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Stories beat experts: An experiment on political persuasiveness

Are personal stories more effective in shaping opinion than experts' endorsements? We conducted a survey experiment about educational spending and policies to reduce pollution to assess how citizens respond to personal stories and experts' endorsements. Our results show that personal stories are more than twice as effective at increasing support for both policies. Moreover, we show that the effect of personal stories is especially strong amongst citizens with populist attitudes, contributing to a better understanding of the electoral success of populist parties.

For democracies to work, voters must define their preferences and understand how different policies align with them (Achen & Bartels, 2016). Given that citizens lack basic facts about the political world (Bartels, 1996; Delli Carpini & Keeter, 1996), the use of cues by experts and politicians has been hypothesized to bridge voters' lack of information and help them make quasi-informed decisions (Lupia, 1994). Nevertheless, the recent rise of populist parties and anti-expert rhetoric, nicely summarized in Michael Gove's famous "Britons have had enough of experts," has reintroduced the classic Socratic concern of how uninformed voters make up their minds.

A growing body of literature suggests that evidence-based cues are not the only channels through which parties and political actors can influence voters' opinions (Graetz & Shapiro, 2005). Emotional appeals, such as episodic frames based on individual stories, can also influence citizens' reasoning through different psychological processes(Iyengar, 1996) (Iyengar, 1996). However, evidence on which frame is more persuasive remains inconclusive

and scattered. Are personal stories actually more effective at shaping opinions than information presented through the endorsement of an expert?

To test which frame is more persuasive, we conducted a unique survey experiment in Spain that examined individuals' attitudes toward two different policies: education spending and policies to reduce pollution. We randomly assigned respondents to three different treatments before asking for their support of the policies. All treatments included the same justification for the policy but changed the frames supporting it: In the expert treatment, an expert recommendation supported the claim; in the episodic treatment, we included a personal story of a girl affected by the policy. The third treatment was a control treatment without further information. This experimental design allowed us to measure the effect of each of the frames and compare their magnitude.

The results of the experiment show that, while expert endorsement only increased support for the policy in one of the experiments, the episodic treatment consistently increased support for the policy in both of them. When we compared the size of the treatments, the episodic treatment was more than twice as effective at influencing citizens' attitudes. Moreover, we show that populist attitudes mediate this effect: citizens with populist attitudes are particularly sensitive to personal stories.

The contribution of this research note is twofold. On the one hand, it sheds light on the burgeoning debate on how frames shape public opinion. On the other hand, it provides a better understanding of the recent success of populist parties by showing that episodic frames can influence citizens with populist attitudes. The rest of the article begins with a review of the literature, followed by the details of the experiment and the presentation of the results. The last section presents the conclusions and discusses the implications.

Literature Review: On Frames and Persuasion

The literature on framing is extensive and its contributions come from multiple disciplines. Although this allows for creativity and diversity, the fragmentation of the field also implies essential conceptual and methodological concerns (Borah, 2011). Our scope here is narrowed to issue-framing, that is, "how different presentations of an issue generate different reactions among those who are exposed to that issue" (Entman, 1993; Jacoby, 2000). In particular, we are interested in issue-framing as a political tool that influences how citizens think of political arguments.

Decades of research on this field have established that frames, that is, "highlights of some aspects of perceived reality that are made more salient in a communicating text" (Entman, 1993), are able to influence citizen's positioning over public issues. In his seminal work, Zaller (1992, p. 82) provided an illustrative example of this based on support for oil-drilling. He showed that support for oil-drilling depends on whether the frame under which the information is presented highlights foreign dependency or the economic costs of the policy. Several examples of this phenomenon have followed over the years on a wide range of issues, such as government spending (Jacoby, 2000), social policy (Hayes & Guay, 2019), freedom of expression (Hartman & Weber, 2009), or the European Union (Hernández & Pannico, 2020).

More recent contributions to this literature have introduced a lot more nuance into this debate by considering which characteristics make these frames more persuasive. A few examples are as follows: arguments that frame negative views about a specific policy or that evoke loss aversion are more persuasive (Arceneaux, 2012; Cobb & Kuklinski, 1997; Jerit, 2009); information is more convincing if attributed to a credible source rather than a less credible one (Chong & Druckman, 2007); information about a policy increases support for the policy even when this information conflicts with a supporting party's position (Boudreau

& MacKenzie, 2014), especially with salient issues (Ciuk & Yost, 2015); and policy opinions change when the supporting party's position party changes its position toward the policy, even when the new position contradicts citizens' previously held views (Slothuus & Bisgaard, 2020).

