

EXPLORING THE INFLUENCE OF ARTIFICIAL INTELLIGENCE ON THE GOVERNANCE OF POLITICAL CULTURE: PERSPECTIVES FROM ALGERIAN YOUTH

Dr. Chikhaoui Ahmed ¹

¹ Senior lecturer at Dr Moulay Tahar University- Saida (Algeria),
ahmed.chikhaoui@univ-saida.dz

Received: 11/2023, Published: 01/2024

ABSTRACT :

This study investigates the impact of modern technology and artificial intelligence on the political culture among Algerian youth. The aim is to explore the evolving political views, democratic aspirations, and cultural values influenced by technological advancements. Conducted with 650 participants from Dr. Tahar Moulay University, the research utilizes a questionnaire to extract valuable insights. The results indicate that the pervasive use of artificial intelligence and modern technology plays a pivotal role in shaping and reinforcing democratic aspirations among Algerian youth. This reflects a transformative journey beyond conventional Western paradigms, marked by a desire for political freedom, active civic participation, and a decisive rejection of traditional norms.

Keywords: Algerian youth, modern technology, artificial intelligence, political culture, political transformation.

INTRODUCTION :

Artificial intelligence (AI) stands out as a revolutionary technological tool, rapidly reshaping diverse dimensions of our society (Russel and Norvig, 2016). Recent progress in AI led to its pervasive integration across various sectors, including politics (Azzi and Djemaa, 2021). At the core of these advancements lies political culture—an intricate blend of shared beliefs, values, and attitudes that influence the dynamics between citizens and their government (Carrera, 2017). This, in turn, shapes their participation in political processes, decision-making, and overall engagement in governance. Understanding the dynamics of political culture is crucial for unraveling the mechanisms of political systems and comprehending their evolutionary paths.

Against AI's recent progress, its integration into political processes holds the potential to enhance political awareness and increase civic engagement (Azzi and Djemaa, 2021). Algerian youth, in particular, stand to benefit, presenting an opportunity for improved political understanding and active involvement (Boualam and Yesuf, 2022). As AI tools become woven into political engagement, there's a chance for youth to become more informed, politically

engaged, and gain a deeper understanding of Algeria's political landscape. Moreover, the deliberate use of AI-powered tools offers the prospect of introducing evidence-based policymaking in Algeria. This strategic integration could enhance the efficiency of the political machinery and strengthen the decision-making process.

This research aims to explore the complex relationship between AI and political culture, specifically focusing on Algerian youth. By examining the perspectives of this demographic, the study seeks to highlight the potential of AI to stimulate political engagement while critically assessing its implications for the evolution of Algeria's political system.

Artificial Intelligence (AI) and Politics:

Emerging from the broader field of computer science, artificial intelligence (AI) has experienced a rapid advance in recent years, fueled by the widespread availability of large datasets, cloud computing, and smart algorithms. Its transformative potential, spanning various societal domains and industries, has captured the attention of policymakers, academics, and businesses alike. This heightened interest has translated into significant investments in AI research and development, reflecting a recognition of its promising capabilities and the potential for substantial societal impact. (Lee, 2021).

Within this trajectory, the integration of AI into the political landscape has emerged as a pivotal topic, bearing the potential to reshape political processes, governance structures, and decision-making dynamics (Russo and Serbanati, 2020; Nachmani et al, 2020). The infusion of AI capabilities introduces elements such as data analysis, predictive modeling, and automation, effectively strengthening the efficiency and efficacy of political systems (Filguieras, 2022). Moreover, AI's skills hold the promise of fostering evidence-based policymaking by understanding intricate patterns and insights within vast data depositories (Savaget et al, 2019).

Pragmatically, AI stands ready to revolutionize political campaigns, facilitating accurate analysis of voter data, targeted identification of demographics, and optimization of campaign strategies (Berryhill, 2018). However, alongside its potential benefits, the increasing influence of AI in politics raises important concerns (Helbing, 2017). As AI becomes more ingrained in political processes, addressing ethical considerations becomes crucial. This involves establishing a framework of transparency and accountability to preserve the integrity of political proceedings (Philipon and Guruz, 2019).

