Hurricane Names, Candidate Exposure, and Voter Preferences *

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Abstract: We show that, in contrast to classic models of voting and political advertising, mere exposure to (and thus familiarity with) a candidate may lead to greater support. Using data on sub-national elections in Louisiana and names used for Atlantic tropical storms from 1982 to 2020, we find that a down-ballot candidate receives a 12.1-percentage-points higher vote share in elections where a same-name hurricane hit Louisiana before the election. This result holds after considering name-specific popularity and potential behavioral responses from candidates. Our result contributes to our understanding of political campaigning and advertising markets more generally.

Keywords: Candidate exposure, the mere-exposure effect, voter preference, hurricane names

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1 Introduction

Political candidates pour substantial resources into increasing their exposure to voters, including but not limited to political advertising and campaigning. The classic theory of electoral politics assumes that, for the most part, voters make rational decisions based on candidates' policy platforms (Downs, 1957). Under this view, candidate exposure serves to convey information about a given set of policies (López-Moctezuma et al., 2022). Alternatively, the "mere-exposure effect," a well-established form of cognitive bias (Zajonc, 1968), suggests that previous exposure lowers the attention cost of an object and leads to a preference towards it. This paper provides evidence that candidate exposure can directly change voter preferences, and that the mere-exposure effect plays a surprisingly prominent role in determining voter choices in down-ballot elections.

The mere-exposure effect may explain various salient political phenomena, including incumbency advantage (Prior, 2006), political dynasties (Rossi, 2017), celebrity politicians (Xiong, 2021), and political advertising (Spenkuch and Toniatti, 2018). However, it is hard to isolate and quantify this effect in real-world electoral politics, because candidate exposure generally comes bundled with information that can directly change voter beliefs. It is possible to organize a field experiment that randomly sends uninformative messages to voters to increase candidate exposure, but the presence of these messages may itself serve as a signal for a candidate's competence and thus change voter beliefs. This is part of why there is little empirical evidence in the literature of the mere-exposure effect in elections.

We overcome this identification challenge by exploiting the unique naming system of hurricanes, which is irrelevant to elections but sometimes makes some candidates' names more salient. In 1979, the World Meteorological Association developed six permanent name lists for Atlantic tropical storms (Figure A1)[1]; these lists are used on a rotating basis and recycled every six years. Each season's list assigns names to the hurricanes in time order. As a result, all the

[1]Each name list consists of an even split of women's and men's names (e.g., Alberto, Beryl, Chris, Debby, etc.). Earlier naming systems in the US abandoned the latitude-longitude identification methods in 1953, instead using easily remembered female names to facilitate the exchange of detailed storm information.

storms are given names that were decided back in 1979[2]. Given the exogenous timing and path of a hurricane, whether a candidate shares the same (fore)name with any hurricane hitting his/her state before the election (henceforth, a same-name candidate) is plausibly exogenous.

When a hurricane is about to make landfall, it attracts attention from local authorities and media, alerting residents to the danger and often prompting them to evacuate[3]. This inevitably makes the residents more familiar with the hurricane's name[4]. Such familiarity is unlikely to change voters' opinions on a same-name candidate since (1) the event of landfall is objectively independent of a candidate's competence or policies, and (2) more importantly, voters are likely to make decisions on down-ballot elections only when they receive the ballot. Because voters are unlikely to link the politically-irrelevant hurricane to subsequent same-name local candidates, any same-name effect on vote share is most likely to work through the mere-exposure effect.

This paper focuses on sub-national elections, which elect the overwhelming majority of U.S. officials: except for 542 federal offices, every elected official in the U.S. took office after a state or local election. The U.S. has around 90,000 local governments (Warshaw, 2019), and they spend approximately one-quarter of the nation's public budget (Anzia, 2022). Because sub-national elections receive comparatively little media attention, voters are likely to cast their ballots in a low-information environment, making the role of the mere-exposure effect more relevant (Kam and Zechmeister, 2013; Sides, Vavreck and Warshaw, 2021). This paper analyzes this effect using the sub-national election data from Louisiana, for two reasons. Given the notoriously rare records of U.S. local elections (Anzia and Bernhard, 2022), to the best of our knowledge, Louisiana is the only state that (1) is hit by hurricanes frequently, around once every two years, and (2) publicizes all its election results starting from 1982, very close to the year (1979) of the last major change in the naming system of hurricanes.

[2]A storm name is only retired if the storm was particularly deadly or catastrophic, like Hurricane Katrina in 2005 or Hurricane Dorian in 2019. In that case, a replacement name is selected by a committee at the World Meteorological Organization. The full list of retired Atlantic storm names and a detailed history of the naming system of hurricanes can be found at the website of the National Hurricane Center.

[3]Kaplan, Spenkuch and Yuan (2019) observe that natural disasters will attract public attention, which reduces the attention paid to politics.

[4]For evidence suggesting the public's awareness of hurricane names, Jung et al. (2014) showed people perceive the riskiness of female-named and male-named hurricanes differently.