Despite the growing body of literature, however, issue-framing literature has engaged little with findings in communication studies concerning the effect of episodic versus thematic frames in shaping opinions. Several studies on television and the news have shown that personalization or episodic frames, that is, narratives that are boiled down to individuals (Iyengar, 1991, 1996), are more persuasive than interviews with experts or politicians (Brosius & Bathelt, 1994; Lefevere et al., 2012), especially when they resonate with the individual's predispositions (Aarøe & Petersen, 2018; Ryffel et al., 2014). One explanation is that the vividness of episodic or personal frames makes the arguments more engaging and emotionally charged, generating a greater change in attitudes (Olsen, 2017; Springer & Harwood, 2015).

A notable exception is a study by Graetz and Shapiro (2005) on the estate tax. The authors tackled the paradox of how a tax that affects only the top 2% of the population became largely unpopular. Their basic argument was that "stories," and not "cold facts," have been the true drivers of opinion on this specific issue. Nonetheless, their study was purely observational and lacked a causal identification strategy. Sides (2015) contested this argument with experimental data and showed that providing the correct factual information (i.e., who is most affected by the tax) increased support for the tax, regardless of prior value predispositions. Yet, in his rebuttal, Sides did not compare the persuasive effect of factual information with an appeal to a personal story, but focused on normative claims instead. Furthermore, he compared the impact of factual information given by an unknown source, the interviewer, instead of the more plausible example of factual information provided by an

expert in the field. This is a difference worth considering, given that citizens do not always follow experts' cues (see Darmofal, 2005; Sapienza & Zingales, 2013).

We aim to contribute to this gap in the literature by comparing the persuasive effect of these two types of frames, namely the impact of evidence presented as an expert's endorsement versus an episodic frame that appeals to a personal story. More specifically, we introduced two different types of information: 1) an expert recommendation and 2) a personal story designed to mobilize a vivid memory. This comparison is relevant in times of growing support for populist parties, as emotions are increasingly used as political tools, and scientific knowledge grows more politicized.

Framing and Populism

Political science and communication scholars have identified the use of emotions as a particular characteristic of populist communication (Canovan, 1999; Fieschi & Heywood, 2004) . In particular, populism is often depicted as being characterized by negative types of emotions, such as fear, resentment, cultural anxiety, and especially anger (Abadi et al., 2020; Demertzis, 2006; Rico et al., 2017), though it has also been shown to elicit positive emotions under certain circumstances (Wirz, 2018): an emotional charge that the literature has usually associated with the use of an episodic frame or personal stories (Aarøe, 2011; Olsen, 2017).

Despite abundant research on the link between populism and emotions, little attention has been paid to the persuasiveness of emotional arguments among citizens with populist attitudes. A notable exception is Wirz (2018), who found that populist appeals elicit stronger emotions than non-populist messages and that these emotions mediate the persuasiveness of their messages. Instead, our goal was

to understand whether experts' recommendations and personal stories have different effects depending on the populist attitudes of citizens.The Experiment

We conducted an online survey experiment in Spain to test the extent to which different cues can influence opinions. We embedded the two experiments in an online survey with gender, age, and education quotas delivered to a sample of 3,031 Spanish citizens between September 27th and October 28th, 2018. The questionnaire of the survey contained several political questions on Spanish politics and policy preferences. In the experiment, we asked respondents to specify their level of agreement for each of the policies on a scale from 0 (completely disagree) to 10 (completely agree):

1. *Education experiment:* raising tuition fees in universities to increase the number of nursery places for kids between 0 and 3 years old.
2. *Pollution experiment:* limiting the number of cars that can access the center of a city to reduce pollution problems with tolls.

Both policies imply trade-offs with costs and benefits, namely raising tuition fees in exchange for more places in nursery schools and paying for circulation in cities in exchange for clean air, respectively. We designed policies with trade-offs because we wanted voters to have contradictory predispositions that allowed us to study the treatments' intensity. As none of these two issues had been politized by Spanish political parties at the time of the experiment, we expected the position of citizens to be responsive to the treatments.[3] Whereas the average support for tuition fees in the control group is 2.92 (SD 3.04) on a scale that ranges from 0 (completely opposes) to 10 (completely supports), support for the limitation of cars in the center of the cities has an average support of 5.5 (SD 3.22) on the same scale.

[3] The issue of pollution became a source of debate in Madrid with Madrid Central after the experiment was conducted(see Lebrusán & Toutouh, 2020).

Individuals were randomly assigned to one of the two policies and, within each policy, to one of the three treatment groups. The treatment groups and the corresponding cueing approaches are summarized in Table 1.[4] We used a control group throughout the analysis as a benchmark to test the effect of the expert and episodic treatments.

