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About the 66th issue,

We are delighted to present the latest issue of the *ConnectIST: Istanbul University Journal of Communication Sciences.* This issue features 9 original research articles. It gives us great pleasure to express our gratitude to our esteemed guest editors, Professor Badran A. Badran from Liwa College in the United Arab Emirates and Professor Tevhide Serra Görpe from the University of Sharjah in the United Arab Emirates. The process of curating the issue involved significant dedication and effort. As the editorial team, we navigated the challenging task of reviewing and evaluating numerous submissions every two weeks over seven months. The volume of submissions made this endeavor demanding, requiring meticulous attention to detail and rigorous assessment.

Nevertheless, the culmination of this process is always rewarding. Witnessing the evolution of the manuscripts through peer revisions and observing their final form is undeniably thrilling. We take pride in the scholarly contributions featured in this issue and hope they will inspire further research and discourse in the field of communication sciences.

In this issue, we present the following articles: Adwoa Sikayena Amankwah's study delves into how individual attitudes of cynicism, political efficacy, and elaboration shape the motivations of university students to use digital media as political communication tools in elections. Titled "Role of digital media as political communication tools in elections: A study on political science students at a public university in Ghana," the research is a significant contribution to our understanding of political communication in the digital age. The author's findings, derived from a comprehensive survey and focus group discussions, reveal that political attitudes of university students do not generally influence motivations for using digital media as political communication tools in elections. Melis Gey and Cihan Becan, in "A field research on the effect of consumer sensitivity to equality in gender roles on their involvement in advertisements,"analyzing a survey and in-depth interviews, found that consumers' sensitivity to equality in gender roles has a significant and positive impact on cognitive and affective involvement in advertisements.

In "Use of free labour in the media within the scope of citizen journalism: A case study of the main news bulletin on *Show TV*" Sertaç Kaya offers a unique perspective on citizen journalism practices in one of the national channels of Türkiye. Kaya's use of content analysis to determine the proportion of non-professional broadcast images, coupled with his in-depth interview with the person in charge of *Show TV*'s WhatsApp Notification Line, piques curiosity and invites further exploration. Salvatore Schinello provided a comprehensive and meticulous systematic literature review of existing scientific publications on new media and communication in creative societies in "New media and communication in creative society: A systematic review of articles published between 2012 and 2024, indexed in Web of Science". Çiçek Topçu and Meral Serarslan focused on the relationship between social media use and the political knowledge gap in "The view of political knowledge gap among social media users in Türkiye." Field research with 1.076 people showed that education level and gender variables are no longer determining factors in the knowledge gap hypothesis research.

Simge Uğurluer and Mert Seven, in their article "A bibliometric analysis of extended reality research trends in communication studies written in English: Mapping the increasing adoption of extended reality technologies," have made a significant contribution to the field by offering a systematic review of studies published in English in important indexes on extended reality technology in communication studies over a three decades interval. These findings, derived from a rigorous review process, contribute to understanding the evolution of extended reality research in communication studies.

Derya Gül Ünlü and Elif Karakoç Keskin, in their research titled "From pandemic to post-pandemic: Understanding the digital platform usage experiences of older people," undertook a comprehensive study by conducting semi-structured, in-depth interviews with a substantial number of 22 participants. This research aimed to shed light on how individuals aged 65 and over-interpret their digital platform usage experiences in the new period called 'post-pandemic'. The findings of the study have significant implications for digital platform designers and policymakers, as they highlight the need for user-friendly interfaces and digital literacy programs for older adults.

In the research article titled "A study on the Kahramanmaraş Earthquake survivors: 'Social media platforms were more effectively used than the traditional media'", Yusuf Yurdigül, Recep Bayraktar, and Serdar Çil aim to uncover the communication practices of the earthquake survivors after the incident and their opinions on the news coverage of the earthquake. Erkan Yüksel, Abdullah Koçak, and Ali Emre Dingin, in their study titled "The optimal time-lag for media's third-level agenda-setting effect," employed a robust methodology. They first identified the media agenda network connections through content analysis and then conducted two separate surveys in 12 provinces

representing the population of Türkiye. This meticulous approach lends credibility to their findings, which indicated that six weeks is required for the highest similarity to media network connections to occur in the public mind on a specific issue.

Before closing this introduction, let me remind everyone that our journal can continue to publish academic studies in communications sciences through your valued support and participation. We look forward to appearing before you once again with our 67th issue.

Prof. Ayşen Akkor Gül
Istanbul University, Istanbul, Türkiye

Remarks from the guest editors

As the guest editor of *ConnectIST: Istanbul University Journal of Communication Sciences*, published by Istanbul University, I found it an immensely valuable experience. This role has been like embarking on a journey of discovery, where each manuscript I encountered offers a unique insight into the vibrant and dynamic fields of communication sciences and media. It is through this journey that I have come to appreciate the depth and breadth of research conducted by scholars from Türkiye and across the globe as well as the significant contributions they have made to our understanding of communication phenomena.

From the moment I started this role, I was impressed by the diversity of topics addressed in the manuscripts submitted to the journal. Each paper I read served as a window into the fascinating world of communication, shedding light on various issues pertinent to our contemporary society. Whether it was an exploration of social media's impact on public opinion, an analysis of intercultural communication practises, an investigation into the role of media in political discourse, or an exploration of how women are portrayed or used in advertising, each manuscript brought with it a wealth of knowledge and a fresh perspective on the ever evolving and expanding landscape of communication.

What stood out to me was not just the topics themselves but also the thorough way in which researchers approached their studies. Reading about the background and significance of various issues allowed me to gain a deeper understanding of the context within which these studies were conducted. It was enlightening to see how each researcher framed their questions, developed their hypotheses, and chose their methodological approaches to seek answers. This process affirms the rigour and dedication that scholars bring to their work.

I have come to liken a research manuscript to a work of art. Just as an artist uses a canvas to draw or sculpt his/her vision, researchers use their manuscripts to present their vision of the phenomena they are studying. Each paper, with its unique methodology and theoretical framework, is a different canvas that reflects the researcher's creativity and intellectual rigour. Some manuscripts employ quantitative methods, painting a picture with numbers and statistics, while others use qualitative approaches, creating rich, descriptive, and sometimes rather personal narratives that bring their subjects to life. The variety and diversity of these canvases demonstrates the richness of communication studies.

In my humble opinion, the *ConnectIST* plays a crucial role in opening doors for scholars who have a yearning to share their discoveries with others. As an open-access journal, it serves as an accessible platform on which researchers can present their findings, engage in scholarly dialogue, and contribute to the advancement of knowledge in the field of communication. By providing a space for diverse voices and perspectives, *ConnectIST* fosters an environment of intellectual curiosity and innovation.

This experience has not only deepened my appreciation for the fields of communication sciences and media, but it has also reinforced the importance of scholarly publishing to advance our understanding of complex issues. As co-editor, I have had the privilege of witnessing firsthand the dedication and passion that researchers bring to their work. It has been an honour to be part of this journey of discovery, and I am grateful to the journal's chief editor Professor Ayşen Gül for the opportunity to contribute to the dissemination of knowledge through the *ConnectIST*. I also appreciate the unique opportunity to work with Professor Serra Gorpe on this assignment.

In conclusion, my role as a guest editor of *ConnectIST* has been a profound experience that has enriched my understanding of communication sciences and highlighted the critical role of scholarly collaboration and dialogue. It is my hope that *ConnectIST* will continue to inspire and support scholars, professionals, and students from different backgrounds and visions in their quest for knowledge, fostering a community of researchers who are dedicated to exploring and understanding the complex world of human communication.

Prof. Badran A. Badran
Liwa College, Abu-Dhabi, United-Arab-Emirates

Working on the 66ᵗʰ issue of *ConnectIST: Istanbul University Journal of Communication Sciences* was a truly gratifying experience for me in 2024. There were several reasons for this satisfaction, with one significant factor witnessing the exceptional quality the journal has achieved. I have been away from my home institution, Istanbul University Faculty of Communication, for some time. Our journal has always been among the quality academic journals in my home country. Collaborating as a co-editor in this particular edition alongside the *ConnectIST* team allowed me to uncover the secret behind its continuous growth and commitment to excellence.

Being involved as a guest editor in this issue reconnected me with my former colleagues. Furthermore, witnessing the hard work, coordination, and dedication of our early-career academic colleagues who were involved with producing the journal and contributed to the 66ᵗʰ issue was not only inspiring for the advancement of the journal but also for the Faculty of Communication of Istanbul University and the wider academic community. Having worked on this issue with my former colleague and mentor from Zayed University of the United Arab Emirates- Prof Badran- was a delightful experience.

I forgot how many times we got together while preparing this issue! The collaborative effort put into this issue was evident in the volume of submissions received showcasing *ConnectIST* as a sought-after academic journal. Our screening and evaluation process is guided by the journal's scope, and its future aspirations, ensuring a preservation of its identity and appeal to a broader academic community.

Reviewing the submissions for this issue shed light on the diverse interests of scholars within the field of communication and beyond. Since the 66ᵗʰ issue was not a "special issue", I believe that the array of topics covered in this issue spanning from various specializations and methodologies promises an engaging read for readers and encourages scholars to delve deeper into the subject matter.

Looking ahead, my aspiration for *ConnectIST* is for it to evolve into a truly international academic journal within our field. While the 66ᵗʰ issue saw contributions from other countries' scholars, increased participation from the international academic community would enhance the journal's visibility, and accessibility and foster more robust academic dialogues.

In closing, as a guest editor of the 66ᵗʰ issue, I extend my gratitude to *ConnectIST* team for this invaluable opportunity. I hope that our readers will enjoy reading this issue…

Prof. Tevhide Serra Gorpe
University of Sharjah, Sharjah, United-Arab-Emirates

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P R E S S

Research Article / Araştırma Makalesi

Role of digital media as political communication tools in elections: A study on political science students at a public university in Ghana

Seçimlerde siyasal iletişim aracı olarak dijital medyanın kullanımı: Gana'da bir devlet üniversitesindeki siyaset bilimi öğrencileri üzerine bir araştırma

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Abstract

Digital media is often understood through technical lenses that do not include the central issues of how and for what purposes they are used by citizens. Studies on social and personal factors that determine the use and outcome of digital political communication on elections are limited. Therefore, the purpose of this study is to investigate how individual attitudes of cynicism, political efficacy, and elaboration influence the motivations of university students to use digital media as political communication tools in elections. The study addresses this gap by employing the mixed methods approach to survey 400 students and engage 40 students through focus group discussions. Findings indicate that notwithstanding that university students experience cynicism and reduced political efficacy due to distrust of and minimal feedback from political actors on political issues, the students are motivated largely by entertainment, communication, and social utility gratifications to deploy digital media for peer-to-peer political communication on elections. The implications of the findings are that political actors must engage in symmetrical communication with young people to foster a greater sense of political efficacy.

Keywords: Digital media, cynicism, efficacy, elections, political communication

Öz

Dijital medya genellikle, vatandaşlar tarafından nasıl ve hangi amaçlarla kullanıldıklarına dair temel konuları içermeyen teknik mercekler aracılığıyla yorumlanır. Dijital siyasal iletişimin kullanımı ve seçimler üzerindeki sonucunu belirleyen toplumsal ve kişisel faktörlere ilişkin araştırmalar sınırlıdır. Bu nedenle bu çalışmanın amacı, üniversite öğrencilerinin bireysel şüphecilik, siyasal etkinlik ve ayrıntılandırma tutumlarının, seçimlerde siyasal iletişim aracı olarak dijital

medyayı kullanma motivasyonlarını nasıl etkilediğini sorgulamaktır. Çalışmada, 400 öğrenciye uygulanan anket çalışması ve 40 öğrenciyle gerçekleştirilen odak grup çalışmasını içeren karma metot kullanılmıştır. Araştırmaya göre, üniversite öğrencileri, siyasi meselelerde siyasi aktörlere güvensizlik duyması ve bu aktörlerden minimum geri bildirim alması nedeniyle hem şüphecilik hem de siyasi etkinliklerinde azalma deneyimlemektedir. Buna rağmen, elde edilen bulgular, öğrencilerin seçimlerde denkler arası siyasal iletişim için dijital medyayı kullanmaya daha çok eğlence, iletişim ve sosyal fayda tatminleriyle motive olduklarını göstermektedir. Bulgulardan elde edilen çıkarımlar, siyasi aktörlerin daha büyük bir siyasi etkinlik duygusu geliştirmek için gençlerle simetrik iletişim kurmaları gerektiği yönündedir.

Anahtar kelimeler: Dijital medya, şüphecilik, etkinlik, seçimler, siyasal iletişim

Introduction

The proliferation of digital media and their varied platforms necessitate an understanding of the social and personal factors that determine the use and outcome of behaviours (Evans et al., 2022; Shahbaznezhad et al., 2021). Previous research suggests a likely association between political attitudes or behaviour and an individual's motivations to seek information through digital media (Masciantonio & Bourguignon, 2023), where digital media affordance influence individual attitudes and motivations. Digital media encompasses a wide range of online services and applications such as: Social media platforms, video sharing platforms, audio streaming, messaging apps, and augmented reality. The digital media employed in this study were *Facebook, YouTube, Twitter, Instagram,* and *TikTok*. While some studies suggest that political chats influence political behaviours and attitudes (Bimber & Gil De Zúñiga, 2022), others proffer that political discussions online have the proclivity to influence political activities and ways of thinking about politics (Ackermann & Stadelmann-Steffen, 2022; Geise et al., 2021). Very little is known about how individual attitudes and motivations influence electoral communication online. Therefore, the purpose of this study is to investigate how individual attitudes such as cynicism, political efficacy, and elaboration influence motivations for using digital media as political communication tools in elections.

In Africa, the role of these technologies in consolidating participatory democracy is not consensual due to issues related to the structure, nature of the medium, style of communication, and unique adaptation of users (Botchway, 2018; Ngange & Elonge, 2019). Communication on digital media is often constructed through technical lenses as most studies on these technologies exclude the central issues of how they are used by citizens and for what purposes. This is a critical gap that the present study addresses. According to the West Africa Civil Society Institute (WACSI), Africans use social media platforms predominantly on mobile phones. Fifty-seven percent of tweets from Africa originate from mobile devices, whereas the youthful population ranging from 20 to 29 years comprises 60% of tweeters in Africa (Dobra 2012, p. 8). The importance of this study lies in the fact that while prior studies often focus on the use of digital media technologies for communication on elections in developing countries, what makes this study different is that limited studies exist on how individual attitudes and motivations influence university students' political engagement about elections. Therefore, the purpose of this study is to investigate how individual attributes such as political cynicism, efficacy, and elaboration by university students influence motivations

for using digital media as political communication tools in elections. The study employs a mixed methods approach using both surveys and interviews as data collection instruments to gather data from year one through to year four students from a renowned public university in Ghana. University students were sampled because they have the proclivity to use digital media.

The historical context of digital media use in Ghana

The historical context of digital media use in Ghana lies in its strategic deliberative potential. In 2003, the government of Ghana rolled out its vision for Ghana in the information age in a policy framework titled: "An Integrated Information Communication Technology (ICT) led socio-economic development policy and plan development for Ghana" (ICT4AD, 2003, p. 6). The overarching vision of the Policy was to promote the development of the socioeconomic, political, and cultural sectors of the country to enhance good governance, political stability, and democracy. This policy was geared towards harnessing digital technologies and deploying them into relevant sectors of the economy to boost economic growth and development. The general engagement and participation of people using digital media is growing and often takes the form of mobile phone calls, Short Message Service (SMS), social media, and online platforms (Ahiabenu 2013, p. 8). This is considering the fact that persons who are 12 years and older who used mobile phones represented 47.7% of the population in Ghana, while 7.8% of the population used the Internet, making it expedient to undertake a study of this nature (Ahiabenu 2013, p. 15). The Internet, on the other hand, is used primarily for social networking, followed by fact checking, research, instant messaging, and downloading music, movies, images, or watching television (Frempong 2012, p.33). Frempong (2012, p.29) indicates in the Research ICT Africa (RIA) survey that 99.1% of respondents in Ghana use mobile handsets mainly to make and receive calls. Next, the handsets are also used for 'flashing' functions; that is, to make call back requests (64.5%) and to send and receive SMS (60.5%). Digital media have served as a means to hold government and political leaders accountable to the people in addressing issues such as corruption in state institutions. The number of people using digital media technologies keeps growing daily, with a mobile penetration rate of 127.63 percent and a voice subscriber base of 35.008.387 million in December 2015 (National Communications Authority, 2016). Mobile Voice subscriptions increased from 40.35 million at the end of the third quarter of 2020 to 40.46 million at the end of the fourth quarter, representing a growth of 0.27%, while mobile data subscriptions increased by 2.54% from 25.81

million at the end of the third quarter of 2020 to 26.47 million (NCA, 2021). The major factors accounting for the growing number of people with mobile phones and internet usage include the efforts of telecommunication companies to expand their network coverage and the availability of inexpensive smart phones in China. Another reality is that social media helps politicians more effectively reach large numbers of voters in a short time and vice versa.

Political communication, cynicism, and elections

Political communication is an interactive process that involves the transmission of information among politicians, the news media, and the public. The process operates downward from governing institutions towards citizens, horizontally in linkages among political actors, and upward from public opinion towards authorities (Norris, 2001). This study adopted the upward process of political communication where the communication and opinions of university students towards politics, political actors, and institutions were interrogated. Political cynicism has been explained as a "loss of trust in government" and in communication parlance, as a "sense of powerlessness" (Euzébios Filho & Tabata, 2023; Song et al., 2020). It also connotes a belief that government and political leaders, particularly, do not care about what citizens say and do not have the latter's interests at heart (Valgarðsson et al., 2021). This perception is deepened when the public is bombarded incessantly with negative political advertisements that denigrate others; the public eventually becomes tired of politics, withdraw their involvement, and eventually might not vote (Jayswal, 2017; Smith, 2022). Others also argue that cynicism is a stable phenomenon that is neither influenced by news nor advertisements. The framing of news about campaign coverage is also said to influence the upsurge of cynicism (Kachel et al., 2020). These authors assert that when media coverage dwells on elections, framing it as a sport and dwelling on strategies rather than the real issues of candidates, voters become disinterested and cynical.

In some cases, cynicism is purported to have positive effects. For instance, Knudsen et al. (2022) argue that a contentious relationship between the news media and the public is positive in that it challenges the status quo, and existing knowledge deepens political participation. The trend of a destructive and never-ending barrage of negative campaign information is often purported to foster cynicism and a lack of trust among citizens. Subsequently, this leads to a dwindling of civic engagement and political participation, culminating in a situation referred to as a "spiral of cynicism" (Ferreira &

Menezes, 2021). Others suggest that cynicism among younger voters highly contributes to their detachment from politics and their failure to vote (Citrin & Stoker, 2018). Lariscy et al. (2011, p. 73); Grossman & Slough (2022) found that individuals with high levels of efficacy were less cynical than those with low doses of efficacy and that those who are literate in politics are often inclined to be more cynical. For other scholars, cynicism is not always negative, but it might indicate "an interested and critical citizenry" (Schuck, 2017). Another factor claimed to deter citizens from participating effectively in elections and voting is a lack of political efficacy.

Political efficacy and elections

According to Gil de Zúñiga, Diehl, and Ardévol-Abreu (2017, p. 575), "political efficacy examines how evaluations of experiences in political life shape participatory behaviours". The feeling that the level of information a person has regarding politics is sufficient to influence the political system meaningfully. The term "political efficacy" was first used by Angus Campbell and his colleagues from the Survey Research Centre, University of Michigan, in their premiere U.S. national election survey in 1952 titled: "*The Voter Decides*" (Coleman, Morrison & Svennevig, 2008, p. 773). Later, researchers modified the concept by differentiating between 'internal' and 'external' efficacy, the former meaning citizens having confidence in their political capabilities and the latter meaning citizens' impression and experience of the "responsiveness of political institutions and actors" (Coleman, Morrison & Svennevig 2008, p. 773). Political efficacy states that information is processed at different levels based on the type of exposure to that political information (Kaid et al., 2007 Lariscy et al., 2011, p. 753).

Political efficacy is also explained as people's belief in their ability to understand and effectively participate in local, national, and global spheres of governance (Scotto et al., 2021). Thus, feelings of political inefficacy are akin to a sense of marginalisation, detachment, or alienation that citizens feel in connexion to the activities of politicians and political institutions. Sources of information and the medium used are central to constructing an individual's level of efficacy. For instance, prior studies found that digital media, specifically internet users, were noticeably better-informed voters than non-users. In terms of political self-efficacy, that is, the belief that one can handle challenging new situations, researchers have found that web interactivity can enhance the political self-efficacy of people. Those who have higher self-efficacy are more likely to vote or participate in politics (Bernardi et al., 2023). That notwithstanding, digital media users

are often perceived as distrustful of politicians and apathetic to politics as they do not trust the government to faithfully implement its policies (Sobieraj et al., 2020).

Coleman et al. (2008); Park (2019) also conducted a study on media use for news, political efficacy, and ways in which digital media users engage with and think of political structures and personalities within their communities. The study focused on how the interactive potential of digital media could build feelings of political efficacy between citizens and their representatives. The study was premised on earlier studies that reported a perceived lack of engagement in democratic political processes by citizens (Nissen, 2021; Sobieraj et al., 2020). In an attempt to make government, political organisations and leaders more reachable and accessible to citizens, novel communication techniques such as online parliamentary consultations, e-petitions and blogs belonging to politicians were introduced in Britain. These techniques were meant to harness the interactive potential of digital media by promoting dialogue between political actors and their constituents, thus reducing the communication chasm between them. Coleman et al., (2008, p. 775) used seven focus groups of respondents who felt politically alienated and those who felt engaged, within June and July, all in the Leeds area. Each discussion took between an hour and a half and two hours.

Earlier research indicated that citizens who felt they could affect political change either alone or together with others were more likely to be actively engaged in politics. Lu and Luqiu (2020) and Shore (2020) found that political efficacy develops as individuals engage with themselves and other political actors within their immediate localities. The findings also suggest fracturing of the link between "local attachment" and a clear sense of political inefficacy (Coleman et al., 2008, p. 786). They assert that when there is political inefficacy: politics comes to be seen as a remote, aethereal form; a culture in its own right, which does not easily translate into the daily discourse of vernacular citizenship (Coleman et al., 2008, p. 786).

They found that respondents were using the internet to seek realistic and diverse information that would enhance their civic roles; to communicate with people with whom they shared similar cultural values; and to make themselves seen and amplify issues they are passionate about to portray their marginalisation from political engagement (Dambo et al., 2022). Respondents felt that when they accessed the interactivity of digital media by sending messages to their political institutions and representatives, the latter did not respond to them. This increased their disappointment

with their leaders as they rationalised that interactions with others using these same technologies often yielded very positive findings, causing political efficacy to atrophy.

Coleman et al. (2008, p. 787) recommend that citizens be encouraged to develop "confidence-building devices" by reinforcing citizens' conceptions of themselves in ways that would allow them to influence conversations based on their sense of morality and preferences. Deriving from the outcome of their research, Coleman et al., (2008) concluded that the development of political efficacy is a result of citizens' experience of their interactions with authority. This is derived from their daily localised experiences and engagements with political authority.

Sperber et al. (2022) found that abysmal levels of political information efficacy did not encourage young people to vote. Other studies have found that negative advertisements are often conceived as entertaining, informative, and useful in making voting decisions (Malloy & Pearson-Merkowitz, 2016). In this vein, men showed higher levels of political information efficacy than women after exposing themselves to candidate materials. Notwithstanding that, political information efficacy increased cynicism among participants in that experiment did not reduce, implying the independence of the concept's political information efficacy and cynicism. This study aims to determine whether political attitudes influence the use of digital media as a political communication tool in elections.

Political elaboration and elections

Political elaboration pertains to detailed communication involving political content. In a related development, Euzébios Filho & Tabata (2023b); Intyaswati et al. (2021) examined the interrelationships between the Internet as a source of political information and elaboration on political content that fosters political participation, political information efficacy, and cynicism. They compared the subject about digital natives (those born after computers were made) and older people (those born before computers). The information acquired from the Internet plays a critical role in constructing the levels of trust citizens bestow on political leaders, the extent to which citizens believe they can make a difference, and the amount of personal involvement in political processes culminating in their voting decisions (Lariscy, Tinkham & Sweetser, 2011). Zhang (2022) found that young people conceptualised political participation differently from older people. For younger people, political participation includes various individualistic online activities, such as searching for political information or reading blog content.

Aim and methodology

The study employs a mixed methods approach. It adopts both positivist and constructivist research paradigms. The positivist paradigm involves "concepts such as quantification, hypotheses, and objective measures" (Kaushik & Walsh, 2019). Constructivism provides reasons why people behave the way they do and uses methods such as focus groups, ethnography, and observation. This study employs surveys and focus groups. The rationale for adopting this dual research approach is to describe and explain citizens' use of digital media for political communication during elections. Employing qualitative research would explain participants' motivation for the adoption of digital media for political communication, while quantitative research would generate data that can be analysed to project an actual picture of respondents' use of these technologies. The study employs systematic random sampling, which entails selecting subjects from a list of the population in a systematic order rather than a randomised manner (Walker & Baxter, 2019). Ethical approval, with the Ethical Clearance Number ECUPSA–FM–2020-003, was obtained from the Ethics Committee of the University of Professional Studies, Accra.

Aim

The aim of this study is to investigate how individual attributes such as political cynicism, efficacy, and elaboration by university students influence motivations for using digital media as political communication tools in elections. The primary research question of this study is how digital media influences the cynicism and efficacy of university students for political communication particulary in the context of elections in Ghana. Based on the gaps identified in the review literature, the following sub-research questions guided this study:

RQ 1: What are students' motivations for cynicism towards politics and governance when they use digital media platforms in a public university in Ghana?

RQ 2: How do students use digital media platforms to influence political efficacy and the actions of political parties that are seeking to be voted into power In Ghana?

Method

The study adopted a mixed methods research approach that employed both probability sampling techniques and non-probability techniques, particularly the purposive or judgemental sampling technique. To ensure the validity and reliability of the findings regarding the research questions under investigation, a sample of 400 students from the Political Science Department of a public university in Ghana were systematically selected from the class attendance registers of year one to year four students.

A probability sample is "selected according to mathematical guidelines whereby each unit's chance for selection is known" (Wimmer & Dominick 2011, pp. 89-90), and cases are selected in a systematic way using a table of random numbers to ensure that each unit has an equal chance of being selected. The systematic random sampling technique is an adjusted form of simple random sampling that entails selecting subjects from the population in a systematic order rather than a randomised manner (Cohen et al., 2007, p. 111). This sampling technique involves the researcher selecting the sample at regular intervals from the sampling frame or the range of cases for consideration in the sample (Wimmer & Dominick, 2011, p. 98; Saunders et al., 2007, p. 218). The universe for the study was 2.500 students from the department. A sample size of 400 was systematically selected. With a random start of two and a sampling interval of six, every sixth student was selected for inclusion in the sample. The reliability coefficient for the study was 0.834, whereas the validity coefficient was 0.467, significant at the 0.01 level. Periodicity was ensured by printing out all the students' name lists from various year groups of the department on A4 sheets of paper and mingling the page arrangement before starting the sampling process.

The study also adopted a nonprobability sampling method that uses a purposive or judgmental sampling technique to undertake qualitative analysis. Nonprobability sampling does not use mathematical guidelines because the inclusion of a unit in the sample is not known (Wimmer & Dominick 2011, p. 89). Purposive samples include "respondents, subjects or elements selected for specific characteristics or qualities" (Wimmer & Dominick 2011, p. 94). The sample is selected intentionally in a non-random way. Purposive sampling enabled researchers to use their judgement to select cases that would best enable them to answer their research questions and meet their objectives (Neuman 2000 in Saunders et al., 2007, p. 230). The sample size for the four sets of focus group discussions (comprising ten participants per group) for this study is 40. This

information-rich set of participants was selected for inclusion in the discussions on the basis of their consistent use of digital media for political communication on elections and their orientation to the key variables hinging the objectives of the study. The purposive sampling strategy adopted in the present study is the heterogeneous or maximum variation sampling technique. This sampling technique enables the researcher to collect data and explain the key themes that can be observed.

Four sets of focus group discussions were also conducted using the purposive sampling strategy. A focus group interview relies on "interaction within a group that discuses a topic supplied by the researcher yielding a collective rather than an individual view" (Morgan, 1996, p. 9). A focus group interview clearly concentrates on a particular issue, product, service, or topic and encompasses the need for interactive discussion among participants (Carson, Gilmore, Perry & Gronhaug, 2001 cited in Saunders et al., 2007, p. 339). Wimmer and Dominck (2011) recommend that focus groups should comprise a minimum of six and a maximum of ten participants who engage in semi-structured discussions on a selected subject. This study employs 10 participants per focus group.

Cohen, Manion, and Morrison (2007, p. 376) indicate that the contrived setting of focus groups is both a benefit and a deficit. Notwithstanding their unnatural or contrived settings, they concentrate on a particular issue and therefore could produce perspectives that might otherwise not have been available in a straightforward interview (Saunders et al., 2007). Wimmer and Dominick (2011, p. 132) add that they facilitate a better comprehension of people's attitudes and behaviour. However, critics claim that data from focus groups are difficult to analyse and that under- and over-responsiveness of some members to the discussions is sometimes challenging to handle as it has the tendency to produce unreliable data (Wimmer & Dominick, 2011, p. 134; Cresswell, 2009). They augment their arguments by indicating that intragroup conflicts among members often pose challenges to inexperienced moderators (Cohen et al., 2007, p. 377). Notwithstanding these limitations, the present study adopts focus group interviews because they ensure a wider coverage of issues, save time, and produce a large amount of in-depth data that elucidates responses in a short period of time.

The focus group interview schedule for this study comprised 11 semi-structured open-ended questions that the researcher used to engage with the groups. The interviews took approximately 45 min each after the morning lectures had ended. The

focus group discussions were recorded using a digital voice recorder; notes were also taken and later transcribed for analysis. The application of focus groups to collect qualitative data for a study is not a new phenomenon as they are often used by political parties to test voter reactions to particular policies and election strategies and in market research to test reactions to products (Saunders et al, 2007).

A group of respondents made up of 100 students sampled per year group were administered with individual hard copies of the questionnaire to complete (Wimmer & Dominick 2011, p. 209). The session occurred in a natural setting, specifically in their tutorial lecture room. It took approximately 20 min to complete the questionnaires and 45 minutes to complete a focus group session. The data from the survey revealed that a quarter (representing 100) of the respondents were at level 100 (year 1 students), 93 were level 200s (year 2 students), 99 were level 300s (year 3 students), and 99 were also from level 400 (year 4 students), culminating in a total figure of 391. Although the study endeavoured to ensure representativeness in terms of number per level or year of study, the number of questionnaires that were retrieved and analysed was 391 due to missing and uncompleted questionnaires. Cronbach's alpha values of reliability tests conducted on major variables of the study based on the research objectives yielded the following values: Cynicism towards politics and governance 0.751; political efficacy 0.834; and elaboration and discussion 0.652.

The researcher encouraged respondents to be objective in their responses and reassured them that their responses would not affect them negatively as this was a study independent of their department or university. Additionally, respondents were also requested not to interact among themselves, which would make the findings biased. With the assistance of two trained field assistants, respondents appeared well-composed and excited to participate in the survey.

The study adopted this technique of questionnaire administration for the following benefits: The presence of the researcher to address any issues about the questionnaire items contributed to securing a high response rate. Furthermore, the session allowed respondents to proceed at their own pace, albeit within the time allocated for the session. Another reason for adopting this mode of questionnaire administration was that the questionnaire was longer than typical ones, such as those used in mail surveys. This was done to ensure that the research objectives had been adequately covered. Second, the group-administered questionnaires had a high response rate as the researcher was available to address problems that could arise in line with what Wimmer

and Dominick (2011, pp. 209-210) suggest. This also ensured that fewer items were left unanswered or answered incorrectly. The questionnaire involved the use of Likert scales to measure concepts that were interrogated in the study objectives. A pilot study was conducted to measure the reliability of the instruments before questionnaire administration.

Findings

Variables for the study covering three dimensions of political attitudes were adopted from Haridakis and Hanson's (2009), and Kaye and Johnson's (2002) studies. They are cynicism towards politics and governance, political efficacy, and elaboration. The subvariables tested under cynicism towards politics and governance were: the poor state of the economy, rising unemployment in the country, trust in the government, and interest in politics. The subvariables for political efficacy included how respondents' views influence the actions of the political party seeking to be voted into power, the influence of respondents' views on the actions of the presidential candidate, and whether respondents' views are heard. The subvariables for elaboration and discussion are; facilitator for political discussions, facilitator of communication with my political party, and enablers for determining issues at stake in the elections. Findings from the survey are presented first, followed by those from the interviews.

Cynicism towards politics and governance

This section presents findings on how individual attitudes namely cynicism towards politics and governance, influenced respondents' motivations for political communication on elections in terms of the economy the majority of respondents (represented by 87.7%, n: 343) variously agreed that the economy was in bad shape, while less than 10% were not sure, and three-point six percent variously disagreed. In the context of unemployment, a significant number of respondents (86.9%, n:340) variously agreed that unemployment levels in the country were rising, while less than five percent disagreed. The next subsection presents the findings on political elaboration and political discussion.

Findings appear to differ from the preceding ones on cynicism towards governance and politics in that almost a third of the respondents indicated they were unsure of their trust in the government. Further, 38.1% (n: 149) also disagreed that they trusted

the government. Only a third say they have trust in the government. Thus, more than two-thirds (70.6%, n: 276) of the respondents are either unsure of or distrust the government. This reinforces respondents' feelings of cynicism towards governance and politics. Interest in politics is presented next.

More than half of the respondents (58.3%, n: 228) indicated that the use of digital media as a political communication tool helped increase their interest in politics. Nearly a quarter is neutral and 18.1% (n: 71) disagree on the contribution of digital media to enhancing their interest in politics.

Findings from the study indicate that university students' feelings of cynicism towards politics and governance do not generally influence motivations for the use of digital media for political communication on elections, although they were dissatisfied with socioeconomic indicators of the standard of living. Unsurprisingly, over a third indicated that they were not sure they trusted the government; almost 40% (n: 156) said they did not trust the government, and just over a third agreed they trusted them. To affirm their sense of cynicism, the students shared that they joined political parties for survival reasons or to obtain party cards for travel. The next set of findings covers the subsections on political elaboration and political discussion.

Political efficacy

This dimension has three items. They are how respondents' views influence the actions of the political party seeking to be voted into power, the influence of respondents' views on the actions of the presidential candidate, and whether respondents' views are heard

Respondents were asked to indicate whether their views influenced the political party seeking their mandate. Almost a third of the respondents (33.2%; n: 130) were not sure that their views influenced the actions of the political party that they wanted to be voted for. While approximately 35% (n: 137) agreed that their views were heard by their political party, 30.7% (n: 120) indicated that their views were not heard.

Respondents were also asked to indicate how perceptible their views were to their political party. More than a third (38.8%; n: 152) of the respondents indicated that their views were not heard by their political party; a third was not sure their views were heard, while 29.9% (n: 117) indicated that their political party heard their views.

Respondents were asked to indicate whether their views influenced the action of the candidate seeking their vote. A similar scenario where almost a third of the respondents (32.2%, n: 126) indicated they were not sure that their views influenced the actions of the candidate seeking their vote. A little over another third (37.1%, n: 145) disagreed that their views were influential, while a marginal 30.7% (n: 120) agreed on the influence of their views. Overall, more than two-thirds of the respondents were unsure or disagreed on the influence of their views on political candidates seeking their votes.

In general, the study found that university students were not certain that their views were taken seriously by their political leaders nor were they sure that those views influenced the actions of political leaders. Political efficacy variables scored weak but significant associations with motivations for using digital media for political communication. The exception was political efficacy, where its correlation with social utility and communication yielded a medium positive association of 0.477. This indicates that feelings of political efficacy were associated with motivation for social utility and communication. In other words, the university students' feelings of political efficacy were a factor that culminated in their use of the technologies for political communication in elections.

Altogether, the responses strongly point to respondents' dissatisfaction with the political situation, governance, and efficacy of political leadership in Ghana. Respondents indicated distrust of the government, notable levels of political inefficacy, and a resonating concern for unemployment, corruption, and epileptic power cuts, culminating in an overall sense of diminished well-being and efficacy of the citizenry.

Political elaboration and discussion

There were three items under this category: The ability to engage in political discussions with others, the ability to communicate with respondents' political parties, and the ability to find out more about issues at stake in the elections.

Respondents were also asked to indicate whether the opportunity to elaborate on and discuss political content enhanced their political engagements and interactions with others. From the findings, 73.6% of respondents agree that when digital media are used as political communication tools in elections, they facilitate political discussions. This attests to the deliberative potential of these technologies. Less than a fifth (16.6%, n: 65) is not sure and less than ten percent disagree.

Respondents were asked to indicate how the elaborative potential of digital media facilitates communication with their political parties. While 43.8% (n: 171) of respondents variously agreed that they were enabled to communicate with their political party, more than a third (38.6%, n: 151) disagreed and a little over a quarter (27.6%, n: 108) were not sure of their ability to communicate with their parties. Altogether, the proportion of respondents who are unsure of or in disagreement with the potential to communicate with their political parties is more than those who could communicate with the party.

Respondents were also asked to indicate whether they could determine more about the issues driving the elections. Most respondents agreed that when digital media was deployed as political communication tools for elections, it facilitated information provision on issues at stake in the elections. A little over a tenth was not sure, and less than a tenth disagreed.

Motivations for using digital media for political communication in elections

Generally, the study found that more than 80% (n: 313) of the students indicated that they engaged in political discussion of issues with others, while about two-thirds (73.7%, n: 288) said they were enabled to learn more about politics and elections from the discussions. Evidence from the correlational analysis shows that a correlation between political elaboration and political discussion and entertainment yielded a perfect positive correlation of one. This suggests a very significant relationship between the two variables. This indicates that university students elaborate and discuss issues of digital media influences their motivations for using digital media for entertainment.

Whereas the correlation between political information and entertainment was weak, suggesting that respondents attached seriousness to accessing political information for political communication, the perfect independence of one suggests that respondents conducted their online engagements and elaborations in a relaxed, fun-filled, exciting, and trendy manner. Thus, as much as they took the content seriously, they communicated with the content in a manner that excited and relaxed them. The study also found that how university students elaborated and discussed content did not significantly influence their motivation to use the technologies for guidance regarding election issues.

In terms of motivations for the study, mean scores of three dimensions of political attitudes; namely: cynicism towards politics and governance, political efficacy, political

elaboration, and political discussion, were interrogated. Trust in government and interest in politics dimensions soared, with the former being 3.14 and the latter having a mean score of 2.45. Varied responses to the items on trust and interest ranging from agree through neutral to disagree corroborated the mean score. It is also noteworthy that both items are personal issues that revolve around the respondent. Trust in government and interest in politics dimensions soared, with the former being 3.14 and the latter having a mean score of 2.45. This is an indication of varied responses to the items on trust and interest, ranging from agree through neutral to disagree. It is also noteworthy that both items are personal issues that revolve around the respondent.

Regarding motivations for political efficacy, a mean of 2.93 indicates that respondents are not sure that their opinions influence the actions of the political party that they want to be voted for. A mean of 3.17 also indicated that respondents were not sure that their views were heard by their political parties. The mean score of 3.12 also indicates that respondents are not sure that what they have to say influences what the candidate who wants to be voted for does. In terms of motivations, these scores indicated dwindling levels of political efficacy among respondents.

In terms of the motivations for political elaboration and political discussion, a cumulative mean of 2. suggests that respondents largely agree that digital media technologies offer them opportunities to elaborate on and discuss issues pertaining to the elections. A mean score of 2.13 for political discussions and 2.83 for ability to communicate with their political party (mean of 1.93) indicated that elaboration helped them discover more about issues at stake in the elections.

Generally, findings from the present study have little to do with political attitudes and motivations for digital media use for political communication in elections. The correlations mostly revealed weak but positive and significant associations. For instance, the correlation between motivation for cynicism towards politics and governance yielded a weak association of 0.074. This suggests that respondents' feelings about the poor state of the economy, corruption, growing unemployment levels, and frequent power cuts as well as their interest in politics do not significantly influence their motivation for deploying digital media technologies for surveillance purposes. The correlation between cynicism towards politics and governance and entertainment was also a very weak but positive figure of 005, suggesting that cynicism towards politics and governance was not likely to have influenced motivations for entertainment. Motivation for guidance, correlated

with political elaboration and political discussion, yielded a weak positive association of 151, suggesting that elaborations and discussions were also not likely to have influenced respondents' motivations for guidance. In other words, respondents were independent-minded and sufficiently aware of their media needs that they did not permit their political discussions online to influence their motivation for guidance on determining issues critical to the elections as well as their personal political values.

However, political efficacy correlated with social utility and communication yielded a medium positive association of 0.477, indicate that feelings of political efficacy might have influenced motivations for social utility and communication. Regarding political efficacy, respondents indicated (with a mean score of 3.086) that they were not sure they had feelings of political efficacy and that their views were not heard by their political leaders and parties nor did their views influence what the political candidates and parties did. The sense of political inefficacy and cynicism was confirmed when some students indicated that they joined political parties to obtain party membership cards for travel.

Interestingly, feelings of political efficacy did not generally influence motivations for adopting digital media technologies for political communication in elections. Thus, the university students found it useful to deliberate on issues through political communication on digital media technologies that were devoid of their feelings of political efficacy or inefficacy. Intention to vote also yielded very weak associations with the motivation variable, indicate that motivations did not really influence the university students' intention to vote.

Regarding cynicism towards politics and governance, four out of every five university students in the study agreed that the economy was in a bad state, unemployment was high, corruption was endemic, and power cuts were rampant. Two-thirds of respondents indicated their uncertainty or lack of trust in the government.

Generally, the results of the focus group discussions corroborate the survey findings. Some excerpts of the participants' responses are presented in the in Table 1 below.

Table 1. Participants' responses on digital media influence, political parties and their political candidates.

Views of year 1 respondents
"You have quick access to the sites and politicians." "Other social media (such as Facebook) is crowded, so you get the sense that you are not seen. You can just 'like, comment, view, or follow' others but with WhatsApp and Instagram, you can contribute to the discussions and track them. This gives us a sense of importance." "On social media, politicians just shows us what they can do, not what we want." "We use social media features to engage online on political issues." "Prefer social media because traditional media takes their agenda from social media." "Social media air information that traditional media use."
Views of year 2 respondents
"No limitations, free to give comments and criticise." "Free to share information in the comfort of your own room without fear of attack." "Helps test your ideas in terms of whether your views are popular." "Watchdog to politicians who act on their views as they represent public opinion." "Know about current issues." "Information is viral as favourite tweet can spread."
Views of year 3 respondents
"Views are heard as politicians have people who monitor online discourse." "Obtain information from other constituencies." "Political party fanbearer on social media projecting party has loyalty effects and projects party as winnable." "You meet politicians on social media."
Views of year 4 respondents
"Feedback indicate others or 'collective' groups share your views." "Indirect links with political leaders." "Online media is bigger platform than rallies." "Some people are unwilling to speak at rallies but might speak online." "Go to Facebook to cheque where political party is touring, know its next messages."

Discussion and conclusion

The aim of this study is to investigate how individual attributes such as political cynicism, efficacy, and elaboration by university students of a renowned public university in Ghana influence motivations for using digital media as political communication tools in elections. This study is novel as it unravels how university students' motivations for the purposeful deployment of digital media influence their sense of efficacy, cynicism, and elaboration on political communication on elections. Generally, the findings suggest that university students did not allow their feelings of cynicism towards politics and politicians to influence their motivations for political engagement, political elaboration, and political discussion. However, year three and four university students exhibited noticeable levels of political inefficacy when communicating on the elections, cautious of avoiding being tagged as belonging to one political party or the other when they made comments on political issues. These findings align with Haridakis and Hanson's

(2011) study, in which they found that voter cynicism among younger voters detached them from politics and deterred them from voting. Scotto et al. (2021) explain this phenomenon by asserting that feelings of political inefficacy are akin to a sense of marginalisation, detachment, or alienation that citizens feel in connexion to the activities of politicians and political institutions.

However, Malloy and Pearson-Merkowitz (2016) argue that negative campaign information influences cynicism and lack of trust in political leaders. Jones-Jang et al. (2021), who found that voter cynicism negatively influences political participation share similar views. However, Song et al. (2020) discovered that media cynicism towards politics and governance produces positive effects in that it challenges the status quo, deepening people's political participation in politics. It is clear from these studies that not much has been uncovered in terms of whether political attitudes influence motivations for digital media adoption. Findings on this study hope to unravel more of the association as it discusses how political efficacy influences motivations for digital media use.

Conversely, those with higher levels of efficacy were more likely to participate in politics, and online political interactions could enhance political efficacy (Oser et al., 2022). According to Lu and Luqiu (2020) and Shore (2020), it is as individuals engage with themselves and other political actors within their immediate localities that they develop political efficacy.

Pingree (2007) offers an insightful explanation of this conundrum to the effect that expression, not reception, may be the first step towards better citizenship. Its mere expectation can motivate elaboration of media messages, and the act of message composition is often much more effective at improving understanding than any act of reception (Pingree 2007, p. 447).

Thus, the literature corroborates findings on the political elaboration of political information in which year three university students indicated that they discussed and understood content on websites and social media platforms of political leaders and their parties without solely depending on graphics. There is an implicit suggestion here that the opportunity to compose, discuss, and elaborate on content for social utility purposes facilitates understanding.

In addition, the findings indicate that university students exhibited a sense of ownership of content on digital media platforms by simplifying it to enhance understanding. It also indicates a likelihood of why, despite scant communication from political actors, students still engage in political communication. They simply like it, and as a student aptly puts it, "My world is in the mobile phone."

Notwithstanding the cynicism towards governance and politics expressed by university students, the findings indicated that they were not averse to communication on digital media platforms. In other words, the feeling of university students that government and political leaders did not care for them or have their interests at heart did not influence their motivations to use digital media for political communication in elections. As a result, they proceeded to engage with others in the elections despite their cynicism towards politics and governance.

Further political elaboration and political discussion did not significantly influence social utility and communication motives. Evidence from correlational analysis depicts weak but significant associations. This indicates that political elaboration and political discussions by university students are made independently of guidance and social utility motives. Knoll et al. 2020 argued that the opportunity to express one's view on social media foster participation. Similar views are shared by Jennings et al. (2021). They found that citizens were disengaged from democratic political processes. He et al. 2022 found that a sense of political efficacy developed as citizens engaged among themselves and with other political actors in their communities. In line with Grunig and Hunt's (1984) models of communication, elaborations and discussion of content on digital media epitomise symmetric communication in that the process involves transmission and sharing of information among university students. However, the findings indicated that except for the entertainment variable, political discussions and political elaboration on issues did not generally influence motivations for digital media use for political communication on elections markedly.

Notwithstanding that this section seeks to determine the influence of political attitudes on motivations, it is also crucial to determine the role of the interactivity of digital media as it facilitates political elaboration and political discussion on digital media. Earlier, findings on social utility and communication bore close to strong correlations with all three dimensions of interactivity, attesting that interactivity fosters communication and discussions on digital media (Amankwah & Mbatha, 2021). In

support of this, Ciuchita et al. (2022) argue that interactivity is at the centre of communication, discussion, and elaboration and that they offer an 'affordance that allows one to make real-time changes to the content in the medium.' Li and Chen (2021) express similar views. They assert that the five dimensions of interactivity are 'playfulness, choice, connectedness, information collection, and reciprocal communication.' All five dimensions of interactivity conform to social utility and communication motives and political attitudes of political elaboration and political discussion.

It is also noted that with respect to political elaboration and political discussion, the discussions and elaborations conducted by year one and year two university students influence their use of the technical interactive features of digital media. In other words, features such as emails, hyperlinks, chats, and SMS text messages serve as useful tools that support discussion and elaborations students conduct on digital media. Likewise, political elaboration and political discussion matched well with textual interactivity. This indicates that digital media users deploy content, graphics, and photographs to facilitate online discussions and conversations but do not depend solely on them for understanding. This is why the study asserted earlier that the inherent motivation and purposefulness of university students enabled them to simplify, modify, recreate, and disseminate messages on digital media. Political elaboration and political discussion correlated with cynicism towards politics and governance yielded a medium correlation of 0.523, suggesting that the opportunity for political elaboration and political discussion of digital media content might have provided an outlet for digital media users to vent their feelings of cynicism towards politics and governance.

In conclusion, this study discovered that political attitudes of university students did not generally influence motivations for using digital media as political communication tools in elections. Although they were displeased with the harsh socio-economic realities and high unemployment, as well as felt some cynicism and reduced levels of political efficacy due to limited feedback from political actors, political parties, and their social media platforms; the opportunity for political elaboration and political discussion afforded them through symmetrical peer-to-peer communication in an entertaining manner enabled them to rise above the cynicism to political efficacy and enact citizenship.

Future research could investigate how political actors could effectively deploy digital media to enhance university students' feelings of efficacy and cynicism, translating

into votes in an election. Furthermore, the sample could be made more diverse to include more students with varied demographic indicators such as gender and ethnicity from both public and private universities to determine whether there is any association between them. To achieve more depth and detail, a purely qualitative study could also be conducted to determine in detail the motivations for digital media use, individual differences, and elections.

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Research Article / Araştırma Makalesi

A field research on the effect of consumer sensitivity to equality in gender roles on their involvement in advertisements

Tüketicilerin toplumsal cinsiyet rollerindeki eşitliğe yönelik duyarlılığının reklamlarla ilgilenime etkisi üzerine bir saha araştırması

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Abstract

In today's world, brands try to strengthen their position in their industry and enhance their connexion with consumers by showcasing themselves on social issues to influence consumers and positively affect their brand image. Gender equality has recently become prominent among these social issues. Accordingly, this study examines consumers' sensitivity to advertisements that promote gender equality. The aim of this study is to measure the impact of consumers' sensitivity to equality in gender roles on their involvement in advertisements and to scrutinize their sensitivities and opinions regarding ads in this context. In the research, which employs a mixed-method approach, surveys were conducted online with 300 participants using convenience sampling, and in-depth interviews were conducted with 10 voluntary participants. To achieve the research objectives and test the hypotheses, one of the campaigns focussing on equality in household gender roles from the past year was selected after a pilot study and presented to the participants. According to the research findings, consumers' sensitivity to equality in gender roles has a significant and positive impact on cognitive and affective involvement in advertisements. Furthermore, participants believed that the message conveyed in the ad could be beneficial in terms of gender equality sensitivity, but they also critically examined equality in household gender roles presented in the advertisement.

Keywords: Advertising, gender roles, gender equality, cognitive involvement, affective involvement

Öz

Günümüzde markalar hem faaliyet gösterdikleri sektörde konumunu sağlamlaştırmak hem de tüketicilerle olan bağını güçlendirmek için sosyal konularda kendini göstererek tüketicileri etkilemeye ve marka imajları üzerinde olumlu etkiler oluşturmaya çaba göstermektedir. Bahsedilen bu sosyal konular

içerisinde son zamanlarda toplumsal cinsiyet eşitliği öne çıkmaktadır. Buradan hareketle çalışma, tüketicilerin toplumsal cinsiyet eşitliğini içeren reklamlara yönelik gösterdikleri ilgilenimi incelemeyi konu edinmektedir. Bu doğrultuda tüketicilerin ev içi toplumsal cinsiyet rollerindeki eşitliğine yönelik duyarlılığın, reklama gösterdikleri ilgilenim üzerindeki etkisini ölçümlemek ve bu içerikteki reklamlara karşı hassasiyetlerini ve görüşlerini irdelemek amaçlanmaktadır. Karma metodun uygulandığı araştırmada kolayda örneklem yöntemiyle, çevrimiçi ortamda, 300 kişiye anket yapılırken, 10 gönüllü katılımcıyla derinlemesine görüşme gerçekleştirilmiştir. Araştırmanın amacını gerçekleştirebilmek ve ortaya koyulan hipotezleri test etmek amacıyla, son bir yılı kapsayan, ev içi toplumsal cinsiyet rollerindeki eşitliği içeren kampanyalardan biri, pilot çalışma sonrası seçilerek katılımcılara gösterilmiştir. Araştırmanın sonucuna göre, reklama yönelik bilişsel ve duygusal ilgilenim üzerinde, tüketicilerin toplumsal cinsiyet eşitliği duyarlılığının anlamlı ve pozitif yönde bir etkisi olduğu gözlemlenmiştir. Ayrıca katılımcıların reklamda iletilen mesajın toplumsal cinsiyet eşitliğine duyarlılık bakımdan iyileştirici olabileceğini düşünürken, bireylerin reklamda sunulan ev içi toplumsal cinsiyet rollerindeki eşitlik ile ilgili içeriği sorgulayıcı bir şekilde ele aldıkları gözlemlenmektedir.

Anahtar kelimeler: Reklam, toplumsal cinsiyet rolleri, toplumsal cinsiyet eşitliği, bilişsel ilgilenim, duygusal ilgilenim

Introduction

In behavioural and social sciences, academics from various disciplines have recently been interested in the social and cultural effects of advertising. Among the topics studied is how the use of portrayals of gender roles in advertisements reinforces social stereotypes and, significantly, how it shapes the attitudes of female and male consumers. It has been observed that brands often use gender roles in ads to establish their products and services in the minds of consumers, aiming to make them stick. Therefore, it can be easily understood why researchers have shown significant interest in portrayals of women and men in advertising since the 1960s.