Using data on sub-national elections in Louisiana from 1982 to 2020, we provide evidence that sharing a name with a hurricane that makes local landfall significantly increases a candidate's vote share. The magnitude is equivalent to an incumbency advantage in our context. Our main finding remains unchanged after including the ballot order, incumbent status, first-name fixed effects, and contest fixed effects. We also conduct randomization and placebo tests to show that our results are unlikely to happen by chance. Moreover, we investigate an alternative interpretation for higher vote shares, namely that hurricanes may lead some same-name candidates from the lower end of the vote share distribution to drop out of the election. We find that the ratio of the number of same-(fore)name candidates to the number of all candidates does not change, hence ruling out compositional changes as an alternative explanation for higher vote shares. In sum, our results imply that candidate exposure can play a prominent role in candidate support in low-level elections, by directly changing voter preferences[5].

This paper mainly contributes to ongoing discussions of how political persuasion works. Two models dominate theories of political persuasion: belief-based models, in which candidate exposure affects voters' beliefs, and preference-based models, in which uninformative messages affect voters' behavior independently of beliefs (DellaVigna and Gentzkow, 2010). Each one has distinct policy and welfare implications: as Kamenica and Gentzkow (2011) suggested, when voters are rational, more information usually improves welfare. However, the welfare implication is ambiguous in preference-based models. The previous literature (Wolfers, 2002; DellaVigna and Kaplan, 2007; Dewan, Humphreys and Rubenson, 2014; Levy and Razin, 2015; Kendall, Nannicini and Trebbi, 2015; Bagues and Esteve-Volart, 2016; Ajzenman and Durante, 2022; López-Moctezuma et al., 2022) has focused primarily on voters' beliefs. For example, DellaVigna and Kaplan (2007) argued that overreaction to signals explains how media exposure affects voters. While we also focus on behavioral voters, this paper is the first to show how voters' real-world preferences are directly changed by candidate exposure without updating information. This result echoes the long-standing theory in behavioral economics that channels like salience, attention and associative reasoning influences the result of persuasion (DellaVigna and Gentzkow, 2010; Mullainathan, Schwartzstein and Shleifer, 2008). This find-

[5]Section 3.3 provides a detailed discussion on the interpretation.

ing provides novel insights into the additional votes for candidates with more exposure, such as incumbents (Gelman and King, 1990; Prior, 2006; Gasper and Reeves, 2011), those from a political dynasty (Dal Bó, Dal Bó and Snyder, 2009; Rossi, 2017; George, 2020), or those who heavily invest in political advertising (Huber and Arceneaux, 2007; Ashworth, Clinton et al., 2007; Krasno and Green, 2008; Gerber et al., 2011; Da Silveira and De Mello, 2011; Gordon and Hartmann, 2013; Kendall, Nannicini and Trebbi, 2015; Spenkuch and Toniatti, 2018; Sides, Vavreck and Warshaw, 2021).

Our work also directly speaks to the literature on the effect of name recognition on voting (Kam and Zechmeister, 2013; Fukumoto and Miwa, 2018). We document a positive effect of (fore)name recognition on the vote share in real-world, low-information elections in the U.S. More importantly, we show that the effect of name recognition exists even in the presence of informative shortcut cues (e.g., partisanship). Lastly, in contrast to prior studies, our research setting permits us to support a particular channel underlying the effect of name recognition: the mere-exposure effect[6].

2 Data and Empirical Strategy

2.1 Data Sets

Data on all Louisiana elections for state and local offices, from 1982 to 2020, were scraped from the website of the Louisiana Secretary of State's Office. State offices include Governor, State Senator, State Representative, Secretary of State, State Board or Commission Member, Assessor, etc. We exclude the gubernatorial elections since they are relatively high-profile elections. Local offices include the Mayor, City Council Member, Sheriff, School Board Member, Police Juror, Justice of the Peace, Local Board or Commission Member, etc. There were

[6]There are generally two potential channels underlying name recognition: the mere-exposure effect and statistical inference. Mere-exposure theories argue that individuals tend to choose objects to which they had been previously exposed due to increases in familiarity, even in the absence of consciousness (Zajonc 1968; for a meta-analysis, see Bornstein 1989). Statistical inference argues that conditional on the extent of name recognition, voters actively make inferences about the candidate's personality traits. Fukumoto and Miwa (2018) found that national candidates running for the Japanese House of Councillors obtained 69% larger vote shares in the presence of a same-surname local candidate. As acknowledged in Fukumoto and Miwa (2018), it is hard to distinguish between the mere-exposure effect and statistical inference. In their context, voters are likely to use surnames to make inferences about national candidates.

26,716 contests and 77,026 candidates during the sample period. The data contains the name of the candidate, the vote a candidate received, his or her party affiliation, the contest name, the date of the election, etc.

The historical basic hurricane information was obtained from the Hurricane Research Division of NOAA. Hurricanes do not happen frequently: there were 14 hurricanes in the 1990s, 19 in the 2000s, and 13 in the 2010s. Some states in the U.S. never experience hurricanes, but states like Florida, Texas, and Louisiana are hit relatively often. During the sample period, Louisiana was hit by 18 hurricanes, but only four of those hurricanes - Andrew, Cindy, Barry, and Laura - share a forename with any local candidates in the year they hit Louisiana. This is partly because some hurricane names are not popular (e.g., Gustav), and some are even not first names (i.e., Delta and Zeta)[7]. Other hurricane names are popular (e.g., Danny), but they coincidentally hit Louisiana in a different year from the national elections. So, there were not many elections the year Hurricane Danny hit Louisiana. As a result, sharing a name with a hurricane is a rare event, and only 15 candidates—5 named Andrew, 5 named Barry, 4 named Laura, and 1 named Cindy—shared a name with hurricanes in the year they ran for office. In later analysis, we will pay particular attention to the robustness of our statistical analysis. Our randomization tests show that the result is unlikely to be a coincidence of the draw for these 15 specific candidates.

