Traditional Media and Social Networks in the 2018 Presidential Election*

Ulises Beltrán**

ABSTRACT: This article seeks to understand the relationship between voter preferences and both media consumption and attention to political advertising during the last presidential election in Mexico. To do this, I discuss some statistical models where the dependent variables are the vote for each candidate and the change or stability in their preferences, and the independent variables are the intensity of media consumption, measured through weekly exposure to news about the campaign, and individual recollection of the candidates' political ads. These models do not show a significant relationship between media consumption and electoral preferences. Contrary to the belief that social media helped the winning candidate, this study finds no empirical support for such claim, in line with the literature that finds that the media has little or no effect on voter preferences.

KEYWORDS: 2018 election, media, media effects, social media.

Medios de comunicación tradicionales y redes sociales en la elección presidencial de 2018

RESUMEN: Este trabajo busca conocer la relación entre las preferencias de los electores y su consumo de medios y atención a la publicidad durante la pasada elección presidencial en México. Para ello, se discuten modelos estadísticos donde las variables dependientes son el voto a cada uno de los candidatos y el cambio o estabilidad en las preferencias por éstos, y las independientes son la intensidad en el uso de medios, medida a través del consumo semanal de noticias sobre la campaña, y la recordación de la publicidad política de los candidatos. Estos modelos no muestran una relación significativa entre el consumo de medios y las preferencias electorales. Frente a la creencia de que

Ulises Beltrán is affiliated professor to the Political Studies Division of Centro de Investigación y Docencia Económicas (CIDE) and director of BGC, Ulises Beltrán y Asocs. S.C. Carretera México-Toluca 3655, Lomas de Santa Fe. Mexico City, 01210. Tel: 52 11 3044. E-mail: ulises.beltran@cide.edu. ORCID iD: https://orcid.org/ 0000-0003-3438-5431.

Note: This range of pages corresponds to the published Spanish version of this article. Please refer to this range of pages when you cite this article.

las redes sociales ayudaron al candidato vencedor, este estudio no encuentra apoyo empírico para la misma, en línea con la tradición que sostiene que los medios tienen efectos mínimos o nulos en las preferencias de los votantes.

PALABRAS CLAVE: elección 2018, medios de comunicación, efectos de medios, redes sociales.

INTRODUCTION

Deliberation on the offers and merits of politicians is a central element of the democratic exercise. Electoral campaigns are highlights of this exercise. Parties and candidates compete to convey their messages to an audience from which they expect to obtain a favorable decision and more concretely, the necessary number of votes to win the election. More than ever, political actors have intensified their communication with voters —within the legal framework that regulates it. This conversation between politicians and the public reaches voters through the media, either through the coverage of campaign events by the news media or through political advertising, in such a way that campaign effects are, ultimately, media effects.

In the 2018 presidential election, media attention to the candidates' campaigns was intense and all of them spread their publicity in the time slots marked by the law. Likewise, all had a notable presence in social networks.

The academic literature regarding the media-driven relationship between politicians and voters has a long tradition in advanced democracies and, over time, has presented opposing views. Early studies supported the idea that the media had "minimal effects" on voters' electoral preferences because electoral choice was shaped by individuals' belonging to broad social groups with common characteristics and because media supply was limited to only a few outlets (Katz and Lazarsfeld, 1955; Klapper, 1960). A second wave of studies supported the idea of significant media effects on preferences. The literature of this period attributed enormous influence to political marketing on voter preferences, from which it inferred a manipulated and even corrupted electoral competition, particularly because of the decisive influence of television on election results (Manin, 1997; Sartori, 1989, among others).[1]

The forms and means of access to information have dramatically changed during the last two decades. On the one hand, the media supply has become much broader and diverse, with the emergence of exclusive news channels, some with explicit political and ideological orientations. In many countries, state networks and channels compete with private channels. On the other hand, the emergence of the Internet has given way to new instruments of information consumption, such as social networks, where the public is informed directly, without editors who classify and

---

[1] The literature on this subject is very extensive. Long and detailed reviews can be found in Benett and Iyengar, 2008 and 2010.

order the news. Public access to information is increasingly individualized due to a massive and sometimes ideologically oriented supply as well as to new forms of person-to-person, unedited information exchange. All these changes force us to review our previous conclusions about the media effects on voting. The media in Mexico has undergone a similar process of change that is said to have played an important role in the 2018 presidential election.

Media consumption can have three effects on voter preferences; First, the information acquired during the campaign confirms the preferences the voter had at the beginning of the campaign, *i.e.* her candidate preferences do not change; second, the voter drops the candidate she preferred at the beginning of the campaign, *i.e.* the candidate loses the voter's preference; and third, the voter changes her preferences in favor of another candidate, *i.e.* the latter gains the voter's preferences. The central purpose of this study is to determine if any significant relationship can be identified between the voter's information sources and how vote preferences moved during the campaign.

This article main draws from the CIDE-CSES 2018 National Election Study. This study consists of a national panel survey of the same individuals in four waves. The first wave was conducted between May 22 and June 3, the second between June 22 and 28, and the third —the first post-election wave— between July 12 and 18. The last wave was conducted in January 2019, with the new government in place. In this article I use only the first three waves. The survey strategy allowed us to interview the same 1 237 individuals in each of the first three waves. For the fourth wave, recollected six months later, 221 participants were lost —an attrition of 18 per cent. The methodology of these surveys is described in detail in Annex 1.

