık davranışları ile farklılaşan ilişkilere sahip olduğuna işaret etmektedir (Studts, Ruberg, McGuffin, & Roetzer, 2010).

Çalışma yazarlarının bilgisi dahilinde, alan yazında farklı mesaj çekiciliği unsurlarının (korku ya da rasyonel) kullanıldığı COVID-19 iletişim araçlarının, korunma motivasyonu üzerindeki etkisinin deneysel desen ile sorgulanmadığı tespit edilmiştir. Bu bağlamda, mevcut araştırmanın amacı korku çekiciliği ve rasyonel çekicilik unsurlarına sahip COVID-19 salgınına yönelik görsel iletişim mesajlarının, bireylerin bu salgına yönelik korunma motivasyonları ve davranışları üzerindeki etkisini tespit etmektir.

## Kavramsal Arka Plan

### Korunma Motivasyonu Teorisi (KMT)

KMT'ye göre, bireyin sahip olduğu korunma motivasyonu, kendisinin tehdide ilişkin değerlendirmeleri (algılanan şiddet ve algılanan hassasiyet) ve başa çıkmaya ilişkin değerlendirmeleri (öz yeterlilik ve tepki yeterliliği) tarafından belirlenmektedir (Rogers, 1983). Kuram, bireyin bir tehdide yönelik korunma motivasyonuna sahip olmasının dört inanışın bir sonucu olduğunu öne sürer: (1) algılanan tehdidin şiddetli olması (algılanan şiddet), (2) bireyin bu tehdide yönelik hassasiyet hissetmesi (algılanan hassasiyet) (3) bireyin başa çıkma tepkisini sergileyebilme yeteneğine sahip olması (öz yeterlilik) ve (4) başa çıkma tepkisinin tehdidi ortadan kaldırmada etkili olması (tepki yeterliliği) (Rogers, 1983, s. 170).

KMT'ye yönelik meta analiz bulguları, tehdide yönelik hassasiyet, tepki yeterliliği ve öz yeterlilikteki artışın bireylerin uyumlu (tavsiye edilen koruyucu) davranışlarını artırdığı yönündedir (Floyd, Prentice-Dunn, & Rogers, 2000). Pandemi süreçlerindeki koruyucu davranışlar incelediğinde, tehdide yönelik yüksek düzey algılanan şiddet, algılanan hassasiyet ve tepki yeterliliğinin bireyin bulaşıcı hastalıklardan korunma davranışlarını açıkladığı görülmektedir (Bish & Michie, 2010). Williams ve arkadaşları bulaşıcı hastalıklardan korunma yollarından biri olan sosyal mesafe davranışını KMT çerçevesinde araştırmış ve çalışma bulguları ışığında öz yeterlilik ile tepki yeterliliğinin sosyal mesafe davranışının sergilenmesi ile ilişkili olduğunu ortaya koymuştur (Williams, Rasmussen, Kleczkowski, Maharaj, & Cairns, 2015). KMT, özellikle son dönemde COVID-19 bağlamındaki pek çok tutum ve davranışı açıklamak için önemli bir çerçeve sunmuştur. Teori ve boyutları, COVID-19 aşı niyetleri (Ansari-Moghaddam, Seraji , Sharafi, Mohammadi, & Okati-Aliabad , 2021; Eberhardt & Ling, 2021; Griffin, Conner, & Norman, 2022; Li, ve diğerleri, 2021; Kowalski, ve diğerleri, 2023; Wu, ve diğerleri, 2022) ile aşı çekincesi (Liu, ve diğerleri, 2022; Rahman, Hossain, Sufian, & Anwar, 2021), tüketicilerin pandemide konaklama (Fan, Kline, Liu, & Byrd, 2022) ve seyahat tercihlerindeki değişimler (Mashrur, Wang, Loa, Hossain, & Nurul Habib, 2023; Nazneen, Xu, Din, & Karim, 2021) pandemi dönemindeki gıda alışverişi ve güvenliğine yönelik tutum (Soon, Vanany, Wahab, & Sani, 2022) ile alınan önlemlerin dışarıda yemek yeme davranışına etkisi (Wen & Liu-Lastres, 2022), pandemi döneminde çevrim içi kıyafet satın alma davranışına yönelme eğilimi (Milaković & Miocevic, 2022), pandeminin umut ve korku üzerindeki etkisi ile bilinçli tüketim ve sağlık odaklı davranış gibi tüketici davranışlarındaki rolü (Kim, Yang, Min, & White, 2022) ile ilişkili bir biçimde kullanılmıştır. Ancak mevcut çalışma kapsamında, COVID-19 dönemindeki koruyucu davranışlara odaklanılmış ve bu konudaki araştırmalar daha detaylı incelenmiştir.

KMT, COVID-19 salgınına karşı alınması gereken koruyucu önlemleri açıklama noktasında da destek görmektedir (Bashirian, ve diğerleri, 2020; Ezati Rad, ve diğerleri, 2021). COVID-19'a yönelik korunma motivasyonunun, koruyucu davranışlar ile ilişkili olduğu ve tehdit değerlendirmesi ile başa çıkma değerlendirmesinin korunma motivasyonunu açıkladığı görülmektedir (Bashirian, ve diğerleri, 2020). Türkiye örneklemi ile yürütülen bir araştırmada, COVID-19 salgınına yönelik tehdit şiddetinin psikolojik sağlık ile negatif yönde ilişkili olduğu, algılanan öz yeterliliğin ve önleyici davranışların ise psikolojik sağlık ile pozitif yönde ilişkili olduğu ortaya koyulmuştur (Yıldırım & Güler, 2020). Kesitsel bir araştırma (Ezati Rad, ve diğerleri, 2021), COVID-19'a yönelik tüm koruyucu önlemlerin alınmasındaki artışın, algılanan hassasiyet, algılanan şiddet, tepki etkinliği, tepki yeterliliği ve korunma motivasyonundaki artış ile ilişkili olduğunu göstermiştir. Okuhara ve arkadaşları tarafından gerçekleştirilen çalışmaya göre ise KMT boyutlarından algılanan şiddet ve öz yeterlilik evde kalma davranışını yordama gücü göstermiştir (Okuhara, Okada, & Kiuchi, 2020). Rad ve arkadaşları da benzer şekilde öz yeterlilik boyutunun korunma davranışını yordamada en güçlü algı olduğu bulgusuna ulaşmış ancak buna ek olarak tepki yeterliliğinin de korunma davranışlarını yordadığını tespit etmiştir (Rad, ve diğerleri, 2021). Boylamsal bir araştırmanın bulgularına göre katılımcıların koruyucu davranışları sürdürmesinde öz yeterlilik ve algılanan şiddetin en güçlü yordayıcılar olduğu sonucuna ulaşılmıştır (Grano, Singh Solorzano, & Di Pucchio, 2022). Mortada ve arkadaşları ise öz yeterlilik algısının korunma motivasyonu ve önleme davranışını yordadığını göstermiştir (Mortada, Abdel-Azeem, Al Showair, & Zalat, 2021). KMT'ye ek olarak, Güven ve İş Birliği modeliyle konuya yaklaşan Šurina ve arkadaşları ise koronavirüsten korunma davranışıyla en ilgili değişkenlerin korku ve algılanan tehdit olduğuna ilişkin bulgulara ulaşmıştır (Surina, ve diğerleri, 2021). Belirli koruyucu yöntemlere odaklanan diğer araştırmalarda (Al-Hasan, Khuntia, & Yim, 2020) ise tehdit ve baş etme değerlendirmelerinin sosyal mesafe kuralına uyulması üzerinde etkili olduğu görülmüştür. Ancak bazı araştırmalar (Kowalski & Black, 2021), COVID-19'a yönelik koruyucu sağlık davranışlarını yordamada korunma motivasyonu, algılanan şiddet ve tepki yeterliliğinin daha açıklayıcı olduğunu göstermiştir.

Yukarıdaki bölümde gözden geçirilenler ışığında COVID-19 bağlamında KMT'deki etkili boyutların farklılaştığı görülmektedir. Ancak KMT boyutları ve COVID-19'a yönelik koruyucu davranışlar ilişkisinde kültürlerarası farklar mevcuttur (Al-Hasan, Khuntia, & Yim, 2020). Bu durum, bağımsız kültürlerde KMT'nin kuramsal varsayımlarının COVID-19 bağlamında test edilmesi gerekliliğini düşündürmektedir. Buradan hareketle, korunma motivasyonu teorisi çerçevesinde, tehdide ilişkin değerlendirmeleri oluşturan algılanan hassasiyet ve algılanan şiddet ile başa çıkmaya ilişkin değerlendirmeleri oluşturan tepki etkinliği ve öz yeterlilik ile bu değişkenler tarafından belirlenen davranışsal niyete (Rogers, 1975) yönelik hipotezler aşağıdaki gibi ifade edilebilir.

Hipotez 1: Korunma motivasyonu alt boyutları koronavirüsten korunma niyetiyle pozitif yönlü bir ilişkiye sahiptir.

Hipotez 1a: Algılanan hassasiyet koronavirüsten korunma niyetiyle pozitif yönlü bir ilişkiye sahiptir.

Hipotez 1b: Algılanan şiddet koronavirüsten korunma niyetiyle pozitif yönlü bir ilişkiye sahiptir.

Hipotez 1c: Öz yeterlilik koronavirüsten korunma niyetiyle pozitif yönlü bir ilişkiye sahiptir.

Hipotez 1d: Tepki etkinliği koronavirüsten korunma niyetiyle pozitif yönlü bir ilişkiye sahiptir.

### Mesaj Çekiciliği: Duygusal ve Rasyonel Çekicilik

Hedef kitleye yönelik müdahaleleri ve mesajları içeren iletişimin, egzersizden madde kullanımına kadar pek çok konuda sağlık davranışını desteklemek için kullanıldığı ifade edilmektedir (Snyder, 2007). Sağlık içerikli iletişim mesajları, COVID-19 bağlamı için de dikkat çekmiştir. Yanlış bilginin yayılması olarak ifade edilebilecek infodemi ile baş edebilmek için izlenecek sağlık iletişimi stratejileri (Mheidly & Fares, 2020), COVID-19 ile ilgili bilgilerin okunabilir olup olmadığının incelenmesi (Basch, Mohlman, Hillyer, & Garcia, 2020), COVID-19 ile mücadelenin daha etkin bir şekilde sürdürülmesi için izlenecek etkili iletişim stratejilerinin geliştirilmesi (Finset, ve diğerleri, 2020), COVID-19 salgınıyla mücadelede çizgi romanların iletişim aracı olarak kullanılması (Kearns & Kearns, 2020) gibi konular pandemi döneminde odaklanılan sağlık iletişimi çalışmalarına örnektir. Bu konudaki çalışmaların bir ayağını ise iletişim kampanyalarında kullanılan mesaj çekiciliği unsurları oluşturmaktadır.

Tasarım, konu ve içerik açısından çeşitlilik gösterse de iletişim mesajlarında kullanılan çekicilik unsurlarının, temelde duyguları ya da bilgileri/işlevselliği konu edinecek şekilde ikili bir ayrım üzerinden ele alındığı görülmektedir (Kim, Jeon, & Lee, 2020; Lindauer, ve diğerleri, 2020; Studts, Ruberg, McGuffin, & Roetzer, 2010). Duygusal çekicilik odaklı mesajlar, sevgi, neşe ve mizah gibi olumlu ya da korku ve suçluluk gibi olumsuz duygulara dayanırken, rasyonel çekicilik odaklı mesajlar detaylı bilgilere, mantıksal çıkarımlara ve argümanlara dayanmaktadır (Zhang, Sun, Liu, & Knight, 2014). Bir diğer ifadeyle, duygusal çekicilikte mesajın bağlamı temel alınarak olumlu ya da olumsuz duygular yaratmak amaçlanırken, rasyonel çekicilikte bilginin objektif bir sunumu ile alıcının rasyonelliğine odaklanılır (Gursoy, Ekinci, Can, & Murray, 2022).

Duygusal çekicilik, "duygusal içerikli bir mesaja duygusal bir tepki oluşturmak amacıyla tasarlanmış bir ikna yöntemi" olarak tanımlanmaktadır (Lee & Hong, 2016, s. 364). Duygusal çekicilik, bireyleri belirli bir sağlık davranışı konusunda ikna edici mesajlar oluşturmak için sıklıkla kullanılmaktadır (Nabi, 2015). Duygusal çekiciliğin ne düzeyde davranış ve tutum değişikliğine neden olduğu çeşitli araştırmalara konu olmuştur. Bağış davranışı sergileme örneği göz önüne alındığında, duygu yoğunluğunun artırılmasının bağış davranışındaki artış ile ilişkili olduğu görülmektedir (Bebko, Sciulli, & Bhagat, 2014). Bir diğer örnekte, sigara paketleri üzerindeki şekillerin sadece yazı bulunan uyarı resimlerinden daha çok duygusal tepkiye yol açtığı, duygusal tepkilerin ise öncellikle risk algısını artırdığı, bunun da sigarayı bırakma niyetinde artışla ilişkili olduğu bulgusu elde edilmiştir (Evans, ve diğerleri, 2015). Duygusal çekicilik içerikli mesajların, olumlu ya da olumsuz duyguları temel alarak kullanılmasının pandemi döneminde bireylerin aşılanmaya yönelik tutumları nasıl etkileyebileceğine ilişkin tartışmalar da yürütülmüştür (Chou & Budenz, 2020)

İletişim mesajlarında, duygusal çekicilik öğesi olarak korku ve mutluluk gibi duyguların uyandırılması hedeflenir (Bebko, Sciulli, & Bhagat, 2014). Ancak, riskli davranışın değişimi ve sağlığa zararlı davranışların ortadan kaldırılması amacıyla geliştirilen sağlık iletişimi içeriklerinde sıklıkla korku çekiciliğine (öğesine) başvurulmaktadır (Ardıç Çobaner, 2013). Korku çekiciliği, tavsiye edilen eylemlere uymadıklarında karşılaşacakları olumsuz sonuçların gösterilmesi yoluyla, bireyleri korku unsurundan faydalanılarak ikna etmeyi hedefleyen bir mesaj türüdür (Ardıç Çobaner, 2013). Konuya etik açıdan yaklaşan bazı araştırmalar ise korumacı davranışlar üzerindeki kısa süreli etkisine karşın korku çekiciliğinin bireyler üzerinde yaratabileceği olumsuz duygulara vurgu yapmaktadır (Guttman & Lev, 2021). Korku çekiciliğinin sağlık tutum ve davranışları üzerindeki etkisini açıklamaya odaklanan kuramlar arasında mevcut araştırmanın kuramsal çerçevesini de oluşturan KMT öne çıkmaktadır (Floyd, Prentice-Dunn, & Rogers, 2000). KMT'ye göre, korunma motivasyonu; korku çekiciliğinin tutumlar üzerindeki etkisine aracılık etmekte ve bireyin risklere yönelik önleyici davranışlar sergilemesini etkilemektedir (Rogers, 1975).

İletişim mesajının ikna gücünü artırmak amacıyla başvurulan diğer bir araç ise bireyleri doğrudan duygular aracılığıyla etkilemek yerine duruma yönelik gerçekçi bilgileri açıkça sunarak etki yaratmaya çalışan rasyonel çekicilik olmuştur (Stafford & Day, 1995). Rasyonel çekiciliğin temel amacı, mesajı alanın düşüncelerine hitap edecek bilgi sağlama yoluyla ikna etmektir (McKay-Nesbitt, Manchanda, Smith, & Huhmann, 2011). Araştırma ve istatistiklere dayanan rasyonel çekicilik içerikli mesajların, düşük duygusallığa sahip ve rasyonel düşünmeye eğilimli bireyleri bağışa teşvik etme konusunda etkili olabileceği ifade edilmektedir (Lim, Bouchacourt, & Brown-Devlin, 2020). Buna ilaveten, çekicilik unsurunun kültürel faktörlerle ilişkili olabileceği ve bireycilik baskın toplumlarda rasyonel çekiciliğin, duygusal çekiciliğe kıyasla daha etkili olabileceği ortaya konmuştur (Kim, 2016). Ayrıca çekicilik unsurlarının bir arada kullanılmasının prososyal davranışlar için daha güçlü bir motivasyon olabileceğine yönelik bulgular vardır (Lindauer, ve diğerleri, 2020). Yoksul insanlara yardım etme motivasyonu için, rasyonel bir çağrının, bir çocuğun fotoğrafının gösterildiği durum kadar etkili olduğu ve dahası duygusal çekicilik unsuruyla bir arada kullanılmasının da yardım etme motivasyonunu daha da güçlendirebileceği ifade edilmektedir (Lindauer, ve diğerleri, 2020).