2.2 Empirical Strategy

We use the following specification to examine whether down-ballot candidates who share the same name with a hurricane that hit up to 180 days before the election receive a larger vote share:

$$voteshare_{ij(et)} = \alpha_e + \beta_1 samename_{ij} + \pi_t + \pi_p + \pi_f + \epsilon_{ij} \tag{1}$$

where $voteshare_{ij(et)}$ is the vote share candidate i received in contest j. $samename_{ij}$ is a dummy variable indicating whether candidate i shares the same (first) name with any hurricanes that hit Louisiana 180 days before contest j[8]. We control for contest name fixed effects

[7] The Greek alphabet was used for the 2020 hurricane season after the official list ran out of names.

[8] We also consider nicknames. For example, if a person's name is Laurie, Lauren or Laurinda, then she shares the same name with Hurricane Laura.

α_e[9], year fixed effects π_t, party fixed effects π_p, and first-name fixed effects π_f. Standard errors are clustered at the first-name level[10].

Although the timing and path of a hurricane are random, names that appear in the name lists of hurricanes might be particularly popular [11]. Thus, including first-name fixed effects is essential to the analysis, which controls for first-name popularity. Our identifying assumption is that the timing of a candidate sharing a specific (fore)name with the hurricane hitting Louisiana is exogenous. It is satisfied in our setting since hurricanes are exogenous, and since the name list of the hurricane in a given year was predetermined in 1979. As a result, our coefficient of interest, β_1, should be estimated without bias conditional on the first-name fixed effects.

3 Results

3.1 Main Results

Column (1) in Table 2 provides our baseline specification. The coefficient on the same name implies that sharing the same name with a hurricane has a highly significant, positive impact on the candidate's vote share (a 12.1-percentage point increase).

To better understand this magnitude, we compare it to two benchmarks: the ballot order effect and incumbency advantage. Those two factors are widely documented to have a non-trivial impact on one's vote share (Koppell and Steen, 2004; Augenblick and Nicholson, 2016; Blom-Hansen et al., 2016; Gelman and King, 1990; Prior, 2006; de Benedictis-Kessner, 2018). In Louisiana, the names of the candidates for each office are arranged alphabetically by surname. If the surname is uncorrelated with the forename, the inclusion of ballot order should not affect our main results. We include ballot ordering in column (2). The ballot order effect is mild

[9] There are around 6,000 contest names. For state elections, the contest name refers to the general title of the election—for example, Attorney General, Secretary of State, etc. For local elections, the contest name refers to the specific title of the election. For example, Chief of Police – City of Abbeville, Chief of Police – City of Baker, Chief of Police – City of Breaux Bridge, etc.

[10] Our results remain unchanged when standard errors are clustered at either the contest level or contest-name level.

[11] We do not find that candidates whose first name is Barry, Andrew, or Laura have higher vote shares during normal years, but they do gain a higher vote share in the presence of a same-(fore)name hurricane. In fact, candidates named Andrew generally have lower vote shares than other candidates during normal years.

compared to the impact of sharing a name with the hurricane. In column (3), we include the candidate's incumbent status[12]. Results show that the same-name effect has similar magnitude to the incumbency advantage in our context, which implies that the mere-exposure effect plays a surprisingly big role in affecting voting decisions in low-level elections.

The inclusion of ballot order and incumbent status also helps us alleviate the concern that our results may coincidentally capture the ballot order effect or incumbency advantage due to the small sample of treated observations. In fact, our results are unlikely to be confounded by the incumbency advantage, since only 1 out of 15 treated observations involve incumbents. However, it raises the concern that a potential incumbent disadvantage in the presence of terrible events (e.g., hurricanes) may be a confounder. Voters may punish incumbents for even random negative experiences (Healy, Malhotra and Mo, 2010). If this is the case, all non-incumbents might obtain a higher vote share in the presence of hurricanes. To show that this incumbent disadvantage does not contaminate our findings, we show that there was no incumbent disadvantage after the landfall of a hurricane in our context in column (4)[13]. Moreover, in column (5), we find that other non-incumbents do not receive a higher vote share in contests that include a same-name candidate, suggesting that only candidates with a hurricane's name obtain a higher vote share.

Lastly, in column (6), we include contest fixed effects (26,716 contests) to control for all contest-specific characteristics (e.g., the number of candidates, the election date, contest name, etc.). Our results remain unchanged: candidates who share the same (first) name with the hurricane hitting Louisiana before the election will receive a higher vote share.

