SCIENCE SET
OPEN ACCESS PUBLISHERS

Research Article

Science Set Journal of Economics Research

Internet and Participation in Public Affairs in Togo: An Analysis According to Gender and Place of Residence

PELENGUEI Essohanam[1*], YENLIDE Tchablemane[1], DONI Pikabé[1], and KAFANDO Benoit[2]

[1]*Research Center in Applied Economics and Management of Organizations (CREAMO), University of Lome (Togo)*
[2]*University of Montreal, Research advisor at Economic Francophonie Observatory, Canada*

[*]**Corresponding author:** PELENGUEI Essohanam, Research Center in Applied Economics and Management of Organizations (CREAMO), University of Lome (Togo)

Submitted: 26 September 2023 **Accepted:** 03 October 2023 **Published:** 10 October 2023

Citation: *PELENGUEI Essohanam, YENLIDE Tchablemane, DONI Pikabé and KAFANDO Benoit (2023) Internet and Participation in Public Affairs in Togo: An Analysis According to Gender and Place of Residence, Sci Set J of Economics Res 2(3), 01-08.*

Abstract

Using data from the 7th Togo's 2017 Afrobarometer round, we analyze by gender and residence setting to highlight the effects of internet access on citizen participation in public affairs in Togo. Using the Oaxaca-blinder decomposition method, the Oaxaca-Blinder results show that: (i) men participate more in public affairs than women in Togo, (ii) discussions and political group membership explain the compositional effect between men and women, (iii) the internet is the component related to male structural advantage, (iv) individuals living in urban areas participate more in public affairs than those living in rural areas, (v) political group membership and discussions explain the compositional effect between urban and rural areas. Based on these results, we suggest that awareness campaigns on the importance of participation in public affairs be directed at women and rural populations. Also, policies on women's access to the Internet could help reduce the gender gap in public participation.

Keywords: Internet, Information, Participation, Public Affairs, Togo

Introduction

Individual participation in public affairs is defined as all citizen activities that influence the socio-economic or political life of their community [1]. The most important forms of participation in public affairs include voting, demonstrating, signing petitions, participating in community activities, paying taxes, etc. A growing body of empirical evidence suggests that citizen engagement improves the accountability of public authorities in the implementation of development projects and public financial management and strengthens democracy and good governance (Yameogo, 2017) [2, 3].

One of the critical aspects of individual participation in public affairs is to access information. Economic theory on the role of access to information in the civic engagement of individuals was originally formulated by Downs under the concept of rational ignorance. The theory of rational ignorance involves forgoing seeking information before deciding when the cost of obtaining that information is greater than the stakes of that decision [4, 5]. This behavior can lead to collective errors in domains subject to community decisions such as voting. Furthermore, rational ignorance can facilitate manipulation by opinion leaders insofar as they can anticipate that the individuals, they want to convince will not control their actions.

The revolution in information and communication technologies has significantly reduced the cost of access to information. In particular, access to the Internet facilitates communication and the dissemination of information on a planetary scale and in record time. Thanks to this tool, a new form of political and social activism is made possible. Thus, access to the Internet could constitute a source of democratization of access to information on subjects of interest and strengthen the control of public action and the participation of citizens in the management of their community's affairs [6,1]. However, the empirical work on this issue leads to contrasting results. Indeed, several studies show that the proliferation of false information, selectivity, and misinformation increase the cost of accessing reliable information and thus reduce individuals' incentives to take an interest in the management of public affairs [7, 8].

Togo provides an ideal setting for this study. After a socio-political context marked by violence following electoral disputes in 1990 and 2005 and a poisonous political climate, Togo recently embarked on a wave of major political reforms to strengthen the inclusion of the various political and social forces in the country's public life. To respond to this imperative of strengthening social inclusion in the implementation of public action, Togo has initiated its decentralization process in 2019, by organizing local

elections. The objective of this decentralization is to strengthen the responsibility of citizens as actors of their own development through their adhesion and ownership of development projects and programs implemented by the State and local authorities.