When gender is brought to the forefront, the focus often shifts to representations of women and men in everyday life practises or the public sphere, highlighting the perception of inequality, which has been a subject of debate for many years. Gender role patterns generally used in advertising are derived from traditional roles associated with men and women within society over time. Advertising messages have traditionally been presented in a male-dominated discourse style, effectively internalising and supporting role patterns that position women as subordinate to men. In parallel, in advertisements, men are often portrayed as responsible for their families, emotionally intense, confident, capable of taking on leadership roles in public spaces and workplaces, and successful individuals. Women are often depicted in more private settings and engaged in household chores, consuming products that fulfil their families' needs, or fulfilling the assigned role of motherhood.

However, the findings suggest that women want to be portrayed as independent thinkers, career-oriented individuals, and potential societal leaders. Women have expressed dissatisfaction with how advertisements represent them, stating that advertisements rely on stereotypes and portraying gender roles in advertisements is inaccurate (Zimmerman & Dahlberg, 2008). This negative attitude towards ad content, created by pushing women into the background and depicting them in passive roles, also leads to negative attitudes and behaviours towards the brands. In this context, the recent criticism from academia and the industry of portraying women in advertising as catering to the male gaze and reinforcing patriarchy has led brands to prioritise gender equality in their marketing communication activities in recent years (Canbazoğlu, 2020, p. 74). Consequently, brands that have faced criticism from society have started taking action to promote gender equality, particularly in their advertisements, by

delivering messages that support gender equality in their marketing communication activities.

As gender roles have begun to change and evolve, ads have shifted, with increasing efforts towards gender-sensitive and equitable advertising. Recognising the potentially transformative power of advertisements in achieving gender equality, there has been a growing emphasis on creating ads that challenge and break free from stereotypes related to gender. The impact of such advertisements, which eliminate stereotypes that go against gender equality, can be evaluated by examining the reactions and attitudes of viewers.

To date, the limited number of studies measuring the relationship between sensitivity to gender equality and involvement in advertisements underscores the importance of this study. This study examines how consumers respond to ads focusing on gender equality. Within this framework, the study aims to measure the influence of consumers' sensitivity towards equality in gender roles on their involvement in advertisements and to analyse their sensitivities and opinions regarding these types of content. To reveal the relationship between sensitivity to gender equality and consumers' involvement in ads, quantitative and qualitative research methods have been used in a mixed-method approach.

Overview of gender equality in advertising

The concept of 'gender' in feminist literature was introduced by the British sociologist Ann Oakley. In her book *Sex, Gender, and Society*, she argued that gender is not a determining factor in the oppression of women, thus popularising the concept (Oakley, 1972). The reason for distinguishing between "sex" and "gender" is that, from a biological standpoint, there is limited potential for political change, while culture allows for change (Mutlu, 2012, p. 301). Scott (2007) notes that the concept of "gender" is more seriously used to refer to the social organisation of relations between sexes and that the recent frequent use of the term is aimed at establishing the academic credibility of research conducted in this field (p. 10). The concept of gender has proven to play a very important role in illuminating one of the fundamental elements in social stratification: gender, which precedes and intersects with all other social differences, such as social class, status, and race, between men and women (Slattery, 2008, p. 345). People tend to act in ways that their cultures expect. Traditional gender expectations are often based on

how many individuals behave within their culture. In this regard, gender is more about what we do than a universal concept of who we are (Atkinson, 2015, p. 58). Cislaghi and Heise (2020) define gender as the totality of social expectations created based on how women and men within a society reflect socially accepted behaviours.

The expansion and strengthening of the feminist movement over the last 20-30 years have opened the way for a more detailed analysis of discussions on gender and gender differences. In this regard, Arat (2020) states that the concept of gender can change over time or in different societies because of political, social, economic, and cultural transformations. For example, in the past, women were expected to only embrace the roles of mother and wife at home, but today, they are expected to participate in all areas of society, join the workforce, and take on representative roles in politics. Therefore, it is now widely recognised that gender cannot be approached from a fixed perspective. It is constantly reevaluated, especially by postmodern paradigms, and is a contentious definition. This reality encourages us to emphasise gender sensitivity further, ultimately leading us towards gender equality.

Ensuring gender equality is closely related to creating awareness of gender sensitivity. Gender sensitivity involves being aware of and respecting the needs, interests, and sensitivities of women and men. Examples of this sensitivity include refraining from using derogatory language, avoiding stereotypes, and providing opportunities to meet different needs (Ecevit, 2021, p. 14). Gender equality is "a broader concept and, according to one definition, it refers to women and men having equal rights, opportunities, obligations, and responsibilities in a social, economic, and cultural platform" (Jarviste, 2010, p. 1). Gender equality is a concept associated with the unequal positions of women and men in society, not biological differences (Ecevit, 2021, p. 25). According to another approach, gender equality minimises gender role differences and the discrimination that may arise (Grove, 2005; House et al., 2002).

Advertising is one factor that directly affects the shaping of gender perceptions in people's minds. In today's consumer society, where advertisements have become a fundamental determinant of daily life as part of the media, it can be anticipated that they have a much more central role in shaping perceptions of gender roles compared to the past. The symbolic power of advertisements emerges in reinforcing or changing a consumer's opinion about any product and/or service, strengthening their attitude, or determining societal beliefs independent of the product. As Vivian (2009) points

out, advertising is a tool used to sustain specific social structures where different attitudes, behaviours, and social statuses of women and men are portrayed, such as gender.

The use of images that depict stereotypical gender roles and words in advertising communication has introduced gendered advertising in the literature. Goffman (2020) addresses gender advertising as a type of advertising that socially defines and constructs gender relationships, signs, and roles in people's minds (p. 102). Since advertising presents a visual value system, the relationship between advertising and gender becomes inevitable because of its reflection of culture and its creation of meaning in the circulation of culture. Research on gendered advertising indicates that women are often portrayed explicitly in domestic roles, such as happy housewives and mothers, while men are frequently depicted in outdoor and professional settings (Eisend, 2010; Furnham & Mak, 1999; Furnham & Paltzer, 2010; Grau & Zotos, 2016; Matthes et al., 2016). Based on these studies, the consensus is that stereotypes are known to have a general effect of preventing distraction, capturing viewers' attention, encouraging a focus on the brand message, and simplifying cognitive processes and classification on behalf of consumers, thereby hindering advertisers from refuting them (Windels, 2016; Zotos & Tsichla, 2014). According to feminist thought, advertising in popular media overtly contributes to gender inequality by promoting sexism and accepting distorted image ideals as acceptable and valid (Kilbourne, 1999).

Recently, a shift has been observed in the portrayal of gender in advertising communication, prompting a reevaluation of gender roles within the realm of advertising (Tsichla, 2020, p. 36). Indeed, advertisements convey new meanings of gender by creating an image of active, self-confident, or sexually empowered women and presenting loving fathers and men. The primary reason behind this change is the inclination to adopt and effectively communicate corporate social responsibility or brand advocacy practises at the corporate level to appear more socially responsible and satisfy viewers, especially ethically conscious Generation Y consumers (Champlin et al., 2019). Gill (2008) and Varghese and Kumar (2022) point to many powerful reasons behind gender equality in advertising, such as the increasing brand activism for better representation of women, the increased economic independence of women, rising criticisms of commodity feminism, sensitivity to gender stereotypes, and heightened scrutiny of gender role representations by regulatory governmental bodies. In this regard, advertisements reflect societal cultural changes by breaking gender stereotypes

more than in the past and presenting increasingly prevalent gender equality roles (Fowler & Thomas, 2015; Grau & Zotos, 2016; Åkestam et al., 2017). Consumers expect brands and advertisers to take a stance in line with this as consumers act more consciously towards achieving gender equality (Pounders, 2018).

Valek and Picherit-Duthler (2021) conducted a study in the United Arab Emirates (UAE). In China, traditions and culture still play a vital role, focussing on consumers' perceptions of gender role stereotypes in advertising. According to the results, more participants remembered an advertisement featuring a female character than a male one. In addition, female and male participants agreed that a female character should be used in a household product advertisement, but this joint agreement was disrupted for a bank advertisement. The research conducted by Nwokoro and Ekwunife (2020) demonstrates the inevitability of gender sensitivity in ads, highlighting that women are negatively characterised as "less competent" compared to their male colleagues described as "active and competent" for public positions. A study by Huhmann and Limbu (2016) found that the more consumers believe that advertisements depict gender stereotypes, the less favourable their general attitudes towards the ad. In addition, multiple group analyses concluded that gender stereotype attitudes adversely affect the attitude towards advertisements for women and young consumers.

Another study presents a meta-analysis based on 64 primary studies regarding gender roles in TV and radio advertisements. The research's conclusion reveals that advertisements' stereotypings has decreased over time, but this decrease is mainly attributed to developments in countries with high levels of masculinity. Furthermore, correlation analysis and structural equation modelling results indicate that gender stereotyping in advertisements is linked to gender developments and value shifts. These findings provide experimental support for the mirror argument, challenging the mould argument for the first time (Eisend, 2010). In another study examining gender equality in tourism advertisements focussing on the social marketing approach, 394 photographs were visually analysed and coded using Goffman's framework of gender and media relations. The study reported mixed results in terms of finer details and transparent and more explicit visual cues depicting relationships between men and women. Subsequently, important implications for social marketing were drawn, and a meaning-means framework for quality of life was proposed (Chhabra et al., 2011). In the 2021 Gender Equality Scorecard Study, which analysed TV commercials that received Effie Awards at the national level, the visibility of men significantly increased in the "Home Cleaning and Care" category

traditionally associated with women, while the visibility of women increased in the "Banking-Finance" category traditionally associated with men. The portrayal of women in working roles increased beyond the previous year, and their visibility in the workplace showed an increasing trend. Additionally, the study observed that the advertisements focussed on men who spend more time at home and perform household chores (Şener & Öztürk, 2022). These data reflect an increase in societal awareness of gender equality and diversity and a greater embrace of transformation in gender representations in advertisements that align with these values.

Aim and methodology

In recent times, as gender roles in society have begun to transform, it has been observed that advertisements have changed and that the steps taken regarding gender-sensitive and egalitarian advertisements have increased. Building on this, this study addresses the relationship between gender equality and advertisements. Consequently, this study examines the relationship between sensitivity and gender equality and consumers' involvement in ads.

Aim

The research measures consumers' sensitivity towards advertisements that incorporate equality in gender roles. The study's primary objective is to measure the impact of consumers' sensitivity to equality in household gender roles on their involvement in advertisements and examine their sensitivities and opinions towards ads in this context.

Shteiwi (2015), in his research using variables such as gender, age, and employment status, investigated attitudes towards gender roles in Jordan, emphasising the recent modernisation. The findings suggest a relationship between gender, age, employment status, and attitudes towards gender equality. Accordingly, female participants showed a more robust support for women's social and economic participation than male participants. Moreover, non-working individuals and the age groups of 18-24 and 45-54 demonstrated a more egalitarian attitude than other age groups. In line with this study, the following hypotheses have been developed:

H1a: There is a significant difference between the gender groups of consumers and their societal sensitivity towards gender equality.

H1b: There is a significant difference between the gender groups of consumers and their domestic sensitivity towards gender equality.

H2a: There is a significant difference between the marital status of the participants and their societal sensitivity towards gender equality.

H2b: There is a significant difference between the participants' marital status and their domestic sensitivity towards gender equality.

H3a: There is a significant difference between the participants' age groups and their societal sensitivity towards gender equality.

H3b: There is a significant difference between the age groups of the participants and their domestic sensitivity towards gender equality.

H4a: There is a significant difference between the participants' income levels and their societal sensitivity towards gender equality.

H4b: There is a significant difference between the participants' income levels and their domestic sensitivity towards gender equality.

It is assumed that raising awareness about advertising messages that highlight sensitivity towards gender equality and emphasise the power of women will both increase the involvement of brands and advertisements among consumers and establish an emotional bond, especially with female consumers (Valek & Picherit-Duthler, 2021, p. 513). In a study conducted by Drake (2017), reaching 181 consumers through an online survey, it was revealed that advertisements focussing on gender equality, particularly those centred around women, led to a positive attitude towards both the advertisements and the brands creating them. These ads generated purchasing intention and facilitated an emotional connexion with the brand. Based on these studies, the following hypotheses have been formulated:

H5a: Consumer sensitivity to gender equality is positively related to their cognitive involvement in advertisements.

H5b: Consumer sensitivity to gender equality is positively related to their affective involvement in advertisements.

H6a: The effect of consumers' sensitivity to gender equality on their cognitive involvement in advertisements is significant.

H6b: The effect of consumers' sensitivity to gender equality on their affective involvement with advertisements is significant.

Method

In this study, quantitative and qualitative research methods were used in a mixed-method approach. The research was conducted in two phases: 1-questionnaire and 2- in-depth interview. In this study, both a survey and an in-depth interview were utilised to measure individuals' statistical involvement in advertisements emphasising gender equality in household social roles and to interpret their sensitivities and attitudes towards these advertisements based on their direct opinions. First, a questionnaire was developed to achieve the quantitative research objective. This questionnaire measured participants' sensitivity to gender equality and to determine their cognitive and affective involvement in ad messages addressing gender equality. On the basis of numerical measurement, the data collected through surveys can be viewed as a valid and reliable tool (Lewin, 2005, p. 219; Dawson, 2007, p. 15). In addition to the survey, a qualitative research method, namely an in-depth interview technique, was conducted as the second stage. This allowed for a deeper understanding of participants' awareness of gender equality and their emotions, thoughts, and motivations towards the ad incorporating gender equality.

Combining qualitative and quantitative data ensures a more comprehensive data analysis. The aim of this study is to enrich integrating and complementing the data from these two methods. On the other hand, in-depth interviews, beyond being a tool that gathers many opinions of individuals, provide structures framing the "subjectivities" by delving into the depths of discourse like a drill (Barbour & Schostack, 2005, p. 41; Dawson, 2007, p. 15). According to Johnson and Turner (2003), methods should be mixed to create complementary strengths and non-overlapping weaknesses. This involves the recognition that all methods have limitations and strengths. In this study, priority was given to quantitative data, and the two methods were integrated during the interpretation phase. The mixed method was characterised by a sequential explanatory strategy, in which the collection and analysis of quantitative data were followed by the collection and analysis of qualitative data (Creswell, 2003).

Research model

The research adopted a descriptive research design to determine the sensitivity of individuals participating in the study towards gender equality and to portray a detailed picture of the situation. Furthermore, it relied on an explanatory research design (Gürbüz & Şahin, 2018, pp. 101-102) to test whether consumers' involvement in advertisements

involving equality in gender roles varies based on their sensitivities and to reveal the causal relationships between variables. It is possible to evaluate it under the experimental model because it is a candidate to explain how an ad selected purposefully in accordance with the subject of the study affects the cognitive and affective involvement of consumers towards ads containing equality in household gender roles. Karasar (2009) defines an experimental model as "a research model in which the researcher directly controls the generation of the desired observed data to determine cause-and-effect relationships" (p. 87). The fundamental model of this study was tested through hypotheses on how consumers' sensitivity to equality in household gender roles would result in cognitive and affective involvement in advertisements.

Quantitative sampling

The study population consists of married or single consumers residing in Türkiye who have opinions on advertisements, gender equality, and inequality. Thus, a sub-sample representing this entire group was selected for the study. The participants included in the study were selected using convenience and snowball sampling methods. Due to limitations in terms of time and cost, the desire to choose units that are easily accessible and practical to implement led to the use of convenience sampling. For convenience sampling, the researcher can select sufficient elements from the existing ones (Tutar & Erdem, 2020, p. 261). Since the aim was to ensure the dissemination of the survey through social media platforms and online channels, it was important for individuals in the population to establish connexions with each other. Therefore, snowball sampling was also used. The questionnaire for this study was distributed to 300 consumers through Google Forms on the online platform. The 300 individuals included in the study constitute the sample for this research.

Qualitative sampling

A small sample group was determined by reaching five single and five married participants out of the individuals invited to in-depth interviews. Ten participants were interviewed. Qualitative research has varying opinions on the required sample size. Some experts believe that an ideal sample size cannot be calculated for qualitative studies, and only one or two cases, such as individuals or groups, are sufficient (Bayyurt & Seggie, 2015). Conversely, other researchers argue that qualitative studies can be assessed using different techniques, and their effectiveness should be evaluated on the basis of their ability to

achieve the objectives and goals related to the topic and the appropriateness of the units in the sample (Silverman, 2011). According to Creswell and Poth (2018), no specific answer exists. However, the number of participants depends on the qualitative research approach. According to Creswell and Creswell (2018), Narrative includes 1-2, phenomenology includes 3-10, and grounded theory includes 20-30. The participants' demographic characteristics and the diverse interpretations they brought to the questions in this context allowed for a broad sample representation. Participants were reached through snowball sampling, and the interviews were conducted in a meeting room in accordance with the researcher's and the participants' mutual decisions. The interviews with the participants lasted between 35 and 45 min. Participants are coded from P1 to P10. The ages of the participants ranged from 25 to 51, with an average age of 32. Six female and four male participants were predominantly employed in the private sector.

Data collection tool

In this study, which utilises both quantitative and qualitative research methods, data collection was carried out in two stages. The survey form generally consists of three sections. In the first section of the survey form, participants' cognitive and affective involvement in the selected advertising example that includes gender equality, relevant to the subject of the study, was queried. For cognitive involvement regarding the ad (CIA), the cognitive involvement scale developed by Logan et al. (2012), Pavlou and Fygenson (2007), and Lee and Hong (2016) was used. Cognitive involvement in an ad refers to the degree to which an individual carefully examines and evaluates the content of an ad. The affective involvement (AIA) scale developed by Davis (1983) and Lee and Hong (2016) was used to assess affective involvement. AIA in the ad refers to understanding how the audience interacts with the advertisement on an emotional level. In the second section of the study, Sudkamper et al.'s (2020) gender equality scale was employed to measure individuals' sensitivity to gender equality. The sensitivity to gender equality (SGE) scale measures consumers' thoughts on gender equality in societal roles (workplace, public sphere, etc.) (SSGE) as well as their perceptions of roles within the household, (DSGE: Domestic sensitivity to gender equality). In the third section, the last part of the questionnaire, questions about the participant's demographic information, such as age, gender, marital status, and income, were included.

A semi-structured questionnaire was prepared to conduct an in-depth interview, facilitating a thorough exploration of the participants' perspectives. The in-depth interview questionnaire comprises two categories: general questions about gender and gender

equality awareness before showing the ad video and specific questions about the ad after displaying the ad video. The questions in the first section of the questionnaire were developed on the basis of the information revealed in the literature review. The participants' thoughts on gender equality, perspectives, and sensitivities were investigated in this section. In the second section, questions were directed towards eliciting participants' thoughts on what they had seen in the advertisement and their evaluations regarding the advertisement in connexion with gender equality. The phenomenological method was employed for data collection and analysis through in-depth interviews. Phenomenology is an approach initiated by Edmund Husserl and later developed by Heidegger, aiming to investigate human experiences and how events are perceived and experienced (Smith et al., 2009). This analysis seeks to elucidate experiences and meanings, thereby understanding how individuals interpret their surroundings and events (Wade & Tavris, 1990). Phenomenological data analysis reveals experiences and meanings. The obtained data is conceptualised during the analysis process, and efforts are made to identify themes that describe the phenomenon. The findings obtained within the framework of the emerging themes are explained and interpreted (Yıldırım & Şimşek, 2016). Accordingly, the received data was conceptualised in the analysis process to reveal themes that could describe the phenomenon.

Limitations

One of the limitations of this study is the selection of the advertisement to be tested from a product category, which necessitates the ad to appeal to a different demographic group because it is chosen from a consumer audience with varying characteristics. It was also ensured that the selected product category would appeal to both men and women. Another limitation of the study is the use of a limited number of participants chosen through a convenience sampling method and conducted through Google Forms in an online environment within a specific time frame. Therefore, it is impossible to generalise the findings to Türkiye and all product categories.

In this study, advertising content that addresses equality in household gender roles and, mainly, in which male and female roles are seen as equal within the household has been examined. The scans show that durable/white consumer goods and cleaning products are among the categories where these contents are most prevalent. Accordingly, five ads with 1 million views and overviews on the *YouTube* platform were identified for analysis in the recent year. Before the research, opinions were obtained from an academic and a volunteer for the selected ads. Following this process, Bosch's *Perfect*

Harmony campaign for dishwashers was included in the study. Therefore, it can be considered a limitation of the research that responses were sought based only on the advertisement belonging to the Bosch brand within the scope of this study.

Gender inequality is a multidimensional issue that affects all aspects of social relations. It is influenced by factors such as culture, lifestyle, and geographic location. To better understand how people approach this issue, researchers have evaluated changes in household gender roles, which is a small part of gender equality. The selected advertisement focuses on 'sharing household chores' instead of the stereotype of women being solely responsible for household tasks. Because of the mixed-method approach, it was deemed appropriate to show only one advertisement to prevent participants from ending the research process early and to provide consistency of the data from both research methods.

Procedure

Before analysing the survey data, the responses were appropriately coded for accuracy and meaningfulness, and pre-analysis cheques were performed. In this context, independence cheques for the response options and whether the responses exhibited a regular or random distribution were examined. In addition, reliability and validity analyses of the data were conducted. The data obtained from the quantitative research were evaluated in line with the study objectives.

Scale scores were calculated, and kurtosis and skewness coefficients were examined to determine the appropriateness of the scores for a normal distribution. It is considered important for a normal distribution that the kurtosis and skewness values obtained from the scales fall within the range of +3 to -3 (Hopkins & Weeks, 1990; De Carlo, 1997). The z-test values obtained from the scales are also observed to be ($\pm$ 1.96). Upon examining the values, it can be concluded that the scores follow a normal distribution. The study's kurtosis and skewness coefficient table and z-test values are shown in Table 1. Because of the normal distribution of the scores, parametric test techniques were utilised in the study. T-tests and Analysis of Variance (ANOVA) were employed to analyse the differences in scale scores based on demographic characteristics. The t-test was used to analyse demographic variables with two groups, while ANOVA was used to analyse demographic variables with k (k>2) groups. While we can determine if there is a difference between the two groups by using the t-test and ANOVA, we need to

know the effect size to interpret the magnitude of this difference. The effect size is a statistical value that indicates the magnitude of the difference between groups that we expect to have a difference. The overall assessment for effect size in η^2 values is as follows: values of .01 or lower indicate low effect size, .06 indicates moderate effect size, and .14 and above indicate high effect size (Cohen, 1988).

Table 1. Kurtosis and Skewness coefficient table of the study

	N	Skewness	Kurtosis	z-test values
AIA	300	0,616	-0,632	1,31490
CIA	300	-0,559	-0,552	1,23261
SSGE	300	-1,302	1,347	-1,98851
DSGE	300	-0,434	-0,342	-1,30933
SGE	300	-1,214	1,839	-1,18148

AIA: Affective Involvement in Ad; CIA: Cognitive Involvement in Ad; SSGE: Societal Sensitivity to Gender Equality; DSGE: Domestic Sensitivity to Gender Equality; SGE: Sensitivity to Gender Equality

Exploratory factor analysis was conducted to determine the construct validity of the scales used. In this regard, the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's test were applied to determine whether the scale was suitable for factor analysis. The KMO coefficient is calculated to assess the adequacy of the sample size, while the normality assumption is examined using the Bartlett sphericity test. Within this scope, the KMO test should result in .50 or higher for the measurement outcome, and Bartlett's sphericity test should be statistically significant. In the factor analysis process, factor loading values were examined for assigning or removing scale items to/from the factors. Cronbach's alpha coefficient provides the reliability level of the scale (Meyers et al., 2010, p. 332). The KMO value was calculated as 0.941 in the factor analysis for the scale. Accordingly, the sample size is suitable for factor analysis (KMO>0.50). Within the scope of the Bartlett test, the X^2 value was calculated as 4038.156 and was found to be statistically significant (p<0.05). Therefore, the assumption of a normal distribution has been provided.

In the survey section, which includes involvement in advertisements, an analysis was conducted to determine the distribution of factors based on the data obtained from the participants. The distribution of questions and factor loadings is shown in Table 2. According to the factor analysis results, items 6 and 11 were removed, and it was concluded that the scale consists of 14 items forming two dimensions. The first sub-dimension of the scale, 'affective involvement,' consists of nine questions with

factor loadings ranging from 0.873 to 0.767. This factor accounts for a total variance explanation rate of 46.517%. Additionally, upon examining the reliability results, it was concluded that the sub-dimension is highly reliable due to $0.70 \leq \alpha=0.960 <1.00$. The second sub-dimension of the scale, 'cognitive involvement,' consists of five questions with factor loadings ranging from 0.858 to 0.736. This factor accounts for a total variance explanation rate of 29.210%. Furthermore, the reliability results indicate that the sub-dimension is highly reliable with $0.70 \leq \alpha=0.908 <1.00$.

Through the factor analysis conducted on the basis of the data obtained from the participants for the second section of the survey aiming to measure sensitivity to gender equality, as seen in Table 3, two-factor dimensions were identified. Accordingly, it was concluded that the scale consists of 11 items forming two dimensions. The first sub-dimension of the scale, societal sensitivity to gender equality, consists of seven questions with factor loadings ranging from 0.868 to 0.657. This factor accounts for a total variance explanation rate of 45.896%. Additionally, upon examining the reliability results, it was concluded that the sub-dimension is highly reliable, with $0.70 \leq \alpha=0.930 <1.00$. The second sub-dimension of the scale, which encompasses domestic sensitivity to gender equality, consists of four questions with factor loadings ranging from 0.867 to 0.621. This factor accounts for a total variance explanation rate of 22.999%. Furthermore, reliability results indicate that the sub-dimension is considerably reliable with $0.70 \leq \alpha=0.781 <1.00$.

Table 2. Factor structure of involvement in the ad

	AIA	CIA	Variance Explained	Cronbach's Alpha (Reliability)
16. The advertisement is unique	,873			
9. I felt intense emotions after watching the advertisement.	,871			
13. The advertisement was extraordinary.	,870			
12. I was emotionally impacted by the message of the ad.	,828			
15. The advertisement was intriguing.	,814		46,517	0,960
8. I felt like I was inside the advertisement.	,813			
7. It was an ad that stayed in my mind and made me contemplate even after seeing it.	,788			
14. The advertisement was different.	,768			
10. I found the ad interesting.	,767			

		Variance	Cronbach's
3. The ad contained information about gender equality.	,858		
2. The advertisement was informative.	,850		
5. I could grasp the main message of the ad.	,836	29,210	0,908
1. The advertisement was instructive	,747		
4. What was conveyed in the advertisement caught my attention.	,736		

Table 3. Factor structure of sensitivity to gender equality

	SSGE	DSGE	Variance Explained	Cronbach's Alpha
2. If I had the opportunity, I would participate in activities that advocate for gender equality.	,868			
7. I would support my acquaintances/friends on the issue of gender equality.	,866			
6. Supporting people affected by gender inequality is important.	,864			
1. Advocating for gender equality is my priority.	,841		45,896	0,930
3. I am interested in news articles and reports on gender equality in the media.	,840			
5. When I encounter a situation related to gender inequality, I express my opinion.	,839			
4. I participate in discussions about gender equality.	,657			
8. I am willing to make compromises with my partner.		,867		
9. I believe that all decisions should be made jointly with one's partner.		,849		
11. I believe that a person's financial contribution to their household should be equal to their partner's.		,645	22,999	0,781
10. I believe that a person and his/her partner should share daily household chores.		,621		

Findings

The Findings of the survey

Diversity in the demographic characteristics of participants is important for research to yield accurate and reliable results. In the survey, 56.7% of the participants were female and 40.7% were male. When the participants were examined in terms of age, it was observed that 19% were 18-25, 38.3% were 26-35, 20.7% were 36-45 age, and 22% were 46 years old and above. Regarding marital status, it was notable that the participants were almost equally distributed between married (46.3%) and single (53.7%) individuals. In consideration of the potential impact on sensitivity to gender equality due to participants' income levels, data on participants' income levels were collected. According to this data, 12% of the participants had an income

below 10,000 TL, 17% between 10,000 and 14,999 TL, 25.3% between 15,000 and 19,999 TL, and 45.7% had an income of 20,000 TL and above. Looking at their employment status, it was found that 82.7% were actively employed, and 55.3% were working full-time in the private sector. The significant majority of participants were from the actively employed group, which is considered an important factor that could influence sensitivity to gender equality.

The results of the ANOVA test to examine the differences in societal and domestic sensitivity to gender equality based on gender groups are presented in Table 4. According to the analysis results, societal and domestic sensitivities to gender equality differ based on gender groups (H1a and H1b supported; p<0.05). Based on the mean scores, women have the highest score on the societal sensitivity scale, whereas those who prefer not to specify their gender have the lowest score. Additionally, based on the mean scores, men scored the highest on the domestic sensitivity scale, whereas women scored the lowest. The variance in the SSGE and DGSE variables explains the gender group variable with a high effect size. Additionally, it is observed that the variance in the SGE variable explains the gender variable with a moderate effect size.

Table 4. Comparison test on differences in sensitivity to gender equality by gender

Gender		n	X	ss	ANOVA		Effect size (η2)
					F	p	
SSGE	Female	170	4,13	0,97	8,425	0,000*	0,055
	Male	122	3,69	0,90			
	I would not like to specify	8	3,55	1,61			
DGSE	Female	170	3,30	1,07	3,260	0,040*	0,019
	Male	122	3,62	0,96			
	I would not like to specify	8	3,50	1,65			
SGE	Female	170	3,83	0,88	1,654	0,193	0,012
	Male	122	3,66	0,77			
	I would not like to specify	8	3,53	1,60			

The results of the ANOVA test to examine the differences in societal and domestic sensitivity to gender equality based on age groups are presented in Table 5. According to the analysis results, it is determined that societal and domestic sensitivities to gender equality do not differ based on age groups (H3a and H3b rejected; p<0.05). The variance in the DSGE variable explains the average effect power of the age group variable. In

addition, it can be concluded that the variance in the SSGE and SGE variables explains the low effect power with the age variable.

Table 5. Comparison test on differences in sensitivity to gender equality by age group

Age		n	X	ss	ANOVA		Effect size (η2)
					F	p	
SSGE	18-25	57	3,92	0,89	0,266	0,850	0,005
	26-35	115	3,91	1,03			
	36-45	62	3,89	1,06			
	46 and above	66	4,03	0,92			
DSGE	18-25	57	3,47	1,05	0,215	0,886	0,007
	26-35	115	3,47	1,08			
	36-45	62	3,42	1,09			
	46 and above	66	3,35	1,01			
SGE	18-25	57	3,76	0,83	0,053	0,984	0,005
	26-35	115	3,75	0,91			
	36-45	62	3,72	0,88			
	46 and above	66	3,78	0,83			

The results of the t-test to examine the differences in societal and domestic sensitivity to gender equality based on marital status are presented in Table 6. According to the analysis results, societal and domestic sensitivities to gender equality do not differ based on marital status (H2a and H2b rejected; $p<0.05$). This study explains that the variance in the SSGE, DGSE, and SGE variables is associated with low effect power with the marital status variable.

Table 6. Comparison test on differences in sensitivity to gender equality by marital status

Marital status		n	X	ss	t	p	Effect size (η2)
SSGE	Married	139	4,00	0,99	1,010	0,313	0,003
	Single	161	3,88	0,98			
DSGE	Married	139	3,42	1,07	-0,230	0,818	0,000
	Single	161	3,45	1,05			
SGE	Married	139	3,79	0,85	0,628	0,531	0,001
	Single	161	3,72	0,88			

The results of the ANOVA test to examine the differences in societal and domestic sensitivity to gender equality based on consumers' income levels are presented in Table 7. According to the analysis results, domestic sensitivity to gender equality differs based

on income levels (H4a rejected, H4b supported; p<0.05). Based on the mean scores, individuals with an income of 9,999 TL and below have the highest score on the domestic sensitivity scale, whereas those with an income of 15,000-19,999 TL have the lowest score. In the study, it is observed that the variance in the DSGE variable explains the income status variable with strong effect power, whereas the variance in the SSGE variable explains it with moderate effect power. In addition, the variance in the SGE variables explains the income status variable with low effect power.

Table 7. Comparison test on differences in sensitivity to gender equality by monthly household income

Monthly Household Income		n	X	ss	ANOVA		Effect size (η2)
					F	p	
SSGE	9.999 TL and below	36	3,90	0,98	0,707	0,548	0,007
	10.000-14.999 TL	51	3,76	0,97			
	15.000-19.999 TL	76	3,96	1,07			
	20.000 and above	137	4,00	0,94			
DSGE	9.999 TL and below	36	3,90	0,92	3,717	0,012*	0,036
	10.000-14.999 TL	51	3,59	0,94			
	15.000-19.999 TL	76	3,27	1,21			
	20.000 TL and above	137	3,34	1,01			
SGE	9.999 TL and below	36	3,90	0,86	0,479	0,697	0,005
	10.000-14.999 TL	51	3,70	0,83			
	15.000-19.999 TL	76	3,71	0,98			
	20.000 TL and above	137	3,76	0,82			

The relationships between sensitivity and gender equality and involvement in ads (cognitive and affective) were determined through correlation analysis. According to the obtained data, there is a relationship between sensitivity to gender equality and both cognitive and affective involvement in ads at a significance level of both 95% and 99%. When examining Table 8, a weak positive relationship was found between the participants' sensitivity to gender equality and the affective involvement they showed towards ads (H5a supported; r=0.324; p=0.000<0.050), and a moderate positive relationship was observed between sensitivity to gender equality and cognitive involvement (H5b supported; r=0.449; p=0.000<0.050). On the basis of these findings, it can be suggested that sensitivity to gender equality enhances consumers' cognitive involvement in ads that encompass gender equality to some extent.

Table 8. Correlation analysis between sensitivity and gender equality and involvement in advertising

		AIA	CIA	SSGE	DSGE	SGE
AIA	r	1				
	p					
CIA	r	,626**	1			
	p	,000				
SSGE	r	,236**	,406**	1		
	p	,000	,000			
DSGE	r	,345**	,350**	,436**	1	
	p	,000	,000	,000		
SGE	r	,324**	,449**	,917**	,759**	1
	p	,000	,000	,000	,000	

In addition, regression analysis was conducted to explain the impact of sensitivity to gender equality on consumers' cognitive and affective involvement in ads, aiming to further test the research hypotheses. Regression analysis is a mathematical function that describes the relationship between a dependent variable and one or more independent variables (Wagner, 2010, p. 73). This study applied simple linear regression analysis, a predictive equation, to investigate how sensitivity to gender equality explains cognitive and affective involvement in advertisements. The significance of the regression model, which tests the effect on cognitive and affective involvement in ads, was evaluated using the F (ANOVA) test. Upon examining the ANOVA indicators, it is observed that the F-test value for cognitive involvement is 75.144 and that for affective involvement is 34.910. The corresponding values in the sig. (significance) column for both variables are less than 0.05 (p=0.000; p<0.05), indicating statistical significance in the relationship between the variables. As the resulting values are significant, it can be inferred that the results of the analysis conducted in the study can be utilised.

From these findings, it can be said that consumers' sensitivity to gender equality significantly influences their affective and cognitive involvement in the ad. When looking at the standardised beta coefficients, a one-unit change in gender equality sensitivity leads to a 0.324-unit positive change in affective involvement (H6b supported; t=5.909; p<0.05). Similarly, a one-unit change in gender equality sensitivity triggers a 0.449-unit positive change in cognitive involvement (H6a supported; t=8.669; p<0.05). Evaluated as a whole on the basis of the obtained data, it is observed that the regression model explains 10.5% of the variance in affective involvement towards ad as a significant dependent variable and 20.1% of the variance in cognitive involvement towards ad as

a significant dependent variable. The regression analysis results of sensitivity to gender equality influencing affective and cognitive involvement in ads are shown in Table 9. Furthermore, the F-test value to test the significance of the regression model, which tests the effect of societal and domestic sensitivity dimensions, sub-dimensions of sensitivity to gender equality, on cognitive and affective involvement in advertising, was 37.491 for cognitive involvement and 21.853 for affective involvement. For both sensitivity dimensions, the value in the sig. (significance) column corresponding to these values for cognitive involvement is less than 0.05 (Table 10), indicating significance. However, it was observed that for affective involvement in advertising, the significance value for the societal sensitivity dimension was more significant than 0.05 (Table 11). Therefore, it was determined that the effect of societal and domestic sensitivity dimensions of gender equality on cognitive involvement in advertising is significant. In contrast, the impact of the societal sensitivity dimension on affective involvement in advertising is not significant.

Table 9. Results of the regression analysis of sensitivity to gender equality impacting affective and cognitive involvement in ad

Independent	Dependent	Beta	t	p	R^2	F
SGE	AIA	0,324	5,909	0,000*	0,105	34,910
	CIA	0,449	8,669	0,000*	0,201	75,144

*p<0,05: Linear regression test

Table 10. Results of regression analysis of sub-dimensions of sensitivity to gender equality impacting cognitive involvement in ad

Dependent	Independent	Beta	t	P	R^2	F
CIA	SSGE	0,313	5,430	0,000*	0,202	37,491
	DSGE	0,213	3,701	0,000*		

*p<0,05: Linear regression test

Table 11. Results of regression analysis of sub-dimensions of sensitivity to gender equality impacting affective involvement in ad

Dependent	Independent	Beta	t	P	R^2	F
AIA	SSGE	0,105	1,746	0,082	0,128	21,853
	DSGE	0,300	4,976	0,000*		

*p<0,05: Linear regression test

Findings of in-depth interviews about Bosch's *Perfect Harmony* ad campaign

This section presents the results obtained from the analyses conducted using the methods and techniques mentioned, along with interpretations and discussions related to these findings. Due to the presentation of questions in two main sections during the in-depth interviews, the themes are graphically represented in two main lines. The findings for the first section (Figure 1) consist of three main themes and five sub-themes, whereas for the second section (Figure 2), three main themes and four sub-themes emerged. Figure 1 shows the themes and sub-themes related to awareness of gender equality, whereas Figure 2 displays the themes and sub-themes regarding evaluation after watching the ad.
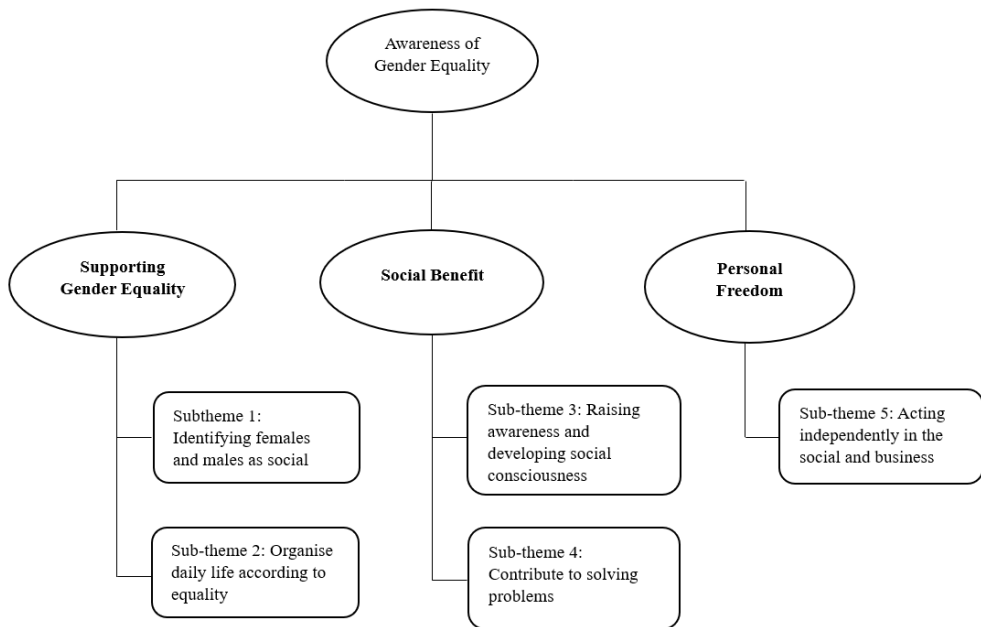
Figure 1. Themes and sub-themes on awareness of gender equality

Supporting gender equality

The participants expressed that gender equality should be supported in every way. Specifically, none of the participants distinguished equality based on a specific issue or situation. The importance of gender equality in creating a more liveable environment has been emphasised; therefore, it is highlighted that it should be supported socially.

The participants generally supported gender equality, viewing women and men as social entities beyond biological differences. They particularly operate from this perspective when expressing their thoughts.

> In my opinion, gender equality is meaningful when true equality exists. Unfortunately, I believe that there is positive discrimination in separate categories for women and men in our country (…) (P5)

> Gender equality, which should not be distinguished biologically and should exist in every field, is unfortunately significantly lacking. (P6)

> I believe it should be equal. I think that throughout a person's life, in all environments they enter, including the family environment, actions should be taken without considering gender. (P3)

> Yes, I believe they should be equal in many aspects. In a positive sense, it is important to mention that equality may not always be entirely fair because of structural differences. (P9)

When participants expressed their ideas supporting gender equality, it was noticeable that they organised their daily lives accordingly as a form of support.

> I will not work in any environment where equality is not exhibited towards women and men. Male labour only shows differences based on physical strength, but there is no difference in brainpower between men and women. (P10)

> I am attempting to organise my social living conditions by ensuring equality. (P7)

Social benefit

During the interview, the participants' expressions regarding gender equality generally revolved around keywords such as social actions, contributions to society, and social awareness. Based on this, it can be said that the participants have a common understanding regarding making specific improvements to achieve gender equality and proposing solutions that will contribute to society. Some participants have emphasised creating more awareness and fostering consciousness.

Women and men should be equal in any situation beyond the responsibilities imposed by their genders. This equality is achieved by raising awareness in society and ensuring justice. (P3)

Gender equality is the evaluation of women and men under equal conditions in societal situations, enabling them to have equal rights. In my opinion, this equality should first (…) strive for equal conditions in workplaces and education. (P4)

The toxic masculine thought system that has captured society must be addressed. Creating a new societal order can begin with dismantling patriarchy as much as possible and raising conscious individuals who prioritise gender equality as parents. (P4)

The participants also emphasised the necessity of taking steps to address the problems arising from gender differences in the societal domain and to reduce inequality. They contribute to finding solutions to these problems in their own ways.

This can be achieved by increasing societal awareness and the education rate in the country. (P9)

It is necessary to impart rules regarding human rights and freedoms to younger age groups. Regular training sessions should be provided to raise public awareness through one-on-one psychological assistance. (P7)

We need to remove this gender discrimination (…). Girls should be educated and integrated into the workforce. As society becomes more aware and the mindset changes, everything will blossom like a flower. (P10)

Personal freedom

When the participants were asked about their views on "what gender equality means and the contextual experiences of gender equality," it was observed that some of the participants expressed their views within the framework of freedom. Thoughts related to freedom emerged, especially in the context of their experiences in social and work environments.

I believe gender equality exists in my home and workplace as compared to the broader society. Raised by my family as two sisters, we were raised liberally and independently. I have the same rights as my male colleagues (P4)

The oppression against women must be eliminated, and the ground must be prepared for women to be free. It is the freedom of individuals to express themselves in all areas. This equality should be achieved (…) (P2)

Gender equality means that women and men should have the same freedom and living space. For instance, just as a male can walk the streets comfortably late at night without feeling uneasy, the same conditions should apply to women. (P7)
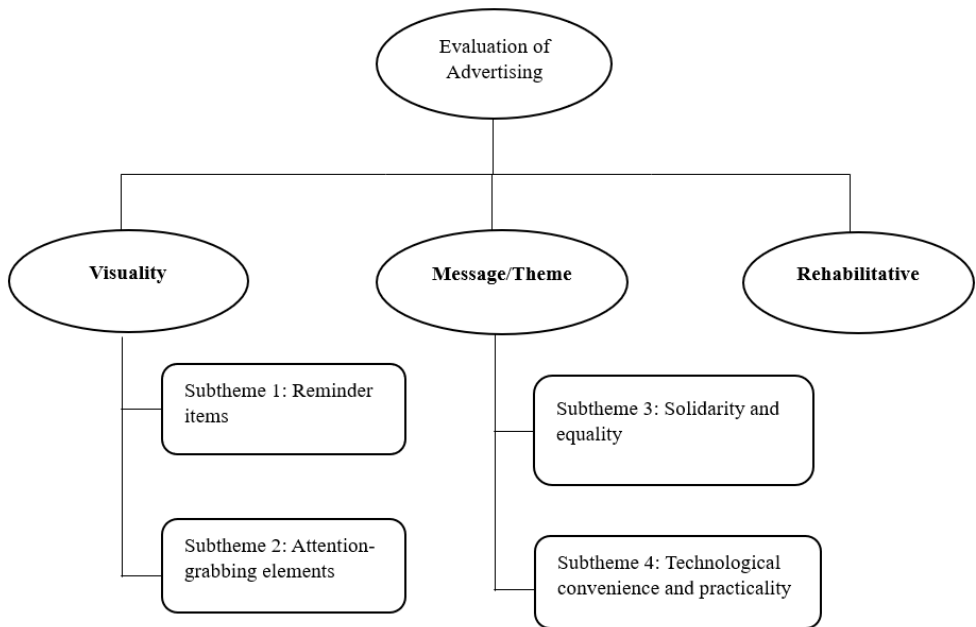
Figure 2. Themes and sub-themes for the evaluation of advertising

Visuality

In the second part of the study, participants were first asked to mark what they remembered from the images shown to them regarding the advertising message they watched. Based on the responses received, it was determined that images depicting a kitchen scene, in which both male and female actors simultaneously collect dishes and glasses from the dishwasher, were prominent in the memories of a significant portion of the participants.

I remember both the male and female actors taking out the dishes from the dishwasher simultaneously. That stuck in my mind. (P1)

I remember both of them putting the glasses in the closet. It seemed like a nice gesture to me. (P8)

It's nice to see a scene where a woman and a man are together. (P6)

Participants were asked which of the selected visuals from the advertisement caught their attention more. The responses indicate that the focus was on the dishwasher and the mobile phone. Figures 5 and 6 present the visuals that stood out the most from those shown during the in-depth interviews.

Connecting to the machine via a smartphone is very convenient and reassuring. (P4)

The panel looks very simple and stylish. (P5)

Message/theme

After watching the advertisement, participants were asked for their insights on the main themes they derived from the advertisement. Considering the answers received from the participants during the interview, the most emphasised points are 'being technological,' which prioritises convenience and practicality, and 'equality,' which emphasises cooperation between spouses.

The man is not withdrawing by saying it is the woman's job to help her spouse. The product is advanced and practical, pushing the boundaries of technological conditions. (P4)

I think the advertisement conveys that the dishwasher can be controlled via a mobile phone. (P7)

The environment depicted in the advertisement is one in which a couple of collaboratively shares household chores. (P1)

Overall, the advertisement conveys that men and women can perform a routine task common in every household, which is not gender specific. (P3)

In addition to the main theme, participants were then asked to state the message that the advertisement wanted to convey most appropriately. The participants agreed that, beyond being an innovative and technological product, the product brought equality in 'housework' as one of the most significant indicators of social inequality. In other words, participants displayed an emotional approach rather than a rational one in their responses to the advertisement.

> The message offered in this advertisement is to destroy the perception that "housework" is a woman's duty, which is one of the most important elements of social inequality. (P1)

> From the scenes I remember in the advertisement I watched, I did not see one gender playing a more dominant role or performing most of the tasks. Although the work was portrayed as easy and enjoyable, it was equally done. (P5)

Rehabilitative

Participants were asked about their evaluations of achieving gender equality after watching the advertisement. Although there was a discussion about whether gender equality reflects real life, participants whose evaluations were sought particularly emphasised that there have been some improvements compared to the past and that such images in the advertisement can be rehabilitative in conveying a message.

> I definitely believe that there has been progress compared to the advertisements that were aired in the past. (…) I hope this advertisement shift will contribute, even if slightly, to achieving gender equality eventually. (P5)

> Awareness of solidarity and sharing is very beneficial in terms of embedding it in the subconscious. (P7)

> While this advertisement emphasises gender equality, I do not believe it will lead to a healthy outcome in achieving gender equality. However, such advertisements feel good in the current context where sexism is prevalent. (P6)

Discussion and conclusion

Recently, certain brands have emphasised in their advertising content that both genders are equally valued, have equal opportunities to contribute to society's economic, social, and cultural development, have the freedom to enhance their skills and make choices, and that their priorities and interests are considered. (Banet-Weiser, 2012; Lazar, 2014; Åkestam et al., 2017; Abitbol & Sternadori, 2019). From this viewpoint, this study examines the impact of sensitivity to gender equality on consumers' cognitive and affective involvement in advertisements. The study mainly aims to investigate the involvement of consumers in advertisements that specifically focus on equality in household gender roles. In line with this, survey data collected from 300 participants was statistically analysed. Within the scope of the research, the relationship between the sub-dimensions of gender equality sensitivity, namely societal ($0.70 \leq \alpha=0.930 <1.00$) and domestic sensitivity ($0.70 \leq \alpha=0.781 <1.00$) and cognitive ($0.70 \leq \alpha=0.908 <1.00$) and affective ($0.70 \leq \alpha=0.960 <1.00$) involvement in advertisements, was examined, aiming to elucidate the impact of sensitivity to gender equality on consumer involvement in ads.

According to the findings obtained from the research, sensitivity to gender equality is positively and significantly related to cognitive and affective involvement in the Bosch advertisement campaign. The research results reveal that the societal sensitivity dimension towards gender equality has a higher level of correlation with cognitive involvement ($r=.406$; $p=.000<0,05$) in advertisements compared to affective ($r=.236$; $p=.000<0,05$). On the other hand, the domestic sensitivity dimension has an equal level of correlation with both affective ($r=.345$; $p=.000<0,05$) and cognitive involvement ($r=.350$; $p=.000<0,05$) in the ad. A weak level of correlation was found between the sensitivity to gender equality and affective involvement ($r=.324$; $p=.000<0,05$) in ads, a moderate level of correlation was found between cognitive involvement ($r=.449$; $p=.000<0,05$), and both were statistically significant. Cognitive involvement has a higher relationship level than affective involvement, which implies that individuals critically engage with the content related to equality in household gender roles presented in the advertisement, regardless of whether the advertisement's message is rationally or emotionally focussed. On the other hand, the relationship between domestic sensitivity and affective involvement in the ad is slightly higher than the social sensitivity dimension, which can be interpreted as consumers identifying the family environment in the ad with their own family/home environment or finding a part of it.

One of the significant aspects explored within the scope of this research is the impact of sensitivity to gender equality on cognitive and affective involvement in Bosch advertisements. It has been observed that consumers' sensitivity to equality in gender roles has a meaningful and positive effect on their cognitive and affective involvement in Bosch advertisements. Indeed, this study indicates that individuals inclined to question the content of an ad focussing on gender equality while identifying with it in their everyday lives tend to view both rational and emotional ads positively. Furthermore, while the impact of gender equality on cognitive involvement in the ad is significant for both societal and domestic sensitivity dimensions, the effect of the societal sensitivity dimension on affective involvement in the Bosch ad is not significant. This suggests that individuals who express sensitivity to gender equality, especially in a societal context, do not approach the ad content with an emotional focus.

An investigation into whether sensitivity to gender equality shows significant differences based on demographic variables is among the examined findings. Because of the analyses conducted, it was determined that the dimensions of sensitivity to gender equality differed significantly by gender and monthly household income from demographic variables. Based on this result, it is found that women are more robust in the societal sensitivity dimension compared to men, while men stand out slightly in the domestic sensitivity dimension. The findings align with Shteiwi's (2015) research on gender roles within the gender equality framework, which showed significant differentiation based on gender variables. The conclusion that women demonstrate greater sensitivity regarding social and professional participation aligns with this research. Consequently, it can be said that women's sensitivity in the social context is highlighted a bit more because of their increased encounters with challenges in social and professional life compared to men. On the other hand, it is evident that as consumers' monthly household incomes decreases, domestic sensitivity increases. The main reason for this is the reduction of economic power, which leads to a more delicate balance of equality between spouses.

In-depth interviews, constituting the second phase of the research and conducted with 10 participants, play a crucial role in providing insights into the details and sociological aspects of the quantitative findings. The interview process was implemented in two stages, first aimed at assessing awareness of gender equality and then evaluating the Bosch advertisement campaign, called *Perfect Harmony*, featuring equality in household gender roles. The participants were observed to have a certain level of

understanding regarding gender equality, and a significant portion showed sensitivity towards the associated challenges.

Based on the coding conducted according to the notes obtained from the first phase of the interview, the responses can be categorised into three main points. Generally, the participants expressed their support for gender equality by perceiving women and men as social beings and aiming to organise their daily lives under equal conditions. In addition, the participants emphasised the importance of creating awareness and enhancing societal consciousness towards eliminating the challenges hindering gender equality in our country. They stressed the need for equal educational opportunities, increased women's employment rates, involved parents in gender equality education, instilled rules related to human rights and freedoms from a young age, and re-established justice to contribute to solving the problems. The findings obtained from the in-depth interviews with the participants highlighted freedom. They expressed their desire for freedom in the social and professional spheres and mentioned experiencing challenges in their environment. Furthermore, during the interview, female participants noted that the positive discrimination applied to men posed difficulties for them. The findings of this study align with Bozbay et al.'s (2019) in-depth interview, where they examined consumer perception of female-focussed advertisements with a sample group of 15 individuals. Their research revealed that female-focussed advertisements are important for increasing awareness. It was also observed that some companies perceive creating empowering advertisements for women as a temporary trend and expect tangible benefits from these advertisements. A qualitative study by Abitbol and Sternadori (2019) with a similar demographic profile observed that the perception of female-focussed advertisements was positive. According to the data presented in Dauvergne's (2018) study, brands that focus on social issues can contribute to addressing the problems faced by society.

