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Agenda Setting, Localization and the Third-Person Effect: An Experimental Study of When News Content Will Directly Influence Public Policy Demands¹

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Abstract:

Building from the third-person effect model of DRR policy adoption and mediated policy learning, this study provides an experimental examination of how specific elements of news media’s localisation of distant events directly influence public opinion. Controlling for salience effects, the construction of affinities between the distant, stricken community and the newspaper’s audience is argued to create a sense of shared vulnerability to the reported disasters. This is correlated within an increase in the respondent’s intention to act directly and an increase in their willingness to punish elected officials who do not act accordingly. The construction of difference between the communities, even though it is not related to risks related to the disaster, is argued to create implicit reassurances that the observing community does not need to act. This leads to an increased intention to act directly in opposition to efforts to reduce risk, but a neutral response towards political actors who pursue risk reduction policy actions.

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Agenda setting is one of the more robust concepts in the study of politics and probably the most robust theoretical claim in the study of political communication. In fact, the idea is so integral to the field that many would consider it an act of pedagogical malpractice if a student passed a political communication course without being able to repeat Cohen’s famous quote that the press “may not be successful much of the time in telling people what to think, but it is stunningly successful in telling its readers what to think about” (1963, 19). From the classic case study of McCombs and Shaw (1972), through the experiments of Iyengar and Kinder (1987) and beyond, the idea that news media salience matters but content has little or no influence on public opinion has become a core belief for the simple reason that it has been confirmed through, quite literally, hundreds of studies.

In addition to the empirical robustness, the utility of the concept has also proven to be impressive. From the rally-round-the-flag effect (Baker and Oneal 2001), to the CNN-effect (Gilboa 2005), the idea that salience drives reactions makes it possible for the news media to have an outsized if not overwhelming impact upon the policy arena, without challenging the belief that the public generally remains ignorant on policy issues, which has persisted in one form or another since the studies of Almond (1950), and Lippmann (1955). Even foreign aid bureaucracies, which arguably embody the pinnacle of policy expertise in the area, appear to respond to news media salience as an indicator of public demand. They not only appear to largely ignore the negative elements of the news content, but they also prioritise salience over any other factor, including measures of recipient need and their own state’s strategic interests (Van Belle, Rioux, and Potter 2004).

Clearly, salience matters. However, the implied corollary in the Cohen quote, that the substantive policy relevant content of the news media does not matter, is more problematic. We know that extremely subtle differences in the linguistic construction used to discuss an issue or choice, such as the choice of analogies (Khong 1992) or the framing of an issue (Tversky and Kahneman 1985), can have a huge impact on the policy making process. Despite that, the belief is still overwhelmingly skewed toward the idea that the public reacts
to salience, but the content is only a cue. Even with framing, which is often treated as an extension of the agenda setting literature (Scheufele and Tewksbury 2007), the effect of the news media content focuses primarily upon which pre-existing belief sets or which opinion leaders are selected (Shoemaker and Reese 1996) rather than the substance of the media coverage itself.¹

It would be a stretch to say that salience displaces the relevance of the substantive content of the news media coverage entirely, but it does accurately represent the simple fact that even when the content is the focus of study, it is conceptualized as more of a catalyst than a force of its own. It is not expected to exert much, if any direct influence on the public opinions that are relevant to policy making.

In contrast, recent research argues that the third-person effect model argues that it is the content, not the salience of news media coverage of distant catastrophes that is a critical factor for the implementation of disaster risk reduction (DRR) policies (Van Belle 2015). This can clearly be seen in the media coverage and policy actions in key case studies. However, there has been little empirical evidence that demonstrates the effects of news content on the conditions for policy adoption.

In this study, we demonstrate that localized news media content has strong effects on public support for costly public policies, while controlling for salience. This is an initial result, and further research is necessary. However, given that localization is a natural part of the way the news media functions, it is possible that this perspective might finally provide a framework for identifying what elements of content have a direct, rather than catalytic influence upon public opinion.

The study contributes the understanding of the conditions under which DRR policies are supported by the public, providing the opportunity for policy learning in at-risk communities in response to distant events. These results have broad implications for political

¹ This is a debatable point. A more complex conceptualization of framing would include elements, such as the emotive, that would directly impact opinions in ways beyond what logic is used for making sense of incoming information.
communication, but they have important substantive implications for communities at risk from natural disaster in New Zealand and around the world.

**Policy Learning and the Third-person Effect Model**

Policy learning refers to “a process in which individuals apply new information and ideas to policy decisions” (Busenberg 2001, 173). It can occur through a variety of different mechanisms such as through social knowledge (Haas 1980; Levy 1994; Pacheco 2012); through Bayesian updating (Leng 1983; Huth and Russett 1984; Powell 1988; Wagner 1989; Levite, Jentleson, and Berman 1992; Reiter 1996; Ramamurti 1999; Brune, Garrett, and Kogut 2004; Braun and Gilardi 2006; Gilardi 2010); through channeled learning (Coleman et al. 1966; Edwards and Edwards 1992; Rogers 1995; Axelrod 1997; Biglaiser 2002); through personal and organizational networks (Gray 1973; Li and Thompson 1975; Lutz 1987; Börzel 1998; Khamfula 1998; Brooks 2005); through international institutions (Haas 1959; Nye 1987; Kahler 1992; Quirk 1994; Eising 2002); and through the space created by punctuated equilibria, focusing events, and critical junctures in conjunction with media attention (Baumgartner and Jones 2010; Birkland 1997; Baumgartner, Jones, and Mortensen 2014).

