Political Judgments and Impersonal Influence: Exploring the Role of Cognitive Moderators

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Abstract: In the following paper we study how aggregate preferences of the public influence individuals' attitudes and opinions, and how such influence is moderated by two individual level cognitive traits, namely, need for cognition and political knowledge. Our general expectation is that as people have higher levels of need for cognition and/or political knowledge their presidential approval judgments and propensity to identify with a party will be less influenced by majority opinion. To empirically test this hypothesis we conducted a national telephone non-probability survey in Chile that included two randomly assigned experimental manipulations. Each of these provided respondents with 'majority cues' informing them about the existing low levels of presidential approval and partisan identification among Chilean population. The results largely confirm our general theoretical expectation as we find a larger effect of the majority cues among individuals that score low on need for cognition or political knowledge.

Introduction

The following paper studies the influence that aggregate preferences of the public have over individuals' attitudes and opinions. In particular, we aim to uncover the heterogeneous nature of the effect of majority opinions over two particularly important variables in field of public opinion research: presidential approval and party identification.

Building on public opinion and social psychology literature, we argue that two individual level cognitive traits, namely need for cognition and political knowledge, will moderate the effect of information about opinions held by a majority of the population. While we provide the details later, the general expectation is that as people score higher on either of these cognitive traits the effect of majority opinion over their approval judgments and propensity to identify with a party will decrease.

The scientific exploration of people's susceptibility to aggregate preferences is not a new research theme in the public opinion discipline. By now there are several conceptual frameworks such as Elizabeth Noelle-Neumann's spiral of silence theory (Noelle-Neumann, 1993) and Diana Mutz's theory of impersonal influence (Mutz, 1998), just to mention the most prominent ones. While we review both of these theories below, it is important to mention that despite the advances offered by these theories, we do not know currently much absolute how contingent this effect might be, and what variables in particular moderate it's effect. To be sure Mutz and several other scholar in the spiral of silence tradition have explored this issue already, but we are still far from obtaining a definitive picture. It is in this context that this study seeks to contribute to the field by uncovering the moderating role of two particularly important cognitive variables over two particularly relevant political dependent variables such as presidential approval and party identification.

To test the moderating role of political knowledge and need for cognition we conducted a national telephone non-probability survey in Chile during the month of June, 2012. The survey included, among other things, two simple randomly assigned experimental manipulations that provided respondents with 'majority cues' that provide respondents with information about collective preferences of the Chilean public about presidential approval and partisan identification. The results largely confirm our general theoretical expectation about a larger effect

of the majority cues among individuals that score low on need for cognition or political knowledge.

The article is organized as follows. In the next section we review of the main theoretical concepts involved in this study and derive some general behavioral patterns to be contrasted empirically. The following section details all relevant information about the research design, including the experimental manipulations we developed and measurement. After this, we review the empirical results from the different experiments. The final section summarizes and concludes.

Conceptualizing Impersonal Influence

In this paper we study a special type of social influence, namely, the influence that the attitudes and opinions that other people hold have on our own attitudes and opinions. These "other people" do not refer to our friends, relatives or acquaintances, but to the more abstract notion of aggregate collectivities such as a "majority of people", "public opinion", large social groups, or society itself. Diana Mutz (1998) refers to this type of social influence as impersonal influence. Her concept is connected to a particular theoretical approach about how this influence operates (which we review below), but the concept itself can be employed, as we do here, in this more general sense as well.

There are two particularly prominent theories about this form of influence, the spiral of silence theory of Elizabeth Noelle-Neumann (1974, 1977, 1993) and the theory of impersonal influence of Diana Mutz (1997, 1998). In the following we review and contrast both theories briefly in order to understand better this form of social influence. We continue reviewing why and how the effect of impersonal influence over individuals' opinions and attitudes can be moderated by cognitive variables, namely, individuals' level of political knowledge and need for cognition.