In summary, the survey research indicates a meaningful and positive influence of sensitivity to equality in gender roles on cognitive and affective involvement in the Bosch advertising campaign. However, in-depth interviews are required to comprehend the impact on cognitive and affective involvement. The emphasis by participants on solidarity, gender equality, and rehabilitation through the visuals in the ad highlighting the product's technological features and domestic assistance underscores the critical role of in-depth interviews in showcasing how affective involvement, which may not have been prominently reflected in the survey, comes to the forefront. Indeed, upon a deeper examination of the underlying factor behind the significant impact of

consumers' sensitivity to gender equality on their cognitive and affective involvement in the Bosch ad, it can be observed that the cognitive interest of participants who watched the advertisement stems from their critical evaluation of the content related to gender equality in household social roles presented in the ad. Additionally, identifying the participants with the family scene in the ad and relating it to their own family/home environment, subsequently emphasising cooperation and equality, indicates an abstract approach and demonstrates affective involvement in this context. Hence, it can be said that the results obtained from the survey align with the findings obtained from the in-depth interviews.

Some practical recommendations can be made on the basis of the results of the study. Brands should strive to present a balanced mix of rational and emotionally appealing content in their ads. Finding the right equilibrium between rational focus and emotional appeal will likely positively influence consumers' attitudes towards ads. Brands should demonstrate awareness and sensitivity in their advertising content, especially when dealing with sensitive issues. Being conscientious and conducting activities with this awareness is expected to play an influential role in fostering a positive attitude towards both the advertisement and the brand. This research is believed to contribute to future studies and hopefully guide brands in shaping their advertising messages. Increasing the number of survey participants can enhance the collected data's reliability and representativeness. The research is also designed around a single advertisement. This study explores how sensitivity to equality in gender roles within households, as part of gender equality, influences consumers' involvement in ads. However, advertisements are designed on the basis of the product and the intended message for the target audience. To examine sensitivity to gender equality on a broader scale, future research could select advertisements from a greater variety of product categories in a focus group study with more participants. Moreover, a comparative analysis of different ads highlighting gender equality and inequality can provide a critical perspective to understand attitudes towards these ads better. Additionally, for more comprehensive insights and findings that may not be fully achievable through traditional research methods, the research can be conducted with different stimuli and samples using neuromarketing techniques such as Functional Magnetic Resonance Imaging (fMRI) and Electroencephalography (EEG). Studies conducted using techniques such as fMRI and EEG can measure in more detail and directly how participants respond when exposed to advertisements. This can provide significant benefits in understanding changes in emotional and cognitive responses and quantitative and qualitative research

results. This is crucial for understanding the effects of advertising strategies on different segments, providing valuable insights to optimise advertising strategies.

Endnotes

1. The link to the ad video used in the study was accessed on May 15, 2023, at https://www.youtube.com/watch?v=t0-CMwjXkaQ

2. For this research, Ethics Committee Approval was obtained from the Uskudar University Non-Interventional Research Ethics Committee with protocol number 61351342 during May 31, 2023 meeting. This study was designed to comply with ethical principles and regulation.

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P R E S S

Araştırma Makalesi / Research Article

Use of free labour in the media within the scope of citizen journalism: A case study of the main news bulletin on *Show TV*

Yurttaş gazeteciliği kapsamında medyada ücretsiz emek kullanımı: Show TV *ana haber bülteni üzerine bir örnek olay incelemesi*

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Abstract

Citizens' ability to interact with content and participate in its production has enabled shifts in journalism techniques. Citizens' ability to record experiences, thanks to digital technologies and internet usage, has offered new perspectives on the news and helped place certain events on the agenda. Media organisations are now using user-generated content derived from images submitted by the public to report news that their reporters do not have access to. This research addresses the process by which media organisations exploit free labour by incorporating images captured by citizens into their broadcasts. To this end, news coverage on *Show TV* from May 9 to 15, 2022 and May 9 to 15, 2023 was analysed, with content analysis conducted to determine the proportion of non-professional images in the broadcasts. An in-depth interview was also conducted with the person in charge of *Show TV*'s *WhatsApp* Notification Line, which allows citizens to contribute to news production and gain insight into the operational processes of this structure. The findings that while the use of citizen-generated content varies from newscast to newscast, such images are present in every broadcast and enable the exploitation of free labour and the creation of value.

Keywords: Citizen journalism, user-generated content, crowdsourcing, prosumer, free labour

Öz

Vatandaşların içerikle etkileşime girebilme ve üretime katılabilme yeteneği, gazetecilik pratiklerinde değişimlere olanak sağladı. Dijital teknolojiler ve internet kullanımı sayesinde vatandaşların deneyimlerini kayıt altına alabilmesi, haberlere yeni bakış açıları kazandırmış ve bazı olayların gündeme gelmesine yardımcı olmuştur. Medya kuruluşları artık kendi muhabirlerinin erişemeyebileceği haberleri bildirmek için kullanıcı tarafından oluşturulan içeriklerden elde edilen görselleri kullanıyor. Bu araştırma, vatandaşların çektiği görsellerin yayınlarına dahil edilmesi

yoluyla medya kuruluşlarının ücretsiz emekten yararlanma sürecini ele almaktadır. Bu amaçla 9-15 Mayıs 2022 ve 9-15 Mayıs 2023 tarihlerinde *Show TV*'de yayınlanan haberler incelenerek yayınlarda profesyonel olmayan görsellerin oranının belirlenmesi amacıyla içerik analizi yapıldı. Vatandaşların haber üretimine katkıda bulunmasına olanak sağlayan *Show TV*'nin *WhatsApp* Bildirim Hattı sorumlusu ile de bu yapının operasyonel süreçleri hakkında bilgi sahibi olmak amacıyla derinlemesine görüşme gerçekleştirildi.

Bulgular, vatandaşların ürettiği içeriğin kullanımının haber programından haber programına farklılık gösterse de, bu tür görüntülerin her yayında mevcut olduğunu, ücretsiz emeğin sömürülmesine ve değer yaratılmasına olanak sağladığını ortaya koymaktadır.

Anahtar kelimeler: Yurttaş gazeteciliği, kullanıcı tarafından oluşturulan içerik, kitle kaynak kullanımı, üretüketici, ücretsiz emek.

Introduction

The confluence of computer technologies and the Internet has significantly changed individuals' relationships with media (Van der Huff 2001). People have begun to satisfy their needs for information and entertainment not only through traditional mass media but also through the environments offered by these new technologies. This situation not only required the integration of mainstream media into digital environments but also enabled alternative, new publications (Negroponte, 1995; Lievrouw, 2011; Harcup, 2013).

The advent of Web 2.0 has significantly changed the manner in which people interact with media (Choudhury, 2014). People are no longer passive consumers; they can access news, information, entertainment, and contribute their own content through various online platforms. With the proliferation of smart devices and increased access to the Internet, users can share their perspectives and experiences from anywhere, becoming "prosumers" (Toffler, 1981) who play an active role in media content creation.

This situation has led to new approaches and understandings in journalism and has transformed the sector (Pavlik, 2001; Bardoel & Deuze, 2001; Ledford, 2008; Manfredi Sánchez et al., 2015; Vultee et al., 2020). As a result, new perspectives and approaches have emerged, such as the concept of citizen journalism. More and more people are contributing to news production by creating and sharing content online and responding to requests from media organisations.

User-Generated Content (UGC) includes journalism, news production, and content beyond (Holton et al., 2013). In this case, newsrooms had to open their doors to access photos, videos, and user comments (Lewis et al., 2010). The impact of technology on news has been addressed with a user-centred approach (Hermida & Thurman, 2008) and from a participation perspective (Deuze et al., 2007).

To complement their news productions, media organisations have adopted nonprofessional structures that allow UGC to be incorporated into their broadcasts (Atton, 2008). While this approach has brought a number of benefits to media organisations, such as increased efficiency (Goode, 2009; Blaagaard, 2013) and reduced costs (Buckingham, 2009), it is essential to recognise that users who contribute their content to these productions should also receive financial compensation for their

efforts. The surplus value added by non-employees is then fed into publications and creates the potential for financial returns.

This study takes a critical look at the support media organisations receive from users through citizen journalism. To illustrate this point, the news from *Show TV* is analysed and the surplus value created by images captured by non-employees is evaluated. In addition, the study includes an interview with the person responsible for *WhatsApp* Notification Line, which acts as an intermediary for citizens in sending images to media organisations.

Transformation of individuals into prosumers using user-generated content and crowdsourcing

The advent of Web 2.0 and subsequent communication technologies have empowered individuals to not only consume media content and actively produce it (Darwish & Lakhtaria, 2011). Anderson (2007) referred to UGC as a key feature of Web 2.0. UGC encompasses all the ways people interact with social media and describes a range of media content and formats created by end users (Kaplan & Haenlein, 2010). Another study in this area highlights two important aspects of UGC. The first relates to business models that incorporate UGC and the impact of UGC on journalists' work routines and news reporting. The second aspect focuses on citizens' role in democracy through content creation, with an emphasis on strengthening the public sphere and promoting citizenship (Manosevitch & Tenenboim, 2017).

According to van Dijck (2009), users view their voluntary contributions to content creation as entertainment or play, rather than work. This is especially true when users engage in social activities, express their thoughts and feelings, or spend their free time on social media platforms. As a result, individuals tend to overlook the time and effort they invest when sharing content with their consent. Therefore, the act of taking advantage of content producers' labour becomes obvious (Martens, 2011).

On the other hand, crowdsourcing is a model for problem-solving and production that leverages the collective intelligence of online groups to benefit organisational goals. Participants are invited to engage in various activities, and incentives are provided to encourage participation (Estellés-Arola & González-Ladrón-de-Guevara, 2012; Brabham, 2013). Crowdsourcing is an online participatory activity in which an individual,

institution, organisation, or company solicits information from a large group through an open call. Brabham (2013) characterised it as a story of collaboration, teamwork, consensus, and creativity. This approach also provides organisations with access to new perspectives and innovative solutions while allowing them to engage with people who are not on their payroll, thus revealing value and reducing costs.

In news production, crowdsourcing goes beyond citizen journalism. It encompasses a variety of applications that use collective intelligence to gather information, regulate it, create news, or make production decisions (Haak et al., 2012). In this way, media organisations can gain access to information and documents and employ confirmation mechanisms from different perspectives.

Toffler (1981) coined the term "rise of the prosumer" to describe the processes involved in product production. This essentially refers to consumers' increasing participation in production activities. As a result, the traditional boundaries between these segments are disappearing, and consumers are increasingly taking on tasks that were once performed by others. Toffler also argued that customers' taking over a certain part of the work can be seen as an "externalisation of labour costs," which means that employee costs are reduced. In summary, this concept highlights consumers' growing role in production and the potential cost savings associated with increased participation.

It has been observed that capitalists have found new ways to generate surplus value through productive consumers in addition to the traditional exploitation of workers. To this end, the prevailing view in capitalist circles is still that "the only thing better than a poorly paid worker is the one who does the work without pay" (Ritzer & Jurgenson, 2010).

The advent of communication technologies has significantly changed the way in which producers think. Frayssé and O'Neil (2015) note that the computer and the Internet have moved beyond the "do-it-yourself" mentality by creating consumption and production channels. Consumers' digital labour includes the free acquisition of data, symbolic construction of brands, and the "labour of the audience," i.e., the free provision of creative content.

Citizen journalism

Advances in communication technology have led to changes in the production and dissemination of news, which is the result of journalism (Hermida, 2012). With the advent of portable digital devices and Internet access, even ordinary citizens in crime scenes can record and share their testimonies.

According to Allan (2013), citizen journalism is when ordinary people temporarily take on a journalistic role, often because they are in a crisis, accident, or disaster. Wall (2015), on the other hand, explains it as news content created by amateurs in the form of text, images, or sound. Both definitions emphasise the importance of witness testimony and the possibility of obtaining records by being present at the event. Thus, citizen journalism is created by individuals who participate in immediate events such as accidents, disasters, or conflicts as witnesses, spectators, or observers and share their recordings online using digital technologies.

In places where a journalist is not available, ordinary people can use their smart devices to capture and disseminate online events. Citizens can also play an active role in news production by sending images to traditional media outlets through *WhatsApp* Notification Lines. Thus, citizen journalism encompasses various activities, from providing newsworthy images to news agencies and sharing them online (Roberts, 2019). Thanks to the mobility of communication technology, millions of people can now capture what they see and share their first-hand experiences without waiting for reporters.

At this point, it is necessary to mention the concept of monitorial citizenship. Monitorial citizenship is a form of civic engagement in which people gather information about their surroundings or follow issues concerning their local or personal interests to improve their communities and ensure justice (Graeff, 2019). The term comes from Michael Schudson's 1998 book, *The Good Citizen*. Schudson (1998) discussed the responsibility of citizens to monitor government affairs. This definition is even more effective now, given the opportunities provided by smartphones. Smartphones improve the practise of audience citizenship by expediting citizens' information gathering and sharing procedures.

Bruns, Highfield, and Lind (2012) stated that technology plays a critical role in driving these developments. They highlight the impact of the Internet, which has led to a surge

in the number of avenues for information dissemination. As Internet-based media content and reader engagement continue to grow, opportunities for news production innovation are emerging. In addition, Bruns, Highfield, and Lind emphasise the importance of using Internet technologies to gather insights from a diverse audience and a variety of participants rather than relying solely on a paid professional team. Similarly, Dyer-Witheford (2015) highlighted the emergence of cyber-proletariats with the rise of Web 2.0. With this technology, unpaid labour spread to digital environments, and he noted that the profession was destroyed by placing professionals working in corporations in competition with unpaid labour with approaches such as citizen journalism.

Media organisations are trying to cut expenses and save time and resources because producing a certain types of news is expensive. For this reason, downsizing, cutbacks, and layoffs are often resorted to. If work is to continue with the remaining staff, employees are forced to multitask and work under flexible conditions (Allan, 2013). Reducing the number of employees and lowering the cost of news production lead organisations to develop methods that take user feedback and contribute to the production of news by followers. In this way, civilian participation in news production is encouraged, and news can be enriched through their input without the need to employ reporters. The proliferation of digital technologies has enabled individuals to capture and share events as they unfold, resulting in a more diverse group of news creators and disseminators than ever before.

Free labour and the contribution of free labour to media organisations by individuals

Labour is not merely an economic concept; it is a general aspect of human existence and is independent of social structures. It has been stated that it can produce value with both paid labour and free labour (Wittel, 2012). The concept of value can have different meanings when interpreted from the perspective of different disciplines. According to Cevizci (1999), the concept of value, which is considered economic in this study, means the ability to determine the value of a saleable or exchangeable object, especially in material terms. Alpagu (2015), however, explains that, in the liberal view, value is the price or exchange power determined by the market and formed by the equilibrium between supply and demand. In contrast, from the socialist perspective, this means that the working class determines it, comes out with the labour power, and corresponds to the value of labour.

Marx argued that workers' labour power is exploited by capitalists or capital (1982, p. 326). According to Marx, capital has only one purpose: to create surplus and gain value (1982, p. 342). While surplus value is defined by Marx as "the materialised form of unpaid labour," he notes that it costs the labour of the worker, but the capitalist gains it effortlessly (1968, p. 509). Therefore, the capitalist "absorbs the surplus labour and exploits the labour power" (1968, p. 300). Marx asserts that surplus value is nothing but unpaid labour. This means that part of the profit comes from unpaid labour. In every commodity, the production cost reflects the invested capital, and the surplus over these costs represents the unpaid labour controlled by the capital (1968, p. 40). Harvey (2010), on the other hand, calls attention to a procedure that exploits employees' labour by using the means of production, pays them just for their labour, and generates communal rather than individual exploitation. Today, however, things have changed drastically as common people use their own technology to participate in production without even receiving payment.

According to Marx, the technologies developed under capitalism have not been used to reduce human labour. The goal is to increase labour productivity, which leads to higher profits for employers without increasing workers' wages (Marx, 1982). Fuchs, on the other hand, argues that the workplace has expanded beyond physical locations and is now global thanks to the Internet, mobile devices, and social media (Fuchs, 2014a). Just as machines are used in factories to produce value, millions of cell phones have become tools that individuals can use to generate value while on the move. News organisations now use free video from the public rather than relying solely on paid staff to create content.

According to Fuchs (2014b), outsourcing value creation to free labour can lead to increased capital accumulation. Fuchs also notes that users are often turned into unpaid workers, allowing firms to reduce their investment and labour costs. Unfortunately, this can lead to the hollowing out of professions, the exploitation of users, and companies without paying for them, producing surplus value from which they make a profit (2014a).

In the media sector, financial gains are also achieved through free labour. Value is created not only by extending the days and hours that media workers work but also by reducing labour time and extending the time they work for capital. The advent of communication technologies has significantly reduced labour time, leading to the

production of more products. In addition, technological advances have enabled non-employees to participate in the production process.

Thanks to the communication technologies used by citizens, the media are now capable of producing content for publications without the need for paid workers. This has become easier with users being able to produce content and using developing technology in newsrooms. Media organisations use free labour in news production through crowdsourcing, *WhatsApp* Notification Lines, and users' social media posts. Therefore, audience labour has evolved into user labour and continues to be utilised by the media in its new dimension. The viewer is also the producer of the consumed content. Portable smart devices have become value-producing tools. It is possible to see citizens as agents who produce news and naturally create value. By not presenting the labour of people through citizen journalism as 'work', media organisations take absolute control of income generated from production. Citizens and their technological devices are used as tools for fuel production. In this way, both labour and technology are made functional as externally provided resources and become part of the economy.

The concept of free labour was used by Terranova (2000) to describe how users can produce in the digital economy and how such production can be exploited by capital. According to him, free labour is 'simultaneously voluntarily given and unwaged, enjoyed and exploited'. However, this concept is not new. It was used to describe the labour involved in housework during feminist debates in the 1970s. Free labour occurs in forms such as the labour spent to produce use value at home, distribution processes undertaken by the consumer, creative works for self-expression, and voluntary or unpaid internships (Huws, 2014). This type of labour has the characteristics of being free, autonomous, and exploited by capital (Wittel, 2012). Unpaid labour is found in many types of media products, such as movies, games, television shows, and news (Fast, Örnebring, & Karlsson, 2016).

Dallas Smythe (1981) was the first to focus on the role of the audience in media. Smythe focused on the relationship between media organisations, advertisers, and audiences. According to him, media provide capital accumulation by creating an audience that can be sold to advertisers. This approach is critical to our understanding of unpaid labour in today's Internet-based environments and in traditional media that use such products. However, in Smythe's approach, the role of the audience begins after a programme is produced and broadcast (Cohen, 2013). Nevertheless, on digital platforms, user labour occurs both in the production and consumption of content.

Commodification has become more visible in social practises with the advent of digitalisation in communication-based areas. In this way, people's capacities to produce information and communicate have been harnessed by capital in the form of 'economic externalities' (Prodnik, 2012). The ability of users to create content through digitalisation demonstrates the involvement and exploitation of free labour in the creation of commodities (Petersen, 2008; Fast, Örnebring, & Karlsson, 2016). This situation indicates that value production is no longer confined to places and times where paid work (Terranova, 2000), exemplifying the concept of the society factory, where business processes extend beyond the factory to society (Negri, 1989). This concept, first used by Tronti (1962/2019), emphasises the penetration of capitalist production into social relations. The spread of the factory into the general structure of society causes production and social relations to become more intertwined. This begins the process of internal colonisation. Although it does not fall within the realm of paid labour, value production through online activities has become feasible (Andrejevic, 2012). This new reality illustrates capitalism's ability to find alternative avenues for expansion (Ritzer & Jurgenson, 2010) and necessitates a reevaluation of how exploitation operates (Andrejevic, 2012).

Citizen journalism has been defined as alternative media and alternative perspectives (Atton, 2009; Deuze et al., 2007), civic participation (Ardèvol-Abreu et al., 2018; Nah et al., 2017), audience engagement (Chung et al., 2018), news sources (Noor, 2017), and participatory news (Deuze et al., 2007; Singer, 2011). In another study, *WhatsApp* notification lines have also been regarded as a practise of citizen journalism, but this study only addressed their impact on television news (Karaman & Önder, 2017). Citizen journalism is considered a form of free labour in this study, and it aims to reveal how media organisations use this resource. Therefore, this research makes a new contribution to the existing literature.

Aim and methodology

Before the research began on May 9, 2022, the ratings were analysed, and *the Show TV* news bulletin was chosen as a sample because it was one of the most watched programmes on May 7 (Medyafaresi, 2022a) and 8 (Medyafaresi, 2022b), 2022. The broadcasts of the corresponding channel between May 9 and May 15, 2022 and between May 9 and May 15, 2023, were studied using content analysis. The aim of selecting these periods is to collect a large dataset and reveal the state of unpaid labour through citizen journalism. To support the data in the research, an in-depth interview was

conducted with the manager of the *WhatsApp* Notification Line of *Show TV*. The Istanbul Aydin University ethics committee approved the in-depth interviews performed as part of the study.

This study analyzes the potential for media organisations to benefit from free labour through citizen journalism. This will be explored by examining: The extent to which *Show TV* utilises user-generated content. The extent to which *Show TV* uses security cameras that automatically capture images without the need for an employee's presence in the news production process. For this reason, the research was conducted on the following research questions:

RQ$_1$: What is *Show TV*'s tendency to use images from sources other than staff members of the organisation (such as security cameras and cell phones) in news broadcasts?

RQ$_2$: Is there a difference in the use rate of cell phone and security camera recordings in news production between the years examined?

RQ$_3$: Does *Show TV* benefit from the free labour provided by citizen journalism activities that it receives from *WhatsApp* Notification lines?

Coding

Content analysis was used to identify the sources of images in the news. The source of each image projected on the screen was determined by watching the news on the analysed dates. Two academics independently conducted the content analysis coding process for the sake of validity and reliability. The coding process was repeated until a 100% consensus was reached between the two coders. This approach was used to assess the accuracy of the coding process and to ensure the consistency of the obtained data. In this context, 12 different image sources were identified, and the broadcasts were analysed based on these codes.

Security camera images are not included in the scope of user-generated content. However, these are not the kind of images that media companies should be investing in, as they come from sources other than their own staff. As a result, labour is moved to technology, which can use images to create news. Therefore, citizen journalism items and security camera images were evaluated in tandem. During the analysis, it was

found that cell phone recordings were also used for news production in the images originating from the agency. However, since these images were not provided directly to the media company, they were classified as originating from an agency.

In addition, although the names of the cameramen are stated in the professional footage presented in the news, this information is excluded from other amateur footage. Furthermore, the fact that the person who took the video with his/her cell phone was also the person who narrated the events indicates who made the recording. The images recorded on the mobile phone were taken by random witnesses and not reporters.

Findings

The findings of the content analysis are presented in Table 1 and Table 2.

Table 1. Distribution of news from May 9 to 15, 2022

Image source	9th		10th		11th		12th		13th		14th		15th		Total
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f
Newsroom Camera	7	21.2	9	40.9	11	29.7	12	21.4	12	36.4	10	28.6	9	30	70
Agency Images	8	24.2	6	27.3	6	16.2	18	32.1	7	21.2	9	25.7	11	36.7	65
Agency-Sourced Cell Phone Images	3	9.1	1	4.5	3	8.1	7	12.5	2	6.1	7	20	2	6.7	25
Agency-Sourced Security Camera Images	1	3	1	4.5	4	10.8	4	7.1	1	0	1	2.9	1	3.3	13
Images from Foreign Media	3	9.1	2	9.1	2	5.4	3	5.4	0	0	1	2.9	4	13.3	15
Cell Phone Camera	4	12.1	1	4.5	3	8.1	4	7.1	6	18.2	4	11.4	3	10	25
Security Camera	2	6.1	0	0	4	10.8	3	5.4	3	9.1	3	8.6	0	0	15
Police/Military Camera	3	9.1	2	9.1	1	2.7	2	3.6	0	0	0	0	0	0	8
Social Media	2	6.1	0	0	1	2.7	1	1.8	0	0	0	0	0	0	4
Other Channels	0	0	0	0	2	5.4	0	0	2	6.1	0	0	0	0	4
Music Clip	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Movie	0	0	0	0	0	0	1	1.8	0	0	0	0	0	0	1
Total	33	100	22	100	37	100	55	100	33	100	35	100	30	100	245

On May 9, 2022, the broadcast featured 15 news items and used 33 image sources, with 18.18% (n:5) from cell phone and security camera footage. A total of 40% (n:6) were produced using these recordings, with two from their own sources and four from news agencies. On May 9, 2023, 16 news items and 40 image sources were available, with 12.5% (n:6) from cell phone footage. 37.5% (n:6) were produced using these recordings, equally split between their sources and news agencies.

On May 10, 2022, there were 15 news items and 22 image sources, of which only 4.54% (n:1) were from cell phone records. On May 10, 2023, 14 news items and 28 image sources were available, with 3.57% (n:1) from cell phone footage. 21.42% (n:3) were produced using cell phone and security camera recordings, with one from their own sources and two from news agencies.

Table 2. Distribution of news from May 9 to 15, 2023

Image source	9th		10th		11th		12th		13th		14th		15th		Total
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f
Newsroom Camera	14	35	11	39.3	16	50	13	30.2	13	28.9	-	-	18	32.1	85
Agency Images	12	30	10	35.7	7	21.9	12	27.9	19	42.2	-	-	30	53.6	90
Agency-Sourced Cell Phone Images	4	10	2	7.1	2	6.3	0	0	5	11.1	-	-	0	0	13
Agency-Sourced Security Camera Images	2	5	0	0	1	3.1	2	4.7	2	4.4	-	-	0	0	7
Images from Foreign Media	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0
Cell Phone Camera	5	12.5	1	3.6	1	3.1	5	11.6	5	11.1	-	-	4	7.1	21
Security Camera	0	0	1	3.6	1	3.1	1	2.3	1	2.2	-	-	0	0	4
Police/Military Camera	0	0	0	0	1	3.1	0	0	0	0	-	-	0	0	1
Social Media	0	0	1	3.6	0	0	2	4.7	0	0	-	-	1	1.8	4
Other Channels	3	7.5	0	0	2	6.3	8	18.6	0	0	-	-	2	3.6	15
Music Clip	0	0	1	3.6	0	0	0	0	0	0	-	-	1	1.8	2
Movie	0	0	1	3.6	0	0	0	0	0	0	-	-	0	0	1
Total	40	100	28	100	31	100	43	100	45	100	-	-	56	100	243

On May 11, 2022, the broadcast included 18 news items and 37 image sources, with 18.91% (n:7) from cell phone and security camera footage. A total of 38.88% (n:7)

were produced using these recordings, with one from their own sources and three from news agencies. On May 11, 2023, there were 17 news items and 31 image sources, of which 6.45% (n:2) were cell phone and security camera footage. 23.52% (n:4) were produced using these recordings, of which two were from their own sources and two were from news agencies.

On May 12, 2022, the broadcast featured 19 news items and 55 image sources, with 12.72% (seven images) from cell phone and security camera footage. A total of 68.42% (n:13) were produced using these recordings, with three from their own sources and 10 from news agencies. On May 12, 2023, there were 19 news items and 43 image sources, with 13.95% (n:6) from cell phone and security camera footage. In addition, 21.05% (n:4) were produced using these recordings, with two from their own sources and two from news agencies.

On May 13, 2022, the broadcast included 18 news items and 33 image sources, of which 27.27% (n:9) were from cell phone and security camera footage. 33.33% (n:6) were produced using these recordings, of which five were from their own sources and one was from news agencies. On May 13, 2023, 21 news items and 45 image sources were available, with 20% (n:9) of cell phone and security camera footage. 38.09% (n:8) of these recordings were produced using these recordings, with two from their own sources and six from news agencies.

On May 14, 2022, there were 19 news items and 35 image sources, with 20% (n:7) from cell phone and security camera footage. A total of 52.63% (n:10) were produced using these recordings, with five from their own sources and five from news agencies. Since there was a Presidential election in Türkiye on 05.14.2023, a special broadcast was made about the election.

On May 15, 2022, the broadcast featured 19 news items and 30 image sources, with 10% (n:3) from cell phone and security camera footage. 15.78% (n:3) were produced using these recordings, with one from their own sources and two from news agencies. On May 15, 2023, there were 19 news items and 56 image sources, with 7.14% (n:4) from cell phone and security camera footage. A total of 5.26% (n:1) were produced using these recordings; this low percentage was influenced by intense election news coverage on that day.

The significant role of mobile phone and security camera footage in news broadcasts demonstrates the use of UGC to support news coverage. This strategy allows the channel to access various visuals at no cost. Such a practise can be seen as a form of exploiting unpaid labour. It can be understood that citizens who capture and share footage contribute to the channel's news production by looking at the sources of the images they use.

Additionally, such footage highlights a shift in the burden of gathering news. The increasing role of mobile phones and security camera footage in news production indicates that the burden is also being transferred to ordinary citizens and surveillance systems. While this democratises news gathering to some extent, it also allows channels to reduce operational costs by relying on free, crowdsourced content.

It is also important to consider the usage rates of cell phone and security camera recordings between the years examined. The frequencies of specific visual sources used in *Show TV* news broadcasts can be examined to analyse changes between 2022 and 2023. Across all visual source categories, a decrease was observed in 2023 compared with 2022. Usage of agency-sourced cell phone images decreased by 48%, agency-sourced security camera images by 46%, direct cell phone camera images by 16%, and security camera images by 73%. Despite technological advancements, the reason for not using cell phones and security camera recordings in news production could be the lack of events or news topics requiring such visual content. It is also important to note that the presence of a special broadcast for presidential elections on a day examined in 2023 may have influenced this difference.

WhatsApp as a citizen journalism practise

This section presents the data obtained from the in-depth interview. Media organizations' use of technology for news production underscores their ability to receive information and documents from citizens via *WhatsApp*. Examination of news broadcasts from television stations found that material recorded using cell phones was often included.

Although the official stated that *Show TV* subscribes to multiple news organisations, obtaining photographs via *WhatsApp* demonstrates that citizens have become an essential source of news production. The advent of digital tools in newsrooms allows the capture of occurrences that were previously impossible to report. When asked about the role and importance of *WhatsApp* in news production, the respondents answered as follows:

> For example, during the COVID-19 epidemic in China, we were able to reach citizens there, and during the Ukraine War, we made news using videos that most Turkish citizens had sent to our *WhatsApp* Notification Line. There are also many distressing images that are frequently shared, including images of theft, fighting, murder, war, and epidemics. Videos of natural disasters are also frequently shared.

These discourses demonstrate that images of national and international events are captured. As a result, civilians can capture images even in areas where no reporters are available. Although media organisations subscribe to various national and international news agencies, *WhatsApp* Notification Lines enable the creation of unique news. These visuals help the channel shape its news agenda as follows:

> We must make different news from other channels. We achieve this owing to the messages we receive through our *WhatsApp* Notification Line. We receive newsworthy images of fraud, theft, murder, and other interesting events. Sometimes the person who captured the event is not present to provide a detailed report. In such cases, we request a video description of the event, which allows us to create a more detailed news report. This method has many advantages. Some images we receive are unique to us and cannot be found elsewhere. These images help us improve the quality of our newsletter.

At the end of the broadcast, viewers are invited to submit relevant footage they have captured to the channel. This indicates that the channel values citizen contributions in sourcing content. The number of images sent to the channel daily as a result of these announcements is also an important matter, as it demonstrates the potential to leverage free labor. The answer to this question is provided below:

> The number of incoming images can vary greatly depending on the current social media. During peak periods, many users may send the same image. However, on an average day, we receive about 350-400 messages between 8:00 p.m. and 8:30 a.m. In total, I follow an average of 1000 messages per day. I monitor the dynamics of the channel and closely monitor issues such as assault, extortion, theft, and murder.

> The large number of incoming images also provides the channel with the opportunity to choose between content. In particular, on days when there is no busy agenda, the broadcast flow can be filled by making choices among the incoming images.

Use of citizens as free labour

When the media company was asked what topics the news usually requests citizens to take pictures or videos of and whether a fee was paid for them, the following response was received:

> We do not pay. If you are the only one who captured the moment the Twin Towers in the United States were hit and you can prove it, I will let the managers. Even in that case, I cannot say for certain whether the person who captured the footage will receive compensation.

The above statements indicate that the likelihood of citizens being paid for footage is impossible. It is stated that footage contributing to exclusive news production will not be compensated. This proves that numerous videos and information provided to the channel daily are used without payment. However, it should be emphasised that by using unpaid labour, the channel has the potential to obtain free content, employ fewer reporters, avoid technological investments, fill the broadcast schedule, and even increase advertising revenue through exclusive news.

> We do not offer compensation for images sent to us. Because cameras are so widely available, pictures are readily available. Even if someone says they will not send us an image until we pay them, chances are we'll receive it from somewhere else.

The fact that many citizens were present in the scene and that security cameras were recording shows that channels are not reliant on just a few individuals. In fact, the official has stated that there is no need to pay individuals because these images can already be obtained from agencies. This indicates that footage can be sourced from other sources to generate news. Footage is sent for various reasons, even when no monetary compensation is provided:

> Some people may choose to share their images regardless of payment because doing so offers them a sense of pride or the opportunity to contribute to public opinion. People like to say, 'Look, I shot this image that was broadcast on TV.' It has sociological and psychological aspects. Therefore, people often send us images without compensation.

The importance of *WhatsApp* Notification Line as a news source is reflected in the fact that the platform's content is included in every news, making it an indispensable tool for publications. Although many media organisations rely on subscriptions from agencies, using the *WhatsApp* Notification Line allows for unique news stories that stand out from other broadcasts by leveraging information and documents from citizens. This approach relieves the burden on newsrooms to produce content while recognising the role citizens play in creating news. Citizens sharing images do not receive payment; therefore, using their contributions to create publications based on unpaid labour demonstrates that value production is not limited to workers.

WhatsApp Notification Lines are increasingly being used as an extension of citizen journalism to collect visuals and information. The images and information received through this platform play a critical role in the production of exclusive news by media organisations. In this context, the visual materials and information citizens provide contribute to the diversification and deepening of news content. However, the lack of compensation for these contributions demonstrates that citizen journalism is being used as free labour.

Discussion and conclusion

The emergence of smart mobile phones has presented unforeseen opportunities for capturing and sharing real-life experiences worldwide (Pantti, 2013). But, most mainstream news broadcasts tend to limit the use of video footage captured by mobile phones, according to studies (Hadland et al., 2019). The results of the present study provide evidence that video recordings of this nature are regularly featured in news broadcasts on the examined channel. This study aims to investigate not only the frequency of such video integration in news but also the circumstances under which such integration takes place. The media's use of unpaid labour in citizen journalism increases the importance of this study's understanding of where capital derives its value.

As with many businesses, media organisations seek to minimise expenses and maximise profits. Citizen journalism offers a potential solution to this struggle by allowing individuals to capture and share newsworthy events. Despite the lack of financial compensation, citizen journalists can take pride in contributing to public opinion and the dissemination of important images. In addition, citizen journalism can foster a sense of community and

belonging within a local area (Robinson & Deshano, 2011). For broadcasters, citizen journalism provides a source of free content that can be integrated into newscasts and can also lead to the creation of special news programmes that can boost ratings and profits. By relying on the contributions of ordinary citizens, media organisations can effectively turn them into unpaid contributors who help create compelling news content and fill air time.

Recording, especially through cell phones, enables citizen participation in work processes. Similar to how people objectify subjective information by posting on social media (Yazdanipoor et al., 2022), mobile devices make it simple to turn testimony into a commodity with the potential to become news. This meta-analysis also allows individuals to begin the process of financial gain through publication. In essence, broadcasting newsworthy images becomes a form of unpaid labour and reveals a situation in which profit is made solely through capital. Even people who are not actively working can create news on behalf of media organisations, eliminating the disadvantage of reporters not being able to be on the scene. With the help of technology, even those who do not receive wages or unpaid work are included in the production of surplus value. In this way, every individual can contribute to capital, and the scope of labour is extended to the whole of society.

In addition, security cameras provide valuable resources for members of the media who cannot see an incident in person. These cameras take the human element out of the equation, relying solely on technology to capture moments and circumvent the problem of reporters potentially missing important details. This allows reporters to focus on producing news content from their desks and using images to enhance their reporting.

Mobile phone footage and surveillance camera images are shared through *WhatsApp* notification lines and have become important components of news production. This method lowers costs by not employing paid staff and limiting the use of technical equipment. Citizen journalism is not only a source of volunteer or collaborative contributions but also generates economic input through surplus value created by unpaid labour. Therefore, it is important to recognise that citizen journalism is a product of labour and has surplus value, even if it is produced voluntarily or collaboratively.

When media organisations exclude citizen content from news production, they must produce more news to fill the broadcast slots. This adds costs to media organisations,

such as hiring more reporters, spending more time, and using more equipment. In contrast, citizen journalism can significantly reduce or even eliminate these costs because the content is produced and submitted anonymously. This approach illustrates how capital can be valued beyond working staff.

The process of producing broadcasts and preparing information from social media platforms, which are subsequently viewed, read, or clicked, benefits media firms both monetarily and in terms of reputation (Palmer, 2013). This can be achieved through advertising or special news. However, the people who took the footage and forwarded it to the media companies did not gain financially from this process.

This study shows that media organisations no longer only employ their employees in news production but also include citizens in the process. Although not paying any payment for the images provided by citizens allows media organisations to reduce their content production costs, this reveals the existence of a system in which citizens do not receive compensation for their efforts. Thus, media organisations minimise news production costs by turning citizens into free labour. This shows that media organisations have turned entire societies into tools for capital production through technology, a reflection of capitalist progress.

When citizens become the driving force in content creation through technology, there is an opportunity for the media to make profits from content that they do not produce themselves (Baruch, 2021). To ensure that contributors are fairly compensated for their work, media organisations can eliminate exploitation by paying a fee or royalty to the owners of the images they use for their broadcasts. In this way, individuals' contributions to the news should be appreciated and rewarded, creating a mutually beneficial arrangement rather than one-sided profits for capital.

It was found that on the days under examination, news had images from 12 distinct sources. When examining the image sources, it is clear that cell phone and security camera images were frequently used during the research data in *Show TV*'s news bulletin. Even when we examine the images provided by agencies, we find that some of the images are taken from cell phones and security cameras even though the agency logo is present. Not only media organizations but also agencies include citizen-derived content in their news production.

The bulletin showed that certain news stories were illustrated exclusively by images captured by cell phones and security cameras. Reporters often supplemented these images with interviews with those involved in the incidents. It was also noted that some cellphone footage was captured by citizen journalists who covered the events as if they were professional reporters. The media organisation only uses reporters to gather information from citizens and conduct street interviews for news stories published at the end of the bulletin.

Mobile phone imagery continues to play an important role in reporting on the ongoing conflicts between Russia and Ukraine, particularly due to the lack of correspondents in conflict zones. In the absence of war correspondents in conflict zones, visual news relies on foreign media images and mobile phone footage of people on the ground. This shows that *Show TV* uses images submitted by citizens in the region as news rather than assigning journalists to cover the war. In addition, images from mobile phones and security cameras are commonly used to report theft, fighting, and accidents.

From the interview data, it appears that the *WhatsApp* Notification Line is perceived similarly to messages from official outlets and even has the advantage of unique message content that sets it apart from other channels. Indeed, news stories that used these images were labelled as 'special news' when they were released. However, the fact that contributors are not paid for their countless daily posts indicates that the work is performed through unpaid labour. On the other hand, the findings of this research should be evaluated specifically within the context of *Show TV*, bearing in mind that it does not represent the entire media landscape in Türkiye or worldwide.

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İSTANBUL
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P R E S S

Araştırma Makalesi / Research Article

New media and communication in creative society: A systematic review of articles published between 2012 and 2024, indexed in *Web of Science*

Yaratıcı toplumda yeni medya ve iletişim: Web of Science'ta indekslenen 2012-2024 yılları arasında yayınlanmış makalelerin sistematik bir incelemesi

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Abstract

Technologies, media, and creativity are strictly intersected in creative society. This study sheds light on how new media and technologies affect creativity and creative communication, through research articles published in the Web of Science (WoS-Clarivate Analytics) database. The primary objective of this research is to provide a systematic literature review of existing scientific publications on new media and communication in the creative society and to provide proposals for future research. A total of 173 articles, published between 2012 and 2024 in scientific journals indexed by the WoS database, were considered in this literature mapping. The results of this research report the following: (1) the structure of this field of study with regard to publications, authors, journals, and countries; (2) an analysis of the structure and content of selected articles; (3) an analysis of the new trends in the field (Artificial Intelligence, Algorithms); (4) a critical discussion of the current publications together with proposals for future research. This study aims to offer an overview of current scientific research on new media and communication in the context of creative society, providing for the first time a systematic literature review of this topic.

Keywords: Creative society, new media, communication, artificial intelligence, creativity, platforms.

Öz

Teknolojiler, medya ve yaratıcılık, yaratıcı toplumda sıkı bir şekilde kesişmektedir. Bu çalışma, yeni medya ve teknolojilerin yaratıcılık ve yaratıcı iletişimi nasıl etkilediğini, Web of Science (WoS-Clarivate Analytics) veritabanında yayımlanan araştırma makaleleri aracılığıyla aydınlatmaktadır. Bu araştırmanın temel amacı, yaratıcı toplumda yeni medya ve iletişim üzerine mevcut bilimsel yayınların sistematik bir literatür taramasını sunmak ve gelecekteki araştırmalar için önerilerde bulunmaktır. Bu literatür haritalandırmasında, WoS veritabanında

indekslenen bilimsel dergilerde 2012 ile 2024 yılları arasında yayımlanan 173 makale dikkate alınmıştır. Araştırma sonuçları şu bulguları rapor etmektedir: (1) yayınlar, yazarlar, dergiler ve ülkeler açısından bu çalışma alanının yapısı; (2) seçilen makalelerin yapı ve içeriğinin analizi; (3) alandaki yeni eğilimlerin analizi (yapay zeka, algoritmalar); (4) mevcut yayınların eleştirel bir tartışması ve gelecekteki araştırmalar için öneriler. Bu çalışma, yaratıcı toplum bağlamında yeni medya ve iletişime yönelik mevcut bilimsel araştırmaların bir genel görünümünü sunmayı ve bu konudaki ilk sistematik literatür taramasını sağlamayı amaçlamaktadır.

Anahtar kelimeler: Yaratıcı toplum, yeni medya, iletişim, yapay zeka, yaratıcılık, platformlar

Introduction

The term 'creative society' denotes the transition from a knowledge-based society to one that emphasises creativity. Elements of creativity in a broad sense can be found in every historical society, considering creativity as a factor that allows a new society to emerge and compete with others; however, the creative society can be interpreted as a society that is founded as a consequence of the rise of the creative industries (Kačerauskas, 2014a). The emergence of the creative industries has created a new and heterogeneous social class, the creative class (Florida, 2002), which can be considered the core of a creative society. In these terms, it might seem that creativity is only one aspect of the knowledge society. Yet the transition from a knowledge society to a creative one is theorised as the new creative society presupposes new and different social relationships, forms of work, and lifestyles.

Indeed, it is crucial to comprehend the aspects in which the creative society differs from the knowledge society and to identify its peculiarities. Reimeris (2016) suggests considering the creative society as the latest stage in the development of society and as an evolution of the knowledge society that is caused by the spread and application of technology in any aspect of life and, particularly, in creativity. Outlining its features, Reimeris (2016) describes the creative society as: an open, non-hierarchical, locally oriented society in which every individual can express, in a personal way, her (his) creative potential and be involved in creative activities; a society based on technological advancements and creative economy, and in which the production and consumption of exclusive creative products are means of self-differentiation.

As a postmodern phenomenon, creative society can be analysed through an interdisciplinary approach that brings together philosophy and aesthetics, sociology and communication, economics and management (Kačerauskas, 2014b).

Various aspects of creative society have been examined, in the Lithuanian academic context, by several authors: among others, the creative economy (Kačerauskas 2014c, 2018, Levickaitė & Reimeris 2011), creative class (Kačerauskas 2014d, Stasiulis 2015), creative city (Kačerauskas & Kaklauskas, 2014), creativity in sport (Kačerauskas & Tamošauskas 2015, Dadelo 2020), creative ecology (Kačerauskas & Zavadskas 2015, Kačerauskas 2016b, Stankevičienė et al. 2011), sustainability in creative society (Kačerauskas et al. 2021, Kovaitė et al. 2022), creativity in education (Navickienė et al. 2019, Žydžiūnaitė & Arce 2021), creativity management (Kačerauskas, 2016a), and political communication of creative society (Venckūnas, 2022) may be cited.

In the international context, the term 'creative society' appears in the works of authors such as Takashi Iba, Louis Galambos, and Silvia Lindtner. In particular, Iba (2016), relying on Niklas Luhmann's (1927-1998) systems theory, sees the creative society as a future society in which people are able and willing to "create their own goods, tools, concepts, knowledge, mechanisms, and ultimately, the future with their own hands" (p. 29). However, unlike Kačerauskas, who conceives the creative society as a postmodern one, Iba (2016) finds that the roots of creative society trace back to modern society. Galambos (2012) and Lindtner (2014) refer the concept of creative society to specific countries, respectively the United States (USA) and China. According to Galambos (2012), the USA is a creative society driven by the heterogeneous social class of the 'professionals;' Lindtner (2014) observes that the initiative to foster a creative society in China is led by the so-called 'Do It Yourself (DIY) makers.' Both social groups may be, in a way, associated with the 'creative class' theorised by Richard Florida (2002). Outside the academic environment, the term 'creative society' has been used by Lars Tvede (2015), with reference to creativity as a long-term development factor for both businesses and societies.

Despite a wide number of studies on various aspects of creativity, still little research has been done on new media and communication in creative society; nevertheless, as platforms, algorithms and artificial intelligence acquire a specific importance in nowadays society, their impact on creativity cannot but be investigated. Technologies, media, and creativity are closely related in creative society for two main reasons: first, technologies and media require a certain level of creativity in their development; second, technologies and media are crucial tools for creative industries (Kačerauskas, 2015). This paper sheds light on how new media and technologies are affecting creative society through research articles published on the WoS database.

Aim and methodology

The aim of this study is to systematically review the existing scientific literature in order to understand the interplay between new media, technologies, and creativity within the framework of a creative society. Specifically, this research evaluates how new media and technological advancements impact creative processes and practises. By mapping the academic landscape (2012-2024), this study offers a comprehensive overview of current trends, challenges, and opportunities in this field. The research questions were expressed as follows:

RQ1. What are the trends in academic research on new media and technologies in the context of a creative society?

RQ2. How do new media and technologies influence creative processes and outputs in the context of a creative society?

RQ3. What types of new media and technologies are most commonly applied for creative purposes and communication?

RQ4. How are creators adapting to a creative society that is shaped by new media and technologies?

The methodology underlying this research is based on other studies providing literature reviews (Silva et al. 2019, Snyder 2019). It was decided to use only articles published in scientific journals indexed by the WoS database, as it is among the most acknowledged in its field (Li et al. 2018), and it offers the possibility of easily filtering the results based on the established criteria. Three keywords were used for three different searches: 'Creative Society,' 'Creative Society' and 'Communication,' 'Creative Society' and 'Media.' The aim was to gather as many articles as possible regarding the notion and issues of creative society, the study of creative society from a Communication studies perspective, and the role of new media and technology in creative society. It should be underlined that the results show only articles that are strictly related to creative society with reference to new media and communication. In doing so, it is understood that scientific works dealing with other aspects of creative society are excluded.

It is interesting to note that the results of the first search already incorporate the articles gathered using the main keyword 'Creative Society' in combination with the other two keywords 'Communication' and 'Media.'

The following filters were applied to the search results:

1. 'Articles,' to exclude books and other types of documents. Despite the filter 'Articles,' it can be noticed that some book chapters were still included in the results. It was decided to proceed manually with their exclusion because the aim was to investigate only literature published in scientific journals.

2. WoS categories 'Social Science Interdisciplinary,' 'Humanities Multidisciplinary' and 'Communication,' in order to limit the research in the fields of Social Sciences (which already incorporates disciplines as 'Communication' and 'Media') and Humanities.

3. 'Publication Year,' with a focus on the articles published from 2012 to 2024.

By filtering the results, 1185 articles were obtained and then screened using the following criteria:

a) Scientific articles that analyse the concept of creative society from a communication perspective.

b) Articles that address the role of media and technology in creative society.

c) Articles mapping and reviewing the literature about creative society.

With respect to the last criterion, it was decided to consider the following aspects of creative society: creative industries, creative economy, creative class, creative city, policy of creativity, and creativity.

The first selection was made by reading all the abstracts, keywords, and final considerations. Of the initial pool of articles, 1012 were excluded because they did not meet the specified criteria, leaving 173 articles eligible for inclusion in this research.

Findings

Figure 1 shows the trend in the number of publications on creative society per year (2012-2024). The first (in chronological order) publication that has been taken into account in this paper is by Fink et al. (2012) in the journal *Psychology of Aesthetics, Creativity and the Arts* (Q1, HIndex:75). Analysing the data collected on research publications from 2012 to 2024, it can be observed a significant and progressive increase in studies on creative society and its various aspects until 2021, followed by a decline in 2022 and a slight resurgence in 2023. As for 2024, since the data were gathered in the early months of the year, a complete overview of the publications is not available.
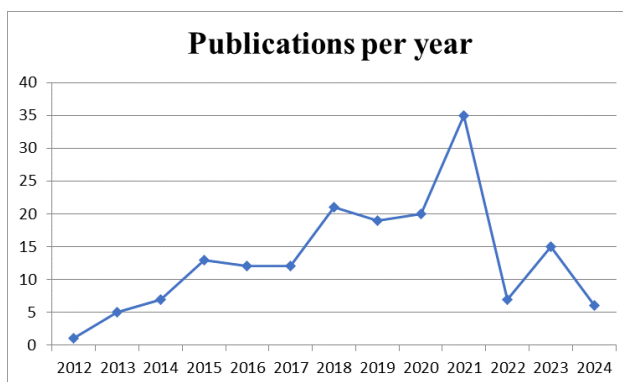
Figure 1: Trend in the number of publications on creative society (2012-2024)

Publications per journal

Fig. 2 shows data regarding six journals that have published more than five articles on creative society. However, analysing all the 173 selected articles, it can be affirmed that 61 scientific journals are involved in this research, among which the vast majority have dedicated to this topic only one article (35 journals, 20,23% of the total) or two (14 journals, 8,09% of the total). This may underline the growing tendency of scientific journals to specialise and focus on specific themes and the growing interest of such journals in the fields of creativity and creative society. The four journals with more than 10 publications are as follows: *Journal of Arts Management*, *Law and Society* (Q1, HIndex:24), *New Media & Society* (Q1, HIndex:149), *Media, Culture and Society* (Q1, HIndex:84), and *Logos-Vilnius* (Q2, HIndex:7).
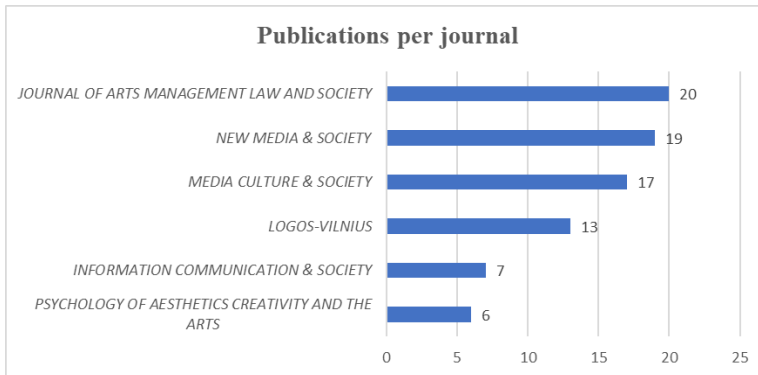
Figure 2: Journals with more than five publications

Publications per author

Considering the number of publications per author, it can be observed that out of the 173 selected articles, only a few involve the same author. Four authors have three publications (among them, C. Meisner appears in two publications as co-author and in one as sole author), and only one author (T. Kačerauskas) has six publications on this topic. The remaining articles (118 articles, 68,20% of the total) are written by authors that have only one publication in this field of study. This may suggest that creativity studies or the notion of creative society are increasing their importance in scientific research, although only few authors decide to exclusively devote their studies to this topic.
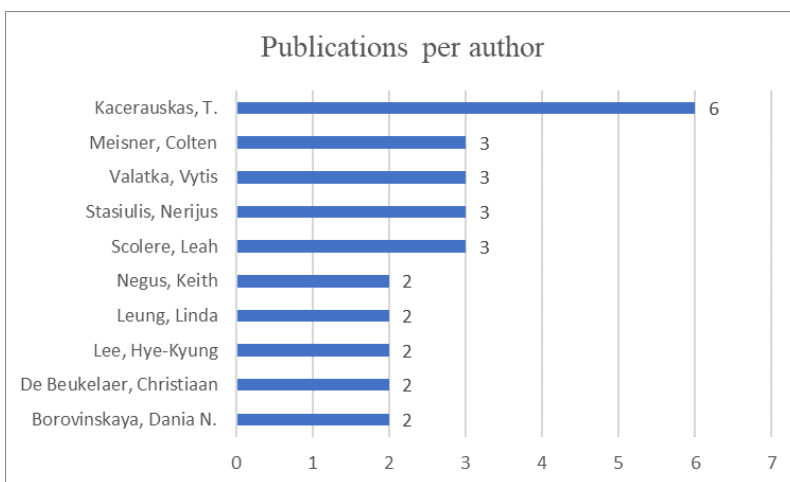
Figure 3: Publications per author

Authors and the 20 most cited articles

In order to focus on the more cited articles, the data provided by WoS regarding the time each article was quoted in its database were used. Table 1 presents the 20 more cited articles together with the percentage of quotes in connection with the total number of citations considered. The 173 articles collectively produced 1467 citations; while considering the top 20 more cited articles, 775 citations, which correspond to approximately 52% of the total citations, were counted. All the 20 most cited articles are published by journals that belong to Q1. Later on, the top 20 articles will be analysed per journal, focusing on each journal's metrics.

