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Algorithmic Dominance over Users' Orientations and Choices toward Digital Content: A Survey Study on a Sample of Digital Platform Users

هيمنة الخوارزميات على توجهات المستخدمين وخياراتهم نحو المحتوى الرقمي: دراسة مسحية على عينة من مستخدمي المنصات الرقمية

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- **Abstract:**

This study aimed to examine the manifestations of algorithmic dominance in digital environments by investigating its impact on users' exposure to digital content and their content choices, as well as exploring their level of awareness of algorithmic personalization mechanisms. The study employed a descriptive research design using a questionnaire administered to a sample of digital platform users.

The results showed that algorithms play a central role in organizing content and shaping users' exposure to it, with users interacting to varying degrees with the content recommended by digital platforms. The study also found a considerable level of awareness of how algorithms operate. However, this awareness did not prevent algorithms from influencing users' browsing behavior or reshaping some of their digital interests and choices. The findings further indicated that users recognize the influence of algorithms on their digital experience while maintaining a degree of agency in making selections and resisting algorithmic recommendations.

The study concludes that algorithmic dominance is primarily manifested through directing users' attention and shaping their pathways of exposure to digital content, gradually influencing their interests and preferences within the digital environment.

Keywords:

Algorithmic Dominance; Digital Content; Algorithmic Recommendation; Digital Platforms; Users.

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الملخص:

هدفت هذه الدراسة إلى الكشف عن تجليات هيمنة الخوارزميات في البيئات الرقمية من خلال دراسة تأثيرها في تعرض المستخدمين للمحتوى الرقمي واختياراتهم تجاهه، إضافة إلى استكشاف مستوى وعيهم بآليات التخصيص الخوارزمي. واعتمدت الدراسة على المنهج الوصفي، باستخدام استمارة استبيان طبقت على عينة من مستخدمي المنصات الرقمية. وأظهرت النتائج أن الخوارزميات أصبحت تؤدي دورا محوريا في تنظيم المحتوى وتوجيه عملية التعرض له، حيث يتفاعل المستخدمون بدرجات متفاوتة مع المحتويات المقترحة من قبل المنصات. كما كشفت الدراسة عن وجود مستوى معتبر من الوعي بآليات عمل الخوارزميات، غير أن هذا الوعي لم يمنع تأثيرها في سلوك التصفح وإعادة تشكيل بعض الاهتمامات والاختيارات الرقمية، وبينت النتائج كذلك أن المستخدمين يدركون التأثير الذي تمارسه الخوارزميات على تجربتهم الرقمية، مع احتفاظهم بهامش من القدرة على الانتقاء والمقاومة. وتخلص الدراسة إلى أن هيمنة الخوارزميات تتجلى أساسا في توجيه الانتباه والتحكم في مسارات التعرض للمحتوى، بما يؤثر تدريجيا في اهتمامات المستخدمين وتفضيلاتهم داخل البيئة الرقمية.

الكلمات المفتاحية:

الهيمنة الخوارزمية؛ المحتوى الرقمي؛ التوصية الخوارزمية؛ المنصات الرقمية؛ المستخدمون.

• Introduction

Communication research on audience studies, which began in the late 1930s, concluded that audiences shifted from being passive recipients who accepted whatever the media presented and were influenced by it directly or indirectly to active participants who engage with media content in an intelligent and selective manner. This shift emphasized the concepts of selectivity, limited media effects, and the reduced authority and influence of the media over audience thinking. However, technological developments over the past few years, together with the growing dominance of digital platforms in users' daily communication environments, their interactive features, users' continuous connectivity to technology, and their deep immersion in diverse digital content, have transformed the nature of audience behavior. As a result, audiences have increasingly become directed toward specific content, creating a situation in which they are more likely to consume content that is made available and placed before them by digital platforms.

The media landscape has undergone significant transformations as a result of the growing reliance on algorithms. Algorithmic processes are increasingly used to collect, produce, publish, and distribute news content automatically with minimal human intervention. Technology companies and developers play a central role in strengthening the capabilities of media organizations by developing technologies that support automated news production and communication processes. At the same time, users receive highly personalized content experiences,

as algorithms organize and deliver content across digital platforms by classifying information, filtering content, prioritizing items, and generating recommendations.[1]

The growing influence of algorithms, reflected in their central role in managing digital content by determining what is made available to audiences and recommending certain content over others, as well as through mechanisms such as filter bubbles and echo chambers, requires a reconsideration of the contemporary audience. These developments call for a reexamination of audience characteristics, roles, patterns of media consumption, and modes of thinking within an algorithm-driven digital environment.

Study Problem

The problem of this study can be formulated in the following main research question:

How is algorithmic dominance manifested in digital environments through its influence on users' choices of digital content?

The following sub-questions are derived from this main question:

- What roles do algorithms play in organizing and directing content across digital platforms?
- How do algorithms contribute to reshaping users' behavior and interests within the digital environment?
- What is the level of users' awareness of the mechanisms through which algorithms operate on digital platforms?

