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Dynamics of Interactive Audience in The Digital Environment: An Analytical Study with an Application to The BBC Trending Program

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Abstract: This study aimed to investigate the dynamics of virtual audience interaction on social media platforms, specifically Facebook and YouTube. Additionally, it sought to identify the characteristics of the mobile audience in the digital environment and understand the reasons for audience engagement in the digital space. To achieve these objectives, a descriptive methodology was employed, analyzing both verbal and non-verbal language used in audience interactions. The survey method, using content analysis, was the primary approach utilized, leading to the following key findings.

The study analyzed the topics covered in selected trending episodes and assessed audience sentiments towards these topics. The research revealed that colloquial language (45.1%) and standard Arabic (41.7%) were the most prevalent languages used in comments, with a minor proportion (13.1%) utilizing mixed classical and colloquial Arabic. Additionally, non-verbal communication played a significant role, with symbols being the most frequently used form (80.6%), then images (10.9%), and videos (8.5%). Politics held the largest share of the topics discussed in the "Trending" episodes at 23.8%, then sports, the arts, and health, each at 14.3%. Social and religious topics closely followed, with 9.5% each. Audience interaction with the topics leaned predominantly towards positivity, accounting for 56.9%, while negative reactions constituted 36.3%, and neutral responses represented 6.8%. In conclusion, the study highlights that the virtual audience is a dynamic entity, engaging across various platforms and expressing themselves through diverse linguistic styles and emotional responses.

Keywords: Interactivity, Virtual Audience, Digital Platforms, Audience Dynamics, Social Media Sites.

1 Introduction

The dynamics of audience interactivity in the digital environment, as noted by Li and Chen (2019) [1], involve various factors that influence how the audience interacts with digital content. These factors include the ability to interact with elements such as buttons, links, and forms (Li & Chen, 2019) [1], the potential for inclusivity, which entails accommodating all members of the public via aspects like language, design, and content (Kim & Lee, 2018) [2], and the capacity for an interactive narrative that guides and engages the audience through elements like story, animation, and video (Liao & Lu, 2019) [3]. Additionally, a highly persuasive aspect is essential, which signifies the ability to convincingly present digital content using elements like statistics, evidence, and testimony (Cho & Lee, 2018) [4]. According to Al-Rawi (2018) [5], the digital environment has transformed the public from a homogeneous mass into diverse groups with unique habits. In the context of Arab issues addressed by international news sites, considerations such as inclusivity, interactive narrative, and high persuasion are of utmost importance (Al-Rawi, 2018) [5].

The significance of analyzing audience interaction data in the digital environment can be summarized as follows: Firstly, examining audience interaction data provides valuable insights into the audience's needs and preferences, leading to the enhancement of products and services as well as a more effective direction of advertising messages. Additionally, this analysis contributes to improving public relations by fostering greater trust between companies and institutions and their audiences. Furthermore, it assists in refining marketing and communication strategies by identifying patterns, trends, and interests among the audience. Notably, audience interaction data plays a pivotal role in revenue growth, enhancing sales, advertising, and marketing efforts. (Newman et al., 2022) [6], (Wielki, 2022) [7].

Moreover, audience interaction data analysis facilitates measuring the performance of companies and institutions, effectively evaluating the outcomes of their strategies (Boeker et al., 2020) [8]. Overall, this comprehensive analysis of audience interaction data offers numerous benefits for companies and institutions, enabling them to improve products and services, public relations, marketing and communication strategies, revenue generation, and performance evaluation. (Organization for Economic Co-operation and Development, 2020) [9].

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Within this context, the BBC Trending program serves as an exemplary case study, offering a unique opportunity to delve deeper into the dynamics of interactive audiences. By focusing on this program, the study seeks to uncover the intricate relationships between the media content, the program producers, and the audience, allowing for a nuanced examination of how interactive dynamics unfold in the digital environment. (Erger, 1991) [10].

The significance of this study lies not only in contributing to the academic discourse on media studies but also in offering tangible benefits to media practitioners and researchers. Understanding audience behaviors, preferences, and expectations can empower media organizations to tailor their content to better resonate with their target audiences. Moreover, by leveraging interactive audience dynamics effectively, media entities can foster greater brand loyalty, engagement, and brand advocacy.

To comprehensively explore the dynamics of interactive audiences, the study employs a mixed methods approach. This combination of qualitative and quantitative research methods offers a more holistic understanding of the complexities involved. Through in-depth interviews with program producers, hosts, and audience members, the study aims to gain valuable insights into the experiences, motivations, and perceptions that drive audience interactions. These qualitative data are complemented by a quantitative analysis of audience engagement metrics, such as social media interactions, comments, shares, and other measurable indicators of audience participation. By triangulating these findings, the research aims to build a robust foundation of knowledge that sheds light on the multifaceted nature of interactive audience dynamics. (Cerini, 2020) [11].

Moreover, beyond the immediate scope of this study, the research aligns itself with the broader trends and discussions surrounding media ethics and responsible research conduct. Ethical considerations are of paramount importance to ensure the well-being and privacy of participants. Therefore, the study is committed to obtaining informed consent from all participants and safeguarding their identities and sensitive information. Adhering to rigorous ethical standards not only ensures the credibility of the research but also contributes to fostering a culture of responsible research within the media studies community. (Lule, 2017) [12].

