

Media dependency and evaluation of Mexican governmental administration of pandemic

Carlos Muñoz*  <http://orcid.org/0000-0002-9021-8198>

Universidad Autónoma de Nuevo León, México, carlos.munizm@uanl.mx

Victoria Isabela Corduneanu  <http://orcid.org/0000-0001-7958-2944>

Universidad Autónoma de Ciudad de México, México, isabela.corduneanu@uacm.edu.mx

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Luis Cejudo Espinosa

Abstract: During a crisis context such as the Covid-19 pandemic, the population's dependence on the media system to seek information and guidance increases, which can generate and/or increase political attitudes, such as support for the governmental administration of the crisis. In particular, the article seeks to determine if media dependence influenced the citizen evaluation of the management of the president and the subsecretary of Health during the pandemic in Mexico and if the level of political partisanship moderated this effect. A survey with a representative sample at national level ($N = 1211$) was carried out. Findings allow observing a moderating effect of partisanship on the relationship between dependency and the evaluation of pandemic administration, especially in the case of the subsecretary of Health. This suggests that the differentiated media coverage of both political actors contributed to modifying the citizen evaluation, especially among nonpartisans.

Key words: media system dependency, governmental administration evaluation, partisanship, pandemic.

*Corresponding author:
Carlos Muñoz,
carlos.munizm@uanl.mx

Resumen: En contextos de crisis como la pandemia por Covid-19 se incrementa entre la población la dependencia del sistema mediático para buscar información y orientación, lo que puede generar y/o acrecentar actitudes políticas, como el apoyo a la gestión gubernamental de la crisis. Así, el presente artículo busca determinar si la dependencia mediática influyó en la evaluación ciudadana de la gestión del presidente y del subsecretario de Salud durante la pandemia en México y si el nivel de partidismo moderó este efecto. Para ello, se realizó una encuesta ($N = 1211$) con una muestra representativa a nivel nacional. Los resultados muestran un efecto moderador del partidismo sobre la relación entre la dependencia y la evaluación de la gestión de la pandemia, principalmente en el caso del subsecretario de Salud. Ello sugiere que la cobertura mediática diferenciada de ambos actores políticos contribuyó a modificar la evaluación ciudadana, en especial entre quienes eran apartidistas.

Palabras clave: dependencia del sistema mediático, evaluación de la gestión gubernamental, partidismo, pandemia.

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Introduction¹

When on March 11th, 2020, World Health Organization (WHO) declared a global pandemic due to the disease caused by a coronavirus (Covid-19), various national governments started deciding action plans regarding their countries. In the case of Mexico, on March 23rd, the federal government declared the National Plan of Social Distancing so that the population voluntarily confined and maintained social distancing in public places. From this declaration, governmental administrative activities were severely reduced, largely focusing on the institutional communication strategy in the daily broadcast of pandemic-related information to the population by means of press conferences hosted by the President and the Undersecretary of Health. These conferences were held up to July 2020, when the return to normality was intended in the country. From that moment forward, the government's public discourse focused on the political side of the pandemic, though there has always been a constant appeal to the "specialists" and observing its health care recommendations.

In situations like this, which entail a threatening scenario for public health, but also in national and international crises at various levels (social, economic, political, etc.), the consumption and exposure to communication media tend to increase among the population as a way to look for information and guidance on how to act (Farré, 2005; Garfin *et al.*, 2020; Morton and Duck, 2001; Muñiz, 2011). This relationship between audience and media in moments of crisis and uncertainty has been explained by the media system dependency theory (Ball-Rokeach and DeFleur, 1976), which states that citizens intensify their linking to communication media as primary information sources, in times when conflicts in the social system occur, either as a result of natural disasters, public health issues or from human actions and decisions (Hindman, 2004; Lin *et al.*, 2020; Morton and Duck, 2001; Muñiz, 2011).

Although the contingency due to Covid-19 is relatively recent, there is already evidence on the way media exposure tended to increase over the pandemic (Duc Huynh, 2020). For example, in a recent study Casero-Ripollés (2020) detected that media consumption in the US increased as

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the pandemic took place and affected this country. Not only were citizens expected to obtain information from the media in order to decide on how to act in a crisis such as the pandemic, it is also important the task the media perform disseminating the political management of the governments, for example, in the face of a crisis (Davies, 2009). And although many citizens are not usually interested or attracted to politics, it is possible that in contexts of change and conflict their attention to the media changes, and in virtue of this, they develop an opinion about the governmental authorities' actions to address the crisis (Donovan *et al.*, 2020).

In this sense, previous research has been able to detect that media dependency manages to generate and/or increase political-based attitudes (Davies, 2009; Halpern, 1994; Ognyanova and Ball-Rokeach, 2015), as it may be the support for officials during crises. In this regard, Hindman (2004) detected a clear relationship between dependency and support for the actions of the US President after the September 11 attacks, which was moderated by the citizens' partisanship. Situations like the above are unforeseen events that escape the plans and political programming governments usually carry out, affecting the popularity of the various political actors involved in it (Canel, 2009). Owing to this, and bearing in mind that "popularity is a vital political resource" (Krosnick and Kinder, 1990: 497) which expresses as a high level of media attention (Todhunter, 2013), it is expectable that the coverage of the management of a crisis influences the citizens' support for politicians.

Considering these theoretical backgrounds as a reference, the present study intends to ascertain the extent to which media dependency influenced the assessment of Mexican citizens of the federal governmental management of the Covid-19 pandemic. Moreover, it is sought to find out whether personal factors such as partisanship are capable of moderating the aforementioned effect. To so, the case study will be the assessment of the management of the crisis by the two main actors involved, that is to say, on one side, President Andrés Manuel López Obrador, as head of the Executive, and the Undersecretary of Health,² Hugo López-Gatell Ramírez, on the other, who has been the government spokesperson in relation to health, keeping permanent communication with the citizenry in daily press conferences as of February 28th, 2020, and on occasion as of mid-June, 2021.