Study Objectives

This study aims to:

- Identify the nature of users' engagement with digital platforms within the contemporary algorithm-driven environment.
- Examine the roles that algorithms play in directing, organizing, and personalizing digital content for users.
- Measure the level of algorithmic awareness among digital platform users.
- Assess the extent to which users rely on algorithmically recommended content when selecting and consuming digital content.
- Investigate the impact of algorithms on users' orientations and choices regarding digital content.
- Determine the extent to which algorithms contribute to reshaping audience characteristics and communication behaviors within the digital environment.

Study Importance

The importance of this study lies in the following:

- Examining algorithms as one of the most influential emerging actors in the digital communication environment.
- Addressing the growing reliance on digital platforms for information, entertainment, and social interaction, alongside the increasing use of algorithmic recommendation systems.
- Contributing to the Arabic literature on the relationship between algorithms and digital audiences, an area that continues to require further empirical research.

1- Hasan, Wessam Muhammad Ahmad, “Idrak al-Jumhur li-Tathir al-Anzimah al-Khawarizmiyyah ala Tawzi al-Muhtawa al-Ikhbari bi-Mawqi Facebook wa Alaqatuhu bi-Sulukihim al-Tafauli,” Majallat al-Buhuth al-Ilamiyyah, Jamiat al-Azhar, no. 70, pt. 1 (2024), p. 305.

- Identifying the level of users' awareness of the algorithmic mechanisms that govern the presentation and circulation of digital content.

Study Design

This study adopts a descriptive-analytical survey design, which aims to describe, analyze, and interpret social and communication phenomena in their various dimensions. Hussein defines descriptive-analytical survey studies as those that seek to "depict, analyze, and evaluate the characteristics of a particular group or situation, or to examine the current realities related to the nature of a phenomenon, a group, or a set of events and conditions."[2]

Similarly, Abdel Hamid argues that descriptive-analytical survey studies focus on describing audiences, their composition, and their various characteristics, while examining their motives, needs, attitudes, behavioral patterns, levels of interest, and preferences. This approach facilitates an understanding of the variables associated with the phenomenon under investigation and enables their analysis in light of the study's objectives and research questions.[3]

Accordingly, adopting this research design is appropriate for the present study, which seeks to describe and analyze the influence of algorithms on digital platform users' orientations and content choices, as well as to examine their level of awareness of algorithmic mechanisms and the extent to which these mechanisms shape their communication practices and behavior within the digital environment.

Study Methodology

This study employed the survey method, one of the most widely used research methods in descriptive-analytical studies within the field of media and communication. The survey method enables researchers to describe and analyze the phenomena under investigation while identifying their key characteristics and patterns. It is well suited to the objectives of the present study, which seeks to examine the influence of algorithms on users' orientations and choices regarding digital content and to assess their level of awareness of the algorithmic mechanisms that govern the presentation and recommendation of content across digital platforms.

To collect the empirical data, the study used an online questionnaire, which is considered one of the most appropriate data collection instruments for survey research because it facilitates access to respondents and enables efficient data collection from a large number of participants within a relatively short period. Samir Mohammed Hussein defines the questionnaire as "one of the methods used to collect primary, basic, or direct data from the selected sample or from all members of the research population through a set of specific, pre-prepared questions."[4]

The online questionnaire was distributed to the study sample during the data collection period. A total of 77 valid responses were obtained and included in the statistical analysis. These responses constituted the dataset used to analyze the study variables and answer the research questions.

Study Population and Sample

2- Samir Muhammad Husayn, Al-Ray al-Amm: al-Usus al-Nazariyyah wa al-Jawanib al-Manhajiyyah (Cairo: Alam al-Kutub, 1997), p. 127.

3- Muhammad Abd al-Hamid, Dirasat al-Jumhur fi Buhuth al-Ilam (Cairo: Alam al-Kutub, 1993), p. 125.

4- Samir Muhammad Husayn, op. cit., p. 131..

The study population consisted of users of digital platforms across a variety of demographic groups and usage patterns. The study was not limited to a single digital platform because its objective was not to examine the characteristics of a specific platform or the nature of its content. Rather, it sought to understand the characteristics of digital audiences and their patterns of interaction with content across multiple platforms, considering the common role that algorithms play in directing content and shaping the user experience.

Given the nature of the study and the use of an online questionnaire as the data collection instrument, a purposive sampling technique was employed. The sample consisted of digital platform users with practical experience in using and interacting with digital content and who were able to provide informed responses regarding their online behavior and digital experiences. This sampling technique was adopted to ensure that participants possessed direct knowledge of the phenomenon under investigation and meaningful experience with algorithm-driven interactions in digital environments.

1. Theoretical Framework of the Study

1.1 Conceptual Definition of the Study

1.1.1 Algorithmic Dominance

Algorithms are abstract procedures used in computer programs to sort data, determine its relevance, select it, and arrange it. Lazer and others propose the term *algorithmic selection*, which constitutes the functional core of numerous Internet applications, including search engines, news aggregators, recommendation systems, content filters, rating services, and monitoring and prediction applications.[5] Consequently, popular or trending search algorithms can rapidly elevate topics to the top of rankings or cause them to decline just as quickly. The underlying logic shifts from collecting "scattered traces of individual searches" to emphasizing "interaction and communication among the audience." This logic is simultaneously private, individual, and egalitarian, while also being public, relational, hierarchical, and increasingly oriented toward the integration of humans and machines.[6]

Algorithmic organization reshapes the nature of dependency in the contemporary high-choice media environment. A vast amount of content competes for users' attention, making the opportunity cost of actively searching for news higher than ever before. According to media dependency theory, users become accustomed to relying on algorithms to organize their online experiences because their online activities are continuously tracked and used to predict and influence their future behavior. At the same time, users experience tension between the convenience of algorithmic organization and the privacy concerns arising from the collection of personal data.[7]

Accordingly, for the purposes of this study, *algorithmic dominance* is defined as the authority exercised by algorithms over digital platforms through controlling the content users see and consume based on their behavior and interactions.