While the prior discussions primarily revolve around data analysis, decision-making, campaigns, and the procedural aspects of politics, an essential query emerges: can artificial intelligence (AI) go beyond these operational dimensions to influence the very essence of political culture within societies? Exploring the realm of political culture leads us to question whether AI has the capacity to significantly alter people's political beliefs, values, and attitudes. This, in turn, may lead to a transformation in their overall civic engagement and interaction with governance systems.

AI and Political Culture:

Political culture is a collective fabric of shared beliefs, values, attitudes, and behaviors that intricately shape the socio-political environment of a society or a specific group. It involves how individuals perceive and engage with the political sphere, their expectations from governing bodies and political establishments, and their understanding of civic duties (Almond and Verba, 1963). This complex framework consists of beliefs and values that resonate broadly within a society, influencing its understanding of political matters and guiding its attitude toward governance. For instance, democratic societies often focus their political culture on values such as freedom of expression, equity, and individual rights, highlighting their importance in shaping the collective ethos (Inglehart and Wezel, 2005).

Furthermore, political culture is a domain shaped by individuals' attitudes and perspectives toward politics. These inclinations range from trust to skepticism in political institutions, ideologies, or specific leaders. These attitudes impact political involvement, levels of engagement, and the extent of political tolerance within a community (Beck and Dalton, 2013). Crucially, it reflects how individuals perceive their role in politics and what they expect from governmental entities. This includes attitudes toward voting, expressions of dissent, affiliations with political parties, and the extent to which individuals believe their voices matter in the decision-making process (Verba and Schlozman, 1985).

At the core of political culture lies the concept of civic responsibility and the expectations individuals have for themselves and their fellow citizens. This encompasses a range of actions, from adhering by laws and staying informed about political issues to participating in communal efforts that contribute to societal well-being (Putnam, 2000). Essentially, political culture is a complex subject that mirrors, defines, and sustains the intricate relationship between a population and its political environment.

Taking into account the mentioned factors, the impact of artificial intelligence (AI) on these dimensions holds utmost significance. A 2018 study by the University of Oxford titled "How AI is shaping the future of politics" highlights AI's potential to resonate through these aspects, significantly influencing political culture. Starting with shared beliefs and values, AI emerges as a tool capable of uncovering commonalities among individuals' beliefs and values by analyzing extensive datasets. This capability could facilitate the formation of political alliances based on shared interests or objectives. However, there's a dual edge to this: AI's ability to amplify certain beliefs and values introduces the potential for manipulation of public sentiment.

Moving to attitudes and perceptions, AI's capability lies in analyzing extensive amounts of social media data, providing insights into public attitudes and perceptions related to political issues (Boualam and Yusuf, 2022). This information empowers politicians to craft messages and strategies finely tuned to specific target audiences, thereby enhancing their understanding of prevailing public sentiment.

Regarding participation and expectations, AI plays a transformative role in political campaigns. It helps decide where to put resources and finds potential supporters. For instance, AI can figure out which voters might not show up to vote, so campaigners can focus on encouraging those who are more likely to vote (Savaget , et al. 2019). This smart approach has the potential to increase the number of people taking part in elections.

In the aspect of civic responsibilities, AI offers governments an effective way to monitor and promptly address challenges. By rapidly identifying and addressing issues related to public safety, health, and the environment in real-time, AI promotes an environment that encourages civic responsibility (Filgueiras, 2022) .

In essence, this study emphasizes that AI's impact extends to the fundamental aspects of political culture, having the ability to redefine how common values are recognized, attitudes are assessed, participation is promoted, and civic duties are maintained.