Table 1. Authors and their respective citations (20 most cited articles)

| Ranking	Authors	Journal	H Index	Quartil	Total of citations	% of total citations
1°	Bechmann & Lomborg (2013)	*NEW MEDIA & SOCIETY*	149	Q1	100	12,90
2°	Alacovska (2018)	*HUMAN RELATIONS*	162	Q1	63	8,13
3°	Carah & Angus (2018)	*MEDIA, CULTURE & SOCIETY*	84	Q1	55	7,10
4°	Fink et al. (2012)	*PSYCHOLOGY OF AESTHETICS, CREATIVITY AND THE ARTS*	75	Q1	51	6,58
5°	Klawitter & Hargittai (2018)	*INTERNATIONAL JOURNAL OF COMMUNICATION*	61	Q1	48	6,20
6°	Hill & Monroy-Hernandez (2013)	*AMERICAN BEHAVIORAL SCIENTIST*	132	Q1	41	5,29
7°	Duffy & Meisner (2023)	*MEDIA, CULTURE & SOCIETY*	84	Q1	40	5,16
8°	Hesmondhalgh (2021)	*NEW MEDIA & SOCIETY*	149	Q1	38	4,90
9°	Negus (2019)	*MEDIA, CULTURE & SOCIETY*	84	Q1	38	4,90
10°	Weststar (2015)	*INFORMATION, COMMUNICATION & SOCIETY*	114	Q1	35	4,52
11°	Scolere (2019)	*NEW MEDIA & SOCIETY*	149	Q1	33	4,26
12°	Newsinger (2015)	*MEDIA, CULTURE & SOCIETY*	84	Q1	31	4,00
13°	Dent (2020)	*MEDIA, CULTURE & SOCIETY*	84	Q1	30	3,87
14°	Meisner & Ledbetter (2020)	*NEW MEDIA & SOCIETY*	149	Q1	27	3,48
15°	Frenette (2017)	*JOURNAL OF ARTS MANAGEMENT, LAW AND SOCIETY*	24	Q1	26	3,35
16°	Muller et al. (2016)	*PSYCHOLOGY OF AESTHETICS, CREATIVITY AND THE ARTS*	75	Q1	26	3,35
17°	Hong et al. (2021)	*NEW MEDIA & SOCIETY*	149	Q1	25	3,23
18°	Essig (2015)	*JOURNAL OF ARTS MANAGEMENT, LAW AND SOCIETY*	24	Q1	24	3,10
19°	Rendell (2021)	*CONVERGENCE-THE INTERNATIONAL JOURNAL OF RESEARCH INTO NEW MEDIA TECHNOLOGIES*	56	Q1	22	2,84
20°	Coldevin et al. (2019)	*HUMAN RELATIONS*	162	Q1	22	2,84
				Total	**775**	**100%**

Publications per country

In relation to the authors' countries, Table 2 shows that, among the 20 most cited articles, 12 publications (60% of the total) belong to authors whose country of origin is the USA (7 articles) or the UK (5 articles). This underscores the highest attention to research in

the UK and the USA in terms of financing and working conditions that potentially correspond to an increase in the productivity of researchers.

Denmark and Australia have 2 publications while the rest of the involved countries Austria, Canada, the Netherlands, and Switzerland have only one article each. One article is co-authored by researchers from different countries (Norway, Portugal and UK).

Publications per journal

Regarding the journals publishing the 20 more cited papers (Table 2), five journals with more than 1 article among the aforementioned publications are mentioned. The list is led by *New Media & Society* (HIndex 149, Q1) and *Media, Culture & Society* (HIndex 84, Q1) with 5 articles each; it follows *Humans Relations* (HIndex 162, Q1), *Psychology of Aesthetics, Creativity, and the Arts* (HIndex 75, Q1), and *Journal of Arts Management, Law, and Society* (HIndex 24, Q1) with 2 articles each. Four journals are counted with 1 publication each: *International Journal of Communication* (HIndex 45, Q1), *American Behavioral Scientist* (HIndex 124, Q1), *Information, Communication & Society*, and *Convergence* (HIndex 59, Q1).

Table 2. Distribution of published articles per journal (20 most cited articles)

Journal	Number of publications
NEW MEDIA & SOCIETY	5
MEDIA, CULTURE & SOCIETY	5
HUMAN RELATIONS	2
PSYCHOLOGY OF AESTHETICS, CREATIVITY AND THE ARTS	2
JOURNAL OF ARTS MANAGEMENT, LAW AND SOCIETY	2
INTERNATIONAL JOURNAL OF COMMUNICATION	1
AMERICAN BEHAVIORAL SCIENTIST	1
INFORMATION, COMMUNICATION & SOCIETY	1
CONVERGENCE-THE INTERNATIONAL JOURNAL OF RESEARCH INTO NEW MEDIA TECHNOLOGIES	1

Analysis of the structure and content of the 20 most cited articles

Analysing the structure of the 20 articles it is detected that 4 are literature reviews, 2 are theoretical papers, 11 applied empirical approaches (4 quantitative, 7 qualitative) and only 3 are case studies. The most recurring theoretical frameworks among the 20 articles are the following: Creative class by Florida (2002), Social and cultural capital by Bourdieu (1986), and Connectivity by Van Dijck (2013). Concerning the units of analysis, 40% of the articles deal with new media and social media, while 25% focus on creators and the creative class. The remaining articles apply to creativity as a process (20%) and

to the policy of creativity (15%). Concerning data collection, 35% of the studies applied qualitative interviews, while articles with literature reviews represent the 20%. Among the data collection methods applied in the 20 articles, questionnaires (2 articles), 1 psychological test, and simultaneously questionnaires and qualitative interviews were observed. Three researches are based on data available online.

Regarding empirical articles, it may be noticed that, due to various methodological limitations related to the construction of robust samples that are capable of representing the population as a whole, authors themselves often request for future research, humblingly recognising their researches' limitations and also suggesting how to improve them. Nonetheless, the conclusions are, in general, adequately informative and capable of validating the established objectives. Limitations and future research sections provide us with proposals and suggestions that permit us to identify what remains to be done to progress in this scientific research domain.

Concerning the content of the 20 most cited articles and focusing solely on their findings related to new media and technologies, several studies point to the fundamental role of digital platforms in reshaping creative work and communication (Bechmann & Lomborg 2013, Carah & Angus 2018, Negus 2018, Rendell, 2021), suggesting a need to adopt a theoretical approach that brings together media studies and computer science, in order to focus on the technical mechanisms behind the platforms and not just on users' shared content (Carah & Angus, 2018). Despite the new opportunities for sharing creative content and earning provided by these platforms, challenges such as algorithmic mechanisms and unequal working conditions persist (Duffy & Meisner 2023, Klawitter & Hargittai 2018). Indeed, the informal and precarious nature of creative work in a digital environment is a recurrent theme, with a significant focus on economic and social aspects (Alacovska 2018, Duffy & Meisner 2023, Hesmondhalgh 2021). As social capital plays a strategic role in creative societies, it may lead to forms of unpaid creative work, such as bartering, voluntary work or favour-swapping. Nonetheless, creators who work and communicate through new media, as those presuppose spatially and socially distant clients and users, receive more paid work opportunities comparing to others (Alacovska, 2018). Digitalisation has also redefined creators' role: from producers of creative outcomes to content creators for digital platforms (Negus 2018, Rendell 2021); a role that is further challenged by AI-generated creative outputs (Hong et al., 2021).

Overall, the 20 articles seem to suggest the need for a more comprehensive approach to understanding the impact of new media and technologies on the creative society, balancing technical, economic, social, and cultural perspectives.

Analysis of the structure and content of new media and communication in creative society focused articles

As previously stated, the objective of this research is to provide a comprehensive overview of the current literature on new media and communication within the framework of a creative society. To achieve this objective, three separate searches were conducted on the WoS database using three different keyword combinations: 'Creative society,' 'Creative society' and 'Communication,' 'Creative society' and 'Media.' After screening 1185 articles, 173 articles were included in this study, among which only 42 articles (around 24% of all the articles subject to our analysis) were strictly related to new media and communication in creative society.

Concerning the study type, case studies (11), qualitative interviews (14), qualitative interviews followed by ethnographic, online, or netnographic observations (5), quantitative research (5), literature review (3), and experiment (1) can be observed. This prevalence of qualitative methods reflects researchers' efforts to provide a deeper understanding of the processes involved, which can be challenging to capture through quantitative measures alone. Indeed, new media and technologies appear to have the greatest impact on the agents of the creative society—the creators, members of the so-called creative class. A qualitative approach may seem necessary to analyse creators' perceptions of the opportunities and challenges that new media and technologies bring to creativity.

Types of media and technology, and their implications for the creative society

Concerning the units of analysis, it may be reported that at the centre of most studies are artificial intelligence (hereafter referred to as AI) and algorithms (10 articles). Other studies focus on social and/or digital media, online (live)streaming platforms, music streaming platforms, user-generated content technology, open-source software, location-based technology, and platforms such as Patreon, Pinterest, and Tik Tok (one article each).

Creative society, as an interdisciplinary subject, requires a plural scientific approach (Kačerauskas, 2014b). For this reason, the vast majority of the research applies a combination of different scientific approaches (communication, technology, aesthetic, management, psychology, and economics). For what concerns the implications of new media and technologies on creativity, they can be thematically divided into five distinct aspects: 1) the relationship between creators and audiences, 2) the influence of platforms, 3) the role of artificial intelligence and algorithms, 4) the effects on the creative class, 5) opportunities and challenges to creativity. Here, an overview of each aspect is provided:

1. New media and technologies enhance the relationship between creators and their audiences. First, they allow creators to easily build and interact with their networks (Willment, 2023; Baboo & Yi, 2018) and enable audiences to contribute to the creative process by supporting creators and providing both emotional and financial support through various monetization platforms. Through social live streaming platforms, the audience is invited to contribute to creators' self-branding process in what is called "participatory branding" (Meisner & Ledbetter, 2022). Relationships between creators and patrons may vary from formal to familial, making it difficult for creators to maintain relational boundaries (Bonifacio et al., 2021). Moreover, the dynamics of social media, serving as a fundamental tool of creative communication, require creators to be constantly up-to-date with technological advancements (Llorente Barroso et al., 2021), continuously display their private lives, in order to self-brand and optimise their creative content (Bishop, 2023), and share inspirational content or works still in progress to engage with their audience (Scolere, 2019).

2. Platforms facilitate the global production and distribution of digital creative products (Bidav & Mehta, 2024; Giannatou et al., 2019). They also contribute to reduce the barriers and inequalities in cultural participation (Ateca-Amestoy & Prieto-Rodriguez, 2023), simplifying the possibilities of digitally enjoying creative works. Therefore, creators' attempts to adapt their productions to platform standards can be noticed (Zhang & Negus, 2024; Polak & Schaap, 2024; Tintiangko et al., 2023). These adaptations can impact both the form and content of digital creative products and can bring to forms of standardisation or self-censorship. Platforms can also potentially amplify independent or local creative production, especially through crowdfunding (Li et al., 2022), although inequalities and bias persist (Holcombe-James et al., 2022).

3. Algorithms and AI may potentially increase creative possibilities; nonetheless, they cannot replace humans in the creative process (Birtchnell, 2018) as this requires human qualities (i.e. creativity itself, critical thinking, etc.). AI-generated works might be still differently perceived than artworks produced by humans (Hong et al., 2021; Messingschlager & Appel, 2023) as a consequence of anthropocentric thinking (Kalpokiene & Kalpokas, 2023); this may generate forms of aesthetic dismemberment (Laurentiz, 2021) or antagonism with the audience (Nikolić & Liu, 2021). AI is also discussed in terms of content optimisation (by creators) and content moderation (by platforms), both of which are underpinned by AI technologies.

4. Creators become more autonomous from producers and publishers; they are now able to independently produce, publish, distribute and monetize without having to turn to intermediaries (Poort et al., 2015). Nonetheless, creators face various challenges in the digital space: inequalities (Hesmondhalg, 2021), overwork (Duffy and Meisner, 2023), 'hate raids' (Meisner, 2023), and content moderation, which can sometimes lead to forms of self-censorship (Dergacheva & Katzenbach, 2023).

5. Technologies, creativity, and economy are strictly intersected in creative society (Kačerauskas, 2015). New media and technologies enable the digital transformation of culture and art (Bannikova et al., 2023) and give rise to new, more interactive forms of creativity (Scolere and Humphreys, 2016; Carpio et al., 2023; Mago et al., 2023; Hausken, 2024; Sovhyra et al., 2023; Hill & Monroy-Hernández, 2015). They can also represent an issue to creativity in what concerns, among others, the legal protection of authorship (Tay et al., 2018), the originality of creative works, creators' capability to earn revenue from their creative works, and other challenges related to copyright, data management and commercialisation of digitised cultural goods (Terras et al., 2021). Moreover, while platforms amplify the possibilities to participate in digital creative production and sharing, despite spatial limitations (Zhao, 2024; Rendell, 2021) and often redefining cities' geographies (Berry & Goodwin, 2012), researchers note a certain tendency to homogenisation and adaptation of creative productions to platforms' standards (Zhang & Negus, 2024; Polak & Schaap, 2024; Tintiangko et al., 2023). Researchers suggest examining these phenomena through interdisciplinary approaches (Bechmann & Lomborg, 2013; Leng & Bentley, 2017; Obradors, 2021).

In conclusion, these recent studies, analysing the implications of new media and technologies on creative society through an interdisciplinary approach, highlight the increasing influence of platforms, AI and algorithms on the production and distribution of creative goods and on creators themselves.

Discussion and conclusion

As noted in the introduction, the phenomenon of creative society is observed by various scholars from various countries and through different scientific approaches and perspectives. Despite this diversity and heterogeneity, what seems to unite all those different theories is the idea that creative society is a postmodern, mediated (Kačerauskas 2014a, 2017) society led by a class of creators ['creative class' (Florida 2022), 'professionals' (Galambos 2012), 'DIY makers' (Lindtner 2014)], based on the creative economy (Reimeris 2016) and in which creative activities are inseparable from new media and technologies (Kačerauskas 2015).

Through this research, the aim was to map and describe trends in academic literature on the roles and implications of new media and technologies within the context of a creative society (RQ1), considering elements such as year, journal, author, country, and highlighting the most relevant publications on this topic. Although specific keywords ('creative society,' 'communication,' 'media') were used for the search in the WoS database, it may be noticed that some of the collected articles do not specifically use the term 'creative society;' however, it was decided to include them in this systematic literature review as they analyse specific aspects of creativity in contemporary society (the creative society), relating them to new media and communication. In general, what stands out is the heterogeneity of all these articles, which occurs for mostly two reasons: firstly, creative society is a wide concept that includes several aspects (creative economy, creative class, policy of creativity, etc.), and secondly, this phenomenon can be analysed through different scientific approaches.

Regarding the influence of new media and technologies on creativity (RQ2), a dual impact may be observed: improvements (Alacovska 2018, Klawitter & Hargittai 2018, Sclater & Lally 2014, Davis & Boellstorff 2016) and challenges to the creativity process (Hill and Monroy-Hernández 2015, Negus 2018).

On the one hand, they enhance creativity by providing new tools and platforms for creative expression, such as social media, which are playing a main role in creative society as they enable both the users to participate in the creation of what is being

published and the creators to draw on and get inspiration from the audience's contribution (Bechman & Lomborg, 2013; Willment, 2023). Also, they offer new ways for creators and audiences to creatively engage and communicate together, as testified by the phenomenon of online live music shows during COVID-19 restrictions (Rendell, 2021). In doing so, social media somehow erase the border between creator (producer) and user (consumer). This is evident in the rise of user-generated content technology, which brings about collaborative creative works and authorship, and remixing practises, which redefine originality and innovation (Hill & Monroy-Hernández, 2018). This last aspect presents challenges, such as the difficulty of assigning authorship to collaborative works. In order to solve this issue, it has been suggested to introduce the concept of 'deemed author,' an entity whose function is to collect all contributions and oversee the configuration of the final output, in copyright law (Tay et al., 2018). In this respect, it can be affirmed that new media enables users not only to participate, along with creators, in creative works but also to rework and redefine them (Hill & Monroy-Hernández, 2018). The increase in remixing practises, facilitated by the diffusion of open-source software, raises questions about the nature of originality and innovation, key aspects of creativity and whether new media enhance or impede the development of creativity, potentially making the creative society 'less creative.' The duality of generativity (they are derivative works) and originality (they differ from their antecedents) in remixes, as it is conceptualised in Hill and Monroy-Hernández's research (2018), poses methodological issues. Assuming that remixes are both derivative and original, the criteria for measuring and evaluating their level of originality and creativity remain to be established, which presents a methodological gap that future research can address. This raises questions about the nature of creation in a creative society dominated by new media and technology, particularly concerning the definition of creation, the criteria for recognising creative works, the identification of creators, and the attribution of copyright; answering these questions becomes increasingly urgent following the spread of AI-generated creative outputs.

Social media provide opportunities for global communication and distribution of digital creative products, potentially benefiting independent and local productions. However, researchers are divided on this issue. Some argue that independent and local productions struggle to compete with larger productions and algorithmic biases (Bidav & Mehta, 202 4). Conversely, others highlight successful examples of crowdfunding (Li et al., 2022) and the growing popularity of livestreaming platforms (Zhao, 2024), which empower many independent and local creators.

The creators' attempts to adapt their productions to the standards of platforms can impact both the form and content of digital creative products and can lead to forms of standardisation (Polak & Schaap, 2024; Zhang & Negus, 2024) or self-censorship (Dergacheva & Katzenbach, 2023).

Algorithms and AI are increasingly being applied to artworks, increasing creative possibilities (Hausken, 2024) but also generating aesthetic dismemberment, as affirmed by Laurentiz (2021), whose statement that creators have the key responsibility of declining to incorporate these new technologies into their artworks seems to represent a quite ideological, although legitimate, position.

Researchers' positions towards algorithms and AI applied to creativity are indeed contrasting: some of them underline machines' progressive emancipation and autonomy from humans (Nikolić and Liu, 2021), while others affirm that AI is not able to replace humans in creative processes because AI does not possess human qualities such as creativity (Birtchnell, 2018) and that AI-generated creative works are still perceived as less creative than human-created artworks (Messingschlager & Appel, 2023). If creativity is assumed to be a quality that belongs exclusively to humans, the evaluation of AI-generated contributions to artworks, filmmaking, and contemporary music (Hong et al., 2021) prompts consideration of whether the idea of AI creativity should finally be accepted.

Concerning RQ3, the types of new media and technologies predominantly applied for creative purposes include, in addition to social media, various platforms, digital portfolios, open-source software and artificial intelligence. Platforms have become essential tools for creators to build their digital presence (Instagram, TikTok), distribute their digital creative works (streaming platforms), and secure financial support (Patreon, crowdfunding platforms). The application of AI in creative processes is another significant trend, offering new possibilities for creative outputs and raising questions about the role and recognition of AI-generated content (Kalpokiene & Kalpokas, 2023).

Regarding the last research question (RQ4), digitalisation, generated by the application of new technologies on creativity, redefines creators' role from producers of creative outcomes to content creators for digital platforms (Keith Negus:2019). This is evident in the music industry, where every new musical work seems not to stand on its own as it acquires economic and cultural value based only on its performance on dedicated platforms; however, it could also be applied in other sectors of creative industries where a digitalisation occurs. At the same time digitisation is seen by creators

as an opportunity to become more autonomous from publishers and producers and gain more control over their creative works (Poort et al., 2015).

New media also have an impact on how creators present and promote themselves. In a society dominated by social media, creators should not ignore the importance of building a strong digital portfolio (Scolere, 2019) through their presence on various social networks (like the *Instagram portfolio*). In this sense, building a portfolio is a complex process in the digital era, as it goes beyond a simple description of a creator's abilities and career. It incorporates personal aspects, inspirational content, and works that are still in progress. It can be affirmed, together with Scolere (2019), that the portfolio itself is currently a work in progress, as creators are "always designing" it. However, the challenges creators face in digital spaces, including inequalities, overwork, 'hate raids,' content moderation, and the pressure to constantly share aspects of their private lives, must also be considered.

New media and technologies have also an impact on creators' capability to get paid for their creative works. As the social capital plays a strategic and important role in creative society, it may bring to forms of unpaid creative work, such as bartering, voluntary work or favour-swapping. Nonetheless, creators working and communicating through new media, as those presuppose spatially and socially distant clients and users, appear to receive more paid work opportunities compared to others (Alacovska, 2018). It is undeniable that platforms have allowed more creators to earn money from their works than in the past; nonetheless, some criticisms still persist, such as inequalities and poor working conditions (Hesmondhalg, 2021).

New media enable creators to access new forms of private financing through digital patronage platforms such as Patreon ©. Thanks to Patreon ©, creators can receive feedback on content, emotional and economic support—even without expectation of reward—from their patrons (Bonifacio et al., 2021). Future research may investigate whether new media enable a creative society to become more independent from public financing, determine the ongoing necessity of public financing for the development of a creative society, and ascertain which type of financing—public or private—is most suitable for creative activities.

With reference to the general conclusion of this literature review, it may be affirmed that the roles and implications of new media and communication on creativity in the context of creative society are progressively becoming the object of various scientific

inquiries, a field of studies that possess considerable potential due to the relevance and topicality of this theme. Existing studies, analysed in this research still present some limitations, such as the construction of a solid sample (Bonifacio 2021, Hong et al. 2021), the lack of knowledge about the consequences of AI and algorithms' contributions to creative processes (Birtchnell, 2018), and the struggle when analysing digital data that can be modified continuously (Hill & Monroy-Hernández, 2018). The aforementioned limitations represent valuable opportunities for future research.

Finalising this literature review allows us to observe a detailed overview of what has already been published in this field, and it also represents support for those who aim to conduct research on this topic in the future. Moreover, reviewing the existing literature on this topic highlights the different scientific approaches towards creativity studies and identifies the types of media or technologies applied to the creativity process, together with their implications and consequences for the creative society.

This research underscores the burgeoning interest within the scientific community in exploring the relationship between new media, technologies, and creativity in the context of creative society. However, it also highlights a current deficiency in robust empirical studies, particularly in the domains of algorithms and artificial intelligence.

However, this study is obviously subject to several limitations. First, this research only included articles published in journals that are indexed in the WoS database. WoS is one of the most renowned and recognised databases in the academic field; nonetheless, it would be interesting to expand the research on this topic using other databases, such as Scopus, and then compare the results. Second, the keywords used in the research brought to 1185 articles, among which only 173 articles were included in the final literature review. Using other combinations of keywords, including 'Technology' or 'Creativity,' would result in different search results and, consequently, different selection of articles. Third, it was decided to filter the 1185 articles applying, among others, only three WoS categories 'Social Science Interdisciplinary', 'Humanities Multidisciplinary' and 'Communication,' in order to limit the research in the domains of Social Sciences and Humanities; however, categories such as 'Business,' 'Management,' 'Urban Studies,' 'Economics' or 'Philosophy,' as those disciplines represent part of the scientific approaches through which analysing creative society, could have been included. Finally, as the data were collected in the early months of the year, a complete overview of the publications in 2024 is not yet available.

As interest in this field increases, future research may consider a new mapping of the literature that would include other WoS categories, as well as book chapters or conference papers that were excluded from this study.

As for future research on creative society or creativity, researchers cannot avoid to consider the impact of platforms, which seem to dominate every aspect of our life to the point that some authors have started to talk about Platform Studies as a brand-new field of knowledge (Magaudda & Solaroli, 2021), on creativity. Moreover, with the rapid spread of AI-generated creative outputs, future research should explore the definition of creation, establish criteria for recognising creative works, identifying creators, and determine the attribution of copyright for such outputs. Finally, future research may also investigate whether new media enable the creative society to become more independent from public financing and determine which type of financing—public or private—is most suitable for creative activities.

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P R E S S

The view of political knowledge gap among social media users in Türkiye*

Siyasal bilgi açığı: Sosyal medya kullanıcıları arasındaki siyasal bilgi açığının Türkiye'deki görünümü

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Abstract

This study primarily focuses on the relationship between social media use and the political knowledge gap in Türkiye. Regarding political issues, the work in this focus axis is built on questioning and researching the political knowledge gap among individuals categorized at different levels regarding socio-economic status, education level, motivation, and social media use variables. Based on the problem, the differentiation in education and socio-economic level is at the center. Gender, motivation, and social media use are other investigated variables. The research examines whether the effect of social media environments, which are today's most common usage area, on the level of political knowledge reveals a meaningful differentiation and reveals at what points information gaps arise. For this purpose, field research was carried out in Türkiye with 1.076 people. The study has a quantitative design based on the fact that its original value is in its being the first research in this field in the country. The data obtained from the documents showed that education level and gender variables are no longer determining factors in the knowledge gap hypothesis research.

Keywords: Knowledge gap hypothesis, political knowledge gap, social media use, socio-economic status, motivation.

Öz

Bu çalışmada, Türkiye'de sosyal medya kullanımı ile siyasal bilgi açığı ilişkisine birincil olarak odaklanılmaktadır. Bu odak ekseninde çalışma, siyasal konular söz konusu olduğunda; sosyoekonomik statü, eğitim düzeyi, motivasyon, sosyal medya kullanımı değişkenleri kıstasında farklı düzeylerde kategorize olan bireyler arasındaki siyasal bilgi açığını sorgulama ve araştırma amacı üzerine inşa edilmektedir. Söz konusu sorunsallıktan hareketle, başat olarak eğitim düzeyi ve sosyoekonomik düzeydeki farklılaşma merkeze alınmaktadır. Cinsiyet, motivasyon ve sosyal medya kullanımı araştırılan diğer değişkenlerdir. Araştırma, günümüzün en yaygın kullanım alanına sahip olan sosyal medya ortamlarının, belirlenen kıstaslar çerçevesinde ayrı ayrı kategorize olan bireyler arasındaki siyasal bilgi düzeyine dair etkisinin anlamlı bir farklılaşmanın öncüsü olup

olmadığını incelemekte ve bilgi açıklarının hangi noktalarda doğduğunu ortaya koymaktadır. Bu amaçla, 1076 kişi ile Türkiye geneli bir saha araştırması yapılmaktadır. Özgün değerinin bu alana dönük ülkemizdeki ilk araştırma olmasına dayanan nicel desendeki çalışmada sahadan edinilen veriler, eğitim düzeyi ve cinsiyet değişkenlerinin bilgi açığı hipotezi araştırmalarında birer belirleyen olmaktan çıktığını belgelemektedir. Sosyo ekonomik statü ve motivasyon, hala belirleyen konumundadır. Siyasal bilgi açığının Türkiye'deki görünümünü en güncel şekliyle sunan bu çalışma, söz konusu teoremin değişen ve dönüşen medya ortamları ile paralel şekilde revizyona uğradığını da belgelemektedir.

Anahtar Kelimeler: Bilgi açığı hipotezi, siyasal bilgi açığı, sosyal medya kullanımı, sosyoekonomik statü, motivasyon

Introduction

The knowledge gap hypothesis, which Tichenor, Donohue and Olien first mentioned as a theorem in 1970 and followed in the footsteps of subsequent researchers, basically focuses on the knowledge gap that is assumed to occur between segments with high education levels and those with low education levels. The main starting point is the question of how the differences in education and economic levels within the society affect the formation of the knowledge gap (Tichenor et al., 1970). Results revealing the existence of a significant knowledge gap among lower groups (Beka-lu & Eggemont, 2013; Cho & Mcload, 2007; Eveland et al., 2000; Fredinet et al., 1994; Grif-fin, 1990; Moore, 1987; Salter et al, 2009) support Tichenor et al. The reason for this is that early research shows that reading newspapers requires skill and that these environments appeal more to people with higher education levels (Donohue, 1986; Speight, 1999; Tichenor et al., 1790; Tichenor et al., 1975). Television, on the other hand, is positioned as environments that equalize knowledge (Eveland & Scheufele, 2000; Graber, 1990; Graber, 2004; Kim, 2008). Some studies conducted after the 2000s, after new technologies had definitively entered human life, reveal the existence of an increasing knowledge gap between individuals in the lower and upper status categories in terms of education level (Anduza et al.), 2009; Cho & Mcload, 2007; Gaziano, 2014; Jeffery & Anderson, 2004; Pereira et al., 2014; Yanık, 2015). The argument put forward based on the results of the said research is that the use of new technologies and the internet environments they carry with them requires a certain knowledge and skill, just like newspapers; It is the comment that people with low education levels have limited access to these environments. A similar idea also applies to the socio-economic level. Most research reveals that there are large differences in using communication skills between those with higher and lower socio-economic status (Tokgöz, 2015, p. 295). This main result also has a sub-result: the individual with a high socio-economic and educational level already has a broad background due to their advanced levels of economics and education, and therefore, it is inevitable that there will be a positive difference from the other group in terms of knowledge reception (Eastin et al., 2013; Kim, 2007; Wei & Hindman, 2011).

The study presented by summarizing the focus so far, when it comes to specific issues such as politics in a holistic sense, becomes problematic by questioning and researching the political knowledge gap between individuals at different levels in terms of socio-economics, education, motivation and social media usage variables. Based on

this problematic, the focus is primarily on the education and socio-economic level differentiation. Gender, motivation and social media use are other variables investigated. Depending on the structure of individuals who are categorized and differentiated in the individual context, social media environments, which are the most widely used today, it is aims to examine whether the effect on the level of political knowledge reveals a meaningful differentiation and to reveal at what points the knowledge gaps arise.

The study, which is designed for this purpose, and consists of two parts. In the first part of the study, there is a comprehensive literature review in order to make the theorem in question more understandable. The second part, which is created in the reference of this part, where the theoretical foundations are laid, presents the empirical part of the study. This section, which aims to seek answers to the questions of where social media environments stand at the point of formation of the political knowledge gap and what effect they have on the formation of the knowledge gap between individuals, is shaped in a quantitative pattern and covers the part where field research is included. After this section, in which the details of the field research carried out with the hybrid method are shared with 1.076 people whose universe is pointed out by all of Türkiye within the determined sample, and comments on the findings obtained from the field are included, the study is finally completed by presenting the current situation. The study, whose original value is based on the fact that it is the first research in Türkiye in this field, also reveals differences that differ from the findings of other studies based on the knowledge gap hypothesis conducted in the world to date, and especially documents that the variable of education level is no longer a determinant.

The birth of the knowledge gap hypothesis and a first look at the subject

When this theory first started to be discussed in America in the 1970s, Europe both continued the trace of the critical movement and add different perspectives to it, and focused on associating the holistic way of life, which it described as cultural studies within the media. While Stuart Hall was writing his article titled "*Coding-Decoding*" in 1973, he worked particularly on the ideological roles of the media and the nature of ideology. According to Hall, the process along the lines of "sender-message-receiver" is insufficient to understand communication (Özçetin, 2018, p. 189). Because according to him, this line misses the point of how media texts are received and denies that the viewer/reader actually has the opportunity to make a choice when receiving media

texts. At this point, Hall ignores media ownership and control (Yaylagül, 2013, p. 131). He emphasizes the idea that the education level, social stratum, mentality, motivation and most of all the cultural structure of the audience groups, which he categorizes as dominant, oppositional and argumentative, are decisive in terms of content consumption (Hall, 2005, p. 96, 97). The thinker, who is among the recent pioneers of Europe's critical movement tradition, persistently opposes the idea that people have a completely passive structure.

As a result of the empirical method being influenced by the critical approach, the knowledge gap hypothesis, which was put forward in 1970, appeared simultaneously in America (Şeker, 2005, p. 16). On the one hand, it is obvious that it refers to the concrete difference in society and that it takes the aforementioned European schools as a reference. On the other hand, it continues to follow the American empirical trajectory in that it is the theory of the message-receiver paradigm that developed in an American school. In this context, for the theory, which focuses on the central role of media and media use, the difference in the degree of knowledge that occurs as a result of the differentiation in the level of economy and education between people at the point of knowledge acquisition is the first subject of research on this theory. Tichenor, Donohue and Olien did the first studies on the knowledge gap, in their research titled *Mass Communication Flow and Growth Differences in knowledge* (1970). When the amount and variety of knowledge disseminated through media tools in the social system increases, they reveal the judgment that individuals with a high socio-economic level receive knowledge more quickly and consciously than individuals with a low socio-economic level. According to them, in such a situation; The formation of a knowledge gap between two different segments of society is inevitable (Tichenor et al., 1970, p. 161).

With reference to the studies of the researchers who conducted their first research, different factors are listed as to the reason for the formation of the knowledge gap hypothesis in subsequent studies. In the first studies, in addition to the factors that directly linked the reason for the knowledge gap to being included in a lower or higher status and educational status, subsequent studies began to talk about the existence of different variables among the reasons for the formation of the gap. As a matter of fact, Donohue et al. emphasize the idea that individuals who apply to the same media environment have different reasons for applying, and that individuals can turn to different contents of the same media according to their interests. He emphasizes the

idea that this difference may cause a knowledge gap (1973, p. 659-660). So much so that the researchers who conducted this study on newspaper readers reveal that readers turn to news content on different topics according to their different interests.

Robinson emphasizes that different media environments can cause knowledge gaps among individuals. In particular, he defends the idea that print media increases the knowledge gap compared to television (1990, p. 133).

Donohue and his colleagues also state that closing the knowledge gap may vary depending on the sensitivity of the mass media and the nature of the individuals who have the knowledge. For example, while the knowledge gap between individuals is less in subjects that are within a general area of interest and known by all segments of society, such as sports and housework; the knowledge gap between individuals can be much greater on issues related to a specific field such as science and politics (1970, p. 158). In parallel, Donohue and his friends, based on the differences arising from these individual characteristics, raise a question of theoretical and social importance: Under what conditions can the knowledge gap be reduced or eliminated? In order to find an answer to this question, it is emphasized that the majority structure of society should be defined correctly and it should be understood whether it has a homogeneous pattern (1975).

Brantgarde explains the existence of knowledge gap between different social layers. It relates to having knowledge and equipment regarding international, national and regional news (1983, p. 362). According to him, individuals with low socio-economic levels have less knowledge about national or international issues than the other segment, which reveals the existence of a concrete knowledge gap. While starting their research with a similar starting point, Frail and Gomez reiterate that having or not having prior knowledge of political news increases the knowledge gap between individuals, and find that the gender factor is also included as a potential variable at this point (2015). According to what researchers have learned, there is a significant political knowledge gap between men and women, regardless of their pre-existing knowledge. Men are more knowledgeable than women. And even the knowledge gap among women is increasing regarding women-friendly policies and discourses or the charismatic will of leaders (Frail & Gomez, 2015, pp. 98, 102).

In studies on the knowledge gap hypothesis, the point is constantly repeated that the emphasis is on two distinctions to define society, namely the segment included in the high socio-economic level and the segment included in the low socio-economic level (McQuail & Windahl, 1997, p. 156). The theory focuses on the idea that the knowledge levels of individuals belonging to these two different segments also differ directly. Because every segment of society can obtain knowledge, however, individuals with a higher level of education can obtain knowledge faster and thus become more knowledgeable (Yaylagül, 2013, p. 84). The highly educated segment, which can also be described as the upper layer has a greater stake in what is happening in both the economy and politics. This situation carries with it the preparation of most of the media content for the segment with a high socio-economic level. The reason for this is that it can be interpreted that this segment is characterized as consumers by those who prepare media content (Kim, 2008). Ultimately, the difference in the use of media content results in an increasing gap in knowledge. Novak described the phenomenon in question as knowledge gaps. He emphasizes the idea of closing the inevitably existing knowledge gap by suggesting that the stratum that has material power in the social sense offers practical solutions to the other layer through communication activities (1997). Because, according to him, the acquisition of knowledge is a necessity, and the substrate should not be deprived of this need.

Adding the motivation variable to the knowledge gap hypothesis, Lovrich and Piers conduct field research in a region where water resources management policy is carried out. Researchers show that as individuals' personal interest and motivation for the subject increase, they have at least as much knowledge as individuals with a high level of education (1984, p. 427-433). In research aimed at measuring the knowledge gap, the researchers who reveal that the motivation factor is also a basic determinant at the point of knowledge acquisition argue that if individuals with a low socio-economic level are motivated, they will close the existing knowledge gap between them and individuals with a high socio-economic level (1984, p. 433).

If it aims to better understand and summarize the important issues that cause the formation of a knowledge gap and have an impact on this theorem from a broad perspective, it is necessary to evaluate the issue beyond individual differences. In this context, it is important to underline that the developments in the media system are directly related to the knowledge gap hypothesis. Marshall Poe, while writing his *History of Communication*, explains the developments in the field of technology by referring

to Plato's Allegory of the Cave analogy. According to him, in Plato's cave, no one can see the truth. Poe unites today's individual and his cave people on the same denominator by saying that no one actually knows much in Plato's cave, just like those of us who think we know and see everything now (2019, p. 301). In the new century, the individual who builds a vast cave with media technologies is aware that he is between electronic walls, unlike Plato's cave man. This awareness makes it possible to be aware of having an environment that is entertaining, enjoyable, informative and beneficial in terms of providing satisfaction and virtual satisfaction for the individual. However, with the beginning of the process in which how the individual will behave is shaped along with technological developments, the idea that all the knowledge gaps that people have previously demanded will be closed and disappear. At this point, the idea that media tools (Poe, p. 132), which are seen as an accessibility tool, do not serve to meet expectations, contrary to what is actually thought, explains the main reason for the difference between individuals created by the knowledge gap.

Another point is the existence of knowledge gap formation according to the type of social structure and how the distribution of power, in other words, the distribution of knowledge, is affected by the changing media system (Yanık, 2015, p. 12) because the information gap hypothesis is directly related to the unbalanced distribution of knowledge resources and becomes more evident with the development of technology. However, if everyone has the opportunity to use technology to the same degree, the knowledge gap is less. When every innovation in technology spreads in society, a democratization is achieved in terms of knowledge, and the knowledge gap disappears according to the prediction. However, the truth is that technology that advances without slowing down leaves the economically backward segment even further behind.

It is also an important point that the problematic of who is in control of the production and dissemination of knowledge in parts of the social system has been brought to the agenda again with the knowledge gap hypothesis (Gaziano, 2013, p. 117). This means that, on the one hand, there is a segment that uses technology in the best way in every aspect, and on the other hand, there is another segment that has not had the opportunity to meet technology. Today, in the modern world where advanced technology is used, there is a significant population that has never met computers and the internet. The segment with technology - which is defined as the segment with a high socio-economic level, while being able to add knowledge to one's knowledge by using all the opportunities of the knowledge age and having all the benefits of the modern world. Those who

have low socio-economic levels, are hindered in education, and are left out of all development and change are falling further behind in the face of the speed and continuity of development. This increases the gap in the knowledge gap. This being the case, the part of the world that is developing economically, and therefore, able to benefit from educational opportunities is experiencing the knowledge age. It is obvious that a part of the world is still doomed to remain underdeveloped due to inadequate economic and educational conditions.

At the same time, according to the knowledge gap hypothesis, the creation of large differences in knowledge in societies can have profound effects and this can be a central factor in future social change. When the more highly educated are at the vanguard of technological change, the rapid acquisition of knowledge can benefit that society, but at the same time, differences in knowledge can also cause tension within the social system (Yüksel, 2013, p. 125). This approach, which is based on an absolute and objective concept of knowledge as a standard, actually means a communication gap and a special difficulty in solving social problems.

Knowledge gap hypothesis, politics and social media relationship

Only in the last 15 years, social media has started a whole new revolution in human life. It is not just for the social; a new area of interest and inquiry for the academic world has been born with social media environments. Therefore, researchers who believe that the reason for the adoption and use of social media, as well as the necessity of investigating its effects, state that social media environments cover a very diverse research area. It also takes it upon itself to ask how the theories are shaped here and what kind of conceptual frameworks they offer for the research to be carried out (Morozov, 2018, p. 25; Ngai et al., 2015, p. 34). On the one hand, studies claiming that social media plays a dynamic role and is a field of activism. On the other hand, studies that reveal that these environments feed political visibility, and on the other hand, other studies that argue that social media is the first source of reference that comes to mind at the point of knowledge or entertainment. It deepens the multi-layered structure of research in this field. However, it is observed that studies that establish a direct relationship between this environment, which has such a wide field of inquiry, and aim to illuminate the effect of social media on the formation of knowledge gap, remain at a limited level in the world and in Türkiye.

Today, as communication environments continue to change, some of the few researchers who address this problem, especially in terms of the density and availability of media channels and content, are concentrating on re-examining how knowledge gaps occur in this new knowledge society. Chen, who conducted one of the limited studies on establishing the relationship between the knowledge gap and social media, attributes the use of social media to personal motivation that differs between individuals. According to him, every individual who develops interest and motivation in a subject and turns to the content of the media in question is relatively more knowledgeable than other individuals who do not develop the motivation (2013, p. 13). In the study, which measures the effect of a social media environment called Guokr, which is widespread in China, on individuals when it comes to information about science and technology, it is concluded that the reason for the knowledge gap is due to the difference in the level of interest and motivation developed by individuals rather than the use of social media. In the study, Guokr is described as a weak environment in terms of knowledge. The researcher, who attributes the reason for this to the fact that users do not turn to this environment for knowledge, emphasizes that social media environments do not carry a reliable image in the eyes of the user, especially on issues that require more seriousness in science, technology and politics (Chen, 2013, p. 24).

Emphasizing the importance of questioning how individuals benefit from these resources with the transition from traditional news media to social media, Shehata and Stramback state that traditional media environments, especially some of them, increase the knowledge gap. In addition, it investigates whether this knowledge gap can be compensated with social media, which has emerged as an alternative to the traditional one today (2018). Researchers who set out to work with the assumption that social media equalizes individuals at different socio-economic levels reach the conclusion that when some individuals need knowledge about politics, they turn directly to social media environments, contrary to what Chen (2013) found, rather than traditional media environments or websites. However, the point that is especially emphasized in the study is that individuals who turn to social media for political knowledge do not have as much knowledge as individuals who follow the news from traditional media. In this context, it is concluded that the knowledge obtained from social media environments is at a weak level compared to the knowledge obtained from traditional media environments and the knowledge gap between the two media mediums is increasing. In terms of a diverse and comprehensive knowledge on politics, it is also stated that social media environments do not compensate for the knowledge gap created by

traditional media environments (Shehata & Stramback, 2018). Ferrin and friends argue that even if the individual leads a life integrated with social media, the individual benefits from television environments the most in the learning process, and television has the biggest effect on encouraging learning (2019, p. 327).

Especially when it comes to issues related to politics, when compared to other members of society, women with low education levels turn to the television environment. It is noteworthy that they reduce the knowledge gap between them and men, which has been revealed by different studies that they have much more political knowledge than women. (Ferrin et al., 2019, p. 329). However, researchers who emphasize the weakness of social media use in providing knowledge on political issues, just like Shehata and Stramback, they say that television media close the gap in political knowledge, while social media is inadequate in terms of providing accurate knowledge. Tran also agrees with the idea that social media use does not contribute to political knowledge (2013). With all of these; that social media use causes a knowledge gap among individuals at different socio-economic levels, it is underlined that groups with higher education levels increase the knowledge gap due to the fact that they already have more knowledge than groups with lower education levels (Ferrin et al., 2019; Shehata & Stramback, 2018; Tran, 2013).

The process that media environments go through is parallel to political communication studies. Considering the transformation of the media and the area of influence it has reached, politicians who want to reach the public must actively use newspapers, radio, television and internet media because today's society, on which symbols and visuals are claimed to be more effective (Lilleker, 2013, p. 80), can easily be informed in short ways through social media, which is blended with the constantly transforming and unfixed nature of truth, occupies an important place for political dynamics. Here, social media appears as a field where the professionalism of political communication is tested. While it also makes possible the existence of a society that is not homogeneous and includes multiple identities, it reminds us that studies in this field will be useful.

The basis for establishing the relationship between social media environments and knowledge gap is based on the idea that the fragmentation of knowledge occurs faster in these environments (Gaziano, 2017, p. 9). Everything related to cultural, political, ideological, religious, and social life is located in different capacities between individuals. Different groups attribute meaning to the social media content they turn to in proportion to the

logical consistency offered by their belief frameworks. This increases the knowledge gap between social groups. The vast majority of studies on the subject result in the finding that the gaps arising from these differences are further fed by the mass media, and that some environments, especially the knowledge gap, are reinforced (Güz & Yanık, 2017, p. 11). In this case, an answer is sought to the question of the extent to which social media environments, which are thought to be the answer to our need for knowledge in daily life, direct the knowledge gap between individuals, especially when it comes to issues related to politics.

Aim and methodology

It is known that the United Stated (USA) is mostly at the starting point of research on media effects. Examining and analyzing what is happening in other countries can help us understand how knowledge is shaped. On the other hand, if the results are similar in different environments, this finding may strengthen the validity of theoretical arguments. The study focuses on the knowledge gap hypothesis, the existence of which mainly depends on the variation in socio-economic level and educational level between individuals. It has been documented by some researchers conducted to date that the knowledge gap, which is thought to already exist among individuals, is further reinforced by the use of different media environments. There are also opposite findings. Based on different perspectives, the study is based on the problematic of to what extent social media environments, which have a wide range of usage areas and purposes today, shape the knowledge gap between individuals with heterogeneous characteristics. Based on this problem, the research aims to measure the knowledge levels and the estimated knowledge gap between different segments of society in social media environments, which are within the scope of the internet, which is the most widely used network among mass media today, based on the knowledge gap hypothesis. When it comes to political knowledge, propaganda and campaigns, which are frequently encountered in social media contents that contain unlimited knowledge, it reveals the political knowledge gap between recipients who differ in socio-demographic (education, socio-economics, gender) and psychological (interest and motivation) aspects. The field research conducted to determine the results revealed important findings.

On the axis of this purpose, the study is built on two separate parts. The first part of the study is the section where a comprehensive literature review is made and the theoretical foundations are laid. The second part is presented on the empirical section, which includes field research based on theoretical foundations. 1.076 people participated

in the field research designed in a quantitative pattern. The field research was mainly conducted online. However, some handicaps of the online field research were also taken into consideration. As the biggest handicap, it was thought that it was difficult to deliver the online questionnaire to individuals who were included in the lower class at the level of education and socio-economy. Therefore, it was decided that the survey should also be supported by a telephone interview. The main thing in the research on the knowledge gap hypothesis is to determine the difference in the level of knowledge between individuals in the lower and upper status categories of the society. In this sense, it was decided to carry out the field research in a hybrid manner. 90% of the study was conducted online and 10% by phone interview. The ethics committee approval required for the research was also obtained before the field research began.

The research questions of the study are as follows:

- Is there a significant political knowledge gap among participants with different statuses based on education level?
- Is there a significant political knowledge gap among participants with different statuses based on socio-economic level?
- Is there a significant political knowledge gap among participants in terms of interest and motivation levels regarding political issues?
- Is there a significant political knowledge gap among participants of different genders?
- Is there a significant political knowledge gap between participants who use social media and those who do not use social media?

Application of the research and sample selection

The universe of the study is Türkiye, and the sample that is supposed to represent the universe is represented by 1.076 people determined from 12 different provinces. TurkStat data were used in order to approximate the universe values of the interviewees. Through Quota Sampling, which is a non-random sampling method; 53 people from Adana, 142 from Ankara, 80 from Bursa, 30 from Erzurum, 47 from Gaziantep, 412 from Istanbul, 124 from Izmir, 39 from Kayseri, 52 from Kocaeli, 30 from Malatya, 37 from Samsun and 30 from Trabzon were reached. A total of 1.076 people, who are assumed to represent the universe, were surveyed throughout Türkiye with the hybrid method. All participants are over the age of 18. While determining the sample, it should be emphasized that

quotas are made by creating a distribution according to the representative age, gender and province-based population numbers of Türkiye. The data obtained from the sample were generalized for the whole of Türkiye.

While determining the sample, the Statistical Classification of Regional Units (SCRU) was taken as reference. SCRU is a geocoding system that started in Europe in the 1970s. The main purpose of these regional units is to collect regional-based statistics, conduct socio-economic analyses and create the framework of regional policies for society.

 SCRU, which was created according to the similar characteristics of the regions in order to create a single database throughout the European Union (EU) , to standardize regional statistics and to create a comparable picture while doing this, was accepted as an exemplary regional unit application in Türkiye and was completed in 2002 by the State Planning Organization (SPO) with the support of the Turkish Statistical Institute (TurkStat).

In the SCRU classification, the provinces are defined as 'Level 3;' neighboring provinces, which are similar economically, socially and geographically, were grouped as 'Level 1' and 'Level 2', taking into account their regional development plans and population sizes, and a hierarchical SCRU was made.

Within the scope of Level 3, each province has defined a Statistical Regional Unit, a total of 81. Level 2 Statistical Regional Units are defined as a grouping of neighboring provinces within the scope of Level 3, and there are 26 of them. Level 1 Statistical Regional Units, on the other hand, are defined as a result of the grouping of 'Level 2' Statistical Regional Units, and there are 12 of them, and all region-based studies in the public domain are now based on SCRU studies.

On the other hand, in this research, a sample was created by using statistical science to predict the universe. While creating the samples, the confidence interval and margins of error affect the number of interviews in the samples. In the research that is the subject of the study and in all other Market and Public Opinion Surveys, confidence intervals are generally divided into 2. These are the 90% and 95% confidence intervals. The preference of this research is to create a sample with a 95% confidence interval. In addition to this, there is also a margin of error. In the study, the max-candle is studied with a margin of error of 5.0±. Above this margin of error, it negatively affects the reliability and validity of the research.

Therefore, in the research subject to the study, the confidence interval was taken as 95%, the margin of error was determined as ±3.0 at maximum and the sample size was determined as 1.076. The determined sample size enabled both estimation of Türkiye and statistical analysis in sub-breakdowns.

Limitation of the research; it is framed by the level of informing individuals of political knowledge, propaganda and campaigns on *YouTube* (92% usage rate), *Instagram* (83%), *Facebook* (76%) and *Twitter* (61%) applications. For the field research conducted, the period between 16 APRIL - 7 MAY 2021 was considered as a temporal limitation.

Data collection tools

The research was provided by the participants answering the questionnaire containing a total of 78 questions. The questionnaire that the participants were expected to answer was easy to understand and had been designed with reference to previously tested measurement tools. In the scale of goals and attitudes towards social media use, there were other questions that sought answers about the purposes of using social media, attitudes towards social media, political knowledge methods, and whether Türkiye's political agenda was followed (Anduza, Gallego & Jorba, 2009; Balci, 2016; Balcı & Sarıtaş, 2019; Sugar, 2004; Burn, 2015). On the scale of interest in political issues, it was investigated to what extent the participants found the communication tools and methods effective in the political knowledge process. Cronbach's α ≥ is defined as 0.872. The knowledge level test on the political agenda was a multiple-choice part that aimed to open the key points of the study and included questions consisting of the political agenda of Türkiye. This last part was prepared by us and was a 20-question exam on the current political events of Türkiye. In the analysis phase of the research, the data obtained from the last part were positioned as the main determinants. This test, which enabled those who score between 0 and 25 points to be categorized as uninformed, those between 26 and 50 points as less knowledgeable, those between 51 and 75 points as knowledgeable, and those between 76 and 100 points as very knowledgeable, tested the arguments defended by this study. At the end of the questionnaire, there were questions to determine the demographic characteristics of the participants.

Findings

Before seeking answers to research questions, it is important to summarize some data obtained from the field. Field research findings showed that the social media usage

rate was 96%. 4.0% of the participants stated that they never used social media. Additionally, the average time spent on social media was found to be 4 hours. 55% of the participants spend 5 hours or more on social media a day. 69.0% of the participants who use social media think that social media environments are very important and useful.

When the purposes of social media usage were investigated, it was found that users mostly turned to social media to communicate. 73.2% of the participants use *YouTube* frequently. With a total of 35.8% positive values, the least preferred platform is *Twitter*.

When the participants' ability to obtain political knowledge in social media environments was investigated, it was found that 44.5% of the users were interested in Türkiye's political agenda, while 34% remained passive regarding the political agenda. It has also been found that internet news sites are among the communication tools and methods that affect people in the process of obtaining political knowledge. Social media and television broadcasts are also at similar levels.