NEWS COVERAGE

As in any presidential election, campaigns were prominent in the news media. Table 1 shows the results of the news coverage analysis carried out by students of the UNAM's Faculty of Political Science in 2018 on the INE's behalf (INE, 2018b). The news coverage of the candidates' activities was mostly neutral. When the media goes evaluative, the marks usually lean "negative"; it is critical-oriented information. Table 1 shows that López Obrador was the candidate who received slightly more media coverage, especially during the pre-campaign, but also that he was the candidate with the highest number of negative notes, eleven per cent compared to an average of five per cent for the other two leading candidates. That is, contrary to expectations, the candidate with the most negative coverage was the one who increased his vote preferences the most during the campaign and ended up carrying the election.

For the primary source of voter information, the CIDE-CSES 2018 National Election Study includes a set of questions asking participants to indicate how often they heard campaign news on radio, television, print media, *Facebook*, *Twitter* and *What-*

TABLE 1. Precampaign and campaign qualified news coverage*

	Precampaign (percentage)			Campaign (percentage)		
	Total mentions	Positive	Negative	Total mentions	Positive	Negative
Andrés Manuel López Obrador	37.80	1.60	14.10	28	1.90	11.00
José Antonio Meade	34.60	2.10	7.60	23	1.30	5.10
Ricardo Anaya	27.50	1.20	9.60	21	1.50	4.80
Margarita Zavala	ND	ND	ND	15	0.70	5.50
José Luis Rodríguez	ND	ND	ND	12	1.40	11.20

Source: INE (2018a). *I did not directly include the proportion of mentions that the evaluators qualify as neutral because this can be inferred from the other two percentages.

sApp.[2] There are other networks available to the public, but several accounts indicate that these three are the most used by candidates and parties to spread political messages (Vázquez, 2018).[3]
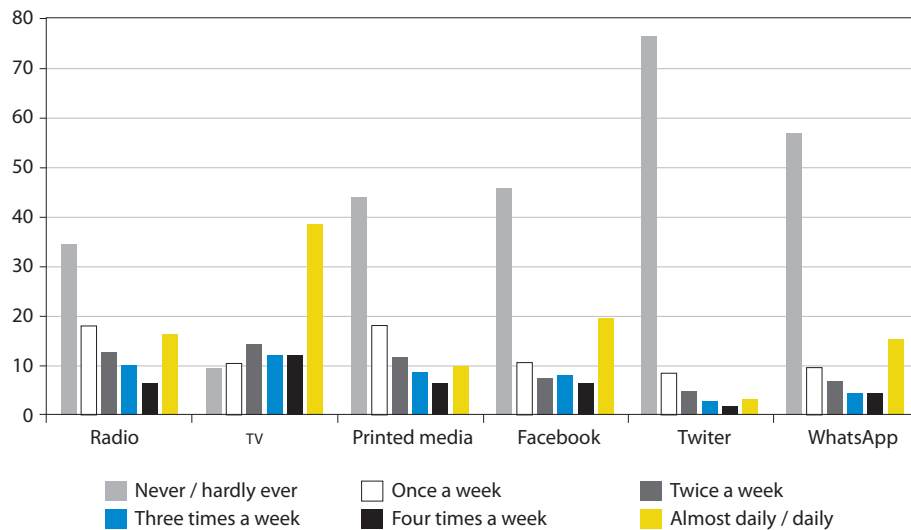
The data reveal marginal voter attention to news information, except for television broadcasting (see Figure 1). Only 30 per cent of our sample seek news information between four times a week and almost daily on any news source. As usual, the role of television as the most used source of information stands out: 51 per cent of interviewees consult news about the campaign on television, 26 per cent on *Facebook*, 24 per cent on radio, 20 per cent on *WhatsApp*, 16 per cent on print media and only 6 per cent on *Twitter*. If we remove the two most extreme channels —television and Twitter—, only an average of 24 per cent of people sought information about the campaign more than four days a week.

ADVERTISING

Political advertising in mass media is another central instrument for any political campaign. While the consumption of news through any source —however broad it may be— hits a limited and usually friendly public that is probably less susceptible to changes of opinion and preference, advertising reaches a much larger audience and is directly produced by the candidates themselves, so that it directly conveys the messages with which they want to win the vote. This is the reason why most campaign funding is used for political advertising.

[2] "Thinking about last week, please tell me how often you heard news about the campaign from the (media source), never, almost never, once a week, twice, three times, four times a week or almost daily?

[3] The most widely used is *Facebook*, followed by *WhatsApp*, *Youtube*, *Instagram*, *Twitter* and the rest. See www.statista.com/statistics/449869/mexico-social-network-penetration.See Social networks on Election Day. https://www.forbes.com.mx/las-redes-sociales-durante-la-jornada-electoral/ [accesed on: July 8, 2020].

FIGURE 1. Information source of the campaign: Usage frequency per week

Source: National Electoral Study CIDE-CSES 2018 (Beltrán, Ley and Castro Cornejo, 2020).

The elections where candidates spend the most on political advertising are probably those in the United States, because of the characteristics of its electoral system and the cost of broadcasting, and yet there is no strong evidence indicating that advertising has a significant effect on voter preferences. The literature considers that the effect of political advertising on preferences is limited because candidates invest similar amounts to disseminate such advertising, surely under the assumption that if they do not do so they expose themselves to likely defeat (Iyengar and Simon, 2000: 151; Brox y Shaw, 2006; Zaller, 1996). The result is that these conflicting messages nullify each other's possible effect on voter preferences.