The existing literature reveals a noticeable gap in discussions about the transformative impact of artificial intelligence (AI) on reshaping political culture, especially in third-world countries like Algeria. These regions often face limited political discourse, primarily influenced by political agendas. However, the evolution of AI has the potential to bring about a paradigm shift. This shift is notable as AI's progress exposes people to new cultural influences, often assimilating elements from more developed nations. As a result, this dynamic introduces fresh perspectives to the realm of political culture, fostering a wave of global interconnectedness. This research initiative represents an exploratory journey into this unexplored territory, aiming to elucidate how AI is prompting a change in the political culture among Algerians. The focus is particularly on the youth, who encounter AI more frequently and integrate it into their lives more extensively than other demographic categories.

In this context, the study embarks into the examination of possible consequences and future paths for Algerian politics as the use of AI becomes a lasting aspect. Guiding this exploration are two fundamental questions:

- ✓ How does the incorporation of artificial intelligence into political processes influence the political culture and engagement dynamics among the youth in Algeria?
- ✓ What are the expected implications for the evolution of political culture within Algeria due to the continuous and widespread integration of artificial intelligence?

METHOD :

The primary aim of this study is to investigate the influence of technology and artificial intelligence on the political culture of students at Dr. Tahar Moulay University in Algeria.

To address the research questions, a comprehensive methodological approach was employed, involving the administration of a questionnaire in addition to observation.

PARTICIPANTS :

The research comprises a purposive sample of 650 students from Dr. Tahar Moulay University in Saida, Algeria. The selection criteria prioritized diversity across disciplines and academic levels, aiming for a comprehensive insight into the influence of technology and artificial intelligence on political culture within the academic setting.

TOOLS :

The following tools were employed in the current study:

QUESTIONNAIRE:

The primary tool employed in this research is a structured questionnaire designed to elicit responses from the 650 participants at Dr. Tahar Moulay University. The questionnaire is divided into three parts, each addressing distinct aspects of the study. In the first part, participants respond to eight statements, giving their perceptions of the impact of technology and artificial intelligence on political culture. The Likert scale (1932), with response categories ranging from "I strongly agree" to "I reject," enables participants to articulate the intensity of their opinions.

The second part of the questionnaire comprises nine statements focused on exploring the perceived positive dimensions of the changes in political culture influenced by technology and artificial intelligence.

The conclusive segment, i.e, the third part of the questionnaire involved participants responding to five statements strategically designed to investigate the impact of technology and artificial intelligence on shaping the transition towards a firmly established democratic system.

This comprehensive structure ensures systematic data collection, enabling a quantitative analysis of participant responses and providing valuable insights into their perspectives on the intricate interplay between technology, artificial intelligence, and the evolution of political culture.

OBSERVATION:

In addition to the questionnaire, observational data is collected through the researcher's active engagement in classroom discussions. As an instructor specializing in political science at Dr. Tahar Moulay University, the researcher observes and records interactions, debates, and discussions related to political topics. The qualitative insights obtained through observation supplement the quantitative data gathered via the questionnaire, providing an understanding of the dynamics shaping students' perspectives on political culture and technology.

Data Collection and Procedures :

PROCEDURES :

In order to achieve the study's objectives and analyze the collected data, diverse statistical methodologies were employed utilizing the IBM SPSS Statistics 22 software.. The chosen time period was calibrated on a Likert pentagon scale (1932) with a rating of 4/5, equivalent to (0.80). Responses were categorized into five choices: *strongly disagree*, *disagree*, *neutral*, *agree*, and *strongly agree*. The different ranges for these choices were outlined as follows:

- Weighted average from 1 to 1.79 corresponds to the phrase "***strongly disagree***."
- Weighted average from 1.80 to 2.59 corresponds to the phrase "***disagree***."
- Weighted average from 2.60 to 3.39 corresponds to the phrase "***neutral***."
- Weighted average from 3.40 to 4.19 corresponds to the phrase "***agree***."
- Weighted average from 4.20 to 5.00 corresponds to the phrase "***strongly agree***."