1.1.2 Digital Content

5- Matthias Karmasin, Sandra Diehl, and Isabell Koinig (eds.), Media and Change Management: Creating a Path for New Content Formats, Business Models, Consumer Roles, and Business Responsibility (Cham: Springer, 2022), p. 430.

6- Jiatong Liu, “Research on Trending Algorithms of Digital Platforms: A Case Study of Little Red Book and Instagram,” Media and Communication Research 5, no. 4 (2024), p. 61.

7- Nadja Schaetz, Emilija Gagrčin, Roland Toth, and Martin Emmer, “Algorithm Dependency in Platformized News Use,” New Media & Society 27, no. 3 (2025), p. 1363.

Digital content is defined as all information and data that are created, stored, and displayed in digital form, regardless of the type of digital media or the methods used for its transmission and storage. It also encompasses every type of data structure that constitutes digital content, including metadata. Furthermore, digital content refers to the vast amount of textual, audio, image, and video information exchanged through digital networks.[8] It includes the diverse audio, visual, and textual materials that are produced, published, and circulated through digital platforms and websites within the virtual environment. In the contemporary digital context, users are regarded as both primary actors and creators of this content, reflecting what is commonly known as the culture of participation.

Digital content is also defined as "the process of creating and publishing information in specific contexts through digital media with the aim of achieving particular objectives and satisfying the needs of the user audience, the follower audience, or even the potential audience that is granted access to this content. It includes everything expressed through videos, images, written texts, or audio recordings.[9] It is also a broad term that encompasses the various types of media that can be accessed through the Internet, such as video and audio recordings, texts, images, music, applications, interactive games, web pages, websites, digital animations, and avatars."[10]

1.1.3 User audience

Based on the active audience theory, the concept of the active audience encompasses aspects of the meaning of the "consumer" from the perspective of behavioral research. The media audience is regarded as an active and engaged group of consumers who are responsible for shaping their own media experiences. With the evolution of the media landscape, driven by advances in communication technology, the Internet, and artificial intelligence, audiences have undergone a transformation toward the role of the smart user. Unlike the traditional mass audience, the smart user adopts a user-centered approach, demanding direct two-way communication, more personalized content services, and greater opportunities to participate in both media consumption and content creation.[11]

Innovative technologies for recording, storing, and replaying various forms of media have significantly increased the flexibility of media use and enabled content to be made freely available to audiences beyond the control and management of traditional media institutions. This development has empowered audiences to choose what they read and watch according to their preferences. As a result, the concept of personalization has become increasingly prominent. Since individuals have diverse interests, each person makes different choices from a wide range of available media content. Whereas earlier limitations in information availability and media technologies restricted the diversity of audience choices, contemporary society is characterized by

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8- Sari Hanan and Ain Ahjar Zuhayr, “Al-Muhtawa al-Raqmi li-Muassasat al-Jamiat al-Jazairiyyah: Dirasah Tahliliyyah li-al-Mustawda al-Raqmi li-Jamiat Muhammad Khaydar Biskrah,” Majallat al-Ulum al-Insaniyyah, Jamiat Muhammad Khaydar Biskrah, vol. 19, no. 2 (2019), p. 237.

9- Khabizi Samiyah, “Al-Muhtawa al-Ilami fi al-Fada al-Raqmi: Khutuwat Sinaatihi wa Tahaddiyat Tatwirihi,” Majallat al-Tashri al-Ilami, Jamiat al-Jazair 3, vol. 20, no. 2 (2024), p. 29.

10- Ibid., p. 30.

11- Biao Gao and Lin Huang, “Smart Media Audience-type User’s Media Service Acceptance: an Empirical Research,” in Proceedings of the 4th International Conference on Economy, Judicature, Administration and Humanitarian Projects (JAHP 2019), Advances in Economics, Business and Management Research, vol. 94 (Paris: Atlantis Press, 2019), p. 1026.

an unprecedented abundance of information that supports highly personalized media consumption.[12]

The term *user*, which originally emerged from the fields of economics and marketing, generally refers to consumers and purchasers of products or services who possess both initiative and the freedom to choose. With the evolution of traditional mass media into interactive media and, more recently, smart media, the delivery of media services has undergone a fundamental transformation. Consequently, the traditional media audience has evolved into a user audience.[13]

Within the context of interactive and smart media services, audiences have greater control over both the form and content of the media they consume. Interactive media allow users to select the content that interests them directly and to customize their content preferences. The personalization process begins by identifying and incorporating specific characteristics of the target user. In the context of smart media, artificial intelligence and big data analytics enable platforms to deliver increasingly personalized content services. Moreover, natural language understanding facilitates more natural and effective two-way communication between users and media platforms. Users can also actively participate in content creation through collaborative interactions. As a result, the personalization of the user experience is further enhanced.[14]

For the purposes of this study, the *user audience* is operationally defined as all individuals who own an account on a social media platform within the digital environment and receive digital content through that platform. This study examines the dominance of algorithms across digital platforms without focusing on the specific technological characteristics of the platforms or the nature of the digital content itself.