Mesaj çekiciliğiyle ilgili çalışmalar genel itibariyle, rasyonel ve duygusal çekiciliğin davranış ve tutum üzerindeki etkilerini karşılaştırmalı olarak tespit etmeye odaklanmıştır. Örneğin, duyguların kimi zaman risk algısını gerçekçi bilgilerden daha çok yönlendirdiği ifade edilmektedir (Slovic, Finucane, Peters, & MacGregor, 2004). Özellikle, riskli durumlar karşısında ortaya çıkan duygusal tepkiler sıklıkla bu riskli durumlara yönelik bilişsel değerlendirmeden sapar ve böyle anlarda davranışı duygusal tepkiler yönlendirir (Loewenstein, Weber, Hsee, & Welch, 2001). Davranış niyetine odaklanan bir araştırmada, duygusal çekiciliğin organ bağışı programına katılma niyeti oluşturmada rasyonel çekicilikten daha etkili olduğu görülmüştür (Studts, Ruberg, McGuffin, & Roetzer, 2010). Bunun yanında, yoksullukla mücadele eden bir çocuğa ait fotoğrafın, gerçekçi olarak değerlendirebileceğimiz yardıma muhtaç bireylerin istatistiki bilgilerinden daha fazla bağış yapılmasında etkili olduğu görülmüştür (Small, Loewenstein, & Slovic, 2007). Öte yandan, korku çekiciliğinin bireyler üzerinde yaratabileceği olumsuz etkilerin pandemi döneminde daha da ciddi sonuçlar doğurabileceği ve bu nedenle korku çekiciliği içeren mesajlar yerine bireyleri korunma davranışına yönlendirecek kanıtlara dayalı ve bilgilendirici mesaj tasarımlarının kullanılması gerektiği vurgulanmaktadır (Stolow, Moses, Lederer, & Carter, 2020). Ayrıca literatürde rasyonel çekiciliğin, duygusal çekiciliğe göre tutumu daha güçlü bir şekilde etkilediğine ilişkin bulgular da (Stafford & Day, 1995) yer almaktadır. COVID-19 bağlamında, bireylerin duygusal çekiciliğe kıyasla rasyonel çekicilik içerikli mesajlara maruz kaldığında daha yüksek hava yolculuğu yapma ve hava yolculuğunu tavsiye etme niyeti gösterdikleri belirlenmiştir (Garaus & Hudáková, 2022). Benzer şekilde, COVID-19 sırasında rasyonel çekicilik içerikli mesajların otelde konaklama niyeti üzerinde daha güçlü bir pozitif etki yarattığı ortaya konmuştur (Ju & Jang, 2023).

Pandemi sırasında baskın duygulardan birinin korku olduğu (Van Bavel, ve diğerleri, 2020) ve korku çekiciliğinin sağlık davranışların benimsenmesindeki rolü nedeniyle etkin halk sağlığı kampanyalarında kullanılabileceği ifade edilmektedir (Witte & Allen, 2000). Diğer taraftan aynı dönemde medya aracılığıyla pandeminin gidişatına ilişkin sayısal bilgiler paylaşılırken (Anwar, Malik, Raees, & Anwar, 2020), yayılım hızı, yeni vaka, toplam vaka ve toplam vefat sayıları gibi istatistiksel bilgiler kullanılmıştır. Bu nedenle, korku duygusuna yönelik mesajların yanında istatistiksel ve sayısal ifadelerin yer aldığı mesajların da bireyleri korunma davranışına yönlendirmek için kullanıldığı görülmektedir. Pandemi süresince gösterilen en temel duygusal tepkilerden birisinin korku olması (Van Bavel, ve diğerleri, 2020) ve salgına yönelik bu korkunun, salgına karşı alınacak bireysel tedbirlerin (örn., sosyal mesafe ve el hijyeni) uygulanması ile ilişkili olması (Harper, Satchell, Fido, & Latzman, 2020) nedeniyle, COVID-19 salgını bağlamında korku çekiciliğinin rasyonel çekiciliğe kıyasla korunma motivasyonu boyutları üzerinde daha büyük etki yaratması beklenmektedir.

Hipotez 2: Korku çekiciliğine yönelik mesajlar, rasyonel çekiciliğe yönelik mesajlara kıyasla korunma motivasyonu boyutları üzerinde daha etkilidir.

Hipotez 2a: Korku çekiciliğine yönelik mesajlar, rasyonel çekiciliğe yönelik mesajlara kıyasla algılanan hassasiyet üzerinde daha etkilidir.

Hipotez 2b: Korku çekiciliğine yönelik mesajlar, rasyonel çekiciliğe yönelik mesajlara kıyasla algılanan şiddet üzerinde daha etkilidir.

Hipotez 2c: Korku çekiciliğine yönelik mesajlar, rasyonel çekiciliğe yönelik mesajlara kıyasla öz yeterlilik üzerinde daha etkilidir.

Hipotez 2d: Korku çekiciliğine yönelik mesajlar, rasyonel çekiciliğe yönelik mesajlara kıyasla tepki yeterliliği üzerinde daha etkilidir.

Hipotez 2e: Korku çekiciliğine yönelik mesajlar, rasyonel çekiciliğe yönelik mesajlara kıyasla korunma motivasyonu üzerinde daha etkilidir.

## Yöntem

Bu çalışmada, bireylerin korunma niyetini etkileyen motivasyon faktörlerini belirlemenin yanında, korku çekiciliği ve rasyonel çekicilik unsurlarına sahip görsel iletişim mesajlarının bireylerin korunma motivasyonları ve niyetleri üzerindeki etkisinin belirlenmesi amaçlanmaktadır. Araştırmanın amaçları doğrultusunda iki ayrı çalışma tasarlanmıştır. Hipotez 1'in testi için Çalışma 1'e, Hipotez 2'nin testi için ise Çalışma 2'ye başvurulacaktır.

### Çalışma 1

İlk çalışmanın amacı, COVID-19 bağlamında bireylerin korunma niyetini etkileyen motivasyon faktörlerini belirlemek ve korunma motivasyonu teorisi kapsamında oluşturulan hipotezleri test etmektir. Bu çalışmada hipotezler, çevrim içi anket aracılığıyla elde edilen kesitsel veriyle test edilmiştir.

### Katılımcılar

Çalışma örneklemini 347 üniversite öğrencisi oluşturmaktadır. 347 katılımcının 241 tanesi (%69,5) kadın ve 94 tanesi (%27,1) erkektir. Katılımcıların yaş aralığı 18 ve 25 arasındadır (*Ort*. = 20, *S* = 1.58). Katılımcıların ailelerinin aylık ortalama geliri ilgili dönemde 5.250 TL'dir. Çalışmanın gerçekleştirildiği dönemde, Koronavirüs aşısı henüz yaygınlaşmadığından, katılımcılar arasında aşı olan bulunmamaktadır. Katılımcıların 19 tanesinin (%5,5) kronik bir rahatsızlığı bulunurken, 109 tanesinin (%31,4) kendisi ya da birinci derece yakınının koronavirüs geçmişi bulunmaktadır.

### Prosedür

Çalışma İzmir Bakırçay Üniversitesi lisans öğrencileri ile gerçekleştirilmiştir. Çalışmada yer alacak katılımcıları belirlemek için kayıtlı tüm lisans öğrencilerinin bulunduğu listeden rassal/seçkisiz atama gerçekleştirilmiş ve bu nedenle basit tesadüfi örnekleme yöntemi uygulanmıştır. Kesitsel araştırma kurgusuna sahip bu çalışmada veri toplama yöntemi olarak anketten faydalanılmıştır. Çevrim içi düzenlenen anket formu pilot çalışma amacıyla ilk aşamada Nisan 2021'de kısa mesaj yoluyla 300 öğrenciyle paylaşılmıştır. Çevrim içi anket formu Haziran 2021'de 2800 kişiye ulaştırılmış, toplamda 787 kişi ankete katılmıştır. Hatalı ve eksik cevaplar dışarıda bırakıldığında 347 kişi ile analizler yürütülmüştür. Çalışmanın etik kurul onayı İzmir Bakırçay Üniversitesi Girişimsel Olmayan Klinik Araştırmalar Etik Kurulundan alınmıştır (Karar No: 178 Tarih: 29.01.2021).

Anket formunu cevaplamadan önce katılımcılar gönüllü katılımlarını bildiren formu okuyarak onay vermiştir. Ardından algılanan hassasiyet, algılanan şiddet, öz yeterlilik, tepki etkinliği ve korunma niyetiyle ilgili ifadeleri görmüş ve son olarak da COVID-19 ile ilgili genel eğilimlere ilişkin ifadeleri cevaplamışlardır. Soru formunun son bölümünde demografik ifadelere yer verilmiş ve katılımcılara teşekkür edilerek çevrim içi anket sonlandırılmıştır.

## Ölçme Araçları

### COVID-19 Korunma Motivasyonu Ölçeği

Soru formunda yer alan ifadeler literatürdeki çalışmalardan (Bashirian, ve diğerleri, 2020; Khazaee-Pool, Shahrousvand, & Naghibi, 2020) derlenmiş, ayrıca çalışmanın içeriğine bağlı olarak araştırmacılar tarafından yeni ifadeler de eklenmiştir. Korunma motivasyonu alt boyutları kesinlikle katılmıyorum (1), kesinlikle katılıyorum (5) olmak üzere 5'li likert aracılığıyla ve 30 ifadeyle, COVID-19 ile ilgili genel değerlendirmeler 8 ifadeyle ve demografik yapı 3 ifadeyle olacak şekilde toplam 41 ifade aracılığıyla ölçüm gerçekleştirilmiştir. Ayrıca dikkatsiz cevaplayıcıları belirlemek amacıyla iki adet dikkat sorusu da forma eklenmiştir (Bkz. Bu maddeyi okuduğunuzu göstermek için lütfen "(2) Katılmıyorum" seçeneğini işaretleyiniz.).

### Demografik Bilgi Formu

Soru formunda, katılımcıların demografik durumunun tespiti amacıyla, yaş, cinsiyet ve aile bazında aylık ortalama gelirlerinin anlaşılmasına yönelik olarak 3 soru ifadesine yer verilmiştir. Bu ifadeler dışında, katılımcıların kimliğinin anlaşılmasına ve kişisel verilerinin ihlaline sebebiyet verebilecek herhangi bir soru yöneltilmemiştir.

### Veri Analizi

Korunma motivasyonu ölçeğinin faktör yapısının bağımsız örneklemlerde sınanması amacıyla çalışma örneklemi seçkisiz olarak iki ayrı örneklem grubuna (*n1*=174 ve *n2*=175) ayrılmıştır. Birinci (*n1*=174) örneklemde SPSS 22 programında Açımlayıcı Faktör Analizi yürütülmüştür. İkinci örneklemde (*n2*=175) ise AMOS programı aracılığıyla Doğrulayıcı Faktör Analizi gerçekleştirilmiştir. Hipotez 1'i sınamak amacıyla gelir bilgisi sağlamayan 2 kişi analiz dışı bırakılarak çalışmanın toplam örneklemi ile (N= 347) AMOS programında yol analizi gerçekleştirilmiştir. İyi bir model uyumu için anlamlı olmayan $\chi 2$ istatistiği ve 3'ten küçük $\chi 2$ / serbestlik derecesi oranı (Byrne, 2006) .95'e eşit ya da daha büyük CFI değeri, .06'ya eşit ya da daha küçük RMSEA değeri (Hu & Bentler, 1999) ve .95'ten büyük GFI (Shevlin & Miles, 1998) değerinin elde edilmesi önerilmektedir. Hipotez edilen ilişki testleri için %95 güven aralığında (GA) 5000 önyükleme (bootstrapping) yapılmıştır.

## Bulgular

### Korunma Motivasyonu Ölçeği Yapı Geçerliliği

Farklı ölçüm araçlarından alınan korunma motivasyonu maddelerinin faktör yapısını incelemek amacıyla faktör analizi gerçekleştirilmiştir. "Korunma Motivasyonu" ölçek maddeleri üzerine yapılan Varimaks rotasyonlu temel bileşenler açımlayıcı faktör analizi sonunda toplam varyansın %69.54'ünü açıklayan ve öz değeri 1'in üzerinde olan 8 faktör ortaya çıkmıştır. Çapraz yüklenen madde sayısının fazlalığı ve faktörlerin yorumlanma güçlüğü sebebiyle, faktör yapısı 5'e ve 6'ya zorlanarak analiz yeniden tekrarlanmıştır. Toplam varyansın %62,55'ini açıklayan 6'ya zorlanmış faktör çözümünün kavramsal olarak yorumlanabilir olduğu gözlenmiştir. Bu aşamada faktörlere çapraz yüklenen 7 madde çıkarılmıştır. Kalan toplam 23 maddenin yüklendiği faktörler sırasıyla Dışsal Tepki Etkinliği (5 madde; .65 ile .83 aralığında faktör yükü), Öz Yeterlilik (5 madde; .77 ile .64 aralığında faktör yükü), Korunma Niyeti (3 Madde; .71 ile .82 aralığında faktör yükü), Algılanan Şiddet (4 Madde; .53 ile .83 aralığında faktör yükü), Algılanan Hassasiyet (4 madde; .46 ile .79 aralığında faktör yükü) ve İçsel Tepki Etkinliği (2 madde; .69 ile .87 aralığında faktör yükü) olarak isimlendirilmiştir. İlgili faktör analizine ilişkin temel bileşenler faktör analizi sonuçları Tablo 1.'de sunulmuştur.

**Tablo 1:** *Korunma Motivasyonu Ölçeği Temel Bileşenler Faktör Analizi Sonuçları*

| | Faktör Yükleri | | | | | |
|---|---|---|---|---|---|---|
| **Korunma Motivasyonu Maddeleri** | **Faktör 1** | **Faktör 2** | **Faktör 3** | **Faktör 4** | **Faktör 5** | **Faktör 6** |
| **Faktör 1 Dışsal Tepki Etkinliği** | | | | | | |
| 22. Kalabalık yerlere girdiğimde maske kullanmaya özen gösteririm | **,83** | | | | | |
| 15. Diğer insanlar ile fiziksel ve sosyal mesafeyi (1,5 metre) korumam, koronavirüs bulaş riskini düşürmeye yardımcı olur. | **,71** | | | | | |
| 31. Koronavirüs salgını bitinceye kadar dezenfektan ve maske gibi koruyucu ekipmanları kullanacağım. | **,70** | | | | | |
| 27. Kullandığım maskenin temiz olmasına özen gösteririm | **,66** | | | | | |
| 14. Dışarıda maske takmam, koronavirüsün bulaşmasını önlemeye yardımcı olur | **,65** | | | | | |
| **Faktör 2 Öz Yeterlilik** | | | | | | |
| 24. Sıklıkla temas ettiğim yüzeyleri ve eşyaları düzenli olarak dezenfekte ederim. | | **,77** | | | | |
| 26. Eve girdiğimde hiçbir yere temas etmeden tüm kıyafetlerimi değiştiririm. | | **,75** | | | | |
| 16. Dışarıdan aldığım ürünleri genellikle dezenfekte ederim. | | **,68** | | | | |
| 19. Koronavirüs kapmamak için yüzüme dokunmadan önce veya dış yüzeyler ile temas ettikten sonra ellerimi dezenfekte ederim. | | **,66** | | | | |
| 25. Evden dışarı çıktığımda yüzeylere temas ettikten sonra, ağzıma, yüzüme, burnuma dokunmamaya özen gösteririm. | | **,64** | | | | |
| **Faktör 3 Korunma Niyeti** | | | | | | |
| 29. Koronavirüs salgını bitinceye kadar zorunlu durumlar dışında evden dışarı çıkmayacağım. | | | **,82** | | | |
| 18. Koronavirüs bulaşma riski olduğu için, yakın çevremle yüz yüze görüşmem. | | | **,76** | | | |
| 23. Duygusal olarak zorlanıyor olsam bile, koronavirüse yakalanma ihtimalim olduğu sürece evde kalırım. | | | **,71** | | | |
| **Faktör 4 Algılanan Şiddet** | | | | | | |
| 9. Koronavirüse yakalanmak organlarımın, yaşamımı alt üst edecek kadar hasar görmesine sebep olabilir. | | | | **,83** | | |
| 8. Kesin bir tedavisi olmadığı için koronavirüse yakalanmak ölümcül olabilir. | | | | **,81** | | |
| 10. Koronavirüse yakalanmak, ömür boyu sürecek sağlık sorunlarına sebebiyet verebilir. | | | | **,79** | | |
| 7.Koronavirüsüdüşündüğümde endişeleniyorum. | | | | **,53** | | |
| **Faktör 5 Algılanan Hassasiyet** | | | | | | |
| 5. Dünyadaki tüm insanlar gibi, ben de koronavirüse yakalanabilirim. | | | | | **,79** | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 3. Her yaştan bireyin koronavirüse yakalanma olasılığı vardır. | | | | | **,68** | |
| 6. Koronavirüs, kısa sürede toplumdaki birçok kişiyi etkileyebilir. | | | | | **,57** | |
| 4. Koronavirüse sadece risk grubunda yer alanlar (yaşlılar, kronik rahatsızlığı olanlar vb.) yakalanabilir. | | | | | **,46** | |
| **Faktör 6 İçsel Tepki Etkinliği** | | | | | | |
| 11. Ellerimi sık sık sabun ve suyla yıkamam, koronavirüsün bulaşmasını önler. | | | | | | **,87** |
| 13.Yüzeyleri ve eşyaları dezenfekte etmem, koronavirüsün bulaşmasını önler. | | | | | | **,69** |
| *N* =175 | | | | | | |

Faktörlerin Cronbach alpha iç tutarlılık hesaplamalarında düşük “madde toplam korelasyonu” değerine sahip madde 3, madde 7 ve madde 14 ilgili faktörlerden çıkarılmıştır. Yeniden hesaplanan iç tutarlılık değerleri Dışsal Tepki Etkinliği için .86, Öz Yeterlilik için .84, Korunma Niyeti için .81, Algılanan Şiddet için .83, Algılanan Hassasiyet için .73 ve İçsel Tepki Etkinliği için .78 olarak bulunmuştur. Korunma Motivasyonu Ölçeğinin toplam iç tutarlılık değeri ise .89’dur.

