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The personal can be political: The political returns to a good personal image

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"Lo personal puede ser político: El retorno político de la imagen personal"

Resumen

La imagen personal parece ser una preocupación creciente entre los políticos. Es posible ver a muchos funcionarios electos esforzándose por mantener una imagen personal carismática en sus redes sociales mientras están en el poder, intentando transmitir rasgos positivos de su personalidad o mostrando fragmentos de su vida íntima en sus posts. En este trabajo, exploramos el vínculo entre la imagen pública personal de un político y las evaluaciones de los votantes sobre su desempeño en el cargo como posible explicación de tales esfuerzos. Para ello, llevamos a cabo un experimento online aleatorizando la exposición a una selección de extractos de la actividad en las redes sociales de un destacado político estadounidense. Encontramos que los encuestados tratados, especialmente los jóvenes o los que pasan más tiempo en las redes sociales, dan evaluaciones más altas al desempeño de dichos políticos, aunque los efectos son pequeños y débiles. De hecho, al corregir los p-valores por testeo de hipótesis múltiples, algo necesario ya que tenemos varias variables outcome, ninguno de los efectos es estadísticamente significativo a los niveles convencionales. Nuestra evidencia también es consistente con la interpretación sesgada de la información como posible mecanismo.

Palabras clave: Economía, Economía del Comportamiento, Política, Campaña de opinión, Opinión Pública, Redes Sociales.

"The personal can be political: The political returns to a good personal image"

Abstract

Personal image seems to be a growing concern among politicians. Many elected officials can be seen making efforts to keep a charismatic personal image in their social media while in power, trying to convey positive personality traits or giving glimpses of their intimate lives in their posts. In this work, we explore the link between a politician's personal public image and voters' evaluations of their performance as policymakers as a possible explanation for such efforts. To this end, we run an online experiment randomizing exposure to selected excerpts from the social media activity of a prominent US elected official. We find that treated respondents, especially young ones or those who spend more time on social media, give higher evaluations to the performance of said politicians, although the effect sizes are small and not strong. When correcting the p-values for multiple hypothesis testing, necessary since we have several outcomes, none of the effects are statistically significant at conventional levels. Our evidence is also consistent with biased interpretation of information as a possible mechanism.

Keywords: Economics, Behavioral Economics, Politics, Public image campaign, Public Opinion, Social Media.

Códigos JEL: C91, D83, D91, L82, Y40

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1 Introduction

Public image and the general opinion are ever-present concerns for elected officials. After all, in modern democracies, the general perception of their track record while in positions of power is surely one of the main factors influencing the future of their political career. It is no surprise, then, that politicians dedicate time and resources to promote their past successes while downplaying their failures and broadcasting their proposals and promises. This is especially true during election years, when rallying the support of their voter base and influencing public opinion are key to win.

At the same time, besides promoting the virtues of their policy record or policy proposals, political actors try to keep a polished, and even charismatic, personal image. Recent decades, in fact, have seen a heightened exposure of the personal figure of politicians and elected officials, brought in part by a heavy increase in the use of social media for political communications (Lalancette and Raynauld 2017; Muñoz and Towner 2017; Bimber 2014; Gerodimos and Justinussen 2014). This movement has been associated with a rise in the attention of politicians to how they show themselves to the public. Among other things, there has been a trend towards adopting a more "personalized" communication style when engaging with the public. That is, politicians feature themselves and their intimate lives more prominently and make an effort to communicate certain positive and charismatic qualities, a strategy that is not limited to only election-years (Domalewska 2018; Metz, Krukermeier, and Lecheler 2019; Lalancette and Raynauld 2017; Larsson 2015; Colliander et al. 2017).

However, it is not clear *why* such strategies and the pursuit of a charismatic image would have an actual payoff for elected officials in terms of their future political career. Does engaging with voters on a more personal and humane level increase the public's perception of a politician's competence? Does it make it more likely to be reelected? The performance and general policy track record of a high-ranking elected official are part of the public record and very likely well remembered by those who lived under his mandate and experienced it first hand. Given that, it seems strange to think that the general public opinion regarding him could change significantly by being exposed to content about his intimate life or positively biased towards him.

In this paper, then, we try to measure the impact of such strategies on the perception of a politician's competence, looking for a possible bias in voters' evaluations that might explain the investments of elected officials[1] in their image, and the mechanisms through which it could operate. To this end, we conducted an online experiment using Amazon Mechanical Turk in which we randomized exposure to a selected set of Instagram posts from President Biden. Then, we measure the perception of our subjects regarding the competence of Biden and his government in some specific policy areas and in general, as well as their willingness to vote for him. In addition, we included questions asking them to recall relevant factual information that they presumably weigh in in their evaluations. This allowed us to analyze biased information recall as a possible mechanism.

As we discuss in detail below, some authors have analyzed traditional political campaigning

[1]Of course, all politicians most likely invest in their personal image. However, in this work we focus on the efforts of politicians who have a policy track record, for whom the likelihood of shifting public opinion in their favor seems more uncertain ex-ante.

methods -that is, not necessarily focused on improving the charisma of a certain candidate- during election periods (Kalla and Broockman 2017), or the effect of politicians engaging in "personalization" during campaigns (Colliander et al. 2017) using made up political profiles. Our experiment, however, directly tests for the effect of charisma and the "personalizing" approach to politics on the public's perception of a politician's competence and willingness to vote him. Our novel contributions are, then, to use real communications and posts from a prominent elected official in a time frame close to their publication, and testing them on subjects who have lived, and are living, under the mandate of said official. Our subjects, therefore, should have some real world information to weigh in on their judgements, making the perceived niceness of that person irrelevant from a purely rational point of view when evaluating his performance.

Our results are analyzed in detail in section 4. In summary, we find some evidence consistent with such content having a positive effect on the perceptions of elected officials' competence, and so with a positive return of personal charisma on voters' evaluations of performance. What's more, the effects seem stronger in younger subjects and those who spend more time on social media, suggesting that this new trend in political communication and campaigning is not only effective but especially so if targeted towards these groups. However, the size of the effects we find is quite small and not statistically significant in many cases, and the evidence is not as conclusive as we would like, so we are cautious when interpreting our results. Furthermore, when we adjust the p-values for multiple hypothesis testing using the Romano-Wolf adjustment (Romano and Wolf 2005), none of the effects is statistically significant at conventional levels.

2 Related literature

This study is related to both the literature on political communication through social media and to the many analysis studying "campaigning-like" behavior of elected officials that does not necessarily happens during non-election years (especially from presidents). In the first body of work, there are several accounts on how politicians have been intensifying their social media usage to communicate with voters. For example, Gulati and Williams (2013) report how, just two years after Facebook's creation, a sizable proportion of major party candidates running for the US Congress in 2006 had used a Facebook profile (30% for the Senate and 13% for the House), and for the 2012 elections that proportion was above 90% for both chambers. This eager adoption of social media by politicians is by no means an isolated phenomenon of the US, and studies on Canadian, European or other countries' politics mirror the same general findings, and also include Instagram, Twitter and other social media platforms aside from Facebook (Domalewska 2018; Lalancette and Raynauld 2017; Filimonov, Russmann, and Svensson 2016; Larsson 2014).

Research on the *contents* of communications from politicians shows that, aside from typical political broadcasting of party politics and goals, there is a growing number of politicians that also engage in strategies of "self-personalization". These strategies involve developing a personal brand, either through the sharing of their personal lives or by maintaining an image of Ideal Candidate (Metz, Krukermeier, and Lecheler 2019; Domalewska 2018). In any case, they focus on developing their image aside from communicating the agenda of their associated parties or any other policy-related content.

Regarding this last point, many studies on "permanent campaigning"[2] that are relevant to this paper come in. There are several works that document an intense use of social media by elected officials in non-election years, with a focus on transmitting a certain image to their audience, either by emphasizing their competence and professionalism or by sharing information from their personal lives. As a case study, Lalancette and Raynauld (2017) document Trudeau's use of Instagram in the months following his electoral victory in 2015 and find that, during that period, he maintained an active online presence. Many of his posts were focused on himself and showed him as a young, energetic and active leader, instead of broadcasting policy proposals or a work agenda. Granted, the intensity of communication from politicians through social media is still noticeably greater when elections are near (Larsson 2014). However, the quantity of posts during non-election years and the effort put into them by elected officials seem to be great enough to have deserved several studies during the past years.