Despite these efforts, the participation of individuals in the management of public affairs remains unsatisfactory. Indeed, nearly 81 % of Togolese say they have never made contact with a local elected official (Amewunou, 2022). Participation in communal meetings is higher in rural areas (70 %) than in urban areas (41 %), and more than half of Togolese say that local leaders do not take citizens' opinions into account. The lack of initiative to discuss public affairs is much more pronounced in Lomé (55 %) and in the Maritime region (57 %), in urban areas (53 %), among women (52 %) and among the less well-off (51 %). According to statistics from the African Elections Database, the turnout for the last three presidential elections in Togo was 64.7 %, 60.99 % and 92.28 % in 2010, 2015 and 2020, respectively.

Over the same period, Togo has experienced a true digital revolution with a considerable increase in internet access. The proportion of the population using the internet has increased from 3 % in 2010 to 24 % in 2020 . However, significant inequalities remain in internet access and use in Togo. While mobile penetration reaches 89 % of the population, nearly 87 % of the population living in rural areas do not have access to the internet. Young people (27 %) go online more frequently than older people, and the better-off (36 %) use it more often than the less well-off (17 % - 20 %).

This study is being conducted with the humble intention of helping to analyze the factors that motivate individuals' participation in the governance of their community. The purpose of this study is twofold: i) to determine the effect of internet access on individuals' participation in public affairs, and ii) to analyze the role of gender and residence in the relationship between internet access and individuals' participation in public affairs.

The remainder of the article is organized as follows: Section 2 presents a brief review of the literature; Section 3 presents the analytical framework of the study. Section 4 describes the analysis methodology followed by the discussion in Section 5 and Section 6 concludes the study.

Review of the literature

The information system influences public accountability through the role of three categories of actors: voters, politicians, and the media. Indeed, voters choose politicians who are responsible for maximizing collective utility. Politicians, for their part, set the objective of winning elections. The media, on the other hand, choose to provide media coverage in order to maximize their profits. This standard model essentially contains two building blocks. The first block analyzes the role of information in political affairs. The second block analyzes the ways in which information selection affects public accountability.

Nowadays, with the resurgence of ICTs, information is available to everyone and in all environments. Access to communication tools can therefore increase access to public information. The conclusions of many researchers point in the same direction and emphasize that communication tools can promote access to public information, thanks to political campaigns and awareness raising [9, 1, 10].