The field research also provided knowledge that political content on social media environments is not directly trusted and that participants resort to different channels to confirm the accuracy of these contents. On the other hand, 66.1% of the participants described themselves as 'informed' on political issues, and 3.3% described themselves as 'uninformed.' In addition, 47.6% of social media users stated that they were knowledgeable about the political thought/worldview/ideology they advocated, while 33% stated that they remained passive regarding the political thought/worldview/ ideology they defended. It was observed that the level of knowledge of the participants on political issues was at the 'informed' level with 65.2%.

Among the participants, the number of participants using social media was 1,033, and the number of participants not using social media was 43. While analyzing political knowledge questions, the number of social media users (1.033 people) was taken as basis.

Table 1: Central tendency statistics for political knowledge scores of participants using social media according to their educational status

	S	x̄	SD.	95% Mean for Confidence Interval		Min.	Max.
				Lower Limit	Upper Limit		
Primary Education	178	66.29	19.267	63.44	69.14	15	100
High School	384	65.33	16.869	63.63	67.02	20	100
University	428	65,41	17.205	63.77	67.04	10	100
Graduate	43	66.86	19.610	60.83	72.90	30	100
TOTAL	**1033**	**65.59**	**17.538**	**64.52**	**66.66**	**10**	**100**

The evaluations in Table 1 present the categorization of the political knowledge scores of the participants using social media according to the variable of education level. The group with the highest knowledge score is the graduate group (x̄=66.86), followed by the primary education group (x̄=66.29). It seems surprising that the knowledge score among the participants, who were categorized into extreme groups in the criterion of education level, was very similar. The mean score value was almost equivalent between high school (x̄=65.33) and university (x̄=65.41) groups. Moreover, the group with the lowest political knowledge score among the participants is the university (min. = 10 points). People with a full score of 100, which is the highest, are available among all training groups. On the other hand, it should be emphasized that the lowest (x̄=60.83) and the highest (x̄=72.90) average knowledge score values belong to the graduate group, and the score difference within the group is more visible than other education groups.

Regardless of the education level, a large portion of social media users show that they are 'informed' on current political issues. This result is consistent with the answers of the participants regarding how they evaluated their level of knowledge regarding the political knowledge expected from them before measuring their knowledge. Participants evaluated themselves as 'knowledgeable.' As a matter of fact, the political knowledge score results also support these evaluations of the participants.

Table 2: Political knowledge gap among participants according to education level variable (ANOVA)

	Sum of squares	Df	Mean of squares	F	Sig.
Between the group	198,059	3	66,020	.214	**.887**
Within group	317241,728	1029	308,301		
TOTAL	**317439,787**	**1032**			

Table 2 shows that according to the results of the Analysis of Variance (ANOVA) test based on education level, it is noteworthy that there is no statistically significant difference between individuals categorized into separate levels in the education level variable (F = 0.214; p = 0.887 and p > 0.05). This result draws attention as a finding that contradicts the basic assumption of the knowledge gap hypothesis put forward by Tic-henor and friends, and the findings of subsequent studies conducted by different researchers. Thus, our first research question, which questions whether there is a political knowledge gap among participants who are categorized into different levels based on education level, is answered. It is documented that there is no political knowledge gap among participants with different education levels. This finding, which is contrary to what was predicted, reveals a result that contradicts the basic assumption of the knowledge gap hypothesis.

Table 3: Central tendency statistics for political knowledge scores of participants using social media according to their socio-economic status

	S	x̄	SD.	95% Mean for Confidence Interval		Min.	Max.
				Lower Limit	Upper Limit		
AB	317	67.26	17.958	65.27	69.24	10	100
C1	278	68.27	17.841	66.17	70.38	30	100
C2	319	63.15	16.875	61.29	65.01	15	100
DE	119	61.43	15.933	58.54	64.32	25	95
Total	1033	65.59	17.538	64.52	66.66	10	100

Table 3 lists the political knowledge scores of the participants depending on their socio-economic status. Socio-economic level classification is determined by the matrix calculation used by the Turkish Researchers Association (TURA) in social and political research. EU status indicates the highest level, C1 and C2 indicate the upper middle and lower middle, and DE indicates the lowest level.

As can be seen. it is determined that the segment of the C1 socio-economic level has a higher score than other segments (x=68.27). Following the C1 group, the group belonging to the EU socio-economic level appears (x=67.26). The lowest average score belongs to the DE group, which indicates the lowest socio-economic status of the society (x=61.43). So much so that, in the scoring of knowledge regarding the political

agenda, the presence of individuals categorized as 'less knowledgeable' only in the DE group draws attention. Although all groups are determined to be 'knowledgeable' as a whole, the DE group is located at the lowest limit in the knowledge score and the C1 group is located at the upper limit.

Table 4: Political knowledge gap among participants according to socio-economic status variable (ANOVA)

	Sum of squares	Df	Mean of squares	F	Sig.
Between the group	6840,341	3	2280,114	7,554	**,000**
Within group	310599,446	1029	301,846		
TOTAL	**317439,787**	**1032**			

Table 4 aims to understand the presence or absence of a knowledge gap among social media users on the basis of socio-economic variables. According to the results of the Anova test, there was a statistically significant difference on the basis of socio-economic status (F=7.554; p=0.000 and p<0.05). This indicates the existence of a growing political knowledge gap among segments of different social classes. There is a need to understand among which socio-economic segments the deficits arise.

Table 5: Differences in political knowledge levels depending on the socio-economic level variable (Tamhane's multiple comparison table)

Socio-economic status		Mean difference	Sig.	95% Confidence Interval	
				Lower Limit	Upper Limit
AB	**C2**	4.105*	**.018**	.46	7.75
AB	**DE**	5.827*	**.007**	1.12	10.54
C1	**C2**	5.123*	**.002**	1.35	8.89
C1	**DE**	6.845*	**.001**	2.04	11.65

In Table 5, the status expressed with EU indicates the highest income group. C1 is the upper middle group and C2 is the lower middle group. DE constitutes the lowest income group. In the light of the knowledge obtained, it is seen that the knowledge level of people with EU socio-economic status differs positively from the knowledge level of people with C2 and DE socio-economic status regarding the said knowledge (p=.018 and p=.007). Moreover, the political knowledge level of people in C1 socio-economic status differs positively from the political knowledge level of people in C2 and DE socio-economic status (p=.002 and p=.001). It is seen that the level of knowledge about politics is higher in people with EU and C1 socio-economic status. In this case, it can be said that there is an increasing political knowledge gap between the privileged

group in the EU socio-economy, which constitutes the upper segments of society, and the C1 upper middle class group, and the DE segment, which is categorized in the lower segment of society. This result also answers our question, which investigates whether there is a significant political knowledge gap among individuals categorized in different statuses based on socio-economic level among the participants. It reveals a finding similar to the basic assumptions of the knowledge gap hypothesis.

Table 6: Central tendency statistics for political knowledge scores of participants using social media according to interest and motivation variables

Relevance	Number	x̄	SD.	95% For Confidence Interval		Min.	Max.
				Lower Limit	Upper Limit		
1 Very disinterested	27	52.96	17.988	45.85	60.08	25	85
2	17	51.18	15.363	43.28	59.08	15	80
3	71	54.44	13.901	51.15	57.73	15	85
4	108	54.35	13.151	51.84	56.86	15	80
5	175	59.66	14.087	57.56	61.76	10	95
6	176	63.04	14.382	60.90	65.18	20	100
7	172	68.60	16.016	66.19	71.02	25	100
8	127	74.72	16.322	71.86	77.59	25	100
9	58	79.91	15.232	75.91	83.92	35	100
10 Very Interested	102	80.98	16.045	77.83	84.13	35	100

The first researchers who pointed out that the motivation element is a basic determinant at the point of knowledge acquisition, regardless of education and socio-economic level, argue that if individuals develop interest and motivation, the knowledge gap between them and other individuals will disappear (Ettema & Kline, 1977; Ettema, et al., 1983; Lovrich & Piers, 1984; Chew & Palmer, 1994). Table 6 shows the respondents who are expected to evaluate their knowledge of current political issues. It also presents the score of the level of political knowledge they have along with their level of interest. As shown, the political knowledge scores of the participants who define themselves as 'very interested' in political issues and give 1, 2, 3 points are behind the political knowledge scores of the participants who evaluate themselves as 'very interested' and give 10, 9, 8 points. Those with the highest average political knowledge score belonged to the participants who described themselves as 'very interested' (10 points) (x̄=80.98). The people with the lowest average political knowledge score are the participants who

rated themselves as 'very disinterested' (1 and 2 points) ($\bar{x}$=52.96 and $\bar{x}$=51.18). Participants who developed the highest motivation for political issues were also included in the category of 'very knowledgeable' about political issues. The least motivated participants were positioned at the bottom end of the 'knowledgeable' category.

Table 7: Political knowledge gap among participants according to the variable of interest and motivation (ANOVA)

	Sum of squares	Df	Mean of squares	F	Sig.
Between the group	85833.109	9	9537.012	42.125	**.000**
Within group	231606.678	1023	226.399		
Total	**317439.787**	**1032**			

Table 7 also refers to the findings of the first studies on the subject. It shows that there is a statistically significant difference between individuals who differ in their interest and motivation levels, according to their interest (motivation) levels (F=42.125; p=0.00 and $p<0.05$). This points to the existence of a growing political knowledge gap.

Table 8: Correlation analysis findings for the relationship between the level of interest and motivation for political issues and the score of political knowledge (Pearson r)

Correlation Analysis	1.	2.
1.Interest and Motivation Level	1	
2. Political Knowledge Score	**.506****	1

Increasing the number value from 1 to 10 means that the level of interest increases systematically. In scoring, if the participant marked a value close to 1, it is inferred that the level of interest is low, and if the participant marked a value close to 10, it is inferred that the level of interest is high. Descriptive statistics show that social media users' interest levels regarding political issues are above average ($\bar{x}$=6.19). The correlation analysis findings regarding the relationship between the level of interest (motivation) in political issues and the political knowledge score presented in Table 8 reveal the existence of a strong relationship between the level of interest and motivation and the political knowledge score (r = .506 and $p < .05$). This means that the political knowledge levels of participants who show interest in political issues also increase. This also answers our question, which investigates whether there is a significant political knowledge gap among participants based on the level of interest and motivation regarding political issues, and reveals that interest and motivation are important determinants of the formation of a political knowledge gap.

Table 9: Demographic tendency statistics for political knowledge scores of participants using social media according to gender variable

Gender	Number	x̄	SD.
Woman	521	64.93	16.929
Man	512	66.26	18.130

Table 9 presents the central tendency towards political knowledge scores according to the gender of the participants using social media. As can be seen, the average political knowledge score between the female (x̄=64.93) and male (x̄=66.26) groups for knowledge on current political issues is similar. Both groups fall into the category of "knowledgeable" on current political issues.

Table 10: Political knowledge gap among participants according to gender variable

					95% confidence interval	
t-value	Df	sig.	Average Difference	SD.	Lower limit	Upper limit
-1.215	1023.458	0.225	-1.327	1.092	-3.1469	.815

Table 10 is intended to test whether there is a significant knowledge gap between male and female groups whose scores are found to be at similar levels. Accordingly, no statistically significant difference was found in the knowledge score level according to gender (t=-1.215; p=0.225 and p>0.05). This result also suggests that the gender variable does not constitute a definitive criterion for the existence of a knowledge gap between individuals. In order to understand the political knowledge gap between genders. It is important to emphasize that factual and analytical areas of knowledge should also be taken into account. On the other hand, today, the visibility of women leaving the home and entering working life has increased, and this situation suggests that women have increased their activity in acquiring political knowledge and forming attitudes towards it. In such a case, the political knowledge gap between women and men is closed.

Table 11: Central tendency statistics for political knowledge levels of participants who use social media and participants who do not use social media

	Number	x̄	SD.
Participants who use social media	1033	65.59	17.538
Participants who do not use social media	43	56.63	12.427

Among the 1.076 people who participated in the field research, only 43 said that they were not involved in any social media environment. People who do not use social media take up a very small part in the sample. Table 11 shows that social media users

(x̄=65.59) have a higher political knowledge score than participants who are not social media users (x̄=56.63). According to the knowledge obtained, as social media use increases, the political knowledge score increases.

Table 12: Political knowledge gap between participants who use social media and participants who do not use social media (t test)

					95% Confidence Interval	
t-value	**Df.**	**sig.**	**Average Difference**	**SD.**	**Lower Limit**	**Upper Limit**
4.545	49.240	**0.000**	8.963	1.972	5.000	12.925

Table 12 reveals that there is a significant difference in political knowledge score between people who use social media and people who do not use social media (t=4.545; p=0.00 and p<0.05). Thus, it is determined that there is an increasing political knowledge gap between individuals who use social media and individuals who do not use social media.

Discussion and conclusion

Different media environments, in different ways, with privilege, while it has the opportunity to present the same knowledge differently, it also increases the diversity in the knowledge rate of individuals using media environments (Tokgöz, 2015, p. 296). Today's most powerful communication environment, social media, blends visuals and text series. The first is potentially easier to interpret. However, the latter may be more difficult to decipher (Gaziano, 2017, p. 5; Niederdeppe and colleagues, 2010). In this case, even if access to the internet and its content is easy, the obstacles to gaining knowledge do not seem to have disappeared. In this sense, the complete increase in familiarity with social media may be disappointing in reducing the knowledge gap (Gaziano, 2017, p. 6).

Based on this idea, in the design phase of the study, focusing on the impact of the internet and the social media it brings with it, the rather optimistic perspectives (Ferrin et al., 2019; Fraile & Iyengar, 2014; Jerit et al., 2006; Shehata & Stramback, 2018; Tran, 2013) are approached with suspicion (Kim, 2008; Scheufele & Nisbet, 2002). And then, considering that the easy-access structure of the internet and social media environments will not always provide the same positive effect. It is thought that optimism should be lost in matters related to knowledge and especially political knowledge because here

it is not just the structural media context, that is, the availability of knowledge (Curran et al., 2009; Kim, 2008). At the same time, the importance of media use and exposure to political knowledge is also noteworthy. Of course, it is estimated that the question of how social media defines problems and covers data has a direct impact on increasing or decreasing the knowledge gap (Jerit et al., 2006). Based on this idea, the comprehensive field research conducted provides important findings.

At the end of the research, contrary to what was thought at the design stage of the study, social media is positioned as an environment that eliminates doubts when evaluated on the basis of the basic variable of education level. Social media, which has emerged as an environment that equalizes political knowledge among users with different education levels in Türkiye, with this particular structure reveals a result that is contrary to the findings of most of the studies investigating the knowledge gap hypothesis in new media environments to date (Donohue, et al., 1986; Tichenor, et al., 1986; Anduza et al., 2009; Scheufele & Nisbet, 2002; Yanık, 2015; Güz & Yanık, 2018; Ngai et al., 2015; Jerit & Barabas, 2017; Fraile & Gomez, 2017; Moro-zov, 2018; Ferrin et al., 2019). When it comes to current political knowledge, social media plays a leading role in closing the political knowledge gap among different educational segments of society. The point to be emphasized here is that the education level variable, which was the main determinant in the first period when the knowledge gap existed, lost its effect. This is attributed to the fact that everyone can easily access technology, regardless of their education level. Anyone with a mobile phone can easily obtain political knowledge and close the knowledge gap between them and others.

A similar situation applies to gender-based assessments. The gender variable is also in contrast to some studies that have found gender as one of the main variables to date (Donohue, et al., 1986; Tichenor, et all., 1986; Chen, 2013; Gaziano, 2013; Fraile & Gomez, 2017; Gaziano, 2017; Shehata & Stramback, 2018) is among the determinants that are thought to be involved in the formation of a political knowledge gap. Another finding that should be taken into account is that the variables of socio-economic status and motivation still maintain their importance on the first day. In this sense, the use of social media also draws attention as an important determinant. Respondents who use social media seem to be more knowledgeable about political issues than those who do not.

This study, which presents the appearance of the political knowledge gap in Türkiye in its most up-to-date form, reveals that the education level variable adds another dimension to the knowledge gap hypothesis, and that the level of education is no longer a determinant. It has also documented that the hypothesis in question has been revised in parallel with the changing and transforming media environments.

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P R E S S

Araştırma Makalesi / Research Article

A bibliometric analysis of extended reality research trends in communication studies written in English: Mapping the increasing adoption of extended reality technologies

İngilizce iletişim çalışmalarında genişletilmiş gerçeklik araştırma eğilimlerinin bibliyometrik bir analizi: Genişletilmiş gerçeklik teknolojilerine gelişen rağbetin haritalanması

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Abstract

With the development of communication technologies, extended reality technologies and applications are increasingly favoured because of their potential to contribute to interactive digital experiences. In addition to providing information about objects, the integration of extended reality offers an enriched experience through a virtual layer that includes various interactions. This paper offers a quantitative and systematic review of studies published in the Web of Science Science Citation Index Expanded (SCI-EXPANDED), Social Sciences Citation Index (SSCI), Emerging Sources Citation Index (ESCI), and Arts & Humanities Citation Index (AHCI) on extended reality technology in communication studies in English between 1992 and 2023. Within the scope of this research, studies on the concepts of mixed reality, augmented reality, virtual reality, and extended reality in journals indexed in the Web of Science (WOS) database were searched. A total of 209 publications were included in the scope of the bibliometric analysis with filters for publication type, language, open access category, and subject. Bibliometric tools were employed to identify trends in extended reality and communication studies, including primary research topics and clusters, interdisciplinary distribution, productivity, and collaboration at the country level, keyword and citation networks, and co-occurrence networks. These findings contribute to the understanding of the evolution of extended reality research in communication studies and lay a foundation for further research.

Keywords: Extended reality, virtual reality, augmented reality, communication studies, bibliometric analysis

Öz

İletişim teknolojilerinin gelişimiyle birlikte, genişletilmiş gerçeklik teknolojisi ve uygulamaları, etkileşimli dijital deneyimlere katkı sağlama potansiyelleri nedeniyle giderek daha çok tercih edilmektedir. Genişletilmiş gerçekliğin entegrasyonu, nesneler hakkında bilgi sağlamanın yanı sıra sanal bir katman aracılığıyla zenginleştirilmiş ve çeşitli etkileşimleri içeren bir deneyim sunmaktadır. Bu çalışma, İngilizce dilinde gerçekleştirilmiş iletişim çalışmalarında 1992 ile 2023 yılları arasında genişletilmiş gerçeklik (extended reality) teknolojisi konusunda Web of Science Science Citation Index Expanded (SCI-EXPANDED), Social Sciences Citation Index (SSCI), Emerging Sources Citation Index (ESCI) ve Arts & Humanities Citation Index (AHCI) dizinlerinde yayımlanmış çalışmaların nicel ve sistematik bir incelemesini sunmaktadır. Araştırma kapsamında, WOS veri tabanında endekslenen dergilerde karma gerçeklik, artırılmış gerçeklik, sanal gerçeklik ve genişletilmiş gerçeklik kavramları ile ilgili çalışmalar taranmıştır. Yayım tipi, dili, açık erişim kategorisi ve konu filtreleri ile ulaşılan 209 yayın bibliyometrik analiz kapsamına dahil edilmiştir. Bibliyometrik araçlar, genişletilmiş gerçeklik ve iletişim çalışmalarındaki eğilimleri belirlemek amacıyla temel araştırma konuları ve kümeleri, alanlar arası dağılım, ülkeler bazında üretkenlik ve iş birliği, anahtar kelime ve alıntı ağı ve eşdizim ağlarını belirlemek için kullanılmıştır. Bulgular, genişletilmiş gerçeklik araştırmalarının iletişim çalışmalarındaki evrimini anlamaya katkıda bulunmuş ve gelecekteki araştırma çabaları için temel oluşturmuştur.

Anahtar kelimeler: Genişletilmiş gerçeklik, sanal gerçeklik, artırılmış gerçeklik, iletişim çalışmaları, bibliyometrik analiz

Introduction

The integration of extended reality (XR, an umbrella term for technologies that merge the real and virtual worlds), including the modalities of virtual reality (VR, fully immersive digital environments), augmented reality (AR, the overlay of digital information onto the real world), and mixed reality (MR, the blending of real and virtual elements with interaction), has become increasingly prevalent across diverse fields, introducing innovative tools and methodologies. The implementation of XR technologies has been explored in diverse disciplines, including education, psychology, tourism, business, and computer science. The use of XR in these disciplines has demonstrated its potential to revolutionise traditional approaches, create immersive experiences, and enhance engagement across different contexts.

XR technologies have been explored for their enabling roles in enhancing learning experiences and engagement in education. Studies have explored the application of VR and AR in educational contexts, demonstrating their ability to attract students' attention, strengthen concentration, and improve academic achievement (Sırakaya & Çakmak, 2018; Wang et al., 2018; Steele et al., 2020). Furthermore, XR's integration into distance learning systems has shown a significant correlation between spatial skills and AR, highlighting its potential to transform open and distance learning (Altınpulluk, 2018). XR has also been recognised for its potential to promote novel and innovative learning experiences in higher education (Steele et al., 2020).

In psychology, XR technology has been leveraged to address various psychological and therapeutic challenges. Several studies have demonstrated the potential of VR to alleviate psychological distress; for instance, it has shown the effectiveness of VR in treating conditions such as gambling behaviour (Dickinson et al., 2020) and various anxiety and stress-related disorders through stress management (Matsangidou et al., 2020). Moreover, immersive VR experiences have been associated with assisting older adults, providing ways to promote health, and addressing social isolation and loneliness (Ferreira et al., 2022).

In tourism and business contexts, XR technologies have been applied to create AR experiences and offer innovative ways to engage and attract consumers (Rosanensi, 2020; Kyguolienė & Braziulytė, 2022). The integration of AR in product packaging has been analysed, showing its potential for advertising purposes and consumer engagement

(Kyguolienė & Braziulytė, 2022). XR has been integrated into e-commerce platforms to enhance effectiveness and user experience (Serrano et al., 2013).

In computer science and technology, XR technologies have been studied for their applications in various domains, including mathematics, artificial intelligence, and geospatial visualisation (Artut, 2019; Chung et al., 2020; Pavlenko et al., 2022). Research on the development of XR technologies demonstrates their potential to generate enhanced user experiences, highlighting the field's ongoing innovation and exploration (Dirgantoro, 2021).

The impact of XR on various disciplines extends beyond the aforementioned areas, encompassing fields such as arts, music education, history, and healthcare. XR technologies have been utilised to create immersive experiences in music education and to enhance the understanding of historical contexts through AR (Suparjoh et al., 2020).

In conclusion, the integration of XR technologies has significantly affected various disciplines by offering innovative tools and methodologies to enhance learning, address psychological challenges, transform consumer experiences, and advance technological applications. The diverse applications of XR in different disciplines underscore its potential to revolutionise traditional approaches and create immersive and interactive experiences across diverse domains.

Defining extended, augmented, virtual, and mixed reality

XR, which includes MR, AR, and VR, describes a range of technologies that modify or create new realities. XR encompasses environments generated, enhanced, or manipulated using digital technology (Flavián et al., 2019). Mann and Wyckoff (1991) first used the term XR as an umbrella term for technologies that integrate both virtual and real elements. According to them, a basic form of XR involves a generalised real-time X-response that actively extends the human senses approximately 30 to 60 times per second, equivalent to 16 to 33 milliseconds. This is in contrast to the prolonged process of shooting the XR film and undergoing chemical development, which takes hours to observe the results. In this evolved XR concept, individuals can perceive the world through a specific viewer created from a VR Head-Mounted Display (HMD) connected to specialised television cameras (Mann & Wyckoff, 1991). XR applications include

various levels of immersion, from fully digital VR environments to MR and AR, in which virtual elements are superimposed on the user's perception of reality (Tham et al., 2018).

Milgram and Kishino (1994) employ the theory of "Reality-Virtuality Continuum" to categorise VR, AR, and MR concepts. Within this continuum, VR refers to an environment in which the user's relationship with the world is completely severed after entering, in contrast to AR, which maintains a connection with the real world by seamlessly integrating data and images into the real-world view (Milgram & Kishino, 1994). Milgram and Kishino's (1994) groundbreaking work established MR as an encompassing term that integrates both virtual and genuine features. Scholarly discourse on this notion varies, with some challenging perspectives from Milgram and Kishino. According to some scholars, MR is a unique form of reality that falls between AR and "augmented virtuality (AV)" (Farshid et al., 2018; Flavián et al., 2019).

Hoyer et al. (2020) broadened the discussion by suggesting that MR functions as an expansion of AR, arguing that AR is typically accessed through smartphone applications, while MR calls for a headset or a comparable wearable device. In addition, some authors have emphasised the fundamental differences between AR and VR (Tan et al., 2022). Adding complexity to the discussion, Milgram et al. (1995) note, "Perhaps surprisingly, we do, in fact, agree that AR and VR are related and that it is quite valid to consider the two concepts together" (p. 283).

VR is characterised as an artificial environment crafted to make a user feel an integral part of the environment. AR entails the integration of digital elements into an individual's actual environment, which is achieved through various means, such as computer-generated imagery, digital animation, and 3D graphics. MR, also known as XR, is a technology that integrates artificially created content with the physical world by utilising holograms that are projected into the user's environment and possess interactive capabilities. (Montoya et al., 2018; Muñoz-Saavedra et al., 2020).

Jaron Lanier introduced the term "virtual reality" in 1989, which includes three-dimensional environments experienced through stereo-viewing goggles and reality gloves (Krueger, 1991). Lanier (1989) conceptualised technology as a computer-simulated environment in which people can engage. By employing visual, aural, and haptic devices, users can immerse themselves in a synthetic environment and experience it

as if they were integral parts of that world. The integration of motion and response sensing input devices into computers enables the creation of a dynamic, interactive, and immersive synthetic environment in real time, providing the illusion of active engagement within the virtual world (Riva et al., 2007).

Despite the common characterisation of VR as a specific array of technological hardware, it is equally possible to articulate the concept of VR experience, particularly by employing the notion of presence (Steuer, 1992). According to Greenbaum (1992), this is an alternate reality consisting of computer-generated images that respond to human movements, which are typically accessed through expensive data suits outfitted with stereophonic video goggles and fibre-optic data gloves. Communication studies often fail to provide meaningful insights to researchers, software developers, policymakers, and media consumers because of the conventional depiction of VR as a technological medium. This hardware-centric focus, which emphasises computers, HMDs, headphones, and motion-sensing gloves, is primarily geared towards hardware producers. However, according to Steuer (1992), such a device-driven conceptualisation is inadequate for understanding the experiential aspects, processes, and effects of VR systems.

The pivotal notion in defining VR lies in the concept of "presence." Presence, as proposed by Gibson (1979), goes beyond physical surroundings in the real world; it encloses the interpretation of physical surroundings through a combination of automatic and controlled mental processes. This perspective emphasises the experiential aspect of VR, offers a framework for regulatory decisions, media product creation, and consumer understanding, and provides users with immersive three-dimensional experiences through HMDs (Coates, 1992).

AR is described as a technology that merges real-world and virtual visuals, facilitating synchronous interaction between real and virtual entities (Azuma, 1997). According to Azuma (1997), AR is a variation of virtual environments. The term denotes technology that enhances a user's perception of the real world by presenting information perceived as part of the spatial environment (Azuma et al., 2001, p.45). AR involves the combination of real-world and computer-generated data, including graphics, video, sound, animation, and information on Global Positioning System (GPS) location (Zachary et al., 1997). AR applications enable the independent and simultaneous use of virtual objects, such as 3D elements, text, images, videos, and animations (Wang et al., 2013), allowing users

to interact naturally with objects, information, and actions (Wojciechowski et al., 2004; Wojciechowski & Cellary, 2013). Three key features distinguish AR, as highlighted by Azuma (1997) and Moreno, MacIntyre, and Bolter (2001) are; the integration of virtual and real objects, real-time interaction, and incorporation of 3D objects.

While the concept of AR has its roots in the 1950s, it was termed Tom Caudell in the 1990s. Caudell pioneered the development of AR technology to guide workers during the installation of electrical cables on aeroplanes, thereby creating a head-mounted digital imaging system (Caudell & Mizell, 1992; Siltanen, 2012). Craig (2013) outlined the elements of AR, emphasising its augmentation of the physical world by adding digital information, reflecting information in relation to the real world, shaping displayed information based on the physical world's location and viewers, and enabling interactive experiences. AR technology has gained widespread usage in various sectors, including education, health, architecture, art, and marketing, since the early 2000s. It is used across various platforms, including desktop computers, laptops, tablets, and smartphones (Kirner et al., 2012). Potential and existing applications of AR include entertainment, gaming, cultural heritage, education and training, tourism, social networking, and marketing (Gervautz & Schmalstieg, 2012).

Extended reality research

XR, which includes VR, AR, and MR, has emerged as a transformative technology with diverse applications across various disciplines. The literature on VR research encompasses various topics such as immersion, presence, learning outcomes, assessment tools, gaming, and the impact of VR on behaviour and cognition. Studies have directly related the sense of 'presence', 'immersion', and 'flow' in various VR interfaces with favourable learning results (Hamari et al., 2016). This finding indicates that VR has been investigated for its impact on learning and engagement. Additionally, researchers have explored the challenges of VR-based assessment tools compared with traditional measures, indicating the necessity for meta-analytic approaches to comprehend the cumulative findings of research in this area (Neguţ et al., 2016). This highlights the rigorous examination of VR as an assessment tool and the complexity of its implementation.

Furthermore, VR has been investigated in the context of its impact on various behaviours and experiences. For example, studies have explored the effects of VR on perceived enjoyment, value, behavioural intention, and its influence on gambling

behaviour (Lee, Chung & Lee, 2013; Dickinson et al., 2020). These studies demonstrate the diverse range of behaviours and experiences examined in relation to VR. The potential of VR as a diagnostic tool for social anxiety has been explored, indicating its potential applications in mental health research (Dechant et al., 2017). Additionally, the impact of VR on creative performance and emotions has been studied using brainwave analysis, demonstrating its potential to enhance creativity and emotional experiences (Huang & Chang, 2023).

The literature also discusses the technological aspects of VR, such as its use in navigation, spatial training, and the design of immersive learning environments (Chang et al., 2015; Montag et al., 2021). This indicates the multidisciplinary nature of VR research, which encompasses fields such as human-computer interaction, education, and cognitive psychology. In addition to its application in research and education, VR has been studied in the context of consumer behaviour, shopping experiences, and the impact of VR on product interactions and purchase decisions (Serrano et al., 2013; Kerrebroeck et al., 2017; Lombart et al., 2020; Bigne, 2024). These findings indicate that VR has commercial and marketing implications.

Furthermore, the ethical and societal implications of VR have been explored, including its impact on sociopolitical attitudes, socialisation, and the potential for escapism from real-world experiences (Bacovsky, 2020). This indicates that VR research extends beyond technical and psychological aspects to encompass broader societal and cultural considerations. Overall, the literature on VR research is extensive and multidisciplinary and addresses a diverse array of topics and applications. This reflects the diverse and evolving nature of VR as a subject of study, encompassing its technological, psychological, commercial, and societal dimensions.

AR has attracted considerable attention from academic literature across various disciplines, reflecting its diverse applications and implications. The literature on AR encompasses various topics, including technology acceptance, user engagement, educational applications, and their impact on social and cultural aspects. A particular area of investigation revolves around the impact of AR attributes on technology acceptance. McLean and Wilson (2019) introduced a new set of AR attributes, such as AR novelty, interactivity, and vividness, and established their impact on technology acceptance factors such as perceived ease of use and usefulness. This study illuminates the factors that influence the adoption and acceptance of AR technology.

AR has demonstrated effectiveness in increasing user engagement and enhancing the overall experience. Its use at science festivals as part of the broader "experience economy" trend shows AR's power to create memorable interactions across diverse applications (tom Dieck et al., 2018).

AR has been explored in the field of education because of its potential in vocational training and early literacy. Liao and Humphreys (2014) defined AR as a technology that blends a real environment with a virtual environment to provide interactive and immersive experiences (Liao & Humphreys, 2014). Studies have also focussed on the development of AR-based systems for teaching and treating specific phobias, highlighting their potential in educational and therapeutic settings (Drigas et al., 2015; Wrzesien et al., 2015; Belo et al., 2016).

The literature examines the ways in which and are shaped by society and culture (Liao, 2016). Liao's work, drawing on "sociology of futures" theories, emphasises the dynamic interplay between technological development and its prospective impact on the future. Moreover, the impact of AR on social media use, well-being, and family connectedness has been subject to systematic and critical scoping reviews, reflecting increasing interest in understanding the effects of AR on both individuals and society (Hawk et al., 2008; Tariq et al., 2021; Ronzhyn et al., 2022).

In addition to its applications, AR has been examined in the context of gaming, location-based experiences, and its potential to induce cooperation. Shaikh and Karjaluoto (2015) emphasised the importance of domain-specific literature reviews to advance research and open new possibilities for future studies. This highlights the need for specialised studies to explore the diverse applications and implications of AR in specific domains. Furthermore, the literature has addressed technological advancements, the intersection of AR and artificial intelligence, anime culture, and digital media tools, thus reflecting the interdisciplinary nature of AR research (Melchior & Oliveira, 2021; Liu & Wu-Ouyang, 2022).

Overall, the literature on AR is multidisciplinary, encompassing technology acceptance, user engagement, educational applications, societal and cultural implications, and convergence with other technological domains. The diverse range of topics and applications reflects the evolving nature of AR as a subject of study, with implications for various fields and domains. The literature review of XR research in communication

studies highlights the multidisciplinary nature, evolving use, and understanding of XR technologies, underscoring their potential to revolutionise traditional approaches and create immersive experiences in diverse domains.

Aim and methodology

This study explored XR research in communication studies between 1992 and 2023. A bibliometric analysis was conducted to provide an extensive comprehension of this domain and reveal academic trends in the field. This type of analysis is a scientific, computer-assisted investigation methodology designed to discern fundamental research or authors and elucidate their relationships. This method achieves its objective by comprehensively reviewing all publications associated with a particular topic or field (De Bellis, 2009). Bibliometrics encompasses a collection of methods used to measure and evaluate academic output (Cobo et al., 2011). As outlined by Merediz-Solà and Bariviera (2019), this involves statistical analysis of publications within a particular research field. This approach seeks to map the current state of research in this field quantitatively and impartially.

The research methodology employed in this study utilised bibliometric tools to examine and elucidate the volume, attributes, and productivity of XR and communication studies. The application of bibliometric methods facilitates the systematic examination and assessment of the research field. This study used bibliometric methods to investigate the progression of XR and communication fields. With these objectives in mind, this study addressed the following research questions:

Q1: What is the progression of XR research within the realm of communication studies over time?

Q2: Which countries exhibit the highest productivity, and how is the international collaboration framework structured?

Q3: Which journals demonstrate the highest productivity in the field of research?

Q4: Who are the most productive authors in this field?

Q5: What are the most frequently used keywords, and how are these keywords clustered?

Q6: What is the intellectual framework of the research field based on the co-citation network of authors and journals?

Q7: Which articles received the highest number of citations in the research field?

These research questions were designed to comprehensively explore various aspects of XR in communication studies, ranging from historical development to key contributors, journals, keywords, and trends within the field.

The trends in the literature that constitute the subject of the research are examined using keyword research conducted via WOS, utilising the terms 'mixed reality,' 'augmented reality,' 'virtual reality,' and 'extended reality' combined with the operator 'OR.'

The search was conducted without time limitations to retrieve records that matched the query in the titles. No time constraints were applied, and all available years in the database were included. Data were retrieved on February 3, 2024. Initially, the keywords in the titles yielded 97.597 results. After restricting the document type to articles and review articles, language to English, and WOS categories to communication, and excluding green-published and green-submitted articles, the results were narrowed to 589 articles.

In the next step, the meso topics of Human-Computer Interaction, Communication, Management, Social Psychology, Sociology, Bibliometrics, Scientometrics, and Research Integrity were chosen, along with the SCI-EXPANDED, SSCI, ESCI, and AHCI. This refinement resulted in 285 articles. Following a thorough evaluation of the abstracts of the articles, the selection process resulted in a final dataset comprising 209 publications spanning 1992–2033.

A comprehensive search for publications related to the research topic was conducted in the WOS, and the results were analysed. A literature-specific framework was constructed on the basis of studies conducted on the subject. The acquired data were analysed using RStudio, Bibliometrix, and VOSviewer. RStudio, functioning as an integrated development environment for R, a programming language specialising in statistical calculations and graphics, facilitates statistical computations and visualisation. Bibliometrix, developed by Aria and Cuccurullo in 2017 for the R statistical programming language, is a package designed for the quantitative analysis of publications, including citation numbers associated with journal articles (Aria & Cuccurullo, 2017). The VOSviewer tool was employed for the bibliographic processing of key findings and plays a pivotal role in the analysis. This freeware programme was designed to process and map bibliometric data, thereby contributing to a comprehensive exploration of the research landscape.

Various bibliometric methods, including citation, co-occurrence, and co-citation analysis, have been utilised to comprehensively map the research field. This study relies on a descriptive analysis, including the number of titles, citations, research areas, and corresponding sources, to establish a foundation. The number of publications served as an indicator of productivity in the research field. In addition, the study incorporated a bibliographic map featuring the most frequently used titles and abstract words along with author and country productivity. To enhance the structure of the subject area, co-citation maps of the authors and their sources were generated using VOSviewer and Bibliometrix. Finally, the 20 most frequently cited articles are listed. The results offer an intellectual framework for this research field and discuss the research themes and their temporal evolution.

Findings

The analysis of articles published in indexed journals provided a statistical framework for this study. The earliest article in the dataset was published in 1992, with no increase in publication count observed until 2014. However, since 2014, there has been a notable increase in interest in XR research in the communication field. Articles published between 2014 and 2023 represent 80.8% of the total literature in the dataset.

The analysis revealed that 209 articles authored by contributors from 38 countries were published in 79 different journals from 1992 to 2023 (Table 1). In addition, among these articles, 72 single-author studies were published by 65 authors, and the cumulative number of authors across all studies reached 436. Furthermore, the average co-authorship per document was calculated to be 2.38, with international co-authorship accounting for 16.27% of collaborations.

Table 1. Descriptive statistics of the articles

Description	Results
Period	1992-2023
Sources (Journals)	79
Total documents	209
Articles	209
Average citations per document	31.69
Authors	436
Single-authored documents	72
Authors of single-authored documents	65

Co-authors per document	2.38
International co-authorships (%)	16.27
Author's keywords (DE)	693

Table 2 illustrates the distribution of articles published by these sources. Specifically, one journal published 20 articles, whereas the other published 14. Additionally, two journals each had 10 articles, seven articles, and six articles, whereas two journals published five articles each. Of the 79 journals examined, 39 published only one article each, whereas 18 published two articles each. Consequently, it is noteworthy that 72.1% of the journals contributed few articles to the literature.

Table 2. Number of articles and source frequency

Number of articles	Source (Journal) frequency
1	39
2	18
3	4
4	8
5	2
6	2
7	2
10	2
14	1
20	1
Total 209	79

Publications per relevant fields

Table 3 displays the distribution of publications across various relevant fields. It is crucial to note that the dataset was restricted to literature in the field of communication. Psychology has emerged as the most relevant field in XR research in communication studies, followed by business economics and film, radio, and television.

Table 3. Number of publications per relevant field

Discipline	Number of records	% of 209
Communication	209	100%
Psychology	23	11%
Business Economics	17	8.1%
Film Radio Television	14	6.7%
Sociology	9	4.3%
Cultural Studies	8	3.8%
Information Science and Library Science	5	2.4%
Engineering	4	1.9%
Education Educational Research	2	1%
Environmental Sciences and Ecology	1	0.5%
Health Care Sciences Services	1	0.5%
Women Studies	1	0.5%

Most productive countries and country collaboration networks

Table 4 provides insights into the countries most actively involved in XR research within the communication field, considering both publication frequency and citation impact. The data, derived from the affiliation addresses of the respective authors, emphasise the ten most productive and influential countries. Notably, the United States (USA) emerged as the most productive country, with 93 publications and 2199 total citations, followed by Australia and Spain.

Table 4. The 10 most productive and influential countries (VOSViewer)

Country	Number of articles	Total citations
United States (USA)	93	2199
Australia	20	277
Spain	16	697
South Korea	13	422
Netherlands	9	115
Germany	9	107
Canada	8	53
Finland	6	32
Taiwan	5	35
United Kingdom	5	85

Figure 1 illustrates the network of countries that showcase international collaboration within the research field. VOSviewer identifies relevant data from 38 countries, with 16 countries forming clusters. The size of the bubbles indicates the dominance of countries in XR research in communication studies, whereas the line weights represent the collaboration strength between those countries. Additionally, different bubble colours signify clusters, with yellow cluster countries representing those that collaborate most frequently. From the network, it is evident that the United States and South Korea exhibit the strongest ties in terms of XR publications.
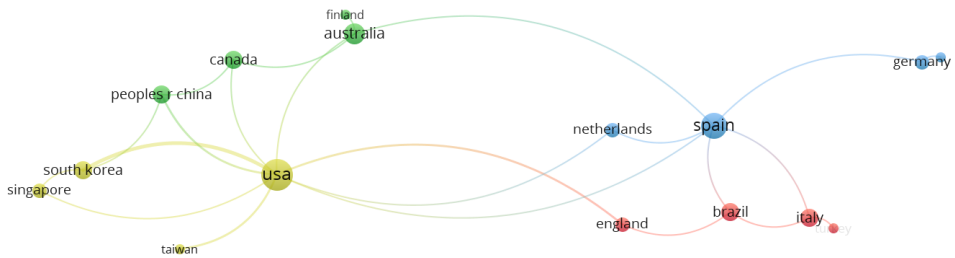

Figure 1. Mapping of country collaboration

Most productive journals and co-citation analysis of journals

Table 5 presents the 15 most productive journals in the field of research. According to the table, the three most productive journals are New Media and Society, Convergence-The International Journal of Research into New Media Technologies, and Cyberpsychology and Behavior. The initial publication related to this subject matter appeared in 1992 in the Journal of Communication, which was also the most cited journal. New Media and Society began publication in 2002, while Convergence—The International Journal of Research into New Media Technologies—debuted in 2012. The first publications in the remaining journals occurred after 2000, with a particularly noticeable upward trend after 2013.

Table 5. The most productive journals (VOSviewer)

Journals	Articles	Citations	First publication year*
New Media and Society	20	599	2002
Convergence-The International Journal of Research into New Media Technologies	14	81	2012
Cyberpsychology & Behavior	10	164	2000
Mobile Media & Communication	10	746	2013
Information Communication & Society	7	155	2013
International Journal of Advertising	7	148	2017
Journal of Communication	6	2869	1992
Media Psychology	6	234	2008
Digital Journalism	5	149	2020
Journalism Studies	5	84	2019
Media International Australia	4	74	2017
Journal of Current Issues and Research in Advertising	4	43	2019
Critical Studies in Media Communication	4	22	2000
Journal of Advertising	3	408	2002
Journalism Practice	2	24	2021

* The first publication year indicates the year in which the study of XR research in communication studies was first published in a relevant journal.

The co-citation analysis of the journals illustrated in Figure 2 provides an in-depth overview of the subject fields. A minimum threshold of 20 citations for a source was chosen, resulting in 54 of 5448 sources meeting these criteria. The size of the bubbles indicates the number of citations received by the journal, whereas the line weight represents the link strength. The proximity and connectivity between the two journals determine the co-citation relationship. Additionally, the colors of the circles signify clusters, categorizing journals into three clusters based on their common characteristics. The green cluster comprises journals dominant in computer-human interactions within communication, management, and marketing. The red cluster consists of journals that focus on new media and computer technology-oriented communication studies. The blue cluster in the middle consists of journals investigating human behavior and psychology within XR research in communication studies.
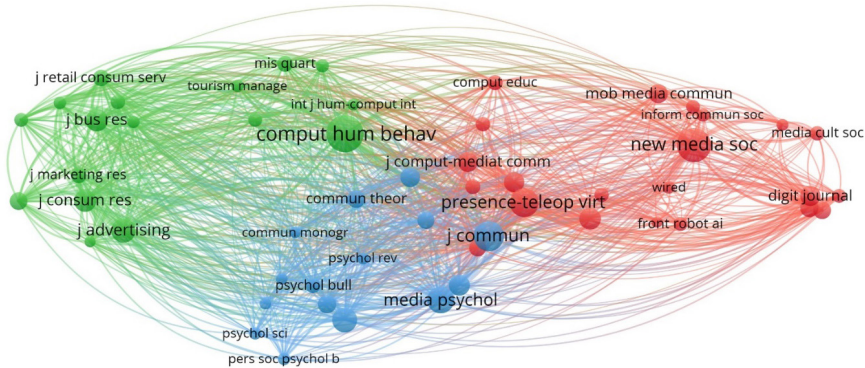
Figure 2. Journals co-citation map (Treshhold:20 / Out of 5448 identified sources, 54 sources met the treshold)

Author publication, citation, and co-citation analysis

Information regarding authors' productivity is presented in Table 6. Based on the table, Kim emerged as the most productive author in terms of the number of articles contributed. Upon closer examination of the number of authors listed in the articles, Biocca became the first author with the highest number of articles fractionalized. This observation highlights the impact of authorship order on individual contributions. The number of authors in an article decreases, and the fractionalized effect of each author's contribution may increase, even if the total number of articles authored by an individual decreases.

Table 6. The most productive authors

Authors	Articles	Authors	Articles fractionalized
Kim, J	7	Biocca, F.	3.33
Ahn, S.J.G.	5	Kim, J	2.73
Biocca, F.	5	Liao, T.	2.70
Carter, M.	4	Carter, M.	2.00
Egliston, B.	4	Egliston, B.	2.00
Liao, T.	4	Dowling, D.O.	2.00
Wu, D.Y.	4	Harley, D.	2.00
Lin, J.H.T.	3	Irom, B.	2.00
Bailenson, J.N.	2	Rantakokko, S.	2.00
Best, K.	2	Wu, S.	2.73

Table 7 shows the impact of the most productive 10 authors. Carter and Egliston stand out as the most notable authors based on the M-index, which represents the median number of cited publications. Despite the commencement of research in 2022, their impact is rapidly increasing. However, Kim ranked first in terms of the G-index. With seven articles and starting production in 2015, the author also demonstrates a significant impact, with the potential for further effectiveness as time progresses.

Table 7. Impact of the most productive 10 authors

Author	H-index	G-index	M-index	Total citations	Number of paper	First publication year
Biocca, F.	5	5	0,152	674	5	1992
Ahn, S.J.G.	4	5	0,571	46	5	2018
Carter, M.	4	4	1,333	62	4	2022
Egliston, B.	4	4	1,333	62	4	2022
Kim, J.	4	7	0,4	53	7	2015
Liao, T.	3	4	0,3	93	4	2015
Bailenson, J.N.	2	2	0,5	16	2	2021
Best, K.	2	2	0,167	10	2	2013
Butler, S.	2	2	0,167	10	2	2013
Daviz, D.Z.	2	2	0,333	17	2	2019

Figure 3 illustrates the co-citation network of authors within the XR research field. A citation threshold of 10 was set to ensure the display of relevant articles. Of the 6.831 authors in the dataset, 67 met the threshold criterion. This figure highlights the intellectual roots of the research topics associated with the authors, leading to the identification of the five main clusters. In the purple cluster, Slater emerged as the most frequently cited author with 71 citations, focusing primarily on the concepts of presence and immersion in virtual environments. Biocca achieved the highest number of citations in the green cluster, with 53 citations, with a research background mainly covering VR research in communication. Shin stands out in the red cluster, cited most frequently with 43 citations, exploring the concept of immersion, especially in AR games, from a user-centered perspective. Ahn was the most frequently cited author in the yellow cluster, with 36 citations attributed to their work. Finally, in the blue cluster, Azuma received the highest number of citations, with 36 citations.
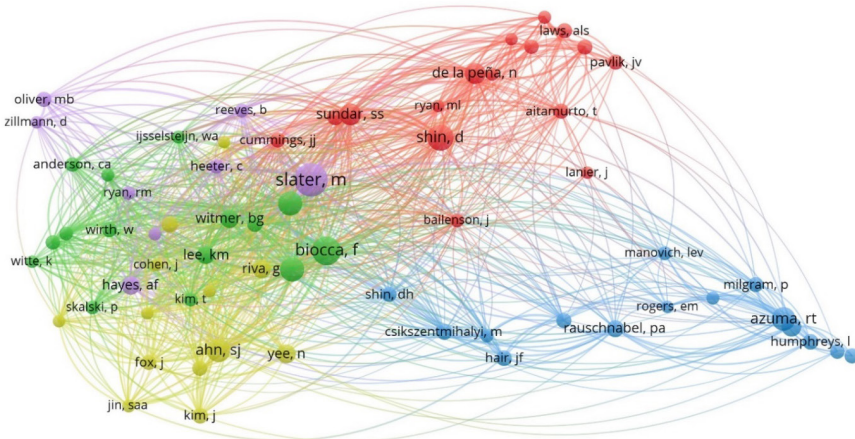
Figure 3. Author co-citation map (Treshhold:10 / Out of 6831, 67 met the treshhold)

Keyword analysis and co-occurrence network

Figure 4 shows the co-occurrence analysis and its connections. Following the approach of Vallaster et al. (2019), a threshold of five was set to display the keywords. This threshold determines the frequency at which a keyword appears in an article within the dataset to be considered in the analysis. Visualized by VOSviewer, the co-occurrence analysis organizes the research field into clusters. The size of the bubbles represents the frequency of keyword occurrence in the articles. A closer proximity of keywords indicates a stronger relationship between the terms (Alonso et al., 2009).
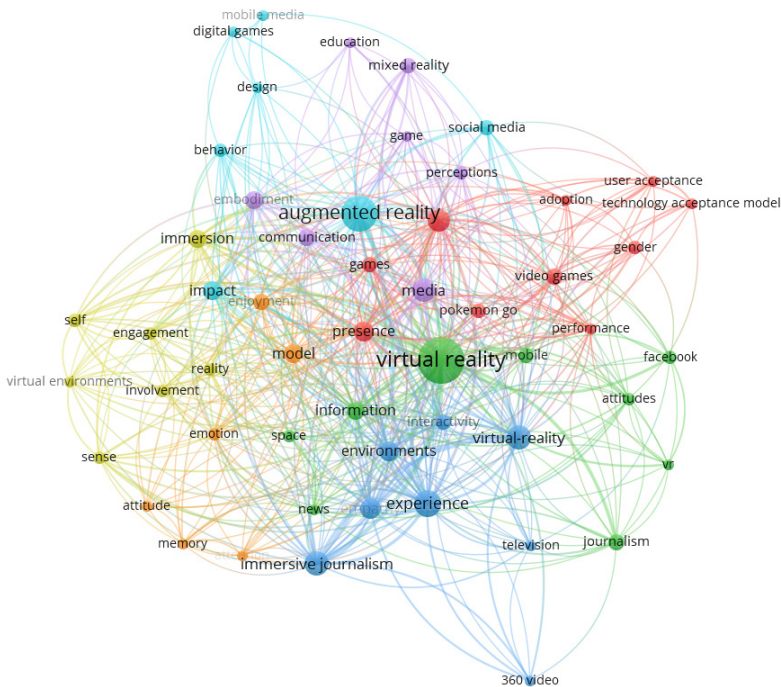
Figure 4. Keyword (all keywords) co-occurence map (Min:5 / Out of 968, 54 met the treshhold)

A total of 209 studies were analyzed using VOSviewer, based on keywords. The resulting individual clusters were color-coded according to subject areas, with VR and AR emerging as the main clusters in XR in the communication research field. Figure 4 highlights the most frequently used keywords. The green cluster primarily focused on the concept of XR, with the keyword 'virtual reality' appearing 82 times at the center and comprising the most references. VR is commonly associated with keywords such as information, journalism, attitudes, mobile, news, space, and *Facebook*. In the light blue cluster, the most referenced and central term is 'augmented reality' which is closely linked to other clusters. Related terms include impact, social media, behavior, design, digital games, and mobile media. The dark blue cluster emphasizes the 'experience' in XR research, adopting a perspective on topics such as immersive journalism, VR, environments, empathy, interactivity, television, and 360 videos. The purple cluster focuses on 'media', combining terms like communication, perceptions, embodiment, game, MR, and education. The red cluster centers around 'technology,' addressing terms such as presence, games, video games, performance, adoption, and acceptance. The yellow cluster explores 'immersion,' combining terms such as involvement, engagement,

and reality. Lastly, the orange cluster centers on the term 'model,' incorporating terms like enjoyment, emotion, attitude, memory, and attention.

Table 8 provides supplementary information to Figure 4 by presenting the values of the most significant 20 keywords in the dataset, organized based on the strength of their total links. This illustrates the frequency of the occurrence of particular keywords in publications. As shown in Table 8, VR and AR were the most frequently used keywords in XR research in communication studies. In addition, terms such as immersive journalism, presence, immersion, and embodiment were included in the articles.

Table 8. The most frequent author keywords

Keyword	Occurrences	Total link strength
Virtual reality	88	101
Augmented reality	44	37
Immersive journalism	21	38
Presence	15	26
Immersion	11	26
Embodiment	10	16
Empathy	9	17
Mixed reality	8	13
Video games	7	12
Technology	6	16
Journalism	6	12
Facebook	5	17
Gender	5	10
Social media	5	6
Oculus	4	14
Metaverse	4	10
VR	4	10
Extended reality	4	9
Interactivity	4	9
Telepresence	4	9

Table 9 lists the 20 most frequently cited articles in the dataset. These articles, characterized by their high citation numbers, shed light on specific research trends within the XR domain. Notably, the article "Defining virtual reality: Dimensions determining telepresence" by Steuer (1992) gathered the highest number of citations. Among the 20 most frequently cited articles, a significant portion was dedicated to VR

research.