Additionally, the study employed the following statistical methodologies:

- Cronbach's Alpha coefficient (1951), employed to measure the reliability of the study's instrument.
- Frequencies and percentages, facilitating an exploration of response distribution.
- Mean and standard deviation calculations, providing insights into the degree of variation within the sample's responses.

RESULTS :

The current study shows the following results :

1- The Impact of Technology and AI on the Political Culture :

This section entails assessing participants' perspectives on how technology and artificial intelligence influence political culture. This is effectively portrayed in the subsequent table

Table 1: The impact of technological means on the change in political culture.

Statement	Average	Standard Deviation	General Trend
1- Political diversity has become a necessity in societies.	3.55	1.02	Agree
2- Democratic values have become universal and essential in all countries.	3.86	1.06	Agree
3- Communication tools have diminished absolute control over citizens by systems.	3.63	1.11	Agree
4- Human rights have become global, and international solidarity in political issues.	3.33	1.35	Neutral
5- The status of women and children's rights is highly protected.	3.69	1.20	Agree
6- I do not accept the oppression of any individual or civil group worldwide.	4.12	0.77	Agree

7- The necessity of liberating the media in all countries.	4.32	0.65	Strongly Agree
8- I strongly believe in modern civic values more than traditional tribal values.	3.27	1.50	Neutral

□ Overall Average for Statements Assessing the Impact of Technological Means on Change in Political Culture: **Average: 3.72. Standard Deviation: 1.03. General Trend: Agree**

Table 02 indicates an overall agreement among respondents regarding the impact of technological means on political culture, with an average of 3.72. Notably, the statement "The necessity of liberating the media in all countries" received the highest average of 4.32, suggesting strong agreement and a consensus on the importance of media liberation globally. On the other hand, the statement "I strongly believe in modern civic values more than traditional tribal values" obtained the lowest average of 3.27, indicating a more neutral stance and varied opinions on the prioritization of modern civic values over traditional ones.

The standard deviations provide insights into the spread of responses. The statement with the highest average also exhibits a low standard deviation (0.65), suggesting a consensus among respondents. In contrast, the statement with the lowest average has a higher standard deviation (1.50), indicating a more varied range of opinions.

Overall, the convergence of averages for other statements, coupled with their moderate standard deviations, implies a consensus among the study's sample. This reflects a shared perspective on the impact of technological means on political culture among students in Algeria. The findings underscore a generally positive attitude towards the transformative influence of technological means on political culture, with some variations in the intensity of agreement across different statements.

2- Postive Change in Political Culture :

This part tries to explore the perceived positive aspects of the changes in political culture shaped by technology and artificial intelligence. This is depicted in the following table:

Table 2: Statements Reflecting Positive Change in Political Culture.

Statement	Average	Standard Deviation	General Trend
1- Modern communication technology has diminished absolute sovereignty of nations.	3.28	1.18	Neutral
2- Modern communication tools have strengthened the sense of freedom and opposition engagement.	4.06	1.02	Agree

3- I have become more inclined towards freedom and democracy in my thinking.	3.90	0.89	Agree
4- I believe in the necessity of political participation and affiliation with political organizations strongly.	4.24	0.72	Agree
5- I strongly believe that democratic values enhance citizenship significantly.	4.30	0.70	Agree
6- I am becoming more inclined towards civil societal integration than adhering to tribal customs strongly.	3.52	1.29	Agree
7- I conform to tribal tendencies even if they are incorrect.	2.62	1.28	Neutral
8- I agree to let our tribal leader decide on my behalf.	3.21	1.39	Neutral
9- I prefer choosing the most competent rather than my tribal kin in elections.	3.98	0.96	Agree

□ Overall Average for Statements Reflecting Positive Change in Political Culture:
Average: 3.68. Standard Deviation: 0.99. General Trend: Agree

As depicted by Table 2, the above information outlines the responses of the study participants concerning statements related to positive change in political culture. The arithmetic means for statements reflecting positive change in political culture varied between (2.62 and 4.30), with an overall average of (3.68). This mean suggests a trend towards agreement, indicating a propensity for positive change in the political culture among students.