Accordingly, some politicians (and several of the most successful ones in recent times) do invest time and resources in developing their personal image, even while occupying an elected position and during non electoral years. To do so, they use 'personalizing' and emotional or persuasive content in social media. A relevant question then is, does this strategy make sense? Why does it? Sure, voters are far from being rational agents. But, it seems rather odd to imagine that citizens would significantly alter the image they have on a certain elected official, whose policy results they are able to watch in real time just by being exposed to meticulously crafted content of said politicians in social media and other channels.

Strange as it may seem, a case for the plausibility of such a response from voters could be made. The idea that opinions or beliefs that are the objects of a person's preference precede the arguments and evidence that said person might find to support them is not a new one. Recently, a large literature, surveyed by Epley and Gilovich (2016), has developed under the umbrella term of "motivated reasoning" to explain this and other related behaviors. According to it, sometimes agents can collect information and arguments regarding a topic and then assess their truthfulness according to how they affect his or her priors, instead of rationally. As the authors mention, biased recruiting of information and biased evaluation of evidence are two important mechanisms through which motivated reasoning can occur.

In the case at hand, then, perhaps voters could recall better the "good" policy outcomes of politicians that they like, or even recall that those outcomes were better (in their opinion) than what they actually were for those politicians, in a sort of biased information collection. It could also be the case that, for two politicians with similar policy records, a voter judges the competence of the "liked" politician as higher than that of the other, by a biased interpretation of their results (e.g. finding justifications for the more liked politician's mistakes and/or attributing the unliked politician's successes to other factors instead of his competence). Then, if social media campaigns could improve a politician's charisma, and increase the number of people who like him as a person, that politician could be able to improve his or her career prospects, even without enhancing his or her policy record. So, we can imagine at least some scenarios where it would make sense to invest in personalizing social media campaigns for elected officials.

[2]Some authors use the term "permanent campaigning" to refer to campaigning-like behavior by elected officials on non-election years.

Even disregarding the argument above, one could argue that voters could be collecting valuable information from those social media posts. The image projected by a politician could be thought of as a proxy for traits that they find desirable in their elected officials. These traits could include honesty, similarity (to them), being smart or hard working, or any other "positive" quality that made it more likely for them to vote said officials, and so improving their career prospects. The image one presents in social media can, and is likely to be fabricated and unrealistic however, and probably most people are aware of this possibility. Knowing this, it is still relevant to test whether voters are actually updating the representation they have about their politicians based on the content they and their teams create and broadcast about themselves.

The answer to whether there is an actual payoff for an elected official for developing a positive personal image through social media (either working through the mechanisms discussed above or through others) is to be found empirically. There is already a large literature on experiments trying to estimate the effectiveness of political campaigns on outcomes such as intention to vote and interest in the campaigning candidate. While most of it does not exactly fit the motivation of this study, it is worth reviewing. Kalla and Broockman (2017) write a meta study that offers a good summary of the results of the bulk of the literature on "typical" political campaigns during election times. They find out that the effect of most campaigning interventions during election time is zero, or very nearly so. The campaigning activities analyzed are many, most of them at the core of traditional political campaigns that focus on getting the main political proposals of a certain candidate to the electorate: door to door canvassing, letter sending, newspaper, TV, and online advertising of political agendas. Their results are informative -and sobering- about the effect of political campaigns and, based on them, a null effect in the experiment was very much within the realm of possibility.

However, it is important to note that this study (and the ones it reviews) does not focus on *elected* officials, which is a key point of this work. They also test widely different forms of campaigning, mostly focused on the political messages from candidates and none quite as the one of interest here (personalized communication by social media presence), and they do it close to election time, when voters are facing a lot of aggressive campaigning activity from many candidates and may be saturated from it.

Colliander et al. (2017) and Meeks (2017) are two studies closer to ours in a sense, since they focus on measuring the effect of "personalizing" communication from a politician against a de-personalized strategy on voter intent and competence perceptions. Both studies are based on randomly exposing participants to different types of tweets and then measuring their responses in surveys, and they both find a moderate and positive effect on the intention to vote and perceptions of competence. However, an important caveat of both studies, and a big reason why they are set apart from the present study, is that the candidates that they test are entirely fictional (as well as the politician's tweets), and so their relevance for the question at hand here is limited.

So, while informative, past research on political campaigns and communications strategies from politicians does not provide a ready answer to the question that motivates this work. Our main contribution, then, consists of directly testing and providing causal evidence on the effectiveness of personalization strategies by elected politicians and the returns of building a charismatic image, while shedding light on possible mechanisms that could be operating.

3 Design

To test our hypothesis, a survey featuring a randomly allocated treatment was conducted in October 2021. The survey was designed to directly test the effect of personalizing social media content from President Biden's Instagram accounts (@POTUS and @joebiden) on respondents' evaluations of his government's performance (so far) in several issues.

The survey was conducted through Amazon Mechanical Turk, and, after excluding a small number of observations (95) that did not satisfy an initial attention check, which was a prerequisite for participating in the study, we were left with a sample size of 855 individuals[3]. Before the proper survey, respondents were also asked if they were US residents and over 18 years of age, another prerequisite for our study. This is important for our experiment given our motivation, since we want to test the effect of personalizing campaigns by a politician on voters that have lived under that politician's mandate and are more likely to have direct information on the politician's competence.

The survey, which is included in its entirety in the appendix section, was organized as follows. First, several background questions were asked, including age, sex, schooling, average time spent on social media, years spent as a US resident, economic policy preferences, and political preferences. After that, respondents had a 50% chance of being exposed to several posts from the POTUS' Instagram account, or else they received the control condition, which featured similarly spirited Instagram posts but without any links to President Biden or to any other politician. Finally, the respondents had to answer several questions regarding 1) their evaluation of Biden's mandate so far in general terms and regarding inflation, unemployment, and the Covid19 pandemic handling separately, 2) whether they would vote for Biden or for Trump if the 2020 election was held again today, and 3) their recollection of what the current inflation, unemployment, Covid19 related deaths and Covid19 vaccination rates are today.

We also included two attention checks, a first one which was used as a qualification to participate in the study, as described above, and a second one after the treatment that will be used for a robustness check after screening out inattentive respondents. These attention checks follow the recommendations laid out by Haaland, Roth, and Wohlfart (2020). Namely, that they should be easy to understand and not cognitively demanding, and also clearly explain in their phrasing why such checks are used in online surveys. Both checks have also been used in past studies: the first one, a "favorite color" attention check, is present in the study cited above, and the second one, a "state of mind" screener, was used, among others, in Drenik and Perez-Truglia 2018.

Our background questions were fairly ordinary in their phrasing. Questions about age, years of residence in the US, and average time spent on social media (in minutes) in a day were simple numeric entries. In the question about sex, respondents had to pick the choice that they identified themselves with among "Male", "Female", "Other", "Prefer not to say". The schooling question asked them about their highest level of completed education, and the choices were "Less than high school diploma", "High school diploma or equivalent", "College degree", and "Graduate degree". For the economic policy preferences question, respondents had to choose a choice in the liberal/conservative spectrum, with the options being "Very conservative", "Conservative", "Moderate", "Liberal", and

[3]Thanks to MTurk's Worker ID system, we were able to verify that each response corresponded to only one individual worker while maintaining each worker's anonymity.

"Very liberal". Finally, in the political preferences questions, respondents had to answer whether they identified as Republican, Independent or Demorat, and the choices were "Strong Republican, "Moderate Republican", "Independent", "Moderate Democrat", and "Strong Democrat".

Meanwhile, the post-treatment questions are divided into two main blocks: evaluation questions and recall questions. The evaluation questions, which are the first to be shown after the treatment, are phrased as "How would you evaluate the performance of Biden's government regarding X?" where "X" would be inflation, unemployment, and the Covid19 pandemic. There is also a question asking about the general performance of the Biden Administration so far, and another asking the respondent whether he would vote for Donald Trump, Joseph Biden, or none if the 2020 election were to be held again today. The choices for the evaluation questions are organized on a Likert scale, and respondents had to choose an option among "Very good", "Good", "Neither good nor bad", "Bad", and "Very Bad".