The influx of new information is the central element in all of those approaches to policy learning, but the exact nature and means of that influx is often left ambiguous, unspecified or only partially addressed.

We build on work that suggests that policy learning can occur through the adoption of frames and discourses (Stone 1989; Schmidt 2002; Schmidt and Radaelli 2004). As such, it is

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1 Unfortunately, a point of disambiguation is required when extending the discussion of this model to the study of public opinion. In the study of public opinion, the term “third-person effect” has been used to refer to the dynamic where even though an individual’s opinion is not changed by an influence such as media coverage, that person believes that the influence will change the opinions of others (Davison 1983; Perloff 1993). It is not clear why a literary term that refers to a non-participating observer was adopted in this way in the study of public opinion, but the Third-Person Effect Model discussed here (Van Belle 2015) was initially constructed in the context of the study of media, and closely reflects the original meaning and use of the term. In that model, third-person refers specifically to a non-participating observer, and the effect is the influence that the mediated construction of a distant event has upon that observer.
not just the event itself that matters, but its interpretation by news media, the public, and political actors that affects the likelihood of policy learning.

Previous research suggests that DRR has been unsuccessful in many disaster-stricken communities, in spite of resources having been made available (Van Belle 2015). This puzzling phenomenon can be largely explained by the application of prospect theory (Kahneman and Tversky 1979). The media appeared to be opening an opportunity to adopt DRR in the immediate aftermath of the disaster, but during that period, the stricken community was overwhelmed by the response effort. By the time the community moved into the recovery phase, loss framing had come to dominate the public discourse and a significant portion of the population was engaged in extreme, sometimes irrational over-valuing of the previous status quo. This created significant local resistance to any option other than rebuilding exactly as things were before the event. It did not matter if DRR was externally funded or that DRR adoption would make them safer or could even be used to provide a better community environment. Any option other than returning to as close to the previous status quo as possible elicited significant resistance (Van Belle 2015).

However, observing communities do sometimes learn from distant events. News media coverage of overseas disasters often includes discussion of DRR that appeared to be opening a window for policy learning to occur (Birkland 1997; Jamieson and Van Belle 2014). That window was closing before a stricken community could act, but in a third-person, observing community, if the media was opening a similar window, a process of adopting DRR could be initiated while it was open.

(Figure 1 about here)

Thinking in terms of windows of opportunity leads naturally to a necessary conditions model, where certain conditions must be in place to create the possibility that something will occur (Mintz, Geva, and DeRouen 1994). Figure 1 presents a model of four necessary conditions for DRR policy adoption to occur: DRR must be on the policy agenda, the public must be willing to act, there must be policy leadership, and resources must be available. In
this article, we examine how the content of news media affects the public’s willingness to act. We argue that salience is insufficient by itself for policy learning. Instead the nature of the coverage has important effects on people’s willingness to act in support of DRR policies.

**News Media, Audiences and Localization**

The business imperatives of the news and how they shape disaster coverage have often been a source of angst over the effectiveness and role of the news media (See McKenzie 1993). However, the very aspects that cause so much consternation regarding how the coverage relates to the disaster-stricken community actually encourage the media to push DRR onto the public and policy agenda whenever it is relevant to an unaffected, third-person community. Localization, as the concept is used here, is the practice of demonstrating how the content of news coverage is relevant to the interests of the audience and that is a significant part of engaging and sustaining an audience’s attention, which is the core commodity produced by the news.

It is tempting to equate the concept of localization with the more general concept of domestication, however they are distinct concepts. Domestication refers to national interpretations of foreign events (Gurevitch, Levy, and Roeh 1991; Clausen 2004; Hafez 2011). Localization, however, focuses on subnational or community level interpretations and production of news. It may not necessarily be international, and often is not. This is a modest, but critical difference as the adoption of DRR and many other policies subject to policy learning most often occurs at the subnational, community level and there is likely to be a significant difference when that localization does not have to cross an international border.

Localization emerges out of a growing body of research that has worked to develop a better understanding how domestic news organizations represent foreign news. This has led to two schools of thought about how local news organizations cover distant events (Archetti 2008). Globalization scholars argue that contemporary news is produced similarly around the world (Brüggemann and Königslöw 2013; Curran et al. 2017); where developments such as technological advances (Giddens 2013, 1991); the universality of professional norms and
education (Gurevitch, Levy, and Roeh 1991; Reese 2008); the reliance on pooled reports from international press agencies (Clausen 2004); and media convergence (McChesney 1998) explain the worldwide homogeneity of news content.

That assertion that all news is essentially the same, however, seems to be contradicted by a great deal of anecdotal evidence indicating that journalists and news outlets make significant and substantial efforts to relate distant disasters to local risks and the local experience. In that regard, the work of domestication scholars appears to offer a more useful perspective on the issue. Domestication scholars argue that even if the same events are covered worldwide, news organizations interpret them differently for their domestic audience (Alasuutari 2013; Clausen 2004; Gurevitch, Levy, and Roeh 1991; Qadir and Alasuutari 2013). Research suggests the nature of foreign news coverage is dependent on the observing community’s emotional response (Alasuutari, Qadir, and Creutz 2013); capacity for social unrest (Alasuutari, Qadir, and Creutz 2013); philosophical values, interests, economic relations and proximity to the affected state (Balmas and Sheafer 2013); and their national identity (Nossek 2004). Domestic news depictions could also vary according to the level of identification with the affected community (Olausson 2014).