1.1.4 Algorithmic Awareness

Algorithmic media awareness is defined as "the extent to which people possess accurate perceptions of what algorithms do within a particular media environment, as well as their influence on how users consume and experience media content."[15]

Algorithmic awareness can negatively affect users' trust in digital platforms. As users become more informed about how algorithmic recommendations are generated, the perception of algorithmic neutrality and objectivity tends to diminish. Rather than viewing digital platforms as neutral facilitators, informed users may perceive them as strategic actors operating within a broader system shaped by economic, political, and surveillance interests.[16] Algorithmic media awareness encompasses several dimensions, including:

- Content filtering.
- Automated decision-making.
- Human-algorithm interaction.
- Ethical considerations.

12- Tong Zhao, “Analysis of the Concept of Audience in the Digital Age,” in Proceedings of the 2018 International Workshop on Education Reform and Social Sciences (ERSS 2018), Advances in Social Science, Education and Humanities Research (ASSEHR), vol. 300 (Paris: Atlantis Press, 2019), p. 133.

13- Biao Gao and Lin Huang, op. cit., p. 1026.

14- Ibid., p. 1026.

15- Pierre Louvins and Anne Oeldorf-Hirsch, “How Algorithmic Awareness Predicts Passive and Active Social Media Content Engagement Behavior,” Journal of Communication Technology 7, no. 3 (2025), p. 102.

16- Marija Gombar and Marija Boban, “Algorithmic Awareness and Digital Responsibility: The Role of Platform Trust and Digital Literacy,” Business Systems Research 17, no. 1 (2026), p. 179.

Some researchers suggest that digital literacy, which generally includes knowledge of digital technologies, may positively influence algorithmic awareness. The skills and competencies acquired through Internet literacy contribute to users' understanding of how algorithms shape the content presented to them, targeted advertisements, and search engine results. Consequently, higher levels of digital literacy are often associated with greater algorithmic awareness.

For the purposes of this study, *algorithmic awareness* is operationally defined as users' knowledge and perception of the algorithmic mechanisms that determine the digital content they encounter and influence their content choices.[17]

1.2 Literature Review

1.2.1 Foreign studies

A review of the previous studies indicates a growing interest in examining the roles played by algorithms in the digital environment. Ji's study found that algorithms are more influential than peer influence in enhancing user engagement with content and shaping patterns of media consumption, confirming their ability to influence users' choices. Similarly, DeVito's study[18] revealed that content selection on Facebook is governed by a system of algorithmic values based on users' interests, social relationships, and previous interactions, making the content users see the result of complex automated selection processes.

In the same context, Santos' study[19] demonstrated that content personalization on TikTok relies on the collection of users' personal data, enabling the platform to deliver content that closely matches their preferences. Jackie Chan's study further highlighted that algorithmic ranking largely determines which content receives greater visibility and engagement than competing content. Likewise, Arfni's study[20] examined the role of algorithms in shaping users' information environments while reassessing the filter bubble and echo chamber hypotheses.

1.2.2 Arabic studies

At the Arab level, the study by Meqaash Youssef (2025)[21] confirmed that algorithms play a central role in reshaping users' digital values and behaviors, while Hassan's study (2024)[22] showed that the public is aware of the impact of algorithmic systems on the ranking and distribution of news content. The study by Lahmar Nabil and Hassani Romaysaa (2025)[23] also found that

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17- Pierre Louvins and Anne Oeldorf-Hirsch, op. cit., p. 102.

18- Michael A. DeVito, "From Editors to Algorithms: A Values-Based Approach to Understanding Story Selection in the Facebook News Feed," Digital Journalism 5, no. 6 (2016).

19- Maya De Los Santos and Daniel Klug, "The TikTok Tradeoff: Compelling Algorithmic Content at the Expense of Personal Privacy," in Proceedings of the 20th International Conference on Mobile and Ubiquitous Multimedia, Leuven, Belgium (2021).

20- Giacomo Figà Talamanca and Selene Arfini, "Through the Newsfeed Glass: Rethinking Filter Bubbles and Echo Chambers," Philosophy & Technology 35, no. 1 (2022).

21- Yusuf Maqash, "Khawarizmiyyat Mawaqi al-Tawasul al-Ijtimai wa Tathiruha ala Qiyam al-Jumhur wa Sulukiyyatihi: Dirasah fi Itar al-Muqtarah al-Nazari li-al-Intiqal al-Qiyami al-Lawai (UVTT)," Majallat Ulum al-Insan wa al-Mujtama, Jamiat Biskrah, vol. 14, no. 4 (2025).