The purpose of these questions is mainly to capture our respondents' evaluation of President Biden's work as a president so far, arguably a very relevant factor influencing a politician's career. Even if the government does not have as much control of inflation, unemployment, or Covid19 related outcomes as it would like, it is generally accepted that government policy does have influence them, and they are important dimensions for voters. Also, especially for monetary policy, the policy regarding these outcomes may not be set unanimously or directly by the President, but this does not prevent him from influencing it. Thus, voters very likely do hold President Biden at least partially accountable for them and weigh in the perceived performance of Biden and his government at addressing these outcomes when evaluating his competence.

Conversely, the question about the 2020 election measures willingness to vote for President Biden, were an election to happen. We use this to get another relevant measure of President Biden's approval, which could be thought of as broader than just an evaluation of performance. We chose to phrase the question using the 2020 presidential election because it is still recent, probably fresh in voters' memories, and so it might be easier for respondents to evaluate their vote than if we were asking them about a hypothetical election with an abstract opponent.

In the "Recall" section, we asked respondents about their perceptions of what the current rate of unemployment, vaccination against Covid19 and the inflation of the first six months of 2021 were, and also the number of deaths by Covid19 in 2021 so far. The question about rates was asked in percentage terms. While it was not likely at all that respondents had the necessary information to provide accurate answers to such questions[4], what we wanted to measure were differences in recollection of information between the treated and the control individuals. Since higher inflation, unemployment, or deaths are usually (and almost universally) regarded as worse social outcomes than their reverse, the answers are informative about some of the data that respondents would have been pondering while answering the questions in the Evaluation block, and the positive or negative value associated to it.

Finally, going into more detail about the treatment, what we needed was to capture a certain type of social media content generated by elected officials. Given that politicians find many different

[4]Indeed, in the Results section the reader can see that the means in both groups for all the Recall questions were way off their real values.

uses for social media, from formal communications to policy broadcasting to informal images sharing (Lalancette and Raynauld 2017), randomly chosen posts would not do the job, since we want to focus on the latter category. Because of this, four posts were hand-picked from recent posts by the presidential Instagram account which do not feature any explicit political content (no mention to policy nor political broadcast to the voter base), and in which Biden's figure and personal side are preeminent[5].

Another relevant point is that it is not straightforward to know just how the public might interpret the images from politicians' posts (Lobinger and Branter 2015). Therefore, we work on the assumption that careful deliberation was given to the posts by Biden's team to ensure a positive interpretation of them. Even in the case that they are not interpreted in a positive light, they are the ones that were chosen by Biden's team to be posted, so they are the ones that should be tested when analyzing the effectiveness of this type of communications. To control for the effect that seeing "positive" or personal images might have on the study subjects, as well as seeing them as Instagram posts and with certain captions, the control group will be shown "similar" images posted on a fake Instagram account using the same captions as the ones shown to the treatment group, since they are part of the "message" that is being broadcast. Since the control images were taken from Pexels, a free images bank, they are not exact replicas of the treatment ones but, whenever possible, images with people in similar poses or engaged in similar activities were chosen. The number of likes, dates, comments in pictures, and geographic location were deleted from all the posts to avoid any influence they might have on results.

The selected images of the treatment consisted of four Instagram posts either from the @POTUS or the @joebiden accounts, available together with the control ones in the appendix section. Two posts feature President Biden walking and/or smiling with his wife, with positive captions. Another one features him celebrating National Ice Cream Day, with a cheerful caption, while the last one is an Instagram post about his dog, a German Shepherd, and a mournful caption mentioning that the dog passed away. The control group was also shown four Instagram posts, this time from a made up username, each one trying to mimic the poses, people, and tone displayed in the treatment images, while using the same captions as them.

4 Results

In this section, we first show some descriptive statistics of the sample that we recruited through MTurk and describe our variables and then we move on to our main results. After that, we analyze heterogeneities in the effects of the treatment by several variables. Next we run some robustness checks of our main results. Finally, we discuss our overall results and their implications.

[5]Restricting the study to posts that do not mention anything political at all could have excluded some posts that would fall in our desired category (e.g. posts that make a small mention of something policy related in the caption), but we think it is best to avoid anything that could be interpreted as political content in order to focus only on the effect of personalizing content and isolate the effect of a good personal image when comparing the outcomes between the treatment and control groups.

4.1 Data and Sample

The final sample used for our results consisted of 855 subjects. Table 1 below summarizes the pre-treatment characteristics of this pool of people, created from the pre-treatment questions of our survey described in the above section and in the Appendix.

Except for age, years of residence (in the US) and time spent on social media (in minutes), all the variables are created as dummies that are equal to 1 if the respondent belongs to that category and 0 if not, so the means for each group represent the share of individuals from that category in that group. For education we have three different groups, "Less than highschool", "Highschool", and "College or more", which groups respondents who answered "College degree" or "Graduate degree" as their highest level of completed education. The dummies for economic policy and politics preferences categories, on the other hand, group the extremes. This means that the dummy for "Policy: Conservative" groups subjects who answered "Very conservative" and "Conservative" in the question about their economic policy preferences, and the same goes for the "Policy: Liberal", "Politics: Republican", and "Politics: Democrat" dummies. Finally, the variable "Attention check" is a dummy equal to 1 for respondents who answered correctly the second screening question.

As expected, pre-treatment characteristics seem to be properly balanced between the control and the treatment group. The differences between both groups in the variables collected for background information are all small enough to be negligible, and only 2 out of 15 appear to be significant at conventional confidence levels (age and years of residence in the US, at 95% and 99% confidence levels, respectively). However, even in these two variables differences in means are quite small (the Control group is a year older on average, and has been living in the US for two years less than the Treatment group). When regressing the treatment dummy on all the controls and running a test for joint significance, the F statistic is very low and the variables are not jointly statistically significant.

Another important detail when considering the validity of this experiment is that our sample is not representative of the general US population, a common occurrence in online experiments in MTurk (Ross et al. 2009). Males are over-represented in our data, and the respondents are, on average, younger, more educated, and more democrat and liberal leaning than the average US resident. Finally, since we requested that participants pass an attention check in order to participate in the survey[6], its likely that our sample is skewed towards more attentiveness relative to the US population.

[6]Out of the 950 workers that clicked on our survey, 10% were rejected as participants

Table 1: Means of pre-treatment characteristics by group

Variables	Treatment	Control	Difference
Age	34.804	36.166	-1.362**
	(0.452)	(0.489)	(0.666)
Male	0.651	0.652	-0.001
	(0.024)	(0.022)	(0.033)
Education: Less than highschool	0.007	0.004	0.003
	(0.004)	(0.003)	(0.005)
Education: Highschool or GED	0.116	0.131	-0.014
	(0.016)	(0.016)	(0.023)
Education: College or More	0.876	0.865	0.011
	(0.016)	(0.016)	(0.023)
Social media (min)	139.636	134.042	5.594
	(21.644)	(17.144)	(27.611)
Years of residence	30.636	33.007	-2.371***
	(0.647)	(0.625)	(0.900)
Policy: Conservative	0.416	0.395	0.021
	(0.025)	(0.023)	(0.034)
Policy: Moderate	0.223	0.193	0.030
	(0.021)	(0.019)	(0.028)
Policy: Liberal	0.361	0.412	-0.051
	(0.024)	(0.023)	(0.033)
Politics: Republican	0.282	0.251	0.032
	(0.022)	(0.020)	(0.030)
Politics: Independent	0.183	0.213	-0.030
	(0.019)	(0.019)	(0.027)
Politics: Democrat	0.535	0.537	-0.002
	(0.025)	(0.024)	(0.034)
Attention check	0.960	0.960	0.000
	(0.010)	(0.009)	(0.013)
N	404	451	855

Notes: * significant at 10%; ** significant at 5%; *** significant at 1%. Standard errors in parenthesis. GED stands for General Educational Development tests, which can be taken to certify high school-equivalent academic skills. The two first columns display the means for the pre-treatment characteristics collected by our survey for the Treatment group and the Control group, respectively. The third column displays the difference between the two. The last row of the table includes the number of treated respondents, control respondents, and the total.