In some ways, the localization of foreign news leads local news organizations to interpret overseas events for their local audience in a process similar to translation (Berger 2009; Bielsa 2014; Bielsa and Bassnett 2008; Brown et al. 2011; Gambier 2016; Podkalicka 2011). This translation is necessary considering macro-level processes cannot always explain variation in news coverage of distant events (Archetti 2008). In locally-produced news media, “the media’s cultural and economic imperatives of audience appeal are amplified” (Reese and Buckalew 1995, 41); and “global stories are often made more relevant to a local audience by giving them a local spin” (Rolston and Mclaughlin 2004, 191). Communities could even interpret foreign events as a “mirror”, where overseas news becomes localized through shared experiences or debates (Castelló, Dhoest, and Bastiaensens 2013).
These similarities with domestication and translation indicate that localization could be thought of as a simple refinement of a larger body of work, where localization focuses on the manufacture of narrative linkages that public and political actors can use to draw lessons for themselves and their community.

**A Localization Typology**

Focusing on the key element of relating a distant event to a community’s local issues and concerns, a taxonomy of localization was inductively developed for DRR by examining the news media coverage of earthquakes in several cities around the world (Jamieson and Van Belle 2014). There were several ways that these newspapers constructed the foreign event in relation to the local audience, but they clustered relatively neatly into three reasonably distinct categories: Communalization, Neutral Localization and Othering. Table 1 introduces the taxonomy of localization.

(Table 1 about here)

**Communalization**

Generally speaking, communalization occurs when the narrative establishes a direct connection that indicates an affinity between the two communities. This was most obvious, and most relevant when coverage would directly and overtly refer to the distant events as offering lessons for their own community. For instance, on the day after the Japanese earthquake, a *Seattle Times* article headline asked its readers, “Are you prepared for when a quake hits?” (Staff 1995).

Communalization also occurred when direct comparisons were made between the disaster risks and hazards shared by affected and observing communities. One example was when the Kingston, Jamaica newspaper, *The Gleaner* reported that, “Post-Haiti earthquake alarm bells are signalling a crucial need for an examination of the structural integrity of Jamaica’s critical facilities” (Spaulding 2010).
The third form of communalization was the description of shared characteristics between the disaster-stricken location and the newspaper’s community, such as descriptions of the technology used in the construction of buildings, the science surrounding the prediction of earthquakes, the type of fault, the natural features that were significant in the tremor, or the measures taken to prepare for the eventuality of the earthquake. These did not always explicitly discuss risks, but clearly implied that lessons could be drawn.

Neutral Localization

The second type of localization was neutral localization, where a connection between the stricken community and the third-person community is explicitly made, but not in a way that might be relevant to drawing lessons from the event, such as when a *Dominion* article predicted that the New Zealand economy might benefit from exporting resources to Japan for the recovery of Kobe (Weir 1995), or when the *Vancouver Sun* stated that there were up to 6,000 Canadian residents in the country before the earthquake (Cayo 2010). References to people indirectly affected by the earthquake who live in the newspaper’s community, such as when the *Seattle Times* featured a Turkish resident of Seattle who “was scheduled to fly to Turkey on Monday for business and a short vacation, but decided Friday to wait until next week because of a mix-up with his tickets,” thus avoiding the earthquake (Burkitt and Fries 1999). Stories about locals who had become victims of the event, locals recalling experiences in the affected communities, and other similar instances were also classified as neutral localization.

Othering

The third category of localization was othering, which involved the practice of emphasizing differences between the locality of the newspaper, creating distance between them and the disaster-stricken community. This type of localization in the news coverage of distant disasters builds on previous research that suggests that the distinction between peoples
can involve “the process of attaching moral codes of inferiority to difference” (Said 1978, 300; Krummer-Nevo and Sidi 2012). In such a way the news media might employ “discursive strategies that blame the victims for their circumstances on their own social, economic and even cultural disadvantage” (Teo 2000, 8). This type of localization was manifest in the news coverage of the distant earthquakes in three key indicators.

This included explicit references to differences between communities such as the inadequate enforcement of building codes; social disorder; a lack of preparedness; a troubled history; poverty; corruption; or poor public infrastructure, such as when a Vancouver Sun article claimed that the Haitian earthquake “was a disaster waiting to happen” because “Haiti is a nation of poorly built structures sitting on a major fault line” (Bruemmer 2010). The comparison with the local was often implicit but still clearly noting the differences. Examples included criticism of the effectiveness of the response and recovery in the stricken community; poor construction, poor economic policies; poor leadership; identification of cultural differences; identification of different religious practices; their treatment of women; or their treatment of children.

Othering could also occur in sympathetic coverage, such as in The Gleaner’s coverage of the Haitian earthquake, when they decried colonization and economic exploitation that created a situation where “Haiti doesn’t have building codes and even if it did, people who make on average $2 a day can’t afford to build something that can withstand earthquakes and hurricanes” (Borenstein 2010). In such a fashion, the description of characteristics not shared by the newspaper’s community accentuates differences between the communities.