Table 1. Cueing approach

Treatment	**Cueing approach**
Control	Support for policy asked without further information.
Expert	Suggested that people that defended the policy were following the advice of an authority figure on the field.
Episodic	Suggested that the policy would help a young girl whose picture and story were shown in the text.

To test for the effects of the different treatments, we ran several types of models, including different sets of controls, i.e., socio-economic (age, gender, education, town size) and attitudinal (ideology and political interest) indicators, as well as regional-level fixed effects with robust standard errors. Besides OLS regression, we also tested the results using inverse-probability weighting (IPW), regression adjustment, and propensity score matching, all of which provided similar results[5]. The balance test and manipulation checks indicate that there is no overlap assumption violation and that our data are a fit for this type of analysis[6].

To test whether the effect of emotional appeals is, in fact, stronger among citizens with higher populist attitudes, we relied on an indicator of populism built on the basis of the most important characteristic of populism —people-centrism[7]. We followed Hawkins et al(2019) (2018) to construct this indicator based on three variables that were included in the survey:

[4] See Table A1 in the appendix for the exact formulation of each of the experiments.
[5] See section 3.2 in the Appendix.
[6] See sections 3.1 and 3.3 in the Appendix.
[7] See Hawkins (2019) where they show that this is the most important dimension. We have also tested with the second most important dimension –anti-elitism– and the results are similar, especially for the pollution experiment.

1. Politicians should always listen closely to the problems of the people.
2. Politicians do not have to spend time among ordinary people to do a good
3. The will of the people should be the highest principle in this country's politics.
4.

Results

Figure 1 illustrates the marginal effects of each of the two treatments, taking the control group as a reference for each of the models. Table 2 reports the results of three linear regressions on the support for each of the policies with three different model specifications that cover different sets of controls.

Our findings suggest that the episodic treatment increased, on average, between 1 and 1.2 points (on a 10-point scale) the support for both policies compared to the control group. The expert treatment rendered a null effect in support of the pollution policy. In contrast, it significantly increased the support for the education policy between 0.4 and 0.5 points compared to the control group. Although our findings suggest that the expert cues can also influence the individual's position on a specific issue under some circumstances, the effect for this treatment was, at most, half of the effect that we observe for the episodic treatment. This allows us to conclude that episodic frames are more persuasive than expert’s endorsements.

Figure 1. Marginal effects of treatments (in reference to control group)

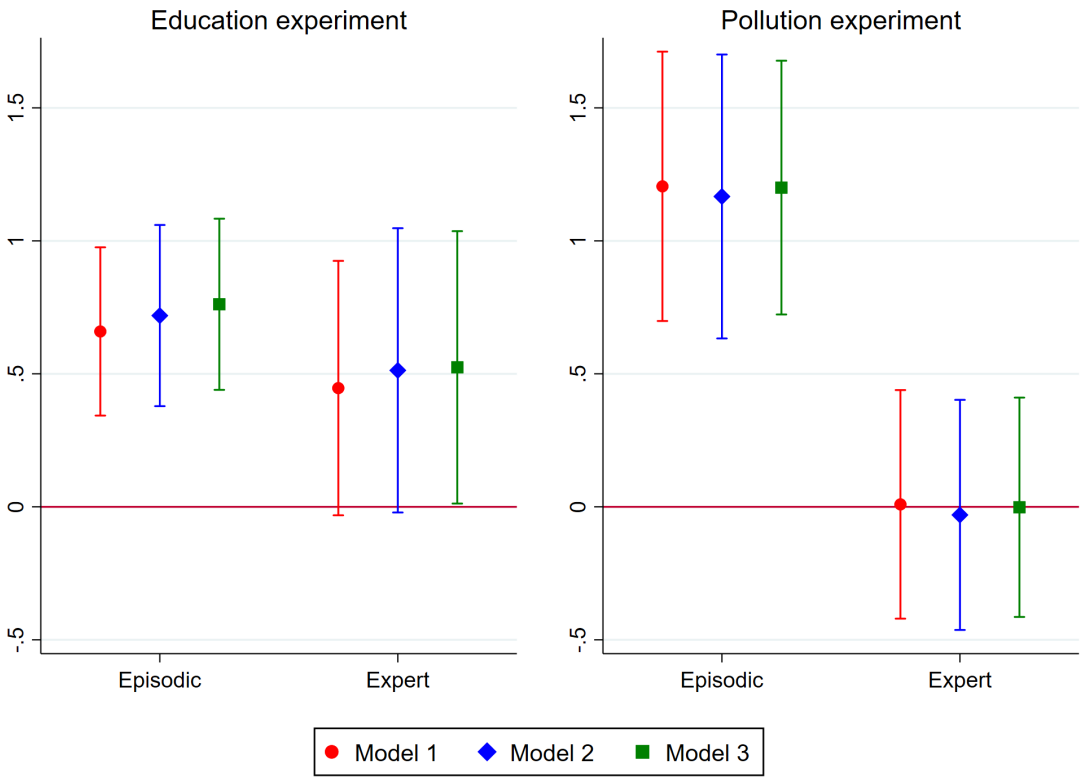

Education experiment
Pollution experiment
1.5
1
.5
0
-.5
Episodic
Expert
Model 1
Model 2
Model 3