Ölçeğin 6-faktörlü yapısını sınamak amacıyla çalışmanın ikinci örnekleminde DFA yürütülmüştür. 6-faktörlü yapı, veri ile iyi uyum göstermemiştir ($\chi 2$ (155) = 375.34, $\chi 2$ / sd = 2.42, $p$ < 0,001; CFI = 0,85, RMSEA = 0,09, GFI = .82). Modifikasyon/düzeltme önerileri incelenmiş ve modelin iyileştirilebilmesi için önerilen değişiklikler kavramsal çerçeve ile uyumlu olacak şekilde gerçekleştirilmiştir. Modifikasyon indekslerinde aynı faktöre yüklenen 8 maddenin hataları arasında korelasyonların serbest bırakılması önerilmiştir. Önerilen modifikasyon düzeltmeleri sonrası altı faktörlü yapı veriye daha iyi uyum göstermiştir ($\chi 2$ (147) = 266.43, $\chi 2$ / sd = 1.83, $p$ < 0,001; CFI = 0,91, RMSEA = 0,07, GFI = .87). Dışsal Tepki Etkinliği faktör yükleri 0,55 ile 0,81 arasında, Öz Yeterlilik faktör yükleri 0,57 ile 0,83 arasında, Korunma Niyeti faktör yükleri 0,73 ile 0,78 arasında, Algılanan Şiddet faktör yükleri 0,76 ile 0,87 arasında, Algılanan Hassasiyet faktör yükleri 0,63 ile 0,91 arasında ve İçsel Tepki Etkinliği faktör yükleri 0,68 ile 0,85 arasında değişmektedir.

**Model Testi: Yol Analizi**

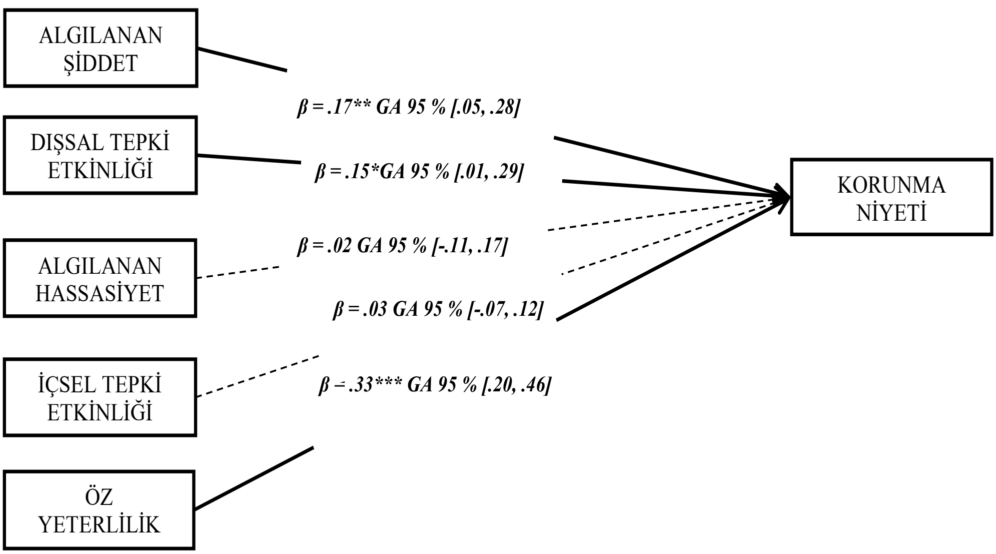
Araştırma değişkenleri arasındaki korelasyonlar Tablo 2’de sunulmuştur. Araştırma değişkenleri arasındaki ilişkilere yönelik korelasyon değerleri literatürde önerilen korelasyon katsayılarının güç aralıklarına (Hair, Bush, & Ortinau, 2002) göre değerlendirildiğinde, korunma niyetiyle algılanan şiddet arasında pozitif yönlü zayıf ($r$ = .36, $p$ < .001), korunma niyetiyle algılanan hassasiyet arasında pozitif yönlü zayıf ($r$ = .27, $p$ < .001), korunma niyetiyle öz yeterlilik arasında pozitif yönlü orta düzeyde ($r$ = .49, $p$ < .001), korunma niyetiyle içsel tepki etkinliği arasında pozitif yönlü zayıf ($r$ = .22, $p$ < .001) ve korunma niyetiyle dışsal tepki etkinliği arasında pozitif yönlü orta düzeyde ($r$ = .43, $p$ < .001) ilişki olduğu görülmektedir. Diğer yandan, korunma niyetinin COVID-19’un uzun süreceği beklentisi ($r$ =.18, $p$ < .05) ile pozitif yönde, COVID-19’a yönelik umutsuzluk ($r$ = – .19, $p$ < .001), cinsiyet ($r$ = – .11, $p$ < .05) ve gelir durumu ($r$ =-.12, $p$ < .05) ile negatif yönde anlamlı ancak göz ardı edilebilir ilişkiler olduğu görülmektedir. Bu doğrultuda, modelde COVID-19’a yönelik umutsuzluk ve COVID-19 gelecek algısı ile cinsiyet ve gelir durumunun korunma niyeti üzerindeki etkisi kontrol edilmiştir.

**Tablo 2:** Araştırma Değişkenleri Arasındaki Korelasyonlar

| **Değişken** | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1. COVID-19'a Yönelik Umutsuzluk | - | | | | | | | | | |
| 2. COVID-19'un Uzun Süreceği Beklentisi | .24** | - | | | | | | | | |
| 3. Cinsiyet | .11* | .15** | - | | | | | | | |
| 4. Gelir | -.03 | .09 | .07 | - | | | | | | |
| 5. Korunma Niyeti | -.19** | -.18** | -.10 | -.12* | - | | | | | |
| 6. Algılanan Hassasiyet | -.20** | -.12* | .01 | .10 | .27** | - | | | | |
| 7. Algılanan Şiddet | -.19** | -.16** | -.07 | -.01 | .36** | .40** | - | | | |
| 8. İçsel Tepki Etkinliği | -.09** | .02 | -.04 | .08 | .22** | .18** | .14** | - | | |
| 9. Dışsal Tepki Etkinliği | -.24** | -.10 | -.16** | .09 | .43** | .49** | .32** | .37** | - | |
| 10. Öz Yeterlilik | -.16** | -.07 | -.13* | .09 | .49** | .28** | .33** | .37** | .63** | - |
| Ort. | 1.10 | 1.10 | - | - | 3.28 | 4.56 | 3.80 | 3.85 | 4.47 | 3.95 |
| SS | .30 | .30 | - | - | .93 | .51 | .82 | .73 | .55 | .72 |

***p < .01, *p < .05.*

**Şekil 1.** Yol Analizi




*χ2 (23) = 53.16, p > .05, χ2/df = 2.46, CFI = .94, GFI = .97, RMSEA = .07*
*Not. Model testi COVID-19'a yönelik umutsuzluk ve COVID-19 gelecek algısı ile cinsiyet ve gelir durumunun etkileri kontrol edilerek yürütülmüştür. Kesik çizgiler anlamlı olmayan, düz çizgiler ise anlamlı yolları temsil etmektedir.*
** p < .05, **p < .01, **p < .001.*

Önerilen model IBM AMOS programı aracılığıyla yol analizi yürütülerek test edilmiştir. Model veriye iyi uyum sağlamıştır, $\chi2$ (23) = 57.16, $p < .001$, $\chi2/df = 2.49$, CFI = .94, GFI = .97, RMSEA = .07. Test edilen yol modelinde, algılanan şiddet (β = .17, GA 95 % [.05, .28], $p$ =.00), dışsal tepki etkinliği

($\beta$ = .15, GA 95 % [.01, .29], $p$ =.04) ve öz yeterliliğin ($\beta$ = .33, GA 95 % [.20, .46], $p < .001$) korunma niyeti ile ilişkilerinin pozitif ve anlamlı olduğu bulunmuştur. Ancak, korunma niyetinin algılanan hassasiyet ($\beta$ = .02, GA 95 % [-.11, .17], $p$ =.80) ve içsel tepki etkinliği ($\beta$ = .03, GA 95 % [-.07, .12], $p$ =.52) ile ilişkisinin anlamlı olmadığı görülmüştür. Dolayısıyla araştırma kapsamında oluşturulan ilk hipotezin kısmen kabul edildiği ifade edilebilir.

**Tartışma**

Çalışmanın bulguları korunma motivasyonu ölçeğinin (Bashirian, ve diğerleri, 2020; Khazaee-Pool, Shahrousvand, & Naghibi, 2020) yapı geçerliliğine destek sunmaktadır. Model testi sonuçlarına göre, algılanan şiddet, dışsal tepki etkinliği ve öz yeterlilik korunma niyetiyle ilişkilidir. Algılanan hassasiyet ve içsel tepki etkinliğinin ise korunma niyetiyle anlamlı bir ilişkileri yoktur. Bu bulgulara göre COVID-19 kaynaklı sağlık sorunlarının şiddetinin arttığına yönelik algı, bireylerin korunma niyetlerini de artırmaktadır. Ayrıca geçmiş çalışmalarda tepki etkinliği tek bir boyutta ele alınmasına karşın mevcut çalışmada bireylerin bu boyuttaki değerlendirmelerinin farklılaştığı görülmektedir (Zhang, ve diğerleri, 2017; Hsieh, Chen, & Wang, 2021). Bu durum COVID-19 ile ilgili korunma davranışlarının bireyin kendisi kadar başkalarıyla da ilgili olmasından kaynaklanabilir. Bir diğer ifadeyle bireyler koronavirüsten korunmaya yönelik tepkilerin etkin olmasında hem korunmaya yönelik doğrudan kendileriyle ilgili dezenfekte etme temelli eylemlerin (iç tepki etkinliği) hem de diğer bireylerle bir arada bulunulan ortamlardaki hijyen önlemlerinin (dış tepki etkinliği) rolü olduğuna ilişkin değerlendirmelerde bulunmuşlardır. Buna göre özellikle dış tepki etkinliği ile korunma niyeti arasında bir ilişki olduğu ancak iç tepki etkinliği ile korunma niyeti arasında bir ilişki olmadığı sonucuna ulaşılmıştır.

**Çalışma 2**

İlk çalışmada korunma motivasyonu faktörleriyle korunma niyeti arasındaki ilişki tespit edilmiştir. İkinci çalışmanın amacı deneysel tasarım ve gruplar arası desen yardımıyla mesajlardaki çekicilik unsurlarının, korunma motivasyonu kapsamındaki alt boyutlar üzerindeki etkisini tespit etmektir. Dolayısıyla, korunma niyetini etkileyen motivasyon faktörlerini harekete geçirmede, mesajlardaki çekicilik unsurlarının etkisi araştırılmıştır.

**Katılımcılar**

Ekim 2021-Ocak 2022 tarihleri arasında toplamda 255 katılımcı araştırmaya dahil olmuştur. Görsel uyaran gösterimi sonrasında uygulanan anket içerisindeki dikkat sorularını hatalı cevaplayan ve manipülasyon kontrolünü geçemeyen katılımcıların cevaplarıyla birlikte eksik ve hatalı cevaplar dışarıda bırakılmış, toplamda 180 katılımcının cevapları analize dahil edilmiştir.

Katılımcıların demografik özellikleri incelendiğinde, 104 tanesinin kadın (%57,8), 75 tanesinin erkek (%41,7) olduğu ve 1 katılımcının ise cinsiyetini belirtmediği görülmektedir. Katılımcıların yaş aralığı 17 ve 24 arasındadır (*Ort.* = 20, *S* = 1.36). Katılımcıların ailelerinin aylık ortalama geliri 5.500 TL olarak elde edilmiştir. Koronavirüs ile ilgili kritik olduğundan ve konu hakkındaki düşüncelerini etkileme ihtimali bulunduğundan, katılımcılara kronik rahatsızlığa sahip olup olmadıkları, kendilerinin ya da birinci derece yakınlarının koronavirüs geçmişi olup olmadığı ve aşı geçmişleri sorulmuştur. Alınan yanıtlara göre, katılımcıların 16 tanesinin (%8,9) kronik rahatsızlığı bulunmakta olup, 19 katılımcı (%10,6) kendisinin, 65 katılımcı (%36,1) ise birinci derece yakınlarından koronavirüse yakalanan olduğunu belirtmişlerdir. Ayrıca katılımcılardan 1 tanesi hariç tamamı koronavirüs aşısı olduklarını ifade etmişlerdir.

### Prosedür

Çalışma, İzmir Bakırçay Üniversitesi Nörobilim ve Bilişsel Araştırmalar Uygulama ve Araştırma Merkezinde İzmir Bakırçay Üniversitesi lisans öğrencileri ile gerçekleştirilmiştir. Katılımcılar, deneysel tasarım kapsamında belirtilen koşullara rassal olarak atanmıştır. Bu çalışmanın etik kurallara uygunluğu, İzmir Bakırçay Üniversitesi Girişimsel Olmayan Klinik Araştırmalar Etik Kurulu tarafından 29.01.2021 tarihli ve 178 sayılı kararla onaylanmıştır.


**Görsel 1.** Korku Çekiciliğine Yönelik Mesaj İçeren Görsel


**Görsel 2**. Rasyonel Çekiciliğe Yönelik Mesaj İçeren Görsel

Deney başlamadan önce katılımcılar gönüllü katılım formunu okumuş ve araştırmaya dahil olmak isteyenler formu imzalamıştır. Ardından deney için belirlenen koşullara katılımcıların rassal ataması gerçekleştirilmiştir. Deney tasarımında dört koşul yer almaktadır. Bunlardan ilki korku çekiciliği temalı COVID-19 görselinin kullanıldığı (Görsel 1; n=36), ikincisi rasyonel çekicilik temalı COVID-19 görselinin kullanıldığı (Görsel 2; n=30), üçüncüsü afişin diğer unsurlarının aynı kaldığı ancak diğer afişlerde çekicilik ifadelerinin yer aldığı kısmın boş bırakıldığı bir görselin kullanıldığı (Görsel 3; n=51) ve sonuncusu da herhangi bir görselin kullanılmadığı kontrol koşuludur (n=63). Çekicilik ifadeleri, literatürdeki geçmiş çalışmalardan ve araştırmacıların görüş birliğiyle hazırlanmıştır. Ayrıca, manipülasyon kontrolüne yönelik sorular yardımıyla da kontrol edilmiştir. Buna benzer manipülasyon uygulamaları literatürdeki benzer çalışmalarda farklı bağlamlarda sıklıkla kullanılmaktadır (Gerçek & Doğan, 2012; Sciulli, Bhagat, & Bebko, 2012). Bunun dışında kontrol koşulunda yer alan bireyler doğrudan korunma motivasyonu ölçeğini cevaplamıştır.