In Mexico, the rules of party access to mass media for the circulation of electoral propaganda changed radically in 2008. The reforms passed that year prohibited political parties and any other civil organization from directly buying slots on broadcasting networks to transmit any type of election-related message. To broadcast parties' and candidates' advertisements, as well as various INE announcements on the electoral process, the government granted free access to 12.5 per cent of the advertising slots that a previous law already granted, slots that the INE now distributes among the participating political parties for institutional broadcasting (DOF, 2018).[4] From then on, access to advertising time for electoral propaganda became markedly inequitable, since the law assigns 30 per cent of the time available to each

[4] The reform was approved at the end of 2007 and published on 14 January 2008. A detailed description of this electoral reform can be found in Buendía and Aspiroz (2011).

of the registered parties and the remaining 70 per cent is distributed based on party votes collected in the previous election.

For the 2018 federal and local elections, the INE had access to nearly 30 million hours of airtime on all radio and television stations between December 14, 2017 and Election Day. This is equivalent to 48 minutes per day in media that were distributed in two and up to three minutes per hour of transmission on each radio station and television channel between 6:00 AM and 12:00 AM. Of these 48 minutes, the parties and candidates daily received 18 minutes on each radio station and television channel. In states with concurrent local elections, the INE allocated 15 minutes per day for local campaigns on each radio station and television channel with coverage in the state. The remaining time was available to the INE.[5] Each party may freely decide how to distribute their messages in their corresponding time in both local and federal elections.
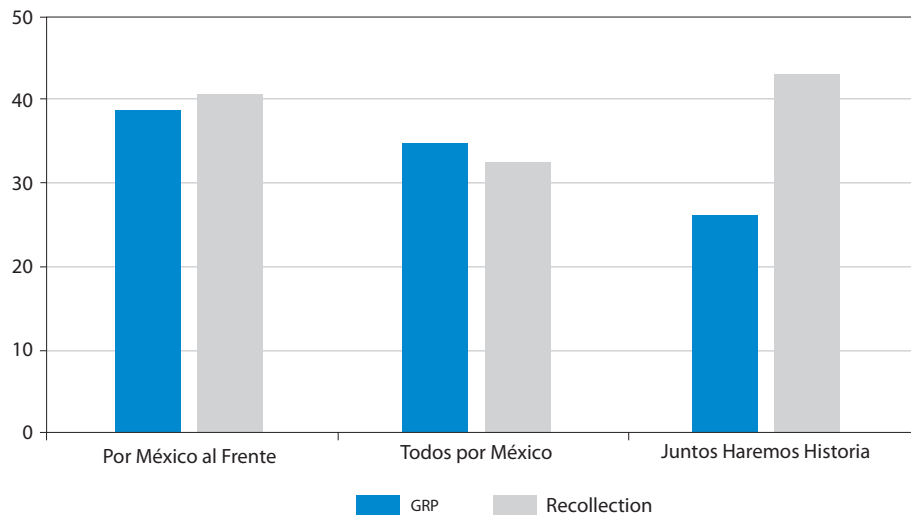
This change in parties' and candidates' access to airtime for the distribution of their political communication messages represented an enormous change compared to the time they used for the same purpose in the 2006 election. In that election period, 142 358 ads were broadcast; in 2018, parties and candidates broadcast just over 41 million ads (INE, 2018b).

For the 2018 presidential election, the coalition *Todos por México* that nominated José Antonio Meade received 39 per cent of the total airtime available to broadcast its ads from the beginning of the pre-campaign until the election; the coalition *Por México al Frente* that nominated Ricardo Anaya received 37 per cent, and the coalition *Juntos Haremos Historia* that nominated Andrés Manuel López Obrador received 23 per cent.[6] As noted, Ricardo Anaya and José Antonio Meade received similar amounts of airtime (37 and 39 per cent in total), while the winning candidate, López Obrador, received approximately 16 per cent less time and therefore a fewer amount of viewers.

---

[5] The commercial value of this space in the media is enormous and meant a significant increase in campaign resources for the parties, even though the nominal value of the direct funding they receive decreased.

[6] The real measure of access to the media is the so-called "Gross Rating Points" (GRPs), which indicates the proportion of the audience that each channel has per minute; that is, they consider the audience reached with the assigned space. In this case, the second measure is important because, given that the INE assigns the specific spaces in which the announcements are broadcast based on the time corresponding to each party and not the audience at that moment, it could be that some parties obtain a greater audience due to the moment in which the ads are broadcast. This does not occur. Every week, the INE rotates the order of the ads of each party and thus manages to assign a proportional audience that, if not exactly equal, is very similar between the assigned times. *Todos por México* reached 35 per cent of the audience, *Por México al Frente* 39 per cent and *Juntos Haremos Historia* 26 per cent (INE, 2018b). Audience data come from the audience measurement agency Nielsen. I am grateful to José de la Rosa Medero, General Director of Nielsen Mexico, and Olivia Pérez, Data Science Business Leader Media Latam for providing this information to me.

FIGURE 2. Audience reached (GRPs, Nielsen México) and ad recollection (%) May

Source: National Electoral Study CIDE-CSES 2018 (Beltrán, Ley and Castro Cornejo, 2020). Nielsen Media Report.

Despite López Obrador's disadvantage in accessing airtime for the dissemination of his messages due to electoral law, his campaign was very efficient since, as Figure 2 shows, his ads were remembered the most by the population.

In sum, the candidate who received the highest proportion of negative notes on the news coverage of his campaign and who had the least relative media airtime to transmit his ads, Andrés Manuel López Obrador, was the one who obtained the highest proportion of votes.