Randomization Tests — To check the extent to which the result is a pure coincidence driven by a particular combination of 15 candidates, we conduct a randomization test by randomly assigning the same name status to candidates. Table 1 shows that five Andrews, five

[12] In Louisiana, the incumbent status is not printed on the ballot. We construct the variable $incumbent$ by checking whether a candidate was the winner of the last contested election for the same office in our dataset. It is worth noting that the measurement might be imperfect if a candidate ran for the same office unopposed last time, as unopposed contests are not included in the dataset. Also, the variable $incumbent$ is missing for candidates in the first four years in our sample due to the lack of historical records.

[13] $hurricane$ is a dummy variable indicating whether a contest was held within six months after the landfall of any hurricanes.

Barrys, four Lauras, and one Cindy shared the same name with hurricanes during the sample period. To preserve this fact (i.e., the same composition of the first name), we randomly select five other Andrews, five Barrys, four Lauras, and one Cindy from the whole sample and assign the same-name status to them. Using this false same-name status variable, we estimate the "effect" using the baseline specification. We expect the magnitude to be very close to 0 since randomly selected candidates did not share their names with any hurricane in the years when they ran for office. To increase the statistical power, we repeat the randomization tests 1,000 times.

Figure 1 shows the distribution of the estimates from the 1,000 runs, along with the baseline estimate, 0.121, from column (1) in Table 2. The mean is -0.005 and the standard deviation is 0.047, suggesting there is no effect with the randomly constructed same-name status. Meanwhile, the baseline estimate is ranked 3^{rd} among the 1,000 runs. Combined, these findings suggest that the positive and significant effect of sharing the same name on a candidate's vote share is real and unlikely to happen by chance.

Placebo Tests — There are six name lists of hurricanes, which are recycled every six years. In this subsection, we exploit this institutional feature and conduct five placebo tests using five alternative name lists that would be used in the subsequent year. For example, the hurricane hitting Louisiana in 2019 was named Barry, but it would have been named Bertha if we used the hurricane name list from 2020. Similarly, as we can see from Figure A1, the names of the hurricane would be Bill, Bonnie, Bret, and Beryl for 2021, 2022, 2023, and 2024, respectively. We expect candidates named Bertha would not be affected in 2019 since the name of the hurricane was Barry. Column (1) of Table A1 confirms this expectation. We do not find that candidates who share the same name with hurricanes from the next year's list receive a higher vote share. We repeat the same exercise for the remaining four alternative name lists, and the results are reported from columns (2) to (5) in Table A1.

The Event-study Specification — We also present the event-study plot in Figure A2 [14]. We do not find any statistically significant lead-lag effects, and the coefficients of all lead-lag

[14]Specifically, we add three lead terms and three lag terms in equation 1. To construct lead-lag terms, we assume that the hurricane made landfall before or after n years of its actual landfall.

terms are small, implying that same-name hurricanes do not have pre-trends and only affect elections in the short run.

3.2 Candidate Behavior

One possible concern with our results is that sharing the same name with a recent hurricane may change candidates' behavior. Below, we examine two potential channels that candidate behaviors can influence: the mobilization effect, which states same-name candidates strategically utilizes the landfall of the hurricane to benefit their campaigns; and the composition change, which states that same-name candidates who are at the lower end of the vote share quit the election. We argue that hurricanes are unlikely to influence candidate behaviors.

The Mobilization Effect — Could the mobilization effect of a same-name candidate explain the higher vote share? Assume a same-name candidate strategically utilizes the hurricane's name to improve the his/her visibility among the voters[15]. Since down-ballot contests are themselves not well-known, such efforts increases the visibility of the entire contest, which reduces voter roll-off[16] and raises the turnout. That is, the mobilization effect has potential impacts on both the intensive and the extensive margin. We estimate the following specification using the contest-level voter turnout data:

$$ln(Turnout_j) = \alpha_e + \beta_1 samename\ race_j + \pi_t + \epsilon_j \tag{2}$$

where $ln(Turnout_{j(et)})$ is the logarithm of the voter turnout in contest j. $samename\ race_j$ is a dummy variable indicating whether contest j has any candidates that share the same (first) name with any hurricanes that hit Louisiana up to 180 days before the contest. We control for contest name fixed effects and year fixed effects. Standard errors are clustered at the contest name level. Results for equation (2) are reported in column (7) of Table 2. We do not find evidence to support the mobilization effect among same-name candidates in low-information elections.

[15]Relatedly, Gulzar, Robinson and Ruiz (2022) find that candidates respond to the (randomly assigned) top position on the ballot by raising and spending more money on campaigns.

[16]Voter roll-off refers to the behavior of leaving the down-ballots blank, which is well-documented in American politics (Wattenberg, McAllister and Salvanto, 2000; Streb, Frederick and LaFrance, 2009).

Consider the nature of down-ballot elections, there is usually low or even no information available for voters (Kam and Zechmeister, 2013). Voters may not even know the candidates' names before entering the voting booth. It is less likely that the existence of a same-name candidate in a sub-national election can mobilize a significant number of voters.

Composition Change of Candidate Pool — Even if having a same-name status may hurt a candidate's vote share, we might still observe a positive coefficient on the same name in our baseline specification, if candidates who are at the lower end of the vote share distribution decided not to run for office if they shared a name with the hurricane.