**Görsel 3.** Mesaj İçermeyen Görsel

Katılımcılar, Araştırma Merkezi Laboratuvarındaki bilgisayar ekranının karşısında konumlandırılmıştır. Katılımcılara, deney süreci hakkında genel bilgilendirme yapılmış ve uyaran gösterimi gerçekleştirilmiştir. Görsel uyaranlar, bilgisayar ekranında 20 saniye boyunca gösterilmiştir. Uyaran gösteriminin tamamlanmasının ardından katılımcılardan demografik ifadelerin ve COVID-19 korunma motivasyonu ölçeğinin yer aldığı anketi doldurmaları istenmiştir. Katılımcılara, gerçekleştirilen deney hakkında bilgi verildikten sonra teşekkür edilerek deney sonlandırılmıştır.

## Ölçme Araçları

### Korunma Motivasyonu Ölçeği

Çalışma 1'de yapı geçerliliği sınanmış olan Korunma Motivasyonu Ölçeği kullanılmıştır. Ölçek maddeleri kesinlikle katılmıyorum (1), kesinlikle katılıyorum (5) olmak üzere 5'li likert aracılığıyla 5'li Likert ölçek üzerinden yanıtlanmaktadır. COVID-19 ile ilgili genel değerlendirmeler 8 ifadeyle ve demografik yapı 3 ifadeyle ölçülmüştür.

Çalışma kapsamında dikkatsiz katılımcıları tespit etmek amacıyla iki adet dikkat sorusu eklenmiştir (Bkz. Bu maddeyi okuduğunuzu göstermek için lütfen "(2) Katılmıyorum" seçeneğini işaretleyiniz).

### Manipülasyon Kontrolü

Ayrıca deneysel tasarım kapsamında, manipülasyon kontrolü amacıyla katılımcıların gördükleri uyarana ilişkin iki adet soru sorulmuştur: "Gördüğünüz afişte ne tür ifadeler yer almaktadır?" ve "Gördüğünüz afişte yer alan maske hangi renktedir?". Dikkat sorularını ve manipülasyon kontrolü amacıyla sorulan soruları doğru cevaplayamayan katılımcıların cevapları analize dahil edilmemiştir.

### Veri Analizi

Analizler, katılımcıların korunma motivasyonuyla ilgili boyutlara verdikleri cevaplar arasında koşullar arasında bir farklılık olup olmadığını belirlemek amacıyla gerçekleştirilmiştir.

### Bulgular

Araştırma kapsamında oluşturulan Hipotez 2'yi test etmek amacıyla gruplar arası karşılaştırma analizleri ile yürütülmüştür. Korunma motivasyonu boyutlarının koşullara göre değişip değişmediğini ölçmek için bağımsız tek yönlü ANOVA yürütülmüştür. Levene test sonuçları, algılanan şiddet ($F$ (3,176) = .92, $p$ = .44), algılanan hassasiyet ($F$ (3,176) = .82, $p$ = .49), öz yeterlilik ($F$ (3,176) = .47, $p$ = .71), içsel tepki etkinliği ($F$ (3,176) = .38, $p$ = .77), dışsal tepki etkinliği ($F$ (3,176) = .94, $p$ = .42) ve korunma niyeti ($F$ (3,176) = .44, $p$ =.73) boyutlarında grup varyanslarının birbirinden anlamlı şekilde farklılaşmadığını göstermektedir. Sonuçlara göre algılanan şiddet için gruplar arası fark istatistiksel olarak anlamlıdır ($F$ (3,176) = 2.86, $p$ < .05, $\eta p2$ = .05). Bonferroni ile yapılan karşılaştırma sonuçlarına göre, korku koşulundaki katılımcıların algılanan şiddet ortalamaları (*Ort.* = 4.05, *SS* = .85), kontrol koşulundaki katılımcıların ortalamalarından (*Ort.* = 3.51, *SS* = .99) anlamlı olarak yüksektir ($p$< .05, GA, 0.02, 1.05). Korku koşulundaki katılımcıların algılanan şiddet ortalamaları ile rasyonel koşulundaki katılımcıların ortalamaları ($p$=.23, GA, – 0.13, 1.09) ve boş afiş katılımcıların ortalamaları arasında fark yoktur ($p$=.11, GA, – 0.06, 1.02).

**Tablo 3:** Mesaj Çekiciliği Gruplarına göre Korunma Motivasyon Boyutlarının Farklılaşıp Farklılaşmadığını İnceleyen Tek Yönlü ANOVA Sonuçları

| | Korku Afişi | | Rasyonel Afiş | | Boş Afiş | | Kontrol | | *F*(3,176) | *ηp2* |
|---|---|---|---|---|---|---|---|---|---|---|
| | *Ort.* | *SS* | *Ort.* | *SS* | *Ort.* | *SS* | *Ort.* | *SS* | | |
| Algılanan Şiddet | 4.05b | .85 | 3.57a | .89 | 3.56a | .92 | 3.51a | .99 | 2.86* | .05 |
| Algılanan Hassasiyet | 4.76 | .56 | 4.62 | .68 | 4.78 | .41 | 4.64 | .69 | .85 | .01 |
| Öz Yeterlilik | 3.69 | .93 | 3.63 | .92 | 3.40 | .85 | 3.49 | .94 | .86 | .01 |
| İçsel Tepki Etkinliği | 3.71 | .95 | 3.52 | 1.05 | 3.64 | 1.06 | 3.71 | .96 | .29 | .01 |
| Dışsal Tepki Etkinliği | 4.48 | .70 | 4.40 | .66 | 4.48 | .52 | 4.45 | .74 | .10 | .00 |
| Korunma Niyeti | 2.92 | 1.13 | 2.66 | 1.10 | 2.46 | .97 | 2.56 | .99 | 1.51 | .03 |

*Not.* Ortalamaların üzerindeki farklı üst simgeler anlamlı farklılığa işaret etmektedir $p$ <.05

Korunma motivasyonun diğer boyutları ile yürütülen analiz sonuçlarında, koşullar arası farkın algılanan hassasiyet ($F$ (3,176) = .85, $p$ = .47), öz yeterlilik ($F$ (3,176) = .86, $p$ = .47), içsel tepki etkinliği ($F$ (3,176) = .29, $p$ = .84), dışsal tepki etkinliği ($F$ (3,176) = .10, $p$ = .96) ve korunma niyeti ($F$ (3,176) = 1.51, $p$ = .21) için anlamlı olmadığı tespit edilmiştir.

## Tartışma

Bu çalışmada, deneysel tasarım ve gruplar arası desen aracılığıyla mesajlardaki çekicilik unsurlarının, korunma motivasyonu kapsamındaki boyutlar üzerindeki etkisine odaklanılmıştır.

Çalışmanın bulgularına göre korunma motivasyonu boyutlarından yalnızca algılanan şiddet için gruplar arasında istatistiksel olarak anlamlı bir fark olduğu sonucuna ulaşılmıştır. Farklılığın, korku çekiciliği boyutundan kaynaklandığı anlaşılmaktadır. Buna göre korkuya yönelik ifadelerin, istatistik ve kurumlara vurgu yapan ifadelere kıyasla bireylerin COVID-19 ile ilgili algıladıkları tehdidin şiddetine daha fazla etki ettiği ifade edilebilir. Bu bulgular, korkunun COVID-19 özelinde karşılık bulması (Van Bavel, ve diğerleri, 2020; Harper, Satchell, Fido, & Latzman, 2020) ve ilgili dönemde koronavirüsün beraberinde getirdiği belirsizliklerle ilişkili olabilir.

## Sonuç

Bu çalışmada, bireylerin korunma niyetini etkileyen motivasyon faktörlerini belirlemenin yanında, korku çekiciliği ve rasyonel çekicilik unsurlarına sahip görsel iletişim mesajlarının bireylerin korunma niyetleri üzerindeki etkisinin belirlenmesi amaçlanmıştır. Araştırmanın amaçlarına ulaşabilmek amacıyla iki ayrı çalışma tasarlanmıştır. İlk çalışmada, çevrim içi anket aracılığıyla öğrencilerin korunma niyetini etkileyen motivasyon faktörleri belirlenmiş ve model testi gerçekleştirilmiştir. İkinci çalışmada ise deneysel tasarım ve gruplar arası desen yardımıyla mesajlardaki çekicilik unsurlarının, korunma motivasyonu boyutları üzerindeki etkisine odaklanılmıştır.

Kesitsel nitelikteki ilk çalışmanın sonuçlarına göre, algılanan şiddet, dışşal tepki etkinliği ve öz yeterlilik korunma niyetiyle ilişkilidir. Algılanan hassasiyet ve içsel tepki etkinliğinin ise korunma niyetiyle anlamlı bir ilişkileri yoktur. Geçmiş çalışmalar incelendiğinde Okuhara ve arkadaşları bu çalışmanın bulgularına kısmen benzer şekilde yalnızca algılanan şiddet ve öz yeterlilik boyutlarının korunma niyetiyle ilişkili olduğu sonucuna ulaşmıştır (Okuhara, Okada, & Kiuchi, 2020). Genel itibariyle değerlendirildiğinde ise algılanan hassasiyet, algılanan şiddet, tepki etkinliği ve öz yeterlilik alt boyutlarının her birinin korunma niyetiyle ilişkili olduğunu tespit eden çalışmalar da mevcuttur (Mortada, Abdel-Azeem, Al Showair, & Zalat, 2021; Rad, ve diğerleri, 2021).

Bu durum, çalışmaların farklı coğrafyalarda, sağlık çalışanları gibi farklı örneklem gruplarında ve koronavirüs vaka sayılarının yoğunluğu ile ilişkili olarak farklı zamanlarda yapılmasından kaynaklanıyor olabilir. Ayrıca pandeminin seyrinin ve ülke genelinde alınan önlemler ile izlenen stratejilerin de korunma motivasyonlarıyla ilgili farklı bulgulara bir gerekçe olarak gösterilmesi mümkündür. Araştırma bulguları doğrultusunda, korunma motivasyonu ile ilgili literatürdeki benzer çalışmalardan farklı olarak koronavirüs bağlamında tepki etkinliğinin iki alt boyutta değerlendirilebileceği yaklaşımı, sonraki çalışmalarda da üzerinde durulması gereken bir konu olarak değerlendirilebilir. Bu bağlamda, bireylerin COVID-19 pandemisinin şiddetini yüksek (algılanan şiddet), ilgili tedbirleri uygulayacak yeterliliğe sahip (öz yeterlilik) ve koruyucu tepkilerinin ise salgını önlemede etkin (tepki yeterliliği) olduğu algısının güçlendirilmesi gerekmektedir.

İkinci çalışmanın en temel bulgusu ise korku çekiciliğine yönelik iletişim mesajlarının, rasyonel çekiciliğe yönelik iletişim mesajlarına kıyasla COVID-19'a yönelik algılanan şiddet üzerinde daha etkili olduğudur. Koşullar arasındaki farklılığın, korku çekiciliğine yönelik iletişim mesajından kaynaklandığı anlaşılmaktadır. Bu bulgular, korkunun COVID-19 bağlamında özellikle karşı karşıya olunan belirsizlik nedeniyle en baskın duygulardan biri olması (Van Bavel, ve diğerleri, 2020; Harper, Satchell, Fido, & Latzman, 2020) ile ilişkilendirilebilir. Ayrıca mevcut çalışmanın bulguları, çekicilik unsurlarını karşılaştırmalı olarak değerlendiren ilgili literatürde korku çekiciliğinin rasyonel çekiciliğe kıyasla tutum ve davranışlar üzerinde daha güçlü bir etki yarattığına yönelik bulgularla da (Slovic, Finucane, Peters, & MacGregor, 2004; Studts, Ruberg, McGuffin, & Roetzer, 2010) tutarlıdır. Bulgular, COVID-19 özelinde algılanan şiddetin vurgulanmasının faydalı olabileceği görüşü de dikkate alındığında (Okuhara, Okada, & Kiuchi, 2020) önemli görünmektedir.

Çalışmada, korunma motivasyonu boyutlarından yalnızca algılanan şiddet için gruplar arasında istatistiksel olarak anlamlı bir fark olduğu sonucuna ulaşılmıştır. KMT'nin beklentileri (Rogers, 1975; Rogers, 1983) ile tutarlı şekilde, çekicilik unsurları kullanılarak verilen mesajların başa çıkmaya yönelik değerlendirmelerden ziyade tehdide yönelik değerlendirmeler (şiddet ve hassasiyet) üzerinde bir etki yaratması daha muhtemel görünmektedir. Bu çalışmada da korku çekiciliği, rasyonel çekiciliğe kıyasla tehdide ilişkin değerlendirmelerden biri olan algılanan şiddet üzerinde etkili olmuştur. Ancak korku çekiciliğinin, tehdide ilişkin değerlendirmelerden diğeri olan algılanan hassasiyet üzerinde rasyonel çekicilikten daha güçlü bir etkisinin olmaması da ilgi çekicidir. Bu durum, araştırmanın COVID-19'un ve etkilerinin güçlü bir şekilde seyrettiği dönemde gerçekleştirilmesiyle ilgili olabilir. Böyle bir dönemde, tüm katılımcılar maruz kaldıkları iletişim mesajlarından bağımsız yüksek hassasiyete sahip olabilir. Benzer şekilde, korunma niyeti açısından da koşullar arasında farklılık olmaması, ilgili dönemde korunma davranışına yönelik niyetin zaten güçlü olmasıyla ilişkili olarak açıklanabilir.

İki farklı mesaj içeriğinin korunma motivasyonu boyutları üzerinde etki yaratmaması, rasyonel ve duygusal içerikli Kızılay reklam afişlerinin katılımcıların kan bağışında bulunup bulunmamalarında bir farklılık yaratmaması (Aytekin & Yakın, 2015) ile tutarlıdır. Ayrıca duygusal çekiciliğin ya da rasyonel çekiciliğin daha etkili olması durumu konuya, bağlama ve ürüne göre de değişiklik gösterebilmektedir (Liebermann & Flint-Goor, 1996; Zhang, Sun, Liu, & Knight, 2014). Çalışma bulguları ışığında, korku çekiciliğinin algılanan şiddet boyutu üzerindeki etkisi görülmektedir.

Diğer taraftan, bulguları tartışırken araştırmanın gerçekleştirildiği bağlamın göz önünde bulundurulması gerekmektedir. Korku çekiciliğinin, algılanan şiddet üzerindeki etkisi koronavirüsün beraberinde getirdiği belirsizliklerle ilişki olabilir. Hastalığın ve bu hastalık sonucundaki uzun vadeli sağlık durumlarının belirsizliği nedeniyle COVID-19 ile ilgili algılanan şiddet, korku duygusuna yönelik ifadelerle daha da güçlenmiş olabilir. Zira literatürde belirsizliklere dayalı olarak korkunun ve korunma motivasyonunun arttığına dair bulgulara ulaşan başkaca çalışmalar da bulunmaktadır

(Papageorge, ve diğerleri, 2021). Sonuç itibariyle iletişim mesajlarında korku unsurlarına yönelik içeriklerin kullanılmasının araştırmanın gerçekleştirildiği bağlam için daha etkili olduğu anlaşılmaktadır.

Korku çekiciliği görsellerinde, korku unsurunun yanı sıra çözüm odaklı mesajın aktarılması, bireylerde korku uyandırmayla birlikte kendilerini ve toplumu koruyabilmelerinin olasılığını aktarmalıdır (Demirtaş Madran, 2021). Mevcut çalışmada, tüm görsellerde bu husus, önleyici tedbirlerin (maske, mesafe, hijyen) görselin orta alt bölüme yerleştirilmesiyle aktarılmıştır.