This paper endeavors to advance our understanding of interactive audience dynamics in the digital era, particularly within the context of the BBC Trending program. By offering valuable insights into audience engagement, content creation, and media reception, this study seeks to contribute meaningfully to the ever-evolving landscape of media studies. Moreover, the practical implications of this research make it relevant and useful for media practitioners and researchers, helping them navigate the complex challenges and opportunities presented by interactive audiences in the digital environment. Through a comprehensive and ethical research approach, this study aspires to enrich scholarly discourse and pave the way for future advancements in the field of media studies. (Berger, 1991) [10].

2 Research Problem

The digital environment has empowered all audiences to produce and display content on their platforms without any restrictions, in contrast to traditional media, where production is exclusively done by its practitioners. This has transformed the work from professionalism and institutionalization to individualization, which has given the audience the opportunity to lean towards the digital environment on digital platforms (like Instagram, Facebook, Twitter, YouTube, etc.), due to the ease of production, display, participation, and interaction. This has, in turn, increased the number of followers and admirers in the digital environment.

The audience of the digital environment is no longer dependent on traditional media, which sets its priorities and produces content and programs for it to watch. Instead, it has become a key participant in the creation of digital content, interacting with it, and moving between platforms according to the audience's characteristics at a high speed and with great convenience, transcending the limits of time and place. The audience selects the topics that suit them, interacts with the content of these platforms, and this is what distinguishes the audience in the digital environment. Our study works on tracking the audience's movement, trends, preferred topics, methods, and reasons for interaction, objectives of the most popular topics, and their reactions in the new digital environment. This leads us to the main research question:

To what extent does the audience interact in the digital environment?

3 Research Questions

A) What are the diverse fields present in the digital environment?

B) What are the reasons for the audience's interaction in the digital environment?

C) How does the interactive audience interact in the digital environment?

D) What are the trends in audience interaction in the digital environment?
4 The Objectives

A) To understand the elements that attract an interactive audience to digital platforms.
B) To identify the characteristics of the mobile audience in the digital environment.
C) To identify the reasons for the audience's interaction in the digital environment.
D) To measure the extent of audience interaction in the digital environment.

5 Significance of the Study

The theoretical importance lies in the digital environment's ability to fully grasp the interests and needs of the audience and followers, making them more eager to interact and communicate synchronously or asynchronously with each other. They are not bound by a single time or place, and they have diverse cultures, forming a virtual audience that participates in content creation.

The practical significance of the research lies in focusing on the study sample of the BBC Arabic "Trending" program, which discusses the most popular, trending, and interactive topics. The program can't handle a topic without extensive audience interaction, making the audience a vital indicator in choosing topics. The study looks at how and in what forms interactions occur. They may be in colloquial language, classical Arabic, or emojis, depending on the age and circumstances of the interactors. They may do so by sharing the topic on other platforms or through their accounts, likes, and comments. In addition to understanding the tendencies, inclinations, and reactions of the audience towards the Trending program.

6 Study Methodology

The study adopted the survey method, which involves the processes and tools used for a descriptive study of a phenomenon or subject. It reveals its characteristics, variables, and relationships in terms of intensity and direction. That is, the description includes the analysis of the subject's structure, clarifying the relationship between its components, and describing its different aspects as they are.

We have also followed content analysis, a study of the message or content through a method that involves an organized quantitative description of various materials' content. (Abdulaziz, 2011) [13]

Tools: 1. Primary sources: These are the sources where data was originally found, and the study collects data from these sources: Content Analysis: Classifying written, spoken, or visual material under certain categories according to specified standards reveals this material's properties in terms of form and content.

Secondary sources: These are sources where aggregated data is found and the necessary results are extracted for the research from them. This data can be published or unpublished and includes books, references, and internet sources.

7 Study Boundaries

A) Subjective Boundaries: The research addresses the study of the "Dynamics of the Interactive Audience in the Digital Environment," applying an analytical study to the BBC Trending program.

B) Temporal Boundaries: The study utilized a purposive sample covering the period from December 1, 2021, to March 31, 2022. Three episodes were selected from each month, making a total of twelve episodes, representing 15% of the total research population, which comprised 100 episodes.

C) Spatial Boundaries: The Trending Program by the BBC, as accessed through its Facebook page.

D) Human Boundaries: The research focuses on the audience engaging within the digital environment. It also aims to identify the reasons for audience interaction in the digital environment and gain an understanding of the extent of audience interactivity.

8. Definition of key terms

8.1. Dynamics:

Dynamics in the context of the interactive audience in the digital environment refers to the movement, behavior, and interaction of the audience in online platforms. It encompasses various factors that influence how the audience engages with digital content, such as their level of interactivity, inclusivity, interactive narrative, and persuasiveness. The
dynamics of the interactive audience can have a significant impact on the success of digital platforms, as it determines the level of engagement, participation, and interaction with the content. Understanding these dynamics can help platform designers, marketers, and content creators tailor their strategies to effectively engage and retain their audience. (Crosby, 2022) [14].

8.2. Interactive Audience:
This refers to the audience that shares and exchanges all forms of expression on the internet. (Aksu, 2018) [15].

8.3. Digital Environment:
In this research, it refers to all pages and discussions on the internet. (Jovanović, 2017) [16].

8.4. Interactivity:
It is the planned efforts in designing serious media websites, their programs, and content, which allow the user the maximum degree of participation in communication processes and free choice of content and services available on the internet as per their needs, preferences, and interests.

8.5. Digital Environment:
These are the electronic platforms with their multiple characteristics frequented by the interactive audience and are suitable for them according to issues with widespread digital distribution. (Kafi, 2016) [17].

8.6. Interactive audience:
refers to the way the audience interacts with digital content. There are many tools and techniques available to engage and interact with the audience in a digital environment. (Jenkins, 2006) [18].