To address this concern, we use the following specification to directly test whether hurricanes lead to fewer same-name candidates running for office:

$$Ratio_{ft} = \alpha_f + \beta_1 samefirstname_{ft} + \pi_t + \epsilon_{ft}$$

where $samefirstname_{ft}$ is a dummy variable indicating whether the first name f is the name used for any hurricanes that hit Louisiana during the year t. $Ratio_{ft}$ could be either the number of candidates whose first name is f in year t, normalized by the total number of candidates in year t[17], or normalized by the total number of elections in year t [18]. We control for year fixed effects π_t and first-name fixed effects α_f. Standard errors are clustered at the first-name level.

Results are reported in Table 3. We do not find that the presence of a hurricane leads to fewer candidates who share its name. The finding helps us rule out the alternative explanation that hurricanes negatively impact the vote share of same-name candidates and change the composition of candidates who run for office.

3.3 Channels and Implications

The empirical analysis above suggests that the landfall of a hurricane changes voters' behavior in a way that favors candidates that share the hurricane's name. Theoretically, this

[17] $Ratio1_{ft} = \frac{\#\ of\ first\ names_{ft}}{\#\ of\ candidates_t}$
[18] $Ratio2_{ft} = \frac{\#\ of\ first\ names_{ft}}{\#\ of\ elections_t}$

may be due to voters actively drawing inferences from the names or a subconscious preference for objects that are more frequently mentioned by the media. In DellaVigna and Gentzkow (2010), these two channels are respectively denoted by belief-based and preference-based persuasion. While economists commonly associate voter behaviors to belief-based persuasion, our analysis attributes our empirical findings to the preference-based channel.

Bayesian Paradigm — Candidate exposure may be deemed as positive messages by voters. Consider the setup of Bayesian persuasion (Kamenica and Gentzkow, 2011), where the voters (receivers) deem the hurricane as a signal that potentially reveals information about the same-name candidate's capability. Objectively, the hurricane does not convey any information since sharing the name with a hurricane is probabilistically independent of the personal traits of the candidates. Given a correct understanding of the underlying probabilistic distribution, the voters' beliefs toward the same-name candidates' capability should not be influenced by the hurricane landfall[19].

Voters may also perceive illusory correlations between hurricanes and same-name candidates due to cognitive biases. Most cognitive biases do not systematically influence the population's beliefs about the traits of same-name candidates[20]. The most relevant one is representativeness heuristic (Kahneman and Tversky, 1972; Gennaioli and Shleifer, 2010), which refers to the tendency to overestimate the correlation between events with similar essential characteristics (in our case, the name shared by hurricane and candidate). Due to the disastrous outcomes brought by hirricanes, such over-inference would hurt the image of same-name candidates, which induces lower vote shares. In this case, the coefficient for $samaname_{ij}$ should be negative, which is inconsistent with our observations.

Ambiguity Reduction — Decision-makers may prefer a more familiar choice because they feel less ambiguous about its consequences. For example, familiarity increases the attractiveness of an asset by reducing the perceived amount of ambiguity of its payoffs (Epstein

[19]While the landfall of hurricanes may generate signals that reveal information about the incumbents, our results are robust after controlling candidate incumbency.

[20]For example, the confirmation bias leads to belief polarization, which produces ambiguous impact on the vote share of a candidate. Many other cognitive biases, like optimism bias or probability neglect, are irrelevant in our setting.

and Miao, 2003; Uppal and Wang, 2003; Boyle et al., 2012; Dlugosch, Horn and Wang, 2014). Consider a voter that is ambiguous about the same-name candidate's traits. Since the landfall of hurricane is independent of the traits of the same-name candidate, the voter's set of beliefs should not shrink according to all mainstream models of information processing under ambiguity[21]. Therefore, our results are not likely to be driven by ambiguity reduction.

Whether we consider (non-)Bayesian updating or the presence of ambiguity, our analysis rules out the possibility that hurricanes benefit same-name candidates by influencing voters' beliefs. Next, we illustrate how our empirical result supports the channel of preference-based persuasion.

Processing Fluency — Numerous results in neuroscience and psychology suggested familiarity increases "processing fluency", in other words, reduces the cognitive cost to process stimuli[22]. In this paper, the hurricane serves as an exogenous shock that increases the familiarity of its name among the voters. The processing fluency theory thus predicts voters tend to notice and choose same-name candidates at the voting booth, whose names are less costly to perceive. This prediction is consistent with our result that the coefficient $samaname_{ij}$ is positive, which states the landfall increases the votes for same-name candidates. Such an effect is especially significant when voters have little idea of what to choose, which corresponds to the low-information environment of sub-national elections.

More generally, this channel echoes the long-standing theory in behavioral economics that non-informative dimensions may affect choices through channels like salience, attention and associative reasoning (DellaVigna and Gentzkow, 2010; Mullainathan, Schwartzstein and Shleifer, 2008). This is in sharp contrast to the belief-based persuasion models primarily discussed by the voting literature. Through this channel, messages about an election (even uninformative ones like a hurricane that shares a name with some candidates) can influence voters'

[21] Including full Bayesian updating, maximum likelihood updating (Gilboa and Marinacci, 2016) and the model introduced by Epstein and Schneider (2007).