The statement "I strongly believe that democratic values enhance citizenship significantly" secured the top rank with an average of (4.30) and a standard deviation of (0.70), surpassing the overall mean (3.68). Conversely, the statement "I conform to tribal tendencies even if they are incorrect" obtained the ninth and final position with an average of (2.62) and a standard deviation of (1.28), falling below the overall mean (3.68) with a standard deviation of (0.99). The table also illustrates the convergence of averages for other statements, most of which indicate agreement, reflecting a consensus in the perspectives of the study's sample regarding the positive change in political culture among students due to the use of modern social and technological media.

3- Algerian Shift towards a Firm Democratic System :

This concluding section of the questionnaire investigates the influence of technology and artificial intelligence on shaping the transition toward a firm democratic system. The responses are depicted in Table 3.

Table 3: Statements Reflecting a Shift Towards a Firm Democratic System.

Statement	Average	Standard Deviation	General Trend
1- The new global system reinforces the political cultures of nations and unifies their values strongly.	4.21	0.83	Agree Strongly
2- The global democratic system enhances the concept of coexistence and respect for opposing opinions.	3.73	1.18	Agree
3- Social equality is preferable to tribal preferences.	3.86	1.09	Agree
4- Individual harmony with society is better than tribal competition.	3.75	1.13	Neutral
5- Political party competition is better for society than competition based on tribal affiliation.	3.95	1.14	Agree

□ Overall Average for Statements Reflecting a Shift Towards a Firm Democratic System:
Average: 3.90. Standard Deviation: 1.04. General Trend: Agree

The above Table 3 elucidates the responses of the study participants regarding statements pertaining to a future shift towards a solid democratic system. The arithmetic means for statements about the transition, in general, ranged between (3.73 and 4.21), with an overall average of (3.90) and a standard deviation estimated at (1.04). This mean, indicative of agreement, suggests a prevailing inclination and acceptance towards a transition to a firmly established democratic system.

The statement "The new global system reinforces the political cultures of nations and unifies their values strongly" secured the top rank with an average of (4.21) and a standard deviation of (0.83), surpassing the overall mean (3.90). In contrast, the statement "The global democratic system enhances the concept of coexistence and respect for opposing opinions" attained the fifth and final position with an average of (3.73) and a standard deviation of (1.18), falling below the overall mean (3.90). The table also indicates the convergence of averages for other statements, all of which signify either agreement or strong agreement. This reflects the convergence in the perspectives of the study participants regarding the inclination towards transitioning to a firmly established democratic system in the future, influenced by modern social and technological media.

DISCUSSION:

The current study endeavored to investigate the evolving political culture among Algerian youth in response to the widespread adoption of modern technology and artificial intelligence. By employing a structured questionnaire and observation, the study revealed the following findings :

First, the emergence of modern technology and artificial intelligence has sparked a significant shift in the political perspectives of Algerian youth. They are currently proactively pursuing increased democratic practices, drawing inspiration from Western political norms, which are seen as synonymous with enhanced democracy and freedom. The impact of technology has been instrumental in molding this transformation. These findings align with the assertions of Russo and Serbanati (2020), who highlighted that the integration of AI brings about changes in the political landscape.

Second, a notable shift is observed in the youth's eagerness to confront political authority within factions. They are actively striving to engage in political decision-making, showcasing a quest for political freedom aided by technology, which includes advocating for freedom of expression and transparent electoral procedures. These outcomes align with the findings of Berryhill (2018), who emphasized that AI is poised to transform political campaigns by enabling precise voter data analysis, targeted demographic identification, and the optimization of campaign strategies. Algerian youth are currently advocating for a shift away from conventional political behaviors toward more democratic practices, mirroring Western norms.