2 Even if the official position is Undersecretary for Prevention and Promotion of Health Care in the Secretariat of Health Care of the Mexican Government [Subsecretario de Prevención y Promoción de la Salud / Secretaría de Salud del Gobierno de México], in the present article, the charge "undersecretary of health care" will be preferred as it is the most used in the media.

Media system dependency in crisis situations

Communication media are essential tools for citizens to access information on social reality (Shehata and Strömbäck, 2014); this activity has expanded from traditional media such as the press, radio and television, toward the newest such as social media and social networks. This relationship tends to become robust to the extent the population needs more guidance to make decisions; this may occur in situations of change and uncertainty, e.g., a war, a terrorist attack, health crises, or even in a regular context such as an electoral campaign (Mehrad and Yousefi, 2018; Morton and Duck, 2001; Muñiz, 2011). It is usual that in uncertainty contexts, dependency on the information disseminated by the media increases, while people become more dependent on the messages received over these communication means (Halpern, 1994; Hindman, 2004; Tai and Sun, 2007). This has been already detected in a number of countries, where media consumption looking for information related to the contingency as regards the Covid-19 pandemic has increased, more often than not the information received comes from traditional media and also digital channels (Casero-Ripollés, 2020; Duc Huynh, 2020).

This dependency has been conceptualized as a relationship established between various actors, in which the capability of some to attain their goals will depend on the access to the information resources held by others (Ognyanova and Ball-Rokeach, 2015). This heavy dependency generated between audiences and communication media at times of change and conflict, as crises may be, has been explained from the media system dependency theory (Ball-Rokeach and Defleur, 1976; Shehata and Strömbäck, 2014). The main postulate of the theory claims that the media turn into primary information sources at times of conflict in the social system, either the result of natural disasters or human intervention (Ball-Rokeach and Defleur, 1976; Hindman, 2004). This action of the media is framed in the theory as regards the existing interaction between media, society and audiences, which besides allows grasping the individuals' use of the media in contexts of crisis (Hindman, 2004; Tai and Sun, 2007).

The dependency relation is noticed at a macro level, where relationships between the media and political systems take place; but at micro level as well, where the effects of the media system on the population become tangible (DeFleur and Ball-Rokeach, 1989). Therefore, it is noticed that theory places halfway between research works focusing on the effects of media content consumption such as the theory of agenda setting or framing, which study the

habits and expectations kept by the audiences as regards media consumption, an aspect approached from the use and gratification theory (Mehrad and Yousefi, 2018). This way, it is assumed that individuals expose themselves to media contents in order to meet certain psychological needs, including guidance, comprehension and acting (Hindman, 2004; Lin *et al.*, 2020). Particularly, it has been detected that individual dependency on the media system is a previous orientation that makes people look for information for the purpose of understanding the social environment, receiving guidance to relate to other individuals and even act following the established social norms in case of problems (Ball-Rokeach and Defleur, 1976; Davies, 2009; Mehrad and Yousefi, 2018; Wilkin and Ball-Rokeach, 2006).

Therefore, it may be assumed that the people's media attention will be stronger to the extent that their dependency on the media system increases (Halpern, 1994; Tai and Sun, 2007); this is emphasized in contexts of change and conflict such as the crisis triggered by the Covid-19 pandemic, when it is expectable that the population broadens its search for information related to health care from official and nonofficial sources and also from more traditional media as well as the new information channels provided by digital media (So *et al.*, 2019; Yoo *et al.*, 2020). Well now, various are the factors that could influence the increase of information searching, among them contextual and individual factors may be listed. Among the latter the main have been the development of fear or anxiety emotions and the perception of risk stirred in people facing the possible negative effects that at individual level may come from the crisis being experimented (So *et al.*, 2019).

This increase in the processing of items of news and information broadcast by the media derived from the dependency relation produces, in a complementary manner, an increase in the likelihood that these media have can foster the development of beliefs, perceptions, sentiments and behaviors of the population by means of disseminating the information produced in their newscasts (Ball-Rokeach and Defleur, 1976; Halpern, 1994; Hindman, 2004; Morton and Duck, 2001; Ognyanova and Ball-Rokeach, 2015). This is because the media allow obtaining reliable information to make decisions, e.g., defining protective behaviors before the health crisis on an individual basis (Garfin *et al.*, 2020; So *et al.*, 2019). It has been thus stated that dependency may make people gain knowledge about crises (Lin *et al.*, 2020) or performing certain behaviors such as prevention actions promoted by governments and health care authorities (Morton and Duck, 2001; Yoo *et al.*, 2020).

Furthermore, attitudinal effects of dependency have been detected, for example, the increase of fear and anxiety during crises (Mehrad and Yousefi, 2018) or the perception of personal risk (Morton and Duck, 2001; Muñiz, 2011; Yoo *et al.*, 2020). Also on political perceptions and behaviors (Halpern, 1994), due to the heavy dependency of the citizens on the media system to obtain information, for example, about candidates in an electoral campaign or the political decisions of officials and legislations in their daily activities (Davies, 2009; Shehata and Strömbäck, 2014). Thus far, studies have noticed that dependency is a clear predictor of the citizens' political perceptions (Halpern, 1994), vote decisions (Davies, 2009) or political efficacy (Ognyanova and Ball-Rokeach, 2015). For example, Hindman (2004) detected that support for the US President tended to increase among those with the heaviest media dependency during the crisis after the terrorist attacks on September 11th.

Assessment of political management during crises

By means of their management of daily politics, officials intend to solve the problems that affect the society they represent. But beyond this political management task, there is no doubt that their actions are also defined by a communication strategy by means of which they seek to influence on the public opinion for the purpose of defining the image of the government and its representatives. Not in vain, Krosnick and Kinder (1990: 497) mentioned that popularity is "a vital political resource" that every governor always tries to care for. To a great extent, the officials' political management of affairs with negative social effects will define the citizens' assessment of these managers, that is to say, the approval of their political performance (Donovan *et al.*, 2020). Owing to this, such civil assessment, reflected in the various opinion surveys usually carried out, is a factor permanently desired, sought-after and supervised by the political elites (Dempsey, 2006).