The spiral of silence theory is a simple and elegant conceptual framework about how public opinion emerges based on a micro-sociological model of individuals' opinion formation and expression process. The theory can be decomposed into a few behavioral assumptions. In first place, society threatens with isolation those who deviate from the basic social consensus. In other words, conditional on the marginal distribution of opinions regarding an issue, some positions receive certain general approval, while others are associated with possible social rejection. Accordingly, individuals that hold minority positions can experience what Noelle-Neumann calls fear of isolation, which encourages people in general to constantly monitor which opinions are socially acceptable, as well as which ones becoming are more or less popular. Second, in order to monitor of opinion climate, people develop a quasi-statistical sense. This sense can be quite accurate, but that isn't necessary or even important. The key element is the concrete perception that people have of the opinion climate which may not necessarily correspond to the actual opinion climate. Noelle-Neuman distinguishes two primary sources of information about the opinion climate. These are the immediate social environment (consisting of the primary network) and the mass media. The latter can become particularly important in situations where people do not have direct contact with a given issue, or more generally, when they have informational difficulties to access directly the climate of opinion (Sheufele and Moy, 2000).

Lastly, the information gathered about the opinion climate affects people's willingness to express their views publicly. If someone believes that their opinion is part of the consensus, she will be more likely to express her views publically, either verbally or through symbolic expressions such as stickers or through clothing. On the other hand, those who perceive themselves as holding a minority position, or whose opinion is becoming increasingly unpopular, will tend to safeguard their opinion or silence it. Therefore, a possible threat of isolation

combined with the perception of a negative opinion climate can activate a dynamic spiral process through which minority opinions become progressively less expressed.

Of course, not all people or all issues are equally sensitive to this form of social influence. Noelle-Nuemann clarified that the spiral cannot be activated unless the issue at hand has a strong moral connotation. Similarly various scholars have explored the moderating role of specific individual level traits, such as attitude strength and certainty (Glynn et al., 1997; Matthes et al., 2010).

The second important framework we review is Diana Mutz's theory of impersonal influence (1997, 1998). As mentioned above, impersonal influence refers to the effect that stems from the perception of other people´s attitudes, opinions and beliefs with the caveat that "others" refers to aggregates of anonymous people outside our sphere of interaction, such as mass population majorities or large social groups. This definition is abstract enough to capture this form of social influence without any reference to the mechanism through which it operates, and therefore captures essentially the same thing than Noelle-Neueman's notion of the influence of the opinion climate. However, when we focus on the mechanisms through which this force takes place we obtain a very different picture than the one offered by the spiral of silence theory. Indeed, a defining feature that distinguishes Mutz's concept of impersonal influence is that its strength is not derived from the potential appeal that some representation of others may have (as is the case of a reference group), but simply due to the number of people who adopt a certain opinion, belief or attitude. In other words, impersonal influence, under Mutz's conceptualization, need not be motivated by an affinity or identification between the individual and a group, but only because of the numerical weight of some representation of collective opinion. This, in turn, implies that impersonal influence does not operate through social conformity or group identification mechanisms, but through strictly cognitive mechanisms.

To justify this theoretical claim, Mutz relies on a cognitive response theory.[1] According to this perspective when people receive a persuasive communication they can generate thoughts in response to the communication that can potentially trigger attitudinal changes (Petty and Caccioppo, 1981). People's attitudes can change when they learn about the views of others (for example, when they receive a majority cue indicating broad support for a candidate, a policy, a group, etc.) because this information can lead them to think about the possible arguments that might explain the positions adopted by the collective. As they mentally rehearse these possible arguments, people get involved in a self-persuasion process whereby their own attitudes can be moved on the direction of the arguments of the majority view.

The direction of the effect of impersonal influence is not necessarily consistent with the direction of the majority cue. According to Mutz, the direction depends also on individual level traits, namely individuals' previous level of commitment respect to their attitude on the subject in question. If a person is not firmly committed to a particular vision, the thoughts that come to mind are probably supportive of the majority cue. However, if a person has an opposite position on the issue in question, and the issue is important to the person, the reception of a majority cue (that is, information indicating that a majority of citizens support certain position) can trigger the generation of thoughts against the majority position, and hence trigger a greater rejection of the majority position.

Despite how brief our reviews of Noelle-Neumann's and Mutz's theory have been, it should be clear enough that a major difference between both approaches resides in the mechanism through which the influence of majority cues or opinion climate information takes

[1] It should be noted that Mutz (1998) is careful enough to recognize other possible cognitive mechanisms. For examples, aggregate preferences of a majority of the public could operates as a *consensus heuristic*, through which an individual increasingly supports a given position as the degree of social support increases as well. According to Mutz, *"... information about consensus views triggers a socialized tendency for people to associate the popular with the good or intelligent choice*" (Mutz, 1998, pp. 210). However, she also claims that the cognitive response mechanism performs the best, both theoretically and empirically.

place. While in Noelle-Neumann's conceptualization the strength of the climate opinion operates through a motivational feature such as fear of isolation, in Mutz's model the strength of the influence of others is primary cognitive. Indeed, according to Mutz attitude change can take place given that information about mass opinion can trigger a self-persuasion process that lead to the revision of an individual opinion. Moreover, in the spiral of silence model there is no specification of attitude change. Noelle-Neumann argues that individuals might not revise their opinion but only silences them (or perhaps could *falsify* it in Kuran's (1995) language).