[22] For example, readers spend less processing time on familiar words than on novel words (Williams and Morris, 2004); familiar strings of letters attracting attention, causing the unfamiliar letter strings to be processed less effectively (Flowers, Polansky and Kerl, 1981); the brains of infants process the familiar auditory stimuli more quickly than unfamiliar ones (Thierry, Vihman and Roberts, 2003); subjects are more efficient in detecting changes at the location of a familiar item (Christie and Klein, 1995).

behavior without entering their beliefs. Our results, then, provides us with a non-informative approach to understanding various important topics in the political economy literature. Three notable examples are political advertising, incumbency advantage, and political dynasty.

Political Advertising — A large body of work that straddles economics, political science, and marketing aims to estimate the causal effects of political advertising on voting behavior — voter turnout and vote choice (Huber and Arceneaux, 2007; Ashworth, Clinton et al., 2007; Krasno and Green, 2008; Gerber et al., 2011; Da Silveira and De Mello, 2011; Gordon and Hartmann, 2013; Kendall, Nannicini and Trebbi, 2015; Spenkuch and Toniatti, 2018; Sides, Vavreck and Warshaw, 2021)[23]. With few exceptions, the existing work has provided little empirical evidence on the underlying channel through political advertisements work[24]. The mere-exposure effect highlights the importance of getting known among the voters: people can simply cast more votes for those candidates that are frequently mentioned by the media.

Incumbency Advantage — Incumbency advantage is a well-documented phenomenon in politics (Gelman and King, 1990). Gasper and Reeves (2011) find that a disaster declaration increases support for the incumbent. This may be due to higher visibility in the media after the disaster, making the incumbent more familiar to the voters. More generally, Prior (2006) shows that the spread of television in the 1960s led to a sudden increase of incumbency advantage in U.S. House elections. Since incumbents tend to be associated with more exposure, the mere-exposure effect can partially explain the incumbency advantage in elections.

Political Dynasties — Political dynasties remain ubiquitous in modern democratic societies (George, 2020). Rossi (2017) finds that the family name-recognition channel could be a mechanism behind dynastic political success. A woman in Argentina, for instance, is more likely to choose her husband's surname for political activities when married to someone with a recognized surname. The mere-exposure effect implies that voters may choose candidates with surnames they were previously exposed to.

[23] See DellaVigna and Gentzkow (2010) and Jacobson (2015) for reviews.

[24] One exception is Kendall, Nannicini and Trebbi (2015). They find that voters who randomly received messages about the incumbent's valence or ideology updated their beliefs and supported the incumbent more.

4 Conclusion

This paper studies the role that candidate exposure plays in changing voter preferences in real-world low-level elections in the U.S. We show robust statistical evidence that in Louisiana, candidates receive a higher vote share when they share a (fore)name with a hurricane making landfall before the election. The mere-exposure effect documented in this work provides a window into behavioral channels underlying many salient political phenomena (e.g., political advertising, incumbency advantage, political dynasty, etc.). Future research can examine whether the mere-exposure effect is one of the channels underlying these political phenomena and investigate whether the mere-exposure effect still exists in high-level and high-information elections.

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Table 1: The list of hurricanes hit Louisiana during 1982-2020

Year	Month	Name	Election Dates	# of obs
1985	Aug	Danny		
1985	Oct	Juan		
1988	Sep	Florence		
1992	Aug	Andrew	3-Oct & 3-Nov	5
1997	Jul	Danny		
2002	Oct	Lili		
2005	Jul	Cindy	12-Nov	1
2005	Aug	Katrina		
2005	Sep	Rita		
2007	Sep	Humberto		
2008	Sep	Gustav		
2008	Sep	Ike		
2012	Aug	Isaac		
2017	Oct	Nate		
2019	Jul	Barry	12-Oct & 16-Nov	5
2020	Aug	Laura	03-Nov & 05-Dec	4
2020	Oct	Delta		
2020	Oct	Zeta		

Notes: This table reports all hurricanes that hit Louisiana between 1982 and 2020. # of obs is the number of candidates who share the same (fore)name with the hurricane. Election dates are the dates of elections when same-name candidates run for office.

Table 2: Baseline results

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Vote Share						ln(Turnout)
samename	0.121**	0.105**	0.124**		0.125**	0.0906*	
	(0.0572)	(0.0519)	(0.0591)		(0.0592)	(0.0492)	
ballotorder		-0.0176***					
		(0.000550)					
incumbent			0.113***	0.112***			
			(0.00241)	(0.00262)			
incumbent*hurricane				0.00557			
				(0.00465)			
nonincumbent in a same-name race					0.00523		
					(0.0335)		
same-name race							-0.0789
							(0.129)
Observations	77,026	77,026	70,454	70,454	70,454	76,438	25,953
R-squared	0.365	0.391	0.408	0.408	0.380	0.613	0.956
Contest Name FEs	X	X	X	X	X	.	X
Year FEs	X	X	X	X	X	.	X
Party FEs	X	X	X	X	X	X	.
First Name FEs	X	X	X	X	X	X	.
Contest FEs	.	.	.	.	.	X	.