This reality takes place particularly at times of crisis or during unforeseen events, which in words by Canel (2009: 220), they are any sort of "event or occurrence that escapes plans or political programming the government has", for instance: terrorist attacks, wars, economic or health crises. This way, it has been pointed out that the officials' management, good or bad, of the unforeseen events their administrations come across has a heavy impact on the assessment and popularity the executive will have among the citizens (Hindman, 2004; Krosnick and Brannon, 1993). These effects take place with special force regarding the president -either of the republic in a presidential

system or the government in one parliamentary- since this politician becomes the head of the Executive and embodies that very institution (Canel, 2009; Krosnick and Kinder, 1990).

In this sense, it has been demonstrated that the governmental management to overcome or deal with certain crises turns into popularity changes. In the United States, Krosnick and Brannon (1993) detected that the management of the Gulf War in 1991 had a considerable impact on the presidential acting on the population. The same occurred for the actions of the officials after the September 11 attacks; this way, the popularity of the Mayor of New York and the US President (Hindman, 2004) increased. In the case of Spain, it has been verified that the management of various unforeseen events occurred during administrations of various political parties had a direct influence on the popularity and assessment of the government management, which evinces that events function as stimulators of public support (Canel, 2009).

Well now, for the management to be weighty on the assessment of the officials, it is necessary that such assessment is known by the public opinion. In this sense, even though some authors see the media as irrelevant reasons for the public interpretation of governmental actions (Dempsey, 2006), it is traditionally assumed that the media are essential tools to disclose the management, thereby, they influence the assessment by the citizens through the attention paid to it (Todhunter, 2013). This relationship between the political and media systems is one of the basic processes at the macro level of the dependency on the media system, which explains how the media become heavily dependent on the political elites and officials to produce their news items about crises (Hindman, 2004; Ognyanova and Ball-Rokeach, 2015). Owing to this, it is not surprising that during crises and periods of uncertainty, governments try to control the communication toward society for their own political benefit (Canel, 2009).

The reason for this is that the media usually set “the standards with which officials, presidents, public offices and political candidates are judged” (Iyengar and Kinder, 1987: 63). Hence, assessments are commonly substantially conditioned to the newscast coverage of the officials’ actions regarding relevant affairs such as a crisis (Donovan *et al.*, 2020; Krosnick and Kinder, 1990; Sheafer and Weimann, 2005). In this sense, the more attention the media pay to an affair, the stronger it fixes on the public’s mind, and it is more likely that it becomes accessible in order to assess the government (Krosnick and Kinder, 1990; Scheufele, 2000). In this regard, it has been detected that at times of strong dependency on the media system, media consumption might impact on the support for the government, as it was the case after the September 11 attacks in the United States (Hindman, 2004).

Nevertheless, this exposure is not uniform among the members of the audience, whereas dependency on the various media, both traditional and social, varies according to the personal characteristics of each individual (Lin *et al.*, 2020; Mehrad and Yousefi, 2018). In this regard, it has been pointed out that there are several personal factors that may moderate the effect of the dependency on the media system (Ball-Rokeach, 1998; Mehrad and Yousefi, 2018). Aspects such as sex, age or schooling are capable of moderating the influence of the exposure on the assessment of government actions in a context of crisis (Mehrad and Yousefi, 2018). Adding to these factors, partisanship has been usually detected as a key moderating element of the effect media consumption has on the public opinion assessment of government performance (Hindman, 2004). To a large extent because this audience tends to be involved or more experienced in politics, which usually makes it be better informed (Krosnick and Brannon, 1993).

Although research in this regard is not abundant, this moderating effect has already been detected in situations such as the public support for the US President management after September 11 attacks. In a work by Hindman (2004), the author detected that partisanship made approval fluctuate in function of the respondents' ideological proximity. This result enabled the author to discard a possible *rally round the flag* effect, which states that in the face of crises, the predictors that traditionally define the approval of the president may become less predictive than usual in the governments' everyday management.

This way, the citizens' ideological or partisan preferences may be displaced by a support and approval tendency of the governments in all the sectors as a reaction to the crisis (Hindman, 2004; Hetherington and Nelson, 2003; McLeod *et al.*, 1994). An effect which in any case is expected to decline as time passes and the ideological or partisan factors become central in the political debate on the government's management and results again (Gartner and Segura, 1998). Bearing in mind the theoretical backgrounds previously exposed, the following hypotheses and research questions are put forward:

RQ1: Are there differences in the assessment of the management during the pandemic by the President and the Undersecretary of Health?

H1: Dependency on the media system contributes to improve the assessment of the management of the President and the Undersecretary.

H2: Partisanship has a moderating effect on the relationship between media system dependency and the assessment of the covid-19 pandemic management by the President and Undersecretary.

Method applied

Design and sample

A descriptive survey was carried out at national level (Mexico) by means of a questionnaire applied to a population probabilistic sample. Considering the pandemic context, which advised against fieldwork, the firm *QuestionPro* was hired instead, as it specializes in carrying online surveys at international level. It is worth pointing out in this regard that even though the survey was online, the opinion poll presented here is not a traditional online survey. That is to say, the sample selection was taken from the members of the panel or the pool of respondents in the studies of the firm, by means of a personal invitation sent only to the members of the panel or pool or respondents with the required characteristics in order to ensure the sample's final appropriate representativity.