4.2 Main results

Table 2 shows the OLS estimates for the treatment effect on the outcomes based on the questions evaluating several aspects of the Biden Administration. The outcomes in the OLS models are based on our post-treatment questions and are indicated in the header of each column, and the main independent variable is a dummy = 1 if the respondent was treated. Controls are used in the regression when indicated, and include the entire set of pre-treatment characteristics collected by our survey and displayed in Table 1. In addition, each column has the Romano-Wolf adjusted p-value for multiple hypothesis testing for the significance test of the treatment dummy coefficient at the bottom[7]. The outcome variable "Vote Biden" is a dummy equal to 1 if the respondent chose "Joseph Biden" as the answer to the question of who would he vote for if the 2020 election was held again today. The rest of the outcome variables represent the subject's perception of the performance of Biden's government in several dimensions, and are built on a scale from 1 to 5, where 1 represents "Very Bad" and 5 "Very Good". Additionally, Figure 1 displays the mean of each evaluation outcome by treatment for the treatment and control groups.

The effects are mostly positive, meaning that, on average, the treatment group has a more positive image of Biden's government in each dimension than the control group. However, the sizes of the differences are quite small, even 0 in the case of the point estimate for 'Vote Biden', and only the one related to inflation handling is statistically significant at the conventional confidence levels. Even in for this outcome, the effect is not significant when considering the adjusted p-value. In addition, even the difference in this variable, which is the greatest of all, does not seem large or economically significant for the treatment. The difference in each evaluation outcome between the Control and Treatment groups can be appreciated graphically in Figure 1. A curious thing to note is that both groups seem to have a fairly positive image of the Biden Administration and its performance so far. In all of the dimensions of performance, the subjects chose above "Neither good nor bad" on average and over 70% of subjects answered that they would vote Biden today in both groups.

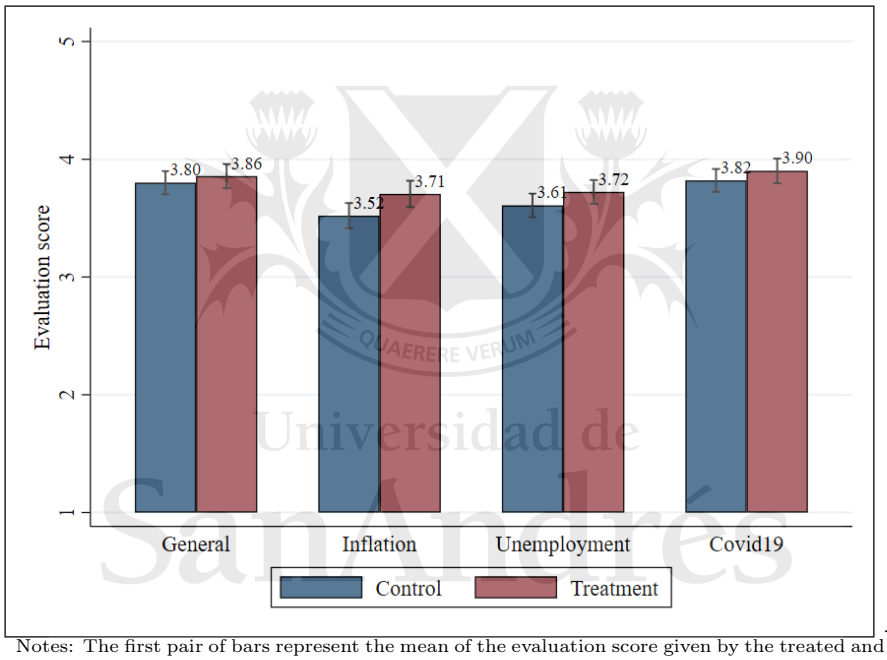
[7]The p-values are adjusted to account for the fact that we test for statistically significant effects in 9 outcomes - 5 in Evaluation outcomes and 4 in Recall outcomes.

Table 2: Evaluations of performance

	General		Inflation		Unemployment		Covid19		Vote Biden	
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Treated	0.056	0.030	0.184**	0.143*	0.115	0.091	0.081	0.064	-0.003	0.000
	(0.072)	(0.067)	(0.079)	(0.074)	(0.072)	(0.069)	(0.073)	(0.070)	(0.030)	(0.028)
R-squared	0.001	0.168	0.006	0.148	0.003	0.125	0.001	0.116	0.000	0.150
Controls	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Adj. P-val	0.614	0.921	0.277	0.386	0.554	0.485	0.564	0.733	0.911	1
Dep Var Mean	3.827	3.827	3.608	3.608	3.662	3.662	3.858	3.858	0.742	0.742

Notes: * significant at 10%; ** significant at 5%; *** significant at 1%. Robust errors in parenthesis. Observations: 855 for each column. Each column represents a different OLS regression. In columns (1) and (2), the dependent variable is the evaluation score given by respondents to the general performance of the Biden Administration; in columns (3) and (4), it is the evaluation score regarding performance related to inflation; in columns (5) and (6), performance related to Unemployment; in columns (7) and (8), performance related to Covid19; in columns (9) and (10), the dependent variable is a dummy = 1 if the respondent would vote for Biden if the 2020 election was rerun today. The dependent variable mean is included at the bottom of each column.

Figure 1: Means for performance evaluations



Notes: The first pair of bars represent the mean of the evaluation score given by the treated and control groups to the general performance of Biden's government. The second pair represents the evaluations for the performance regarding inflation, the third pair regarding unemployment, and the fourth pair regarding the Covid19 pandemic.

Table 3 shows the estimated effect for the recollection outcomes, again including the adjusted p-values. Given the lack of strong evidence of differences in evaluations between Treatment and Control, it is surprising that there seem to be differences in the perception of some socioeconomic outcomes between both groups. Even more puzzling, the treatment group recalls what most people would qualify as *worse* outcomes than the control group which, at first glance, is at odds with the initial motivation of this work, i.e., that personalizing social media campaigns could improve the image of politicians. While, again, the differences are small relative to the size of the means, the

treated subjects appear to perceive higher inflation, higher unemployment, and a lower vaccination rate than the control subjects. This hardly does for a good public image campaign. However, none of this differences are significant when considering the adjusted p-values.

Table 3: Factual recall of outcomes

	Inflation rate		Unemployment rate		Covid19 deaths (in 100K)		Covid19 vaccination rate	
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Treated	5.260***	4.452**	4.034**	2.879	-17.756	-17.404	-1957385.851*	-1959535.632*
	(1.987)	(1.894)	(1.906)	(1.816)	(12.793)	(12.389)	(1178455.409)	(1165243.577)
R-squared	0.008	0.113	0.005	0.114	0.002	0.016	0.003	0.011
Controls	No	Yes	No	Yes	No	Yes	No	Yes
Adj. P-val	0.218	0.248	0.356	0.465	0.564	0.485	0.545	0.455
Dep Var Mean	31.79	31.79	31.21	31.21	14.21	14.21	1881390	1881390

Notes: * significant at 10%; ** significant at 5%; *** significant at 1%. Robust errors in parenthesis. Observations: 855 for each column. Each column represents a different OLS regression. In columns (1) and (2), the dependent variable is the inflation rate recalled by respondents; in columns (3) and (4), it is the unemployment rate; in columns (5) and (6) it is the number of Covid19-related deaths; in columns (7) and (8) it is the Covid19 vaccination rate. The dependent variable mean is included at the bottom of each column.

On a side note, it is interesting that the perceived inflation, unemployment, Covid19 related deaths, and vaccination rates are wildly out of touch with the real values of those outcomes. In addition, several subjects had answers way over 100 for the question about the vaccination rate (numerically impossible), which drives up the numbers a lot. It is possible that they misread the question as if it was asking about the *number* of vaccinated people in the US instead of the vaccination rate, or that they were just inattentive respondents but, since the numbers for the other rates don't include answers over 100, this latter option does not seem likely. In the Robustness section, we analyze these observations. However, this lack of accuracy does not complicate the purpose of these questions, since we intended only to measure differences between groups, not their absolute levels.