Notes: Columns (1) - (6) report the effect of sharing the same name with hurricanes on candidate's vote share. Standard errors are clustered at the first-name level. Column (4) includes a dummy variable $hurricane$. Column (7) reports the effect of having a candidate sharing the same name with hurricanes in a contest on voter turnout. Standard errors are clustered at the contest name level. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

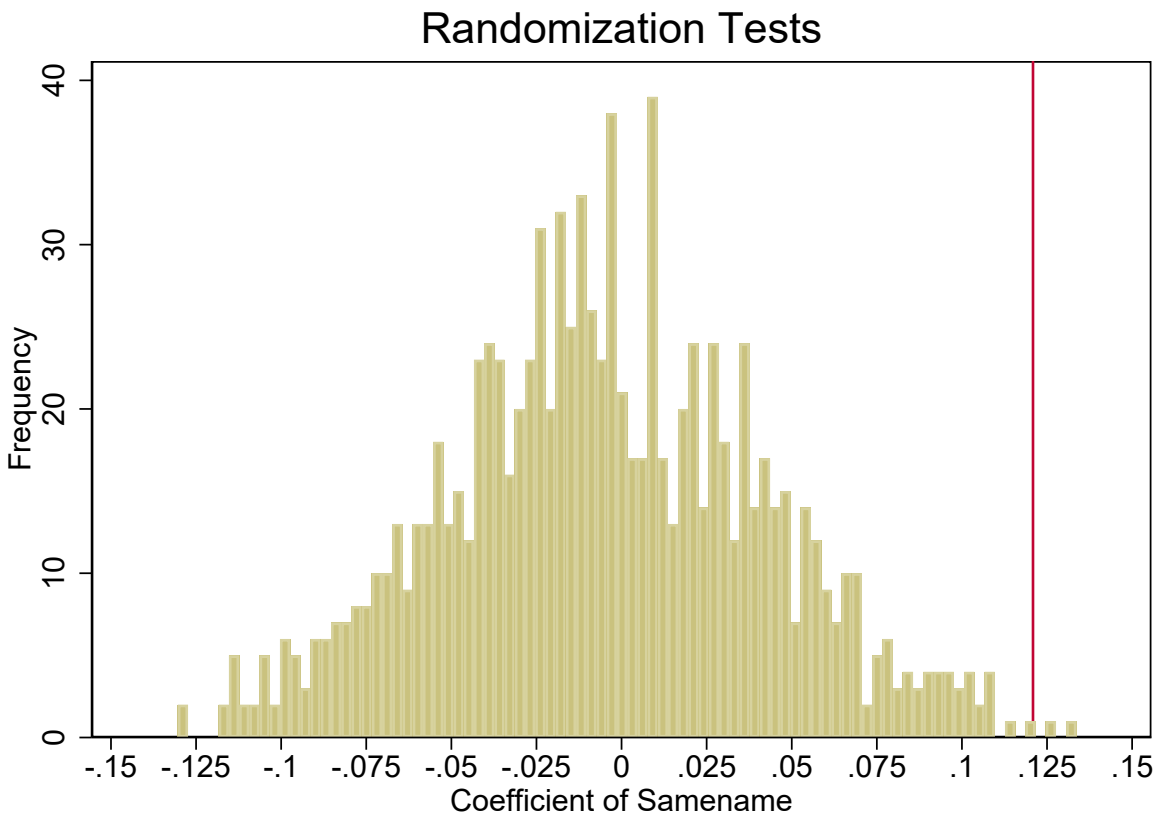

Figure 1: Distribution of estimated coefficients of randomization tests

Notes: The figure shows the distribution of the estimated coefficients from 1,000 simulations randomly assigning the same name status to candidates. The vertical line presents the result of column 1 in Table 2.

Table 3: A diffident composition of candidates?

VARIABLES	(1) Ratio1	(2) Ratio2
samefirstname	-0.000154	-0.000516
	(0.000303)	(0.000852)
Observations	195,663	195,663
R-squared	0.704	0.697
First Name FEs	X	X
Year FEs	X	X

Notes: This table reports results on the effect of sharing the name with hurricane on running for office. $Ratio1_{ft}$ is the number of candidates whose first name is f in year t normalized by the total number of candidates in year t. $Ratio2_{ft}$ is the number of candidates whose first name is f in year t normalized by the total number of contests in year t. Standard errors are clustered at the first-name level. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table A1: Placebo tests

VARIABLES	(1)	(2)	(3)	(4)	(5)
	Vote Share				
samename(Alt Name List 1)	0.0231				
	(0.0199)				
samename(Alt Name List 2)		-0.00739			
		(0.0374)			
samename(Alt Name List 3)			0.0581		
			(0.0412)		
samename(Alt Name List 4)				0.0403	
				(0.0508)	
samename(Alt Name List 5)					0.0851
					(0.107)
Observations	77,026	77,026	77,026	77,026	77,026
R-squared	0.365	0.365	0.365	0.365	0.365
Contest Name FEs	X	X	X	X	X
Year FEs	X	X	X	X	X
Party FEs	X	X	X	X	X
First Name FEs	X	X	X	X	X