CHANGES IN VOTER PREFERENCES

The electoral process officially began on December 14, 2017 with the start of what the law defines as the pre-campaign period, where parties and coalitions had to select their candidates, and independent candidates had to meet the requirements for registration. The period ended on February 11, 2018 (INE, 2017). In November 2017, several polls showed that electoral preferences were largely distributed among four candidates: Andrés Manuel López Obrador with 35 per cent of preferences, Ricardo Anaya with 20 per cent, Miguel Osorio Chong with 30 per cent and Margarita Zavala with 12 per cent. As shown, the preferences for the two potential candidates from the PAN added up to 32 per cent, a similar number to that of López Obrador, who was leading the polls. In other words, during the 2018 electoral process, vote preferences for López Obrador grew by nearly 18 percent-

TABLE 2. Electoral preferences and change between the start of the campaign in May (first panel wave) and the post-election survey taken one week after the election (third panel wave)

Candidate	May (%)	July (%)	Change (%)
Ricardo Anaya	25.0	22.1	-2.9
José Antonio Meade	16.1	18.2	2.1
Andrés Manuel López Obrador	38.6	45.8	7.2
Margarita Zavala	0.6	0.0	-0.6
Jaime Rodríguez Calderón	3.2	2.0	-1.2
None	9.4	10.0	0.9
Other	0.0	0.4	0.4
Does not know	7.1	1.4	-5.8

Source: National Electoral Study CIDE-CSES 2018 (Beltrán, Ley and Castro Cornejo, 2020).

age points, while preferences for Ricardo Anaya fell by 11 points and those for José Antonio Meade by seven. The following analyses begin in May because the first wave of the panel survey —which is its empirical basis— began on that date. Table 2 shows the changes in electoral preferences between May and the July post-election survey.

These changes in preferences may seem small. However, in reality almost 60 per cent of the panel participants changed their preferences between the first and the third wave, a very significant proportion of people, while the remaining 40 per cent maintained their preferences during the campaign.

To analyze what happened to voters' preferences during the campaign between the first wave in May and that of July, I estimated three variables that identify whether the preferences for the candidate did not change, whether the candidate gained or whether he lost the voter's preference. In Table 4, I present the percentage of panel participants who fall into each category for each candidate. It is important to note that this set only includes panelists who expressed preferences in May and July. One should also note that López Obrador was by far the candidate who retained or gained the most preferences compared to the other two: 46 per cent versus 22 per cent for Anaya and 26 per cent for Meade.

ANALYSIS
Electoral preferences and media consumption
The candidates' campaign activities are ultimately known to the general public through their presence in mass media and social networks. The most common assumption about this relationship in the previous campaign is that social networks played an important role, particularly in the case of Andrés Manuel López Obrador,

TABLE 3. Changes in preferences between May and the July post-election survey (percentage)

Candidate	Preferences in May	Change between May and July	Changed to Anaya	Meade	AMLO	Other	None
Anaya	25	65	35	16	37	2	11
Meade	16	58	15	42	32	2	10
AMLO	38	40	17	13	60	1	8
Other	4	82	10	10	45	18	18
None	17	82	26	16	38	2	18
Total	100		22	19	45	2	11

Source: National Electoral Study CIDE-CSES 2018 (Beltrán, Ley and Castro Cornejo, 2020).

TABLE 4. Proportion of voters with stable vs. moving preferences between May and July

Preferences	Anaya	Meade	AMLO
Lost	16.4	8.1	8.8
Gained	13.5	19.7	22.4
No change	8.5	6.5	23.4
Total	38.5	34.3	54.5

Source: National Electoral Study CIDE-CSES 2018 (Beltrán, Ley and Castro Cornejo, 2020).

who was allegedly very successful among these media sources. The same is expected of advertising. As mentioned earlier, in the survey we asked about the consumption intensity of each source and we also asked if the interviewee remembered any of the candidate's advertisements. In the three waves of the panel, respondents were asked to state their preferences for the candidates of that time. The third wave was conducted the week after the election and, having asked if the respondent participated the election, he or she was asked to specify for whom he or she voted. Based on this information, I constructed three dichotomous variables —one for each candidate— that have a value of one if the respondent voted for the specific candidate and zero if he or she did not. To identify the relationship of preferences with media and advertising, I ran logistic models in which the dependent variable is the dichotomous variable of preference for each candidate and the inde-

TABLE 5. Preference for each candidate and media consumption as a source of information for the campaign (data from the third wave of the CIDE-CSES Study) (Logistic models)

	Anaya		Meade		AMLO	
	B	**Sig.**	**B**	**Sig.**	**B**	**Sig.**
Radio	0.00	N.S.	-0.00	N.S.	0.00	N.S.
Television	-0.00	N.S.	0.01	N.S.	-0.01	N.S.
Print	-0.01	N.S.	0.00	N.S.	0.02	N.S.
Facebook	0.01	N.S.	0.02	N.S.	0.00	N.S.
Twitter	-0.02	N.S.	-0.00	N.S.	0.00	N.S.
WhatsApp	0.01	N.S.	-0.01	N.S.	-0.02	N.S.
Sex	-0.10	N.S.	0.34	***	-0.11	N.S.
Age	-0.09	N.S.	0.29	***	0.01	N.S.
SEL	0.02	N.S.	-0.07	**	0.04	N.S.
Schooling	0.02	***	-0.01	N.S.	-0.01	N.S.
Constant	-1.08	***	-2.48	***	-0.14	N.S.
N	1 237		1 237		1 237	
Pseudo R^2	0.01		0.03		0.01	

Source: National Electoral Study CIDE-CSES 2018 (Beltrán, Ley and Castro Cornejo, 2020).

pendent variable is the consumption intensity of each media source[7] and the recollection of the candidate's advertising.[8] In all models, I include sex, age, socioeconomic level (SEL) and years of schooling of the interviewee to discount their possible effects on the relationship between electoral preferences and both media consumption and advertising. Table 5 shows the results.