In any case, it is possible that online interviews in Mexico for a survey nowadays present a certain bias, which to a good extent comes from the internet penetration level in the country. In this regard, current data state an ongoing closing of the digital divide among the general population; data from *Instituto Nacional de Estadística y Geografía*, INEGI [National Institute of Statistics and Geography] verify so (INEGI, 2020): by 2020, circa 78% of the Mexican population had access to internet, which accounted for about 84 million users. These data are verified against other more recent (World Internet Stats, 2021), which estimate the total Internet surfers in the country in about 92 million people (71% of the population), being up to 100 million the users of social media, which would equal 77.2% of the population.

Taking the above as a reference, the data gathered in the survey for this study allow catching a glimpse of the perception and affectation entailed by the Covid-19 pandemic for the Mexican population. Fieldwork and data collection took place between September 1st and 8th, 2020; the latter by means of a questionnaire on *QuestionPro* platform, which prevents the same user from answering the survey more than once so as to avoid ballot box stuffing. In addition to allowing the reduction of possible biases from the application of online interviews, a representative sample of the Mexican population was sought in terms of sex, age and place of residence. To do so, a probabilistic sample was carried in the first place, using as a sampling frame the Nielsen areas for Mexico, which allow stratifying the country into six geographic areas from which a sample from proportional allocation was obtained.

Moreover, at national level it was stratified with a proportional allotment by sex (men v. woman), age (18-29, 30-39, 40-49, 50-59 years and 60 and older), and socioeconomic level measured with *Índice de Nivel Socioeconómico*, NSE [Socioeconomic Level Index], developed by *Asociación Mexicana de Agencias de Inteligencia de Mercado y Opinión*, AMAI [Mexican Association of Agencies of Market Intelligence and Opinion] (AMAI, 2017). Taking these characteristics into consideration, the study sample was selected from the firm panel, then sending out individual invitations to the member up to completing each of the established strata. In total 1,211 legal-age individuals participated, there was a rejection rate of 18% and a mean answer duration of 21 minutes. The sample worked with an error margin of $\pm 2.8\%$, at a 95-percent confidence level.

Measures utilized

Media system dependency: as regards this construct, the adaption of Morton and Duck's instrument (2001) by Muñiz (2011) for the Mexican case was taken as a reference, for it measures the degree of usefulness the respondents gave the media in order to find out and understand the information regarding the pandemic. In short, the degree of agreement with the following statements was assessed: "They keep us updated on important health care topics such as the coronavirus"; "They help understand the importance topics such as the coronavirus have in health care"; "They allow deciding what health precautions to take in the face of coronavirus"; and, "They enable learning the way other people are facing important health care topics such as coronavirus". All the questions were measured on a five-point Likert-type scale from nothing (1) up to strongly (5). The internal consistency of the indicator was high ($\alpha = .88$), thus an index was created by averaging the four questions above.

Assessment of the officials' management: for the purpose of finding out the respondents' assessment of the Covid-19 pandemic management by the officials, they were asked their valuing of the actions of a series of political actors involved in the pandemic in Mexico and at global level. To do so, a scale that ranged between very bad (0) and very good (10), considering an average assessment (5) was utilized. For the purpose of not distracting the respondents' attention toward the two actors whose pandemic management was under assessment, a listing of six actors was included. In short, data relative to President Andrés Manuel López Obrador and the Undersecretary of Health Hugo López-Gatell Ramírez, for they are the

actors with the most media saliency at federal level during the Covid-19 pandemic at national level.

Partisanship: the respondents were asked which political party out of the existing at national level they feel more related to. In this way, *Partido Acción Nacional*, PAN [National Action Party], *Partido Revolucionario Institucional*, PRI [Institutional Revolutionary Party], *Partido de la Revolución Democrática*, PRD [Democratic Revolution Party], *Partido Verde Ecologista de México*, PVEM [Mexico's Green Party], *Partido del Trabajo*, PT [Labor Party], *Movimiento Regeneración Nacional*, Morena [National Regeneration Movement], *Movimiento Ciudadano*, MC [Citizen Movement], *Partido Nueva Alianza*, PANAL [New Alliance Party], or any other party. Likewise, the option "None" was presented so that citizens with no identification with a party may take this option. Before the statistical analysis, everyone identified with a political party was grouped in a category of partisans (2), while the rest as non-partisans (1).

Control variables: The use of a series of sociodemographic control variables was considered. In short, the respondents were asked about their gender (1: male; 2: female) and age in years; whereas their socioeconomic level was measured with the NSE index created by AMAI (2017). The scale comprises seven levels that range from the highest level (A/B) to the lowest (E); the socioeconomic levels associated to the middle class would be between the levels C+, C and C-. Schooling was evaluated with a scale that ranged from no studies (1) to postgraduate (7).

Analysis of results

As a response to the first research question, statistically significant differences are noticed in the citizens' assessment regarding the pandemic management by the two political actors $F(1, 1206) = 6.103, p = .014, \eta_{\text{partial}}^2 = .005$. Even if the differences were small in relation to the effect size, it was determined that the score for the President ($M = 4.98, SD = 3.63$) was noticeably lower than that for the Undersecretary ($M = 5.76, SD = 3.34$). This difference increases in a sensible manner when comparing the modal score of both actors detected in the survey, for as the President had a modal score of 0 points, that for the Undersecretary was 5 (see Figure 1³).

Furthermore, heeding the statements in the first hypothesis, the existing relationships between the study variables were calculated with a view to ascertaining to what extent there were statistically significant relationships

3 All figures and tables are at the Annex the end of the article (Editor's note).

between the respondents' media system dependency over the pandemic and the assessment of the political actors' pandemic management. To do so, hierarchical multiple linear regressions were made to explain the assessment of each political actor. With this technique –which allows– introducing the independent variables in an equation at various times it is possible to produce different explanatory models and detect the variations in the effect from the predicting variables under analysis. The sociodemographic variables considered for the study were incorporated in the first block in both cases (model 1) with a view to controlling its possible impact, as they are potential moderating variables of the model. With this it was sought to make the moderating effect of a lean toward partisanship evident, once the covariation or influence from other possible variables that have been considered moderating by the literature (Ball-Rokeach, 1998; Mehrad and Yousefi, 2018). Immediately after, media system dependency (model 2) and partisanship (model 3) were incorporated into the equation to determine their impact.