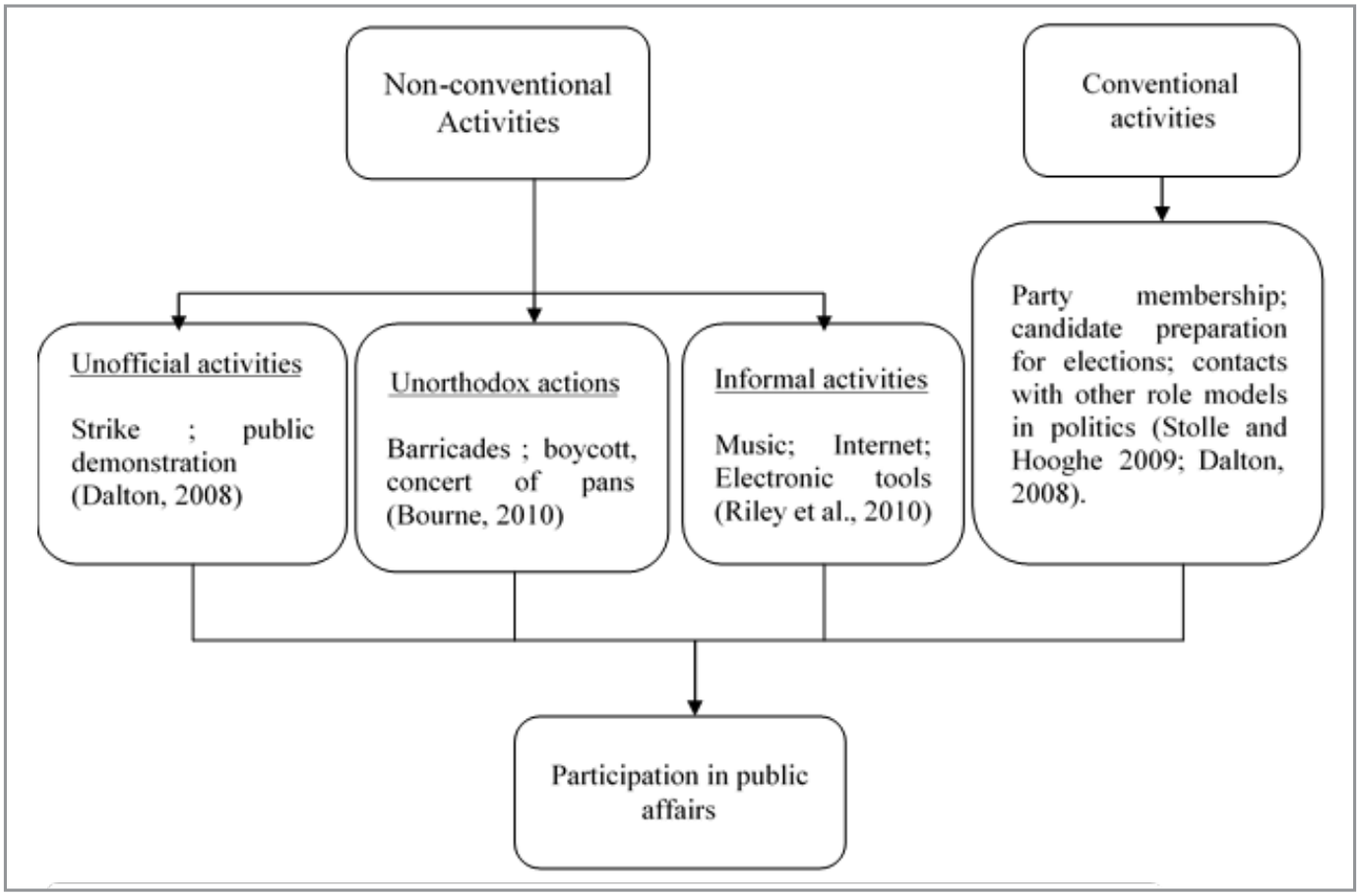
Nevertheless, while most researchers agree that access to communication tools, such as social media, increases citizen's access to information, they have conflicting views on its ability to increase political engagement and participation in public affairs [2, 11]. In effect, authors such as Best and Krueger, Kemp et al., Bakshy 2015 and Garrett 2009 believe that access to the internet has a positive impact on citizen's participation in public affairs in their countries. Others, on the other hand, show that access to these communication tools can contribute to reduced citizen engagement. In this context, Putnam believes that access to the Internet could lead to a reduction in physical interactions between individuals, as it could encourage citizens to remain isolated in front of their various screens [12].

From this rich literature, it appears that the analysis of citizen's access to information on citizen participation in public affairs in their country has received little attention in Sub-Saharan Africa in general and in Togo in particular. Following this literature review, we design an analytical framework that describes the channels through which different factors act on the participation of individuals in the public affairs of their country.

Analytical framework of the relationship between the Internet and participation in public affairs

The analytical framework developed and presented in Figure 1 is based on the work of [13]. This illustration shows that citizen political participation can occur in both conventional and unconventional ways.

The conventional option includes actions provided for in the constitution. Individuals who must intervene in "major" political affairs and who already belong to a political party can influence political affairs in the context of elections, thanks to their expertise. As for the unconventional channel, citizens generally rely on boycotts, demonstrations, and the use of the Internet to make their voices heard. Whatever the means used, citizens express their dissatisfaction with the gap between the institutional and economic welfare values they hope to achieve and those available.



Source: Authors, adapted from Lamprianou (2013)

Figure 1: Analytical framework for citizen participation in political affairs

Methodological approach

This section presents the data sources and methods used to estimate the coefficients of our variables.

Data source and description of variables

Data

The data are from the 7th round of the Togo Afrobarometer conducted in 2017. Data collection was conducted by the Center for Research and Opinion Polls (CROP) with technical support from the Institut de Recherche Empirique en Économie Politique (IREEP). The survey was conducted among 1,200 individuals aged 18 or older. Individuals living in institutionalized buildings were excluded. These data contain information on public opinion, democracy, governance, economic conditions, etc.