22- Hasan, Wessam Muhammad Ahmad, "Idrak al-Jumhur li-Tathir al-Anzimah al-Khawarizmiyyah ala Tawzi al-Muhtawa al-Ikhbari bi-Mawqi Facebook wa Alaqatuhu bi-Sulukihim al-Tafauli," Majallat al-Buhuth al-Ilamiyyah, Jamiat al-Azhar, Cairo, Egypt, vol. 70, no. 1 (2024), pp. 303–392.

23- Lahmar Nabil and Rimisa Hassani, "Al-Hurriyyat al-Raqmiyyah wa al-Handasah al-Jamahiriyyah fi al-Shabakat al-Ijtimaiyyah: Qiraah fi al-Nuzum al-Khawarizmiyyah," Al-Majallah al-Jazairiyyah li-al-Amn al-Insani, Jamiat Batnah, vol. 11, no. 1 (2025), pp. 164–193.

algorithms contribute to the digital engineering of audiences and affect freedom of access to information.

Najwa Ibrahim Sayed Ibrahim's study[24] found a high level of algorithmic knowledge among the participants and showed that they had experienced several forms of algorithmic bias, including blocking, shadow banning, reduced content visibility, and decreased engagement. The findings emphasized the importance of promoting digital literacy and algorithmic awareness to enable users to understand the mechanisms through which platforms operate and to engage with them critically. Likewise, Hazem Fadel Abu Sakhr's study[25] showed that recommendation algorithms significantly influence the type of content that young people prefer and interact with. It also found that these algorithms contribute to the formation of echo chambers and information bubbles by personalizing content according to users' interests. In addition, the study revealed a relationship between users' level of awareness of how algorithms work and the degree to which they are influenced by them. Similarly, the study by Sofiane Ghaniou and El-Hadj Aissa Ben Safi Eddine[26] concluded that algorithms are no longer merely neutral technical tools but have come to exert a direct influence on reshaping collective perception through mechanisms such as ranking, hiding, blocking, and controlling the spread of content. The study recommended strengthening users' critical digital awareness so that they can better understand the hidden mechanisms of influence employed by digital platforms and resist the new forms of symbolic dominance imposed by algorithms.

Although these studies provide valuable insights, most of them focused on the impact of algorithms on user interaction, content distribution, or the shaping of digital values and behaviors. They did not directly and comprehensively examine the manifestations of algorithmic dominance over users' digital content choices, the mechanisms through which this dominance operates, or its implications for users' autonomy in making content choices. The current study seeks to address this gap by exploring these dimensions within the contemporary digital environment.

2. Field Study on a Sample of Users of Digital Platforms

Table 1. Demographic Distribution of the Sample

Category	Educational Level		Economic Level			Marital Status	
	University	Non-University	Good	Fair	Average	Married	Single
Frequency	59	18	15	26	36	34	43
Percentage (%)	76.60%	23.40%	19.50%	33.80%	46.80%	44.20%	55.80%
Total	77 - (100%)		77 - (100%)			77 - (100%)	

Source: Prepared by the researcher using the SPSS program.

Table 1 presents the demographic characteristics of the study sample, which consisted of 77 respondents, based on the variables of educational level, economic level, and marital status.

24- Ibrahim, Nagwa Ibrahim Sayyid, "Idrak al-Shabab al-Jamii li-Istiratijiyyat Tahayyuz al-Khawarizmiyyat ala Shabakat al-Tawasul al-Ijtimai Athnaa Harb Ghazzah wa Tafaulihim Maaha," Al-Majallah al-Misriyyah li-Buhuth al-Ray al-Amm, vol. 23, no. 4 (2024), pp. 235–294.

25- Bu Sakhr Hazim Fadil Abbas and Ali Anas Qusay Numan, "Athar Khawarizmiyyat al-Tawsiyah al-Mudmajah fi Adawat al-Dhaka al-Istinai li-Wasail al-Tawasul al-Ijtimai ala al-Tafdilat al-Ilamiyyah lada al-Shabab: Dirasah Maydaniyyah," Majallat Adab al-Farahidi, vol. 17, special issue, Jamiat Tikrit, Iraq (2025), pp. 312–331.

26- Bin Safi al-Din al-Hajj Isa and Ghaniyu Sufyan, "Al-Hijaj bi-Wasitat al-Khawarizmiyyat: Kayfa Takbah Mansat al-Tawasul al-Ijtimai al-Khitab al-Raqmi al-Arabi?," Majallat Rawafid li-al-Dirasat wa al-Abhath al-Ilmiyyah fi al-Ulum al-Ijtimaiyyah wa al-Insaniyyah, vol. 9, no. 2 (2025), pp. 193–206.

Regarding educational level, the majority of the sample were university educated, accounting for 76.6% (59 respondents), whereas 23.4% (18 respondents) were non-university educated. This result indicates that the study attracted participants with a relatively high educational background, which may enhance their ability to understand the mechanisms through which digital platforms and algorithms operate and to interact with them.

Regarding economic level, respondents with a medium economic level constituted the largest group, representing 46.8% (36 respondents). This was followed by those with a good economic level at 33.8% (26 respondents), while respondents classified as well off accounted for 19.5% (15 respondents). These findings indicate that most participants belonged to the middle economic category, a group that tends to make extensive use of digital platforms because of the widespread availability of smartphones and internet access.