As for the analysis of the impact on the assessment of the pandemic management by the President (see table 1), the variables used in the regression met the supposition of independence regarding the dependent variable, since the Durbin-Watson test value was acceptable ($d = 2.03$), and thereby over the accepted lower and upper limits, 1.5 and 2.5, respectively. What is more, collinearity problems between the variables used in each equation were discarded, producing the statistically significant model $F(6, 1204) = 25.874, p < .001, R^2 = .114$. Relative to the results, the first model managed to explain 1.5% of the assessment of the president, being sex ($\beta = -.089, p = .002$) and schooling ($\beta = -.077, p = .009$) the variables with a statistically significant impact. The inclusion of media system dependency into the equation increased up to 3.3% the explanation for the assessment ($\beta = .136, p < .001$), while including partisanship explained 8.1% of the assessment of the president ($\beta = .290, p < .001$). Therefore, it is observed that dependency positively influenced the assessment of the president, this relationship was moderated by the inclusion of partisanship into the equation, despite it lessened the impact, it was not sufficient to suppress it.

As regards the analysis of the impact about the Undersecretary's pandemic management (see Table 2), the variables used in the regression also met the independence supposition regarding the dependent variables, it was acceptable according to Durbin-Watson's test value ($d = 1.96$). Besides, collinearity problems between the variables used in each equation were discarded, producing the statistically significant model $F(6, 1204) = 16.557$,

$p < .001$, $R^2 = .076$. In the revision of the results, it was noticed that the first model managed to explain 1.6% of the presidential management assessment, being age ($\beta = -.124$, $p < .001$) in this case the only sociodemographic variable with a statistically significant impact. The inclusion of media system dependency in the equation increased up to 4.2% the explanation for the assessment ($\beta = .207$, $p < .001$), whereas partisanship explained 1.9% of the presidential assessment ($\beta = .139$, $p < .001$). Once again, dependency had positive influence on the actors' management; partisanship lessened this impact, though it did not suppress it.

In spite of the analyses carried out, these results do not allow fully clarifying the possible moderating impact of partisanship nor whether there are differences between the various partisan levels. Owing to this, and taking the second research hypothesis as a reference, a mediating analysis was run to find out if partisanship moderates the influence of dependency on the assessment of the pandemic management. To do so, PROCESS for SPSS was resorted to calculating the main effect of the independent or predicting variable on the dependent one or criterion (effect b1), the main effect of the moderating variable on the dependent one (effect b2), and the interaction effect of independent and moderating variables on the dependent one (effects b3) (Hayes, 2013). In short, model 1 was used with a 10,000-sample bootstrapping to calculate the three previously described effects, which was supported on a multiple regression analysis run with the variables considered in the study

This technique is considered the most suitable if the interaction effect between a continuous variable –the one that corresponds to media system dependence– and a dichotomic one –in this case partisanship– is sought. As a step prior to the study, partisanship was turned into a dummy variable, where the nonpartisan category was codified with a value of -0.05, while being a partisan had a value of 0.05. It has been pointed out that this model is the most suitable, as it allows limiting the various “statistically significant areas” by using the Johnson-Neyman procedure; that is to say, it enables observing the effect of the independent variable on the dependent one for the different values taken by the moderating variable.

In the first place, the moderating effect of partisanship in the assessment of the President's management was calculated (see Figure 2). The results demonstrated that the model was statistically significant, $F(7, 1203) = 22.534$, $p < .001$, and as a set explained 11.59% of the variance. On one side, a main effect from dependency on the assessment, $B_{\text{dependency}} = .46$, $ET = .13$, $p < .001$, 95% CI [.2098, .7097], which stresses

the heaviest dependency on the media system; the President's pandemic management had a higher score. On the other side, no main effect of partisanship was observed, $B_{\text{partisanship}} = .60$, $ET = 1.02$, $p = .558$, 95% CI [-1.4105, 2.6101], however there was a moderating effect on the influence from dependency. In particular, this moderating effect occurred in the category partisanship, $B = .65$, $p < .001$, $ET = .16$, $p < .001$, 95% CI [.3379, .9666], among those for whom a heavier dependency on the media system contributed to increase their support for the presidential management of the pandemic. However, this moderating effect was not observed among nonpartisans, $B = .27$, $p < .001$, $ET = .20$, $p = .175$, 95% CI [-.1189, .6533], therefore, the assessment continued for this group with no observable alterations.

Secondly, the moderating effect of partisanship on the assessment of the pandemic management by the Undersecretary (see Figure 3). Results show that the model was statistically significant, $F(7, 1203) = 14.223$, $p < .001$, which as a set explained 7.65% of the variance. On one side, a main effect of the media system dependence on the Undersecretary's pandemic management, $B_{\text{dependency}} = .80$, $ET = .12$, $p < .001$, 95% CI [.5640, 1.0335]. Though, no main effect of partisanship was observed, $B_{\text{partisanship}} = .42$, $ET = .96$, $p = .664$, 95% CI [-1.4707, 2.3056]. The existence of a significant moderating effect was found for partisanship on the influence from dependency. This interaction effect occurred in nonpartisan, $B = .73$, $ET = .18$, $p < .001$, 95% CI [.3707, 1.0960], and partisan categories, $B = .86$, $ET = .15$, $p < .001$, 95% CI [.5689, 1.1594]. In this sense, a heavier dependency on the media system contributed to generate an increase in the support levels for the management of the pandemic by the Undersecretary of Health.