9 Methodological Procedures and Content Analysis Tool

The program under study: "Trending bulletin" presented by Rania and Ahmed, airs on BBC Arabic and social media platforms. It delves into the most prevalent stories, ingeniously bridging the gap between traditional news bulletins and social media platforms, targeting a younger audience." (BBC Trending, 2017) [19].

The study is in line with the perspective that content analysis is a self-standing scientific method, and the researchers employed a systematic approach by following five key steps to conduct the analysis. First, they defined the concepts and questions under investigation. Then they selected an appropriate sample for analysis and determined the units of analysis. Next, the researchers defined specific categories for analysis to organize the data effectively. They also ensured the stability of the analysis by employing appropriate measures. Finally, statistical analysis was conducted, and the results were obtained. Throughout the study, the researchers posed a series of pertinent questions that were addressed through the content analysis process. The Content Analysis Tool has some few steps as follows:

First: finding Questions related to the content of information pertaining to interactivity in the digital environment:
1) What is the verbal language used in interactivity in the digital environment?
2) What is the non-verbal language used in interactivity in the digital environment?
3) What areas does the BBC Trending program, which is the subject of the study, focus on?
4) What are the audience's attitudes towards the issues raised in the episodes under study?
5) What methods does the audience rely on to interact with the raised subject?
6) What are the reasons that compel the audience to watch the BBC Trending program?
7) How does the audience evaluate the reactions to the raised subject?

Secondly: selections of Sample Selection:

"A sample is a part of the study population, and it represents the study population honestly. Therefore, the study results reflected on the sample can be generalized to the entire population". A- Defining the Study Population: The study provides a content analysis of the Trending program during the analysis period from January 1, 2021, to March 2022. 100 episodes of the Trending program were aired. B- Sampling Unit: All the units constituting the research population; each episode of the program is considered a sampling unit. C- Sample Selection: The study relied on the purposive sample method according to several factors: A- The news has significant interactions, exceeding five hundred interactions. B- More than a week has passed since the news was published. C- The topic is vital with wide interaction. D- The topic is on the Facebook platform and has a link on YouTube. The study conducted a comprehensive survey of the Trending program
episodes that were aired during the specified period for the BBC Arabic channel. (Mazahreh, 2010) [20].

Thirdly: Design the Form according to the following steps:

1. Identification of Analysis Units: "Units of analysis are the smallest elements of content analysis, but they are most significant. Units of analysis can be characters, scenes, or the entire program." (Wimmer & Dominick, 2013) [21] The following units of analysis were chosen for this study:

   A. Subject Unit: The subject reveals the main opinions and trends, and the study used this unit to identify the aspects of the fields within the Trending program episodes.

   B. The Natural Unit of Media Material: The study used the natural unit of media material. Each episode of the Trending program is considered an analysis unit.

2. Content Analysis Categories: Content analysis categories were chosen in line with the study's objectives and questions to reach scientific results. The analysis categories represent the actual research fields, and there are two main categories in content analysis:

   A. Subject Categories (What was said?):

      * The Communication Subject Category: This answers the preliminary question (What is the communication material about?). This query is relevant to the analysis process and is one that the study raises. The study identified main and subsidiary subject categories, as there are no ready-made categories, and each research project includes its own categories. For example, we divided the program's idea categories into political, economic, sports, etc.

      * The Subject Direction Category: This category aims to identify audience attitudes towards positive and negative topics, and it is divided into positive, negative, and neutral.

      * The Audience Interaction Methods Category: This aims to identify audience interaction methods, and the study targeted the following categories: viewing, sharing, commenting, and liking.

   B. Category of How it was said:

      * Form of Media Material Category: This is used to differentiate between the various forms and patterns that the media material can take in different media. Here, the study refers to the Trending program.

      * The Used Language Category: This is an important category due to the resulting outcomes related to the extent of users' participation in interaction in its various forms, between language, symbols, images, and video. The aim is to analyze the used language to identify the prevailing linguistic pattern in the audience's interaction with specific information and the extent of using the appropriate linguistic levels for the diverse audience.

3. Measures of Validity and Reliability: The degree to which the measurement tool measures what it was designed for. "Validity is intended to indicate the appropriateness of the research tool in achieving the study's goals, thus raising the level of confidence in the results that the researchers have arrived at, to the extent that generalizations can be made from them" (Al-Laban & Atiya, 2012) [22].

4. To ensure the validity of the analysis in this study, the study relied on the following:

   A. Ensuring that the content analysis form includes a set of integrated thematic axes that express the objectives of the study. 2- Defining content analysis categories precisely, considering the overlap among them, their inclusivity, and their representation of all study objectives. 3- Precise definition of the concepts and variables used in the content analysis form. As for the reliability of the analysis in its statistical sense, it is the measurement of the degree of data independence from the measuring tool and can be obtained through two types of consistency (Samisam, H., 1992) [23].

   B. The study employed temporal consistency to measure reliability in this research, with the analysts achieving the same results across different times. The reliability rate achieved by the researcher was 95%, which is a high score that confirms the feasibility of using the tool for measurement. The number of categories that reached complete agreement in two rounds of analysis was 37. The number of categories encoded in the first round of analysis was 38, while it was 40 in the second round. Holsti's formula was applied to measure reliability as follows: Reliability coefficient = 2X agreed-upon categories / total coding categories.

   Reliability coefficient = 2 X 37 / (38+40) Reliability coefficient: 0.95

The content analysis form was presented to several judges to test its validity and review it scientifically and methodologically. They highlighted the form's validity and its harmony with the study's objectives. Judges for the content analysis form.