Othering also takes place in the establishment of a paternalistic victim-saviour relationship between the communities. The coverage often implied that those countries were helpless such as when a Vancouver Sun editorial asked locals to give generously to the relief effort following the earthquake, claiming that if aid was not forthcoming, “blood will be on our hands” (Staff 2005).
According to the discussion of the dynamics of the third-person effect model, the salience of the event will put DRR on the public agenda, but it is the content of that coverage that will lead to two of the other necessary conditions. Communalization, particularly when it involves direct discussions of lessons the event offers for the local community that is expected to generate a belief that critical values are at stake and that policy action can protect those values, thus shifting public opinion toward a demand for action. Neutral localization is expected to be just that in regard to DRR demand - neutral. It raises the salience of the disaster and in that way, creates a vague condition where disasters are the concern of the moment, but does not drive an increase in demand for policy action. Meanwhile, othering is expected to suppress calls for action, and it could even have a negative effect. By focusing on the differences between the affected and observing community, particularly when a hierarchy that indicates the observing community is superior, the narrative of difference reassures rather than warns and mutes any public demand for action that might be generated from the disaster being brought into the awareness of the observing community.

This implication of the model provides a specific indication of when and how content will influence public opinion on policy matters, and it can be tested.

**Localization and the Public Agenda - Hypotheses**

An experiment is used to test the proposed influences of localized news media content on public opinion toward DRR policy in a population that represents the third-person community. Although the nature of localization varied, the salience was the same for all experimental conditions, allowing for the analysis of agenda setting effects of localization. If there was to be an agenda setting effect, we expected this to be the result of the communalization frame, where lessons are explicitly drawn between communities. The other

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1 It is worth noting that in this way, prospect theory drives an opposite reaction in the observing community than it did in the affected community. In the observing community, framing in terms of threats to possessed goods should bias the response toward reducing the risk to those goods.
hypotheses, and the indicators of measurement that were specific to the California residents participating in the study, were expected to produce measurable differences as indicated.

H1. Communalization Agenda Setting Hypothesis: When presented with a communalization frame, individuals’ support for the adoption of DRR policy increases.

H2. Communalization Action Hypotheses: When presented with a communalization frame, individuals’ willingness to act in support for the adoption of DRR policy increases, as measured by their willingness to sign a petition in support of the policy.

H3. Communalization Voting Hypotheses: When presented with a communalization frame, individuals’ willingness to vote for incumbent politicians who vote against the proposed policy decreases, as measured by:

1. The respondent’s intention to vote for their State Assembly Member if they vote against the policy.

2. The respondent’s intention to vote for their State Senator if they vote against the policy.

3. The respondent’s intention to vote for Governor Jerry Brown if he votes against the policy.

On the other hand, if the news coverage of distant events featured predominantly othering frames in the news coverage of overseas disasters, this should reduce public opinion favoring DRR policies. As a result, it would be reasonable to expect that if othering is the dominant frame in the news coverage of a distant event, this would not lead to the same public support for DRR policies as those who receive a communalization frame.
H4. Othering Agenda Setting Hypothesis: When presented with an othering frame, individuals’ support for the adoption of DRR policy does not change.

H5. Othering Action Hypotheses: When presented with an othering frame, individuals’ willingness to act in support for the adoption of DRR policy does not change, as measured by their willingness to sign a petition in support of the policy.

H6. Othering Voting Hypotheses: When presented with an othering frame, individuals’ willingness to vote for incumbent politicians who vote against the proposed policy does not change, as measured by:

1. The respondent’s intention to vote for their State Assembly Member if they vote against the policy.

2. The respondent’s intention to vote for their State Senator if they vote against the policy.

3. The respondent’s intention to vote for Governor Jerry Brown if he votes against the policy.

Additionally, the control condition featured a neutral localization frame, which was hypothesized to increase interest through the salience, exactly the same as in the communalizing and othering hypotheses, thus producing a null result across that test, and to be the null hypothesis in the action hypotheses and voting hypotheses.

**Experimental Design**

We used an online survey experiment on residents of the state of California to determine the effects of news coverage content on public opinion toward policy, with a foreign earthquake as the focal event. California was a good location to study the effects of
news coverage on public opinion about DRR policy for several reasons. Given its seismic history, one would expect that the state’s residents were likely to be receptive to public policy aimed at reducing the loss of life and limiting the economic damage caused by earthquakes. Further, the risk is shared by pretty much the entire state, meaning that both the costs and potential benefits of a statewide policy would affect everyone in the state reasonably equally. Second, the state had recent experience of earthquakes, with the Loma Prieta ‘World Series’ earthquake in 1989 and the 1994 Northridge quake having occurred within the last thirty years. Third, it was common knowledge that the state faced the risk of future earthquakes. The California ShakeOut earthquake drill run by the Southern California Earthquake Center had over 10.7 million participants in 2016. In short, one might expect high levels of support for DRR policy in a state where public awareness of the hazards they face is so high.

However, given the clear relevance of earthquake related DRR, there has been a puzzling lack of action on the part of individuals and government agencies alike. Although there was a public agency that provided earthquake insurance, just 15 percent of the state had this insurance in 2016 (California Earthquake Authority 2016). A recent study of Californians demonstrated that only 4.77 percent of the sample had completed five simple tasks to prepare for an earthquake such as the identification and prevention of hazards in the home, having a strategy about what to do during an earthquake, having both personal and household disaster supplies kits, and the identification and mitigation of their home’s potential weaknesses (Jamieson 2016).

Similar inaction has occurred in public policy too, where attempts to enforce mandatory retrofitting of soft-storey buildings in Los Angeles began in 1996 and only proved successful in 2015. The City of San Francisco only just beat its southern counterpart, having enacted an equivalent ordinance in 2013. As a result, despite the widespreadacknowledgement of the risks facing Californians, both individual and governmental

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¹ Soft-storey buildings are structures with a bottom floor that is weaker than the floors above it. Typically, these building are supported by pillars that can collapse under the weight of the building during earthquakes as lateral movement imposes too much stress on them.
measures of DRR lagged behind. This puzzling behavior made California an interesting and important case to determine how the news coverage of distant events influences public opinion towards DRR policy.