In this current paper we do not address the possible mechanisms that are behind the influence of the opinion climate, though we locate ourselves closer to Mutz''s position since we are interested in the possibility of attitude change, even if this refers to a small readjustment process. We do leave the door open as to whether impersonal influence can take place though a motivational, cognitive or a mixed route. Instead of addressing this issue we focus our attention on the moderating role that cognitive variables can have over the effect of the opinion climate, regardless of the cognitive or motivation nature of the influence process. Further, we argue and show empirically that individual traits that affect how people process information will have a noticeable effect on the magnitude and even direction of the opinion climate cues that we provided respondents in a series of survey experiments.

The Role of Cognitive Moderators

Why should we expect to observe that the relationship between the perceived aggregate opinion distribution and individuals' opinions varies according to cognitive variables such as political knowledge and need for cognition? Our response is relatively simple: both variables are commonly thought to affect how people process information, and thus can condition the effect of

information regarding the preferences of public opinion. We detail this argument for each cognitive trait separately.

By political knowledge we refer to the accumulation of factual political information saved in individuals' memory. It is commonly argued in the public opinion field that increasing levels of political knowledge are reflective of a higher level of cognitive engagement with political affairs (Converse, 1964; Bartels, 1996; Carpini & Keeter, 1996; Kuklinski et al., 2001; Mondak, 2001; Zaller, 1992). Such engagement is associated with more exposure and attention to political events, and has proven very effective enabling a better comprehension of the messages contained in the political information flows. Survey respondents level of political knowledge is commonly measured using a few factual knowledge questions about public affairs.[2]

We expect that higher levels of political knowledge lead to smaller effects of the opinion climate over individuals' attitudes or opinions regarding a given issue. More knowledge allows people to evaluate the incoming messages with greater degree of scrutiny as it provides the necessary contextual information to recognize important characteristics of the messages as it´s ideological affiliation, policy implications, message emissary, among others. Therefore with more political knowledge individuals can accept or reject the messages in greater accordance with their own political dispositions, as well as to reject and neutralize antagonistic information (Zaller, 1992). The final outcome is that individual with high levels of political knowledge can resist more the persuasive capacity of a given political message. This is the reason why Sniderman & Bullock (2004) claim that people with higher levels of political knowledge are not only more knowledgeable but process information differently.

Our second cognitive moderator is the construct *need for cognition* popularized by social psychologists Richard Petty and John Cacioppo (1986). The authors define this concept as a

[2] We follow this practice, and detail the employed measures in the next section.

psychological trait that *"... represents a person´s level of intrinsic motivation to engage in and enjoy effortful cognitive endeavors"* (pp. 105). The higher people scale on this trait the more they tend to enjoy effortful analytic activities, and are prone to evaluate carefully information they receive with particular attention to the merits of the arguments contained in the message. As a consequence, need for cognition has an important effect in the level of cognitive elaboration an individual commonly engages when evaluating a persuasive message, and therefore affects how susceptible or resistant are people to persuasion. Strictly speaking need of cognition is not a cognitive variable, but a motivational one. However, given that it motivates individuals to engage in a higher degree of elaboration of the information available it affects the way individuals process that information.

Given their higher proclivity to engage in and enjoy laborious thinking, individuals' with high levels of need for cognition tend to base and update their attitudes on a careful evaluation of the relevant information. In contrast, individuals with low levels of need for cognition are more likely update their attitudes based on what Petty and Cacioppo call peripheral cues contained in the relevant information, that is, cues that associate the object of evaluation with positive or negative traits. Therefore, following Petty and Cacioppo's ELM model we expect that survey respondents exposed to majority cues will experiment larger shifts in their opinions as they have lower levels of need for cognition.

While this concept has its origins in cognitive social psychology, and is particularly relevant place in Petty and Cacioppo's Elaboration Likelihood Model, it has become increasingly used among students of political behavior (Arceneaux & Vander Wielen, 2011; Bullock, 2011; Mutz, 1998).