In no case does the consumption intensity of the different media sources show a statistically significant relationship with the preferences for any of the candidates. The idea that the use of social networks was particularly associated with the preferences for the winning candidate does not seem to hold.

Electoral preferences and voters' recollection of candidate ads
The enormous amount of resources invested in political advertising, namely through the value of airtime usage for dissemination, assumes that candidates' advertising encourages changes in voters' preferences and has significant effects on their preferences in the desired sense. In order to reveal the relationship be-

[7] "Thinking about last week, please tell me how often you heard news about the campaign from the (media source), never, almost never, once a week, twice, three times, four times a week or almost daily?

[8] "During the presidential campaign that just took place, did you see or hear any political ads of (name of candidate) on the radio, television or movies?

tween advertising recollection and candidates' preferences, I ran two logistic models in which the dependent variable is the same one I used to analyze the effects of media attention and the independent variables are to recall political ads (see Table 6).

TABLE 6. Preference for candidates and recollection of candidate advertising. Logistic models

	Anaya		Meade		AMLO	
	B	**Sig.**	**B**	**Sig.**	**B**	**Sig.**
Anaya ads	-0.00	N.S.	-0.00	N.S.	0.00	N.S
Meade ads	0.00	N.S.	-0.00	N.S.	-0.00	N.S
AMLO ads	0.00	N.S.	0.00	N.S.	-0.00	N.S
Sex	-0.09	N.S.	0.34	***	-0.12	N.S
Age	-0.10	N.S.	0.27	***	0.02	N.S
SEL	0.02	N.S.	-0.07	**	0.04	N.S
Schooling	0.02	***	-0.01	N.S.	-0.01	N.S
Constant	-1.08	***	-2.39	***	-0.16	N.S
N	1 237		1 237		1 237	
Pseudo R^2	0.01		0.03		0.01	

Source: National Electoral Study CIDE-CSES 2018 (Beltrán, Ley and Castro Cornejo, 2020).

As with media attention, it is not possible to identify any significant relationship between voters' attention to candidates' political advertising and their preferences.

The results of these models are compelling and completely consistent with the finding arguing that it is not possible to find any effect of media consumption or political advertising on electoral preferences.

MEDIA AND ADVERTISING CONSUMPTION AND CHANGES IN PREFERENCES DURING THE CAMPAIGN

In the previous section, we analyzed the relationship of media and advertising with voter preferences in a cross-sectional manner. The National Electoral Study is a panel survey that allows us to know the changes in candidate preference for each participant. Based on the preferences expressed in the first and third waves of the panel, I constructed a variable that shows how voter preferences evolved. The variable has a value of 1 if the candidate lost preferences of voters between May and July, 2 if he won them and 3 if the preferences he obtained in May did not change during the campaign. To estimate the effect of media consumption intensity and advertising recollection over voter's preference stability during the campaign, I ran

multinomial logistic models where the dependent variable is for each candidate whether he kept support, lost voters or won them between May and July, and the independent variables are media consumption intensity —measured by the times that the voter found out about the campaign through the media source in question per week— and the recollection of the candidates' advertising. That is, the estimates show under what conditions the candidate lost or gained votes compared to those citizens whose vote did not change between May and July. Table 7 shows the results of the corresponding models.

The results are remarkably consistent regarding traditional media: radio, television and print. Models fail to report a statistically significant relationship between voter media consumption intensity and changes in voter preferences. In this sense, these results are also consistent with the broad literature that has found minimal or no effects between information sources and electoral preferences. The same could be said about social networks, if it were not for the visible relationship between their usage as a source of information and the change in preferences for Ricardo Anaya. However, the result is somewhat ambiguous, as it seems that the use of *Twitter* as a source of campaign information was associated with both favorable and adverse preferences for Anaya. These results are probably consistent with the nature of this network. As is well known, *Twitter* is a space where the greatest confrontation between opposing views occurs, some of them with the use of "professional" or even automated participants, the so-called bots.

This is a relevant finding that also brings into question the belief even expressed by López Obrador on several occasions about the positive role of social networks in his campaign. The results of the models reveal that there is no statistically significant relationship between the use of social networks as a source of information and the changes in preferences for López Obrador during the campaign.

To identify the possible effects of advertising on the change or stability of preferences, I ran multinomial logistic models where the dependent variable is the change or stability of preferences as described above and the independent variables are dichotomous variables that have the value of one if the interviewee recalled the candidate's advertising and zero if he or she did not. The results can be seen in Table 8.

Advertising recollection does not show a statistically documentable relationship with the change or permanence of the voter's preferences in the campaign either.