4.3 Heterogeneity

In addition to the average treatment effect on our different outcomes, we searched for heterogeneities by several variables that could plausibly enhance or dampen the effect of the treatment, namely age, level of social media consumption, political preferences, and policy preferences. While we do not find evidence of heterogeneous effects by politics or policy preferences, we do find a stronger effect in younger subjects or those more exposed to social media. The results are displayed in Tables 4 and 5 below.

For conciseness, the heterogeneous effects regressions were all grouped in two tables, one for Evaluation outcomes and another for the Factual recall ones, with several panels each. Each column in a panel displays the coefficients for an individual regression using the variable at the column's header as outcome, and the treatment, correspondent interaction dummy, and controls as independent variables.

Table 4: Heterogeneous effects in evaluations

Panel A	(1) General	(2) Inflation	(3) Unemployment	(4) Covid19	(5) Vote Biden
Treated	0.120	0.142	0.157	0.116	-0.016
	(0.152)	(0.167)	(0.150)	(0.149)	(0.063)
Treatment*Independent	-0.261	-0.045	-0.105	-0.378*	0.009
	(0.230)	(0.245)	(0.225)	(0.227)	(0.095)
Treatment*Democrat	-0.074	0.018	-0.085	0.040	0.028
	(0.170)	(0.189)	(0.172)	(0.172)	(0.071)
Politics: Independent	0.015	-0.217	0.005	0.018	0.122*
	(0.158)	(0.169)	(0.154)	(0.157)	(0.067)
Politics: Democrat	0.424***	0.253*	0.370***	0.351***	0.293***
	(0.120)	(0.134)	(0.124)	(0.125)	(0.051)
Controls	Yes	Yes	Yes	Yes	Yes
Panel B	(1)	(2)	(3)	(4)	(5)
Treated	-0.034	0.149	0.120	0.039	-0.010
	(0.115)	(0.123)	(0.111)	(0.117)	(0.045)
Treatment*Moderate	0.013	-0.035	-0.175	-0.005	0.061
	(0.182)	(0.196)	(0.186)	(0.191)	(0.082)
Treatment*Liberal	0.158	0.005	0.019	0.068	-0.006
	(0.149)	(0.168)	(0.153)	(0.155)	(0.061)
Policy: Moderate	-0.181	-0.095	0.060	0.020	-0.054
	(0.129)	(0.136)	(0.135)	(0.137)	(0.060)
Policy: Liberal	-0.010	-0.016	0.080	0.241**	0.073*
	(0.101)	(0.113)	(0.109)	(0.106)	(0.043)
Controls	Yes	Yes	Yes	Yes	Yes
Panel C	(1)	(2)	(3)	(4)	(5)
Treated	-0.102	0.066	-0.060	0.001	0.005
	(0.105)	(0.111)	(0.105)	(0.102)	(0.043)
Treatment*High social media	0.247*	0.138	0.276**	0.114	-0.007
	(0.134)	(0.149)	(0.137)	(0.138)	(0.057)
High social media	-0.030	-0.154	-0.189*	-0.094	0.031
	(0.094)	(0.106)	(0.097)	(0.098)	(0.040)
Controls	Yes	Yes	Yes	Yes	Yes
Panel D	(1)	(2)	(3)	(4)	(5)
Treated	-0.062	-0.010	0.071	-0.087	-0.044
	(0.099)	(0.106)	(0.105)	(0.102)	(0.038)
Treatment*Young	0.177	0.300**	0.033	0.303**	0.086
	(0.134)	(0.148)	(0.138)	(0.139)	(0.056)
Young	-0.190	-0.306**	-0.093	-0.228*	-0.098**
	(0.121)	(0.126)	(0.129)	(0.124)	(0.049)
Controls	Yes	Yes	Yes	Yes	Yes

Notes: * significant at 10%; ** significant at 5%; *** significant at 1%. Robust errors in parenthesis. Observations: 855 for each regression. The table has four different panels, each with a different OLS regression per column. All regressions use controls. Panel A includes the interactions between Treatment and Political beliefs dummies; Panel B the interactions for Economic policy dummies; Panel C the interaction for a dummy = 1 if time spent in social media is above the median; Panel D for a dummy = 1 if age is below median. Regressions in column (1) have as dependent variable the evaluation score given by respondents to the general performance of the Biden Administration; regressions in column (2) the evaluation score of performance related to inflation; regressions in column (3) the performance related to Unemployment; regressions in column (4), performance related to Covid19; for regressions in column (5), the dependent variable is a dummy = 1 if the respondent would vote for Biden. The dependent variable mean is included at the bottom of each column.

Table 5: Heterogeneous effects in factual recall

	(1)	(2)	(3)	(4)
Panel A	Inflation rate	Unemployment rate	Covid19 deaths (in 100K)	Covid19 vaccination rate
Treated	4.090	3.074	-6.638	124,293.944
	(3.872)	(3.865)	(6.155)	(2433925.271)
Treatment*Independent	-4.068	-2.649	-45.017	-1218122.950
	(5.656)	(5.494)	(52.545)	(3038777.871)
Treatment*Democrat	2.163	0.604	-3.597	-3439647.730
	(4.638)	(4.552)	(11.284)	(2814416.038)
Politics: Independent	-4.130	-5.669	30.765	-973,437.109
	(3.875)	(3.868)	(41.734)	(2360910.820)
Politics: Democrat	-2.615	-4.368	3.852	1944380.956
	(3.308)	(3.211)	(11.547)	(2228377.778)
Controls	Yes	Yes	Yes	Yes
Panel B	(1)	(2)	(3)	(4)
Treated	2.632	1.203	-2.552	-2993410.976
	(3.092)	(3.091)	(3.850)	(1867668.377)
Treatment*Moderate	0.864	0.073	-81.803	3522369.280
	(5.083)	(5.019)	(63.713)	(3236835.197)
Treatment*Liberal	4.255	4.309	5.667	779,527.710
	(4.316)	(4.104)	(4.630)	(2500951.899)
Policy: Moderate	-4.792	0.495	78.721	-992,238.171
	(3.653)	(3.705)	(57.791)	(2345055.937)
Policy: Liberal	-12.610***	-11.077***	-6.612	-395,619.562
	(3.028)	(2.874)	(5.044)	(2501173.678)
Controls	Yes	Yes	Yes	Yes
Panel C	(1)	(2)	(3)	(4)
Treated	3.920	1.993	-13.211	-1082909.352
	(2.787)	(2.728)	(13.747)	(1915770.788)
Treatment*High social media	0.825	1.362	-7.492	-1622728.142
	(3.838)	(3.671)	(26.784)	(2449123.766)
High social media	-4.044	-7.063***	9.497	699,495.202
	(2.625)	(2.506)	(28.084)	(2336416.071)
Controls	Yes	Yes	Yes	Yes
Panel D	(1)	(2)	(3)	(4)
Treated	4.702*	0.285	-22.291	-3735039.368*
	(2.696)	(2.538)	(21.729)	(2040693.872)
Treatment*Young	-0.149	5.351	9.559	3567430.411
	(3.799)	(3.653)	(23.899)	(2317040.832)
Young	3.705	-2.536	-9.713	-2637090.477
	(3.404)	(3.280)	(30.022)	(2694160.119)
Controls	Yes	Yes	Yes	Yes

Notes: * significant at 10%; ** significant at 5%; *** significant at 1%. Robust errors in parenthesis. Observations: 855 for each regression. The table has four different panels, each with a different OLS regression per column. All regressions use controls. Panel A includes the interactions between Treatment and Political beliefs dummies; Panel B the interactions for Economic policy dummies; Panel C the interaction for a dummy = 1 if time spent in social media is above the median; Panel D for a dummy = 1 if age is below median. Regressions in column (1) have as dependent variable the inflation rate recalled by respondents; in column (2) the unemployment rate; in column (3) the number of Covid19-related deaths; in column (4) the Covid19 vaccination rate. The uninteracted version of each variable is also included in the controls for the regressions in their respective panels.

First, in Panels A and B of both Tables we show the heterogeneous effects by political preferences and economic policy preferences, respectively. These were, *a priori*, the heterogeneities that interested us the most. It was plausible that the treatment, could have interesting interactions with our subjects' pre-treatment beliefs, since it consisted of content related to the image of a prominent Democrat figure and arguably a closer to the liberal side of the economic policy spectrum. We expected our treatment to have a stronger effect, if it had any effect at all, on people who felt more represented on partisan and economic policy dimensions with President Biden. However, no estimates are statistically significant, and they are all close to 0 in size in the Evaluation outcomes. In fact, in these regressions even the average treatment effects lost all statistical significance for all outcomes.