Research Design

In order to empirically test the moderating role of political knowledge and need for cognition we conducted a national telephone non-probability survey in Chile during the month of June, 2012.[3] The survey included, among other things, two simple randomly assigned experimental manipulations that provided respondents with factual information about collective preferences of the Chilean public regarding presidential approval and partisan identification.[4]

Following Mutz (1998) we employed survey experiments in order to manipulate individuals' knowledge about the opinion climate, instead of asking them directly about it, as commonly done in the spiral of silence tradition. This, of course, allows us to bypass endogeneity problems due to the reciprocal relationship between ones' own attitude or opinion and the aggregate opinion of society.[5] We employed the following majority cues in order to influence survey respondents perception of mass opinion:

Presidential approval: "*Many chileans think that the current government of President Piñera has fulfilled many of his campaign promises, and he has done a good job managing the country. In fact, did you know that according to multiple surveys at least 1 in 2 Chileans approve the work of government in the areas of international relations, employment and management of the economy?"*[6]

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[3] The survey was conducted via CATI system and employed the phone directory as the sample frame. The sample included the sixty municipalities with largest population of the country. The number of cases drawn inside each municipality was proportional to the population. Within each municipality phone numbers were randomly selected. Respondents were chosen using gender and age quotas. A total of 1200 interviews were recollected, though we do not report here results from a second experimental group. See footnote 10 for more details. While our survey did not employ a fully probabilistic sample, we emphasize that it contains a great degree of social, political and economic heterogeneity, and the distribution of important socio demographic variable such as education are relatively similar (add details in appendix).

[4] Given that respondent´s which were assigned to the experimental groups could not be debriefed after completing the surveys due to time restrictions of telephone surveys, we deliberately choose to provide experimental subjects with genuine information about collective preferences extracted from national surveys conducted recently in Chile.

[5] For more details on the characteristics, including both advantages and limitations of survey experiments see Sniderman and Grob (1998), and Gains et al. (2007).

[6] The original text in Spanish was: "*Muchos chilenos piensan que el actual gobierno del Presidente Piñera ha cumplido con muchas de sus promesas de campaña, y que ha hecho una buena gestión. De hecho, ¿sabía Ud. que según múltiples encuestas al menos 1 de cada 2 chilenos aprueba la gestión del gobierno en las áreas de relaciones internacionales, empleo y manejo de la economía*?"

Party identification: "*Many people in Chile say that political parties are, despite their problems, important for the welfare of our democracy and country. Did you know that today two out of three Chileans agree with the statement that "political parties are essential to run the country?"*[7]

After providing each subject with the mayoralty cue, they were asked a presidential approval[8] and a party identification question.[9] If a survey respondent was assigned in to the control group, he or she was asked the presidential approval and/or party identification question immediately.

The majority cues we designed have two important characteristics that should be noted. First, and following the Elaboration Likelihood model terminology, we argue that the majority cues we employed constitute peripheral cues. Indeed, they contain information that explicitly advocates a certain position, but do not contain an argument in favor or against the position that it seeks to support. Instead, the support for its position is ample social agreement by the national public. We would have preferred to make the cues more dramatic in terms of the numerical magnitudes agreeing with the message, but we constrained the information contained in the message to be truthful (see note 4 for details).

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[7] The original text in Spanish was: "*Mucha gente dice que en Chile los partidos políticos, a pesar de sus problemas, son importantes para el bienestar de nuestra democracia y país. ¿Sabía Ud. que hoy día dos de cada tres chilenos están de acuerdo con la afirmación "los partidos políticos son indispensables para gobernar el país*?"

[8] Two different approval questions were employed: (a) *What do you think? Do you approve or disapprove of the way Sebastian Pinera is leading his government?* (Spanish version: *¿Ud. qué opina? ¿Aprueba o desaprueba la forma como Sebastián Piñera está conduciendo su gobierno?*), and (b) *What do you think? Thinking broadly and beyond your own political position, do you approve or disapprove of the way Sebastian Pinera is leading his government?* (Spanish version: *¿Ud. qué opina? Pensando en términos generales, y más allá de su propia posición política, ¿Usted aprueba o desaprueba la forma como Sebastián Piñera está conduciendo su gobierno?* The second question was intended to prompt a higher level of cognitive elaboration before providing an answer. However, results indicated no significant main effect over approval response, or a significant effect between question (b) and need for cognition or political knowledge. Therefore we collapsed responses into a single presidential approval response.