CONCLUSIONS

This article analyzed the relationship between media consumption and political ads recollection and vote during the 2018 presidential election in Mexico. Its main finding reveals that neither media consumption nor political advertising seemed to

TABLE 7. Intensity of media consumption and change in preferences between May and July. Multinomial logistic model. "No change" is the reference category

	Anaya		Meade		AMLO	
	B	**Sig.**	**B**	**Sig.**	**B**	**Sig.**
The candidate lost preferences						
Radio	-0.03	N.S.	-0.00	N.S.	-0.00	N.S.
Television	-0.00	N.S.	0.04	N.S.	-0.02	N.S.
Print	0.04	N.S.	0.02	N.S.	0.03	N.S.
Facebook	-0.07	N.S.	-0.04	N.S.	-0.05	N.S.
Twitter	0.17	***	0.01	N.S.	-0.08	N.S.
WhatsApp	-0.08	N.S.	0.05	N.S.	0.14	N.S.
Sex	-0.16	N.S.	-0.41	N.S.	0.23	N.S.
Age	0.02	N.S.	-0.23	N.S.	0.12	N.S.
SEL	0.16	***	0.04	N.S.	-0.14	**
Schooling	-0.12	***	-0.17	***	-0.13	**
Intercept	0.93	N.S.	1.67	**	-0.61	N.S.
The candidate gained preferences						
Radio	-0.00	N.S.	0.02	N.S.	-0.02	N.S.
Television	0.00	N.S.	0.10	N.S.	-0.04	N.S.
Print	0.07	N.S.	0.05	N.S.	0.06	N.S.
Facebook	-0.09	N.S.	-0.03	N.S.	-0.04	N.S.
Twitter	0.16	**	-0.03	N.S.	0.04	N.S.
WhatsApp	-0.03	N.S.	0.06	N.S.	-0.00	N.S.
Sex	-0.25	N.S.	-0.17	N.S.	-0.00	N.S.
Age	0.06	N.S.	-0.16	N.S.	-0.10	N.S.
SEL	0.30	***	0.08	N.S.	0.07	N.S.
Schooling	-0.02	N.S.	0.01	***	0.02	N.S.
Intercept	-0.50	N.S.	0.75	N.S.	-0.03	N.S.
N	476		424		675	
Pseudo R^2	0.10		0.07		0.06	

Source: National Electoral Study CIDE-CSES 2018 (Beltrán, Ley and Castro Cornejo, 2020).

TABLE 8. Advertisement recollection and change in preferences between May and July

	Anaya		Meade		AMLO	
	B	**Sig.**	**B**	**Sig.**	**B**	**Sig.**
Lost preferences						
Anaya ads	0.00	N.S.	-0.01	N.S.	-0.01	N.S.
Meade ands	-0.00	N.S.	0.00	N.S.	0.00	N.S.
AMLO ads	0.00	N.S.	0.00	N.S.	0.00	N.S.
Sex	-0.19	N.S.	-0.36	N.S.	0.22	N.S.
Age	0.06	N.S.	-0.21	N.S.	0.11	N.S.
SEL	0.16	***	0.04	N.S.	-0.13	**
Schooling	-0.13	***	-0.17	***	-0.11	N.S.
Intercept	0.79	N.S.	1.84	***	-0.60	N.S.
Gained preferences						
Anaya ads	0.01	N.S.	-0.01	N.S.	-0.00	N.S.
Meade ands	0.01	N.S.	-0.00	N.S.	-0.00	N.S.
AMLO ads	-0.01	N.S.	-0.00	N.S.	0.00	N.S.
Sex	-0.27	N.S.	-0.17	N.S.	-0.04	N.S.
Age	0.15	N.S.	-0.15	N.S.	-0.07	N.S.
SEL	0.32	***	0.08	0.22	0.07	N.S.
Schooling	-0.02	N.S.	0.01	0.71	0.02	N.S.
Intercept	-0.70	N.S.	1.41	***	0.14	N.S.
N	1 237		1 237		1 237	
Pseudo R^2	0.42		0.52		0.21	

Source: National Electoral Study CIDE-CSES 2018 (Beltrán, Ley and Castro Cornejo, 2020). ***p< .001, **p< .01, *p< .05.

have a significant effect on the changes in preferences for any of the three major candidates. In this sense, this essay rules out the idea that the use of social networks was a decisive factor in the definition of voters' electoral preferences in the 2018 presidential election. The same holds for the voters' recollection of the candidates' political advertising. These findings go well with the academic literature claiming that the media has minimal or no effect on voter preferences —not only traditional media, but the so-called social networks as well. **P**

REFERENCES

Ansolabehere, Stephen D., Roy Behr and Shanto Iyengar (1993), *The Media Game: American Politics in the Television Age*, New York: MacMillan.

Bartels, Larry M. (1988), *The History of Marketing Thought*, 3rd ed., Columbus: Publishing Horizons.

Bartels, Larry (2006), "Priming and Persuasion in Presidential Campaigns", in Henry E. Brady and Richard Johnston (eds.), *Capturing Campaign Effects*, Ann Arbor: University of Michigan Press, pp. 78-112.

Baum, Michael A. (2003), *Soft News Go to War: Public Opinion and American Foreign Policy in the New Media Age*, Princeton: Princeton University Press.

Beltrán, Ulises (2009), "Publicidad y preferencias", *Política y Gobierno*, thematic volume "Elecciones en México", pp. 237-271.

Beltrán, Ulises, Sandra Ley and Rodrigo Castro Cornejo (2020), *Estudio Nacional Electoral (CIDE-CSES) 2018*, Mexico: Centro de Investigación y Docencia Económicas.

Bennett, W. Lance and Shanto Iyengar (2008), "A New Era of Minimal Effects? the Changing Foundations of Political Communication", *Journal of Communication*, 58(4), pp. 707-731.