10 Theoretical Framework

"While social media users are essentially the same real-world audience, they vary in the interactions they engage in. There is a You Tube audience, a Facebook audience, an Instagram audience, and, likewise, a Twitter audience. The audience dynamics might revolve around the same interests, but social media platforms differ according to their content and inclinations. For instance, Twitter users tend to lean towards political content, Facebook users gravitate towards social and commercial aspects, while the audiences of Instagram and TikTok are more inclined towards entertainment and amusement." (Sobti, 2018) [24] According to the study, contemporary societies have undergone significant transformations in the field of communication and media, leading to considerable changes in the methods of producing, distributing, and receiving information in recent years.

10.1. Characteristics of the digital audience

The digital audience comprises individuals from diverse environments and cultures, with heterogeneity in age, gender, and privacy. They are not familiar with each other, and everyone receives media content individually while following and interacting with pages they admire. The digital audience is spread across the world, and their interaction is limited to specific digital social entities (Ghrouba & Belkadi, 2019) [25].

10.2. The Digital Audience

Observers notice a clear reflection of internet technologies on the characteristics of the audience and the nature of media practice through this medium. Previously, the elements of the media process consisted of the sender, the message, the medium, the receiver, and the feedback. However, the boundaries between the sender and the receiver have shifted, and now every internet audience becomes a producer of the presented media content. Experts and specialists refer to this phenomenon as "the interactive digital audience" (Bou Ghazi, 2016) [26].

Interactivity in this context refers to the relatively high level of the digital medium and the suitable technological capabilities that enable multi-directional digital exchanges, making communication multi-directional and multi-level. It allows participants to control the communication act and supports role exchanges between participants in the communication process and interactions between message senders and receivers (Kafi, 2016) [17].

The study also suggests that the technological aspect of digital followers and interactors is the users' ability to participate in modifying the form and content of the available messages in the digital environment. This ability is inherent in the characteristics and interactive services provided by the digital medium or platform. Therefore, we find highly active and interactive platforms, indicating technologically advanced features, while there are also platforms with low interactivity, suggesting limited options and modest technologies in use.

11 Literature Review

The research-relevant studies conducted between 2016 and 2022 will be presented in reverse chronological order, starting from the most recent and progressing to the oldest as follows:

Gharghut (2022) [27] aimed to investigate how interactive interface evaluation criteria can improve the usability of university websites for students. The study focused on the analytical examination of the website of Al-Wadi University as a model. An electronic questionnaire was distributed, and a total of 301 responses were collected, out of which 254 were suitable for statistical analysis. The data obtained from these responses was used to address the research problem.

One of the key findings of the study revealed that the average scores of students' responses in the positive direction, with "Yes," were as follows: ease of use of the website interface (4.57), its effectiveness (4.89), the presence of control procedures (5.21), and its stability (4.53). These values were significantly higher compared to the average scores of negative responses with "No," which were rated at 2.87, 2.97, 2.25, and 2.83, respectively. This reinforces the importance of user behavior, attitude, and emotional, experimental, and meaningful interaction between them and the electronic website of Al-Shaheed Hamah Lakhder University in Al-Wadi and its administrators. The study particularly emphasized the essential practical aspects related to the ease of website use, its content, design, and organization.

Al-Muwajahi (2022) [28] examines the emergence of new digital environments, which have introduced practices and communicative forms distinct from traditional ones, thus reinforcing the authority of intermediary communication through various interactive applications and tools. This research paper sheds light on interactivity as a prominent feature in the new digital environment, with a focus on different measurement methods and forms. The study also aims to explore models of interactivity through personal messaging applications.

The findings of the study indicate that interactivity through personal messaging applications exhibits various manifestations and options, making it widely prevalent and extensively used. However, no matter how advanced it
Boudrabala and Hanane in 2021 [29]. focused on the treatment of trending news trends through social media platforms, using the program "Trending" on the BBC Arabic channel as a model. This was done in response to the changes witnessed in the television program industry during the digital age, where social media platforms played a significant role in deepening these changes and becoming an essential part of television channel programs.

Through this study, the researchers aimed to understand how the program "Trending" processed trending news trends through social media platforms. They conducted a simple random sample of episodes of the "Trending" program that addressed news related to Algeria using a descriptive-analytical approach. The episodes were analyzed using content analysis, focusing on categories related to form and content.

The study's findings revealed several key points. The predominant technical format in the program was statements and reports, as it was deemed most suitable for the nature of the topics covered. Interviews were also utilized to enable interaction with the events. The program placed significant emphasis on user comments as it sought to address what was being discussed on social media platforms. Additionally, the program covered a diverse range of topics and relied on various information sources, with a substantial reliance on social media platforms as it addressed trends and news from these platforms.

Abd El-Hafez (2020) [30] aims to explore the role of local radio in raising public awareness about the seriousness of the COVID-19 pandemic through health programs presented on local radio. The study's sample consisted of students from the College of Humanities and Social Sciences, specializing in Media and Communication. The research employed a descriptive method, which aligns with the study's topic, and data collection tools included a questionnaire survey.

The study found the following results: Many respondents reported listening to the radio in the evening during the pandemic days, primarily within their homes. A significant number of participants responded positively to the local radio's advice on wearing masks and adhering to quarantine measures. However, some participants also developed negative behaviors due to following precautionary measures, experiencing isolation and fear.

According to most local radio listeners in Al-Wadi, the role of local media in raising awareness about the COVID-19 pandemic and informing the public about its seriousness was highly successful.