Second, Panels C and D display heterogeneities by social media consumption and age. The "High social media" variable and the "Young" variables are dummies equal to 1 if the respondent's average daily social media consumption is above the median or his age is below the median in our sample, respectively. We included the social media consumption question in our survey because, being our treatment an extract of social media posts, we figured that people exposed to more social media could be more susceptible to a possible treatment effect. This could be due to them being used to consuming content displayed in the way of a regular Instagram post, featuring an image, a social media handle indicating who posted it, and a caption written by the poster, all things that could be perceived as strange to someone that had zero contact with social media. We also tested for heterogeneous effects by age because being younger could be a proxy for exposure to social media or familiarity with this type of content.

The results show that, in line with our expectations, the treatment had a stronger effect among subjects with more social media exposure and who were younger. For the Evaluation outcomes, the interactions with high social media consumption are all positive, and they are significant for the General Evaluation and Unemployment Evaluation questions. The size of the interaction coefficient for these two outcomes is almost twice the size of the ones from our Main Results. Still, the effect for subjects with below median social media exposure is close to 0 and statistically insignificant for all outcomes in these regressions, which seems to indicate that the treatment effect of our Baseline results was actually driven by treated subjects from the 'high social media' subgroup. The interactions with 'Young' show similar results: all the interaction coefficients are positive, the ones for Inflation Evaluation and Covid19 Evaluation are significant and also of greater size than the treatment coefficients from our Main Results. Yet, the treatment effect for older individuals is close to 0 and not statistically different from 0. Neither Age nor social media consumption show heterogeneous effects for the Recall Outcomes, however, and the treatment coefficient for some of those specifications lost statistical significance. In fact, the p-values adjusted for multiple hypothesis testing (not included in the tables) are never under 0.1, both for the treatment dummies as well as for the interaction variables. While interesting, the results remain inconclusive, then.

4.4 Robustness

Finally, we test the robustness of our results. First of all, Tables 6 and 7 show the results after dropping what we call "inattentive" respondents. These are the subjects who did not pass the second attention screener in our survey, a simple attention check that was placed between the evaluation and the recall questions. We also drop subjects who gave "implausible" answers to the question about "average daily time in minutes spent on social media". In this question, a few respondents gave answers that indicate that they spend more than 24 hours a day on social media on average, so we believe it may indicate inattentiveness from the respondent. That question, then, acts as an unintentional additional screener in the survey, and, apart from using it as a control, we use it in this section to exclude respondents that indicated more than 20 daily hours of social media

on average[8]. Inattentive respondents defined in this way, then, make up about 5% of our sample, and excluding them keeps our results virtually unchanged, both in the size of the coefficients and in statistical significance, both for the evaluation and in the Recall Outcomes.

Table 6: Evaluation outcomes dropping inattentive subjects

	General		Inflation		Unemployment		Covid19		Vote Biden	
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Treated	0.087	0.074	0.200**	0.169**	0.131*	0.112	0.099	0.091	-0.001	0.007
	(0.074)	(0.069)	(0.082)	(0.077)	(0.075)	(0.072)	(0.076)	(0.072)	(0.031)	(0.028)
R-squared	0.002	0.176	0.007	0.157	0.004	0.128	0.002	0.126	0.000	0.165
Controls	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Adj. P-val	0.574	0.545	0.248	0.366	0.475	0.545	0.574	0.545	0.960	0.842
Dep Var Mean	3.808	3.808	3.582	3.582	3.645	3.645	3.849	3.849	0.743	0.743

Notes: * significant at 10%; ** significant at 5%; *** significant at 1%. Robust errors in parenthesis. Observations: 855 for each column. This table replicates the results from Table 2 after dropping subjects who failed our second attention check or who answered that they spend more than 24 hours a day using social media.

Table 7: Factual recall outcomes dropping inattentive subjects

	Inflation rate		Unemployment rate		Covid19 deaths (in 100K)		Covid19 vaccination rate	
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Treated	4.721**	3.894**	4.134**	2.838	-18.185	-18.012	-2057559.696*	-2088714.909*
	(2.041)	(1.947)	(1.947)	(1.856)	(13.404)	(13.037)	(1238723.600)	(1217624.422)
R-squared	0.007	0.113	0.006	0.115	0.002	0.017	0.003	0.011
Controls	No	Yes	No	Yes	No	Yes	No	Yes
Adj. P-val	0.287	0.366	0.366	0.545	0.574	0.545	0.485	0.505
Dep Var Mean	31.34	31.34	30.80	30.80	14.10	14.10	1978215	1978215

Notes: * significant at 10%; ** significant at 5%; *** significant at 1%. Robust errors in parenthesis. Observations: 855 for each column. This table replicates the results from Table 3 after dropping subjects who failed our second attention check or who answered that they spend more than 24 hours a day using social media.

Second, we looked into the "crazy" and uninterpretable results for the recall of Covid19 vaccination rate outcome. The impossibly high means and coefficients in that outcome are driven by a subgroup of observations, approximately 5% of our sample[9], that gave answers well in excess of 100, the maximum possible vaccination rate. Dropping observations that have more than 100 for this variable leaves the results for every other outcome virtually unchanged but "fixes" the estimations for the vaccination rate outcome, as you can see in Tables 8 and 9. The mean for the vaccination rate outcome in the sample is now approximately 60%, and the estimated coefficient is 1.5, and also statistically insignificant. It is very important to note, however, that selecting our sample by their answers in one of our outcome variables biases the OLS estimator and, since it is a post-treatment outcome, potentially corrupts the results. This is the reason why such selection

[8]Dropping a subsample in this way does not introduce bias in the OLS estimators, since the cutoff value is based on one of the independent (and pre-treatment) variables, and not the dependent one.

[9]The total number of subjects who gave answers of more than 100 is 42, 18 from the Treated group and 24from the Control one.

is not made for the main results, and the exercises in this section should be interpreted as just an exploration on the reason for the crazy coefficients for that outcome. Nonetheless, it is reassuring that the outlier answers are very few and their removal does not affect the estimation of the effects for the other outcomes of the experiment in any meaningful way.

Table 8: Evaluation outcomes dropping crazy means

	General		Inflation		Unemployment		Covid19		Vote Biden	
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Treated	0.061	0.028	0.189**	0.143*	0.106	0.077	0.067	0.049	-0.008	-0.005
	(0.075)	(0.069)	(0.082)	(0.077)	(0.075)	(0.071)	(0.075)	(0.071)	(0.031)	(0.029)
R-squared	0.001	0.176	0.007	0.154	0.002	0.130	0.001	0.125	0.000	0.157
Controls	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Adj. P-val	0.792	0.891	0.307	0.426	0.644	0.752	0.792	0.812	0.792	0.891
Dep Var Mean	3.823	3.823	3.603	3.603	3.654	3.654	3.856	3.856	0.745	0.745

Notes: * significant at 10%; ** significant at 5%; *** significant at 1%. Robust errors in parenthesis. Observations: 855 for each column. This table replicates the results from Table 2 after dropping subjects who answered Covid19 vaccination rates above 100.

Table 9: Factual recall outcomes dropping crazy means

	Inflation rate		Unemployment rate		Covid19 deaths (in 100K)		Covid19 vaccination rate	
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Treated	4.723**	3.825**	3.655*	2.414	-19.221	-18.578	1.362	1.597
	(2.036)	(1.944)	(1.953)	(1.862)	(13.503)	(12.812)	(1.511)	(1.519)
R-squared	0.007	0.107	0.004	0.112	0.002	0.017	0.001	0.029
Controls	No	Yes	No	Yes	No	Yes	No	Yes
Adj. P-val	0.307	0.426	0.505	0.663	0.644	0.634	0.792	0.752
Dep Var Mean	31.63	31.63	30.98	30.98	14.41	14.41	63.41	63.41

Notes: * significant at 10%; ** significant at 5%; *** significant at 1%. Robust errors in parenthesis. Observations: 855 for each column. This table replicates the results from Table 3 after dropping subjects who answered Covid19 vaccination rates above 100.