[9] To measure partisanship we employed an adapted version of the party closeness battery of the Comparative Study of Electoral Systems (see original questionnaire at project website: www.cses.org). This battery was especially designed to measure this concept in multiparty democracies. The employed questions are: *Generally speaking, do you feel close to a political party?* (Spanish version: *En términos generales ¿se siente Ud. cercano a un partido político?)* If respondent says 'yes', she is asked: *With which party?* (Spanish: *¿Con que partido?).* If respondent says 'no', she was asked: Do you feel a little closer, or at least sympathize more with one of the political parties? (Spanish: *Bien, ¿y se siente algo más cercano o al menos simpatiza un poco más con alguno de los partidos?*). Finally, strength of identification was asked to all respondents that mentioned a party: And how close would you say you feel to this party? Very close, somewhat close or little close? (Spanish: Y cuán cercano diría Ud. que se siente a este partido? Siente Ud. bastante cercano a este partido, algo cercano o poco cercano a él?

Second, both majority cues we report are positive in the sense of encouraging more affirmative responses. This is an important point because it relates to the reason why presidential approval and party identification were chosen as dependent variables. We choose to test the effect of impersonal influence on these two variables because both, at least during the time of our survey, had low averages or prevalence, and consequently may represent judgments that are relatively crystallized across a majority of Chilean population. The low frequency of partisanship is related with the extended consensus among scholars that Chilean society shows multiple signs of widespread political disaffection (for examples see Parker, 2003; Altman y Luna, 2007; Toro, 2008), and one of the many empirical manifestations of this phenomena has been a clear decline in the proportion of the population that mentions to identify with a party. According to Morales (2010) between the years 2005 and 2010 this proportion declined monotonically from 47.5% to 26.3%. Consequently, the few people who mention to identify with a party should be a relatively strong partisans, given that in the current opinion climate about political parties, and actors in general, is quite negative. These characteristics make this issue quite consist with the type of issues that Noelle-Neumann argues can active a spiraling process. Indeed, given the dominant negative tone about political actors and parties, people who decide to verbalize a partisan identification risk being socially rejected.

Presidential approval judgments about Piñera's job performance were also during the time of the survey, and for most of the entire year before, quite low. For example, according to the one of the most respected polls in Chile, during the months on June and July his approval rates were between 32% and 36% (Informe Evaluación de Gobierno Julio 2012, Adimark). And those numbers are not that bad since two months before his approval rate were around 26%. Similarly to the case of party identification, we presume that those who supported and opposed Piñera held a relatively clear and strong judgment.

In sum, we claim that judgments about Piñera and partisanship represent political attitudes with fairly unbalanced distributions which may imply that people had relatively crystallized judgments about these issues, and therefore their attitudes are not easy to alter through our majority cues.[10]

To measure need for cognition we incorporated in our survey four items from the original need for cognition scale (detailed in chapter 3 of Petty & Cacioppo (1986)), though one of the items, perhaps due to some ambiguity in the translation, did not correlate well with the other three items. Accordingly we created an additive scale using the three items with a Cronbach alpha of 0.68. We further blocked the measure into three levels (low, medium and high need for cognition) with each level roughly matching with one-third of the sample.[11] Political knowledge was also measured through an additive scale that incorporated a total of seven items with Cronbach alpha of 0.79. The items we employed a mix of factual knowledge items about the political system (for example, which party holds most seats in Congress), as well as some items directed towards capturing exposure to information flows (for example, which political coalition

[10] In this paper we do not report the results from a second experimental group containing negative majority cues, that is, cues highlighting low levels of government approval and low levels of trust in political parties. The results from these treatments did not work out well either because they were not statistically significant as in the case of presidential approval (though the signs of the treatment and interactions with the moderator variables were not as expected), or because the effects were significant but with a very strange pattern as in the case of the partisanship experiment. Specifically, the main effect of the moderator variable canceled out the significant effect of the cognitive moderator-treatment interaction since both coefficients had the opposite signs and similar magnitudes. Results are available upon request.