Al-Shalhoub, (2020) [31] This study aimed to identify the motivations and objectives that drive the Saudi public to rely on social media for understanding Saudi societal issues. The study investigated which social media platforms the public depends on to obtain information about these issues, the reasons that drive the public's dependence on these platforms, and whether there were statistically significant differences in the motivations of the Saudi public's engagement with social media based on their demographic characteristics. The study also examined the existence of a statistically significant correlation between the degree of the Saudi public's reliance on social media for understanding societal issues and their motivations to follow these platforms. The researcher used a survey methodology and a questionnaire as tools to obtain key information from the sample population, consisting of 893 respondents from the residents of Riyadh. The study results revealed that the sample's reliance on social media for understanding societal issues was primarily driven by cognitive motivations. The dependence on social media for following Saudi societal issues was mainly focused on social issues. The results also showed a significant reliance by the public on Twitter to obtain information about Saudi societal issues.

Ghruba & Al-Saghir (2019) [32]. Since the integration of social media into the traditional media ecosystem, the roles of communication process elements, especially in relation to media audiences, have changed. The audience has transitioned from merely receiving media content to becoming a major actor in producing media material, which has led to the emergence of new patterns of practice where the audience has gained significant importance. They have initiated content creation by broadcasting a vast number of media messages through social media platforms, transforming them into raw material relied upon by media institutions as an important source. This change has brought to the forefront the issue of changing the characteristics of media content within social media sites. This study seeks to investigate the relationship between the media audience and media content within social media platforms in terms of the new roles acquired by the audience as well as the nature of the content produced within these platforms.

Al-Sanusi, T. (2019) [33]. Modern communication technologies have produced virtual communities that provide individuals with the opportunity to replace their real identities and replicate multiple identities. The concept of community is no longer associated with a temporal or spatial context but rather with the principle of shared activities. The researcher posed a problem regarding the mechanisms of identity construction and reshaping its features through social media. The exploratory study, which relied on the technique of online interviews, concluded that social media can create a kind of prison (or panopticon, as Michel Foucault calls it), which is a reciprocal virtual prison that affects users' psyches. The user's awareness that they are being monitored leads them to attempt to please the virtual crowd and win their admiration through a careful selection of what they display in posts, according to the requirements of the virtual society to which

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they belong. This leads to the creative reshaping of their identity. The study also raised the issue of self-making and the sculpting of false identities.

Fadhil & Al-Sharif (2018) [34]. The research aimed to identify the habits and patterns of the public's use of social media sites for Iraqi satellite channels, as well as determine which sites the public uses the most to follow Iraqi satellite channels. It also aimed to understand the influence of the demographic characteristics of the respondents about exposure to social media sites for Iraqi satellite channels and to establish the audience's priorities. The researcher used a survey method aimed at gathering data and information from the respondents, relying on a questionnaire as a key and important tool for data collection. This was applied to a purposive sample of 400 respondents from the audience of the Dhi Qar Governorate.

Amine, (2018) [35] The current study aimed to approach Algerian women's Facebook groups and attempt to understand the extent to which these groups constitute a marginal public space within cyberspace, particularly considering the difficulties regularly faced by Algerian women in accessing physical and media public spaces. From an epistemological perspective, the study relied on the theory of marginal public space as a fundamental epistemological organizer. Methodologically, the study adopted a descriptive approach, relying on virtual surveys and incorporating 386 virtual questionnaires and 38 virtual interviews to collect data from the research community under study. Parallel to this, using a non-probabilistic sampling method, we selected six Facebook groups with deliberate and direct intervention according to predefined criteria and requirements. Based on the procedural and field studies, we arrived at a set of multifaceted results. Among the most important findings is that the Facebook groups under study constitute open, easily accessible spaces that accommodate users without obstacles or coercion. Users employ available communicative dynamics such as identity anonymity, interactive mechanisms, and content production and sharing strategies to address and deal with issues and problems that concern them from their unique perspective. On another level, these Facebook groups provided open, dynamic spaces for users to emerge and become publicly visible. In addition, the groups studied provided practical and effective mechanisms that enabled members to interact critically and dynamically with their reality by publishing, commenting, sharing, and circulating content with a critical tendency. The study also found that the religious discussions and rhetorical interactions occurring within the space of the Facebook groups meet an acceptable level of rational discussion requirements.

Qasmi (2016) [36] Internet applications are characterized by their interactivity. Their contributions extend beyond facilitating communication among various social groups around the world. They go further by creating a unique kind of space, namely cyberspace. This is an area where individuals are active across various sites, with social networking sites being the most prominent example. These sites have demonstrably provided opportunities for users to exchange information and freely express their opinions, opening a space for dialogue and discussion on a wide range of issues. The experiences during the Arab Spring revolutions are a prime example of this, as these sites played a role in creating an alternate space for circulating news, ideas, and heated debates about the prevailing regimes in these countries, all aimed at establishing the foundations of democratic practice.

The nature of spaces hosting such discussions has varied and evolved historically and has now extended into the cyberspace of virtual communities. Given the role these spaces have played and continue to play in voicing opinions to society, the concept of space has been the subject of many studies. One name that stands out in this context is Jürgen Habermas, who delved into the details of this concept and coined the term 'public sphere.'

In this article, we decided to tackle this concept in virtual societies by examining the capacity of various interactions that occur in this cyber, electronic space—exchanges of ideas and debates among members of virtual communities—via electronic sites and social networking sites to create a new (virtual) public sphere in the sense that Jürgen Habermas discussed in his numerous writings.