Description of the variables

To effectively measure the effect of Internet access on household participation in public affairs, we add to the basic model the socio-demographic characteristics of individuals. These characteristics were chosen based on literature and economic theory. Table 1 records these variables and the expected signs.

Table 1: Description of Variables

Variables	Definitions and measurement of the variable	Expected sign
	Dependent variable	
Participation in public affairs	It is measured by the interest of individuals in public affairs. It takes the value 1 if the individual participates in public affairs and 0 if not.	
	Independent variables	
Internet	This variable represents the degree of use of the Internet. 1 = never; 2 = less than once a month; 3 = once a month; 4 = once a week; 5 = every day	+

Gender	It is the sex of the individual and takes the value 1 if the individual is male and 0 if not.	+
Age	Age of the individual surveyed	+
Education	Education level of the individual 0 = non-formal education; 1= primary level; 2= secondary level; 3 = higher level	-
Membership	Takes the value 1 if the individual belongs to the ruling party and 0 if not	+
Discussion	Takes the value 1 if the individual participates in political discussions and 0 if not	+
Freedom	1 = individual feels free to talk about political issues; 0 = no	+
Region	1 = Lomé commune; 2 = Maritime; 3 = Plateaux ; 4 = + ; - Centrale; 5 = Kara; 6 = Savanes	+

Source: Authors based on data from the 7ème round of the Afrobarometer

The Oaxaca-Blinder model: decomposition by exogenous factors

The Blinder-Oaxaca decomposition is used to explain the differences observed between two distinct groups. In this study, it will be used to explain the difference in participation in public affairs between men and women. The purpose of this statistical method is to provide a distinct decomposition by taking into account a discriminant variable, which allows for analysis from a policy perspective. Specifically, in this study, the Oaxaca-Blinder method will allow for the identification of the main factors that explain the differences in participation in public affairs between men and women [14].

Specification of the linear Oaxaca-Blinder model

We use the Oaxaca-Blinder decomposition to estimate: (i) the composition effect, which is the proportion of the participation gap due to the characteristics of the household heads, and (ii) the structure effect, which is the proportion resulting from unobservable returns or discrimination (Oaxaca, 1973 and Blinder, 1973). The Oaxaca-Blinder method consists of separately estimating the gender participation gap at the average level:

$$Y_i^h = \alpha^h + \beta^h X + \varepsilon_i^h \quad (1)$$

$$Y_i^f = \alpha^f + \beta^f X + \varepsilon_i^f \quad (2)$$

With Y_i^h and Y_i^f the participation of men in public affairs (h) and women (f) in public affairs. X represents the vector of control variables. β^h and β^f represent the set of coefficients of our explanatory variables of estimates for men and women respectively and ε_i^h and ε_i^f are the error terms.

Knowing that the OLS regression line passes through the main point (i.e., ε_i^h =0 and ε_i^f =0), equations (1) and (2) can be rewritten as follows:

$$Y_i^h = \alpha^h + \beta^h X \quad (3)$$

$$Y_i^f = \alpha^f + \beta^f X \quad (4)$$

Equation (3) measures the total participation discrimination at the level of women (rural), while equation (4) does so at the level of men (urban). Thanks to the Oaxaca-Blinder decomposition, we can therefore distinguish the part of the participation gap relative to men and women (urban and rural) that is explained by a difference in characteristics from the part that is unexplained and therefore discriminatory.

Results and interpretation of the estimates

Statistical results

Table 2 presents the results of the chi-square test on the determinants of individual's participation in public affairs in Togo. Gender plays an important role in the civic and public engagement of individuals. The chi-square test reveals that 87 % of men participate in public affairs in Togo against 72.58 % for women. This situation reflects the existence of inequalities of opportunity between the sexes in participation in public affairs. Furthermore, the analysis according to the place of residence shows that nearly 85 % of individuals who participate in public affairs in Togo live in urban areas.

In Table 2, we can see that individual's participation in public affairs decreases with the frequency of Internet use. Indeed, nearly 81 % of individuals who do not use the Internet participate in public affairs. The statistics also show that 65 % of individuals who use the Internet every day are interested in the country's public affairs. Similarly, the analysis by education level provides the same finding. Over 90 % of individuals with no formal education are interested in public affairs. This trend decreases as the level of education increases, with 86 % of individuals with primary education, 76 % with secondary education, and 74 % with tertiary education, respectively, participating in public issues.