4.5 Discussion

Our baseline results could be summarized as follows: while we see weak and non-conclusive evidence of a positive effect of the treatment on the evaluation of the performance of the Biden Administration by our subjects, the treated participants seem to perceive worse real-world outcomes, such as higher inflation, higher unemployment, and lower vaccination rates than the control respondents. The treatment appears to have affected our subjects, but in a way that was challenging to understand.

These results, however, are not entirely inconsistent with the idea of a positive effect of personalizing approaches, and a good personal image in general, on voters' evaluations of politicians under certain interpretations. It could be the case that the treatment actually had a positive effect on the evaluations of the performance of Biden's government, and this could explain why, despite perceiving higher inflation or unemployment, treated participants had no worse evaluations of

Biden's performance than the control group, or even slightly better. As to why the treated subjects have such differences in perception, it is possible that the treatment also had the unwanted effect of bringing to mind some of the discussions about high inflation and the economic recession in the US caused by the pandemic to our treated participants, which have been heavily featured in media as of late (Guilford 2021; Rennison, Duguid, and Rocco 2021; Kennedy 2021; Fickenscher 2021). This might have made such issues more salient and perceived as worse problems among the treated when compared to the control group. If this is the case, then, it means that our control was not effective at completely isolating the effect of the treatment images on the evaluations of President Biden's performance, and we would have done better by choosing some Biden-related content that cast him on a neutral light. This is easier said than done, since the positiveness or negativeness of depictions of presidents and other politicians is a notoriously difficult issue to objectively assess (Lobinger and Branter 2015).

Taking this interpretation of our results a step further, the evidence above could also be indicative of "biased evaluation of evidence" as the channel through which motivated reasoning could be operating, as opposed to "biased recollection of evidence", which are two of the main mechanisms behind motivated reasoning cited by Epley and Gilovich (2016). This is because, while we do see a difference in the recollection of information between both groups, treated subjects recall *worse* outcomes than the control ones, while showing no significant differences in their evaluation of Biden's government (even a weakly positive bias). Unless the inflation, unemployment, vaccination rates and Covid19-related deaths that they remember have no bearing in how they assess the government's performance in these areas, they must have a lower bar when judging Biden Administration's performance than those of the control group, which points to a biased evaluation of information.

We should, however, be careful with our interpretation, since not only the effect we find is small and not particularly strong, but also other interpretations may be possible. Especially regarding the effect that we see in the recollection of inflation, unemployment and Covid19 outcomes The reason why the images shown as treatment may increase said perceptions is unclear, and our explanation above is only an attempt to make sense of our findings. It could also be the case that subjects do not hold President Biden and his government responsible for such outcomes at all, although such notion seems to be an extreme and implausible one, given how economic and other social outcomes are usually heavily featured in electoral years by political parties and the news when voters are deciding on how to cast their ballot.

Despite these reservations, the fact that we do find more concrete evidence on performance evaluations when looking into younger subjects or those more exposed to social media adds weight to the interpretation of our results as indicating the presence of a bias in favor of more charismatic or well liked officials. In fact, since the treatment consists of social media posts, it is likely that they were designed in advance to target these types of subjects, which are the most likely to be exposed to such content. Hence, the coefficients of the interaction between our treatment variable and the 'Young' or 'High social media' ones are probably closer to the actual effect of the treatment on the perceptions of competence from Biden. After being exposed to positive and personal-related content and communications from President Biden, young respondents or those more exposed to social media seem to evaluate him and his government as more competent in general and in specific

and relevant areas of policy, even though none of the posts displayed any sort of policy-related information or discussion, and they focused only on President Biden as an individual and his personal life. It is interesting, however, that this effect on evaluations was not translated into higher willingness to vote for President Biden in an election.

Such a bias would mean that elected officials could improve their image and potential political future by making investments in the charisma and niceness of their image, without necessarily improving their policy track record. This may help to partially explain the growing trend of politicians investing their time in generating this type of content even while they are in power. Also, while the estimated effects, whenever statistically significant, are too small for it to make much of a difference in increasing public support for a politician, it is important to note that the treatment consisted of only four different images administered quickly and in an experimental setting, and to a sample that was more educated than average and positively selected towards attentiveness. Public image efforts made by politicians and elected officials, however, are usually prolonged in time, and consist of a more or less constant stream of content from their part (not all of them or the type studied in this work, clearly). A campaign of these characteristics, then, could possibly have a stronger effect on the public perception of a politician and the evaluations of his work, paying off the effort.

Our evidence is consistent with other works that also find that politicians may benefit from adopting a more personalizing approach in social media or exposing more of his intimate life to voters, such as Colliander et al. (2017) and Meeks (2017). It also provides an interesting counterpoint to the general message of the literature on traditional political campaigning about the futility of such efforts, as summarized by Kalla and Broockman (2017).

4.6 Conclusion

The last couple of decades have seen a rising trend in political communications, coming hand in hand with extensive social media adoption, of elected officials adopting (in various degrees) a communicating style that has been dubbed as "personalizing" or even "campaigning-like", in efforts of improving their charisma and niceness in the eyes of voters, even in non-electoral years. This style consists using communications happening through social media such as Instagram, Twitter, or Facebook to give glimpses of the personal life of a politician or by making him or her a central element of visual communications, casting him or her in a positive light and projecting positive values.

In this work, using an online survey experiment targeting US residents, we test the effectiveness of this approach to communications, and so of an enhanced personal image, in improving the perceptions of competence of an elected official, namely President Biden. We find that, despite of not containing any information related to his policy agenda or achievements of his administration, posts from the President's Instagram account do seem to improve the performance evaluations of his administration in general and in several policy dimensions, hinting towards a positive return of having a good personal image and being generally liked by voters on a personal level. This could implicate that even elected officials with a proven track record on policy that voters could use to judge their competence could find a benefit in maintaining a personal brand

and charisma, exploiting a bias in voters towards more charismatic leaders, thus explaining the trend of "personalization" and "permanent campaigning" in social media.

The effects we find are small and not particularly strong, so we should be cautious about making broad statements based on our results. More research is needed in order to better gauge the entire effect of 'personalization' campaigns in social media, taking into account that such efforts are usually prolonged in time, and thus escape the scope of what a single survey experiment might achieve.

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5 Appendix

5.1 Questionnaire

This section includes the survey shown to respondents, including both the treatment and the control conditions administered. The text and the order questions and sections is the same as the one used in our experiment (the format is not, however, as we used a Google Forms to administrate the survey).

Note: text in red or [in brackets] is not shown to respondents.

Opinion Survey

Hi. We are a non-partisan group of academic researchers from San Andres University. Our goal is to understand individuals' perceptions and preferences. You can email us at fmalpassi@udesa.edu.ar for any questions you have.

This survey should take about 6 minutes to complete. Your answers are completely anonymous. Since this study is related to the United States, you must be a resident of that country and at least 18 years old in order to participate. If you do not fulfill these requirements, please do not continue any further.

1. Please enter your MTurk Worker ID number. We will use it to reward you for your time once the survey is completed. [number entry]
2. Are you over 18 years of age and a resident of the United States?
   - Yes
   - No

End -only for those who answered that are either not over 18 or not US residents

We thank you very much for your time. Unfortunately, since you indicated that you are either not a resident of the US or are not over 18 years of age, you are not eligible to be a part of this study. We apologize for any inconvenience. Please click "Send" to send your survey results and enter SURVEY_3ND as your completion code in MTurk.

If you have any comments, you can let us know in the text box below. [textbox here]

Attention check 1

3. The next question is about the following problem. In questionnaires like ours, sometimes there are participants who do not carefully read the questions and just quickly click through the survey. This means that there are a lot of random answers which compromise the results of research studies. To show that you read our questions carefully, please enter turquoise as your answer to the next question. What is your favorite color? [10 different options, one of them is turquoise]

End -only for those who failed the attention check above

We thank you very much for your time. Unfortunately, as you failed one of our attention checks, you are not eligible to be a part of this study. We apologize for any inconvenience. Please click "Send" to send your survey results and enter SURVEY_CH3CK as your completion code in MTurk.