Table 9. The most cited articles (VOSviewer)

Author(s) (year)	Title	Source	Total citations	Total citations per year
Steuer (1992)	Defining virtual reality: Dimensions determining telepresence	Journal of Communication	2547	77.18
Riva et al. (2007)	Affective interactions using virtual reality: The link between presence and emotions	Cyberpsychology & Behavior	554	30.78
Li, Daugherty, and Biocca (2002)	Impact of 3-D advertising on product knowledge, brand attitude, and purchase intention: The mediating role of presence	Journal of Advertising	390	16.96
Shin and Biocca (2018)	Exploring immersive experience in journalism	New Media & Society	138	19.71
Regian (1992)	Virtual reality: An instructional medium for visual-spatial tasks	Journal of Communication	128	3.88
Gillath, McCall, Shaver, and Blascovich (2008)	What can virtual reality teach us about prosocial tendencies in real and virtual environments?	Media Psychology	83	4.88
Shin (2017)	How does immersion work in augmented reality games? A user-centric view of immersion and engagement	Information Communication & Society	82	13.67
Lee, Chung, and Lee (2013)	Presence in virtual golf simulators: The effects of presence on perceived enjoyment, perceived value, and behavioral intention	New Media & Society	79	6.58
Biocca (1992)	Communication within virtual reality: Creating a space for research	Journal of Communication	71	2.15
Tamborini et al. (2004)	Violent virtual video games and hostile thoughts	Journal of Broadcasting & Electronic Media	70	3.33
Lanier and Biocca (1992)	An insider's view of the future of virtual reality	Journal of Communication	68	2.06
Van Damme et al. (2019)	360° video journalism: Experimental study on the effect of immersion on news experience and distant suffering	Journalism Studies	63	10.50
Laws (2017)	Can immersive journalism enhance empathy?	Digital Journalism	62	12.40
Liao and Humphreys (2014)	Layar-ed places: Using mobile augmented reality to tactically reengage, reproduce, and reappropriate public space	New Media & Society	56	5.60
Eastin and Griffiths (2006)	Beyond the shooter game - Examining presence and hostile outcomes among male game players	Communication Research	56	2.95
Baek, Yoo, and Yoon (2018)	Augment yourself through virtual mirror: the impact of self-viewing and narcissism on consumer responses	International Journal of Advertising	55	7.86

Vella et al. (2019)	A sense of belonging: Pokemon Go and social connectedness	Games and Culture	53	8.83
Wagler and Hanus (2018)	Comparing virtual reality tourism to re-al-life experience: Effects of presence and engagement on attitude and enjoyment	Communication Research Reports	51	7.29
Bonus et al. (2018)	Look on the bright side (of media effects): Pokemon Go as a catalyst for positive life experiences	Media Psychology	50	7.14
Bollmer (2017)	Empathy machines	Media International-al Australia	50	6.25

Discussion and conclusion

This study was conducted to address the interdisciplinary gap and discover emerging concepts in communication studies by providing a comprehensive bibliometric analysis of XR research trends, demonstrating the work around which communication scholars gather and form clusters. By systematically reviewing and synthesizing the existing literature, it highlights the major antecedents, trends, and factors significant to XR in communication studies, maps them onto models, and offers a future research agenda by elucidating tendencies to strengthen this emerging field. This holistic approach offers insight into the interdisciplinary nature of XR research in communication studies and its applications.

XR technologies, including AR and VR, are significantly transforming how people work, learn, connect, and play by merging physical and digital worlds. XR applications span various fields, including tourism, education, retailing, gaming, and healthcare (Kerawalla et al., 2006; Jung et al., 2015; Glegg et al., 2016; Rauschnabel et al., 2017; Yim et al., 2017). XR technologies were chosen because of their profound impact on enhancing communication by providing immersive and interactive experiences. They allow people to experience a sense of presence and realism, which are crucial for effective communication in digital environments (Suh & Prophet, 2018).

The integration of XR technologies within communication studies is transforming the field by introducing new tools and methodologies while emphasizing the concepts that enhance human interaction with media and simulation technologies. The most frequently cited articles, Steuer's (1992) article on defining VR and the dimensions determining telepresence, and Riva et al.'s (2007) affective interactions using VR show the prevalence of VR research which emphasizes its impact on presence and immersion, concepts that

intersect with communication studies. VR's ability to create fully immersive environments (Herz and Rauschnabel, 2019) and AR's potential to enhance real-world experiences with digital overlays (tom Dieck et al., 2018) have made them focal points of study.

The integration of AR into educational settings has shown its potential to enhance learning experiences align with theories of media richness (Huang & Liu, 2014) and cognitive load (Hsu, 2017; Sırakaya & Çakmak, 2018; Wang et al., 2018; Steele et al., 2020). Moreover, the uses and gratifications theory explains why users are drawn to XR technologies, highlighting their ability to satisfy diverse needs, such as entertainment, social interaction, and information seeking (Rauschnabel, 2018a; Rauschnabel, 2018b). Methodologically, XR technologies enable more sophisticated and immersive experimental designs (Hily et al., 2023), allowing researchers to study the communication processes in highly controlled virtual environments. These trends indicate a shift towards more interactive and immersive communication modalities, driving future theoretical developments in the field and underscoring the growing emphasis on VR and AR, which have the potential to enhance user engagement and interaction, which is crucial for developing effective communication strategies.

The most frequently used keywords in XR research were 'virtual reality' (88 occurrences) and 'augmented reality' (44 occurrences), indicating their dominance in the field. Other significant keywords include 'immersive journalism,' 'presence,' and 'immersion.' Immersive journalism encompasses both presence and immersion as communicative practices. By giving the audience a first-person account of events, this method seeks to increase empathy and engagement by giving them the impression that they are active participants rather than passive audiences (De la Peña et al., 2010), signalling a new domain for communication scholars to explore. For presence, according to Lee (2004), it happens when people who utilize technology are unaware of its virtual nature. Feeling of being there (Cummings & Bailenson, 2015) and being moved into narratives (Green & Donahue, 2012) are the critical constituents of presence which are shaped by sensory and cognitive faculties. Immersion, which can be thought of as a blurment of the experiences and identities between the physical and virtual worlds (Snodgrass et al., 2013), or a psychological state in which a person loses themselves in a digital environment and ignores cues from the real world (Fox et al., 2009), adds another working domain to the interactive nature of digital media. This informs communication studies regarding the contexts in which they are conducted, the communicative practices involved, and the methods of meaning-making and message conveyance.

In this context, McLuhan's (1964) conception of the electric age seems particularly relevant; people see themselves as being translated into information, moving toward a technological extension of consciousness. By integrating the physical bodies within these extended nervous systems through electric media, people establish a dynamic in which previous technologies—extensions of hands, feet, and bodily controls—are translated into information systems. XR technologies take this metaphor one step further. It alters the positioning of the media and consumer as two systems in which two information flows feed each other. This mutual translation of physical and social interactions in immersive digital experiences further blurs the lines between reality and virtuality.

Despite the promising outlook, the adoption of XR technologies has been slower than expected (Cranmer et al., 2016), due to technical limitations, cost, and performance issues, leading to fragmented scholarly work and insights that are yet to be fully translated into practice (Ratcliffe et al., 2021; Rauschnabel et al., 2022). Existing studies often focus on technological aspects, neglecting other factors, such as socio-cultural implications and user perceptions of XR technologies (Herz & Rauschnabel, 2019), and interdisciplinary relationships. However, with the consumer products that are now widely available to public (e.g. Meta's Quest headset, and Apple Vision Pro goggles) are changing the pace of acceptance with these technologies since the entertainment is one of the key trends in adopting the XR technologies (Ziker et al., 2021). Technological advancements have made VR and AR more accessible and practical, leading to their widespread adoption in industries as well as among consumers. This signals a correlation between the increasing number of publications after 2014 and technological accessibility.

This bibliometric analysis of XR research in communication studies from 1992 to 2023 highlights the growing interest and diverse applications of XR technologies. The findings underscore a significant uptick in publications post-2014, indicating a growing scholarly interest in XR's potential across various domains. An examination of 209 articles revealed that XR research in communication predominantly intersects with psychology, business economics, and media studies, illustrating the interdisciplinary appeal of XR technologies. USA, Australia, and Spain have emerged as leading contributors, reflecting a geographically diverse research community.

The analysis demonstrated the field's evolution, thematic orientation, and geographical distribution of research across a dynamic landscape. Despite these

contributions, this study has certain limitations that are inherent to its methodological choices and scope. Primarily, reliance on specific databases to curate the research corpus introduces a selection bias, potentially omitting significant publications not indexed within these platforms or those published in languages other than English. The exclusive use of English sources creates a limited research universe, facilitating discourse primarily within English-speaking contexts while constraining the discussions from non-English-speaking regions. The findings also reveal a geographical and institutional concentration of research output, predominantly in technologically advanced or research-intensive countries such as the USA, Australia, and Spain, thereby possibly overlooking contributions from other regions. Moreover, while the interdisciplinary nature of XR research in communication studies is highlighted, the complexity of such collaborations may not be fully explored, underscoring the need for a deeper investigation into their impact on the field's evolution.

Current trends in XR research will likely lead to the development of new theoretical frameworks that incorporate the effects of immersion and presence on communication. Future studies might also focus on cross-cultural comparisons to understand how diverse cultural contexts influence XR experiences and communication practices (Jung et al., 2015). As these technologies become more available, they require continous investigation and collaboration (Querioz et al., 2024) as well as an understanding of the ethical implications of XR, such as privacy concerns and psychological effects (Slater et al., 2020).

Future bibliometric analysis could benefit from incorporating a broader array of databases, including multilingual research outputs, to mitigate selection bias and to provide a more comprehensive overview of global research. Longitudinal studies focusing on tracking changes over time would be instrumental in identifying emerging trends and shifts in research focus, thereby capturing the rapidly evolving nature and applications of XR technologies. The influence of geographical proximity on citation behavior has been documented (Abramo et al., 2020), suggesting that it significantly affects citation dynamics. An in-depth exploration of the geographical and institutional diversity of XR research could shed light on the drivers of research concentration in certain areas and inform strategies to foster a more inclusive and globally representative research landscape.

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P R E S S

From pandemic to post-pandemic: Understanding the digital platform usage experiences of older people

Pandemiden post-pandemiye: Yaşlı bireylerin dijital platform kullanım deneyimlerini anlamak

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Abstract

The social isolation experienced during the coronavirus 2019 (COVID-19) pandemic period has transformed the daily life practices of individuals of all ages and increased their integration into digital platforms. The adoption of digital technologies by elderly users has accelerated, and the digital environment has assumed an important role in meeting various physical and social needs. Although the mandatory physical isolation after the pandemic period has been replaced by measures taken based on individual preference, it is evident that elderly individuals have become much more active users of digital platforms than before. Based on this understanding, this study aims to make visible how individuals aged 65 and over make sense of their digital platform usage experiences in this new period, also called post-pandemic. A phenomenological approach was adopted to conduct semi-structured, in-depth interviews with 22 participants. As a result of the study, 7 positive and 4 negative sub-themes were identified for the category 'making sense of digital platforms.' Among these, the sub-themes of 'informative,' 'communication tool,' and 'dangerous' came to the fore. The 'digital platform experience' category was divided into 8 positive and 3 negative sub-themes. Among the positive sub-themes, 'receiving news from the environment/ maintaining relationships' was the most common type of experience, and among the negative ones, 'criticism' stood out. Concerning the 'reflection of digital platform experiences on daily life practices' category, 6 positive and 3 negative sub-themes were identified. 'Increased/accelerated access to information' among the positive themes and 'a new addiction' among the negative themes were the most emphasized.

Keywords: Aging, digital platform, post-pandemic, phenomenology, digital platform experience

Öz

Pandemi dönemiyle yaşanan sosyal izolasyon süreci, her yaştan bireyin günlük yaşam pratiklerini dönüşüme uğratmış, kullanıcıların dijital platformlara entegrasyonunu artırmıştır. Yaşlı kullanıcıların dijital teknolojileri benimseme süreçleri hızlanmış ve dijital ortam çeşitli fiziksel ve sosyal ihtiyaçların karşılanmasında önemli bir rol üstlenmiştir. Pandemi dönemi sonrasında zorunlu fiziki yalıtılmışlıklar yerini bireysel tercihle alınan önlemlere bırakmış olsa da yaşlı bireylerin öncesine nazaran çok daha aktif kullanıcılara dönüştükleri görülmektedir. Söz konusu odak noktasından yola çıkan çalışma kapsamında, post-pandemi olarak da adlandırılan bu yeni dönemde, 65 yaş ve üzeri bireylerin dijital platform kullanım deneyimlerini nasıl anlamlandırdıklarının görünür kılınması amaçlanmaktadır. Fenomenolojik yaklaşımın benimsendiği araştırmada 22 katılımcıyla yarı yapılandırılmış derinlemesine görüşmeler gerçekleştirilmiştir. Çalışma sonucunda, dijital platformların anlamlandırılma biçimlerine ilişkin 7 olumlu alt temaya, 4 olumsuz alt temaya ulaşılmış; bunlar arasında bilgi verici, haberleşme aracı ve tehlikeli alt teması öne çıkmıştır. Yaşlı kullanıcıların dijital platform deneyimleri 8 olumlu 3 olumsuz alt temaya ayrılmış; olumlular arasında çevreden haber alma/ilişki sürdürme ve olumsuzlar arasında eleştirilme en fazla karşılaşılan deneyim türü olmuştur. Dijital platform deneyimlerinin günlük yaşam pratiklerine yansıma biçimleri için 6 olumlu ve 3 olumsuz alt tema tespit edilmiş; olumlu temalar içinde artan/hızlanan bilgiye erişim, olumsuz temalar arasında yeni bir bağımlılık öne çıkmıştır.

Anahtar kelimeler: Yaşlılık, dijital platform, post-pandemi, fenomenoloji, dijital platform deneyimi

Introduction

During the pandemic, the elderly were the most isolated social group who stayed at home for most of their time. In their isolated life, digital communication tools and digital platforms have assumed an important role in meeting all the various physical, mental, or social needs. Thus, their use of digital technology and the time spent in the digital environment have increased (Adnan et al., 2021; Hargittai & Micheli, 2019; Özsirkecioğlu, 2022). The increasing integration of elderly users into digital platforms has brought about a significant academic interest in the interaction between elderly users and digital platforms, and many researchers have addressed the positive and negative consequences of this interaction. In this context, the presence of elderly users on digital platforms has been found to have a positive effect on their physical and mental wellbeing by enabling them to connect with their social environment (Banskota et al., 2020; Bayram & Arıcı, 2021; Choi & DiNitto, 2013; Damant et al., 2016; Ekici & Gümüş, 2016; Forsman & Nordmyr, 2017; Forsman et al., 2018; Oppenauer, 2019; Sixsmith et al., 2022; Szabo et al., 2019; Winstead et al., 2013; Zhang et al., 2021), establish a more dynamic relationship with their social environment, actively participate in social life and maintain their social welfare (Artan & Urhan, 2019; McMellon & Schiffman, 2002; Sum et al., 2008; Thomas, 2010; Xie et al., 2020), and eliminate the feeling of loneliness (Fumagalli et al., 2021; Kalınkara & Sarı, 2019; Küçük & Koçak, 2019; Mason et al., 2012; Pettigrew & Roberts, 2008). Digital platforms also allow them to come together with individuals with similar life experiences (Pfiel et al., 2009), increase perceived self-efficacy

(Lam & Lee, 2006; Salanova et al., 2000), and maintain social independence by receiving direct information about health problems (Heart & Kalderan, 2013; Karavidas et al., 2005; Mace et al., 2022). Furthermore, digital communication tools help reinforce a sense of belonging through membership in various online groups (Arun et al., 2022; Nahm et al., 2003), establish social bonds and receive social support (Chen & Schulz, 2016), and cope with stress by reducing anxiety (Nimrod, 2020).

On the other hand, some studies underline that older users approach digital platforms with prejudice and encounter various problems in the adaptation process. Older users are much more selective in their digital platform preferences compared with younger users (Broady et al., 2010). They are exposed to ageist discourses raised by other users (Akbuğa, 2023) and face digital exclusion (Ekoh et al., 2021; Nimrod, 2020). Digital platform use does not necessarily increase perceived social inclusion (White et al., 2002). Instead, it increases physical loneliness (Hill et al., 2015) and digital fragmentation. At the same time, users without access to digital platforms are disempowered and vulnerable to technology (Gibson et al., 2020; Hill et al., 2015; Robinson et al., 2020; Rorai & Perry, 2020; Seifert, 2020). Having considered the relevant literature, this study focuses on the effects of the integration of the elderly into digital platforms on their physical, mental, and social well-being and addresses the transformation in the forms of interaction depending on digital platform use and other environmental-individual variables. Currently, no study looks from the inside at what the increasing integration of elderly users into digital platforms during and after the pandemic period means to them and how they make sense of the various platform experiences they have with their inclusion in the digital environment. In this respect, understanding how digital media-mediated interaction is experienced by elderly users and how this experience is interpreted by understanding the user perspective that includes digital platforms in their life world during and after the pandemic period will contribute to the literature.

Digital platforms continue to play an important role in the life worlds of elderly users even after the pandemic period (Bayram & Arıcı, 2021; Ramirez-Correa et al., 2023). The trust in and application of digital solutions adopted during the pandemic period will continue (Law & Abascal, 2022), and even the digital communication motivations specific to the pandemic period will lead to habits that last longer than the pandemic itself (Nguyen et al., 2020). There is limited literature on how older individuals respond to digitalization affected by the pandemic and how they adapt to the use of technology in daily life (Sixsmith et al., 2022). Therefore, this study, which was conducted during

the post-pandemic period, attempts to contribute to the limited literature by providing an understanding of how the post-pandemic digital transformation is made sense of and experienced by older users. Furthermore, making this interpretation and experience visible is important in terms of increasing the skills and competencies of the elderly in the digital environment and providing a basis for micro- and macro-scale measures to be taken regarding potential risks and problems that may be encountered.

Old age is a life process that arises within the framework of different individual experiences. This process is shaped depending on how it is interpreted by an individual (Görgün & Baran, 2008), which makes it necessary to focus on the life experiences that give meaning to old age. The fact that aging refers to a vital process that finds meaning through individual experiences makes it necessary to recognize the nature of this experience by closely examining the digital platform experience for each elderly user and examine the nuances of this experience more closely. In line with this focus, this research aims to bring to light the meanings that older individuals attribute to their digital platform usage experiences. Since this goal necessitates the study of the nature of the state of being on digital platforms for older individuals and connecting to the world from there, with them attributing meaning to these platforms, the research design was determined to be phenomenology. The phenomenological approach attempts to decipher an individual's perspective on a particular situation or practice around him/her. In the context of this study, this approach is employed to obtain information about the phenomenon defined by the participants (Denzin & Lincoln, 2005; Tutar, 2023). Based on this, older individuals who use digital platforms to meet various needs, such as communicating with family, relieving loneliness, and receiving social support, attribute a subjective meaning to these platforms. This experience and subjective meaning can be considered as a phenomenon. Phenomenology, as an approach that addresses all kinds of phenomena that focus on the subjective experiences of the individual, suggests that individuals will experience the state of being a user on digital platforms in old age differently in relation to their online and offline lives. In this context, the essence of the common experience of elderly users gains importance, and it is necessary to make sense of what it means to be on a digital platform as an elderly user. Within the scope of this research, a semi-structured interview technique was employed, and in-depth interviews were conducted with 22 users. The data was analyzed through thematic analysis; codes, sub-themes, and themes that reveal the essence of the phenomenon were identified.

On the relationship of the elderly with the digital world in the pandemic and its aftermath

Old age is defined as "a set of experiences that vary considerably according to individuals, groups, and societies and are closely related to health, welfare level, social relations, social policies, education, gender, ethnicity, and similar factors" (Arun, 2019, p. 82). In other words, old age is a life process that arises within the framework of different individual experiences rather than a homogeneous group membership. Taking into account the conditions specific to the pandemic period, the transformed life experiences of individuals in the life process in question also gain importance. The social isolation measures taken during the pandemic period have made it impossible for elderly individuals to physically coexist with their environment and perform daily practices, such as receiving health services, shopping, and socializing. In addition, older people face difficulties in many areas, such as psychological, health, finance, access to the environment, death, home care, and especially social interaction and activity restrictions (Heid et al., 2021; Demirtaş & Madran, 2021). The digital environment has become an indispensable part of their life in meeting all these various needs, and the interest and integration of older individuals into the digital world have increased (Adnan et al., 2021; Hargittai & Micheli, 2019; Özsirkecioğlu,2022). According to the TurkStat Household Information Technology Usage Survey (2021–2022), the proportion of individuals in the 65–74 age group who use the internet in Türkiye was 5.6% in 2015; this rate increased to 27.1% in 2020 and 32.5% in 2021.

The pandemic period has changed the communicative needs and expectations of older individuals (Kılıç et al., 2021). With the specific measures required by the pandemic, the opportunity for face-to-face communication, which is the main way of communicating for individuals older individuals, has decreased. Older individuals have turned more toward digital communication, and their use of traditional and social media has significantly increased (Özsirkecioğlu, 2022). During this period, information was obtained through smartphones (social media platforms, applications, news sites, etc.) after traditional media such as television. Due to their isolation, the elderly have increased time spent on online interview programs, e-government applications, videos, and online news sites, leading to their inclusion in an environment where their needs are met with opportunities offered by the digital world (Binark et al., 2020, pp. 12–15). The integration of many actions, such as access to information, communication, socialization, banking, health, shopping, and bill payment, with digital has penetrated the daily

routine of the elderly. In a sense, older individuals have adapted to isolation, social distancing, and quarantine processes through the digital environment (Sayin-Kasar & Karaman, 2021). Therefore, the pandemic period has accelerated the permanent adoption of digital technologies globally (Montealegre, 2020). Furthermore, the fact that several daily needs of elderly users can be met through the digital environment has strengthened the connection between daily life and online inclusion (Erdem, 2022).

For the elderly (Fumagalli et al., 2021; Küçük & Koçak, 2019), who perceive digital platforms as a solution area to overcome the feeling of loneliness and therefore the need to stay connected (Fumagalli et al., 2021; Küçük & Koçak, 2019), the pandemic period, when physical isolation reached the highest level, also served as a potential solution for this need. Social media platforms, in particular, allow individuals to follow social, political, and cultural events in a flow while reinforcing identity practices through membership in and belonging to online groups. In this respect, one of the strategies of the elderly to cope with the feeling of isolation during the pandemic was to stay connected with the closest social environment online (Arun et al., 2022). The digital environment helped elderly individuals to both receive information and services (Mace et al., 2022; Giwa et al., 2020; Xie et al., 2020) and cope with the feeling of loneliness during the pandemic period, thus helping maintain their physical and mental wellbeing (Banskota et al., 2020; Sixsmith et al., 2022).

Furthermore, the growing importance of digital platforms and the function they have assumed have made it necessary to discuss the barriers to older users' digital participation (Ramirez-Correa et al., 2023; Tyler et al., 2020) and the potential consequences of digital inequality in several areas (Binark et al., 2020; Giasanti & Veltro, 2021; Mace et al., 2022; Nimrod, 2020; Robinson et al., 2020; Rorai & Perry, 2020). The most important determinants of reducing these barriers are increasing digital ownership and developing competence.

Aim and methodology

This study aims to reveal how the use of digital media, which started or increased during the pandemic period and continued in the post-pandemic period, is made meaningful and experienced by elderly users and make visible the role that they attribute to digital platforms in their offline daily life practices. The research questions sought to be answered in line with this purpose are:

RQ1: How do older users make sense of the digital platforms they are involved in?

RQ2: What are older users' experiences of digital platform use during and after the pandemic?

RQ3: How do older users make sense of the reflections of their digital platform experiences on their offline life practices?

This research was carried out to answer the above-mentioned research questions and to understand the experiences of elderly users in using digital media during and after the pandemic period. To this end, it was deemed appropriate to conduct field research based on a descriptive method that adopts a phenomenological approach. Phenomenology is a qualitative research design used to understand a group of people's understanding, feelings, perspectives, and perceptions about a particular phenomenon or concept and to describe how they experience the phenomenon in question (Tekindal & Uğuz & Arsu, 2020; Rose et al., 1995; van Manen, 2007). In accordance with the adopted research design (Eddles & Hirsch, 2015; Seggie & Bayyurt, 2017), a semi-structured in-depth interview technique was employed to understand the perceptions and experiences of users who started to take part in digital platforms during and after the pandemic period or whose integration into these platforms increased. This study aims to understand how elderly users perceive the digital platforms in which they consciously participate and what their presence on these platforms means to them. In line with this goal, 12 open-ended questions were included in the interview form to determine which digital platforms the participants use and for what purposes, how they perceive and experience these platforms, and how they make sense of the reflections of their online experiences on their offline lives. The interview questions were designed to reveal the participants' textural and structural description of the phenomenon (Bal, 2016; Tekindal & Uğuz-Arsu, 2020), thus aiming to reach the essence of the phenomenon.

The criterion sampling method, which is one of the purpose-oriented sampling types, was used to determine whether the study group was eligible to participate in the interview. In this framework, it was decided which criteria would need to be met for inclusion or exclusion in the study group (Johnson & Christensen, 2017). Accordingly, the criteria for inclusion in the study group were (1) an age range of 65 years and over, (2) having internet access and owning a smartphone, and (3) actively using or starting to use digital platforms during the pandemic period. In addition, studies on the digital

integration of older individuals (Czaja et al., 2006; König et al., 2018; Van Deursen & Helsper, 2015) show that users with higher education and economic status tend to be more competent digital platform users. In Türkiye, educationally competent individuals with high incomes have medium to high levels of digital capital, and their media repertoire is more diverse (Arun et al., 2022). In this respect, the fourth and final inclusion criterion to achieve more in-depth data on older users' digital platform usage experiences was (4) having a high level of education and income. To understand the essence of the phenomenon, especially in phenomenological research, it is recommended to select participants from a homogeneous pool of participants as much as possible (Smith et al., 2009). Doing so enables the examination of divergence and convergence within the sample in more detail. In this context, the final inclusion criterion is important in terms of enabling a more homogeneous sample group and a more detailed examination of participant experiences. The exclusion criterion was (1) the presence of a physical or mental health problem that prevents older individuals from participating in the study.

Although there is no strict rule for determining the number of participants in phenomenological research, Wilson (2015) states that the number usually varies between 6 and 20. Creswell (2018) and Patton (2014) recommend interviewing 5–25 individuals who have experienced the phenomenon. During the data collection process, the easy accessibility of information, the absence of any reservations in the answers received, the clarity of the subject, and the selection of participants from among individuals who have directly experienced the phenomenon in question (Morse, 2000) made it sufficient to determine the number of participants as 20. Pilot interviews were conducted with 2 participants, and the data collection process continued after no problems were encountered in the process of answering the interview questions. Although the number of participants was predicted to be 20 before the interviews, altogether 22 participants were interviewed to ensure that the data reached sufficient depth and saturation. When repetitive patterns and non-patterned expressions began to be encountered in the raw data set obtained from the interviews, the data collected was deemed sufficient, and the interview process was completed (Kleiman, 2004; Lester, 1999). Table 1 presents the participant group profile in the study.

Table 1: Study group profile

Participant code	Gender	Age	Profession
P1	Male	78	Retired/Private sector executive
P2	Woman	69	Housewife
P3	Woman	70	Retired/Teacher
P4	Woman	65	Retired/Public employee
P5	Male	72	Retired/Public employee
P6	Male	70	Retired/Pilot
P7	Woman	67	Retired/Teacher
P8	Male	86	Retired/Doctor
P9	Woman	83	Retired/Nurse
P10	Male	69	Retired/Attorney
P11	Woman	72	Housewife
P12	Woman	65	Retired/Teacher
P13	Woman	70	Retired/Accountant
P14	Woman	65	Retired/Public employee
P15	Woman	70	Retired/Accountant
P16	Woman	80	Retired/Teacher
P17	Woman	67	Retired/Public administrator
P18	Woman	74	Retired/Private sector employee
P19	Male	65	Retired/Public employee
P20	Male	66	Retired/Private sector employee
P21	Male	68	Retired/Private sector employee
P22	Woman	64	Retired/Private sector executive

During the interview, participant statements were recorded. Each of the interviews, which was completed between January 23, 2023, and March 26, 2023, lasted between 30 and 40 minutes on average. The collected data was analyzed through thematic analysis. In phenomenological research (Clark et al., 2021; Işıkoğlu et al., 2021; Miles & Huberman, 2016; Robson, 2017; Tekindal & Uğuz & Arsu, 2020), the analysis process consists of examining and classifying the research data, generating codes from the data by defining units of meaning, identifying themes that each express a single meaning, ensuring thematic clustering and cascading (deciding on the main themes of the experience), creating thematic networks, ensuring the integrity of the themes, and providing a mixed description of the phenomenon, interpretation, and reporting. The aforementioned steps were also used in the analysis of the raw data; first, the interview transcripts, which were read repeatedly by the researchers, were transferred to the Maxqda program. In determining the codes and themes, an attempt was made to develop an understanding of how the phenomenon in question could best be understood, and the process was repeated until no new codes and themes were encountered.

First, open coding was performed, and the code and theme lists were checked. Cascading was used at this stage to identify the main themes of the experience, and care was taken to ensure that the themes were mutually exclusive. After open coding, axial coding was performed to go from the categories to the themes. In addition, the coding process was carried out relationally to make better use of the data visualization features of the Maxqda program. Researcher coding was frequently checked to ensure that the presence of codes in the document did not fall below 90%. The open and relational coding lists and the codes and themes reached in this process were evaluated by two independent external experts in the field. Thus, the codes brought together were reduced to themes, and the findings were associated with figures, tables, and literature to reveal the essence of the phenomenon (Creswell, 2018; Tekindal & Uğuz & Arsu, 2020). The theme, sub-theme and code distributions reached within this framework are given in Table 2. The number of times each theme was coded is shown in parentheses. The code matrix browser showing the distribution of all themes and codes in participant statements is presented in Appendix 1.

Table 2: Categories, themes, and sub-themes

Categories	Themes	Sub-Themes
Making sense of digital platforms	**Positive**	Entertaining (14) Informative (18) Communication tool (18) Making life easier (14) Friend finder (13) Keeping up with the agenda (14)
		Time passer (8) Trustworthy (6)
	Negative	Dangerous (11) Time waster (4) Need assistance in its use (9) Bad influence on young people (3)
Digital platform experience	**Positive**	Alleviating loneliness (13) Making new friends (2) Receiving news from the environment/ maintaining relationships (17) Joy of life/engagement with life (8) Communicating about content (12) Keeping up with the times (9) Getting ideas/suggestions (9) Satisfying curiosity (4)
	Negative	Missing out on life (4) Criticism (7) Discomfort from overuse (3)

Reflection of digital platform experiences on daily life practices	Positive	Increased/accelerated access to information (22) Access to alternative views (6) Ease in meeting daily needs (12) Self-actualization (7) Constant state of being in contact (20) Spending quality time (15)
	Negative	Inability to escape from unwanted content (6) A new addiction (8) Reducing the need to leave the house (1)

While analyzing the interview data, care was taken to follow certain steps in order to eliminate researcher bias and ensure research reliability and validity. Research reliability means that the researcher is aware of and excludes any personal bias that may affect the study process to present the participants' experiences and interpretations most accurately (Bloomberg & Volpe, 2008). In line with this goal, phenomenological reduction was applied by bracketing the researchers' personal views and attitudes about aging and elderly people's digital platform usage skills (Drew, 2004), thus ensuring the reliability and confirmability of the research process (Başkale, 2016; Kleiman, 2004; Tekindal & Uğuz & Arsu, 2020). The researchers displayed an impartial attitude by not expressing opinions about the participants' experiences during all the interviews (Işıkoğlu et al., 2021; Stake, 1995). Furthermore, a common interview protocol was maintained for consistency (internal reliability), and confirmation was obtained from the participants about their statements during the interview. The recorded interview data and the researcher's notes were also compared to understand the data and provide internal control by documenting the researcher's thoughts and reactions (Starks & Brown-Trinidad, 2007). In addition, two external subject experts were consulted at every stage of the research to control the analysis process (triangulation). For confirmability (external reliability), the research process was explained in detail, the findings were associated with the literature, different participant statements were conveyed without ignoring them, and in the last stage, the research findings were compared again with the raw data. For dependability, the data collection process was explained in detail, and the research was intended to be procedurally reproducible.

In the process of data collection and analysis for credibility (internal validity), the study's literature and relevant research findings were utilized; direct quotations from participant statements were included; confirmation was obtained from participants regarding their various statements; participants were selected to ensure diversity in terms of age (the age distribution of participants over 65 was diversified as much as possible), gender, and occupational group; and inter-coder agreement was frequently

checked. The inter-coder agreement was measured using the Maxqda program based on code association patterns in the document; code presence and code frequency in the document were 98.94% and 98.73%, respectively. To ensure the transferability (external validity) of the findings, direct quotations from the participant statements were again used, and the inclusion and exclusion criteria and details about the participant profile were presented. The stages of examining the data, coding, reaching themes from codes, establishing connections between themes, and interpreting the data were frequently checked between the researchers at each stage. The data analysis process was explained in detail, and attempts were made to ensure research transparency regarding how the results were reached. The use of a qualitative analysis program in the analysis of the research data contributed to the validity and reliability of the study by ensuring that the data were analyzed systematically (Arastaman et al., 2018; Creswell, 2018; Merriam, 2018; Miles et al., 2013). In addition, to ensure the ethical responsibility of the researcher, the participants were informed about the research in advance; it was conveyed that their personal information would be kept confidential; a informed consent form was obtained; participant names were coded as P1, P2, and so forth to maintain anonymity; and ethics committee approval was obtained from Yeditepe University Ethics Board of Social Sciences and Humanities (Board Date: 10.02.2023, Meeting No: 36/2023, Decision No: 3) before the data collection process.

Findings

The findings obtained in the data analysis were interpreted in the context of 32 positive and negative sub-themes in the categories of "making sense of digital platforms," "digital platform experience," "reflection of digital platform experiences on daily life practices," as shown in Table 2.

Making sense of digital platforms

Participants were asked which digital platforms they use before they were asked how they make sense of the digital platforms they use. *WhatsApp* was the most used platform by all the participants, followed by social media platforms *Facebook* and *Instagram*; *Twitter*, *YouTube*, and other digital platforms, respectively, were used by a smaller number of users. In addition, half of the participants emphasized that they started using digital platforms during the pandemic period; the other half highlighted that their usage time and digital platform integrations increased during the pandemic

period and that this increased use continues today in a very intense manner compared with the pre-pandemic period.

Digital platforms have both positive and negative meanings for older users. Participant views on the positive meanings of digital platforms are grouped into 7 sub-themes. When we look at the distribution of these views, the sub-themes of 'communication tool' and 'informative' come to the fore by being coded 18 times each. The majority of the participants see digital platforms primarily as a means of communication and information. For example, P8 stated, "I get news about how my grandchildren are doing, how my children are doing, and what they are doing. I see their pictures when I miss them. This is the most important thing for me." P3 said, "I learn the information I want to learn about the world and life. I look at it to increase my daily life needs and general culture." In addition, the sub-themes of 'entertaining,' 'making life easier,' and 'keeping up with the agenda,' each of which was coded 14 times, stand out. For example, P3 stated, "I play word games a lot; for forgetfulness, I like such things very much," and P6 asserted, "It is a facilitating requirement in today's conditions. It makes life easier; it is very easy to get information." Furthermore, P15 declared, "You can be informed about social developments," whereas P12 stated, "I learn about what is happening in my country." They conveyed opinions related to the sub-theme of 'keeping up with the agenda.' These sub-themes were followed by the theme of 'friend finder,' which was coded 13 times. The participants mentioned that they could find their old friends through digital platforms and interact with others by reaching their friends' friends. For example, P3 stated: "I found my old friends, I found my students, and my circle has expanded more." The other sub-themes were 'time passer,' which was coded 8 times, and 'trustworthy,' which was coded 6 times. The participants also evaluate digital platforms as a means of distraction. For example, P1 said, "There are channels I follow. I watch them in my free time; I follow new videos as they come." P8 stated, "My ear is on the phone; now something has come; now it will come. Look at this, look at that, but I also spend time." P8 was of the opinion that they see digital platforms as tools that help them spend time.

When we look at the negative meanings of digital platforms for elderly users, the sub-themes of 'dangerous,' coded 11 times, and 'need assistance in its use,' coded 9 times, come first. Users stated that they find digital platforms dangerous because they do not know who can access the content they share on digital platforms and are generally afraid of encountering problems such as fraud. For example, P2 said, "I am

skeptical if I don't know the people who write or follow me." P7 stated, "Platforms where young children can face dangers are scary," and P17 declared, "My identity will be exposed; I don't know who will get it. (...) For that reason, I don't think it is a safe place." In addition, the participants stated that they faced various difficulties while using digital platforms and viewed them as channels that they needed help using. In this context, P2 described the help she received from her granddaughter while opening and using her account as follows: "My granddaughter helped me open the account. (...) I usually use it myself, but when something new comes up and I don't understand it. I understand when she explains it. It's not easy to get used to it." It was also observed that, as a precautionary measure, users preferred not to use the platforms that they found dangerous and difficult to use: P9 said that to avoid any problems, he only used applications that family members showed him. Similarly, P19 stated that he did not use platforms such as *Twitter*, which he found difficult to use.

The other sub-themes were 'time waster,' which was coded 4 times, and 'bad influence on young people,' which was coded 3 times. The participants mentioned that they spend too much time on digital platforms and that this is a time-wasting situation in a way: "Every time I have nothing to do, I take it and look at it; it's fine, but I look at what time it is. It's a waste of time" (P17). Examples of participant statements indicating that they think digital platforms negatively affect young people are as follows: "They encourage young people to be what they are not; it causes them to earn money quickly and not develop themselves sufficiently" (P5). "The possibility of being negatively affected is high. For example, I think young people are negatively affected" (P10).

Digital platform experience

The findings of this study indicate that the participants' experiences on digital platforms show a positive trend in general. The most prominent among these positive experiences was the sub-theme of 'receiving news from the environment/maintaining relationships,' which was coded 17 times. The participants stated that they receive news from their surroundings and maintain their digital social relations through their experiences on digital platforms. For example, P3 explained that the state of being in constant communication with her environment allows her to further strengthen her existing social relations: "Since I see them there, our communication has become stronger; we send news to each other." P5 said, "I use *Instagram* to see the photos of my children and grandchildren who are far away and their moments"; P8 stated, "I get news about how

my grandchildren are doing, how my children are doing, and what they are doing. I see their pictures when I miss them. This is the most important thing for me." The sub-theme of 'alleviating loneliness' was coded 13 times, and the sub-theme of 'communicating about content' was coded 12 times. Some participants reported that they felt less lonely through their digital platform experiences: "I didn't feel lonely; I didn't feel empty. (...) I made up for my longing for friends I couldn't see. I didn't lose touch with people" (P3); "I feel that it takes away my boredom and is good for my loneliness" (P2). The sub-theme of 'communicating about content' corresponds to the views that they base their online communication on the content encountered on digital platforms. In this context, P1 mentioned that she sends videos that she receives from various groups or that she watches herself to other friends or her family: "I send the videos I watch and like, the videos that come to me from groups, to my other friends or family. Sometimes we talk about it. Or I tell my children about the videos I watch on *YouTube*."

These sub-themes are followed by the sub-themes of 'keeping up with the times' (coded 9 times), 'getting ideas/suggestions' (coded 9 times), and 'joy of life/engagement with life' (coded 8 times). P10 explained that the digital platform experience is necessary for keeping up with the times: "Staying away from social media and not using it is not a wise thing to do. It is a necessity in this age. It is like living on a mountainside without electricity, television, newspapers, or books. I think the tribes around the Amazon or the Nile River would also use the internet if they had access to it." Regarding the sub-theme of 'getting ideas/suggestions,' some of the participants stated the following: "On *Instagram*, I learn about food, decoration, and information I want to learn about life" (P3); "I watch touristic videos, travel videos, and I take notes for the places I am going to visit" (P12). The digital platform experience is also described as a 'joy of life/engagement with life.' For example, P8 stated, "Now television is 1, phone is 2. It has become our whole life. Otherwise, no time passes in the house. (...) It has taken a leading place in my daily life. I take care of it as soon as I get up in the morning," while P9 added the following: "I get bored; I open it; I look at it; it cheers me up. So pandemic conditions continue for me. My whole life has become colorful. Before that, we were sitting at home. We are connected to life."

Participants' views on their positive experiences with digital platforms are followed by the sub-themes of 'satisfying curiosity,' coded 4 times, and 'making new friends,' coded 2 times. The participants explained how their experiences contributed in terms of satisfying their curiosity and making new friends: "I learn everything I am curious

about, everything I wonder what this is" (P3); "I found my old friends; I found their children, my former students. (...) We added each other with friends of my friends whom I knew remotely or knew by name. I have much more of a news network now" (P12).

However, negative experiences are also encountered. One of these is the criticism received due to various mistakes made on digital platforms. For example, P2 stated that she faced criticism from her family because of the spelling mistakes she made: "My child got angry because I misspelled letters and words when I wrote comments. (...) Sometimes I can't see. I used to write a lot then, but now I don't write anymore when he gets angry." The sub-theme of 'criticism' (coded 7 times) is followed by the sub-themes of 'missing out on life' (coded 4 times) and 'discomfort from overuse' (coded 3 times). As they spend too much time on digital platforms, participants sometimes feel like they are missing out on the reality of offline life, and they receive warnings from those around them for being too busy with the digital platform: "I use it wherever I find the opportunity. I probably use it more than 2–3 hours a day. I learn, I research, and there are groups I belong to on *Facebook*. (...) Sometimes I wonder if I am missing out on life on the street" (P3); "My wife and daughter complain that I use it too much. They warn me sometimes" (P21).

Reflection of digital platform experiences on daily life practices

Older users' interpretations of how digital platform experiences are reflected in their daily lives are divided into two main themes: positive and negative. Among the positive sub-themes, 'increased/accelerated access to information,' which was coded 22 times, takes the lead. Participants stated that with the use of digital platforms, they can access more information more quickly. For example, P9, making a comparison between the period when he did not use digital platforms and the period when he used them, stated: "When we didn't use it, we were living like vegetate. We didn't know anything, but we were content with our old knowledge. Now I use it to learn everything." Again, P1 added the following: "It is much easier now; we used to wait for the news or hear it from our surroundings. Now you can access it immediately; you can type it in. You search for it." Next comes the sub-theme of 'constant state of being in contact,' which was coded 20 times. In this context, the participants stated that through digital media experiences, they can stay in constant touch with their surroundings in their daily lives: "I can get news from social media even when the Metrobus is out of order; it provides comfort; or I can learn about the events in any country before the television and in detail" (P5);

"It has become our window to the world. (...) I can communicate with everyone thanks to it. Otherwise, I am at home, and I have no other life. I follow life with it" (P8).

The sub-theme of 'spending quality time' was coded 15 times. Participants emphasized that their experiences of using digital platforms also increased the quality of their offline lives. For example, P2 reported: "I used to spend my free time watching TV, killing time. (...) I always have my phone in my hand; I listen to songs; there are places that write poems; I follow them." Coded 12 times, the sub-theme of 'ease in meeting daily needs' corresponds to the participants' views that they can meet their offline daily needs with their digital platform usage experiences: "I learned to order from Getir and Banabi during the pandemic. It was very useful for us; we order immediately when we cannot go out" (P1); "I can make my payments from my phone. I learned how to shop during the pandemic, and it made our lives easier" (P4). Other sub-themes encountered under the positive theme were 'self-actualization,' coded 7 times, and 'access to alternative views,' coded 6 times. Participants stated that they could improve themselves in their offline lives by making use of digital platforms and that they could access alternative views that they had not encountered in their offline lives or traditional media. For example, P3 said, "I benefited from art activities. My general culture increased. My vocabulary of knowledge expanded. At least you learn about different kinds of food and see historical and touristic places." P2 explained that he was able to access alternative views and that he no longer believes everything he sees on television: "Especially you see what the public wants and does not want. In street interviews, for example, rich and poor, young and old, all talk. I see different things than on TV. I see what other people think."

Conversely, the participants also indicated that their digital media experiences had negative reflections on their daily lives. The most prominent among these was the sub-theme of 'a new addiction,' which was coded eight times. Participants mentioned that the use of digital platforms can become an addiction and the time they spend in the online world negatively affects their offline lives. For example, P2 reported: It's addictive in a negative way. When I have nothing to do, I immediately pick up my phone and check what's going on. I also get bored when I see the same things done by malicious people all the time. This sub-theme is followed by the sub-theme of the 'inability to escape from unwanted content,' which was coded six times. Participants mentioned that they are frequently exposed to unwanted content, especially on social media platforms, and this negatively affects their psychological wellbeing. For example, P9 stated, "I also encounter a lot of bad news, images, and messages. These inevitably

bother people; you get upset." The last negative sub-theme was 'reducing the need to leave the house,' which was coded once. The fact that digital platforms meet many daily life needs led to a decrease in the need to leave the house: "With the use of social media, I think people over a certain age have less need to leave the house" (P16).

Discussion and conclusion

Within the framework of this research, which aims to reveal the meanings that elderly individuals attribute to their digital platform usage experiences, the focus is on how the elderly perceive and experience the phenomenon in question. On the one hand, the elderly have more positive interpretations of digital platforms; they see digital platforms as informative and communication tools. On the other hand, they also perceive digital platforms as dangerous and requiring help when used. The user's trust in a digital platform is important in terms of accepting and adopting that platform (Mou et al., 2017; Pavlou, 2003) and as a variable that reduces risk and social uncertainty for relatively inexperienced users (Gefen, 2000; Jarvenpaa et al., 2000). In this framework, the participants tend to communicate only with users they know. In addition, to protect their privacy, they tend not to use certain digital platforms that they think are unreliable, thus reducing the potential risks they may encounter. The participants do not prefer to be on platforms that they have difficulty using, do not learn on, or do not trust (Hawthorn, 2007) and show risk-averse behavior by minimizing their digital performance. When they seek the help of their environment, they tend to optimize their behavior when using digital platforms (Vaportzis et al., 2017).

Older people, however, have more positive experiences with digital platforms. One of these positive experiences is receiving news from the environment or maintaining relationships. In addition, positive experiences such as communicating about the content and relieving loneliness stand out. In this context, the findings of this study are consistent with other research findings (Artan & Urhan, 2019; McMellon & Schiffman, 2002; Sum et al., 2008; Thomas, 2010; Xie et al., 2020; Fumagalli et al., 2021; Kalınkara & Sarı, 2019; Küçük & Koçak, 2019; Mason et al., 2012; Pettigrew & Roberts, 2008). Therefore, it is possible to say that positive elements also find a response within the subjective worlds of older users. In addition, considering that elderly users' positive experiences of technology are decisive in their acceptance of that technology (Mitzner et al., 2010; Van Dijk, 2006), it would not be wrong to state that the interpretations of the positive experiences conveyed play an important role in the acceptance process.

However, negative experiences were also encountered. One of the most prominent negative experiences is the criticism they face, especially in their close circles. This situation causes the elderly to restrict their use of digital platforms.

An analysis of the participants' narratives about how the phenomenon reflects on their daily lives shows that the positive sub-themes are similarly predominant, and the most emphasized sub-themes are 'increased/accelerated access to information' and 'constant state of being in contact.' These findings are consistent with the results of various studies (Bayram & Arıcı, 2021; Tyler et al., 2020; Wagner et al., 2010) on the purposes and motivations of elderly users' use of digital platforms, and it is understood that elderly users have similar priorities in their interpretations. When interpreted by considering other sub-themes, it can be said that the elderly think they can improve themselves through the social relationships they establish in the digital environment and the various content they encounter. They also believe that they can access alternative views and meet their daily vital needs through the functional quality of digital platforms. In addition, the elderly's emphasis on relieving their loneliness and providing them with the joy of living while conveying their experiences of the phenomenon makes visible the mediating role of the digital environment in the daily lives of the elderly. However, it was also observed that the elderly think that the phenomenon has negative reflections on their lives. Some participants are of the opinion that they have become addicted because they use digital tools too much. They also complain that they cannot escape from encountering content that upsets them. In this context, it can be stated that the elderly are unable to manage their digital platform experiences according to their own preferences. They also believe that their intensive use of these platforms reduced their need to leave the house. This finding is consistent with Hill et al.'s (2015) argument that digital platform integration increases physical loneliness in older users.

Furthermore, as Flandorfer (2012) reminds us, the socio-demographic background, education, and technology experience of future older adults will be different. Today's older users are in the process of acquiring deeper technological knowledge and will continue to learn how to use technological tools throughout their lives. Therefore, as underlined by Arun et al. (2022), it is important to trace the mobility of the elderly in digital environments in the development and implementation of inclusive social policies. From this point of view, considering the advancing technologies and digital communication processes, it would be appropriate to emphasize the necessity of research diversity that focuses on the experiences of the elderly in these processes.

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Appendix 1: Code Matrix Table Showing the Distribution of Participant Statements

Kod Sistemi	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20	P21	P22
Making Sense of Digital Platforms																						
Negative																						
Bad influence on young people					■		■															
Time passer		■							■									■			■	
Dangerous	■			■		■	■						■				■					■
Need assistance in its use	■		■		■			■				■				■						
Positive																						
Entertaining	■				■				■		■		■					■				
Informative	■					■						■		■				■		■		■
Communication tool	■		■	■		■	■		■			■	■			■		■				■
Making life easier		■	■	■	■		■					■		■		■		■				■
Friend finder			■	■																		
Catching the spotlight		■			■											■					■	
Time waster	■					■		■														
Platform Experience																						
Negative																						
Missing life							■	■														
Discomfort from over use						■																
Criticism		■							■			■			■						■	
Positive																						
Making new friends			■																			
Receiving news from the environment/Mai		■		■		■					■				■		■					
Alleviating loneliness		■	■			■		■				■									■	
Satisfying curiosity		■																				
Keeping up with the times					■	■						■		■								
Joy of life/Engagement with life		■						■	■													
Communications about content	■		■		■		■								■	■						
Getting ideas/Suggestions												■			■							
Reflection on Daily Life Practices																						
Negative																						
A new addiction	■				■						■											
Inability to escape unwanted content					■			■														
Reducing the need to leave the house																■						
Positive																						
Increase/Accelerated access to informatio	■				■		■		■				■			■		■		■		■
Acess to alternative views		■												■		■			■		■	
Ease in meeting daily needs			■	■	■							■		■			■			■		
Self-actualization								■					■			■				■		
Constant state of being in contact	■		■			■					■				■			■				■
Spending quality time	■	■			■		■				■					■						

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P R E S S

A study on Kahramanmaraş Earthquake survivors : "Social media platforms were more effectively used than the traditional media"

Kahramanmaraş depremzedeleri üzerine yapılan bir araştırma: "Sosyal medya platformları geleneksel medyaya göre daha etkin kullanıldı"

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Abstract

Media professionals who broadcast in extraordinary situations because of commercial concerns struggle to provide every piece of information to audiences. Reflecting the dramatic dimension of a disaster, on the one hand, and considering the humanitarian situation of disaster victims, on the other hand, appears to be an area where balance must be established. Focusing on earthquake victims affected by the earthquake centred in Kahramanmaraş on February 6th, 2023, this study aims to reveal the earthquake victims' practises of using communication tools in the process and their opinions on the news created about the earthquake. The results of the present study are important in terms of creating a path for earthquake journalism and literacy for experts in the journalism profession and the earthquake news audience. A quantitative research method was used in the study, and a survey was conducted with 472 participants. The important findings of this study are that there are problems with Global System for Mobile Communications (GSM) operators, that social media platforms are more effective than traditional media for following earthquake-related information and voicing problems, the necessity of an effective fight against disinformation on social media, the lack of helpless images of earthquake victims not being shown in broadcasts, and earthquake-related data being announced every hour.

Keywords: Disaster journalism, social media, Kahramanmaraş earthquake, crisis communication, media

Öz

Tecimsel kaygılar nedeniyle olağanüstü durumlarda yayın yapan medya çalışanları izleyicilere her bir enformasyonu sunmaya çabalamaktadırlar. Bir tarafta yaşanan afetin dramatik boyutunu yansıtmak, diğer tarafta afetzedelerin insani durumlarını göz önünde bulundurmak denge kurulması gereken bir alan olarak belirmektedir. 6 Şubat 2023 Kahramanmaraş merkezli depremin etkilediği

depremzedelere odaklanan çalışma depremzedelerin süreç içerisinde iletişim araçlarını kullanma pratiklerini ve depremle ilgili oluşturulan haberlere yönelik görüşlerini ortaya koymayı amaçlamaktadır. Bu bağlamda habercilik mesleğinin uzmanlarına ve deprem haberlerinin izleyicilerine bir izlek oluşturması açısından önem arz etmektedir. Nicel araştırma yönteminin kullanıldığı çalışma kapsamında 472 kişiye anket uygulaması gerçekleştirilmiştir. Çalışmanın önemli bulguları arasında GSM operatörleri ile ilgili olarak sorunların yaşandığı, depremle ilgili bilgilerin takip edilmesi ve sorunların dile getirilmesi açısından sosyal medya platformlarının geleneksel medyadan daha etkili olduğu, sosyal medyadaki dezenformasyonla etkin mücadele yapılmasının gerekliliği, depremzedelerin çaresiz görüntülerinin yayınlarda gösterilmemesi ve depremle ilgili verilerin saatte bir açıklanması gerektiği ön plana çıkmaktadır.