Design

The experiment featured a simple three group post-test-only design where participants were randomly assigned into three groups whereby they received the neutral control condition, a communalization frame, or an othering frame. The treatments administered to the experimental groups were derived from an article in the Los Angeles Times about an earthquake in Taiwan in early 2016 (Xia and Lin II 2016). The article was modified to create the different treatments, which are included in Appendix A. After receiving the treatment, participants were asked to respond to a series of questions about their support for disaster risk reduction policies at home.

The control condition, or neutral localization frame, briefly discussed the Taiwan earthquake and states that a Californian died. The communalization treatment indicated that Californians shared the same risks, while the othering treatment indicated that developing countries faced similar risks.

Procedure

All participants were asked a series of screening questions to ensure that they were the correct population for the experiment, including that they lived in California and were at least 18 years old. Participants were also asked a series of demographic questions, before they received information about the earthquake in Taiwan. From there, participants were exposed to the newspaper stories that had been altered to create the treatments.

After the treatments, the participants were asked a series of questions about a proposed state-wide law about mandatory retrofitting of soft-storey buildings. First, participants were asked to indicate their support for the policy through the question, “Do you
support, oppose, or neither support nor oppose a California State Government law that would require property owners to retrofit apartment buildings to make them safer in the event of an earthquake?” Participants were presented with a 7-point Likert scale to report their answers to the question, whether they: 1) strongly oppose; 2) oppose; 3) somewhat oppose; 4) neither support nor oppose; 5) somewhat support; 6) support; or 7) strongly support the proposed law. The responses were recoded prior to analysis to range from 0 (strongly oppose) to 1 (strongly support).

Participants were also asked to indicate their strength of support or opposition to the law by asking them what action they would take in support of their preferences. They were asked to indicate whether they would be willing to sign a petition in support or opposition of the proposed law, the directionality of the question based on their previous response. They were asked to indicate their response in a simple yes/no binary measure of their willingness to sign the petition.

Finally, participants were asked to indicate how incumbent politicians’ behavior would affect their vote in the next election. We examined three different political offices in California – the participant’s State Assembly Member, their State Senator, and their Governor. In California, the State Legislature is comprised of a lower house with 80 members serving two-year terms (the State Assembly), and an upper house with 40 members serving four-year terms (the State Senate). Given the differences between their term lengths and the size of their constituency, it is useful to examine the effects of both sets of elected officials’ behavior on public opinion about the DRR policy. Finally, we also examine the implications of the Governor voting against the Bill, representing the executive branch of the California State government.

We asked all participants the following question: If your local State Assembly Member/State Senator/Governor Jerry Brown voted against the California State Government law, do you think it would affect how you vote in the next election? Participants were asked to indicate which of the following responses described their voting intentions: 1) Yes, I
would be more likely to vote for the State Assembly Member/State Senator/Governor in the
next election (1); 2) Yes, I would be less likely to vote for the State Assembly Member/State
Senator/Governor in the next election (-1); 3) No, it would not affect how I vote in the next
election (0).

After completing each of the questions for the dependent variables of interest,
participants completed the rest of the demographic questions. They were also required to
complete a question as an attention check (Berinsky, Margolis, and Sances 2014), but there
proved to be no discernible difference in responses related to that question, and none of the
respondents who completed the rest of the survey were removed from the experiment based
upon that question. Finally, once they completed the survey, participants were debriefed
about the deception used in the study. Participants were able to indicate that they did not want
their answers to be used in analysis because of the use of deception, and ten participants
chose this option, but were still compensated for their time. The full experiment design is
available to view in Appendix A in the online appendix.

Sample

The experiment was conducted on 692 participants recruited through the Amazon
Mechanical Turk (MTurk) website. The sample was limited to residents in California, but it
is important to note the sample is not a representative sample of the entire population. In
some ways this limits the generalizability of the study. However, previous research has found
that MTurk participants are more diverse than other commonly used convenience samples
(Berinsky, Huber, and Lenz 2012; Huff and Tingley 2015), MTurk samples do not vary from
population-based samples in unmeasurable ways (Levay, Freese, and Druckman 2016).

Like previous studies using this platform, participants in the sample were more educated,
more liberal, and less religious than Californian residents more generally. A comparison of
the sample with the population of the California is included in Tables A5-A7 in Appendix C.
studies using MTurk participants replicate experimental results derived from other samples (Casler, Bickel, and Hackett 2013; Mullinix et al. 2015), and they perform well on attention checks (Hauser and Schwarz 2016). As a result of this prior research, and given the experimental nature of the study, differences between samples should not influence the results. It is still important to be cautious about generalizing from the sample to larger populations, but the findings presented here appear to be robust.

Analysis

Once the data was collected, analysis involved testing the effects of the treatment frames on people’s support for the implementation of DRR policy. Analysis of the experimental results was conducted through the comparisons of means to determine the average treatment effect of each frame on support for DRR policy, and the strength of people’s support as measured by their willingness to take action in support of their preferences. Table 2 presents descriptive statistics of the sample, including the dependent variables of interest in the study.

(Table 2 about here)

Demographic information was also collected, and this individual-level data is used as covariates in OLS regressions to assess whether these confound the average treatment effects. This data includes participant’s level of education, gender, income, political ideology, whether they own the home they live in, and whether they identify as white.