If you have any comments, you can let us know in the text box below. [textbox here]

Background characteristics

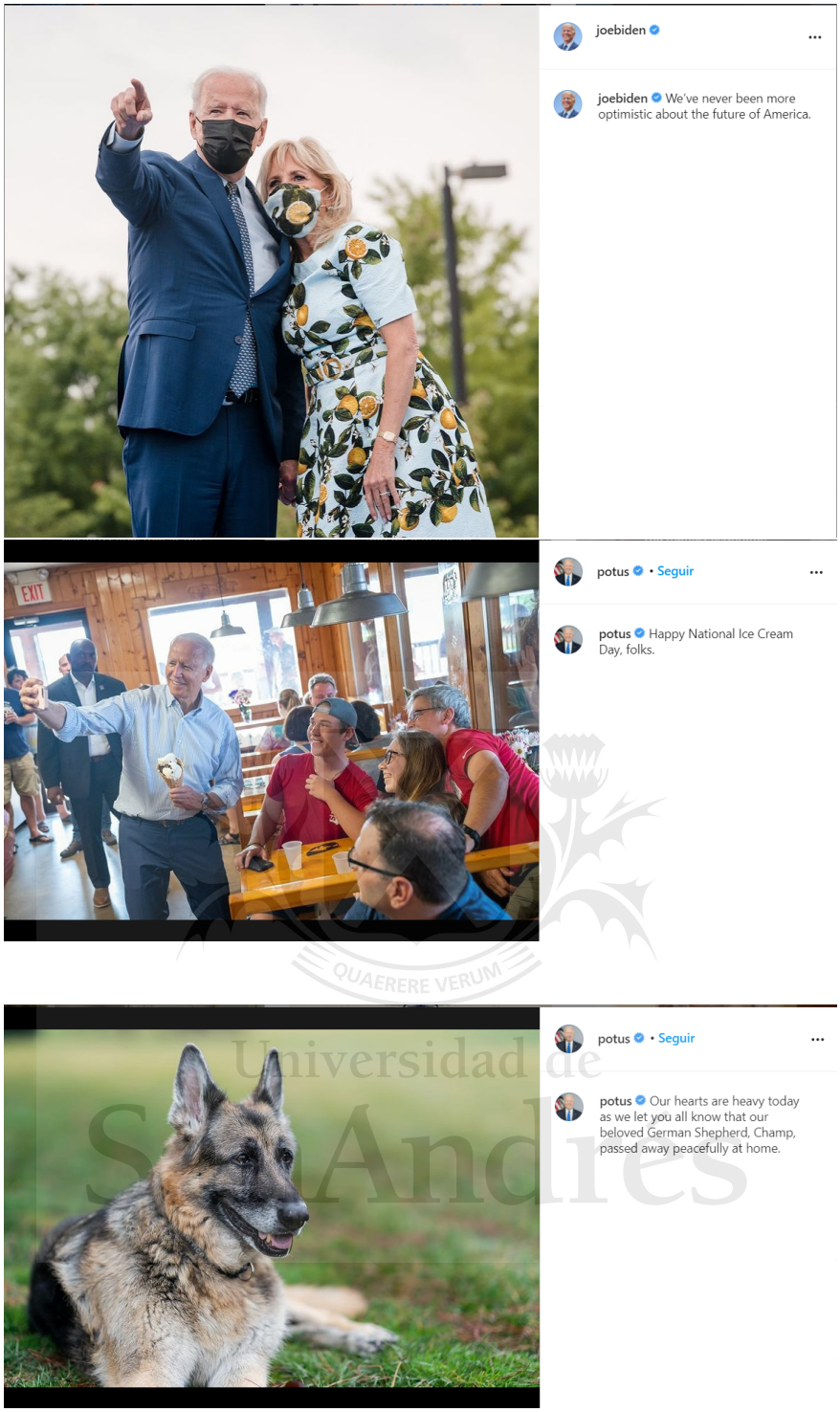
To get a general picture of our survey group, we would like to request some background information. Please remember that your answers will remain confidential and anonymous.

4. How old are you? [number entry]
5. How do you identify yourself?
    - Male
    - Female
    - Other
    - Prefer not to say
6. How long have you been living in the United States? (in years) [number entry]
7. Please select the highest level of formal education that you have completed
    - Less than high school diploma
    - High school diploma or equivalent
    - College degree
    - Graduate degree
8. How much time, in minutes, do you spend on social media on a average day? [number entry]
9. On economic policy matters, where do you see yourself on the liberal/conservative spectrum?
    - Very conservative
    - Conservative
    - Moderate
    - Liberal
    - Very Liberal
10. Generally speaking, do you usually think of yourself as a Republican, Democrat or Independent?
    - Strong Republican

- Moderate Republican
- Independent
- Moderate Democrat
- Strong Democrat

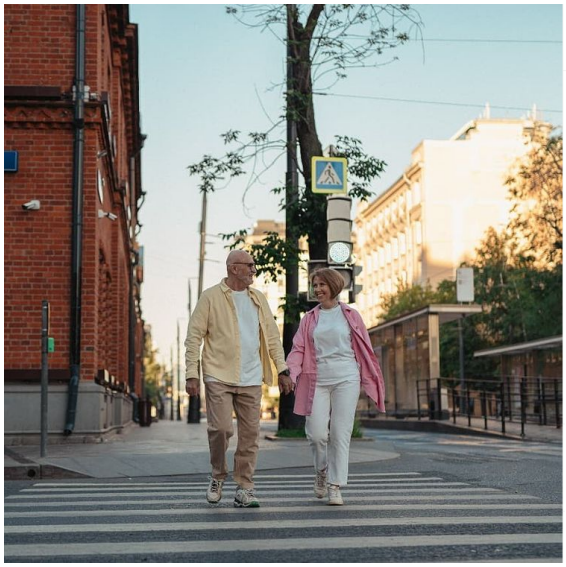
Treatment -only shown to those assigned to treatment

The following section includes several Instagram posts. Please look at them carefully.



Control -only shown to those assigned to control

The following section includes several Instagram posts. Please look at them carefully.



frank.williams_80

frank.williams_80 Couldn't imagine a better partner for this journey.

frank.williams_80

frank.williams_80 We've never been more optimistic about the future of America.

frank.williams_80

frank.williams_80 Happy National Beer Day, folks.

Evaluation questions

11. How would you evaluate the general performance of Biden's government so far?
    - 1 - Very good
    - 2
    - 3
    - 4
    - 5 - Very bad
12. How would you evaluate the performance of Biden's government regarding inflation?
    - 1 - Very good
    - 2
    - 3
    - 4
    - 5 - Very bad
13. How would you evaluate the performance of Biden's government regarding unemployment?
    - 1 - Very good
    - 2
    - 3
    - 4
    - 5 - Very bad
14. How would you evaluate the performance of Biden's government regarding the COVID19 pandemic?

- 1 - Very good
- 2
- 3
- 4
- 5 - Very bad

15. If the 2020 election were to be repeated today, who would you vote for?

    - Joseph Biden
    - Donald Trump
    - None

Attention check 2

16. Recent research on decision making shows that choices are affected by the context in which they are made. Differences in how people feel, in their previous knowledge and experience, and in their environment can influence the choices they make. To help us understand how people make decisions, we are interested in information about you, specifically whether you actually take the time to read the instructions; if you don't, some results may fail to tell us very much about decision making in the real world. To help us confirm that you have read these instructions, please ignore the question below about how you are feeling and instead check only the 'none of the above' option. Thank you very much.

    - A lot of different choices for emotions and, at the end, 'none of the above'

Recall questions

17. Could you recall what the inflation rate for the first six months of 2021 has been? (in percentage % terms) [number entry]

18. Could you recall what the current unemployment rate for the US is? (in percentage % terms) [number entry]

19. Could you recall what the number of deaths by COVID-19 has been during 2021 so far? [number entry]

20. Could you recall what percentage of US residents have been fully vaccinated so far? [number entry]

21. Do you have any comments you'd like to make us about this survey? This is an optional question [text question]

End of survey

Thank you very much for your time. Please click “Send" to send your survey results and enter SURVEY_COMPL3T3 as your completion code in MTurk.

22. Do you have any comments you’d like to make us about this survey? (This is an optional question) textbox here