[11] The survey question is: *Now I'm going to read some statements that describe how some people feel when they are in situations where they have to think and reason about a problem intensely. For each statement, please tell me if you strongly agree, agree, neither agree nor disagree, disagree or strongly disagree... (a) I try to anticipate and avoid situations where there is likely a chance I will have to think in depth about something, (b) Learning new ways to think doesn't excite me very much, and (c) It's enough for me that something gets the job done; I don't care how or why it works*. The Spanish version is: *Ahora le voy a hacer un leer algunas afirmaciones que describen cómo algunas personas se sienten cuando están en situaciones en las que tienen que pensar y razonar intensamente sobre un problema. Para cada afirmación podría decirme si Ud. esta muy de acuerdo, de acuerdo, ni de de acuerdo o en desacuerdo, en desacuerdo o muy en desacuerdo… (a) Trato de evitar situaciones en la que es probable que vaya a tener que pensar en profundidad acerca de algo. (b) Aprender nuevas formas de pensar no me entusiasma demasiado. (c) Me basta saber que algo funcione bien, no me importa cómo*.

wants to change the electoral system).[12] To facilitate comparison between models we also blocked this variable into three groups which roughly matching with one-third of the sample. Both variables we given code 0 for the lowest group levels and code 2 for the highest level. Importantly, both variables do not correlate very highly. The ungrouped and groups correlations are 0.13 and 0.14, respectively.[13] We take this information as indicating that both variables are taping onto different dimensions of how individuals process information.

Empirical Analysis

In this section we report results from simple binary and ordinal logit models with three dependent variables: presidential approval (binary), identification with a political party (binary), and degree of strength of identification among those who mention to identify with a party (ordinal). We model each dependent variable as a function of the treatment (model 1), and as a function of the treatment interacted with each of the cognitive moderators we included in our survey (models 2 and 3). We also plot the predicted probabilities for each dependent variable for the treatment and control groups at different levels of the cognitive moderator variables.

Table 1 reports the results for presidential approval. As can be seen in model 1, the majority cue treatment does not have a significant main effect. However, model 2 shows a significant interaction between need for cognition and the treatment, as well as a marginally significant ($p<0.10$) conditional effect of the treatment among individuals ranked low on the need

[12] The knowledge items of the survey are: (a) *From what you know or have heard, which of the following European countries is facing major economic problems? Germany, Poland, Greece or Belgium?,* (b) *And do you happen to know which political party has most seats in the lower house of the Chilean Congress?,* (c) *By the way, do you remember who Mariano Rajoy is?,* (d) *Do you remember which ministry is Felipe Larrain in charge of?,* (e) *Beyond your own opinion, which would you say is the most conservative political party on issue such as abortion, the morning-after pill, euthanasia, etc?,* (f) *From what you know or have heard, what political coalition is in favor of changing the current binomial system?,* (g) *Do you remember the name of the first democratically elected president in Chile after the military government?*

[13] For the grouped measure we also calculated the polychoric correlation with was only slightly higher (0.18).

for cognition scale. Notice that this effect is positive, while the interaction coefficient is negative. This implies, in accordance to our theoretical expectations, that the treatment has a significant effect increasing approval responses among respondents with low need for cognition, but the positive effect decreases as respondents need for cognition level increases. This can be seen on the left side plot of Figure 1. Moreover, the figure shows that among respondents' with high need for cognition the direction of the treatment effect reverses, now decreasing the probability of approving the president. This is a very interesting pattern because it is consistent with empirical research from Petty and Cacioppo (1986) that shows that when people high in need for cognition receive a weak message in support of certain position they tend to readjust their attitudes in the opposite direction of the message. This might imply that respondents in the treatment group and that scored high on need for cognition tend to react adversary to the majority cue by prompting counter-arguments as to why a significant portion of the public supports the current president. We explore this issue more in the final section of the paper.

*** Table 1 ***

*** Figure 1 ***

The results from model 3 of Table 1 show, contrary to our theoretical expectations, a non-significant interaction between political knowledge and the treatment, though the sign of the coefficient is the same than the interaction between need for cognition and the treatment.

The results from our experimental manipulation on partisanship, shown in Table 2, indicate that the treatment has a positive main effect increasing the probability of expressing a partisan identity. Indeed, the odds-ratio of the treatment coefficient of model 1 (exp(0.049)=1.05), indicates that respondents in the treatment condition where 5% more likely to express a partisan preference than individuals in the control group. A modest but marginally significant effect ($p<0.10$). The results from the model including the political knowledge covariate indicate a

significant positive effect for the majority cue treatment among respondents with low levels of need for cognition. The interaction between need for cognition and the treatment is not significant though.