Mevcut çalışma bulguları çalışmanın sınırlılıkları bağlamında dikkatle yorumlanmalıdır. İlk olarak, birinci çalışma veri toplama aşamasında ortak bir yöntem olarak öz bildirimin kullanılması, buna karşın ölçümlerde zamansal uzaklaştırmamaya gidilmemesi nedeniyle ortak yöntem yanlılığı sınırlılığından bahsedilebilir. Mevcut çalışmada, korunma motivasyonu ölçeğinin faktör yapısı test edilmiş ancak ölçeğe ait kriter geçerliliği ve örtüşen/ayırt edici geçerlilik testleri yürütülmemiştir. Mevcut çalışma kapsamında yer almayan psikometrik testlerin, ileriki çalışmalarda göz önünde bulundurulması önerilir. EFA ve CFA analizlerinin yürütüldüğü birinci çalışma örneklem büyüklüğünün görece düşük olması çalışma sınırlılıkları arasında yer almaktadır.

Bununla beraber, çalışmada COVID-19'dan korunma niyetinin, sağlık okur yazarlık düzeyi, politikacılara ve bilim insanlarına güvensizlik gibi başkaca kişisel ve tutumsal yordayıcıları araştırmaya dahil edilmemiştir. Bu faktörlerin incelediğimiz değişkenlerle ilişkisi araştırılmaya değer bir husus olarak görülmektedir. Gelecekte gerçekleştirilecek çalışmaların, korunma motivasyonunun araştırmamızda ele alınan faktörlere ek olarak başkaca kişisel, kültürel ve demografik faktörlerle nasıl etkileşeceğini incelemesi araştırmanın bulgularını farklı bağlamlar için genişletmek ve bulgular temelinde toplumsal düzeyde mesaj içeriklerinin kurgulanması adına önem taşımaktadır.

Sözü edilen sınırlılıklarla beraber bu çalışmanın bulguları, tüm dünyayı etkileyen pandemi koşulları göz önüne alındığında Türkiye bağlamını ve gençlerin korunma motivasyonlarını anlamaya odaklanması nedeniyle önemli görülmektedir. Bulgular, toplum sağlığını tehdit eden olumsuzluklara yönelik iletişim süreçleri açısından korku unsuruna dikkat çekmektedir ve çalışmanın benzer dönemler için faydalı olacağı ifade edilebilir.

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# Factors Affecting Protection Motivations and the Role of Message Appeal: A Research in the Context of COVID-19

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## Introduction and Purpose

Public perceptions of personal and societal risk factors are crucial in controlling the spread of infectious diseases (Dryhurst et al., 2020). The Protection Motivation Theory (PMT) explains behavior change in response to threats (Rogers, 1975; Rogers, 1983; Floyd et al., 2000). The PMT is relevant for examining individuals' choices during the COVID-19 pandemic. Studies show that perceived severity, vulnerability, self-efficacy, and response efficacy affect protection motivation (Al-Hasan et al., 2020; Ezati Rad et al., 2021; Kowalski & Black, 2021).

Limited research has explored the impact of message content on motivation for protective behaviors despite COVID-19 campaigns (Demirtaş Madran, 2021). Campaign messages reflect emotional and informational/functionality elements (Kim et al., 2020; Lindauer et al., 2020). These elements have varying associations with health behaviors (Studts et al., 2010).

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**Received Date:** 02.06.2023 **Accepted Date:** 02.10.2023

No experimental studies have investigated how COVID-19 communication tools using fear or rational appeal elements affect protection motivation. This study aims to identify motivational factors influencing protective intentions and assess the impact of visual communication messages containing fear and rational appeal elements on motivation to protect.

## Literature Review and Hypothesis

According to the Protection Motivation Theory (PMT) proposed by Rogers (1983), an individual's motivation to protect themselves is determined by their assessment of the threat mechanisms (perceived severity and perceived vulnerability) and their assessment of coping mechanisms (self-efficacy and response efficacy). Higher levels of perceived severity, perceived vulnerability, and response efficacy are associated with engaging in protective behaviors against infectious diseases (Bish & Michie, 2010).

Research by Williams et al. (2015) found that self-efficacy and response efficacy are linked to the adoption of social distancing behaviors, supporting the PMT framework. Similarly, studies examining the COVID-19 pandemic have shown that PMT explains the adoption of protective measures (Bashirian et al., 2020; Ezati Rad et al., 2021). The motivation to protect against COVID-19 is associated with engaging in protective behaviors, and the appraisal of threats and coping mechanisms explain this motivation (Bashirian et al., 2020).

*Hypothesis 1: Perceived vulnerability (H1a), perceived severity (H1b), self-efficacy (H1c), and response efficacy (H1d), which are sub-dimensions of protection motivation, have a positive relationship with the intention to protect against coronavirus.*

Studies have categorized communication message elements into two main types: emotional appeal and rational appeal (Kim, Jeon, & Lee, 2020; Lindauer et al., 2020; Studts et al., 2010). Emotional appeal messages evoke positive emotions like love, joy, and humor, or negative emotions such as fear and guilt. Rational appeal messages, on the other hand, rely on detailed information, logical inferences, and arguments (Zhang, Sun, Liu, & Knight, 2014).

Fear has been identified as one of the dominant emotions during the COVID-19 pandemic (Van Bavel et al., 2020), and fear appeal has been recognized as an effective strategy in public health campaigns for promoting health behaviors (Witte & Allen, 2000). Additionally, numerical information, such as the rate of spread, new cases, total cases, and total deaths, has been shared through the media during the pandemic (Anwar, Malik, Raees, & Anwar, 2020). Therefore, messages containing statistical and numerical information have been used to encourage individuals to adopt protective behaviors alongside fear-inducing messages.

Given that fear is a prominent emotional reaction during the pandemic and is associated with the implementation of individual protective measures (e.g., social distancing and hand hygiene) (Harper, Satchell, Fido, & Latzman, 2020), it is expected that fear appeal would have a stronger impact on the dimensions of protection motivation compared to rational appeal in the context of the COVID-19 pandemic.

*Hypothesis 2: Fear appeal messages are more effective on perceived vulnerability (H2a), perceived severity (H2b), self-efficacy (H2c), response efficacy (H2d), and protection motivation (H2e) than rational appeal messages.*

## Design and Methodology

Two studies were conducted to achieve the research objectives. The first study involved students and utilized a simple random sampling method. It employed a cross-sectional design and collected data through a questionnaire. A total of 787 individuals participated in the online survey, and analyses were performed on 347 valid responses. To examine the factor structure of the motivation to protect scale, the study sample was randomly divided into two groups (n1=174 and n2=175). Exploratory Factor Analysis was conducted in the first sample using SPSS 22, while Confirmatory Factor Analysis was performed in the second sample using AMOS. Path analysis in AMOS was employed to test Hypothesis 1.

The second study also involved students as participants. After obtaining voluntary consent, participants were randomly assigned to one of four experimental conditions. The first condition used a COVID-19 image with a fear appeal theme (n=36), the second condition used a COVID-19 image with a rational appeal theme (n=30), the third condition kept the other elements of the poster consistent but left the appeal statements blank (n=51), and the control condition had no visual stimuli (n=63). The appeal statements were developed based on prior studies and researcher consensus. Manipulation check questions were included, following similar practices found in the literature (Gerçek & Doğan, 2012; Sciulli, Bhagat, & Bebko, 2012). Individuals in the control condition directly responded to the protection motivation scale.

## Results and Conclusions

According to the results of the first cross-sectional study, perceived severity, external response efficacy, and self-efficacy are significantly related to protection intention, while perceived vulnerability and internal response efficacy do not show a significant relationship. These findings partially align with the study by Okuhara et al., which found that perceived severity and self-efficacy are related to protection intention (Okuhara, Okada, & Kiuchi, 2020). Other studies have also found that perceived sensitivity, perceived severity, response efficacy, and self-efficacy are related to protection intention (Mortada, Abdel-Azeem, Al Showair, & Zalat, 2021; Rad, et al.).

The second study's main finding is that fear appeal communication messages have a stronger impact on the perceived severity towards COVID-19 compared to rational appeal messages. This difference is primarily driven by the fear appeal messages, which may be attributed to fear being a dominant emotion during the COVID-19 pandemic, particularly due to the uncertainty involved (Van Bavel, et al., 2020; Harper, Satchell, Fido, & Latzman, 2020). These findings align with previous literature indicating that fear appeal has a greater influence on attitudes and behaviors compared to rational appeal (Slovic, Finucane, Peters, & MacGregor, 2004; Studts, Ruberg, McGuffin, & Roetzer, 2010).

This study's significance lies in its focus on understanding the motivations for protection among young people in the Turkish context during the global pandemic. The findings highlight the importance of fear as a communication element in addressing public health threats, and the study's results can be valuable for similar periods.

Türkiye İletişim Araştırmaları Dergisi / Turkish Review of Communication Studies • Yıl/Year: 2023 • Sayı/Issue: Özel Sayı/Special Issue
ss/pp. e74-98 • ISSN: 2630-6220 • DOI: 10.17829/turcom.1308973

**ARAŞTIRMA MAKALESİ / RESEARCH ARTICLE**

# A Research on Ceo Branding*

## Ceo Markalamaya Yönelik Bir Araştırma

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**Abstract**

"Personal branding" is a phenomenon that has attracted attention since it was first introduced by Tom Peters (1997). Starting from the assumption that every person is a "brand" with a value proposition, the concept of personal brand has expanded its scope over time and has created its own sub-types. The CEO brand is one of these subtypes. CEO branding means that the CEO can brand just like a product, service or institution. In this study, personal brand concepts and practices are analyzed on the axis of the CEO brand and on the basis of new media. The study was designed with a qualitative research method and was carried out using descriptive analysis. The sample of the research consists of CEO accounts that have accounts on LinkedIn. The sample of this study consists of 20 CEOs selected among "Turkey's 50 Most Admired CEOs" who were awarded the Golden Leader Awards in 2021 as a result of the research conducted by KREA. It is desired to explain the CEO brand through the analysis themes of the study. It is aimed to explain the CEO brand through the analysis themes of the study. These themes, adapted from İbicioğlu et al. (2014) are; image management, differentiation, positioning, and career interest become prominent as the main themes of the study. The sub-themes of the study were examined in detail as contextual richness, personal and professional development, personal qualities, distinctiveness, professional photographs, professional achievements and positive features,

* This study was supported by Ege University Scientific Research Projects Coordination Unit. Project Number: 23802.

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**Makale Geçmişi / Article History**
**Gönderim / Received:** 02.06.2023
**Düzeltme / Revised:** 10.08.2023
**Kabul / Accepted:** 11.09.2023

professional abilities, professional titles and duties, professional competence, and future goals. The aim of this study is to examine personal brand practices, CEO brands' use of new media within the scope of the determined sample and research, and to explain the appearance of CEO brands in new media in the context of personal brand with a descriptive analysis. With this analysis, it is aimed to provide a conceptual framework to the literature on the use of LinkedIn by CEO brands. Thus, it was desired to create a scope and definition area for personal branding and CEO branding, which is a relatively new topic in the field of communication studies. The methodology of this research is descriptive content analysis, which belongs to the qualitative research design. The qualitative data analysis program MAXQDA was used to evaluate the research data. Within the scope of the study carried out over MAXQDA, it has been determined that CEOs use new media effectively and carry out branding activities through new media. It has been found that this situation makes a positive contribution to the personal brands of CEOs and the brands of the institutions they work for. In other words, the results of this study create a sustainable CEO brand concept by displaying personal qualities parallel to the personal images of CEO brands and the images of institutions. It has been observed that the definition and scope of the CEO brand concept, the CEO branding process, and the vital importance of new media in the CEO branding process are as discussed in the literature.

**Keywords:** Brand, Personal Brand, CEO Brand, New Media, Linkedln

**Öz**

"Kişisel marka", Tom Peters (1997) tarafından ilk ortaya atıldığından itibaren ilgi çeken bir olgudur. Her insanın bir değer önermesine sahip bir "marka" olduğu varsayımından hareket eden kişisel marka kavramı, zamanla kapsamını genişletmiş ve kendi alt türlerini oluşturmuştur. CEO marka, bu alt türlerden biridir. CEO marka, bir şirketin en üst düzey yetkilisi olan CEO'nun; tıpkı bir ürün, hizmet ya da kurum gibi markalaşabileceği anlamına gelmektedir. Bu çalışmada kişisel marka kavram ve uygulamaları, CEO marka ekseninde ve yeni medya temelinde analiz edilmektedir. Çalışma kapsamında kişisel marka kavramından hareket edilerek CEO marka kavramına odaklanılmakta ve CEO markaların yeni medya kullanımları incelenmektedir. Çalışma ile alanyazında görece yeni bir nitelik arz eden kişisel marka kavramı üzerinden CEO marka ve CEO markalamaya ilişkin bir kapsam ve tanım alanı oluşturmak hedeflenmektedir. Çalışma, nitel araştırma yöntemiyle tasarlanmış olup betimsel analiz kullanılarak gerçekleştirilmiştir. Araştırmanın örneklemini, LinkedIn üzerinde hesabı bulunan ve doğrulanmış nitelik arz eden CEO hesapları oluşturmaktadır. Bu bağlamda KREA tarafından yapılan araştırma sonucunda Türkiye'nin en beğenilen 50 CEO'su arasından belirlenen ve 2021 yılında Altın Lider Ödülleri'ne layık görülen ve 20 CEO seçilmiştir. Araştırmanın temel sorunsalı, İbicioğlu vd. (2014)'ten uyarlanan analiz temaları üzerinden analiz edilmiştir. Çalışmanın ana temaları 'imaj yönetimi', 'farklılaşma', 'konumlandırma' ve 'kariyer ilgisi'; alt temaları ise 'bağlamsal zenginlik', 'kişisel ve mesleki gelişim', 'kişisel nitelikler', 'ayırt edicilik', 'profesyonel fotoğraflar', 'mesleki başarılar ve olumlu özellikler', 'mesleki yetenekler', 'mesleki unvan ve görevler', 'mesleki yeterlilik', 'gelecek hedefleri' olarak belirlenmiştir. Araştırma verilerinin değerlendirilmesinde, nitel veri analiz programı MAXQDA kullanılmıştır. Çalışma kapsamında CEO'ların yeni medyayı etkin bir şekilde kullandıkları ve yeni medya üzerinden markalama çalışmaları gerçekleştirdikleri tespit edilmiştir. Bu bağlamda CEO marka bileşenlerinin tümünün, CEO markalama sürecinde aktif olarak var olduğu ve CEO'lar tarafından yeni medyada kullanıldığı saptanmıştır. Çalışmada elde edilen bulguların uluslararası ve ulusal alanyazın ile paralellik gösterdiği görülmüştür. CEO marka kavramının tanım ve kapsamının, CEO markalama sürecinin, CEO markalama sürecinde yeni medyanın üstlendiği yaşamsal önemin alanyazında konu edildiği şekilde olduğu görülmüştür.

**Anahtar Kelimeler:** Marka, Kişisel Marka, CEO Marka, Yeni Medya, Linkedln

## Introduction

The concept of brand has taken on a quality that includes people with the expansion of meaning over time. This development, which corresponds to a "personal brand", means that people can become brands like products and services. Personal brand can be considered as an important opportunity for today's people, who struggle to exist in an intensely competitive business environment and who are constantly faced with the necessity of improving their competencies.

Brand and branding studies have a parallel operation with communication tools and techniques. In this context, new media brings a modern perspective to brand management. Contrary to traditional media, the new media, which has digital content and a more flexible nature, provides a new scope and application area to all known concepts and applications. This is because the unique dynamics of the new media are its benefits to the communication process.

This study aims to analyze CEO brand concepts and practices, which is a personal brand subtype, through new media. Within the scope of the study, first of all, a conceptual framework was put forward based on the literature. In the research part of the study, CEO brand concepts and practices were analyzed by content analysis method using the MAXQDA data analysis program on Linkedln, a professional business network and social sharing platform specific to new media.

This study aims to contribute to the literature in the field of CEO branding. In this context, the study is a continuation of the studies in this field and aims to add continuity to the literature (Bendisch et al., 2013; Fetcsherin, 2015; Taşkıran, 2017; Gürel & Arslan, 2020; Gürel & Arslan, 2021; Gürel et al. 2022; Gürel et al. 2023).