Regarding marital status, the results showed that single respondents represented the larger proportion of the sample, accounting for 55.8% (43 respondents), compared with 44.2% (34 respondents) who were married. This finding may be explained by the fact that single individuals often spend more time on digital platforms than married individuals, making them more likely to be exposed to the influence of algorithms and algorithmically recommended content.

2.2 Patterns of Using Digital Platforms and Exposure to Content

Table 2. Aims To Identify How the Respondent Uses the Platform and The Way They Reach the Content

Statement	Sometimes *(f)*	Sometimes *(%)*	Always *(f)*	Always *(%)*	Rarely *(f)*	Rarely *(%)*
I usually search for all the content that I follow myself.	54	70.1	19	24.7	4	5.2
The content I usually follow appears as soon as I enter my favorite platform.	41	53.2	34	44.2	2	2.6
I watch the content recommended by the platform I use, even enabling the autoplay feature.	47	61	11	14.3	19	24.7
I browse the content recommended to me by the platform.	56	72.7	13	16.9	8	10.4
Total	77 - (100%)		77 - (100%)		77 - (100%)	

Source: Prepared by the researcher based on the SPSS program.

The results in Table 2 showed that 70.1% of the sample answered "Sometimes" to the statement, "All the content I follow is usually content that I search for myself," compared to 24.7% who answered "Always" and only 5.2% who answered "Rarely." This result indicates that users do not rely entirely on searching for content themselves. Instead, they receive a considerable portion of it through what the platform displays automatically.

The results also showed that 53.2% of the respondents reported that the content they follow sometimes appears as soon as they enter the platform, while 44.2% stated that this always happens, compared to only 2.6% who answered "Rarely." This reflects the increasing role of algorithms in presenting content to users before they carry out any intentional search.

With regard to following the content suggested by the platform, the data showed that 61.0% of the sample sometimes watch the content the platform suggests to them, even with autoplay enabled, compared to 14.3% who always do so and 24.7% who rarely do so. This result indicates that users are willing to interact with recommended content, although to varying degrees.

Regarding the statement, "I browse the content that the platform suggests to me," the highest percentage was recorded in the "Sometimes" category at 72.7%, compared to 16.9% for "Always" and 10.4% for "Rarely." This confirms that the majority of respondents are regularly exposed to content suggested by algorithms, even if this exposure is not continuous.

Overall, the results of this dimension reveal that the process of accessing content among the sample does not depend entirely on self-selection. Rather, it overlaps substantially with the suggestions provided by digital platforms. Although users continue to search for some content independently, they are regularly exposed to and browse suggested content, indicating the active role of algorithms in directing exposure to digital content and shaping users' media consumption patterns. This finding serves as a preliminary indicator that algorithms may influence users' subsequent choices and their orientations toward digital content.

2.3 Users' Perception of Personalization Mechanisms and Algorithms

Table 3. This Dimension Aims to Measure Users' Awareness of The Role of Algorithms in Selecting and Personalizing Content

Statement	Sometimes *(f)*	Sometimes *(%)*	Always *(f)*	Always *(%)*	Rarely *(f)*	Rarely *(%)*
I feel that the platform understands my emotional state.	43	55.8	25	32.5	9	11.7
I believe that the platform's personalization of content for me is positive and convenient.	36	46.8	34	44.2	7	9.1
I can change the type of content available on my platform by searching for different content.	35	45.5	35	45.5	7	9.1
I avoid interacting with certain content so that similar content will not be recommended to me.	30	39	38	49.4	9	11.7
I trust the algorithm's recommendations for the content I am exposed to.	39	50.6	20	26	18	23.4
Total	77 - (100%)		77 - (100%)		77 - (100%)	

Source: Prepared by the researcher with the assistance of the SPSS program.

The results in Table 3 showed that 55.8% of the sample answered "Sometimes" to the statement, "I feel that the platform knows my psychological state," while 32.5% answered "Always," compared with only 11.7% who answered "Rarely." This result indicates that many users perceive digital platforms as being able to infer their preferences and psychological states through their patterns of interaction and use.

With regard to the statement, "I see the platform's personalization of certain content for me as positive and convenient," 46.8% of the respondents answered "Sometimes," while 44.2% answered "Always." In contrast, only 9.1% answered "Rarely." This result reveals a generally positive attitude among the respondents toward the personalized content provided by algorithmic recommendations.

Regarding the ability to control the type of content displayed, the percentages for "Sometimes" and "Always" were equal at 45.5% each for the statement, "I can change the type of content available on my platform by searching for other content," compared with only 9.1% who answered "Rarely." This finding suggests that most users feel they have some degree of control over the content presented to them despite the influence of algorithms.

The results also showed that 49.4% of the respondents always avoid interacting with certain content to prevent similar content from appearing in the future, compared with 39.0% who do so sometimes and 11.7% who do so rarely. This indicates a clear awareness among users of the relationship between their interactions and the content recommendation mechanisms used by digital platforms.

With regard to trust in algorithmic recommendations, 50.6% answered "Sometimes" to the statement, "I trust the algorithmic recommendations for the content I am exposed to," while 26.0% answered "Always," compared with 23.4% who answered "Rarely." This result suggests that users' trust in algorithmic recommendations is cautious and conditional rather than absolute.