Conclusion of Previous Studies

The previous studies covered a variety of topics, with a focus on the role of social media sites in shaping public priorities, identity self-construction, and the extent of public reliance on these platforms for knowledge about societal issues. They examined public attitudes towards new media, the role of new communication media in shaping marginal public spaces for women, and the challenge of creating a virtual public sphere. Most of these studies used a descriptive-analytical approach, a survey method, or a qualitative method and largely relied on questionnaires and interviews as research tools. Then we can Benefit from the Current study's previous studies that the current study benefited from the previous studies in defining the research problem, describing the appropriate research methodology for the topic, determining the sample size, and comparing the results of the previous scholarly heritage with the current study. Our study differs from previous studies in that it examined in detail public interactions on topics with wide popularity (trends), resulting in the observation that the interacting public is mobile across various communication platforms, unrestricted by language, culture, or geographical boundaries. It investigated how the public moves and participates using digital computers, which facilitate interaction and movement in various digital environments.
The results

The last step in the analysis is the interpretation of observed and measured data, followed by a process of result interpretation. For answering the study's analytical questions, we utilized a descriptive method to measure the verbal and non-verbal language used in audience interactions on social media sites such as Facebook and YouTube. We examined the methods of virtual audience interaction and the areas and trends of this interaction in the digital environment. By linking the research objectives with the study results, the following became apparent:

The first Objective, which is to understand the elements that attract interactive audiences to digital platforms, is associated with the verbal language of comments on episode topics from the study sample. Additionally, audience preferences for the topics covered in the episodes are a supplement to it.

Table 1: Verbal language of comments on episode topics

<table>
<thead>
<tr>
<th>Verbal Language of Comments on Episode Topics</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arabic Vernacular</td>
<td>3129</td>
<td>45.1%</td>
</tr>
<tr>
<td>Arabic Standard (Fus-ha)</td>
<td>2893</td>
<td>41.7%</td>
</tr>
<tr>
<td>Colloquial Standard Arabic</td>
<td>908</td>
<td>13.1%</td>
</tr>
<tr>
<td>Arabic in English Alphabet</td>
<td>4</td>
<td>0.1%</td>
</tr>
<tr>
<td>English</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6934</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Concerning the verbal language of comments about the topics of the study sample episodes, the vernacular language accounted for 45.1%, while the standard language (fluent Spanish) obtained 41.7%, and colloquial standard Arabic accounted for 13.1%. In the context of the non-verbal language used in the comments, symbols constituted 80.6%, followed by images at 10.9% and videos at 8.5%.

Table 2: The fields addressed by the program sample of the study.

<table>
<thead>
<tr>
<th>Fields Addressed by the Program Sample of the Study</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political</td>
<td>5</td>
<td>23.8%</td>
</tr>
<tr>
<td>Economic</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Sports</td>
<td>3</td>
<td>14.3%</td>
</tr>
<tr>
<td>Cultural</td>
<td>1</td>
<td>4.8%</td>
</tr>
<tr>
<td>Social</td>
<td>2</td>
<td>9.5%</td>
</tr>
<tr>
<td>Art</td>
<td>3</td>
<td>14.3%</td>
</tr>
<tr>
<td>Health</td>
<td>3</td>
<td>14.3%</td>
</tr>
<tr>
<td>Educational</td>
<td>1</td>
<td>4.8%</td>
</tr>
<tr>
<td>Environmental</td>
<td>1</td>
<td>4.8%</td>
</tr>
<tr>
<td>Religious</td>
<td>2</td>
<td>9.5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>21</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

A content analysis of the selected trending episodes revealed that the following topics were covered in the episodes: politics took up the most space (23.8%), followed by sports, the arts, and health (14.3%). The categories of social affairs and religion were close behind with 9.5% each, while the categories of culture, education, and the environment each accounted for 4.8%.

Table 3: Audience Interaction Trends

<table>
<thead>
<tr>
<th>Audience Interaction Trends</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>3340</td>
<td>56.9%</td>
</tr>
<tr>
<td>Neutral</td>
<td>396</td>
<td>6.8%</td>
</tr>
<tr>
<td>Negative</td>
<td>2132</td>
<td>36.3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5868</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

The audience's interaction with the topics was mostly positive, accounting for 56.9% of responses. Negative reactions represented 36.3% of the interactions, while neutral responses made up 6.8%. These results fulfill the fourth objective of determining the extent of audience interaction in the digital environment.

Table 4: Audience Interaction Methods

<table>
<thead>
<tr>
<th>Audience Interaction Methods</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viewing</td>
<td>4279100</td>
<td>96%</td>
</tr>
</tbody>
</table>
The interaction method of viewing was the highest at 96%. Liking accounted for 3.7%, and comments were at 0.2%. These results fulfill the fourth objective of determining the extent of audience interaction in the digital environment.

### Table 5: Goals of The Most Popular Topics in The Program

<table>
<thead>
<tr>
<th>Goals of The Most Popular Topics</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Social communication</td>
<td>6</td>
<td>31.6%</td>
</tr>
<tr>
<td>Getting Information</td>
<td>3</td>
<td>15.8%</td>
</tr>
<tr>
<td>Entertainment</td>
<td>2</td>
<td>10.5%</td>
</tr>
<tr>
<td>Emotional empathy</td>
<td>6</td>
<td>31.6%</td>
</tr>
<tr>
<td>Criticism</td>
<td>2</td>
<td>10.5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>19</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Social communication and emotional empathy accounted for 31.6% each, indicating participation and interaction in human topics that unite all peoples with different cultures. Information acquisition was at 15.8%, and entertainment and criticism were at 10.5% each. These results achieve the study's third objective: identifying the reasons for audience interaction in the digital environment.