Bennett W. Lance and Shanto Iyengar (2010), "The Shifting Foundations of Political Communication: Responding to a Defense of the Media Effects Paradigm", *Journal of Communication*, 60(1), pp. 35-39.

Brox, Brian J. and Daron R. Shaw (2006), "Political Parties, American Campaigns, and Effects on Outcomes", in Richard S Katz and William J. Croty (eds.), *Handbook of Party Politics*, Thousand Oaks: Sage Publications, pp. 146-159.

Buendía Hegewisch, José and José Manuel Aspiroz Bravo (2011), *Medios de comunicación y la reforma electoral 2007-2008: Un balance preliminar*, Mexico: TEPJF.

Chong, Dennis (1996), "Creating Common Frames of Reference on Political Issues", in Diana C. Mutz, Paul M. Sniderman and Richard A. Brody (eds.), *Political Persuasion and Attitude Change*, Ann Arbor: University of Michigan Press.

DOF (Diario Oficial de la Federación) (2008), Decreto por el que se expide el Código Federal de Instituciones y Procedimientos Electorales, January 14, available at: http://dof.gob.mx/nota_detalle.php?codigo=5028346&fecha=14/01/2008 [accesed on: July 8, 2020].

Fiske Susan T., Donald R Kinder and W. Michael Larter (1983), "The Novice and the Expert: Knowledge-based Strategies in Political Cognition", *Journal of Experimental Social Psychology*, 19(4), pp. 381-400.

INE (Instituto Nacional Electoral) (2017), "Agreement of the General Council of the National Electoral Institute, establishing the pre-campaign period for the federal electoral process 2017-2018, as well as various criteria and procedural deadlines related to the same", September 8, available at: https://repositoriodocumental.ine.mx/xmlui/bitstream/handle/123456789/ 93573/CGex201709-08-ap-12.pdf?sequence=1&isAllowed=y [accesed on: July 8 2020].

INE (Instituto Nacional Electoral) (2018a), "Crónica del Proceso Electoral 2017-2018, junio 2018", available at: https://www.ine.mx/cronica-del-proceso-electoral-2017-2018-junio-2018/ [accesed on: July 8, 2020].

INE (Instituto Nacional Electoral) (2018b), "Numeralia Proceso Electoral 2017-2018", June 8, available at: https://www.ine.mx/numeralia-proceso-electoral-2017-2018/ [accesed on: July 8, 2020].

Iyengar, Shanto and Adam F. Simon (2000), "New Perspectives and Evidence on Political Communication and Campaign Effects", *Annual Review of Psychology*, 51, pp. 149-169.

Iyengar, Shanto and Donald R. Kinder (1987), *News that Matters: Television and American Opinion*, Chicago: University of Chicago Press.

Iyengar, Shanto, Donald R. Kinder, Mark D. Peters and Jon A. Krosnick (1984), "The Evening News and Presidential Evaluations", *Journal of Personality and Social Psychology*, 46(4), pp. 778-787.

Katz, Elihu and Paul F. Lazarsfeld (1955), *The Part Played by People in the Flow of Mass Communications*, Glencoe: The Free Press.

Klapper, Joseph T. (1960), *The Effects of Mass Communication*, Glencoe: The Free Press.

Krosnick, Jon A. and Donald R. Kinder (1990), "Altering the Foundations of Support for the President Through Priming", *American Political Science Review*, 84(2), pp. 497-512.

Manin, Bernard (1997), *The Principles of Representative Government*, New York: Cambridge University Press.

McCombs, Maxwell (1992), "Explorers and Surveyors: Expanding Strategies for Agenda Setting Research", *Journalism Quarterly*, 69(4), pp. 813-824.

McCombs, Maxwell and Donald L. Shaw (1972), "The Agenda Setting Function of Mass Media", *Public Opinion Quarterly*, 36(2), pp. 176-187.

McCombs, Maxwell, Donald L. Shaw and David H. Weaver (1997), *Communication and Democracy: Exploring the Intellectual Frontiers in Agenda Setting Theory*, Hillsdale: Lawrence Erlbaum.

Miller, Joanne M. and Jon A. Krosnick (2000), "News Media Impact on the Ingredients of Presidential Evaluations", *American Journal of Political Science*, 44(2), pp. 295-309.

Popkin, Samuel (1994), *The Reasoning Voter. Communication and Reasoning in Presidential Campaigns*, Chicago: University of Chicago Press.

Rogers Everett and James Dearing (1988), "Agenda-Setting Research: Where has it been and Where is it going?", in James A. Anderson (ed.), *Communication Yearbook*, Beverly Hills: Sage Publications.

Sartori, Giovanni (1989), "Video-Power", *Government and Opposition*, 24(1), pp. 39-53.

Scheufele, Dietram A. and David Tewksbury (2007), "Framing, Agenda Setting and Priming: The Evolution of Three Media Effects Models", *Journal of Communication*", 57(1), pp. 9-20.

Vázquez, Rubén (2018), "Las redes sociales durante la jornada electoral", Forbes México, July 2, available at: https://www.forbes.com.mx/las-redes-sociales-durante-la-jornada-electoral/ [accesed on: July 8, 2020].

Zaller, John (1992), *The Nature and Origins of Mass Opinion*, Cambridge: Cambridge University Press.

Zaller, John (1996), "The Myth of Massive Media Impact Revisited", in Diana C. Mutz, Paul M. Sniderman and Richard A. Brody (eds.), *Political Persuasion and Attitude Change*, Ann Arbor: University of Michigan Press.