Table 2: Descriptive statistics of variables

	Participation in public affairs (%)	P-value (Chi-deux)
	Number of observations = 1193	
Gender ++		9.87*
Male	87	
Female	72.58	
Place of residence		4,07*
Urban	84.46	
Rural	78.91	
Frequency of Internet use ++		9.87**
Never	80.78	
Less than once a month	75	
Once a month	77.27	
Once a week	78.26	
Every day	65.96	
Education level ++.		31.53***
Non-formal education	90.45	
Primary	85.84	
Secondary	76.13	
Superior	74.555	

Probability ***1%, **5%, * 10%.
P-value; N = number of observations; (a); ++ chi-square test for categorical variables.

Source: authors based on data from the 7ème round of the Afro barometer

Results of the Oaxaca-Blinder decomposition

Aggregate breakdown of differences in participation in public affairs in the country

The Oaxaca-Blinder decomposition distinguishes, first, between differences in participation in public affairs by gender and by place of residence (Table 3). Second, it highlights the proportions that can be attributed to differences in participation in public affairs by gender and residence (Table 4 and Table 5).

The results in Table 3 show that men participate more in public affairs than women in Togo.

Men's participation is 1.27 times higher than that of women. This result confirms that of Luka which highlighted the existence of disparities between men and women in terms of participation in public affairs. Indeed, in the Togolese context, this result can be explained by the fact that women generally consider that participation in public affairs is reserved for men. Furthermore, the following Luka considers that several factors can explain women's non-participation in public affairs. These are: (i) the fear that politics will prevent them from taking care of their families, (ii) the fear of having a broken home, and (iii) the fear that politics will prevent them from carrying out their domestic activities.

According to the aggregate decomposition of the gender participation gap as presented in Table 4, we find that 51.32 % of the difference in public participation is explained by compositional effects. In terms of structural effects, we find that 48.67 % of this observed difference is explained by the male structural advantage effect; the female structural disadvantage effect explains 0.05 % of the difference in participation in public affairs.

The results in Table 3 also show that the estimated participation in public affairs in urban areas is 1.09 times higher than in rural areas. This result is explained by the fact that in rural areas, rural work remains the main activity for both men and women. They are less interested in public affairs, hence the low participation of the latter in public affairs. According to the aggregate decomposition of the urban-rural participation gap as presented in Table 4, 98.55 % of the difference in participation in public affairs can be explained by compositional effects. As for structural effects, 26.09 % of the observed difference is explained by the urban structural advantage effect while the rural structural disadvantage effect explains 23.19 % of the difference in participation in public affairs.

Table 3: Oaxaca-Blinder decomposition of differences in participation in public affairs

Difference in participation	
According to gender	(1)
Men	0.89*** (0.026)

Women	0.703*** (0.035)
Difference	0.189*** (0.044)
M/F Report	**1.27**
According to the environment of residence (2)	
Urban	0.85*** (0.040)
Rural	0.78*** (0.026)
Difference	0.069 (0.048)
U/R ratio	**1.09**
Observations	544

Note: * p<0.1, ** p<0.05, *** p<0.01. The dependent variable is binary and represents participation in public affairs. The first results frame (1) presents the difference in participation in public affairs between men and women. The second panel (2) presents the difference in participation in public affairs between urban and rural areas.

Source: authors based on data from the 7ème round of the Afro barometer.

As discussed earlier, we note that since the growth of ICTs, the Internet has become a catalyst for the dissemination of information. In doing so the internet has become a key variable in explaining citizen participation in the public affairs of their country [15]. In order to take into account, the effects of the internet in our analysis, we perform a disaggregated decomposition of our results. The following section presents the results of this decomposition.

Disaggregated Breakdown of Participation Differences

Given the property of additive linearity, it is possible to determine the contribution of each component to the composition effect and the structure effect. The ratio of the different components to the endowment effect describes the importance of each factor. In the table of results that we comment on (Table 4), the overall effect is shown in parentheses. From these results, we note that political party membership contributes 0.24 times to the total composition effect in absolute terms and (0.12) times to the overall gender gap. Political party membership contributes 0.43 times to the total composition effect in absolute value and (0.2) times to the overall gender gap [16-20].