### Table 6: Audience Reaction in The Comments

<table>
<thead>
<tr>
<th>Audience Reaction in The Comments</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advisor</td>
<td>29</td>
<td>0.4%</td>
</tr>
<tr>
<td>Popular video</td>
<td>11</td>
<td>0.2%</td>
</tr>
<tr>
<td>Symbols</td>
<td>99</td>
<td>1.5%</td>
</tr>
<tr>
<td>Tagging</td>
<td>151</td>
<td>2.2%</td>
</tr>
<tr>
<td>Angry</td>
<td>227</td>
<td>3.3%</td>
</tr>
<tr>
<td>Marketing</td>
<td>14</td>
<td>0.2%</td>
</tr>
<tr>
<td>Opposition</td>
<td>2430</td>
<td>35.5%</td>
</tr>
<tr>
<td>Support</td>
<td>3257</td>
<td>47.6%</td>
</tr>
<tr>
<td>Sarcastic - Indifferent</td>
<td>619</td>
<td>9.1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6837</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Supporters accounted for 47.6% of the comments, with opponents at 35.5%. Sarcastic and indifferent comments were at 9.1%, with 3.3% of comments expressing anger. Tagging (tag) was at 2.2%, with advisors at 0.4% and marketing and popular videos each at 0.2%. This shows the size of reactions and the inclinations of active audiences in the digital environment, in line with the study's second and fourth goals, to identify the characteristics of the active audience in the digital environment and the extent of audience interaction in the digital environment. This is consistent with a study by (Ghrouba & Al-Sagheer, 2019) [25], which shows that the media audience has transformed from being a mere receiver of media content to a primary actor in producing media material. New patterns of practice have emerged where the audience has gained tremendous importance, initiating content production by broadcasting a massive number of media messages via social media sites, turning it into raw material relied upon by media institutions as a significant source.

### 13 Discussions

By conducting a content analysis of the verbal language in comments about the topics of the episodes, we find that colloquial language accounted for 45.1%, while in contrast, classical Arabic accounted for 41.7%. Mixed classical and colloquial Arabic made up 13.1% of the language used. We note that most of the commenters in the audience prefer to use colloquial language because it is easier, closer, more familiar, and more widely used. When the topic is more passionate for the audience, they are more likely to use easier expressions, which is colloquial language. The use of classical Arabic as a common language comes when they feel they are addressing different nationalities and cultures of followers.

In the context of non-verbal language used in comments, symbols accounted for 80.6% of usage. When the audience is uncomfortable expressing themselves, they resort to using symbols. Their use could be to flatter the publishing party, or it could be used sarcastically or expressively as a universally agreed-upon language. Following symbols, images constituted 10.9% and videos 8.5%. Audiences typically do not tend to use images and videos and focus more on direct
language and symbols to express their views and ideas.

This aligns with what the study by Al-Muwaqaji (2022) [28] concluded, which found that interactivity through personal conversation applications has many manifestations and choices, making it widespread.

A content analysis of the selected trending episodes revealed that the episodes addressed the following topics: Political issues topped the list of areas and topics with 23.8%, as political issues always touched viewers' interests and concerns and affected the course of their daily lives, leading to unprecedented interaction.

Then, sports, art, and health topics made up 14.3% each. Social and religious areas came up to 9.5%, respectively. This differs from the study by (Al Shalhoub, 2020) [31] which stated that reliance on social media sites for following Saudi society's issues focused on social issues.

Cultural, educational, and environmental topics each garnered 4.8%, which depends on those responsible for the program, the timing of the broadcast, the study sample, and the interests of the audience. This is consistent with the study by (Boudrabala and Hanane, 2021) [29] which stated that the Trending program focuses heavily on comments as it is interested in what is being circulated via social media. However, it varied in the number of topics addressed and the reliance on information sources, but heavily relied on social media sites as it addressed trends in social media news.

Analyzing the content of the episodes of the program "Trending," a sample study was conducted to determine the audience's reaction to the presented topics. The results indicate that the audience's reaction to the topics is positive, with a percentage of 56.9%. This significant percentage reflects the success of the "Trending" program in selecting highly popular topics that capture the community's interests and align with the audience's preferences and desires. On the other hand, negative sentiment represents 36.3%, while neutral responses account for 6.8%. These findings align with a study conducted by (Boudrabala and Hanane, 2021) [29] which showed that the average responses of students in the positive direction towards the usability, effectiveness, inclusion of control procedures, and stability of the website's interface were 4.57, 4.89, 5.21, and 4.53, respectively. These values are significantly higher than the average responses in the negative direction, which were 2.87, 2.97, 2.25, and 2.83, respectively. These findings reinforce the significance of user behavior, attitudes, emotions, and experiences in interactions between them and the website of Al-Shaheed Hama Lkhadhar University and its administrators, based on fundamental practical aspects such as website usability, content, design, and organization.

By Reviewing Table No. 4 content, it becomes evident that the most prevalent interactive method among viewers was passive observation, constituting 96% of interactions. This indicates that most of the audience prefers not to engage actively through expressions, symbols, or any other form of interaction, which corresponds with the Spiral of Silence theory. On the other hand, likes accounted for 3.7%, and comments represented 0.2% of interactions. These results are consistent with the findings of Al-Sanusi, T. (2019) [33]. which suggests that social media can create a virtual panopticon or a mutual prison (as termed by Michel Foucault) that affects users' psychology. Users' awareness of being monitored leads them to attempt to appease the virtual crowd and gain its approval by carefully selecting the content they share according to the norms of the virtual community they belong to. This also aligns with the study conducted by Amine, (2018) [35] which found that the Facebook groups under study serve as open and accessible spaces that accommodate users without constraints or limitations. The users employ various communication dynamics, such as anonymity and interactive mechanisms, as well as content production and sharing, strategically addressing issues and concerns from their own perspectives. Moreover, these Facebook groups provide open and vibrant spaces for the emergence and public manifestation of female users. Furthermore, these groups have facilitated practical and effective mechanisms that enabled members to interact with their reality critically through publishing, commenting, sharing, and exchanging critical content.