On the other hand, it is seen that the studies in the literature mainly focus on the marketing literature. This study, on the other hand, has an interdisciplinary nature and contributes to the fields of marketing, communication and social psychology. It is thought that the data obtained and the results obtained within the scope of the study will contribute to the literature in terms of "personal brand", "CEO brand" and "new media" studies, and will form a basis for subsequent studies. The project will also reveal usable information and data in terms of "business communication", "human resources" and "career management". Since the CEO brands to be examined within the scope of the research are specific to the Turkish business world, the project is also important in terms of creating a national profile on personal brand and CEO brand issues.

In addition, the study is in line with the United Nations – UN – Sustainable Development Goals (2022), 11th Development Plan (2019). In this context, the study is in line with the goals of supporting innovation and creativity in production and employment, which are included in Article 8 of the UN Sustainable Development Goals. In addition, the study is in harmony with the vision, main purpose and objectives of the 11th Development Plan.

## Conceptual Background

### CEO Brand

A brand, which forms the basis of production and marketing activities, is a name, term, word, symbol, design, sign, shape, color or combination of these, which is used to identify, promote and differentiate the products and services of one or a group of vendors from those of their competitors (Kotler & Armstrong, 1989, p. 248). A brand that expresses more than a product and service is the sum of values that create demand in the consumer and have the potential to provide retention and recognition beyond its tangible outputs.

In general terms, a brand is a reflection and concretization of all the features of a product or service, institution, or person. In other words, the brand as a product or service is a set of features that an institution or person has, and it serves to distinguish it from similar ones. Branding and branding are a result of an intensely competitive business environment. So much so that in today's world, the brand appears as a necessity and it becomes more and more difficult to sell an unbranded product.

Corporate brand, is a brand which is based on corporation, in other words, an organization. Organisation; is a formation that was established by people for a common purpose and has a common working order. In other words, a corporation is a structure that carries out planned and organized activities to meet human needs. Organisation can be private, public or not-for-profit. It is one of the most basic features of the institution that its framework is drawn and its boundaries are determined.

Personal brand, on the other hand, is a brand based on the person in the simplest terms. This type of brand, whose subject is a person, has emerged more recently than other types of brands. Although the idea that a person can become a brand just like a product and service is considered ironic and evaluated with a critical view, the personal brand has continued to arouse interest and develop as an agenda item since it was first put forward.

Although the CEO brand is under the concept of personal brand, it is also closely related to the concept of corporate brand in terms of its field of activity. CEO brand is positioned at the intersection of personal brand and corporate brand concepts and interacts with both brands.

CEO branding, in the simplest terms, is the process of creating a CEO brand. Just as being a CEO is a time and effort-consuming formation process, so is being a CEO brand. CEO branding does not happen spontaneously and by chance, as is the case with other types of brands. The returns promised by the CEO brand are realized in parallel with the CEO branding process.

CEO branding; is the process of building, managing, and maintaining a brand. The meaning and importance that organizations and the business world attribute to the concept of CEO is considered as an understanding of CEO branding. In this context, CEO branding draws attention as a developing area of marketing and brand literature (Fetscherin, 2015). The branding efforts of CEOs, who represent institutions in their relations with their target audiences with different characteristics, and who act as an intermediary in conveying the vision, mission, and philosophies of the institutions to their target audiences and in realizing the communication in this direction, appear as a necessity for today's business world and they can use their brand strategies effectively (Ramperstad, 2010; Taşkıran, 2017).

The Internet and new media have changed not only the communication process, but also business and the way work is done. The dynamics of today's business world are driven by the internet and new media. Therefore, the existence of CEOs in this environment and their effective use of this environment means a lot for themselves, their organizations, and the products and services they are responsible for.

To follow the agenda instantly and to be included in the agenda, to give sensitive messages to the target audience and society, to organize various events and to participate in various events; It is one of the factors that increase the brand values of CEOs. Research results on CEOs also confirm this discourse. According to a study by Brandfog (2013), more than 80% of CEOs believe that social media is an important platform to deepen ties with customers, employees and investors.

CEO branding studies can be carried out much more effectively through new media. The most important feature of the business world is its ability to adapt quickly to new developments. The CEO, who is the final decision maker of an organization, is the person who enables the organization to adapt to innovations and to exist in an intensely competitive environment. In this context, the CEO is able to realize and strategically manage the brand of the institution, the product and service brands within the institution, and the works related to his own personal brand through new media.

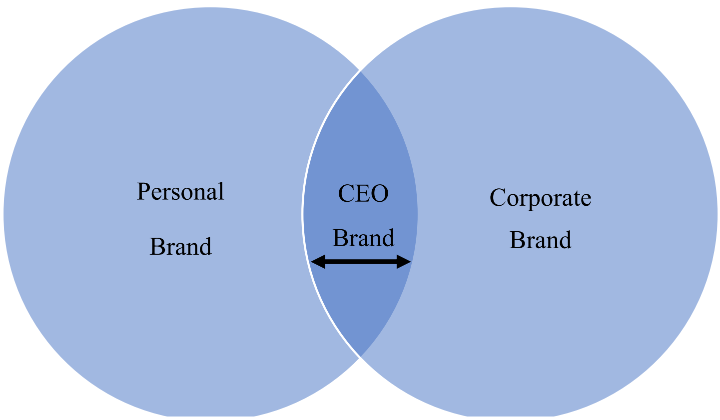


**Figure 1.** Scope of CEO Brand
**Source:** Developed by researchers using (Gürel et al., 2022, p. 732)

The CEO brand, which is essentially a personal brand, is fed by the corporate identity and supports the corporate identity. In this context, it is possible to state that the CEO brand is both influenced and influenced by the personal brand and the corporate brand. This scope is presented in Figure 1.

The CEO brand is a concept that promises great returns. It is possible to deal with the returns of the CEO brand within the CEO and the institution. The CEO brand distinguishes the CEO from his peers, enables him to perform his management and leadership duties more effectively, and enables the institution to receive the support of its employees and society more easily. From the point of view of the institution, the CEO brand differentiates the institution from its competitors, strengthens the product/service and corporate brand of the institution, contributes to the strategy of the institution, and increases the performance, profitability and brand value of the institution. In the context of all these benefits, the CEO brand promises an important competitive advantage for both the CEO and the institution.

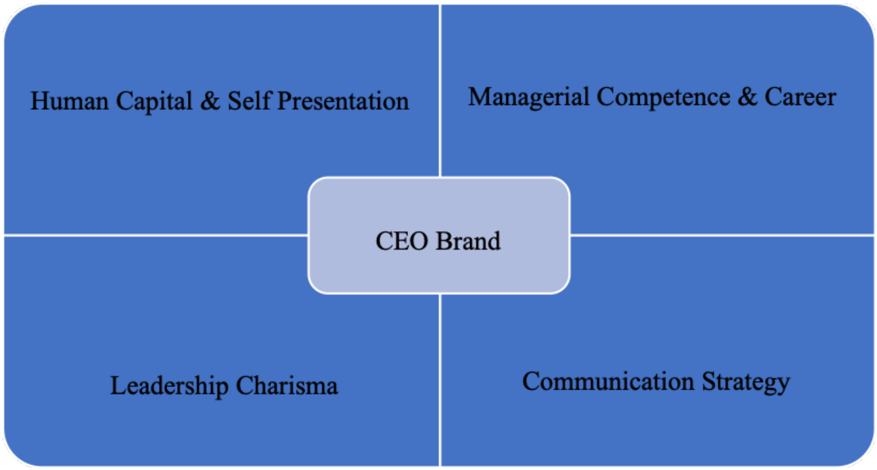


**Figure 2.** Components of the CEO Brand

**Source:** (Gürel et al., 2022, p. 733)

A CEO's personal brand includes individual personality traits, values, competence and leadership characteristics. These features also have an important effect on decision making, which is the main task of the CEO (Chen & Chung, 2017, p. 23). In parallel with this, CEO brand is a concept that has an interdisciplinary nature and consists of many components, as it is based on the concepts of both people and management and institution. It is possible to state that the CEO brand consists of the components of "human capital and self-presentation", "managerial competence and career", "leadership charisma' and "communication strategy" as seen in Figure 2.

The first of the four components of the CEO brand is expressed as "human capital and self-presentation". Human capital refers to the tangible and intangible competence and potential of the CEO. Self-presentation describes the CEO's effort to control the impressions of those they interact with.

Self-presentation and impression management are very important in terms of the corporate value created by the CEO. According to Godfrey et al. (2003), managerial impression management makes a great contribution to the CEO and the institution. In this context, managerial impression management is a branch of financial literature that includes managerial – institutional initiatives.

The second component of the CEO brand corresponds to "managerial competence and career". Managerial competence corresponds to the managerial competence and skills that the CEO possesses. Career describes the CEO's individual career management. In CEO brand formation, it is necessary to carry out and maintain the managerial competence and career of the CEO in a planned and programmed manner.

The third component of the CEO brand relates to the "leadership charisma". Leadership is one of the most fundamental duties of a CEO. In this sense, leadership charisma means that the CEO leads their subordinates, adds value to them as a human and employee, and directs them to a specific mission and vision.

The fourth and final component of the CEO brand corresponds to the "communication strategy". A CEO is in communication and interaction with the internal and external environment of the institution. The communication skills of the CEO, the effective use of communication tools and techniques, the ability to develop and maintain a communication strategy are very important in terms of CEO brand formation (Gürel et al., 2022).

When the conceptual background for the CEO is examined in the literature, it is seen that it is used with a marketing focus. With this study, the concept of CEO can converge to the field of social psychology. This is highlighted by the concept of CEO branding.

**CEO Branding Concept**

CEO branding is the process of creating, managing and maintaining a CEO brand. The meaning and importance that institutions and the business world attribute to the concept of CEO is considered as an understanding for CEO branding. In this context, CEO branding draws attention as a developing area of marketing and brand literature (Fetscherin, 2015). The branding efforts of CEO's, who represent institutions in their relations with their target audiences with different characteristics, and who act as an intermediary in conveying the vision, mission and philosophies of the institutions to their target audiences and in realizing the communication in this direction, appear as a necessity for today's business world and they can use their brand strategies effectively. use it in a way that is necessary (Ramperstad, 2010; Taşkıran, 2017).

In another study, each of the successful CEO brands: has a clear brand identity built on the harmony of human identity and executive identity; a strong CEO brand reputation built on human reputation and harmonious management reputation A clear fit between CEO brand identity and reputation produces a distinctive, differentiated CEO brand positioning that leads to CEO brand equity. These findings, together with the internalization of the CEO brand reputation values, enable the stakeholders to produce positive perceptions about the institution (Cottan-Nir & Lehman-Wilzig, 2018).

CEO branding means the management of corporate performance, corporate image and corporate reputation based on CEO brand components. Components that make up the CEO brand; It can affect corporate performance, corporate image and corporate reputation in a positive or negative way. For this reason, CEO brand components must be effectively managed and associated with corporate concepts and processes. The CEO branding process is presented in Figure 3.

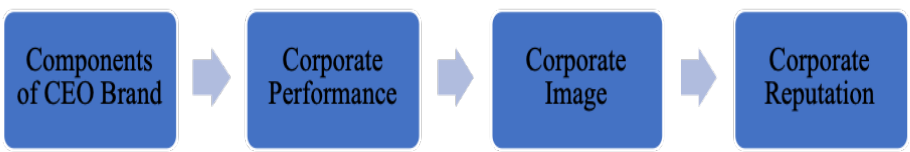


**Figure 3**. CEO Branding Process

**Source:** (Gürel et al., 2022, p. 734)

CEO branding is a set of planned efforts to influence people's and society's perceptions of the CEO. CEO branding is the process of taking corporate steps by moving from the CEO brand components. The corporate dimension of the CEO brand; corporate performance consists of the interaction and holistic synergy of corporate image and corporate reputation.

Institutional performance is a multidimensional concept that includes the success of an institution, in other words, the level of achievement of the institutions' goals. Performance, which is one of the most important parameters of an institution, consists of the results of all the activities carried out by the CEO for the institution.

Corporate image is the image that an institution creates in the minds of the target audience it wants to reach. The corporate image, which consists of the impressions, feelings, thoughts and perceptions of the internal and external customers of the institution, is formed as a result of the associations created by the CEO and attributed to the institution.

Corporate reputation defines the value an institution has in the eyes of the people and institution it is dealing with. Corporate reputation, which is the perception of an institution before its employees, customers and the public, consists of the material and moral capital of the CEO. As (Fombrun, 1996) stated, reputation is closely related to business results and financial values. So much so that it is not possible to survive and compete without 'reputation capital'.

**Use of New Media in CEO Branding**

Personal branding works, like other branding works, use communication tools and techniques intensively. In addition to this, new media has brought a new perspective to personal branding as well as the entire communication process. In today's world shaped by the effectiveness of the new media, visibility has begun to be accepted as the basic impulse of life and society. So much so that today, on the internet and search engines, it means "to exist".

Visibility is very important for personal branding and personal branding. New media is more suitable for personal branding than traditional media because it facilitates and increases visibility. It is possible to state that the relative importance of personal brand has increased in the digital age in parallel with the prevalence of new media. In line with this development, personal branding and personal branding are more closely associated with new communication technologies and the internet in today's world (Gürel & Arslan, 2021).

CEO branding studies can be carried out much more effectively through new media. The most important feature of the business world is its ability to adapt quickly to new developments. The CEO, who is the final decision maker of an institution, is the person who enables the institution to adapt to innovations and to exist in an intensely competitive environment. In this context, the CEO is able to carry out and strategically manage both the brand of the institution, the product and service brands within the institution, and the works related to their own personal brand through new media.

Participants who are in communication with their followers can apply the concept of personal brand to their lives and improve their skills in this field day by day (Hepekiz & Gökaliler, 2019).

Those who are in communication with their followers can apply personal brand concepts to their lives and develop them every day (Taşkıran, 2017).

To follow the agenda instantly and to be included in the agenda, to give sensitive messages to the target audience and society, to organize various events and participate in various events; it is one of the factors that increase the brand values of CEO's. Research results on CEO's also confirm this discourse.

When considered within the framework of leadership approaches, the use of new media in CEO branding studies ensures the realization of the 'open leadership' approach. Open leadership is a new media-based type of leadership. By using the new media, open leaders transform their institution and make them more effective, more determined and profitable.

Lee and Chen (2011) points out that being open to leaders requires more effort and determination than controlling. Being open is not a mantra or a philosophy, but a thoughtful, solid approach to strategy and leadership that brings real results. In this context, the effective use of new media by CEO's will create a competitive advantage in the digital and global economy by positively affecting their management styles.

**Purpose of the Research**

The aim of the research is to examine and explain personal brand concepts and practices through CEO brands' use of new media. Thus, it is aimed to create a scope and definition area for personal branding and CEO brand issues, which is a relatively new topic in the field of communication studies.

The starting point of the research is the lack of sufficient resources in the international and national literature on the concept and application of personal brand and CEO brand.

People can now carry out their personal branding work individually and instantly over these networks. With the start of personal branding studies on new media, it has become a prerequisite for politicians, leaders, celebrities, CEO's and digital influencers to receive professional support or training to create the desired effect (Chen, 2013; Karaduman, 2013; Khedher, 2014; Pawar, 2016).

In the light of these effects, the starting point of the research is to examine the new media use of CEO brands through their personal brands and practices. In accordance with this purpose, the research questions were determined as follows:

**Research Question 1:** What content and themes do CEO brands' LinkedIn profiles consist of?

**Research Question 2:** What are the personal branding components that CEO brands include in their LinkedIn profiles?

**Research Question 3:** What is the most emphasized concept of personal branding?

The research primarily aims to contribute to the literature in the field of communication studies and personal branding and to guide further studies.

Within the scope of the literature review carried out, no study examining CEO brand concepts and practices on LinkedIn could be found. With this study, it is aimed to obtain theoretical and applied information on the concepts of personal brand and CEO brand, and to bring a communication-oriented view to personal branding studies.

## Methodology

This Scientific Research Project, developed under the title "Personal Brand Concept and Application: A Research on New Media Use of CEO Brands", was carried out within Ege University. This project, which was accepted as a Rapid Support Project by the Ege University Scientific Research Commission with the project number 23802, was unanimously accepted by the Ege University Rectorate Commission on August 19, 2022. The interim report of the project was accepted on December 9, 2022. As the interim report output of the project, the authors produced two full-text proceedings. The final report of the project was accepted unanimously on June 1, 2023, and the commission decided to close the project.