7 This analysis uses OLS regression for ease of interpretation, but it is important to acknowledge some of the limitations of this method of analysis in regard to this data. Among those, non-stationarity could be a concern where important statistical factors vary over time, threatening the internal validity of the study if there is systematic variation over time. This could especially be the case if the study was a within-subjects design that measured changes in individuals’ attitudes over time, or if the study used repeated measures. However, we do not believe this to be a critical concern in this posttest-only survey experiment. Random assignment of treatment conditions to participants means that any systematic changes over time that could affect the validity of the results are equally distributed between the groups. As a result, any differences that persist between the treatment groups should be attributable to the average treatment effect of the intervention, and not to any other factors that could confound the analysis in the absence of random assignment.
Further details about how these are measured and coded are available to view in the appendix. We present these full models with covariates in Tables A1-A4 in Appendix B.

**Results**

Despite the minimal exposures to media content involved in the experiment, variations in localization had a statistically significant influence upon the willingness of respondents to take action, suggesting that localization could easily lead to the establishment of several of the necessary conditions in the third-person model.

(Figure 2 about here)

First, Figure 2 illustrates that there were no effects of the treatments on support for DRR policy, where even the communalization frame did not lead to statistically significant increases in support for the policy in spite of the explicit lessons drawn between communities. This is likely the result of the fact the salience of the earthquake was the same in all treatments, effectively priming participants to consider DRR policy. Similarly, no statistically significant variation across the treatments was apparent in the tolerance of the cost of enacting the policy.

However, the treatment frames had significant effects on people’s willingness to act in support of their preferences. This was reflected in considerable differences between treatment groups in their willingness to sign petitions in support or in opposition to the proposed law. Figures 3 and 4 report these results.

(Figure 3 about here)

(Figure 4 about here)

Respondents receiving the communalizing localization treatment were more likely to sign a petition supporting the enactment of the proposed DRR law. The othering treatment had the opposite effect. One of the proposed effects of othering is the implicit reassurance that the status quo in the third-person community is superior or at least adequate and this is seen in the increased willingness of those receiving the other treatment to sign a petition in opposition to the proposed law.
Figures 5, 6, and 7 illustrate the effects of the treatments on voting intentions towards incumbent politicians who vote against the proposed DRR law. The communalization treatment also had a consistently negative effect on the intention to vote for politicians who opposed the DRR law. The othering frame did not lead to a result that is diametrically the opposite of what was found for the communalizing frame. Receiving the othering treatment did not increase the likelihood of voting for a politician who opposed the adoption of the proposed DRR policy. This might be an interesting factor that leads us toward a distinction between using available information to decide how you will act in signing a petition where you are acting directly on your knowledge, and the act of voting, where you are selecting a person that you are reasonably likely to presume knows more than you about policy.

Thus, in the othering treatment, there may be some degree of trusting the judgment of someone assumed to have greater expertise that is showing up in this result. It might also simply be an artifact of asking the question in terms of voting for someone who opposed the policy. In accordance with the third-person effect model, the question was worded that way to capture the idea that communalization would change voters’ opinions in ways that could potentially punish elected officials who did not support action.

Logically, to produce the opposite reaction for the othering treatment, the respondent would have to spontaneously deduce that the action of the elected official would generate costs for the respondent and then decide that the action was something to be opposed. Add to that the simple fact that the effect of othering generally appears to be slightly weaker than the effect of communalizing, and it is an open question whether alternate wording of that particular survey instrument would uncover an effect in the opposite direction as the communalizing treatment.
Discussion

Overall, the findings confirm the expectations generated by the third-person effect model and show that the proposed causal linkage between communalizing localization of distant events and demand for policy action is plausible. Coverage that relates foreign disasters to local hazards can help establish several of the necessary conditions for the adoption of DRR policies in the third-person, observing communities. Further, these effects are generated with simple experimental treatments that offer only the bare minimum of exposure to the different forms of localization proposed. This suggests that the effect of localized coverage on opinion is likely to be substantively significant and/or easy to generate.

Further, other studies have shown that communalizing localization is also common. In all of the case studies examined in the inductive derivation of the localization typology, localization was common in the coverage, often to the point of predominance (Jamieson and Van Belle 2014). In the Seattle case, where extremely expensive DRR policies have been adopted in the aftermath of the quakes studies, lesson-drawing communalization was present in the majority of news stories that reported earthquakes in other developed countries. More generally, employing the neutral localization frame as the control condition makes it possible to circumvent the agenda setting effect through the control for salience and dig directly down to the effect of the content on public opinion.

The likelihood that there might be real-world effects similar to what was found in the experiment is reinforced by the fact that the business imperatives of the news media industry drive news outlets to localize coverage in ways that relate these kinds of events to the needs, wants and interests of their audience. This not only indicates that there might be good reason to extend the study of this and other implications of the third-person effect model, it also suggests additional policy areas where the model might apply.

Crises, regardless of the cause are, by their very nature, inherently newsworthy events (Harrison 2006) and similarities in local conditions that are related to those distant crises are an easy and obvious point of commentary in the localization of that coverage. Thus, any type
of crisis that is relevant to a local is likely to generate the kind of coverage that will drive the third-person effect. Thus, in a country such as New Zealand, the coverage of natural resource crises such as the collapse of the cod fisheries off the east coast of North America, climate-change-driven forest diebacks, or invasive species could drive, or perhaps already have driven a third-person effect and policy actions. Threats to indigenous languages and cultures, cultural appropriation and ensuring the survival of cultural industries such as local film, television and music production could also be a likely place to look for this same policy learning dynamic.