Discussion and conclusions

This article had as a goal to ascertain the extent to which the citizens' media dependency level during the Covid-19 pandemic in Mexico influenced on the assessment of the management of two key actors in the country: President Andrés Manuel López Obrador and the Undersecretary of Health Hugo López-Gatell Ramírez. Adding to this, the study intended to determine whether the citizens' partisanship or nonpartisanship – a personal factor that differentiated them from one another– was capable of influencing on the aforementioned relationship; that is to say, it was sought to define if partisanship had some sort of moderating influence on the relationship

between media dependency and the assessment of two officials at a federal level in Mexico by the respondents, with which it was sought to answer the research question and contrast the stated hypotheses.

In the first place, and as regards the research question about the differences in the assessment of the management by these functionaries, in this regard the obtained data allow offering an answer. In this sense it is noticed that at statistical level both valuations differed, though it is worth recognizing that differences were small according to the effect size. Together with this qualitative analysis, a more qualitative review of the data allows restating this conclusion, for while the President received a strong negative assessment, a modal score equal to 0, the assessment of the Undersecretary was more positive, as it presented a modal score of 5. In any case, this result underlines the need to improve the measuring instruments commonly utilized to ascertain the degree of support or approval of the officials' management to make them more accurate and sensitive to the subtle differences with an emotional load, which are increasingly present among the population.

In connection with the first research hypothesis, the findings allow observing how media system dependency defines to a good extent the public assessment of the officials' management. In this sense, and in agreement with the hypothesis proposed, it was detected that dependency is a clear predictor of the assessment the citizens made regarding the pandemic management by the officials during crises or conflicts as the Covid-19 pandemic. Plus, it is noticed that this relationship takes place for both functionaries in similar terms to those detected by Hindman (2004) in a study on the public support for the US President and his management of the crisis after the September 11 attacks. It is worth mentioning this result is noticed for the Mexican President and the Undersecretary, despite that their respective assessments were statistically significant. These results contribute to deepen into the debate on the political effects of the media system dependency, for even though this relationship is not clear, few are the studies that have empirically approached it so far (Davies, 2009; Halpern, 1994; Hindman, 2004; Ognyanova and Ball-Rokeach, 2015).

Furthermore, the second hypothesis stated in the article was fully verified by detecting the moderating effect produced by partisanship in the relationship of the media system dependency and the assessment of the political actors' management of crises; this is line with Hindman's (2004) findings in a different geographic context. It is concluded therefore that the fact of feeling close to political parties was a determining factor for the

assessment of the governmental management of the pandemic to be altered by media system dependence. In spite of this, it is important to distinguish that the effect of partisanship was different in relation to the assessment of each actor. In particular, it has been verified that for the ones closest to the parties –regardless of the party– media dependency tended to increase the assessment of both actors. Albeit, for nonpartisans variations only took place in the assessment of the Undersecretary, not the President.

This makes us reflect on the way the citizens' partisanship is able to condition the effect of media dependency on the assessment of the governmental management. It is possible that certain contextual factors may propitiate that the effect from partisanship becomes noticeable, as the political environment which more often than not expresses in the current polarization societies experience in the ideological sphere (Donovan *et al.*, 2020). Mexican politics does not escape this polarization scenario, which expresses as an increasingly wide divide in public opinion. Something that has increased after López Obrador assumed office in 2018, as in his political discourse he tends to produce a narrative of rupture between “them” and “us” (Moreno, 2019). Possibly, there lies the fact that it is among partisans that the most influence from media dependency regarding the assessment of the president takes place, since they are the most involved in the political debate and those upon who the political sphere may have greater influence capacity.

Furthermore, in case of unforeseen events, change or uncertainty, as the Covid-19 pandemic, it is usual that a large part of the citizens supports the officials, beyond their ideological or partisan preferences (Hetherington and Nelson, 2003; Hindman, 2004; McLeod *et al.*, 1994). This *rally round the flag* effect produces a positive assessment of the officials the citizens deem suitable managers to address the problem at hand. This may have been the case of the Undersecretary, considering that his public assessment tended to increase while the citizenry's media dependency was greater, regardless of their affinity with a political party. These data make us think of the role the media, via their news contents, might have had on these disparate effects for both officials; because the configuration of the officials' image and civil assessment on their management are usually substantially conditioned by the media coverage (Donovan *et al.*, 2020; Krosnick y Kinder, 1990).

The results of the present study suggest that, as observed in other contexts, in Mexico there might have been a priming effect from the coverage of the actors and their management of the pandemic (Donovan *et al.*, 2020; Krosnick and Brannon, 1993; Krosnick and Kinder, 1990). In this way, in comparison with the more political role of the president and

even contradictory in the first wave of the pandemic, it is possible that the more technical role of the Undersecretary had been benefitted from the public opinion created by the image portrayed by the media. In this sense, the article opens new lines to review the relationships between various theoretical stances that allow studying and understanding the influence the media have on the assessments of politicians and officials. For instance, it would be convenient to deepen into the analysis of the priming effect the media produce in contexts of heavy media dependency, by means of carrying out studies with methodological approaches with greater control in order to accurately ascertain the impact on political attitudes and behaviors.

Finally, the study that configures the present article has allowed detecting certain limitations that should be solved by future research works, which may be carried out considering the findings of this work. It would be recommendable that future works approached the communicative action developed by governments and their officials during the Covid-19 pandemic.

Indubitably, not only is important the governmental management of the crises, but also the communication strategy they develop to make their management known to the citizens. In this regard, it has been noticed that officials frequently use disasters to build a new political agenda to benefit themselves, or even solve the problems they currently face in the political agenda (Hindman, 2004). Because of this, it would be highly recommendable approaching the construction of this agenda, as well as the treatment of reality that they underscore through the advocacy of certain frames, with which it is sought to impact the journalistic interpretation of the political reality (Gerth and Siegert, 2012).