ANNEX

National Electoral Study CIDE-CSES 2018

Methodological Note

The services of the company Ipsos (https://www.ipsos.com/es-mx) were hired to carry out the panel.

Interviews were conducted to men and women over 18 years of age who were Mexican residents and who had voter credentials. For this purpose, the CIDE provided Ipsos with a nationally representative probability sample, following a phased sampling design using the latest list of electoral sections available as a framework. The sample selection method is described below.

Before starting the fieldwork, some sections where logistical difficulties were encountered (e.g., insecurity issues, weather, etc.) were replaced. The replacements were made under the same probabilistic selection methodology.

1. First survey (wave 1), from May 27 to June 4, 2018: In this first stage, 2 600 people were contacted. In the interview, all participants were asked if they would be willing to be interviewed again later in exchange for a MXN$150.00 payoff. 1 540 people agreed.
2. Second survey (wave 2), from June 22 to 28, 2018: In this and the following wave, the 1 239 individuals recruited in the first wave were interviewed and given the proposed payoff.
3. Third survey (wave 3), from July 12 to 18, 2018: The same process described above (wave 2) was repeated and the same 1 239 interviews were obtained.
4. Fourth survey (wave 4), from January 26 to February 5, 2019: the same process described above (wave 2) was repeated, starting with the search for respondents who participated in the previous stages, managing to interview 1 018 panel participants, 66 per cent of the original sample.

Sample selection procedure: Surveys were conducted on a probability sample of electoral sections applying ten interviews per section. In order to have more precise estimates, a stratified sample was made by dividing the territory into four strata: *a)* states governed by the PAN, *b)* northern states governed by the PRI, *c)* southern states governed by the PRI and *d)* states governed by the PRD. Each stratum was in turn divided into strata of political competition according to the results of the 2015 federal deputy election. Within each stratum, sections (primary sampling units) were chosen through systematic sampling with probability proportional to section size (PPS), where size is defined by the 2015 nominal list.

Sections form clusters of individuals so the sampling corresponds to a multi-stage cluster sampling, where the primary sampling unit is the section, the secondary unit is the block, the third unit is the household and the final sampling unit is the interviewee. The electoral sections are chosen within each domain-stratum with probability proportional to the nominal list. Once the sections have been chosen, the selection of blocks and households is carried out during the fieldwork through systematic random sampling. In each section, the interviewer makes a list of the blocks that comprise it, assigning them a consecutive one from which he or she obtains the total number of blocks within the section (k). Within each section, two blocks must be chosen, so the interviewer divides the total number of blocks per section (k) by 2 to determine the "skip" between blocks. The interviewer then randomly chooses a number that is contained between 1 and the "skip" using a random number table and the number chosen is the first block to be selected. To choose the second block, the "skip" is added to the first number selected.

Once the blocks have been selected, we proceed to select the households. The process of selecting households is very similar to the one used to select the blocks. The interviewer lists all of the households on the block and divides the total by five (skips) since five households must be chosen on each block. Then the interviewer randomly chooses a number between 1 and the "skip" and that is the first household selected, the second household selected is the first number selected plus the skip, the third household is the second number selected plus the skip and so on for the fourth and fifth households.

The last stage of selection is that of the interviewee. In each home selected, the interviewer lists all the residents of the home with their respective birthday and chooses the person whose birthday is the most recent. In case the selected person is not home, the interviewer must conduct a checklist to contact the selected person, if the interview could not be conducted even with the checklist, then it is replaced with the adjacent household, moving clockwise.

Under this sampling scheme, all Mexican citizens have a non-zero and known probability of being selected. This constructed sample additionally allows us to generate precise estimates of the variables of interest, to make comparisons between subgroups of the population, to find out if there are differences between them and, above all, to formulate or verify hypotheses about their causes.

Given the sampling design, it is necessary to use expansion factors (π), which are calculated as the inverse probability of interviewee selection. Once the survey has been carried out, non-response adjustment factors are calculated, as well as adjustment factors for deviations from the population parameters of sex and age.

$$\pi = \frac{1}{P\,(\text{individual in sample})}$$

The sample size and design guarantee a 95 per cent confidence level and a theoretical margin of error (d) of ±2.8 points overall.

The calculation of this margin of error is presented below.

$$d = \sqrt{\left(\frac{t^2 * P(1-P) * efd}{n}\right) * 100}$$

$$= \sqrt{\left(\frac{(1.96)^2 * 0.5(1-0.5) * 2}{2\,400}\right) * 100}$$

$$= 2.8$$

Where,

d = the margin of error associated with the estimation of the proportion P.

p = the population parameter (proportion) that we seek to estimate. The calculation of the margin of error is made assuming a proportion of 0.5 because this is the value that maximizes the error, that is, any other proportion will have a smaller margin of error.

t = the percentile of the normal distribution associated with the desired confidence. A confidence level of 95 per cent is assumed for the calculation of the error.

N = sample size.

efd = design effect.

$$efd\,(\hat{p}) = \frac{V(\hat{p})\ \text{Under the sampling design}}{V(\hat{p}) = \text{Under simple random sampling}}$$

$$V(\hat{p}) = \frac{N-n}{(N-1)(n-1)}\,pq$$

N: the size of the population.

n : the sample size.

p : proportion of interest

$q = 1-p$

The design effect must be incorporated into the error calculation because it is a complex sampling scheme. On account of the clustering nature of the sampling (electoral sections), a design effect of approximately 2 is considered.