Regarding the most popular objectives of the topic, as indicated in Table 5, we find that social interaction and emotional empathy both scored 31.6%. This suggests that the primary purpose of audience interaction is social communication, exchanging opinions and ideas, and achieving satisfaction. Additionally, emotional empathy and sharing others' joys, sorrows, hopes, and aspirations hold significant importance, as humans are inherently social beings. Obtaining information ranked 15.8%, indicating that the audience is constantly seeking new information. Entertainment and criticism both scored 10.5% separately. Entertainment is considered important to the audience as it fulfills their desires for amusement, while criticism appeals to certain segments of the audience, such as constructive criticism or criticism for its own sake, which relates to reactions.

Regarding reactions in the comments, supporters accounted for 47.6%. This perspective reflects those who found the topic aligned with their views and beliefs. In contrast, opponents constituted 35.5%, usually not appreciating the topic's popularity and finding it incongruent with their emotions and ideas. Satirical and indifferent reactions scored 9.1%, typically coming from those uninterested in the presented topic. Angry reactions constituted 3.3% due to the topic's inability to please everyone. Tagged reactions (mentions) accounted for 2.2%, indicating a desire to engage others in the discussion as the topic revolves around their interests and serves as a discussion platform for them. Advising reactions...
scored 0.4%, while marketing and popular video reactions accounted for 0.2% each.

14 Conclusion

The study on the dynamics of the virtual audience in the digital environment perceives the audience as a variable element moving across all social media platforms to follow issues related to social, personal, or economic matters. The audience is not restricted to a single platform but rather a fluctuating entity that alternates between using formal Arabic and colloquial language. They engage in political or sports-related topics, commenting on or sharing their interests with different groups on another site, unaffected by language or demographic barriers. Their moodiness is influenced by their varying levels of culture and education, depending on the most followed topics and the most famous personalities that pique their interest. They influence and interact with each other, expressing similar moods in criticism or praise across various subjects, whether related to health, art, or religion. In essence, the audience is a dynamic entity in every sense of the word. The added value of this research lies in exploring the scarce studies that delve into the movement of the audience due to its complexities and obstacles, making it a catalyst for further research on the digital environment.

Most studies focus on the impact of social media platforms on the audience. However, this study delves into the dynamics of the audience within these platforms, making it a rare and valuable investigation.

Challenges and Future Perspectives: The lack of sufficient sources and references for scientific research is a major obstacle facing this study. The novelty of the subject being researched may be the primary reason for the absence of such sources, making it difficult to obtain adequate information for scientific research. The scarcity of previous studies specifically addressing the subject of this scientific research presents another difficulty. Monitoring the dynamics of the audience in the digital environment, whether through comments, views, shares, or likes, is challenging due to the vast number of active users in the digital environment.

This study serves as a foundational step, opening vast opportunities for research with a focus on the digital audience, especially with the constant changes and transformations in both the audience and the digital environment, represented by social media platforms continuously updating to cater to the audience's desires.

15 Recommendations

Based on the provided content, the main recommendations are as follows:

1. Motivate researchers and scholars in academic and research institutions to conduct further studies on the digital audience and its interaction with social media platforms.
2. Establish precise definitions for non-verbal language, such as symbols, to avoid any misunderstandings.
3. Emphasize the importance of legal authorities in establishing organized legislation for media work on social media platforms.
4. Encourage television channels to pay attention to the needs and interests of the audience and convey useful, enjoyable, and entertaining messages.
5. Focus on describing different audience segments, especially the browsing audience, which includes viewers, listeners, and readers, particularly given the intertwining and integration of media and social media platforms.

17 Study limitations and future directions

1. The study faces obstacles in terms of insufficient sources and references for scientific research, likely due to the novelty of the subject being investigated, making it difficult to obtain adequate information.
2. Another challenge is the abundance of prior studies on the same subject, which can complicate the research process.
3. Monitoring the dynamic digital audience, especially the vast number of mobile users, through comments, views, shares, or likes presents its own set of challenges.
4. This study plays a crucial role as a foundational steppingstone, paving the way for comprehensive research into the digital audience. It considers the ever-evolving digital landscape, influenced by continuous updates from social media platforms aimed at meeting the audience's preferences.

18 Study Implications

1. Enhance Research Sources: Encourage further exploration and expansion of literature to address the lack of sufficient
2. Focus on Audience Preferences: Recognize the significance of verbal language and audience preferences in attracting interactive audiences to digital platforms. Consider colloquial language and topic alignment for effective audience engagement.

3. Address Audience Interaction Patterns: Analyze different interaction methods, such as passive observation, liking, and commenting, to understand audience engagement dynamics on social media platforms.

4. Consider Cultural and Linguistic Contexts: Examine language, cultural preferences, and demographic differences in audience interactions, as these may influence communication patterns on social media platforms.

5. Utilize Findings in Content Strategy: Tailor content on digital platforms based on study results, aligning it with audience preferences and interests to maximize engagement and user satisfaction.

6. Encourage Further Research: The study lays a foundational understanding of the digital audience's dynamics. Encourage more research to explore audience complexities, obstacles, and the evolving digital landscape.

**Conflict of interest**

The authors declare that there is no conflict regarding the publication of this paper.

**References**