Notes: This table reports results from five placebo tests. $samename(Alt\ Name\ List\ 1)$ is a dummy variable indicating whether candidates share the same name with hurricane if we use the alternative name list that would be used in the next year. Other four dependent variables are constructed in a similar way but we use other four alternative name lists. Standard errors are clustered at the first-name level. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

A Online Appendix

Atlantic Names

Atlantic Pronunciation Guide (PDF)

2021	2022	2023	2024	2025	2026
Ana	Alex	Arlene	Alberto	Andrea	Arthur
Bill	Bonnie	Bret	Beryl	Barry	Bertha
Claudette	Colin	Cindy	Chris	Chantal	Cristobal
Danny	Danielle	Don	Debby	Dexter	Dolly
Elsa	Earl	Emily	Ernesto	Erin	Edouard
Fred	Fiona	Franklin	Francine	Fernand	Fay
Grace	Gaston	Gert	Gordon	Gabrielle	Gonzalo
Henri	Hermine	Harold	Helene	Humberto	Hanna
Ida	Ian	Idalia	Isaac	Imelda	Isaias
Julian	Julia	Jose	Joyce	Jerry	Josephine
Kate	Karl	Katia	Kirk	Karen	Kyle
Larry	Lisa	Lee	Leslie	Lorenzo	Leah
Mindy	Martin	Margot	Milton	Melissa	Marco
Nicholas	Nicole	Nigel	Nadine	Nestor	Nana
Odette	Owen	Ophelia	Oscar	Olga	Omar
Peter	Paula	Philippe	Patty	Pablo	Paulette
Rose	Richard	Rina	Rafael	Rebekah	Rene
Sam	Shary	Sean	Sara	Sebastien	Sally
Teresa	Tobias	Tammy	Tony	Tanya	Teddy
Victor	Virginie	Vince	Valerie	Van	Vicky
Wanda	Walter	Whitney	William	Wendy	Wilfred

Figure A1: Six name lists of hurricanes

National Hurricane Center

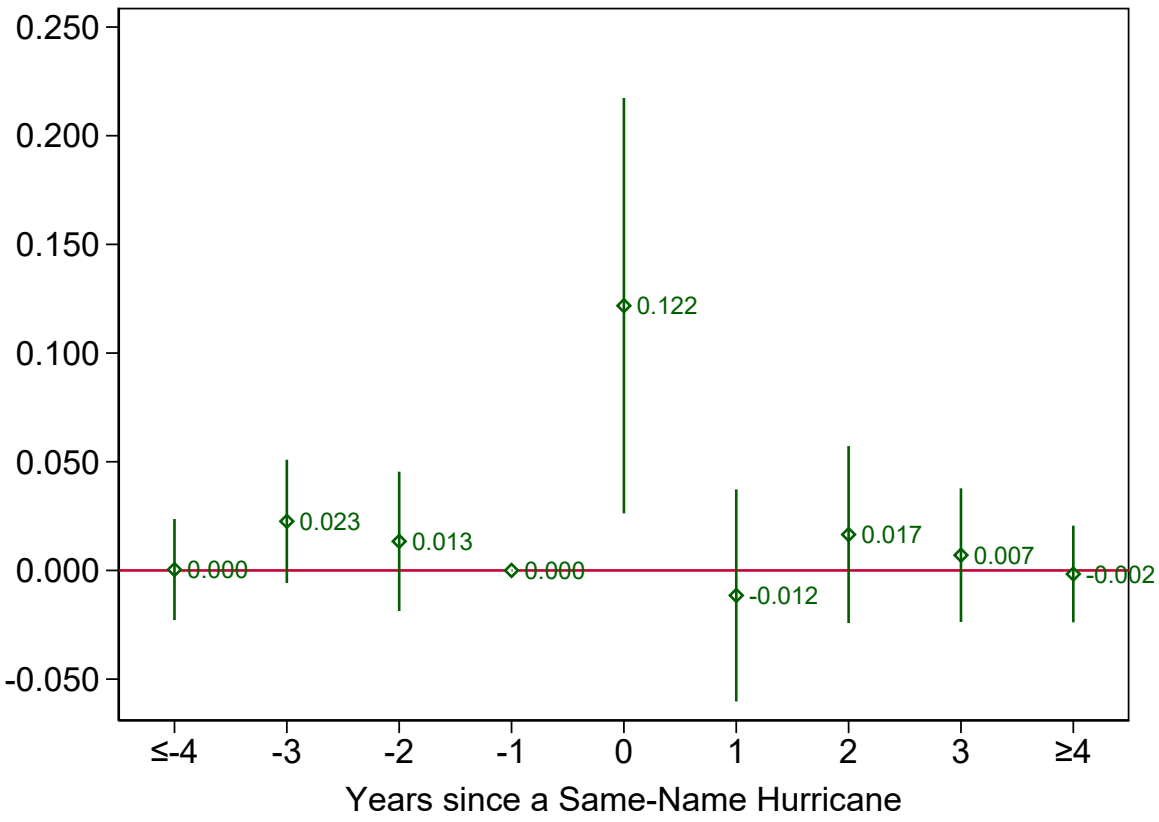

Figure A2: The event study plot

Notes: The event study plot shows lead-lag effects of sharing the same name with hurricanes on vote share. The baseline (omitted) base period is 1 year prior to the landfall of hurricane.