Third, the impact of AI on the shifting political landscape in Algeria is marked by a conscious alignment of Algerian youth with democratic values, a shift instigated and facilitated by technological advancements. The impact of modern technology transcends mere influence on political mindsets—it plays a pivotal role in disseminating new political values, exerting pressure on the existing political system. The Algerian Hirak movement of February 22, 2019, serves as an exemplar, showcasing demands that express a yearning for more democratic values and a rejection of outdated norms. These findings are consistent with the observations of Philipon and Guruz (2019), who emphasized that as AI becomes increasingly integrated into political processes, addressing ethical considerations becomes crucial. Establishing a framework of transparency and accountability is imperative to safeguard the integrity of political proceedings.

Last but not least, it is worth mentioning that these demands have arisen due to the utilization of artificial intelligence and modern technology. Fundamentally, AI is reshaping the political culture among Algerian youth. The notable shift in political values and aspirations is apparent in their advocacy for democracy and rejection of outdated norms. The impact of artificial intelligence and modern technology is evident in the youth's pursuit of a political transformation that exceeds Western systems, as reflected in their persistent calls for change. This aligns with the perspective of Inglehart and Wezel (2005), who observed that AI emphasizes the centrality of values like freedom of expression, equity, and individual rights in shaping the political culture of democratic societies.

CONCLUSION:

Overall, The findings of this study contribute to a deeper understanding of how technological advancements, particularly modern technology and artificial intelligence, shape the political values, beliefs, and aspirations of the Algerian youth. The exploration of these dimensions is

crucial for comprehending the dynamics of political change in the contemporary landscape, shedding light on the factors influencing the youth's evolving political mindset and their aspirations for a more democratic future.

REFERENCES :

- 1-Almond, G. A., & Verba, S. (1963). *The civic culture: Political attitudes and democracy in five nations*. Princeton, NJ: Princeton University Press.
- 2-Azzi, A., & Djemaa, F. B. (2021). The Use of Artificial Intelligence in the Politics: Impact, Risks, and Challenges—A Comparative Study between Algeria and Developed Countries. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(2), 1-22. <https://doi.org/10.3390/joitmc7020021>
- 3-Beck, P. A., & Dalton, R. J. (eds.). (2013). *Comparing democracies: Elections and voting in global perspective*. SAGE Publications. ↵
- 4-Berryhill, J. (2018). *The Politics of AI: A Political Economy Approach to Artificial Intelligence*.
- 5-Boualam, H., & Yesuf, M. A. (2022). The role of digital technologies in mobilizing political activism and change: a case study of Algeria. *Information Development*, 38(1), 131-143. <https://doi.org/10.1177%2F02666669211003261>
- 6-Carrera, L. (2017). *Comparative Politics: Notes and Readings*. CRC Press
- 7-Filgueiras, F. (2022) The politics of AI: democracy and authoritarianism in developing countries, *Journal of Information Technology & Politics*, 19:4, 449464, DOI: [10.1080/19331681.2021.2016543](https://doi.org/10.1080/19331681.2021.2016543)
- 8-Helbing, D. (2017). *Will Democracy Survive Big Data and Artificial Intelligence*.
- 9-Inglehart, R., & Welzel, C. (2005). *Modernization, cultural change, and democracy: The human development sequence*. Cambridge University Press.
- 10-Lee, J. D. (Ed.). (2021). *Handbook of Artificial Intelligence and Society*.
- 11-Likert, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology*, 140, 1–55.
- 12-Philippon, T., & Gürüz, A. H. (2019). *The Political Economy of AI*.
- 13-Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. Simon and Schuster.
- 14-Savaget, P., Chiarini, T., & Evans, S. (2019). Empowering political participation through artificial intelligence, *Science and Public Policy*, 46 :3, 369–380, <https://doi.org/10.1093/scipol/scy064>

15-Verba, S., Schlozman, K. L., & Brady, H. E. (1995). *Voice and equality: Civic voluntarism in American politics*. Harvard University Press.