Political party membership and group discussions are the factors that contribute to significantly explain the male-female composition effect. However, the component related to male structural advantage is the internet. No component is related to female structural disadvantage.

Table 4: Disaggregated breakdown of gender differences in participation

A. Aggregate decomposi-tion	Endowment ef-fect	Male structural advantage	Female structural disadvantage
	(1)	(2)	(3)
Total	0.097***	0.092**	-0.000
	(0.037)	(0.046)	(0.039)
Share in gender differences	51.32 %	48.67 %	-0.05 %
B. Detailed breakdown	Endowment ef-fect	Male structural advantage	Female structural disadvantage
Internet	0.004	0.118**	-0.004
Age	0.007	0.205	-0.007
Primary level	0.004	0.004	0.002
Secondary level	0.010	-0.026	0.011
Upper level	0.005	-0.011	0.006
Membership	0.024*	-0.004	-0.002
Discussion	0.042***	0.095	-0.007
Freedom	0.000	0.003	-0.000
Constant		- 0.292 (0.253)	

Note: * p<0.1, ** p<0.05, *** p<0.01. This table presents the disaggregated decomposition showing the contribution of each variable to the endowment effect. It also shows the contribu-tion of the variables to male structural advantage and female structural disadvantage.

Source: authors based on data from the 7ème round of the Afro barometer.

Table 5 presents the disaggregated decomposition of urban-rural differences in participation. Using the additive property, (i) membership contributes 0.32 times the total composition effect in absolute terms (and 0.31 times of the overall urban-rural difference); (ii) membership contributes 0.45 (0.44) in absolute terms. Belonging and discussion are the factors that contribute to significantly explaining the urban-rural composition effect. No component is related to the urban and rural structural advantage in Togo. Indeed, when an individual belongs to a political party, he or she is subjected to obligations that lead him or her to participate in public affairs, unlike someone who does not belong to a political party. Political discussions also often lead the discussants to interfere in public affairs [21-25].

Table 5: Disaggregated decomposition by residence

A. Aggregate decomposition	Endowment effect	Urban structural advantage	Rural structural disadvantage
Total	0.068***	0.018	-0.016
	(0.024)	(0.049)	(0.023)
Share in gender differences	98.55 %	26.09 %	-23.19 %
B. Detailed breakdown	Endowment effect	Urban structural advantage	Rural structural disadvantage
Internet	0.007	-0.006	0.001
Gender	0.002	0.013	-0.001
Age	0.000	0.114	-0.000
Primary level	-0.000	0.008	-0.000
Secondary level	0.000	0.017	-0.000
Upper level	0.005	0.009	-0.003
Membership	0.022**	-0.021	-0.006
Discussion	0.031*	0.183	-0.010
Freedom	0.000	-0.038	0.003
Constant		(0.281) - 0.260	

Note: * p<0.1, ** p<0.05, *** p<0.01. This table presents the disaggregated decomposition showing the contribution of each variable to the endowment effect. It also shows the contribution of the variables to the urban structural advantage and the rural structural disadvantage.

Source: authors based on data from the 7th round of the Afro barometer

Conclusion

In this study, we analyzed citizen's participation in public affairs in Togo via the Internet according to their gender and place of residence. The results were obtained using the Oaxaca Blinder decomposition model. This is a model that allows for the inclusion of exogenous factors in the decomposition.

The results show that, controlling for gender, men participate more in public affairs than women in Togo. Factors such as discussions and membership in a political party are the factors that explain the composition effect between men and women. Furthermore, the results show that the component related to male structural advantage is the internet, which means that the internet contributes to participation in public affairs in Togo. Now taking into account the place of residence, the results show that individuals living in urban areas participate more in public affairs than those living in rural areas. Furthermore, the results show that factors such as political group membership and discussions explain the compositional effect between urban and rural areas [26-30].

In view of these results, we suggest that awareness campaigns on the importance of participation in public affairs be directed at women and rural populations. Also, given that the Internet is the component related to men's structural advantage in public participation, policies for the effective use of ICTs and especially access by women could help reduce the gender gap in public participation.