Anahtar kelimeler: Afet haberciliği, deprem haberciliği, Kahramanmaraş depremi, kriz iletişimi, medya

Introduction

Throughout human history, natural disasters such as earthquakes, tsunamis, floods, and landslides have occurred because of geographical characteristics and associated risks, resulting in loss of life. Although agricultural societies experienced comparatively fewer casualties due to sparser population settlements, the advent of urbanisation during the industrial era led to a concentration of populations in certain regions, consequently increasing the toll of natural disaster casualties. The impact of urbanisation, particularly when coupled with unplanned development that disregards geographical risks, has significantly intensified this situation. Moreover, urbanisation and industrialisation have not only contributed to the occurrence of natural disasters but have also generated man-made disasters. As disasters continue to exert growing influence and their societal impacts become more pronounced, humans have sought means to mitigate their effects. This effort encompasses various strategies implemented before, during, and after disasters.

Reaching information about disasters and transmitting the information to future generations are important strategies. In this context, the media has played a crucial role as a tool of information in every period of history and in every society (Yurdigül & Erdoğan Çakar, 2019, p. 275). Among these strategies, the media emerged as a potent tool with significant impact and influence across all stages of disaster management. The media bear crucial responsibilities, including raising public awareness and facilitating precautionary measures before disasters, coordinating search and rescue operations during crises, fostering public consensus, and directing attention towards alleviating post-disaster adversities.

As integral components of the risk and disaster communication ecosystem, news agencies and journalists play central roles in information dissemination, message transmission and public engagement during disaster recovery processes. However, they also possess the capacity to distort disaster events, create misunderstandings, or exacerbate negative consequences by withholding essential warnings under the guise of preventing public panic (Antunes et al., 2022, p. 522). Therefore, media entities should prioritise disaster preparedness in terms of both technological infrastructure and personnel training.

Türkiye, due to its geographical location, frequently faces the dual threat of natural and man-made disasters. The country's susceptibility to earthquakes along fault lines, forest fires intensified by climate change, floods, landslides, and droughts underscores the urgent need for comprehensive disaster preparedness measures. The absence of adequate preparations amplifies the potential devastating consequences of such disasters. Moreover, as the scope of destruction caused by natural disasters widens, their socioeconomic repercussions extend to encompass broader segments of society.

On February 6th, 2023, Kahramanmaraş and its 11 neighbouring provinces bore the brunt of two powerful earthquakes measuring 7.8 and 7.5 magnitudes, resulting in the loss of 53.537 lives and rendering thousands of buildings uninhabitable (NTV, 2024). The earthquake's impact reverberated across a vast geographical expanse, posing significant challenges to search and rescue efforts, aid distribution, and logistical operations due to disruptions in communication and coordination, particularly during the initial hours following the disaster. The widespread devastation wrought by the earthquake not only profoundly affected the immediate region but also reverberated throughout Türkiye, leaving indelible sociological and economic imprints.

It can be asserted that the Turkish media, while not fully meeting its responsibilities in preparing society for the impending disaster and catalysing public discourse to draw attention to this matter before the earthquake, demonstrated requisite sensitivity to the issue following the communication disruptions in the immediate aftermath of the event. Communication and coordination are pivotal elements necessary for mitigating the immediate impact of postdisaster destruction. Disruptions to communication infrastructure, potentially exacerbated by the intensified, can compound challenges faced by people who have experienced disaster and their families in accessing information and communicating effectively. Consequently, individuals often resort to both traditional media outlets and social media platforms to obtain information. As evidenced by the February 6th earthquakes, these channels, particularly social media platforms, played a crucial role in facilitating society's access to information, organising relief efforts, and fostering solidarity in the wake of the disaster.

This study evaluates earthquake-related news from the perspective of individuals affected by the February 6th, 2023 earthquake. Academic inquiries into the relationship between disasters and media commonly explore topics such as disaster media coverage, disaster narrative framing, and discourse analysis. For instance, Koç (2006) conducted

a discourse analysis of disaster-related news coverage in the Turkish press from 1923 to 2000. Similarly, Bolat (2023) scrutinised language usage and media self-regulation in coverage of the Kahramanmaraş earthquake, revealing instances of news presentation devoid of ethical considerations and self-regulatory measures. Kütükoğlu (2021) examined newspaper coverage of the Kahramanmaraş earthquake, while Yalçın (2023) delved into the relationship between earthquake news and broader newspaper discourse, highlighting the influence of biassed journalistic approaches. Moreover, scholars such as Yılmaz (2019), Budak (2023), and Antunes et al. (2022) have explored disaster news through the lens of social responsibility, contending that such coverage often sensationalises the societal and economic ramifications of destruction rather than focusing on causes, prevention, or raising awareness about disaster preparedness. In general, existing studies on the interplay between disasters and media predominantly analyse the media treatment of the subject matter. By examining media usage and earthquake-related news consumption among disaster-affected individuals, this study offers a distinct perspective that adds insights to the existing literature.

Disaster and disaster communication

Owing to its geographical characteristics and location, Türkiye faces significant disaster risks, which necessitate comprehensive preparedness measures. Consequently, the establishment of the Disaster and Emergency Management Presidency (DEMP) was imperative to undertake necessary actions for disaster realisation, emergency response, and civil defence services. DEMP's mandate includes ensuring preparedness against potential disasters, coordinating institutional efforts, and overseeing improvement initiatives in anticipation of any disaster or emergency situation. DEMP defines a disaster as "a natural, technological, or human-induced event that causes physical, economic, and social losses for the whole or certain segments of society, disrupts normal life and human activities, and overwhelms the coping capacity of the affected community" (DEMP, 2023). Disasters inflict disruption on affected communities, which surpasses their ability to manage solely with internal resources. The United Nations International Strategy for Disaster Reduction (UNISDR) emphasises that disasters can have human, material, economic, and environmental impacts (Le Roux & Van Niekerk, 2020, p. 129). The characterisation of a disaster is contingent on the magnitude of the material and moral losses incurred by society. To mitigate the repercussions of such losses resulting from disasters, effective preparedness measures must be instituted before and during these events. Establishing an efficient disaster communication network is essential for achieving this objective.

Disaster communication should primarily be executed effectively before the occurrence of a disaster, facilitating societal readiness for foreseeable risks, and enabling proactive measures against preventable hazards. As asserted by Houston et al. (2019, p. 596), disaster communication constitutes a critical component of disaster mitigation, preparedness, response, and postdisaster recovery efforts. The dissemination of disaster information within a community significantly influences its response to a disaster, emphasising the pivotal role of effective communication in saving lives (Sreedharan et al., 2019, p. 33). Communication is of paramount importance during disasters, where the demand for effective communication escalates markedly. As exemplified by earthquakes centred in Kahramanmaraş, disasters can impair communication infrastructure, engendering an environment of misinformation and confusion. The resulting inability of people who have experienced disaster to communicate with relatives or authorities fosters a sense of helplessness, while the breakdown of inter-institutional communication adversely impacts disaster recovery efforts. Therefore, in disaster preparedness initiatives, the establishment of a robust communication network with resilient infrastructure and alternative channels is imperative, along with comprehensive training for communication teams.

Disaster communication assumes two distinct forms: (i) the dissemination of disaster information to the public by governmental bodies, emergency management organisations, and disaster responders, typically through traditional and social media channels; and (ii) the creation and dissemination of disaster-related information by journalists and affected individuals, primarily through word-of-mouth and social media platforms (Fraustino, Brooke, & Yan, 2012, p. 6). Hence, to mitigate the risk of disinformation and the ensuing chaos that may arise before, during, and after a disaster, the communication network established by official institutions must ensure seamless information flow without any gaps.

Dufty categorises disaster communication into two distinct types based on communication duration: "Acute Communication" and "Long-Term Communication." Acute communication occurs when urgent information dissemination is imperative during the postdisaster search and rescue phase. Conversely, Long-Term Communication encompasses pre- and postdisaster efforts, including disaster risk reduction and recovery efforts, spanning an extended timeframe. Throughout these processes, it is imperative for all relevant institutions to establish coordinated and complementary communication systems. Within this framework, the media assumes a central role in facilitating public communication before, during and after disasters (Tarakçı, 2023, p. 1820).

The media bears a strategic imperative in disaster communication, which necessitates the provision of timely and accurate information to the public during the various phases of disaster management, including preparedness, mitigation, response and recovery. During disasters, the media serves as a crucial conduit for public communication, utilising a combination of traditional media channels and modern communication technologies, including social media platforms, to disseminate real-time information. In essence, the media is instrumental in updating information, raising public awareness regarding disaster conditions, managing aid distribution, fostering community engagement and volunteerism, fundraising initiatives, and monitoring and reporting on all pertinent developments, including disaster situation reports (Widyastuti, 2021, p. 101). Thus, the media assumes a pivotal role in disaster communication and must be adequately prepared for disasters and disaster reporting, mindful of their inherent responsibilities in this domain.

Disaster journalism

Disaster journalism encompasses the coverage of pre-disaster, during-disaster, and post-disaster recovery processes, constituting a comprehensive journalistic endeavour. However, it appears that disaster journalism predominantly focuses on search and rescue activities during and immediately after disasters, both due to prevailing practises and the resulting public perception. As highlighted by Koç Akgül (2017, p. 30), media attention peaks during extraordinary situations, particularly when reporting on casualty figures, displaying images of disaster aftermath, and portraying affected individuals in dramatic or distressing circumstances. Commercial media outlets, driven by profit motives, may at times prioritise sensational imagery over ethical considerations, potentially infringing upon personal rights. Coverage of the post-disaster recovery phase typically gains prominence in the midst of dramatic developments. Conversely, the pre-disaster period, crucial for highlighting disaster risks and fostering public awareness, often receives attention only after a significant disaster event. This tendency towards a journalistic approach that downplays discourse on disaster preparedness, social issues, vulnerability, and community resilience, in favour of focusing solely on relief efforts, contributes to the normalisation of disasters and fosters a gap in the public perception of risk (Antunes et al., 2022, p. 521). Consequently, the media deviates from its inherent responsibilities in the realm of disaster journalism. According to Houston et al. (2019, p. 592), disaster journalism encompasses the gathering and presentation of news and information concerning natural and man-made events that have occurred,

are ongoing, or have the potential to occur. Hence, disaster journalism operates within three distinct phases: pre-disaster activities, search and rescue activities during and immediately after the disaster, and post-disaster recovery processes. While facilitating societal preparedness for disasters, the media must also undertake measures to enhance its own capacity for disaster reporting, such as cultivating specialised expertise and delineating journalistic principles.

Disaster journalism is tasked with advancing public interest and acknowledging the vulnerabilities and risks inherent in society. It should deliver reports imbued with a forward-thinking, anticipatory message aimed at altering reality to forestall or mitigate disaster effects, with the goal of acquainting the public with risks and their principal natural and anthropogenic determinants (Antunes et al., 2022, p. 534). The initial phase of disaster journalism involves disseminating information regarding disaster-related risks to society and producing content designed to pique public interest.

Media coverage of past disasters serves as a pivotal tool for understanding present risks and facilitating disaster communication. Lessons learned from previous disasters contribute to enhanced risk awareness and communication strategies. The media serves as a significant repository for historical disaster and risk research paradigms and functions as a repository of collective memory for disaster events (Antunes et al., 2022, p. 522). Moreover, it facilitates the aggregation and dissemination of experiences, knowledge, skills, and technologies embraced by communities residing in disaster-prone regions, thereby bolstering communities' resilience and capacity to mitigate disaster-induced losses (Sreedharan, Thorsen, & Sharma, 2019, p. 34). Furthermore, the media plays a complementary role in augmenting public awareness-raising endeavours aimed at reducing disaster risks. In this regard, educational initiatives and awareness campaigns on potential disasters and appropriate response protocols are very important. Through collaboration with institutions and organisations, the media should cultivate public opinion conducive to government mobilisation towards risk reduction and foster social consciousness surrounding disaster preparedness.

In moments of panic and uncertainty during and immediately following a disaster, individuals' primary concern is typically to determine the extent and persistence of the event. The different stages of disaster response necessitate different types of information for both individuals and organisations to mitigate the disaster's effects. Disruptions such as chaos and damage to communication infrastructures, common in disaster

scenarios, may impede access to and dissemination of crucial information. Consequently, the media assumes a critical role in information dissemination and access.

Journalist Michael Marcotte delineates four pivotal roles that the media fulfils during disasters: (i) announcing the location and impact of the disaster and elucidating its causes and mechanisms, (ii) establishing a communication framework to relay information provided by disaster victims and distribute essential information to them, (iii) expeditiously disseminating reliable information to create an early warning system, and (iv) providing a platform for citizens to unite and extend financial and moral support to one another (Yalçın, 2023, pp. 189-190). Furthermore, the media serves a crucial function in combating post-disaster misinformation, particularly on social media platforms. While social media significantly contributes to the formation of public spaces and aids in search, rescue, and the search efforts for people who have experienced disaster, it also engenders challenges. The abundance of unverified information and well-intentioned or provocative misinformation shared on these platforms can intensify postdisaster turmoil, underscoring the media's responsibility in navigating this landscape.

Another aspect of disaster journalism that is often overlooked compared with the pre-disaster phase is the post-disaster recovery process. Nugent et al. (2017) elucidated in their research that while there is a substantial surge in news coverage during the initial days of a disaster, there is a notable decline in coverage during the post-disaster reconstruction period compared to the first three days following the event (p. 3752). During the post-disaster reconstruction phase, the media concentrates on elucidating the disaster aftermath, facilitating cooperation between governmental and civil initiatives to alleviate the effects of destruction, and advocating for the needs and demands of those in disaster-affected areas. In this context, the media should prioritise addressing the challenges faced by vulnerable and marginalised communities during disasters, shed light on the allocation of aid funds by governmental authorities, and ensure transparent and equitable disaster management practises (Sreedharan, Thorsen, & Sharma, 2019, p. 34). Disaster journalism must be adequately prepared for disasters in terms of technical infrastructure, personnel training, and adherence to journalistic ethics, as well as the content and language employed in news reporting. Journalists should anticipate potential challenges that may arise during disasters, such as the absence of specialised teams and equipment, potential damage to communication infrastructure, and the impact of the disaster on journalists themselves or their families within their communication networks. These internal issues necessitate journalists' preparedness for potential disasters.

As a news genre, disaster journalism encompasses a broad spectrum of events, including natural disasters, such as floods, earthquakes, landslides, and tsunamis, and man-made disasters, such as environmental pollution, nuclear, biological, and industrial accidents. Within this framework, earthquake journalism emerges as a specific subset of disaster journalism, particularly relevant in countries like Türkiye situated in earthquake-prone regions. Defined by Maden (2023, p. 408), "earthquake journalism" encompasses fundamental information about earthquakes, expertise on seismic events, and adeptness in engaging with earthquake victims.

Structural journalism, as employed within earthquake journalism, seeks to enhance the role of journalism in resolving social conflicts, addressing societal issues, and fostering social progress. This approach diverges from traditional conflict-oriented journalism, adopting a constructive activist perspective (Li, Wu, & Chao, 2022, p. 2). By applying this theoretical framework to earthquake reporting, individuals can gain a more accurate understanding of seismic events, address their connection to such events, cope with resulting trauma, and contemplate future perspectives. However, in the Turkish context, achieving this constructive perspective in earthquake reporting remains elusive.

This issue was highlighted in Selin Maden's interview with Süleyman İrvan about earthquake reporting. Irvan stated that (i) Türkiye lacks a journalistic approach that can detect earthquake precursors, proactively shape public opinion, and advocate for preemptive measures, (ii) the media focuses on post-earthquake intervention rather than preemptive warning, (iii) earthquake reporters must have a solid understanding of earthquake-related technical concepts and be careful when using them. In this context, earthquake reporting systems should adopt a proactive warning approach that addresses fault lines and expert analyses of structures located on these lines (Maden, 2023).

Aim and methodology

The earthquakes that struck Türkiye on February 6, 2023, with its epicentre located in Kahramanmaraş, had a profound impact on 11 provinces. This study adopts a quantitative research method incorporating a survey administered to people who experienced the earthquake across the 11 affected provinces. The study universe encompasses the provinces of Adana, Adıyaman, Diyarbakır, Elazığ, Gaziantep, Hatay, Kahramanmaraş,

Kilis, Malatya, Osmaniye, and Şanlıurfa. According to data from the Turkish Statistical Institute (TSI), the combined population of these provinces was 14,013,196 as of 2022 (TSI, 2023). From this universe, the sample should be at least 385 people in total with 95 percent reliability level of 95% and a margin of error (SurveyMonkey, 2024). In this direction, a total of 472 people were reached by a simple random sampling method, and 22 open-ended, closed-ended, and Likert-type questions were asked to the participants. In this study, which aims to evaluate earthquake-related news created from the perspective of earthquake survivors and to reveal their expectations from such news, answers to the following questions were sought:

1. What are the communication and practices of people who have experienced earthquakes and what challenges do they encounter when using these tools?

2. How do people who have experienced earthquakes perceive the selection of topics, guests, and news presentation styles in earthquake-related news coverage?

3. What elements are considered important in earthquake-related news coverage by survivors?

The questionnaire employed in the study comprised three sections: the first section focused on the demographic characteristics of the earthquake survivors, the second section explored their communication and media tool usage practices, and the third section solicited their opinions on the production, presentation, and content characteristics of earthquake-related news coverage. Data analysis was conducted using frequency and descriptive analysis methods.

Ethical approval for this study was obtained from the Ethics Committee of Atatürk University on 04.09.2023, under approval number E.88656144-000-2300269518 and meeting number 16/219.

Findings

The demographic characteristics of the participants were 472 individuals, with 52% being male and 48% being female. Examination of the age distribution indicates that 15% of participants fall within the 20- and below age group, 33% in the 21-30 age range, 28% in the 31-40 age bracket, 16% in the 41-50 age category, and 8% aged 51

and above. These observations suggest that young participants are predominant. Regarding marital status, 45% of participants were single, 1% were divorced, 52% were married, and 2% were widowed, indicating that the majority of married individuals were among the participants. In terms of educational attainment, 7% had completed primary education, 25% had secondary education, 13% held associate degrees, 36% had undergraduate degrees, and 19% had graduate-level education, indicating a predominantly high level of education. Among the participants who experienced the earthquake across the 11 provinces, 16% were from Kahramanmaraş, 15% from Adıyaman, 13% from Malatya, 11% from Hatay, 10% from Gaziantep, 8% from Osmaniye, 7% from Elazığ and Şanlıurfa, 5% from Diyarbakır, 4% from Adana, and Kilis. This distribution highlights Kahramanmaraş as the province with the highest representation among participants, reflecting its status as the epicentre of the 2011–2012 earthquake.

Use of media tools and expectations from these tools

Some elements stand out regarding the effectiveness of GSM operators' post-earthquake activities. For example, 56% of the participants evaluated the activities of GSM operators as completely unsuccessful. 28% of the participants found GSM operators successful. Regarding the DEMP emergency mobile application, 37% of participants affirmed that the application was available, 54% did not, and 9% were unaware of its existence. This indicates that most respondents did not use the DEMP application. In terms of social media platforms used to communicate with relatives under rubble, 62% reported using *WhatsApp*, 20% faced communication challenges, 6% had no relatives under rubble, and 5%, 4%, and 3% used *Twitter*, *Instagram*, and *Facebook*, respectively. Concerning the provision of free phone and internet service for earthquake victims, 77% strongly agreed, 12% agreed, 3% were undecided, and 8% disagreed or strongly disagreed, demonstrating a consensus favouring this provision. Regarding the effectiveness of different communication tools for voicing post-earthquake problems, 39% strongly agreed, 25% agreed that social media was effective, and only 22% strongly agreed for television. The majority of respondents believed that social media was more effective than television. Regarding restrictions on social media after the earthquake, 45% disagreed or strongly disagreed, indicating a stance against such restrictions. When asked about measures to counter disinformation after the earthquake, 95% supported action, with 70% favouring criminal sanctions. Regarding news sources, 57% followed news primarily on social media, 25% on television, and 18% on newspapers/internet newspapers. Additionally, 48% perceived earthquake news on social media as more

realistic than on television, indicating a preference for social media over traditional media for news consumption. These findings underscore the increasing importance of social media as an alternative to traditional media in terms of news dissemination and perception.

Opinions on earthquake news

It was observed that 23% of the participants strongly agree, 16% agree, 25% are undecided, 15% disagree, and 21% strongly disagree with the statement 'Live broadcasting of search and rescue operations disturbs me.' These findings indicate that most participants did not find the live broadcasting of search and rescue operations disturbing. Regarding the statement 'I do not find it right to show the desperate situation of earthquake victims in the broadcasts,' 37% of the participants strongly agreed, 19% agreed, 17% were undecided, 9% disagreed, and 18% strongly disagreed. Concerning the statement 'Broadcasting images of looting and looters disturbs me,' 33% of the participants strongly agreed, 11% agreed, 22% were undecided, 8% disagreed, and 26% strongly disagreed. This finding suggests that the majority of participants were uncomfortable with the broadcasting of images of looting and looters in the news. Regarding the statement 'After the earthquake, the statements made by earthquake experts in broadcasts attract my attention,' 41% of the participants strongly agreed, 28% agreed, 16% were undecided, 8% disagreed, and 7% strongly disagreed. This finding shows that most participants paid attention to the statements of earthquake experts after the earthquake. When asked at which time intervals the number of dead and injured should be announced, 3% of the participants answered that it should not be announced, 48% answered every hour, 32% answered every 2-6 hours, 12% answered every 7-12 hours, and 5% answered every 24 hours. This finding reveals that a majority of participants believe it is appropriate to announce the number of dead and wounded every hour.

Discussion and conclusion

Urbanisation processes that neglect potential disaster risks often overlook fundamental disaster mitigation aspects. According to the existing literature, disaster mitigation generally comprises three key phases: pre-disaster, during disaster, and post-disaster. Media is recognised as a pivotal tool that should be integrated into all phases, wielding significant influence. Media outlets, which play a crucial role in preparing society for

disasters, must also prepare themselves for such events to effectively contribute to social recovery efforts during and after disasters.

Effective disaster communication is essential at every stage of disaster response and requires meticulous organisation. Disaster communication plans that involve collaboration among official authorities, telecommunication companies, and media entities are vital for countering misinformation and alleviating confusion that may arise during these phases. Access to accurate information is a primary requirement for both disaster victims and their families during and after a disaster. Media outlets, operating with a sense of responsibility, must prioritise disaster journalism, and even specialise in various types of journalism tailored to specific disasters based on geographical risks. In this context, earthquake journalism has emerged as a specialisation area that demands attention. However, it is evident that disaster or earthquake journalism in Türkiye predominantly focuses on search and rescue operations during disasters, often neglecting pre-disaster preparedness and post-disaster recovery efforts, except during specific periods. Consequently, ethical and technical dilemmas arise concerning the coverage of news reports during these phases.

Türkiye faces significant risks related to both natural and human disasters. The recent earthquakes centred in Kahramanmaraş on February 6th, 2023, underscored the extent of these risks and highlighted the country's lack of preparedness. It appears that the Turkish media, like other institutions, has not fully fulfilled its role as a driving force in disaster preparedness. Criticisms directed at the media during such events, along with responses from earthquake survivors, corroborate this observation. Initially, the Turkish media showed significant interest in the earthquake, contributing to social cohesion and support for the affected region. However, interest waned over time, highlighting the media's tendency to align with societal interest and emotional intensity.

One of the immediate needs following an earthquake is effective communication with their immediate surroundings and relatives, and accessing the necessary information. The first research question of the study focused on the people who have experienced earthquake usage practises of communication tools and their experiences with these tools during the process. Considering the need for access to information and communication after disasters, it seems that GSM operators cannot properly prepare for such disasters. In addition, people who have experienced earthquakes have intensively used *WhatsApp* and other social media applications to communicate with each other. The fact that such

applications are used in disaster communication demonstrates that such applications should be used to create a disaster action plan, similar to traditional media. According to data obtained from the field, earthquake victims appear to perform such actions through social media platforms rather than traditional media in terms of accessing information or voicing their problems. The majority of the participants preferred social media and found it effective in following news about the earthquake and voicing the problems experienced after the earthquake. The fact that television news is found to be less realistic than social media news in terms of reality also reveals the trust problem experienced by the participants with traditional media tools; accordingly, traditional media tools must place the level of interaction with the audience on a more realistic level.

After the earthquake, intense disinformation was observed on social media platforms, especially where control became difficult. For this reason, claims that access to these platforms is restricted from time to time have also come to the fore. Although the participants did not find the alleged restrictions on social media, which they used extensively after the earthquake, to be correct, they stated that a more effective fight against disinformation in these media should be pursued and, if necessary, criminal sanctions should be imposed. Based on this, relevant institutions must make their presence felt strongly on social media in terms of combating disinformation, which is one of the most important pillars of post-disaster communication. Therefore, the importance of not allowing any information gaps and ensuring a continuous flow of accurate information rather than restrictions comes to the fore. In addition, the fact that the DEMP Emergency mobile application, which is a communication application developed by DEMP for use in such difficult times, has not been used by the majority of earthquake survivors makes it necessary to take action as soon as possible to increase the awareness of such applications, if necessary, through advertising or public spots and to establish a central communication network. It is important to develop ways to benefit from this application.

The second and third research questions of the study aimed to reveal how people who have experienced earthquake responded to news about an earthquake. In particular, broadcasting images of post-earthquake rescue efforts and the resulting destruction in the news may be the subject of ethical debate. However, the perspectives of people who have experienced earthquake, which are central to these debates, are sometimes overshadowed. On the other hand, in the data obtained from the field, the meaningful majority of the participants stated that they were disturbed by the presentation of

helpless images of earthquake victims, dramas at the scene, screams/help voices, and images of looting. While the majority of earthquake survivors were not disturbed by the live broadcasts made from the scene, they were reluctant to have these broadcasts made directly in front of the debris. They stated that the earthquake experts' speeches on the screens attracted their attention very much. Undoubtedly, the media must fulfill their public responsibilities, such as drawing public attention to the disaster area, ensuring increased aid, and mobilising public authorities by revealing deficiencies.

Türkiye's earthquake situation requires media workers and audiences to be conscious of earthquake journalism and literacy. In this respect, raising awareness about earthquake news among journalism professionals and audiences is among the contributions of this study to the field. This study has some limitations. The first approach is to reach earthquake victims directly affected by the earthquake centred in Kahramanmaraş, a sample was created from 11 provinces where the effects of the earthquake were experienced. The second limitation is that there are no previous studies that have evaluated media content by people who have experienced earthquakes in Türkiye. Therefore, this situation made it difficult to create a dataset for the conceptual framework and hypothesis development of the study. The findings of this study will provide data for future research in this area. In this sense, while the study offers a perspective on earthquake-related news from the perspectives of those affected by the earthquake, a comparison with the perspectives of those who were not earthquake victims is among the issues that can be addressed in future studies. It is predicted that the media's perspective on earthquake news will change as a result of the focus group discussions with media professionals.

While the media should fulfil its public responsibilities, including raising awareness and mobilising support, it must do so with empathy and ethical considerations, avoiding sensationalism. Media outlets should specialise not only in disaster coverage but also in preparedness and recovery phases, particularly in earthquake journalism. They should prioritise risk awareness, public vigilance, and disaster communication planning. Ethical standards in earthquake journalism must be upheld, and media organisations practice self-regulation and prioritising public responsibilities.

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P R E S S

The optimal time-lag for media's third-level agenda-setting effect

Medyanın üçüncü aşama gündem belirleme etkisi için en uygun zaman aralığı

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Abstract

Third-level (or network) agenda-setting research investigates the similarity between the links of thought that occur about issues or people in individuals' minds and their links in media content. One of the most important questions in this area of research involves the time that is required for the level of importance of an issue on the media agenda to optimally determine the level of importance of that issue on the public agenda. This study examines eight issues that stand out on the agenda based on data from Yüksel et al. (2022). The research monitored the three most-watched television main news bulletins (*FOX, Show, ATV*), three newspapers with the highest circulation (*Sözcü, Sabah, Hürriyet*), and the three Internet news sites with the highest reach (*ensonhaber.com, mynet.com.tr, milliyet.com.tr*) between April 1-September 30, 2021 and identified the media agenda network connections through content analysis. Also, the study conducted two separate surveys between July 1-15, 2021 and October 1-15, 2021 among a sample of 2.401 households in 12 provinces representing the population of Türkiye to measure the links in public thought. The findings indicate six weeks to mostly be the time required for the highest similarity to media network connections to occur in the public mind on a specific issue.

Keywords: Agenda setting, third-level agenda setting, optimal time-lag, public opinion, media effects

Öz

Üçüncü Aşama (Ağ) Gündem Belirleme araştırmalarında, bireylerin zihnindeki konu ya da kişiler hakkındaki düşünce bağlantılarıyla medya içeriklerindeki bağlantılar arasındaki benzerlik sorgulanmaktadır. Bu araştırma alanındaki önemli sorulardan biri de bir konunun medya gündemindeki önemlilik düzeyinin o konunun kamu gündemindeki önemlilik düzeyini optimum seviyede belirleyebilmesi için gereken sürenin ne olduğudur. Bu çalışmada Yüksel ve

arkadaşlarının (2022) verilerinden hareketle, gündemde öne çıkan sekiz konu ele alınmıştır. Medya gündemi ağ bağlantıları içerik analiziyle saptanmıştır. Bunun için en fazla izlenen üç televizyon ana haber bülteni (*Fox Ana Haber, Show Ana Haber, ATV Ana Haber*), en yüksek tiraja sahip üç gazete (*Sözcü, Sabah, Hürriyet*) ve yüksek erişime sahip üç internet haber sitesi (*ensonhaber.com, mynet.com.tr, milliyet.com.tr*) 1 Nisan-30 Eylül 2021 tarihleri arasında takip edilmiştir. Ayrıca kamu zihnindeki bağlantıların ölçümü için 1-15 Temmuz 2021 tarihleri arasında ve 1-15 Ekim 2021 tarihleri arasında, Türkiye nüfusunu temsil edecek şekilde 12 İl'de 2.401 kişilik hane örnekleminde iki ayrı anket uygulaması gerçekleştirilmiştir. Bulgular bir konuya ilişkin kamu zihninde medya ağ bağlantılarıyla en yüksek benzerliğin oluşması için gereken sürenin çoğunlukla altı hafta olduğuna işaret etmektedir.

Anahtar kelimeler: Gündem belirleme, üçüncü aşama gündem belirleme, optimum zaman aralığı, kamuoyu, medyanın etkileri

Introduction

What is the optimum time-lag for media's effects on people to be seen? In traditional (first-level) agenda-setting research, many studies are found on the optimal time-lag and time frame (i.e., time interval) for media agenda issues to become significant on the public agenda. Although these studies have found different results, a period of a few weeks or months has been expressed as being able to be sufficient to reach the optimum level of effect. However, these studies were unable to identify a definite interval. Third-level agenda-setting research can be considered relatively new, and no published research has occurred regarding this question. The current study aims to examine the time needed to reach the optimal lag for the third-level of agenda-setting effect and focuses on the similarity between the network connections presented in the media and the network connections in the public's mind regarding prominent issues on the agenda in Türkiye.

Third level agenda-setting research, also known as Network Agenda Setting (NAS), examines the similarity between the thought connections in individuals' minds about an issue or person and the connections in media content (McCombs & Valenzuela, 2021, pp. 74–75). NAS seeks to reveal findings about how the media influences people's thinking in relation to the idea that the networked connections established by the media's presentation of a person or issue are transmitted to individuals' minds. These studies are also defined as a model for the media's effects and in the most general sense involve testing the hypothesis that similarities exist between the issue network connections on the media agenda and the issue network connections in the public mind (Vu et al., 2014, p. 670).

The idea of NAS is based on the memory-connected network model, which argues that people tend to make connections between different sub-themes in order to make sense of social reality (Vargo et al., 2014). Accordingly, the news media connect different themes and sub-themes when presenting an issue and ensure that this connection is formed concurrently in the public mind (Guo et al., 2012, p. 58). The media's coverage of an issue is important not only in terms of how news organizations cover a news issue but also how often related issues are mentioned and connected during the same news broadcast. In this context, NAS argues that the media imposes on the public the degree of the importance regarding issues and attributes that are related to each other. For instance, if the media repeatedly mentions a country's foreign policies and domestic economic issues together, viewers may think a connection exists between these two issues. Therefore, they may come to associate economic problems with foreign policy issues in their minds (Vargo et al., 2014, pp. 4–5).

According to Vu et al. (2014, p. 670), NAS has brought about significant changes in the way people have thought about the impacts of the media until today because traditional agenda-setting research assumes that each issue on the agenda is separately transferred to the public agenda and questions the relationship between the degree of importance of the issues on the agenda. While traditional agenda-setting research has focused on the cognitive level of media impact, second-level agenda-setting research has found the media to also be able to convey to the public the qualitative degree of issues or people and the media's impact on public perception of them to also be measurable in terms of the qualitative degree of issues or people. Although this assessment of issue qualification provides clues that the media can also influence how people think, NAS provides much more than this. According to NAS research, concrete evidence exists that the media has an impact on the public mind by transmitting events, issues, or qualities through simultaneous news segments. This suggests that the media not only informs people regarding what to talk about but also on how to think and that the media influences public opinion in this context (McCombs & Valenzuela, 2021).

The concept of traditional agenda-setting in which the media is able to influence people's mental images of the outside world, as described by Walter Lippmann (1922) in his book *Public Opinion* underpins traditional agenda-setting research, has now transformed into the following question that NAS research studies seek to answer: What picture exists in people's minds? (Guo et al., 2012, p. 56).

Major research

NAS studies are worth mentioning to still be new and few in number. Research in this field was initiated in 2011 in the United States of America under the leadership of Guo and McCombs (2011a). Their study conducted a new type of evaluation using data from Kim and McCombs (2002), and their dataset focused on the characteristics and behavior of candidates in the 2002 elections as perceived by newspapers and the general public in Austin, Texas. Guo and McCombs (2011a) identified 10 attributes to describe the characteristics of political candidates: leadership, experience, competition, credibility, morality, caring about people, communication skills, how proud they are of their ancestry and ethnicity, non-political side, and comments about other politicians. To evaluate the media agenda, they conducted a content analysis on *Austin American-Statesman*, Austin's only local newspaper. To measure the public agenda, they interviewed by telephone 417 adults living in Austin. They separately asked each of the four participants the following question: "What would you say about the candidates (including the name of the candidate) to a friend who lives far away from Austin and does not know any of the candidates participating in the election?" Subsequently, the 10 personal characteristics acquired through the content analysis and survey were scrutinized for their correlations. The aim of the analysis they conducted to test the NAS model was to reveal the relationships between news organizations and candidate characteristics in the minds of the public. 10x10 matrices were prepared, and the frequencies were calculated for one issue mentioned in the same article as other issues. According to the analyses, a high correlation was found between the public agenda network and the media agenda network, thus supporting the model.

Guo and McCombs (2011b) second study was conducted similar to the first one. Unlike the first study, they used a different method for obtaining the data set, as well as changing the set's width. Their new study used questionnaires developed using the mind map method. The results of their study once again supported the validity of the agenda-setting network model. The NAS hypothesis should also be noted to have been supported by various studies, such as those conducted by Guo et al. (2012), Vu et al. (2014), Cheng and Chan (2015), Guo et al. (2015), and McCombs and Valenzuela (2021).

The first comprehensive research in Türkiye to examine the NAS hypothesis was Dingil's (2018) doctoral dissertation, which aimed to test the NAS hypothesis using five different health-related issues (i.e., cancer, obesity, diabetes, hypertension, and HIV/

AIDS) at the level of Aydın Province. In order to achieve this, Dingil applied a content analysis to the contents of 13 mainstream newspapers and five local newspapers over a period of six months (October 2017-March 2018) and also conducted a mind-mapping survey of 400 people. The study found significant similarity to be present between the media content and the map of the public mind for all disease categories. According to the study, popular newspapers have more similarities with the public mind map, with the degree of similarity increasing the more directly individuals are affected by the disease. Dingil (p. 7) explained this situation using Lipmann's statement: When the public cannot directly learn what is going on around them, they get their mind maps about issues indirectly from the media.

Dingin (2019) conducted additional research in Türkiye on news about violence against women. Yüksel and Dingin (2020a) conducted research on news about the country's agenda, with Dingin (2020) also conducting research on economic news. These studies revealed confirmation of the NAS hypothesis. Yüksel and Dingin's (2020b) book *Medya, Kamuoyu ve Siyaset Gündeminde Köşe Kapmaca* was published in Turkish and deals with agenda-setting research from past to present.

Yüksel et al. (2022) project study conducted with the support of the Scientific and Technological Research Council of Türkiye (TÜBİTAK) is one comprehensive research study testing the NAS hypothesis in the world and in Türkiye. The study was later published as a book (Yüksel et al., 2023) and analyzed 13 issues (i.e.), Coronavirus Disease 2019 [COVID-19], violence, education, national security, foreign policy, Eastern Mediterranean issue, the Istanbul Convention, the Istanbul canal, the Spinal Muscular Atrophy [SMA] disorder, justice, economy, migrants, and the environmental pollution) that were prominent on the media and the public agenda. The study conducted an analysis over a period of six months from April 1, 2021 to September 30, 2021 of news media and *Twitter* content, along with two nationwide public opinion surveys conducted during two quarterly periods. The results indicated a significant similarity between the issue network connections on the agenda and the network connections related to the same issues in the public mind. The media was also noted to have different effects on different segments of society in terms of age, gender, education, income level, occupation, geographical location, nature of the issues, and orientation needs of the media. Meanwhile, the current study carries out a more detailed analysis on optimal time-lag using the data from Yüksel et al.'s (2022) research project.

Optimal time-lag

Agenda-setting studies have shown in various ways how the level of salience an issue has on the media agenda affects the level of salience that issue has on the public agenda. However, one important question here is how long it takes for this level of salience to move from the media agenda to the public agenda; namely, how long is required to achieve the effect. In other words, assuming that the media effects are cumulative and long-term, a period of time should be taken into account when analyzing the links between media and public agendas. The question of optimal time-lag also relates to how long this period should be. Therefore, one of the most important variables in agenda-setting research and analyzed in this research is the question of the time lag required for the media's agenda to pass to the public agenda.

Agenda-setting research has defined the time question using such concepts as optimal effect span, optimal time interval, expected time order, length of time, time frame, and time-lag (Dearing & Rogers, 1996; İrvan, 2001; Luo et al., 2018; Yüksel & Dingin, 2020a; McCombs & Valenzuela, 2021). In general, these concepts refer to the period for which the highest measured correlation coefficient is found between the media and public agendas.

While traditional agenda-setting research in the literature has examined the optimum impact interval, this is the first time this issue has been addressed in third-level agenda-setting research. However, the findings regarding traditional agenda-setting studies have indicated different time intervals. Stone and McCombs' (1981) research comparing media and public agendas on different data groups regarding how long is required to set an agenda concluded 2-6 months to be required for an issue to move from the media agenda to the public agenda. Shoemaker et al. (1989) addressed the issue of drugs between 1972-1986 and suggested a period of 3-4 months. Winter and Eyal (1981) asserted the strongest connection between the media and public agendas to have been observed during a period of 4-6 weeks when analyzing the front-page content of the *New York Times* on human rights between 1954-1976. For other examples, Wanta and Hu (1994) suggested a period of 1-2 weeks for network news channels, 3-4 weeks for newspapers, and 8 weeks for national news magazines, while McCombs et al. (1995) stated the time required for an issue on the media agenda to influence the public agenda to generally be between 5-7 weeks. However, the nature of the issues affects this situation, and while some established issues can easily enter the public

agenda, new issues require more intensive efforts to enter the public agenda. Severin and Tankard (1994, p. 388) stated that the conclusion of the debates on time-lag shows different issues to require different amounts of time to "generate sufficient noise" to attract public attention.

Luo et al.'s (2018, p. 154) meta-analysis of agenda-setting research conducted from 1972-2015 found that a long-term framework is necessary for media coverage to have the most impact on public opinion. However, researchers are also said to greatly disagree on how to define the optimal effect range. According to Luo et al. (p. 154), empirical studies generally use a range of time periods from a few days to several months; therefore, the agenda-setting effect varies depending on the circumstances of each study. Their meta-analysis found variance in the time-lag to not significantly increase or decrease agenda-setting effects (p. 165). Although the findings revealed in these types of studies generally indicate a period of 4-6 weeks, similar to the study of Winter and Eyal (1981), research findings are found to vary widely, from a few days to a few weeks or even a few months. Meanwhile, the case that "the longer the duration, the better" (Luo et al., 2018, p. 155) should be emphasized to not always hold true, because while long-term media coverage often reinforces the agenda of public opinion, the agenda-setting effect on some issues is also related to chronic accessibility in public opinion. Thus, a temporary rise or fall in media attention may have little effect on public perception.

In summary, one could argue that the nature of the issue, the presence of other competing issues on the agenda, the way an issue is handled, the ups and downs of the agenda, and other factors are able to affect the duration of the issue and the media's agenda-setting power.

Aim and methodology

This research aims to confidently determine the optimum time-lag within the framework of the third level of agenda-setting theory based on the data from Yüksel et al.'s (2022) research project supported by TÜBİTAK. The current study uses the traditional method of content analysis to reveal the network connections regarding issues on the media agenda. For this purpose, the study monitored the data regarding the three most watched television main news bulletins (*FOX*, *Show*, and *ATV*), three newspapers with the highest circulation (*Sözcü*, *Sabah*, and *Hürriyet*), and three Internet news sites with

the highest reach (*ensonhaber.com, mynet.com.tr, and milliyet.com.tr*) for six months between April 1-September 30, 2021. The research project had also tracked *Twitter* agendas but found the effect of NAS to be generally weak. Therefore, the current article does not use *Twitter* agendas with respect to the question of optimal time-lag.

The issues to be followed on the media agenda were selected from the monthly news research findings of *Medya Takip Merkezi* (MTM [Media Monitoring Center]) and from among the prominent issues on the agenda. The study also conducted a public opinion survey through face-to-face interviews with 214 people in Ankara at the beginning of March 2021 to determine the prominent issues on the public agenda. Accordingly, the following issues have been determined: justice, COVID-19, foreign policy, education, economy, immigrants, the Istanbul Convention, the Istanbul canal, violence, and national security. In addition, the research also includes the issues of the Eastern Mediterranean issue and SMA, with the research team anticipating that the amount of news on these issues may change, taking into account how rapidly the agenda changes.

The content analysis evaluates the network connections related to each issue in terms of whether the sub-themes related to an issue appeared together in a news story. The researchers carried out the coding independently, with intercoder agreement being performed using the spreadsheet application Google Sheets. They then extracted the data and applied Cohen's kappa test using the program Statistical Package for the Social Sciences (SPSS) (Nuendorf, 2002, pp. 141–163). Accordingly, the values obtained reveal compliance at the significant and strong levels (0.61 > к > 0.80).

Within the 6-month period during which media content was monitored, the research measured connections in the public mind on a quarterly basis. The survey was conducted twice, once at the end of Phase 1 (April 1- June 30, 2021) between July 1-15, 2021 and again at the end of Phase 2 (July 1-September 30, 2021) between October 1-15, 2021. The surveys were conducted over a sample of 2,401 households in 12 provinces in accordance with the Turkish Nomenclature of Statistical Territorial Units 1 (NUTS1), representing the adult population of Türkiye.

form used in the research November 25, 2020. The study ensured that all participants for both surveys read, agreed to, and signed the voluntary participation form and completed the data collection process.

The survey form used in this third-level agenda-setting research presented the participants with five separate boxes and asked such open-ended questions as 'What comes to your mind when issue X is mentioned? Please write one word or concept in each box below. Then, connect the boxes by drawing a line between at least two boxes you think are related to each other to show the relationship.' The participants were then asked to draw lines representing the relationships between the words they had written in the boxes. This revealed the links between associations about an issue in participant's minds.

The research used the mechanism designed weekly for the news media agenda to evaluate the optimal time-lag at which the issue network connections on the media and public agendas were the most closely related (i.e., the time required for an issue to reach the highest level of similarity on both the media and public agendas). Accordingly, the study evaluated the content analysis data for the news media separately for a period of three months over a total of 13 separate weeks in weekly increments (e.g., Week 1 = 7 days of content analysis data for the week before the start date of the survey); Week 2 = 14 days of content analysis data before the start date of the survey; Week 3 = 21 days of content analysis data before the start date of the survey, and so on). It should be emphasized that the term 'Week 1' does not refer to the first week of the content analysis or the first week of the research. Rather, it denotes the first week prior to the survey being conducted on Phase 1 and Phase 2. Consequently, the effect of the time factor was analyzed by moving backwards from the period when the questionnaire was applied. Therefore, the data for Week 13 involve the content analysis data covering the entire three-month period prior to the survey. The study has evaluated a total of 26 weeks of data in order to compare the data of two 3-month periods (i.e., Phase 1 = April 1-June 30, 2021; Phase 2 = July 1-September 30, 2021).

As in previous NAS studies, the research has compared the media and public opinion datasets using the Quadratic Assignment Procedure (QAP) correlation test. The previous studies accepted similarity as being significant (high) when the QAP correlation was between 70% and 100% ($0.70 < r < 1.00$, $p < 0.05$; Guo & McCombs, 2011a; Guo & McCombs, 2011b; Vargo et al., 2014; Vu et al., 2014; Cheng & Chan, 2015). In this context,

the current study interprets a QAP correlation of $0.00 < r < 0.49$ as no similarity, of $0.50 < r < 0.69$ as low similarity, and of $0.70 < r < 1.00$ as high (significant) similarity.

Findings

Firstly, the research found that no significant similarity could be established between media and public network connections in terms of the NAS hypothesis for the issues of justice ($r = 0.161$), economy ($r = 0.084$), or immigrants ($r = 0.005$) over the total 6-month period that was examined. Although a similarity was found regarding SMA ($r = 0.841$), evaluating its optimal time-lag period was not considered meaningful due to the small number of weekly news articles. In this context, the evaluation for optimal time-lag period was carried out over eight issues that had similar network connections in the media and public agendas, thus finding validity for the NAS hypothesis.

The issue of national security

According to the correlation values obtained with the 13-week regulation regarding the relationship between the network connections in the public mind and the network connections in the news media in the first three-month period (Phase 1) regarding the issue of national security, the highest level of relationship during the period was seen with the media content in Week 6 ($r = 0.858$). In the second trimester (Phase 2), the highest level of similarity was again found with Week 6 of media content ($r = 0.881$). In fact, this level can be said to be the peak over the whole graph, as shown in Figure 1.
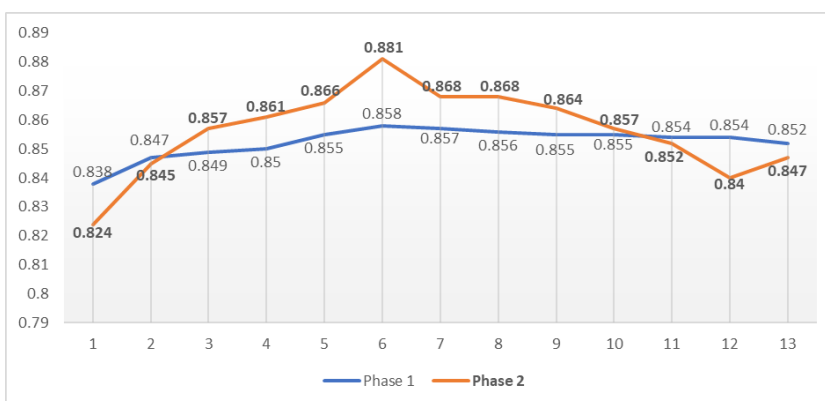
Figure 1. Weekly correlation values on the issue of national security.

As a result, the findings from the analysis conducted during two separate three-month periods clearly reveal the highest level of similarity to have been achieved in Week 6 of media content in both periods.

The issue of foreign policy

Although the findings regarding foreign policy in the first three months (Phase 1) generally indicate a high level of similarity, the highest value was reached in Week 6 (r = 0.83) and Week 7 (r = 0.83).
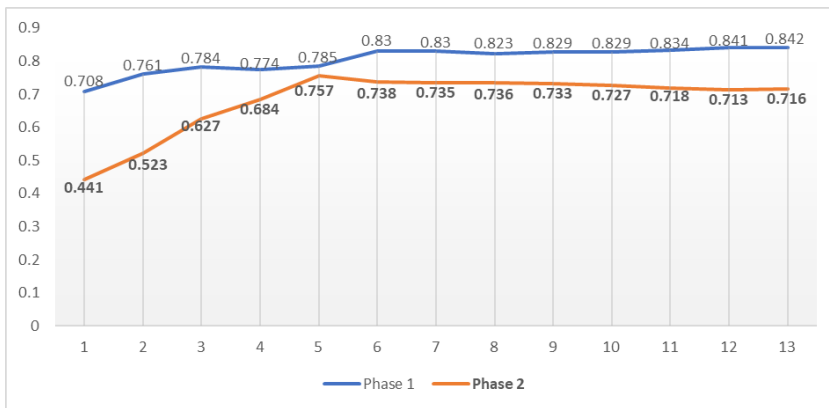

Figure 2. Weekly correlation values on foreign policy issue.

In the second three-month period (Phase 2), the highest correlation value was observed in Week 5 (r = 0.757). Although a high level of similarity was still found in Week 6 (r > 0.7), a slight decrease was observed in the correlation value (r = 0.738). High levels of similarity evidently persist in the subsequent weeks.

The issue of COVID-19

Regarding the issue of COVID-19, the correlation obtained from weekly processing of public and news media network links during the first three months shows a high similarity (r > 0.7) for all the weeks that were examined. As shown in Figure 3, the similarity level can be concluded to have exceeded a significant threshold (r > 0.75) Weeks 3-13, with Weeks 12 and 13 exhibiting the highest levels of similarity.
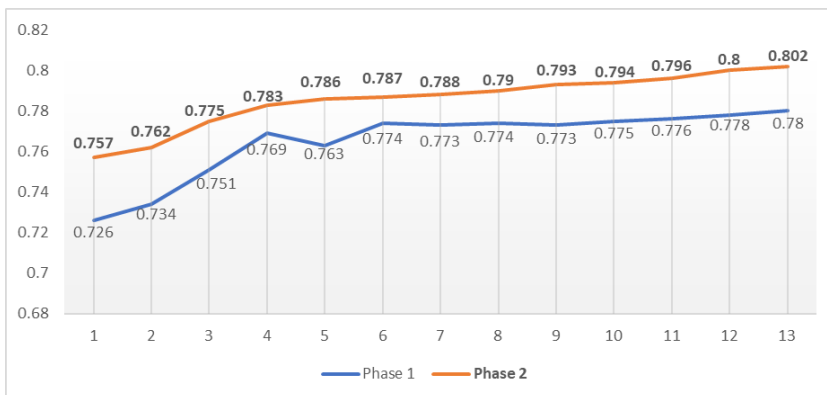
Figure 3. Weekly correlation values regarding the issue of COVID-19.

As seen in Figure 3, the correlation value is quite high for all weeks in Phase 2 for the issue of COVID-19 ($r > 0.75$). In fact, the highest level was reached in the last two weeks of the period ($r > 0.8$). While the findings suggest a high degree of similarity between media and public network connections during all weeks, importance is had in noting that the media effects indicate an increasingly cumulative similarity over time.

The issue of violence

The data presented in Figure 4 for the first three months on the issue of violence indicate a moderate level of similarity ($r > 0.5$) in the weeks preceding the survey. However, the similarity is worth noting to have increased to a high level ($r = 0.709$) from Week 5 onwards, continuing to increase in for Weeks 6-13 with an accumulative effect.
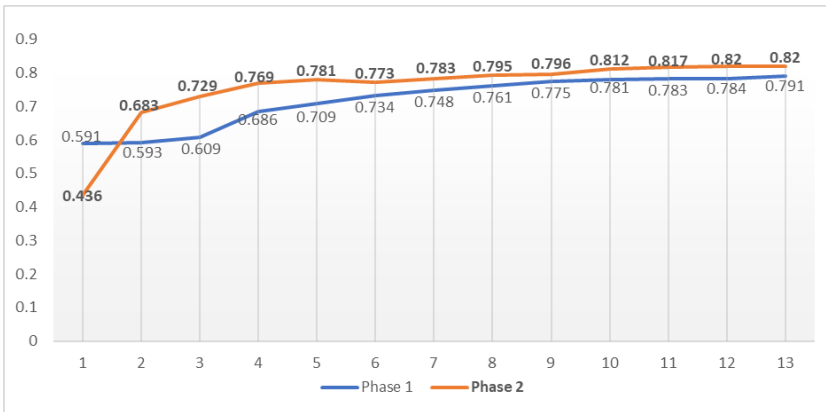
Figure 4. Weekly correlation values for the issue of violence.