*** Table 2 ***

*** Figure 2 ***

Contrary to the results from the presidential approval experiment, the effect of the treatment in the partisanship experiment does vary significantly according to respondents´ level of political knowledge (at least marginally with the interaction coefficient significant at 10% level or less). Here the effect of the treatment is quite substantial among respondents with low levels of knowledge, around 11 points according to the predicted probabilities shown on Figure 2. Confirming our theoretical expectations this effect tends to cancel as respondents become more politically knowledgeable.

*** Table 3 ***

*** Figure 3 ***

Table 3 shows the results of the ordinal logit model predicting respondents perceived level of closeness to their preferred party. The main effect of the treatment is positive, but not significant. However, models 2 and 3 confirm that the effect is moderated by both cognitive variables, in particular by political knowledge. According to model 2 the effect of the majority cue treatment is positive and marginally significant among respondents low in need for cognition. The negative interaction parameter, close to significant (pvalue=0.13), indicates that as an individual´s level of need for cognition level increases, the effect of the treatment decreases. The exact same patterns can be observed among model 3, though the patterns are accentuated. The effect of the treatment among respondents with low political knowledge is significant at a 5% of confidence, and the interaction between political knowledge and the treatment is significant at a

10% level. Figure 3 plots the predicted probabilities for models 2 and 3 for each response category of the dependent variable. As shown there, both need for cognition and political knowledge exercise a extremely similar moderating role. In both cases the differences in the predicted probabilities of responses “Little close” and “Very close” between experimental and control groups tends to cancel as respondents score high on the cognitive moderators. Some of these differences between groups among individual’s with low scores of the cognitive variables are very large. For example, the difference in the predicted probability of responding “very close” among respondents who score low on the political knowledge scale is about 23 points.

As a final comment it is worth mentioning that all the models with interactions shown in Tables 1 through 3 were also estimated using dummy variables for the different levels of the cognitive variables. Results were substantially equivalent and with no exception AIC fit statistics were slightly inferior.

Conclusions

In this paper we have explored the heterogeneous effect that majority opinion preferences have over individuals’ presidential approval judgments and their willingness to express identification with a political party. Building on previous literature, we hypothesized that people with higher levels of need for cognition and political knowledge will be less sensitive to the majority cues we provided them in a series of survey experiments. The results from the experiments provided broad support for our theoretical expectations, but also manifested some intriguing patterns. Most importantly, on the presidential approval experiment we observed that among respondents’ with high levels of need for cognition the effect of the positive treatment did not cancel, but reversed decreasing the probability of approving the president. While somewhat speculative we believe this pattern reflects that respondents in the treatment group and high on

need for cognition reacted adversary to the majority cue by prompting counter-arguments as to why a significant portion of the public supports the current president, and therefore decreased their average level of support for the incumbent.

Related to the point above, we believe that future work should explore more deeply how the effect of majority cue treatments could also vary according to dispositional factors. Specifically, we should explore whether the effect of the approval experiment varies according the ideological inclinations of respondents. If Mutz (1998) cognitive mechanism is accurate we should see negative reactions among potential opponents of Piñera (for example, people who place themselves on the left on ideological scales), and their responses should become increasingly negative as they have either higher levels of need for cognition or political knowledge, or both. Mutz's model also leads us to think that the effect of cues should be even more positive among potential supporters (people who place themselves on the right on ideological scales).

The same could be said about the partisanship experiments. Exploring possible heterogeneous effects across people with different degrees of disaffection with the political system could highlight some systematic differences in the magnitude of the effects of the cues. In this case, we would expect that as people adopt an increasingly negative position towards the political system (for example, low levels of internal efficacy), the effect of the majority cue becomes increasingly negative, particularly among those that are high on need for cognition and/or political knowledge.

Lastly, one important limitation from our study has been inability to identify the mechanism that is behind the influence of the majority cues. From our theoretical review we highlighted two primary models; the spiral of silence that emphasizes the motivational nature of majority influence that leads individual's to silence their opinions, and Mutz impersonal

influence model that arguments that majority preferences can change individuals preferences. Whether individuals under the treatment condition silenced their opinions (or even falsified them) in accordance with the spiral of silence model, or if they in fact changed them in response to the majority cues they received cannot be decided with our study design. Further research should explore and develop methodological designs that could help differentiate which of these mechanisms, or some combination of them, is underlying the changes of survey responses.

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