The research was designed according to the qualitative research approach. Qualitative research is a research method that allows for in-depth examination and analysis of events, phenomena and situations in real environments (Golafshani, 2003). The purpose of choosing the research method as qualitative research is to examine, explain and exemplify the components that CEO's include for their personal brands and practices.

Descriptive analysis, one of the qualitative research methods, was used in the research. Descriptive analysis, in other words, systematic review is defined as descriptive expression of studies on a certain subject on the basis of determined criteria and contextual features (Greenhalgh, 1997).

The design of the research was determined as situation analysis. In the situation analysis process, all the factors related to the situation studied are investigated in detail, and how they affect and affect the situation is revealed. A person, an institution, a group, an environment can be shown as examples of situations to be studied (Yıldırım & Şimşek, 2016, p. 73).

The sampling method of the research was determined as 'criterion sampling' in accordance with the purpose of the study. Criterion sampling, which is one of the purposive sampling methods; It is expressed as the study of situations that meet one or more criteria predetermined by researchers by including them in the sample (Baltacı, 2018, p. 256).

The sample of the research consists of the first 20 CEO's among the "50 Most Admired CEO's of Turkey", who were awarded the Golden Leader Awards in 2021 as a result of the research conducted by KREA M.I.C.E. In this context, being in the top 20 in the "50 Most Admired CEO's" list and having a verified LinkedIn account were determined as criteria.

Information on CEOs and their use of new media, which constitutes the sample of the research, Table. It has been presented in 1.

**Table 1.** CEOs Who Formed the Sample of the Research

| CEO | Number of Connections / Followers |
|---|---|
| CEO 1 | 500 + |
| CEO 2 | 500 + |
| CEO 3 | 500 + |
| CEO 4 | 500 + |
| CEO 5 | 4 |
| CEO 6 | 500 + |
| CEO 7 | 500 + |
| CEO 8 | 500 + |
| CEO 9 | 90 |
| CEO 10 | 500 + |
| CEO 11 | 500 + |
| CEO 12 | 500 + |
| CEO 13 | 500 + |
| CEO 14 | 500 + |
| CEO 15 | 500 + |

The technological transformation has created a revolution in the field of communication, and the quality of being a public sphere attributed to the traditional media has been transferred to the new media (Çalışkan, 2014). Based on the general acceptance that social media is seen as a public space today, this research has been carried out by examining the contents of the posts that are open to all users. Regarding the ethical dimension of the study, the concept of personal data comes to the fore. Personal data is defined as “any information relating to an identified or identifiable person” in the Draft Law on the Protection of Personal Data dated 15/03/2013 (Oğuz, 2014). Accordingly, no data that will directly or indirectly point to any person or institution is shared within the scope of the research. This research, which does not contain the name of an institution or person, does not contain an ethical violation.

The most important criteria in the qualitative research process is to ensure the validity and reliability of the obtained data, data analysis and results (Baltacı, 2019) . For this reason, in order to ensure validity and reliability, a qualitative data analysis program was used in the research coding and analysis process, the research data were evaluated by more than one researcher and opinions were received from experts in the field.

The data collection process of the research was carried out in October 2022 within 14 days. Participants The data they shared publicly in this period in their LinkedIn profiles were encoded. Data, İbicioğlu et al. (2014), the personal branding scale was coded according to the themes and sub-themes created based on the categories. MAXQDA is a program that supports the analysis of qualitative and mixed data using a variety of approaches, including embedded theory, thematic analysis, discourse analysis, phenomenology, ethnography, content analysis, and more (Güven & Tekindal, 2022, p. 1).

Research scale used in the collection of research data consists of four themes: “image management”, “differentiation”, “positioning”, and “career interest”. The research scale was prepared based on the Personal Branding Scale prepared by İbicioğlu et al (2014). The researchers carried out the coding process of the first two CEOs together in accordance with the research calendar, and then continued independently, providing mutual control in the first and second weeks. In the coding process, no inconsistency was found by the researchers.

The “qualitative data analysis program” increases reliability in the coding and analysis process of data in studies designed according to the qualitative approach (Arastaman et al., 2018, p. 59). Qualitative data programs offer a variety of uses ranging from associating codes and themes, taking notes, quantifying qualitative data, and visualizing code distributions in order to transfer them to statistical software (Creswell & Clark, 2018, p. 258).

In order to ensure validity and reliability within the scope of the research, the qualitative data analysis program MAXQDA was used in the data coding and analysis process. In this context, the data coding and analysis process of the research was carried out by two different researchers.

‘Expert review’, is one of the measures to be taken by requesting feedback from people who have general knowledge about the researched subject and who are experts in qualitative research to examine the research process as a whole (Başkale, 2016, p. 24). Within the scope of the research, opinions about the research process were obtained from two experts who have field-specific studies.

In the coding made for the reliability calculation of the analysis results of the data coded by the researchers, the consistency between the coders was provided according to the Miles and Huberman approach. For this purpose, the total number of variables with consensus was divided by the total number of variables with consensus and disagreement and multiplied by 100 (Miles & Huberman, 1994), and inter-coder reliability data were obtained. As a result of the calculation, the reliability of the research data was determined as 99%.

The limitations of the research are that the data collection process covers only 14 days of October 2022 and only the LinkedIn profiles of CEOs are analyzed. For more general and interpretable findings, other social media applications and websites can be analyzed over a longer period of time.

## Findings of Analysis

The data collection process of the research was carried out in October 2022 within a 14-day period. The personal branding scale was coded according to the themes and sub-themes created on the basis of the categories.

**Table 2.** Theme Chart of the Research

| Theme | Sub-theme |
|---|---|
| **Image Management** | • Contextual richness<br>• Personal and professional development |
| **Differentiation** | • Personal qualities<br>• Distinctiveness |
| **Positioning** | • Professional photos<br>• Professional achievements and positive traits<br>• Professional abilities<br>• Professional title and duties<br>• Professional competence |
| **Career Interest** | • Future goals<br>• Education and career plans |

**Source:** Developed by the researchers using (İbicioğlu et al., 2014).

The theme chart used in the collection of research data consists of four themes: "image management", "differentiation", "positioning" and "career interest". The themes and sub-themes used in the research are presented in Table 2.

Descriptive analysis was used in the analysis of the research data. Descriptive analysis is the interpretation of data by coding within the scope of predetermined themes and categories. The descriptive analysis process consists of four stages. In this context, in the first stage of the analysis, it is determined under which category and sub-categories the research data will be processed. In the second stage, data is read, organized and coded in line with the thematic framework prepared. In the third stage, the findings coded in line with the thematic framework are defined and supported with quotations. At the last stage, the whole thematic framework is interpreted as a whole (Yıldırım & Şimşek, 2016).

Demographic findings related to the research were handled on the axis of "gender", "education" and "the sector in which they operate". When the CEO's who are the subject of the research are examined on the basis of gender, it is seen that men are more than women. In this context, five female CEO's were identified among the fifteen CEO's. This finding coincides with the fact that management is seen as a male profession. The literature and researches reveal that it is difficult for women to rise to senior management positions. So much so that this situation is expressed by the glass ceiling syndrome in the literature. The glass ceiling is a metaphor that describes the invisible and insurmountable obstacles that prevent female employees and employees belonging to minority groups from being promoted to senior management positions regardless of their success and merit (Gürel & Muter Şengül, 2012, p. 60).

When the CEO's who are the subject of the research are examined on the basis of education, it is seen that the CEO's with graduate education are relatively dense. In this context, six CEO's are undergraduates and eight CEO's are graduates. A CEO, on the other hand, did not include educational information in their LinkedIn profile.

When the undergraduate degrees of CEO's are examined, it is determined that ten CEO's are from economics and administrative sciences, three CEO's are from engineering and one CEO is from medicine. When the graduate degrees of the CEO's are examined, it has been determined that six CEO's specialize in business, one CEO specializes in finance, and two CEO's specialize in engineering. In parallel, it was seen that one CEO in the sample had a double master's degree in engineering and business administration, and four CEO's had their master's degrees abroad.

Within the scope of the research, it was also determined that the CEO's included the training programs they attended abroad under the title of education in their LinkedIn profiles. In this context, five CEO's received training on management and leadership abroad. These CEO's and the trainings they attended CEO 2, Stanford Universty Graduate School of Business (Executive Program in Leadership), CEO 3, INSEAD (Executive Management), CEO 4, Harvard Business School (Personal Leadership Program), CEO 10 (University of Chicago Booth School of Business Executive Education) can be summarized as CEO 15 (Singularity University, Executive Program).

According to the education category, the fact that CEO's include their educational backgrounds and details about their education in their profiles coincides with the CEO brand components. It is known that the training of CEO's directly affects many structures within the management function of the institution (Scheidt et al., 2018, p. 207). In this context, the fact that fourteen CEO's in the sample included educational information in their profiles is in line with the literature data.

When the research findings are analyzed on the basis of the sector in which they operate, it has been determined that the CEO's that are the subject of the research mainly work in the food/beverage sector. Five of the fifteen CEO's in the sample work in the food/beverage industry. The food/beverage sector is followed by the technology/informatics sector with two CEO's. Automotive, finance, textile and pharmaceutical sectors are among the other identified sectors. In this parallel, four of the CEO's that are the subject of the research are the CEO's of the holding, and eight CEO's work in global companies.

In the thematic analysis of the research findings, it was seen that all themes were used by CEO's. The general findings regarding the evaluation of the research are presented in Table 3 in the context of 'Theme 1', 'Theme 2', 'Theme 3' and 'Theme 4'. In this context, it was determined that CEO 1 and CEO 2 included information and shares on four themes in their LinkedIn profiles: image management, differentiation, positioning and career interest. The image management of CEO 3, CEO 7, CEO 14 and CEO 15 is explained by differentiation and positioning. It is about positioning and image management of CEO 4, CEO 6, CEO 8 and CEO 12 and differentiation and positioning of CEO 5. It has been determined that CEO 10 includes information and shares on image management, positioning, career interest, and CEO 9 and CEO 13 refer to the positioning themes. The findings of the relevant themes are explained in detail in the tables of the sub-themes.

**Table 3.** Evaluation of CEO Brands' Use of New Media According to Themes

| | **Theme 1 Image Management** | **Theme 2 Differentiation** | **Theme 3 Positioning** | **Theme 4 Career Interest** |
|---|---|---|---|---|
| **CEO 1** | ✓ | ✓ | ✓ | ✓ |
| **CEO 2** | ✓ | ✓ | ✓ | ✓ |
| **CEO 3** | ✓ | ✓ | ✓ | - |
| **CEO 4** | ✓ | - | ✓ | - |
| **CEO 5** | - | ✓ | ✓ | - |
| **CEO 6** | ✓ | - | ✓ | ✓ |
| **CEO 7** | ✓ | ✓ | ✓ | - |
| **CEO 8** | ✓ | - | ✓ | - |
| **CEO 9** | - | - | ✓ | - |
| **CEO 10** | ✓ | - | ✓ | ✓ |
| **CEO 11** | - | ✓ | ✓ | - |
| **CEO 12** | ✓ | - | ✓ | - |
| **CEO 13** | - | - | ✓ | - |
| **CEO 14** | ✓ | ✓ | ✓ | - |
| **CEO 15** | ✓ | ✓ | ✓ | - |

Within the scope of the research, "Theme 1" corresponds to image management. Theme 1 has two sub-themes: "personal and professional development" and "content richness". When the research findings are considered in the context of "Theme 1", the education programs abroad, foreign language knowledge and the professional institution that are a member are the "personal and professional development" sub-theme, the current topic in the LinkedIn profile and the shares about the represented brand are the "content richness" sub-category associated with. In the evaluation of the research findings, findings related to these sub-themes were determined. These findings are presented collectively in Table 4.

**Table 4.** Evaluation of CEO Brands' Use of New Media in the Context of Theme 1

| | **Sub-Theme 1<br>Personal and Professional Development** | **Sub-Theme 2<br>Contextual Richness** |
|---|---|---|
| **CEO 1** | - | ✓ |
| **CEO 2** | ✓ | ✓ |
| **CEO 3** | ✓ | ✓ |
| **CEO 4** | ✓ | - |
| **CEO 5** | - | - |
| **CEO 6** | ✓ | - |
| **CEO 7** | ✓ | - |
| **CEO 8** | ✓ | ✓ |
| **CEO 9** | - | - |
| **CEO 10** | ✓ | ✓ |
| **CEO 11** | - | - |
| **CEO 12** | ✓ | - |
| **CEO 13** | - | - |
| **CEO 14** | - | ✓ |
| **CEO 15** | ✓ | ✓ |

In the evaluation of the research findings, it was seen that the information included in the LinkedIn profile of the eight CEO's in the sample matched Sub-theme 1, which is expressed as 'personal and professional development'. In this context, the information in the profiles of CEO 2, CEO 3, CEO 4, CEO 6, CEO 7, CEO 8, CEO 10, CEO 12 and CEO 15 is compatible with Sub-theme 1. Within the scope of the aforementioned theme, it was determined that six CEO's included education programs abroad, foreign language skills of three CEO's, and professional institutions of which three CEO's are members in their profiles. Detailed findings of Sub-theme 1 are presented collectively in Table 4.1.

**Table 4.1.** CEO Evaluation of Brands' Use of New Media in the Context of Sub-Theme 1

| | |
|---|---|
| **CEO 2** | – Participated Overseas Education Program |
| **CEO 3** | – Participated Overseas Education Program<br>– Foreign (English-French) Grammar |
| **CEO 4** | – Participated Overseas Education Program |
| **CEO 6** | – Participated Overseas Education Program<br>– Foreign (English) Grammar |
| **CEO 7** | – Foreign (English-German) Grammar |
| **CEO 8** | – Professional Organization Membership (Private Sector Volunteer Association Board Membership, TÜSİAD Membership, TAİK Turkey-USA Business Council Membership) |
| **CEO 10** | – Participated Overseas Education Program<br>– Professional Organization Membership (TÜSİAD Membership, WBCSD Membership, International Corporate Governance Network Membership, World Economic Forum Membership) |
| **CEO 12** | – Participated Overseas Education Program |
| **CEO 15** | – Participated Overseas Education Program<br>– Professional Organization Membership (YASED Board Member, Endeavor Board Member, M-Tod Board Member) |

In the evaluation of the research findings, it was observed that the information included in the LinkedIn profile of the seven CEO's in the sample matched Sub-theme 2, which is expressed as "content richness". In this context, the information in the profile of CEO 1, CEO 2, CEO 3, CEO 8, CEO 10, CEO 14 and CEO 15 is compatible with Sub-theme 2. Within the scope of the aforementioned theme, it was determined that two CEO's shared on current issues and trends in their profiles, and seven CEO's shared about the brands they represented. Detailed findings of Sub-theme 2 are presented collectively in Table 4.2.

**Table 4. 2.** Evaluation of CEO Brands' Use of New Media in the Context of Sub-Theme 2

| | |
|---|---|
| **CEO 1** | – Current Topic and Trend Sharing |
| **CEO 2** | – Current Topic and Trend Sharing<br>– Sharing About the Represented Brand |
| **CEO 3** | – Sharing About the Represented Brand |
| **CEO 8** | – Sharing About the Represented Brand |
| **CEO 10** | – Sharing About the Represented Brand |
| **CEO 14** | – Sharing About the Represented Brand |
| **CEO 15** | – Sharing About the Represented Brand |

Within the scope of the research, "Theme 2" corresponds to differentiation. Theme 2 has two sub-themes: "distinguishability" and "personal qualities". Considering the research findings in the context of "Theme 2", both sub-themes were coded based on the descriptive statements in the "About" section of the CEO's LinkedIn profiles. The area in question is the area where CEO's express themselves individually. In the evaluation of the research findings, findings related to these sub-themes were determined. These findings are presented collectively in Table 5.