Overall, the results of this dimension indicate that the respondents possess a considerable degree of awareness of the role of algorithms in personalizing and selecting content. This is reflected in their perception of the platforms' ability to understand their interests and tailor content based on their previous interactions. The results also revealed a generally positive attitude toward personalized content and a moderate level of trust in algorithmic recommendations. At the same time, users maintained a sense of their ability to influence and modify the content they receive through searching and selective interaction. These findings suggest that users do not view algorithms merely as neutral tools. Instead, they recognize their direct influence in shaping the browsing experience and patterns of digital content consumption.

2.4 The effect of algorithms on users' digital behavior

Table 4. Measures The Extent of The Effect of Recommended Content on Browsing and Consumption Behavior

Statement	Sometimes *(f)*	Sometimes *(%)*	Always *(f)*	Always *(%)*	Rarely *(f)*	Rarely *(%)*
I feel that the platform understands my emotional state.	43	55.8	25	32.5	9	11.7

I believe that the platform's personalization of content for me is positive and convenient.	36	46.8	34	44.2	7	9.1
I can change the type of content available on my platform by searching for different content.	35	45.5	35	45.5	7	9.1
I avoid interacting with certain content so that similar content will not be recommended to me.	30	39	38	49.4	9	11.7
I trust the algorithm's recommendations for the content I am exposed to.	39	50.6	20	26	18	23.4
Total	77 - (100%)		77 - (100%)		77 - (100%)	

Source: Prepared by the researcher using the SPSS program.

The results in Table 4 showed that 61.0% of the sample answered "Sometimes" to the statement, "I follow the same content for long hours," compared with 27.3% who answered "Always" and only 11.7% who answered "Rarely." This result indicates that recommended content succeeds, to a considerable extent, in maintaining users' attention for extended periods.

The results also showed that 58.4% of the respondents reported that the same content sometimes appears repeatedly, while 32.5% stated that this always occurs, compared with only 9.1% who answered "Rarely." This reflects the reliance of algorithms on repetition and the repeated display of content that aligns with users' interests and previous behaviors.

Regarding the statement, "I forget what I wanted to search for when I enter the platform," 58.4% of the respondents answered "Sometimes," compared with 24.7% who answered "Always" and 16.9% who answered "Rarely." This finding suggests that recommended content has the potential to divert users from their original goals and redirect their attention toward other content provided by the platform.

For the statement, "I do not notice the passage of time while using the platform," 46.8% answered "Sometimes," 28.6% answered "Always," and 24.7% answered "Rarely." This finding indicates a level of digital immersion that may result from continuous exposure to personalized content.

The statement, "The shortness and attractiveness of the videos keep me from getting bored while watching," received the highest percentage in the "Always" category at 51.9%, compared with 32.5% for "Sometimes" and 15.6% for "Rarely." This result confirms the role of short-form content in encouraging continuous digital content consumption and increasing the time users spend on the platform.

Overall, the results of this dimension suggest that algorithms influence users' digital behavior beyond simply recommending content. The repeated presentation of similar content, the ease of moving from one clip to another, and the engaging nature of short videos contribute to longer browsing sessions, divert users' attention from their original goals, and increase their level of immersion in the digital environment. These findings reaffirm that the influence of algorithms

extends beyond content recommendation, playing a significant role in shaping how users consume digital content and manage their time and attention.

2.5 The impact of algorithms on orientations and choices

Table 5. Reveals the extent of the impact of algorithms on shaping users' orientations toward digital content

Statement	Sometimes *(f)*	Sometimes *(%)*	Always *(f)*	Always *(%)*	Rarely *(f)*	Rarely *(%)*
Social media platforms have contributed to expanding my knowledge and ideas.	38	49.4	36	46.8	3	3.9
The platform's recommendations limit my freedom and independence.	44	57.1	13	16.9	20	26
My interests have changed since I started using my preferred platform.	40	51.9	27	35.1	10	13
The platform makes it easier to search for specific content by recommending similar content.	0	0	39	50.6	38	49.4
I feel that the available content controls and restricts me.	34	44.2	18	23.4	25	32.5
I avoid following certain content that conflicts with my beliefs or ideas.	36	46.8	16	20.8	25	32.5
Total	77 (100%)		77 (100%)		77 (100%)	

Source: Prepared by the researcher with the assistance of the SPSS program.

The results in Table 5 showed that 49.4% of the respondents answered "Sometimes" to the statement, "The platforms have contributed to expanding my knowledge and ideas," while 46.8% answered "Always" and only 3.9% answered "Rarely." This result indicates that most users perceive suggested content as an opportunity to enrich their knowledge and broaden their interests.

Regarding the statement, "The platform's suggestions limit my freedom and independence," the responses were "Sometimes" (57.1%), "Always" (16.9%), and "Rarely" (26.0%). This finding suggests that users recognize the influence of algorithms on their choices, although they do not perceive this influence as absolute or constant.

The results also indicated that 51.9% of the respondents answered "Sometimes" to the statement that their interests had changed since they started using the platform, while 35.1% answered "Always," compared with 13.0% who answered "Rarely." These findings suggest that algorithms may gradually shape users' interests through repeated exposure to particular types of content.