In the second trimester, a high level of similarity ($r = 0.729$) with media content and its impact emerged during Week 3. Again, a higher correlation is understood to have been achieved with the contents from the previous weeks, with the effect being accumulative.

The issue of education

Correlation values for the issue of education issue in the first three months indicate a moderate similarity with the media content in Week 3 ($r = 0.524$). Although the correlation values increased partially in the later weeks, they remained at a medium level. The highest value was reached in Week 13 at the end of the Phase 1 ($r = 0.606$).
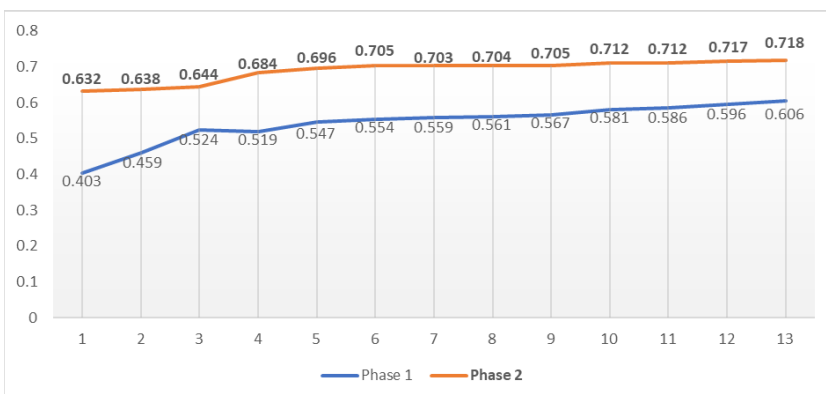
Figure 5. Weekly correlation values regarding the issue of education.

During the second trimester, a significant increase in similarity was seen to occur with Week 6 of media data ($r = 0.705$). The highest correlation value was found during Week 13.

The issues examined in a single period

The study focused on three specific issues in the first trimester (Phase 1), as these were not considered to be relevant in Phase 2. The findings indicate these issues to have become significant within the first 6 weeks.

Data regarding the Eastern Mediterranean issue suggests that the correlation values for the issue reached the highest point in Week 6 ($r = 0.804$). Similarly, the correlation values for the Istanbul canal were at the highest in Week 6 ($r = 0.871$). The data on the Istanbul Convention indicate a significant level of similarity to have been achieved in Week 6 ($r = 0.81$), and these levels were subsequently surpassed in Weeks 7-13.
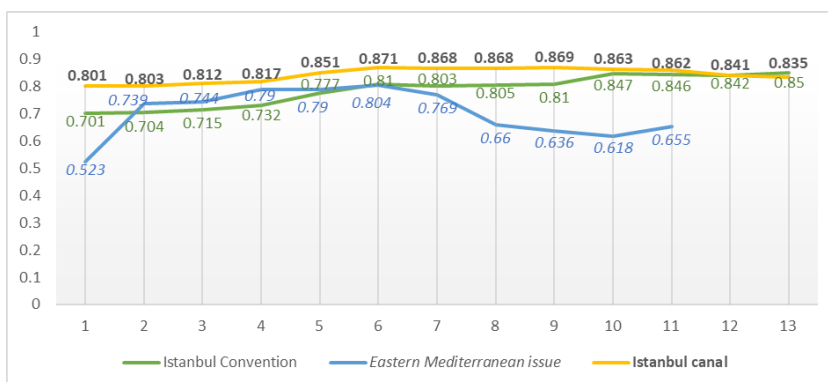
Figure 6. Correlation values regarding the issues of the Istanbul Convention, Eastern Mediterranean, and Istanbul canal.

Discussion and conclusion

In general, the optimum effect is achieved after six weeks. This is shown by the remarkable correlation value of the data regarding Week 6 for six of the analyzed issues. Specifically, the issues of national security, Eastern Mediterranean, and Canal Istanbul show a clear bell curve trend at the 6-week mark. A similar trend is observed for foreign policy,

COVID-19, and the Istanbul Convention. However, a slight decline occurred with regard to Weeks 7-13 for these issues. The level of similarity was also understood to gradually increase over time. For the issues of violence and of education, although six weeks of content indicates a certain level, this similarity gradually increased over the following weeks (Weeks 7-13).

The second key finding is that the media's agenda-setting effect typically accumulates over time. In other words, news coverage of an issue causes that issue to become increasingly similar to the network connections in the public's mind over time.

The 6 week time period seems compatible with other studies in the literature but reveals a more definitive time period. This is because McCombs et al. (1995, p. 285) indicated the time period required for an issue on the media agenda to influence the public opinion agenda to usually be 5-7 weeks. Their study also emphasized the importance of the nature of the issues. The findings obtained in this research also indicate the same point.

Noteworthily, the third-level of agenda-setting theory was not confirmed for three issues: justice, economy, and immigrants. The reasons for this lack of confirmation can be evaluated in the context of the nature of these issues. While the media provided extensive coverage of various subheadings related to these three issues, the survey results indicated that individuals had answered based on their daily life experiences and practical knowledge of the basic meaning of these issues. However, the research structure was insufficient to explain why the theory was not confirmed regarding these issues.

As a result, research on media effects or agenda-setting theory can be emphasized to need to consider at least six weeks of news media content. Therefore, to see findings on the media effects being limited or remaining at lower levels in studies covering shorter periods of time would not be surprising. However, when a period of at least 6 weeks is examined, the effects of the media can generally be seen more clearly.

Meanwhile, this finding is considered to be able to have practical value, particularly in relation to studies of media campaigns. In this context, a maximum period of about 40-45 days has been estimated to be able to be sufficient for an effective media campaign. However, higher levels of similarity should be emphasized as having been assumed will be achieved through an accumulative long-term effect. Although a six-week period

may suffice for certain issues, longer-duration campaigns can be noted as generally being able to be more effective.

Future studies can focus on the differences among media types regarding different issues. For example, the question of optimal time-lag for the third-level of agenda-setting effects regarding prominent issues on social media has yet to be investigated.

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DERGİNİN TANIMI

1992 yılından bu yana yayın hayatına devam eden Connectist: Istanbul University Journal of Communication Sciences, hakemli, açık erişimli, Haziran ve Aralık ayları olmak üzere yılda iki kere yayımlanan uluslararası, bilimsel bir e-dergidir.

Dergiye gönderilen bilimsel çalışmaların dili Türkçe ya da İngilizce olmalıdır.

AMAÇ VE KAPSAM

Derginin amacı, ulusal ve uluslararası camialardan araştırma makaleleri ve derlemeler yayınlamak, akademik araştırmacılar, iletişim uzmanları ve profesyonel karar vericiler için iletişim bilimlerinin tüm alanlarında bilimsel bilgi paylaşımı için entelektüel bir platform sağlamaktır. Uluslararası ölçekte akademik diyaloğu teşvik etmek amacıyla dergi, 2022 yılından bu yana dünyanın dört bir yanındaki saygın üniversiteler ve akademisyenlerle işbirliği içinde sanal uluslararası toplantılar ve konferanslar düzenlemektedir. Böylelikle, dergi, uluslararası katkı, işbirliği ve yazarlık olanaklarını genişletmeyi amaçlamaktadır. Uluslararası indekslerde taranan bir dergi olarak yazarlarına uluslararası görünürlük sağlayan Connectist, Web of Science Core Collection - Emerging Sources Citation Index (ESCI), Directory of Open Access Journals (DOAJ), Erih Plus, EBSCO Communication Source, ProQuest Central, ProQuest Turkey Database, ProQuest Social Sciences Database ve ProQuest Social Sciences Premium Collection'da yer almaktadır ve ayrıca TR Dizin'de de taranmaktadır.

Connectist, iletişim alanında sistemler, teoriler, yöntemler ve uygulamalara odaklanır, iletişimin tüm yönleriyle ilgili araştırma makaleleri ve derlemeler yayınlar. İletişimin çağdaş araştırma alanlarının yanısıra sosyal bilimler ve beşeri bilimlerde iletişim alanıyla ilgili güncel tartışmaları hem disipliner hem de disiplinler arası olarak inceleyen teorik ve/veya uygulamalı araştırma makalelerine açıktır.

Dergide titiz bir çift-kör hakem değerlendirmesi uygulanmaktadır. Derginin hedef kitlesi akademisyenler, araştırmacılar, profesyoneller, öğrenciler ve ilgili akademik ve mesleki kuruluşlardır.

EDİTORYAL POLİTİKALAR VE HAKEM SÜRECİ

Yayın Politikası

Dergi, yayın etiği ile ilgili en yüksek standartlara uymaktadır. Committee on Publication Ethics (COPE), Directory of Open Access Journals (DOAJ), Open Access Scholarly Publishers Association (OASPA) ve World Association of Medical Editors (WAME) tarafından yayınlanan etik yayıncılık ilkelerini benimsemektedir; Principles of Transparency and Best Practice in Scholarly Publishing başlığı altında ifade edilen ilkeler için aşağıdaki linki ziyaret edebilirsiniz:

https://publicationethics.org/resources/guidelines-new/principles-transparency-and-best-practice-scholarly-publishing

Gönderilen çalışmalar derginin amaç ve kapsamına uygun olmalıdır. Özgün, daha önce yayımlanmamış veya aynı anda başka bir dergide değerlendirme sürecinde olmayan, her bir yazar tarafından içeriği ve gönderimi onaylanmış yazılar, değerlendirmeye kabul edilmektedir.

Yayımlanmak üzere dergiye gönderilen çalışmalarda; yazarlardan herhangi birinin ismi, tüm yazarların yazılı izni olmadan çalışma künyesinden silinemez, yeni bir isim künyeye eklenemez ve yazar sırası değiştirilemez.

İntihal, duplikasyon, sahte yazarlık/inkâr edilen yazarlık, araştırma/veri fabrikasyonu, makale dilimleme, dilimleyerek yayın, telif hakları ihlali ve çıkar çatışmasının gizlenmesi, etik dışı davranışlar olarak kabul edilir. Kabul edilen etik standartlara uygun olmayan tüm çalışmalar yayından çıkarılır. Yayın sürecinden sonra tespit edilen kuraldışı ve/veya etik dışı çalışmaların yayını aynı şekilde durdurulur.

İntihal Kontrolü

Ön kontrolden geçirilen çalışmalar, iThenticate yazılımı kullanılarak intihal için taranır. İntihal/kendi kendine intihal tespit edilirse yazarlar bilgilendirilir. Editörler, gerekli olması halinde, değerlendirme ya da üretim sürecinin çeşitli aşamalarında çalışmayı intihal kontrolüne tabi tutabilirler. Yüksek benzerlik oranları, bir çalışmanın kabul edilmeden önce ve hatta kabul edildikten sonra reddedilmesine neden olabilir.

Çalışmanın yayımlanması için türüne bağlı olarak, benzerlik oranının %15'ten az olması zorunludur.

Çift Kör Hakemlik Süreci

İntihal kontrolünden sonra, uygun olan çalışmalar baş editör tarafından özgünlük, yöntem, işlenen konunun önemi ve dergi kapsamıyla uyumluluğu açısından değerlendirilir. Baş editör, biçimsel esaslara uygun olan çalışmaları, yurtiçinden ve /veya yurtdışından en az iki hakemin değerlendirmesine sunarak, adil bir şekilde çift taraflı kör hakemlikten geçmesini sağlar. Baş editör, hakemlerin gerek gördüğü değişiklikler yazar(lar) tarafından yapıldıktan sonra çalışmaların yayımlanmasına onay verir.

Dergiye yayınlanmak üzere gönderilen makalelerin içeriği derginin amaç ve kapsamı ile uyumlu olmalıdır. Dergi, orijinal araştırma niteliğindeki yazıları yayınlamaya öncelik vermektedir

Açık Erişim İlkesi

Açık erişimli bir dergi olan Connectist'in içeriği, okura ya da okurun dâhil olduğu kuruma ücretsiz olarak sunulur. Okurlar, ticari amaç haricinde, yayıncıdan ya da yazardan izin almadan çalışmaların tam metnini okuyabilir, indirebilir, kopyalayabilir, arayabilir ve link sağlayabilir. Bu ilke, BOAI açık erişim tanımıyla uyumludur.

Derginin açık erişimli çalışmaları Creative Commons Atıf-GayrıTicari 4.0 Uluslararası (CC BY-NC 4.0) olarak lisanslıdır.

İşlemleme Ücreti

Derginin tüm giderleri İstanbul Üniversitesi tarafından karşılanmaktadır. Dergide çalışmaların

yayımlanması ve yayın süreçlerinin yürütülmesi ücrete tabi değildir. Dergiye gönderilen ya da yayın için kabul edilen çalışmalar için işlemleme ücreti veya gönderim ücreti alınmaz.

Telif Hakkında

Yazarlar dergide yayınlanan çalışmalarının telif hakkına sahiptir ve çalışmaları Creative Commons Atıf-GayrıTicari 4.0 Uluslararası (CC BY-NC 4.0) olarak lisanslıdır. CC BY-NC 4.0 lisansı, eserin ticari kullanım dışında her boyut ve formatta paylaşılmasına, kopyalanmasına, çoğaltılmasına ve orijinal esere uygun şekilde atıfta bulunmak kaydıyla yeniden düzenleme, dönüştürme ve eserin üzerine inşa etme dâhil adapte edilmesine izin verir**.**

Yayın Etiği Beyanı

Connectist: Istanbul University Journal of Communication Sciences, yayın etiğinde en yüksek standartlara bağlıdır ve Committee on Publication Ethics (COPE), Directory of Open Access Journals (DOAJ), Open Access Scholarly Publishers Association (OASPA) ve World Association of Medical Editors (WAME) tarafından yayınlanan etik yayıncılık ilkelerini benimser; Principles of Transparency and Best Practice in Scholarly Publishing başlığı altında ifade edilen ilkeler için adres: https:// publicationethics.org/resources/guidelines-new/principles-transparency-and-best-practice-scholarly-publishing

Gönderilen tüm makaleler orijinal, yayınlanmamış ve başka bir dergide değerlendirme sürecinde olmamalıdır. Her bir makale editörlerden biri ve en az iki hakem tarafından çift kör değerlendirmeden geçirilir. İntihal, duplikasyon, sahte yazarlık/inkar edilen yazarlık, araştrma/veri fabrikasyonu, makale dilimleme, dilimleyerek yayın, telif hakları ihlali ve çıkar çatışmasının gizlenmesi, etik dışı davranışlar olarak kabul edilir.

Kabul edilen etik standartlara uygun olmayan tüm makaleler yayından çıkarılır. Buna yayından sonra tespit edilen olası kuraldışı, uygunsuzluklar içeren makaleler de dahildir.

Araştırma Etiği

Dergi araştırma etiğinde en yüksek standartları gözetir ve aşağıda tanımlanan uluslararası araştırma etiği ilkelerini benimser. Makalelerin etik kurallara uygunluğu yazarların sorumluluğundadır.

- Araştırmanın tasarlanması, tasarımın gözden geçirilmesi ve araştırmanın yürütülmesinde, bütünlük, kalite ve şeffaflık ilkeleri sağlanmalıdır.
- Araştırma ekibi ve katılımcılar, araştırmanın amacı, yöntemleri ve öngörülen olası kullanımları; araştırmaya katılımın gerektirdikleri ve varsa riskleri hakkında tam olarak bilgilendirilmelidir.
- Araştırma katılımcılarının sağladığı bilgilerin gizliliği ve yanıt verenlerin gizliliği sağlanmalıdır. Araştırma katılımcıların özerkliğini ve saygınlığını koruyacak şekilde tasarlanmalıdır.
- Araştırma katılımcıları gönüllü olarak araştırmada yer almalı, herhangi bir zorlama altında olmamalıdırlar.
- Katılımcıların zarar görmesinden kaçınılmalıdır. Araştırma, katılımcıları riske sokmayacak şekilde planlanmalıdır.
- Araştırma bağımsızlığıyla ilgili açık ve net olunmalı; çıkar çatışması varsa belirtilmelidir.

- Deneysel çalışmalarda, araştırmaya katılmaya karar veren katılımcıların yazılı bilgilendirilmiş onayı alınmalıdır. Çocukların ve vesayet altındakilerin veya tasdiklenmiş akıl hastalığı bulunanların yasal vasisinin onayı alınmalıdır.
- Çalışma herhangi bir kurum ya da kuruluşta gerçekleştirilecekse bu kurum ya da kuruluştan çalışma yapılacağına dair onay alınmalıdır.
- İnsan öğesi bulunan çalışmalarda, "yöntem" bölümünde katılımcılardan "bilgilendirilmiş onam" alındığının ve çalışmanın yapıldığı kurumdan etik kurul onayı alındığı belirtilmesi gerekir.

Yazarların Sorumluluğu

Makalelerin bilimsel ve etik kurallara uygunluğu yazarların sorumluluğundadır. Yazar makalenin orijinal olduğu, daha önce başka bir yerde yayınlanmadığı ve başka bir yerde, başka bir dilde yayınlanmak üzere değerlendirmede olmadığı konusunda teminat sağlamalıdır. Uygulamadaki telif kanunları ve anlaşmaları gözetilmelidir. Telife bağlı materyaller (örneğin tablolar, şekiller veya büyük alıntılar) gerekli izin ve teşekkürle kullanılmalıdır. Başka yazarların, katkıda bulunanların çalışmaları ya da yararlanılan kaynaklar uygun biçimde kullanılmalı ve referanslarda belirtilmelidir.

Gönderilen makalede tüm yazarların akademik ve bilimsel olarak doğrudan katkısı olmalıdır, bu bağlamda "yazar" yayınlanan bir araştırmanın kavramsallaştırılmasına ve dizaynına, verilerin elde edilmesine, analizine ya da yorumlanmasına belirgin katkı yapan, yazının yazılması ya da bunun içerik açısından eleştirel biçimde gözden geçirilmesinde görev yapan birisi olarak görülür. Yazar olabilmenin diğer koşulları ise, makaledeki çalışmayı planlamak veya icra etmek ve / veya revize etmektir. Fon sağlanması, veri toplanması ya da araştırma grubunun genel süpervizyonu tek başına yazarlık hakkı kazandırmaz. Yazar olarak gösterilen tüm bireyler sayılan tüm ölçütleri karşılamalıdır ve yukarıdaki ölçütleri karşılayan her birey yazar olarak gösterilebilir. Yazarların isim sıralaması ortak verilen bir karar olmalıdır. Tüm yazarlar yazar sıralamasını Telif Hakkı Anlaşması Formu'nda imzalı olarak belirtmek zorundadırlar.

Yazarlık için yeterli ölçütleri karşılamayan ancak çalışmaya katkısı olan tüm bireyler "teşekkür / bilgiler" kısmında sıralanmalıdır. Bunlara örnek olarak ise sadece teknik destek sağlayan, yazıma yardımcı olan ya da sadece genel bir destek sağlayan, finansal ve materyal desteği sunan kişiler verilebilir.

Bütün yazarlar, araştırmanın sonuçlarını ya da bilimsel değerlendirmeyi etkileyebilme potansiyeli olan finansal ilişkiler, çıkar çatışması ve çıkar rekabetini beyan etmelidirler. Bir yazar kendi yayınlanmış yazısında belirgin bir hata ya da yanlışlık tespit ederse, bu yanlışlıklara ilişkin düzeltme ya da geri çekme için editör ile hemen temasa geçme ve işbirliği yapma sorumluluğunu taşır.

Editör ve Hakem Sorumlulukları

Baş editör, makaleleri, yazarların etnik kökeninden, cinsiyetinden, cinsel yöneliminden, uyruğundan, dini inancından ve siyasi felsefesinden bağımsız olarak değerlendirir. Yayına gönderilen makalelerin

adil bir şekilde çift taraflı kör hakem değerlendirmesinden geçmelerini sağlar. Gönderilen makalelere ilişkin tüm bilginin, makale yayınlana kadar gizli kalacağını garanti eder. Baş editör içerik ve yayının toplam kalitesinden sorumludur. Gereğinde hata sayfası yayınlamalı ya da düzeltme yapmalıdır.

Baş editör; yazarlar, editörler ve hakemler arasında çıkar çatışmasına izin vermez. Hakem atama konusunda tam yetkiye sahiptir ve Dergide yayınlanacak makalelerle ilgili nihai kararı vermekle yükümlüdür.

Hakemlerin araştırmayla ilgili, yazarlarla ve/veya araştırmanın finansal destekçileriyle çıkar çatışmaları olmamalıdır. Değerlendirmelerinin sonucunda tarafsız bir yargıya varmalıdırlar. Gönderilmiş yazılara ilişkin tüm bilginin gizli tutulmasını sağlamalı ve yazar tarafında herhangi bir telif hakkı ihlali ve intihal fark ederlerse editöre raporlamalıdırlar. Hakem, makale konusu hakkında kendini vasıflı hissetmiyor ya da zamanında geri dönüş sağlaması mümkün görünmüyorsa, editöre bu durumu bildirmeli ve hakem sürecine kendisini dahil etmemesini istemelidir.

Değerlendirme sürecinde editör hakemlere gözden geçirme için gönderilen makalelerin, yazarların özel mülkü olduğunu ve bunun imtiyazlı bir iletişim olduğunu açıkça belirtir. Hakemler ve yayın kurulu üyeleri başka kişilerle makaleleri tartışamazlar. Hakemlerin kimliğinin gizli kalmasına özen gösterilmelidir. Bazı durumlarda editörün kararıyla, ilgili hakemlerin makaleye ait yorumları aynı makaleyi yorumlayan diğer hakemlere gönderilerek hakemlerin bu süreçte aydınlatılması sağlanabilir.

Hakem Süreci

Daha önce yayınlanmamış ya da yayınlanmak üzere başka bir dergide halen değerlendirmede olmayan ve her bir yazar tarafından onaylanan makaleler değerlendirilmek üzere kabul edilir. Gönderilen ve ön kontrolü geçen makaleler iThenticate yazılımı kullanılarak intihal için taranır. İntihal kontrolünden sonra, uygun olan makaleler baş editör tarafından orijinallik, metodoloji, işlenen konunun önemi ve dergi kapsamı ile uyumluluğu açısından değerlendirilir.

Baş Editör, makaleleri, yazarların etnik kökeninden, cinsiyetinden, uyruğundan, dini inancından ve siyasi felsefesinden bağımsız olarak değerlendirir. Yayına gönderilen makalelerin adil bir şekilde çift taraflı kör hakem değerlendirmesinden geçmelerini sağlar.

Seçilen makaleler en az iki ulusal/uluslararası hakeme değerlendirmeye gönderilir. Hakem tarafından söz konusu makale için verilen düzeltmeler yazar tarafından tamamlanır ve farklı bir şekilde renklendirilerek teslim edilir. Yayın kararı, hakemlerin talepleri doğrultusunda yazarların gerçekleştirdiği düzenlemelerin ve hakem sürecinin sonrasında baş editör tarafından verilir.

Baş editör; yazarlar, editörler ve hakemler arasında çıkar çatışmasına izin vermez. Hakem atama konusunda tam yetkiye sahiptir ve dergide yayınlanacak makalelerle ilgili nihai kararı vermekle yükümlüdür.

Hakemlerin değerlendirmeleri objektif olmalıdır. Hakem süreci sırasında hakemlerin aşağıdaki hususları dikkate alarak değerlendirmelerini yapmaları beklenir.

- Makale yeni ve önemli bir bilgi içeriyor mu?
- Öz, makalenin içeriğini net ve düzgün bir şekilde tanımlıyor mu?
- Yöntem bütünlüklü ve anlaşılır şekilde tanımlanmış mı?
- Yapılan yorum ve varılan sonuçlar bulgularla kanıtlanıyor mu?
- Alandaki diğer çalışmalara yeterli referans verilmiş mi?
- Dil kalitesi yeterli mi?

Hakemler, gönderilen makalelere ilişkin tüm bilginin, makale yayınlanana kadar gizli kalmasını sağlamalı ve yazar tarafında herhangi bir telif hakkı ihlali ve intihal fark ederlerse editöre raporlamalıdırlar.

Hakem, makale konusu hakkında kendini vasıflı hissetmiyor ya da zamanında geri dönüş sağlaması mümkün görünmüyorsa, editöre bu durumu bildirmeli ve hakem sürecine kendisini dahil etmemesini istemelidir.

Değerlendirme sürecinde editör hakemlere gözden geçirme için gönderilen makalelerin, yazarların özel mülkü olduğunu ve bunun imtiyazlı bir iletişim olduğunu açıkça belirtir. Hakemler ve yayın kurulu üyeleri başka kişilerle makaleleri tartışamazlar. Hakemlerin kimliğinin gizli kalmasına özen gösterilmelidir.

YAZILARIN HAZIRLANMASI VE GÖNDERİMİ

- Derginin yayın dili Türkçe ve İngilizce'dir.
- Gönderilen yazılarla ilgili tüm yazışmalar, aksi belirtilmedikçe, ilk yazarla yapılacaktır. Makale gönderimi çevrim içi olarak https://iupress.istanbul.edu.tr/tr/journal/connectist/home üzerinden yapılmalıdır. Gönderilen çalışmalar, çalışma türünü belirten ve çalışmayla ilgili bilgileri içeren (bkz: Son Kontrol Listesi) bir mektup; yazının elektronik formunu içeren Microsoft Word 2003 ve üzerindeki sürümler ile yazılmış elektronik dosya ve tüm yazarların imzaladığı "Telif Hakkı Anlaşması Formu" eklenerek gönderilmelidir.
- Her yazarın aynı yıl içinde (özel sayılar hariç) sadece 1 (bir) çalışması yayımlanır.
- Derginin bir sayısında yayımlanmak üzere kabul edilmiş ancak henüz ait olduğu sayı oluşmamış olan makaleler, "Erken Görünüm" olarak yayımlanır.
- Dergimize yayımlanmak üzere gönderilen her çalışmanın tüm sorumluluğu, ilgili çalışmanın yazar(lar)ına aittir.
- Dergimizin yazım kurallarına uygun olarak hazırlanmamış olan çalışmalar, hakem değerlendirmesine gerek duyulmaksızın doğrudan reddedilmektedir.
- Çalışmalar, A4 boyutundaki kağıdın bir yüzüne, üst, alt, sağ ve sol taraftan 2,5 cm. boşluk bırakılarak, 12 punto Times New Roman harf karakterleriyle ve 1,5 satır aralık ölçüsü ile hazırlanmalıdır.
- Çalışmaların türleri; "araştırma makaleleri" (6500 – 8500 sözcük), "derleme makaleler" (6500 – 8500 sözcük) ve "değerlendirme yazıları" (2000-4000 sözcük) şeklindedir.

- Giriş bölümünden önce, çalışmanın kapsamını, amacını, önemini, kullanılan yöntemi ve ulaşılan sonuçları içeren 180-200 kelimelik Türkçe ve İngilizce "öz" ile 600-800 kelime uzunluğunda İngilizce "genişletilmiş öz" yer almalıdır. Çalışmanın İngilizce başlığı İngilizce özün üzerinde yer almalıdır. Türkçe özün altında çalışmanın içeriğini temsil eden 5 (beş) Türkçe anahtar kelime, İngilizce özün altında çalışmanın içeriğini temsil eden 5 (beş) Türkçe anahtar kelime yer almalıdır. İngilizce genişletilmiş öz sadece Türkçe makaleler için zorunludur.
- Çalışmaların başlıca şu unsurları içermesi gerekmektedir: Başlık, Türkçe öz ve anahtar kelimeler; İngilizce başlık, İngilizce öz ve anahtar kelimeler; İngilizce genişletilmiş öz, ana metin bölümleri, son notlar ve kaynaklar.
- Çalışmalarda yer alan tablo ve şekillere metnin içerisinde yer verilmelidir. Tablo ve şekil sayıları sınırlı tutulmalıdır. Örneğin; yazarlar az sayıdaki bulgu ve bilgileri tablo olarak değil, metin içinde düzyazı şeklinde vermelidirler.
- Çalışmalarda yazar(lar)ın vurguları tek tırnak ile belirtilmeli; sadece kitap, film, gazete isimleri italik yazılmalıdır. 40 kelimeyi aşan alıntılar içerden, tek aralık ve tırnaksız bir biçimde verilmelidir.
- Dergi Yazı Kurulu ve hakem raporları doğrultusunda yazarlardan, metin üzerinde bazı düzeltmeler yapmaları istenebilir.
- Dergiye gönderilen çalışmalar yayımlansın veya yayımlanmasın geri gönderilmez.
- Dergimizde yayımlanacak çalışma türlerinin bölümlerinin aşağıdaki akışa uygun olacak şekilde hazırlanması gerekmektedir.

1. ARAŞTIRMA MAKALELERİ
GİRİŞ
-Araştırmanın sorunsalı yabancı ve yerli alanyazına göndermeler yapılarak tanımlanmalıdır. Alt başlıklara geçilmeden önceki son paragrafta çalışmanın önemi, diğer çalışmalardan farkı yani özgünlüğü, amacı ve yöntemi belirtilerek sınırları çizilmelidir.
Konu ile ilgili alt başlık/ başlıklar

AMAÇ VE YÖNTEM
- Amaç ve yönteme geçiş cümlesi veya cümleleri
Amaç
Çalışmanın genel amacı verildikten sonra; çalışmanın araştırma soruları maddeler halinde belirtilmeli ve/veya hipotez/hipotezleri yazılmalıdır.
Yöntem
Nicel/nitel araştırmaların içereceği aşağıdaki unsurlar, başlık halinde verilmese bile içerik olarak bu bölümde mutlaka yer almalıdır:
• Araştırma Modeli
• Evren, Örneklem / Denekler / Katılımcılar
• Veri Toplama Aracı
• İşlem

Çalışmalarda kullanılan ölçek, anket, mülakat çeşitleri vb. belirtilmeli, özellikle istatistiksel analiz/analizler içeren çalışmalarda geçerlik ve güvenirlik katsayıları verilmelidir.

BULGULAR

TARTIŞMA VE SONUÇ

Bu bölümde ilk olarak çalışmanın amacı hatırlatılarak bulguları kısaca özetlenmeli ve alanyazına göndermeler yapılarak tartışılmalıdır.

Daha sonra araştırmacının çalışmasının bulguları ile ilişkilendirilebilecek özgün sonuç niteliğindeki kanaatlerine yer verilmelidir.

Çalışmayı nihayetlendirirken sonraki araştırmalar için araştırma önerileri sunularak alana katkı sağlanmalıdır.

SON NOTLAR

KAYNAKLAR

2. DERLEME MAKALELER

GİRİŞ

Araştırmanın sorunsalı yabancı ve yerli alanyazına göndermeler yapılarak tanımlanmalıdır. Altbaşlıklara geçilmeden önceki son paragrafta çalışmanın önemi, diğer çalışmalardan farkı yani özgünlüğü, amacı ve yöntemi belirtilerek sınırları çizilmelidir.

Konu ile ilgili altbaşlık/ başlıklar

TARTIŞMA VE SONUÇ

Çalışmanın amacı belirtilerek tartışılan fikir, kavram vs. özetlenmeli ve alanyazına göndermeler yapılarak tartışılmalıdır.

Daha sonra araştırmacı yaptığı taramalar sonucunda oluşturduğu özgün sonuç niteliğindeki kanaatlerine yer verilmelidir.

Çalışmayı nihayetlendirirken sonraki araştırmalar için araştırma önerileri sunularak alana katkı sağlanmalıdır.

SON NOTLAR

KAYNAKLAR

3. DEĞERLENDİRME YAZILARI

Değerlendirme yazıları kapsamında iletişim alanını ilgilendiren herhangi bir konunun, görsel / işitsel / yazılı bir metnin, etkinliğin veya olgunun eleştirel bir değerlendirmesi sunulur. Bu yazılar, özgün araştırma makalelerinden farklı olarak alan araştırması içermeksizin kitap eleştirisi, film eleştirisi, diğer görsel / işitsel / yazılı ürünler veya düzenlenen etkinliklerin eleştirel değerlendirmelerini içerir. Çalışmaların özgünlüğünü konunun uzmanı olan yazarların yeni ve farklı bakış açılarıyla alana sunduğu katkılar oluşturur.

Değerlendirme yazıları için yazarların uyması gereken bir başlık sistemi bulunmamaktadır. Yazarlar, konunun özüne uygun bir başlık sistemi benimseyebilirler.

Kaynaklar

Yazar(lar)dan çalışmalarında birincil kaynaklara atıf yapmaları beklenmektedir.

Erken Görünüm olarak yayımlanan makalelere atıflar "sayısı hazırlık sürecindeki yayın" şeklinde verilmelidir.

Kaynakların doğruluğundan yazar(lar) sorumludur. Tüm kaynaklar metinde belirtilmeli ve alfabetik olarak sıralanmalıdır.

Referans Stili ve Formatı

Connectist: Istanbul University Journal of Communication Sciences, metin içi alıntılama ve kaynak gösterme için APA (American Psychological Association) 7. stilini benimser. Bu stille ilgili kurallara aşağıdaki linkten ulaşılabilir:

https://apastyle.apa.org/style-grammar-guidelines/references/examples/

Kaynaklar, aşağıdaki örneklerde belirtildiği gibi gösterilmelidir.

Metin İçinde Kaynak Gösterme

Kaynaklar metinde parantez içinde yazarların soyadı ve yayın tarihi yazılarak belirtilmelidir. Birden fazla kaynak gösterilecekse kaynaklar arasında (;) işareti kullanılmalıdır. Kaynaklar alfabetik olarak sıralanmalıdır.

Kaynaklar metinde parantez içinde yazarların soyadı, yayın tarihi ve sayfa numarası ya da aralığı yazılarak belirtilmelidir. Birden fazla kaynak gösterilecekse kaynaklar arasında (;) işareti kullanılmalıdır. Kaynaklar alfabetik olarak sıralanmalıdır.

Örnekler:

Tek yazarlı kaynak:

(Akyolcu, 2007)

Akyolcu (2007)

İki yazarlı kaynak:

(Tekinalp & Uzun, 2009, p. 127)

Tekinalp ve Uzun (2009), gündem belirlemenin, iletişim araçlarındaki gündemin toplum üzerindeki etkileriyle ilgili olduğunu belirtmiştir (p. 127).

Üç ve daha çok yazarlı kaynak:

(Çavdar et al., 2003)

Kısaltması bulunan kaynak gösterimi:

İlk Atıf: (Dünya Sağlık Örgütü [DSÖ], 2020)

Sonraki Atıflar: (DSÖ, 2020)

İlk Atıf: Dünya Sağlık Örgütü (DSÖ, 2020)

Sonraki Atıflar: DSÖ (2020)

Metin içi atıflardaki belirsizliği önlemek için

Aynı yazar ve tarihli iki farklı çalışmaya yer verildiğinde kaynaklar a, b şeklinde gösterilmelidir:

(Timisi, 2020a) (Timisi, 2020b)

Aynı soyadlı isimden farklı yazarların kaynak gösteriminde, yayın yılı farklı olsa da metnin içindeki alıntılarda yazarların adının baş harfleri de yazılır.

(G. Büyükbaykal et al., 2019; C. Büyükbaykal, 2016)

Aynı yayının yazarlarının soyadı aynı ise, adlarının ilk harflerine yer vermeye gerek yoktur.
(Okay & Okay, 2021)

Doğrudan atıf

Doğrudan atıf yapılırken cümle(ler) tırnak içine alınır ve metin içi alıntılarda sayfa numarası da belirtilir.

Yıldırım ve Şimşek'e göre (2016), "İçerik analizinde temelde yapılan işlem birbirine benzeyen verileri belirli kavramlar ve temalar çerçevesinde bir araya getirmek ve bunları okuyucunun anlayabileceği bir biçimde düzenleyerek yorumlamaktır" (p. 242).

Birden fazla kaynak parantez içinde gösterilirken alfabetik olarak sıralanmalıdır.
(Akyolcu, 2007; Sayıner & Demirci, 2007, p. 72)

Kaynaklar bölümünde kaynak gösterme

Kullanılan tüm kaynaklar metnin sonunda ayrı bir bölüm halinde yazar soyadlarına göre alfabetik olarak numaralandırılmadan verilmelidir.

Her bir yayın türüne göre kaynağın nasıl gösterileceğinin örnekleri aşağıda sunulmuştur.

Kitap

a) Tek yazarlı kitap

Karasar, N. (1995). *Araştırmalarda Rapor Hazırlama* (8th ed.). 3A Eğitim Danışmanlık Ltd.

b) Çeviri kitap

Geraghty, C. (1996). *Kadınlar ve pembe dizi*. (N. Nirven, Trans.) AFA Yayınları.

c) Çok yazarlı kitap

Tonta, Y., Bitirim, Y., & Sever, H. (2002). *Türkçe arama motorlarında performans değerlendirme* (1st ed.). Total Bilişim.

ç) Editörlü kitap

Ören, T., Üney, T., & Çölkesen, R. (Ed.). (2006). *Türkiye bilişim ansiklopedisi* (6st ed.). Papatya Yayıncılık.

d) Kitap içerisinde bölüm

Morva, O. (2016). Ben, kendim ve dijital benliğim: Dijital iletişim çağında benlik kavramsallaştırması üzerine. N. Timisi (Ed.), *Dijital kavramlar, olanaklar, deneyimler* (pp. 41-60). Kalkedon Yayıncılık.

e) Çeviri kitap içerisinde bölüm

Schmeder, G. (2015). İşbölümü dinamiğinde kopmalar ve kesintiler. C. Vercellone (Ed.) ve D. Kundakçı (Trans.). *Bilişsel kapitalizm*. (1st ed., 61-75). Otonom Yayıncılık.

f) Kitap incelemesi

Gül Ünlü, D. (2018). Kitap incelemesi [Şeffaflık toplumu: Şeffaf toplumun eleştirisi üzerine bir okuma]. Galatasaray Üniversitesi İletişim Dergisi, 28, 279-290. http://iletisimdergisi.gsu.edu.tr/tr/pub/issue/37677/436058

g) Yayımcının ve yazarın kurum olduğu yayın

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Makale
a) Makale
Çağlayan, S. (2021). Covid-19 pandemisi sürecine ilişkin bir retorik analiz: T. C. Sağlık Bakanı Dr. Fahrettin Koca'nın basın açıklamaları. *Connectist: Istanbul University Journal of Communication Science*s, 60, 27-62. https://doi.org/10.26650/CONNECTIST2021-801246
b) Yediden fazla yazarlı makale
Lal, H., Cunningham, A. L., Godeaux, O., Chlibek, R., Diez-Domingo, J., Hwang, S.-J., ... Heineman, T. C. (2015). Efficacy of an adjuvanted herpes zoster subunit vaccine in older adults. *New England Journal of Medicine*, 372, 2087–2096. http://dx.doi.org/10.1056/NEJMoa1501184

c) DOI'si olmayan online edinilmiş makale
Sidani, S. (2003). Enhancing the evaluation of nursing care effectiveness. *Canadian Journal of Nursing Research, 35*(3), 26–38. Retrieved from http://cjnr.mcgill.ca
ç) Popüler dergi makalesi
Gürer, Z., Gürer, M. (2021, May-June). Fantastik diziler. *Episode*, 26, 9-12. https://episodedergi.com/fantastik-diziler/

Tez, Bildiri
a) Tezler
Karahan, O. (2019). *Şiddet ve postmodernizm bağlamında Martin Scorsese sineması* [Yayımlanmamış yüksek lisans tezi]. İstanbul Üniversitesi. https://tez.yok.gov.tr/UlusalTezMerkezi/tezSorguSonucYeni.jsp
Türk, E. (2016). G*SM markalarının sosyal medya kullanımlarının halkla ilişkilerin çift yönlü simetrik modeline göre twitter üzerinden analizi* [Yayımlanmamış doktora tezi]. İstanbul Üniversitesi. https://tez.yok.gov.tr/UlusalTezMerkezi/tezSorguSonucYeni.jsp
b) Sempozyum katkısı
Serdar, M. (2019, Aralık, 19-20). Covid-19 pandemisinde medya: Hipergerçeklik ve dezenformasyon. M. Binark (Oturum Başkanı), *Pandemi döneminde enformasyon arayışı ve infodemi* [Sempozyum]. Üsküdar Üniversitesi İletişim Fakültesi 8. Uluslararası İletişim Günleri, İstanbul, Türkiye.

Diğer Kaynaklar
a) Gazete yazısı
Browne, R. (2010, March 21). *This brainless patient is no dummy. Sydney Morning Herald, 45*. https://www.smh.com.au/technology/this-brainless-patient-is-no-dummy-20100320-qn7n.html
b) İnternet sayfası kaynakları
Bordwell, D. (2013, June 18). David Koepp: Making the world movie-sized. http://www.davidbordwell.net/blog/page/27/ adresinden 15 Eylül 2020 tarihinde alınmıştır.
c) Resmi yayınlar ve basın bülteni
Türkiye İstatistik Kurumu. (2021). Çocuklarda bilişim teknolojileri kullanım araştırması (Yayın no. 41132). https://data.tuik.gov.tr/Bulten/Index?p=Cocuklarda-Bilisim-Teknolojileri-Kullanim-Arastirmasi-2021-41132

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ç) Sözlük

Mutlu, E. (2012). *İletişim sözlüğü* (1st ed.). Sofos Yayınları.

d) Podcast

Tufan, F. (2021, June 7). Prof. Dr. Burcu Kaya Erdem ile Jacques Derrida'yı okumak (Bölüm 7) [sesli podcast bölümü]. *İletişim podcast* içinde. https://open.spotify.com/episode/5sz5nRZUCIE4RIKoCw8N7w?si=RJWap-AeSs2ro6IDGUcGRg&dl_branch=1&nd=1

e) Video/Film

Gökalp, S. (2016). *Sosyal medya* [Video]. Youtube. https://www.youtube.com/watch?v=TIayzRpy1X8

Ceylan, N. B. (Yönetmen). (2011). *Bir zamanlar Anadolu'd*a [Film]. Tiglon.

f) Televizyon dizisi

Çatay, K. (Yapımcı). (2018). *Şahsiyet* [Televizyon Dizisi]. Ay Yapım.

g) Sosyal medya

Nişancı, İ. [@ilkayNS]. (2022, 25 Ocak). Sadece sosyal bilimler için geçerli olduğunu düşünmekle beraber çok önemli bir noktada ayrım var: Makale ya da bilimsel araştırma yapmanın bilim insanını verdiği dersler konusunda eğittiği bir gerçek. Bu da üniversitenin asıl öznesi öğrenciye dönük bir faydadır [Tweet]. Twitter. https://twitter.com/ilkayNS/status/1485866565337853956

Twitter için [Tweet], [Twitter profili] vb., Facebook için [Facebook durumu], [Zaman tüneli] vb., Instagram için [Fotoğraf], [Highlight] gibi gösterimler kullanılabilir.

SON KONTROL LİSTESİ

Aşağıdaki listede eksik olmadığından emin olun:

- Editöre mektup
  - ✓ Makalenin türü
  - ✓ Başka bir dergiye gönderilmemiş olduğu bilgisi
  - ✓ Sponsor veya ticari bir firma ile ilişkisi (varsa belirtiniz)
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  - ✓ İngilizce yönünden kontrolünün yapıldığı
  - ✓ Yazarlara Bilgide detaylı olarak anlatılan dergi politikalarının gözden geçirildiği
  - ✓ Kaynakların APA6'ya göre belirtildiği
- Telif Hakkı Anlaşması Formu
- Daha önce basılmış materyal (yazı-resim-tablo) kullanılmış ise izin belgesi
- Makale kapak sayfası
  - ✓ Makalenin türü
  - ✓ Makalenin Türkçe ve İngilizce başlığı
  - ✓ Yazarların ismi soyadı, unvanları ve bağlı oldukları kurumlar (üniversite ve fakülte bilgisinden sonra şehir ve ülke bilgisi de yer almalıdır), e-posta adresleri
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- Makale ana metni dosyası
  - ✓ Makalenin Türkçe ve İngilizce başlığı
  - ✓ Özetler 180-200 kelime Türkçe ve 180-200 kelime İngilizce
  - ✓ Anahtar Kelimeler: 5 adet Türkçe ve 5 adet İngilizce
  - ✓ Makale Türkçe ise, İngilizce genişletilmiş Özet (Extended Abstract) 600-800 kelime
  - ✓ Makale ana metin bölümleri
  - ✓ Finansal destek (varsa belirtiniz)
  - ✓ Çıkar çatışması (varsa belirtiniz)
  - ✓ Teşekkür (varsa belirtiniz)
  - ✓ Kaynaklar
  - ✓ Tablolar-Resimler, Şekiller (başlık, tanım ve alt yazılarıyla)

DESCRIPTION

Connectist: Istanbul University Journal of Communication Sciences is an open access, peer-reviewed, scholarly and international e-journal being published biannually in June and December since 1992. The manuscripts submitted for publication in the journal must be written in Turkish or English.

AIM AND SCOPE

The aim of the journal is to publish research articles and reviews from both international and national communities, providing an intellectual platform for academic researchers, communication professionals, and policymakers to share scientific knowledge across all fields of communication sciences. To encourage academic dialogue on an international scale, the journal has organised virtual international meetings and conferences in collaboration with esteemed universities and colleagues worldwide since 2022. As such, the journal aims to expand international contributions, collaborations and authorship opportunities. Additionally, the journal provides its authors with international visibility, as it is indexed in several international research databases: Web of Science Core Collection - Emerging Sources Citation Index (ESCI), Directory of Open Access Journals (DOAJ), Erih Plus, EBSCO Communication Source, ProQuest Central, ProQuest Turkey Database, ProQuest Social Sciences Database, and ProQuest Social Sciences Premium Collection. The journal is indexed in TUBITAK ULAKBIM TR Index as well.

Connectist focuses on systems, theories, methods, and applications in communication and publishes research articles and reviews covering all aspects of communication. Theoretical and/or applied research articles that explore current debates in the social sciences, humanities, and contemporary communication research fields, both disciplinary and interdisciplinary are welcome.

A rigorous double-blind peer-review evaluation is implemented in the journal. The target audience of the journal includes academics, researchers, professionals, students, and relevant academic and professional organisations.

The target group of the journal consists of academicians, researchers, professionals, students, and related professional organizations.

EDITORIAL POLICIES AND PEER REVIEW PROCESS

Publication Policy

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Subheading(s) related to the topic

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FINDINGS

DISCUSSION AND CONCLUSION

After restating the aim of the study in short, findings should be summed up very briefly and discussed with reference to the relevant literature.

Then the original opinions related to the research findings should be stated by the author as concluding remarks.

Before finalizing the study some suggestions should be formulated for future research to contribute to the relevant field.

ENDNOTES

REFERENCES

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Then the original opinions related to the research findings should be stated by the author as concluding remarks.

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ENDOTES

REFERENCES

3. SHORT NOTES

Within the scope of short notes, a critical evaluation of any subject, audio-visual/written text, an event or phenomenon that concerns the field of communication is presented. Unlike original research articles, short notes do not include field research but may include book criticism, film criticism, or evaluation of other audio/visual/written products or critical evaluations of organized events. Originality of the short notes is expected to be created via new and different perspectives of the experts and veteran scholars.

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Carpentier (2011)

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If the first authors of multiple references share the same surname but have different initials, include the first authors' initials in all in-text citations, even if the year of publication differs.

(A. A. Berger, 2010; J. Berger, 2010)

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When citing directly, sentence(s) are enclosed in quotation marks and page numbers are also indicated in in-text quotations.

According to Luhmann (1982), "Subjectivity is an abstract term invented by philosophers which does not refer to human beings. The real subject of social action is the social system" (p. 324).

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(Mulvey, 2012; Ryan & Kellner, 2012, p. 152).

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All the citations done in the text should be listed in the References section in alphabetical order of author surname without numbering. Below given examples should be considered in citing the references.

Book

a) Citation with one author;

Berger, A. A. (2017). *Media analysis techniques*. Sage Publications.

Kamien R., & Kamien A. (2014). *Music: An appreciation*. McGraw-Hill Education.

b) Translated book

Foucault, M. (1977). *Discipline and punishment: The birth of the prison*. (A. Sheridan, Trans.). Vintage Books.

c) Book with Multiple Authors

Bordwell, D. & Thompson, K. (2010). *Film Art: An Introduction*. McGraw-Hill.

ç) Edited book

Miller, T., & Stam, R. (Eds.). (2004). *A companion to film theory* (Vol. 18). John Wiley & Sons.

d) Chapter in an Edited Book

Jenkins, H. (2004). The work of theory in the age of digital transformation. T. Miller & R. Stam (Eds.), *A Companion to Film Theory* (pp. 234-261). Blackwell.

e) Chapter in the translation book

Schmeder, G. (2015). İşbölümü dinamiğinde kopmalar ve kesintiler. C. Vercellone (Ed.) ve D. Kundakçı (Trans.). *Bilişsel kapitalizm*. (1st ed., 61-75). Otonom Yayıncılık.

Piaget, J. (1988). Extracts from Piaget's theory (G. Gellerier & J. Langer, Trans.). In K. Richardson & S. Sheldon (Eds.) *Cognitive development to adolescence: A reader* (pp. 3-18). Hillsdale, NJ:Erlbaum. (Reprinted from Manual of child psychology, pp. 703-732, by P.H. Myssen, Ed., 1970. Wiley)

f) Book Review
Gül Ünlü, D. (2018). Kitap incelemesi [Şeffaflık toplumu: Şeffaf toplumun eleştirisi üzerine bir okuma]. Galatasaray Üniversitesi İletişim Dergisi, 28, 279-290. http://iletisimdergisi.gsu.edu.tr/tr/pub/issue/37677/436058

Seo, S. (2016). [Review of the book *Journalism and Human Rights: How Demographics Drive Media* Coverage by John C. Pollock]. Journal of Communication, 66 (6), E-15-E-17. https://academic.oup.com/joc/article-abstract/66/6/E15/4082402?redirectedFrom=fulltext

g) Book with Organization as Author
American Psychological Association. (2009). Crediting sources: Citing references in text. Publication Manual of the American Psychological Association (6th ed., p. 177).

Article

a) Article
Seyidov, I. (2020). On conceptual and methodological deficiencies of data journalism-related studies in Turkey. *Connectist: Istanbul University Journal of Communication Sciences*, 58, 273-289. https://doi.org/10.26650/CONNECTIST2020-0070

b) Online article without DOI
Grist, L. (2007). Masculinity, violence, resistance: A new psychoanalytic reading of Raging Bull. *Atlantis*, 29(1), 11-27. Retrieved from https://go.gale.com/

c) Popular magazine article
Salmon, C. (2016, Oct). Ken Loach is right: British film and TV has become too cosy and conservative. *Little White Lies*. https://lwlies.com/articles/ken-loach-fake-nostalgia-tv-period-dramas/

Thesis, Symposium

a) Thesis
Kendrick, J. (2005). *Screen violence and the new Hollywood* [Unpublished Doctoral Dissertation]. Indiana University. https://www.proquest.com/openview/433bbaa0b9973dad53d0aa735d1f941a/1?pq-origsite=gscholar&cbl=18750&diss=y

b) Symposium contribution
Gündüz, U. & Pembecioğlu N. (2021, October, 26-27). Covid-19. H. Adıyaman (Chairs), *The health*

agenda of media in the lights of information ethics and the Covid-19 sentiment analysis of garlic news [Symposium]. 18. International Communication in the Millennium Symposium, Erzurum, Turkey.

Other Sources

a) Newspaper Article
Lee, E. (2019, February 1). Digital Media: What Went Wrong. *The New York Times*. https://www.nytimes.com/2019/02/01/business/media/buzzfeed-digital-media-wrong.html

b) İnternet sayfası kaynakları
Bordwell, D. (2013, June 18). David Koepp: Making the world movie-sized. http://www.davidbordwell.net/blog/page/27/ adresinden 15 Eylül 2020 tarihinde alınmıştır.

c) Official publications and press release
Turkish Statistical Institute (2022). Foreign Trade Statistics (Publication number: 45536). https://data.tuik.gov.tr/Bulten/Index?p=Foreign-Trade-Statistics-January-2022-45536&dil=2
The White House, Office of the Press Secretary. (2010, August 4). Administration officials continue travel across the country holding "Recovery Summer" events [Press release]. https://obamawhitehouse.archives.gov/realitycheck/the-press-office/administration-officials-continue-travel-across-country-holding-recovery-summer-eve

ç) Dictionary
Oxford University Press. (n.d.). *Communication*. In Oxford English Dictionary. Oxford University Press. Retrieved January 1, 2022, from https://www.lexico.com/definition/communication

d) Podcast
West, S. (2020, December). On Media pt. 1- Manufacturing Consent (Episode 148) [Audio podcast]. In Philosophize this!. https://open.spotify.com/episode/04YIh1REL6KOxlnaJWlvfh?si=86782f42 0d744114

e) Video/Film
Zizek, S. (2008). *Violence* [Video]. Youtube. https://www.youtube.com/watch?v=_x0eyNkNpL0
Scorsese, M. (Director). (1976). *Taxi Driver* [Film]. Columbia Pictures.

f) TV series
Chase, D. (Producer). (1999-2007). The Sopranos [TV Series]. HBO.

g) Social Media
Manovich, L. [@manovich]. In the late 1990s South Korea became the leader in Internet connections, and they launched one of the first social networks Cyworld. Next, they used YouTube to create k-pop

global popularity. Can they repeat their success in metaverse? [Tweet]. Twitter. https://twitter.com/manovich/status/1462405978356207626

 [Tweet] for Twitter, [Twitter profile] etc., [Facebook status] for Facebook, [Timeline] etc., [Picture] for Instagram, [Highlight] can be used.

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