**Table 5.** Evaluation of CEO Brands' Use of New Media in the Context of Theme 2

| | **Sub-Theme 1 Distinctiveness** | **Sub-Theme 2 Personal Qualities** |
|---|---|---|
| **CEO 1** | - | - |
| **CEO 2** | ✓ | ✓ |
| **CEO 3** | ✓ | ✓ |
| **CEO 4** | - | - |
| **CEO 5** | ✓ | - |
| **CEO 6** | - | ✓ |
| **CEO 7** | - | ✓ |
| **CEO 8** | - | - |
| **CEO 9** | - | - |
| **CEO 10** | - | - |
| **CEO 11** | - | ✓ |
| **CEO 12** | - | - |
| **CEO 13** | - | - |
| **CEO 14** | - | ✓ |
| **CEO 15** | - | ✓ |

Sub-theme 1, which is expressed as 'differentiability' within the scope of Theme 2, was identified in the profiles of three CEO's, namely CEO 2, CEO 3 and CEO 5. Sub-theme 2, which corresponds to "personal qualities", was identified in the profiles of seven CEO's: CEO 2, CEO 3, CEO 6, CEO 7, CEO 11, CEO 14 and CEO 15. In the light of the findings, it is seen that the seven CEO's in the sample attach importance to differentiation and share in this direction.

Within the scope of the research, "Theme 3" corresponds to positioning. Theme 3 consists of five sub-themes: "professional competence", "professional title and duty", "professional talent", "professional success and characteristics", and "professional photography". In the evaluation of the research findings, findings related to these sub-themes were determined. These findings are presented in Table 6.

**Table 6.** Evaluation of CEO Brands' Use of New Media in the Context of Theme 3

| | **Sub-Theme 1 Professional Competence** | **Sub-Theme 2 Professional Title and Position** | **Sub-Theme 3 Professional Ability** | **Sub-Theme 4 Professional Success and Characteristics** | **Sub-Theme 5 Professional Photography** |
|---|---|---|---|---|---|
| **CEO 1** | ✓ | ✓ | ✓ | ✓ | ✓ |
| **CEO 2** | ✓ | ✓ | ✓ | ✓ | ✓ |
| **CEO 3** | ✓ | ✓ | ✓ | ✓ | ✓ |
| **CEO 4** | ✓ | ✓ | ✓ | ✓ | ✓ |
| **CEO 5** | ✓ | ✓ | ✓ | ✓ | ✓ |
| **CEO 6** | ✓ | ✓ | ✓ | ✓ | ✓ |
| **CEO 7** | ✓ | ✓ | ✓ | ✓ | ✓ |
| **CEO 8** | ✓ | ✓ | ✓ | ✓ | ✓ |
| **CEO 9** | ✓ | ✓ | ✓ | ✓ | ✓ |
| **CEO 10** | ✓ | ✓ | ✓ | ✓ | ✓ |
| **CEO 11** | ✓ | ✓ | ✓ | ✓ | ✓ |
| **CEO 12** | ✓ | ✓ | ✓ | ✓ | ✓ |
| **CEO 13** | ✓ | ✓ | ✓ | ✓ | ✓ |
| **CEO 14** | ✓ | ✓ | ✓ | ✓ | ✓ |
| **CEO 15** | ✓ | ✓ | ✓ | ✓ | ✓ |

In line with the research findings, the theme that CEO's refer to the most in their LinkedIn profiles has been identified as the "positioning" theme. Among the sub-themes of positioning, the sub-theme referred to by all CEO's was found to be "professional title". 15 CEO's in the sample included their professional backgrounds in their profiles.

Within the scope of Theme 3, the sub-theme of "professional competence" refers to the competencies, qualifications and competencies of CEO's. In this direction, it was found that 14 CEO's included expressions reflecting their professional competencies in their LinkedIn profiles. Within the scope of the aforementioned sub-theme, it was determined that only one CEO – CEO5 – did not include any information about his professional competence in their profile.

In the 'professional talent' sub-theme, expressions referring to managerial and leadership characteristics were coded. According to the research findings, it has been determined that there are expressions referring to the “professional abilities” sub-theme in the profiles of nine CEO’s, namely CEO 2, CEO3, CEO 4, CEO6, CEO 8, CEO 10, CEO 11, CEO 14, CEO 15.

In the sub-theme of ‘professional success and positive traits’, the expressions in the approved talent, competence, recommendation section of the profiles of the CEOs and the posts covering their achievements for the brands they represent were coded. In this direction, findings were found in the profiles of a total of six CEO’s in the sample: CEO 1, CEO2, CEO 3, CEO 4, CEO 8, CEO 10.

In the ‘professional photography’ sub-theme, the logo, emblem, etc. of the brand represented by the CEOs. Coding was carried out specifically for the photos with corporate identity works. Within the scope of the research, it was observed that nine CEOs included professional photographs in their profiles. These CEOs were identified as CEO 1, CEO 2, CEO 3, CEO4, CEO 7, CEO 8, CEO 9, CEO 10 and CEO 13, respectively.

Within the scope of the research, ‘Theme 4’ finds expression as career interest. Theme 4 has two sub-themes: ‘education and career plans’ and ‘future goals’. When the research findings are considered in the context of ‘Theme 4’, activities such as training, congresses, interviews, conferences, career days, which are planned to be attended, are sub-theme of ‘education and career plans’, near and long-term goals and expectations related to their fields of expertise, and ‘future goals’ sub-theme. In the evaluation of the research findings, findings related to these sub-themes were determined. These findings are presented in Table 7.

**Table 7.** Evaluation of CEO Brands’ Use of New Media in the Context of Theme 4

| | **Sub-Theme 1**<br>**Education and Career Plans** | **Sub-Theme 2**<br>**Future Goals** |
|---|---|---|
| **CEO 1** | - | ✓ |
| **CEO 2** | ✓ | - |
| **CEO 3** | - | - |
| **CEO 4** | - | - |
| **CEO 5** | - | - |
| **CEO 6** | ✓ | - |
| **CEO 7** | - | - |
| **CEO 8** | - | - |
| **CEO 9** | - | - |
| **CEO 10** | ✓ | - |
| **CEO 11** | - | - |
| **CEO 12** | - | - |
| **CEO 13** | - | - |
| **CEO 14** | - | - |
| **CEO 15** | - | - |

When the research findings were examined in the context of ‘Theme 4’, it was determined that there were findings related to both sub-themes. In this context, it has been determined that CEO 2, CEO 6 and CEO 10 include information on Sub-theme 1 in their LinkedIn profile and CEO 1 on Sub-theme 2 in their profile. In addition, it has been observed that there is no information about

Theme 4 in the LinkedIn profile of CEO 3, CEO 4, CEO 5, CEO 7, CEO 8, CEO 9, CEO 11, CEO 12, CEO 13, CEO 14 and CEO 15.

## Research Findings

It has been seen that the data obtained on the branding processes of CEO's and the use of new media are in parallel with the literature. The most striking finding within the scope of the research is the match with the findings of international and national literature. The basic assumption of the study, that the new media is an effective tool for personal branding and CEO branding, is frequently discussed in international and national literature.

CEO brands use new media intensively. According to the research findings, it was seen that fourteen CEO's included in the sample group of the research actively use the LinkedIn application. Only one CEO in the sample is in the passive user group.

The CEO's included in the sample included information about their education and career backgrounds, professional abilities and competencies, managerial and leadership skills in their LinkedIn profiles. In this context, as Edgett (1972) and Hambrick and Mason (1984) pointed out, it is possible to state that the observable managerial characteristics and personal/professional potentials of CEO's are linear with their institutions positions.

Another finding within the scope of the research is about the preferences of CEOs for profile photos and cover photos. In this context, it was determined that the LinkedIn profile photos of ten CEO's in the sample group were professionally shot, and three CEOs included the logos and emblems of the brands they were affiliated with in their profile photos. Examining the cover photos, it was seen that six CEO's used visuals reflecting the corporate identity of the brand they represent. This situation has been interpreted as the CEO's integrating the identity of the brand they are affiliated with with their personal brand and CEO brand identities, and it coincides with the literature. As stated by researchers such as Bendisch (2011) and Nolan (2015), CEO's function as brand ambassadors of the brands they are associated with. It was determined that all three research questions were confirmed.

Based on research question 1, it has been seen that LinkedIn profiles of CEO brands consist of various contents and themes. In line with the findings, the most emphasized theme was 'positioning', the sub-theme was 'professional competence', the least emphasized theme was 'career interest', and the least emphasized sub-theme was 'future goals'. In parallel with this, it is possible to state that CEO's need positioning strategies and in this direction, they tend to differentiate based on reflecting and 'positioning' all their professional and personal competence/skills/developments.

Another area where CEO's have progressed based on differentiation has been the 'About' and 'Talk about' sections. In these two sections, which they include in their profiles, CEO's have the opportunity to present their selves on the subject, concept and content without any restrictions. According to CEO branding, it is recommended that these two areas be established on the basis of a specific strategy.

Based on research question 2, it has been determined that the majority of CEO brands include personal branding components in their LinkedIn profiles. In this context, Gürel et al. (2022) reached results compatible with the CEO branding components, which can be explained as “human capital & self presentation”, “managerial competence & career”, “leadership charisma” and ‘communication strategy”. However, it has been determined that there are differences in the practices of CEO’s to reflect CEO brand components.

Based on research question 3, it has been determined that there are concepts related to personal brand in LinkedIn profiles of CEO brands. In this context, it has been determined that the concept of ‘management’ is heavily emphasized in relation to the fields of expertise of CEO’s. Personal branding is a strategic work that is designed as “person-based” and covers the stages of planning, implementation and evaluation. The most important characteristics of the CEO’s in the sample are that they have management knowledge and management skills. In this context, it has been seen that the most strategically emphasized concepts and sub-concepts are management-based, which is consistent with the competencies and abilities of the people.

Within the scope of the general evaluation of the research findings, when the frequency distributions of the themes related to the new media usage of CEO brands were examined, it was determined that there were 379 coding matches and expressions referring to the “positioning” theme the most in the LinkedIn profiles of the CEO’s. In this context, 32 codings were applied to the theme of “image management”, 13 codings to the theme of “differentiation”, and 6 codings to the theme of “career interest”.

**Table 8.** Frequency Distribution of Themes Regarding CEO Brands’ Use of New Media

| **Theme 1<br>Image Management** | **Theme 2<br>Differentiation** | **Theme 3<br>Positioning** | **Theme 4<br>Career Interest** |
|---|---|---|---|
| 32 | 13 | 379 | 6 |

The frequency distributions of the sub-themes of the themes related to the new media use of CEO brands indicate that the ‘professional competence’ sub-theme is dense with 294 codes, as presented in Table 8. In this context, it was determined that there were 39 codings for the “professional title and duty” sub-theme, 19 coding for the “professional talent” sub-theme, 18 coding for the “professional success and characteristics” sub-theme, and 9 coding for the “professional photography” sub-theme.

**Table 9.** Frequency Distribution of Sub-Themes of the Most Codified Theme Regarding CEO Brands’ Use of New Media

| **Sub-Theme 1<br>Professional Competence** | **Sub-Theme 2<br>Professional Title and Duty** | **Sub-Theme 3<br>Professional Ability** | **Sub-Theme 4<br>Professional Success and Characteristics** | **Sub-Theme 5<br>Professional Photography** |
|---|---|---|---|---|
| 294 | 39 | 19 | 18 | 9 |

This study points to findings in parallel with the literature review, and it is possible for CEOs, who are corporate managers, to use effective new media and CEO branding. In this way, it is among the findings that they can increase the brand values of the organizations they are affiliated with and contribute to a sustainable corporate image.

## Conclusion

A brand is expressed as differentiating, separating and embodying a product and service from its competitors. Personal branding, on the other hand, is defined as branding activities that take 'human' at the center and include individual talents/competencies. CEO brand, which is a sub-type of personal brand, simply means the branding of a company's top manager.

The CEO is the ultimate responsible for a company. All processes, managers and employees of the company depend on the CEO. CEOs in today's business world; just as products and services are branded. CEO brand; It not only makes a positive impact on the personal brands of CEOs, but also makes a great contribution to the product and service brands and corporate brands of the organizations they work for. CEO brand; CEOs have a significant impact on the brand value, corporate reputation, productivity and effectiveness levels of the organizations they are affiliated with. For this reason, it is necessary to pay attention to the CEO branding efforts and to ensure that they are strategically managed.

The CEO brand not only has a positive effect on the personal brands of CEO's, but also makes a great contribution to the product and service brands and corporate brands of the institutions they work for. CEO's have a significant impact on the brand value, corporate reputation, productivity and effectiveness levels of the institutions they are affiliated with. For this reason, it is necessary to pay attention to the CEO branding efforts and to ensure that they are strategically managed.

The aim of this brand and personal brand-oriented study is to investigate the CEO brand concept and practice through the use of new media by CEO brands. With this orientation, LinkedIn, a professional business network and social sharing platform, was chosen as the research universe. Officially established on May 5, 2003, Linkedln (2023) is a website that gives its members the opportunity to establish a professional network. With 850 million members in 200 countries and regions around the world, LinkedIn is considered the world's largest professional social network.

The aim of this brand and personal brand-oriented study is to investigate the CEO brand concept and practice through the use of new media by CEO brands. With this orientation, LinkedIn, a professional business network and social sharing platform, was chosen as the research universe.

As a result of the research carried out by KREA M.I.C.E using the criterion sampling method within the scope of the research, the first 20 CEO's among the "50 Most Admired CEO's of Turkiye", who were awarded the Golden Leader Awards in 2021, were examined. The constraints of the research are the new media channels that are not included in the research universe and CEO brands that are not included in the sample of the research.

In the general interpretation of the research findings, it has been determined that the information and data about CEO brand concepts and practices are in parallel with the literature. In this context, within the scope of the research, it has been seen that the definition and scope of the CEO brand concept, the CEO branding process, and the vital importance of the new media in the CEO branding process have been discussed in the literature.

Within the scope of the research, it was determined that the three research questions, which were the starting point of the study, were confirmed. This situation coincides with the fact that the research findings are parallel to the literature. It has been determined that fourteen of the fifteen CEO's included in the sample of the research actively use the LinkedIn site. Profile photos and cover photos used by CEO's on LinkedIn profiles are professional and professional. Therefore, it can be stated that CEO's integrate their personal brands with the brands they represent, and they tend to present their selves through new media.

According to the research findings, it has been observed that all of the CEO brand components are actively present in the CEO branding process and are used by CEO's. The component with the most intense frequency among the CEO brand components was determined as 'positioning'. In the context of positioning, it has been determined that elements such as professional competence, professional ability, professional title and duties, professional success and positive features, and professional photographs are used. In this direction, it is possible to state that CEO's are in an effort to differentiate by using these elements.

Based on the research findings, it has been seen that the concept that CEO's emphasize the most in their LinkedIn profiles is "management". This situation coincides with the duties and areas of expertise of CEO's. The CEO's in the sample shared their management expertise and the training they attended with their followers. The aforementioned finding is important in terms of showing CEO's dominance in the concept of management and in the field.

This studies' results is compatible with the literature. For instance Taşkıran (2017) mentions that due importance should be given to the effective use of both the new communication environments under the control of the institution and the personal website and personal social media accounts, which can be considered within the scope of the personal communication management of the CEOs, in terms of personal branding.

The study is also consistent with the results obtained through different channels. For example, the results of Chen (2013)'s study on YouTube reveal potential areas of improvement for personal branding and consumer-personal brand relationships as a result of consumer empowerment on YouTube. The key managerial implication is that the dynamics of business-to-brand and consumer-brand relationships are evolving from a corporate and one-dimensional event on YouTube to a personal perspective and a two-way social bond.

Besides, Bendisch et. al. (2013) clarifies that CEO brands are influenced by their personalities and executive roles, and organizations need to constantly monitor CEO brand reputation and communicate its position. A successful CEO brand increases perceived brand equity and creates value for organizations.

This study also provides cross-cultural validity. The study by Cottan-Nir & Lehman-Wilzig (2018) on Israeli CEOs confirms that. The study clearly shows that each of Israili successful CEO brands has: a clear brand identity, built on the alignment of its human identity and its managerial identity; a strong CEO brand reputation, built on its human reputation and aligned managerial reputation; clear congruence between the CEO brand identity and reputation, producing a distinct, differentiating CEO brand positioning leading to CEO brand equity.

In line with the findings of the study and the conclusions reached, it is possible to make suggestions for future research. In this context, some suggestions for future research can be summarized as follows:

- Personal brand and CEO brand; can be examined by using different disciplines such as business, economics, social science and management science, supported by quantitative, qualitative and mixed research methods.
- The CEO brand concept can be researched on a sector-based basis at international and national level by going to the universe and sample diversity.
- CEO brands' new media usage practices can be examined depending on factors such as gender and age.
- The new media accounts of national and international CEO's can be analyzed on the basis of personal brand and CEO brand, and comparative analyzes can be made.

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