Table 2. OLS regression results on policy support

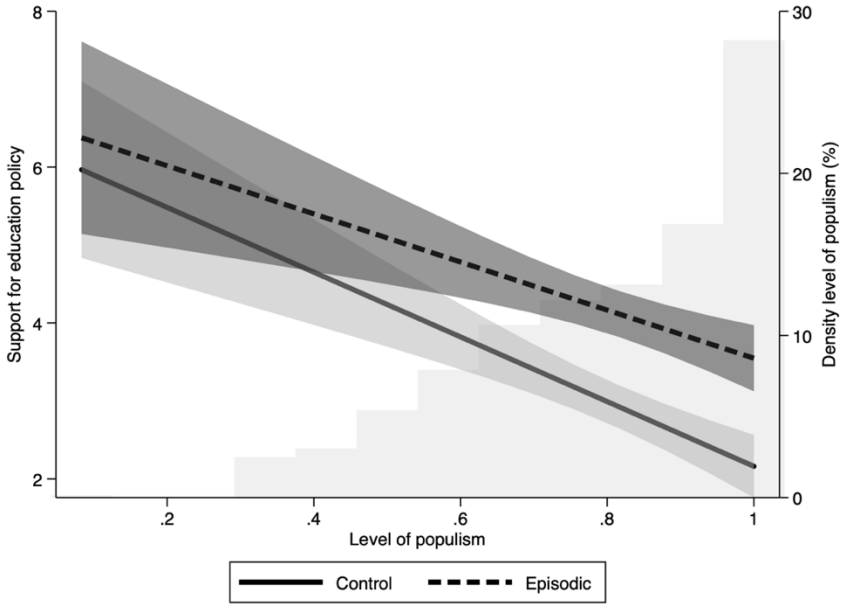
DV: Policy support	Education experiment			Pollution experiment		
Variables	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Treatment						
(Ref: Control)						
Episodic	0.659***	0.719***	0.762***	1.205***	1.167***	1.200***
	(0.150)	(0.161)	(0.153)	(0.240)	(0.253)	(0.226)
Expert	0.447*	0.513*	0.524**	0.009	-0.030	-0.002
	(0.227)	(0.253)	(0.243)	(0.204)	(0.205)	(0.195)
Gender						
(Ref: Women)						
Men		0.808***	0.771***		-0.036	-0.047
		(0.172)	(0.167)		(0.222)	(0.235)
Age						
(Ref: 18-24)						
24-34		-0.274	-0.240		-0.575***	-0.650***
		(0.237)	(0.227)		(0.197)	(0.196)
35-49		-1.053***	-1.043***		-0.599*	-0.635**
		(0.239)	(0.221)		(0.311)	(0.301)
50-64		-1.784***	-1.715***		-0.695**	-0.817**
		(0.204)	(0.206)		(0.291)	(0.291)
Education						
(Ref: Compulsory)						
Secondary		-0.380	-0.400*		0.636**	0.506
		(0.228)	(0.227)		(0.282)	(0.299)
Tertiary		-0.391	-0.423*		0.866***	0.631***
		(0.246)	(0.231)		(0.142)	(0.153)
Ideology			0.177***			-0.117***
			(0.030)			(0.026)
Political Interest						
(Ref: None)						
Little			-0.555**			0.748*
			(0.208)			(0.404)
Quite			-0.282			1.013**
			(0.312)			(0.396)
A lot			-0.572*			1.174**
			(0.286)			(0.551)
Constant	3.047***	3.342***	2.943***	5.487***	5.606***	5.473***
	(0.207)	(0.314)	(0.445)	(0.173)	(0.340)	(0.352)
Regional F.E.	×	✓	✓	×	✓	✓
Observations	1,127	1,127	1,127	1,132	1,132	1,132
R-squared	0.008	0.098	0.120	0.032	0.059	0.076

*Note: Robust standard errors in parentheses (*** p<0.01, ** p<0.05, * p<0.1).*

We then tested whether this composite indicator of populism is relevant with regard to the effect of the treatments discussed in the previous section. The results of the interaction effect between the treatments and populist attitudes suggest that this is, indeed, the case. This finding is robust to the inclusion of all the socio-demographic and political controls.