Moreover, it is worth assuming that ever since the pandemic was officially declared in March 2020, and a number of countries (such as Mexico) took the earliest decisions to face the emergency, the situation experienced around it has changed, over various phases and moments. In this way, the results of the survey allow determining the citizens' perceptions on the government management of the pandemic up to its realization, circumscribing its results to a particular moment and time over the pandemic. As previously stated at the beginning of the paper, in this sort of crises it is usual that strong initial government supports, or rally round the flag effects, subside over time to the extent that partisan affinity polarizes the population again (Hetherington and Nelson, 2003; Hindman, 2004; McLeod *et al.*, 1994). This is why it is possible to speculate that had the study started at the initial moment or at one after the survey, the results would have significantly varied. In this sense, carrying out complementary research with data gathered at various times

over the pandemic would help strengthen the theoretical model studied and validated in this article.

Finally, there is also a methodological limitation regarding the measurement of partisan affinity in the survey, which might be solved in the face of future research that intends to more accurately test the causal effect of dependency and partisan affinity on the assessment of the governmental management of a determinate crisis. The present research, being a descriptive survey, worked with a measurement of the partisan affinity by means of a categorical variable, which makes it difficult to model the affinity for each political party as various moderating variables of the study. In any case, the context of political polarization as the currently experienced in Mexico would advise a future research work with a methodological design that places the explanatory or causal scope before the correlational in order to determine separately if affinity or identification with the party in power and affinity with a party or parties opposed to the president have various mediating effects in the proposed model. It is considered that carrying out an analysis in this sense would help increase the relevance and contributions of the work for the literature on the studied topic.

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Anexo

Table 1
 Explanatory variables of the assessment of the President's management

	Model 1			Model 2			Model 3		
	B	SE	β	B	SE	B	B	SE	β
Constant	8.423	.923		6.366	1.012		6.312	.969	
Sex ^a	-.643	.211	-.089**	-.754	.210	-.104***	-.470	.203	-.065*
Age	-.008	.008	-.029	-.009	.008	-.035	-.017	.008	-.066*
NSE	-.065	.075	-.027	-.053	.074	-.022	-.039	.071	-.016
Schooling	-.345	.132	-.077*	-.386	.131	-.086***	-.351	.125	-.078**
MSD				.617	.130	.136***	.499	.125	.110***
Partisanship ^b							2.130	.203	.290***
R ²	.015			.033			.114		
ΔR^2				.018			.081		

NB: $N = 1211$. SEL = socioeconomic level. MSD = media system dependency

^a Man = 1, Woman = 2. ^b Nonpartisan = 0, partisan = 1

* $p < .05$; ** $p < .01$; *** $p < .001$

Source: own elaboration from the survey in the context of the research project funded by Conacyt.

Table 2

Explanatory variables of the assessment of the Undersecretary's management

	Model 1			Model 2			Model 3		
	B	SE	β	B	SE	B	B	SE	β
Constant	6.517	.848		3.636	.918		3.612	.910	
Sex ^a	-.062	.194	-.009	-.217	.191	-.033	-.092	.191	-.014
Age	-.030	.007	-.124***	-.032	.007	-.133***	-.036	.007	-.148***
NSE	.020	.068	.009	.037	.067	.017	.043	.066	.020
Schooling	.080	.121	.019	.021	.119	.005	.037	.117	.009
MSD				.864	.118	.207***	.812	.117	.195***
Partisanship ^b							.937	.191	.139***
R ²	.016			.058			.076		
ΔR^2				.042			.019		

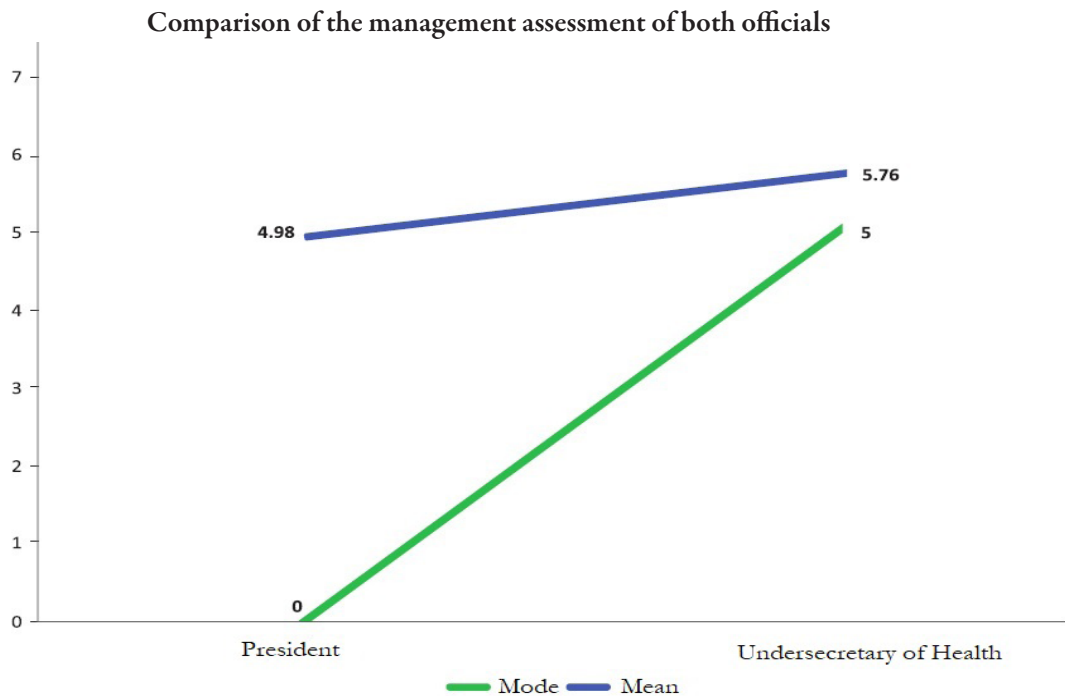
NB: N = 1210. SEL= socioeconomic level. MDS= media dependency system

^a man = 1, woman = 2. ^b nonpartisan = 0, partisan = 1

* $p < .05$; ** $p < .01$; *** $p < .001$

Source: own elaboration from the survey in the context of the research project funded by Conacyt.