It also appears that the coverage of disasters and crises within the country can drive DRR adoption. Anecdotally, the relationship between localized news coverage and the push to mitigate seismic vulnerabilities in Wellington in the months following the 2011 Christchurch Earthquake appears to be strikingly similar to the review and revision of civil defense policies that followed Hurricane Katrina’s devastation of New Orleans (Van Belle 2005).

Conclusion

The results of the study indicate support for the theory that the nature of news coverage of overseas disasters influences underlying conditions for policy learning in third person communities. When presented with a communalization frame, people are more willing to act on their preferences through petitions, and vote against incumbent politicians who vote against the salient public policy.

Building on previous literature on agenda setting and public policy, the paper shows that public opinion shifts according to the nature of news coverage of distant events. Future research should examine the effects of changes in public opinion on political action to further develop an understanding of the conditions under which policy learning occurs in response to distant events. This research agenda has important implications for scholars interested in the
causes of policy learning, and the interaction between focusing events, the news media, public opinion, and political actors.

There are also important policy implications of this research. If scholars are able to better understand when the public supports costly public policies such as DRR, governments and NGOs can take advantage of the conditions under which successful policy learning is most likely. If policymakers and practitioners can exploit these windows of opportunity to pursue public policy, there could be considerable benefits for at-risk communities.

It is important to acknowledge the limitations of the study, some of which can be addressed in follow up studies of the conditions under which the public support public policy. First, this study only tested the effects of single frames. Future studies could include multiple treatment frames to determine how people interpret the coverage of distant events when there are several competing frames in the news. However, it is reasonable to expect that the absence of competing frames is not a fatal problem in this paper given that the frames were derived from content analysis of news coverage of natural disasters across a variety of different locations from 1995 to 2010, and that most of these articles featured only one frame as the dominant narrative.

Another limitation is that all treatment frames may have primed the participants ahead of the questions relating to the dependent variables, meaning that the support for the proposed policy might be overestimated. However, it was notable that the communalization treatment still had much greater effects on people’s willingness to sign petitions in support of the policy and on voting intentions against incumbent elected officials. If anything, the effects of the communalization treatment may be underestimated. Future research could include control conditions that do not mention the effects of natural disasters at all to determine whether the effects of the treatment are underestimated in this study.
Thirdly, these results are derived from small convenience sample of California residents. Despite the fact that this kind of sample compares reasonably well with university students and other sample populations commonly used in experimental studies, future studies should use different samples to determine how the effects in this controlled experiment generalize to other populations.

Finally, future research should also examine the cognitive frameworks employed by participants as they are exposed to news coverage of distant events to shed more light on the cognitive mechanisms driving the effects reported in this study.
References


DOI: 10.1177/2053168015604648.


### Tables

**Table 1. A Taxonomy of Localization in the News Coverage of Distant Events**

<table>
<thead>
<tr>
<th>Type of Localization</th>
<th>Indicators</th>
</tr>
</thead>
</table>
| Communalization      | • How the event offers lessons for the local community  
                         • Direct comparisons between communities  
                         • Descriptions of shared community characteristics |
| Neutral localization  | • Non-DRR related implications for the community  
                         • Citizens of the newspaper’s community in the affected community  
                         • Links to affected community through diaspora population  
                         • Historical experiences of local people in the affected community |
| Othering             | • Explicit attention drawn to differences between communities  
                         • Reference to characteristics of the affected community not shared by the newspaper’s community  
                         • Appeals for help that establish a victim-saviour relationship between communities |
Table 2. Descriptive Statistics.

<table>
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<tr>
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<th>Observations</th>
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<th>St. Dev.</th>
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<th>Max</th>
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Figures

Figure 1. The Third-Person Effect Model

Political Will to Act

- DRR on Policy Agenda
- Public Will to Act
- Policy Leadership
- Resources Available

Public Will to Act

- DRR on Public Agenda
- Belief that Significant Values are at Stake
- Belief that Policy Action will Affect Issue
- Willingness to Accept Social Costs of Action

Leadership in Position to Take Action

Potential Political Gains from Taking Action
Figure 2. The Effects of Treatments on Support for the Proposed Law.
Figure 3. The Effects of Treatments on Willingness to Sign a Petition in Support of the Proposed Law.

Probability of Signing Petition in Support of Proposed Law

Pr(Sign Petition to Support Law)

Control condition  |  Othering treatment  |  Communalization treatment

95% confidence intervals
Figure 4. The Effects of Treatments on Willingness to Sign a Petition in Opposition to the Proposed Law.
Figure 5. The Effects of Treatments on Voting Intentions towards Incumbent State Assembly Members.
Figure 6. The Effects of Treatments on Voting Intentions towards Incumbent State Senators.
Figure 7. The Effects of Treatments on Voting Intentions towards the Incumbent State Governor, Jerry Brown.
Appendix A. The Full Experimental Design

Demographics 1

1. Please enter your age.

2. In which state do you live?

3. What is the zipcode where you live?

4. What is the highest level of school you have completed?
   - No formal education
   - 1\textsuperscript{st}, 2\textsuperscript{nd}, 3\textsuperscript{rd}, or 4\textsuperscript{th} grade
   - 5\textsuperscript{th} or 6\textsuperscript{th} grade
   - 7\textsuperscript{th} or 8\textsuperscript{th} grade
   - 9\textsuperscript{th} grade
   - 10\textsuperscript{th} grade
   - 11\textsuperscript{th} grade
   - 12\textsuperscript{th} grade, no diploma
   - High School Graduate – High School Diploma or the equivalent
   - Some college, no degree
   - Associate degree
   - Bachelor’s degree
   - Master’s degree
   - Professional or Doctorate degree

5. Please indicate what you consider your racial background to be. We greatly appreciate your effort to describe your background using the standard categories provided. These race categories may not fully describe you, but they do match those used by the Census bureau. It helps us compare our survey respondents to the U.S. population.