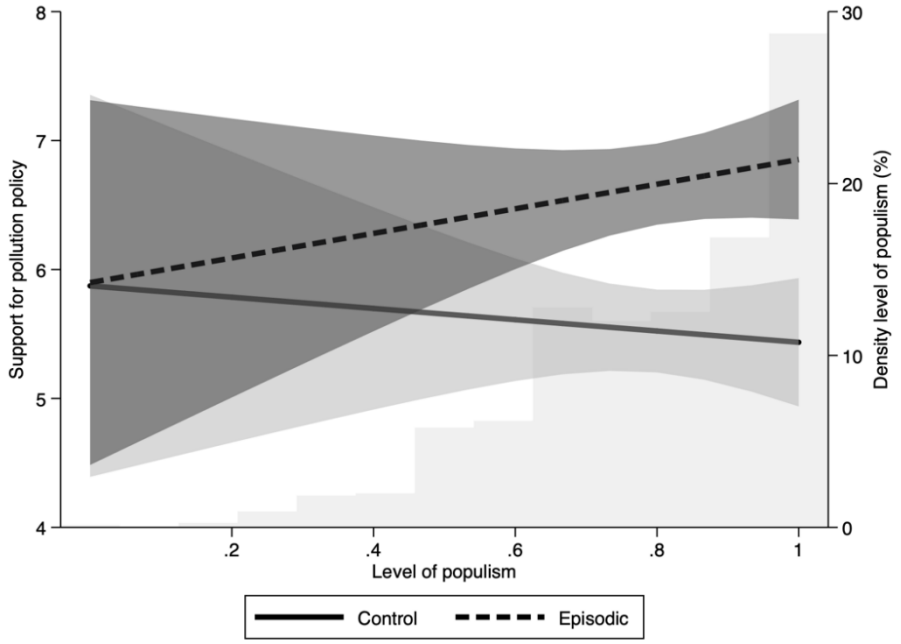
Figure 2 illustrates the predicted probabilities on support for the educational spending policy for the episodic and control treatments over the level of populism, which ranges from 0 (non-populist) to 1 (very populist). Whereas a higher level of populism is associated with lower support for the policy, we observed that, on average, those who were exposed to the personal story displayed higher support for the policy as the level of populist attitudes increased. At the highest level of populism, those in the control group showed, on average, 1.38 points (out of ten) lower support for the educational policy than those in the episodic group.

Fig 2. Effect of treatments on support for education spending policy over the level of populism



Note: Results based on the inter

Fig 3. Effect of treatments on support for the reduction of pollution policy over the level of populism



We obtained a very similar result for the reduction of pollution experiment illustrated in Figure 3. In this case, we found that, while the support for the policy declined slightly, as populist attitudes increased for the control group, the support for the policy actually increased in the episodic treatment as the populist attitudes increased. At the highest level of populism, those treated with the personal story showed, on average, 1.42 points (out of ten) more support for the policy than those in the control treatment. Overall, both experiments provided the same results: as the citizen's level of populism increased, the effect of the episodic treatment had a significantly larger impact.(Orriols & Cordero, 2016; Vidal, 2018) **(Hameleers et al., 2017; Nguyen, 2019; Rico et al., 2017, 2020)Conclusions**

The experiments presented in this article contribute to a better understanding of the kind of cues that make policies more persuasive. Contrary to previous studies comparing the persuasiveness of factual information relative to partisan claims, our evidence shows that

factual information, in the form of an expert recommendation, has less of an advantage when it has to compete with personal stories of people affected by the policy. Although experts' recommendations increased support for one of the policies, they produced less than half the increase in support than the use of personal stories. We can interpret these results as evidence in line with communication studies' findings showing that peers' opinions tend to be more persuasive than those expressed by politicians or experts. Our experiments have also highlighted that personal stories' greater persuasiveness is mainly driven by populist attitudes.

These results have important implications for understanding public opinion formation, especially in times of growing populism. We documented that campaigns that base most of their claims on experts' recommendations might be less effective than those that use personal stories to connect with them. This phenomenon is particularly problematic when these personal stories, rather than exemplifying an existing pattern, are cherry-picked, not representative, or worst, invented. When this occurs, personal stories can manipulate the beliefs of citizens and induce them to make decisions against their self-interest. Nonetheless, further evidence should explore this possibility in depth. (Rico et al., 2017)

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