References

1. Wang L (2022) Race, social media news use, and political participation. Journal of Information Technology & Politics 19: 83-97.
2. Chang AC (2019) Does Internet usage inspire offline political participation? Analyzing the Taiwanese case 20: 191-208.
3. Kim C, Lee S (2021) Does social media type matter to politics? Investigating the difference in political participation depending on preferred social media sites. Social Science Quarterly 102: 2942-2954.
4. Bensaude-Vincent B (2013) Public opinion and science: to each his own ignorance. La Découverte.
5. Caplan B (2001) Rational ignorance versus rational irrationality. Kyklos 54: 3-26.
6. Toros S, Toros E (2022) Social media use and political participation: The Turkish case. Turkish Studies 1-24.
7. Bakshy E, Frachtenberg E (2015) Design and analysis of benchmarking experiments for distributed internet services. Proceedings of the 24th International Conference on World Wide Web 108-118.

8. Garrett RK (2009) Echo chambers online? Politically motivated selective exposure among Internet news users. Journal of computer-mediated communication 14: 265-285.
9. Best SJ, Krueger BS (2005) Analyzing the representativeness of Internet political participation. Political Behavior 27: 183-216.
10. Ward S, Vedel T (2006) Introduction: The potential of the Internet revisited.Parliamentary Affairs 59: 210-225.
11. Lu S, Lin T (2022) Revisiting the nexus of Internet and political participation: A longitudinal study of environmental petition in China 19: 346-359.
12. Putnam FA (1999) Internet-Based Data Acquisition and Control. Sensors-the Journal of Applied Sensing Technology 16: 60-63.
13. Lamprianou I (2013) Contemporary political participation research: A critical assessment. In Democracy in transition 21-42.
14. Fields GS, Yoo G (2000) Falling labor income inequality in Korea's economic growth: Patterns and underlying causes. Review of Income and Wealth 46: 139-159.
15. Skocpol T (2004) Voice and inequality: The transformation of American civic democracy. Perspectives on Politics, 2: 3-20.
16. Anderson SP, Mclaren, J (2009) Media Mergers and Media Bias with Rational Consumers.
17. Bakshy E (2015) Exposure to ideologically diverse news and opinion on Facebook 348: 1130-1133.
18. Besley T, Burgess R (2000) Does the media make government more responsive? Theory and evidence from Indian famine relief policy. International Monetary Fund Seminar Series 10: 1-40.
19. Besley T, Prat A (2006) Handcuffs for the grabbing hand? Media capture and government accountability. American economic review 96: 720-736.
20. Blais A, Gidengil E, Nevitte N, Nadeau R (2004) Do (some) Canadian voters punish a prime minister for calling a snap election? Political Studies 52: 307-323.
21. Chan J, Suen W (2008) A spatial theory of news consumption and electoral competition. The Review of Economic Studies 75: 699-728.
22. Downs A (1957) An economic theory of political action in a democracy. Journal of political economy 65: 135-150.
23. Kemp R, Parto S, Gibson RB (2005) Governance for sustainable development: Moving from theory to practice. International journal of sustainable development 8: 12-30.
24. Lazer BDMJ, Baum MA, Benkler Y, Berinsky AJ, Greenhill M, et al. (2018) The science of fake news.
25. Luka RC (2011) Women and political participation in Nigeria: The imperatives of empowerment. Journal of social sciences and public policy 3: 24-37.
26. Plescia C, Sevi S, Blais A (2021) Who Likes to Vote by Mail? American Politics Research 49: 381-385.
27. Prat A, Strömberg D (2013) The political economy of mass media. Advances in economics and econometrics 2: 135.
28. Skocpol T (2004) Voice and inequality: The transformation of American civic democracy. Perspectives on Politics, 2: 3-20.
29. Theocharis Y, Van Deth JW (2018) The continuous expansion of citizen participation: A new taxonomy. European Political Science Review 10:139-163.
30. Van Boven L, Judd CM, Sherman DK (2012) Political polarization projection: Social projection of partisan attitude extremity and attitudinal processes. Journal of personality and social psychology 103: 84.