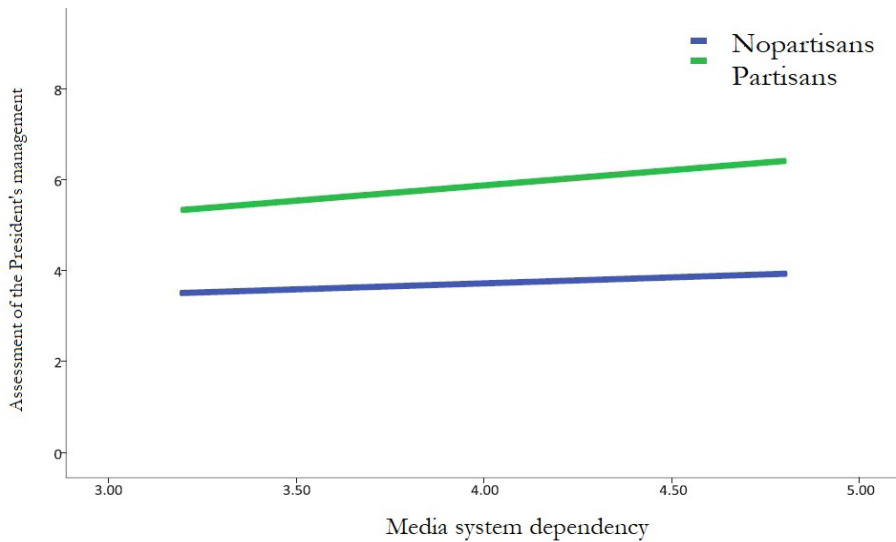
Figure 1



Source: own elaboration from the survey in the context of the research project funded by Conacyt.

Figure 2

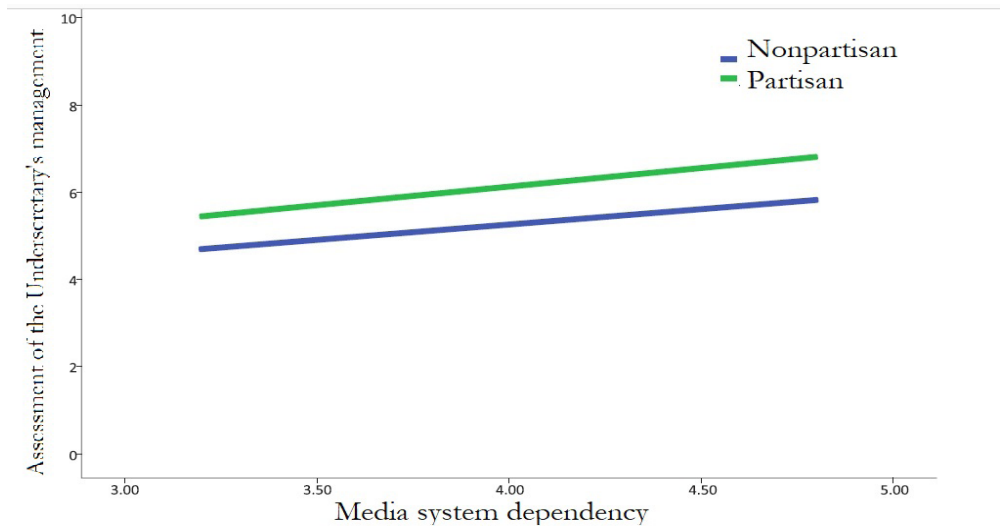
Moderating effect of the partisanship in the assessment of the president's management



Source: own elaboration from the survey in the context of the research project funded by Conacyt.

Figure 3

Moderating effect of partisanship on the Undersecretary's management



Source: own elaboration from the survey in the context of the research project funded by Conacyt.

Carlos Muñiz. Doctor in Communication. Fulltime professor in the College of political Sciences and international Relationships in Universidad Autónoma de Nuevo León. Research lines: media effects in political communication and framing of the occurrences. A member of the National System of Researchers of Mexico, level II. Recent publications: 1) Muñiz, Carlos (2021), “Construyendo la polarización a través del discurso político. Análisis del uso de claves periféricas en la retórica del presidente mexicano López Obrador”, in *Cultura, Lenguaje y Representación*, vol. 26, Spain: Universidad Jaume I; 2) Muñiz, Carlos (2020), “El framing como proyecto de investigación: una revisión de los conceptos, ámbitos y métodos de estudio”, in *Profesional de la Información*, vol. 29, no. 6, Spain: Swets & Zeitlinger; 3) Muñiz, Carlos (2020), “Media system dependency and change in risk perception during the COVID-19 pandemic”, in *Trípodos*, vol. 1, no. 47, Spain: Universidad Ramon Llull.

Victoria Isabela Corduneanu. Researcher-professor in the Academy of Communication and Culture of Universidad Autónoma de la Ciudad de México. Doctor in History and Civilization. Research lines: communication studies and youth, and social movements and mobilization. A member of the National System of Researchers of Mexico, level I. Recent publications: 1) Muñiz, Carlos and Corduneanu, Victoria Isabela (2020), “Percepción de riesgo y consumo mediático durante el inicio de la pandemia de COVID-19 en México”, in *Más Poder Local*, no. 41, Spain: Asociación Latinoamericana de Investigadores en Campañas Electorales; 2) Corduneanu, Victoria Isabela, Muñiz, Carlos and Echeverría, Martín (2019), “Emociones en contexto electoral y atención a política en medios: ¿Inteligencia Afectiva o Evaluación Cognitiva?”, in *Perspectivas de la Comunicación*, vol. 12, no. 2, Chile: Universidad de La Frontera; 3) Corduneanu, Victoria Isabela (2019), “El papel de las emociones sociales y personales en la participación política”, in *Revista Mexicana de Opinión Pública*, no. 26, Mexico: Universidad Nacional Autónoma de México.