Regarding the statement, "The platform makes it easier for me to search for specific content by suggesting certain content," 50.6% of the respondents answered "Always," while 49.4% answered "Rarely." This result reflects a divided opinion among users regarding the effectiveness of algorithmic suggestions in facilitating access to content.

Regarding the feeling of being restricted, 44.2% of the respondents answered "Sometimes" to the statement, "I feel that the platform controls and restricts me through the content it provides," compared with 23.4% who answered "Always" and 32.5% who answered "Rarely." This result indicates that users vary in the extent to which they feel that the content presented to them limits the diversity of the choices available.

Finally, the results showed that 46.8% of the respondents sometimes avoid following content that conflicts with their ideas, compared with 20.8% who always do so and 32.5% who rarely do so. This finding reflects the continuing influence of users' personal values and orientations on their content selection despite the impact of algorithmic recommendations.

Overall, the results of this dimension reveal that the influence of algorithms extends beyond organizing and displaying content to shaping users' orientations, interests, and digital choices. The platforms have contributed to expanding users' knowledge and reshaping some of their interests, while also creating varying perceptions that algorithmic recommendations may restrict freedom of choice. Nevertheless, users continue to retain a degree of independence, as reflected in their ability to reject certain content or engage with it selectively. These findings suggest that algorithms shape users' choices and interests without completely eliminating their autonomy, while exerting a clear influence on users' patterns of exposure to digital content and their preferences.

2.6 General Results of the Study

The study reached a set of findings that reveal the manifestations of algorithmic dominance in digital environments and its effect on users' exposure to content and their content choices. The most prominent findings are as follows:

- Users' exposure to digital content does not depend entirely on self-search but is influenced to a considerable extent by the content recommended by digital platforms through recommendation algorithms.
- The study showed that the majority of respondents repeatedly browse the content suggested by digital platforms, reflecting the strong role of algorithms in organizing access to content.
- The results revealed a considerable level of awareness among users regarding how algorithms work, as they recognize the relationship between their previous interactions and the type of content subsequently presented to them.
- Users generally view content personalization positively, considering that it facilitates access to content that matches their interests while saving time and effort.
- Algorithms influence users' digital behavior by increasing engagement with content and extending browsing time, particularly through the repeated presentation of content and the appeal of short-form content.
- Some users become so engaged with the recommended content that they forget their original purpose for accessing the platform, reflecting the ability of algorithms to direct users' attention within the digital environment.
- Algorithms contribute to reshaping users' interests and expanding their knowledge by continuously exposing them to new and diverse content.
- Users express varying perceptions regarding the extent to which algorithms affect their freedom and independence in choosing content. However, this does not amount to a complete loss of control.

- Users still retain a degree of ability to resist algorithmic influence by rejecting certain recommendations or avoiding interaction with content that does not align with their interests or beliefs.
- The dominance of algorithms is not manifested through the direct imposition of content on users. Rather, it operates by directing users' attention and increasing the visibility and circulation of certain content, gradually influencing their digital behaviors, interests, and content choices.

• Conclusion

The rapid pace of digital transformation has created a new communication environment in which algorithms have become one of the primary actors in organizing the flow of information and digital content. This study sought to examine the manifestations of algorithmic dominance in digital environments by exploring its influence on users' exposure to content and their content choices, while also assessing users' awareness of how these algorithms operate.

The findings indicate that algorithms are no longer merely technical tools for organizing content. Instead, they play a significant role in directing users' attention and determining the content to which they are repeatedly exposed. The study also revealed a considerable level of user awareness of algorithmic personalization mechanisms. However, this awareness does not eliminate the influence of algorithms on browsing behavior, content consumption, or the gradual reshaping of users' digital interests and choices.

The results further show that users engage with recommended content with varying levels of acceptance and trust while maintaining a degree of autonomy through self-directed searches and by avoiding content they consider irrelevant or undesirable. Therefore, algorithmic dominance is not reflected in direct control over users. Rather, it is expressed through the ability of algorithms to shape patterns of content exposure and gradually influence users' preferences, interests, and digital behavior.

Based on these findings, it can be concluded that algorithms have become one of the most significant manifestations of contemporary digital power. This highlights the importance of promoting greater public awareness of how algorithms operate and of their diverse effects on individuals and society.

• Study Recommendations

- Enhance users' digital literacy by improving their understanding of how algorithms work and how they influence the content to which they are exposed.
- Integrate algorithmic awareness into educational and training programs related to digital media, media literacy, and information literacy.
- Encourage users to diversify their sources of information rather than relying solely on content recommended by digital platforms.
- Encourage digital platforms to increase transparency regarding the criteria and processes used to rank and recommend content.
- Develop awareness programs that promote the responsible use of digital platforms and help reduce excessive engagement with digital content.

- Encourage researchers in media and communication studies to further investigate the effects of algorithms on audience media consumption and communication behavior.
- Conduct comparative studies across different digital platforms to examine differences in personalization mechanisms and their effects on users.
- Give greater attention to studying information bubbles and digital echo chambers created by algorithmic recommendation systems, as well as their influence on opinion formation and public attitudes.
- Enhance users' responsibility for managing their digital interactions, recognizing that these interactions influence the type of content displayed by algorithms.
- Promote a balance between algorithmic personalization and users' freedom of choice to ensure a more diverse and open digital experience.

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