Please check one or more categories below to indicate what race(s) you consider yourself to be.
   - White
   - Black or African American
   - American Indian or Alaska Native – Type in name of enrolled or principal tribe
   - Asian Indian
   - Chinese
   - Filipino
   - Japanese
   - Korean
   - Vietnamese
   - Other Asian – type in race
• Native Hawaiian
• Guamanian or Chamorro
• Samoan
• Other Pacific Islander – Type in race
• Some other race – Type in race

6. What is your gender?
   • Male
   • Female

7. The next question is about the total income of YOUR HOUSEHOLD for the PAST 12 MONTHS. Please include your income PLUS the income of all members living in your household (including cohabiting partners and armed force members living at home). Please count income BEFORE TAXES and from all sources (such as wages, salaries, tips, net income from a business, interest, dividends, child support, alimony, and Social Security, public assistance, pensions, or retirement benefits).

   • Less than $10,000 (1)
   • $10,000 to $19,999 (2)
   • $20,000 to $29,999 (3)
   • $30,000 to $39,999 (4)
   • $40,000 to $49,999 (5)
   • $50,000 to $59,999 (6)
   • $60,000 to $69,999 (7)
   • $70,000 to $79,999 (8)
   • $80,000 to $89,999 (9)
   • $90,000 to $99,999 (10)
   • $100,000 to $149,999 (11)
   • More than $150,000 (12)

8. Are you now married, widowed, divorced, separated, never married, or living with a partner?
   • Married (1)
   • Widowed (2)
   • Divorced (3)
   • Separated (4)
   • Never married (5)
   • Living with partner (6)

9. Are your living quarters...
   • Owned or being bought by you or someone in your household (1)
   • Rented for cash (2)
California is considered to be particularly vulnerable to the effects of earthquakes as the state lies on active faults that can create frequent and destructive earthquakes. You will now be asked to read a newspaper article about an earthquake in another country and answer a series of questions about a proposed law in California.

Control condition (neutral localization) - (93 words)

**Los Angeles Times**

**Taiwan earthquake: Californian dead**

**BY ROSANNA XIA AND RONG-GONG LIN II**

**February 5, 2016**

Emergency aid flowed from around the world toward Taiwan as reports of earthquake devastation in Taiwan continue days after a magnitude-6.4 earthquake struck the island near Pingtung City.

U.S. officials evacuated between 300 and 400 U.S. citizens by air, most of them to nearby Hong Kong.

A U.S. businessman was among the dead. State Department spokesman P.J. Crowley said Andrew Johnson, 57, an entrepreneur, had been working in Taiwan since last year. He said he was from California, but her hometown was not available.
Taiwan earthquake: Destruction a grim reminder of dangers for California, experts say

BY ROSANNA XIA AND RONG-GONG LIN II

February 5, 2016

For Californians, reports of earthquake devastation in Taiwan are a reminder of the inevitable. Californians find a way of making peace with the dangers of living on faultlines. But they know how important it is to be prepared.

That is why warnings this week by U.S. observers of Taiwan’s quake damage are disturbing, and why assurances are needed that these warnings will be heeded in earthquake preparedness planning here. The damage, structural engineers said, was a sober reminder that these collapses would also probably occur in California should a massive temblor strike.

"What you're seeing in Taiwan in this recent earthquake is a microcosm of what could happen in a large earthquake occurring in a city in California, where there are thousands more older susceptible buildings," said Saif M. Hussain, who heads Seismic Structures International, a California-based structural engineering firm that specializes in earthquake resilience and safety.

Taiwan generally has been following the same international building standards as California, Hussain said.

A proposed statewide law, spearheaded by several different State Senators, would order apartment building owners to retrofit older concrete buildings as well as wood-frame apartment complexes with weak first floors. The action will save lives, they argue.
The law caps decades of efforts to strengthen these buildings. Past efforts to require retrofitting — or simply identify the most vulnerable buildings — died in Sacramento over the question of cost. Landlords have long been concerned with the financial burden of retrofitting, which could cost as much as $130,000 for a wooden apartment and millions for a larger concrete building.

But some have questioned whether the proposed law's deadlines should be accelerated, given the unpredictable nature of massive earthquakes. Under the proposed law, property owners have seven years, upon notification, to fix wood apartments and 25 years to fix concrete buildings.

Othering treatment (303 words)

Taiwan earthquake: Destruction a grim reminder of dangers for developing countries, experts say

BY ROSANNA XIA AND RONG-GONG LIN II

February 5, 2016

For people in developing countries, reports of earthquake devastation in Taiwan are a reminder of the inevitable. These people find a way of making peace with the dangers of living on faultlines. But they know how important it is to be prepared.

That is why warnings this week by observers of Taiwan’s quake damage are disturbing, and why assurances are needed that these warnings will be heeded in earthquake preparedness planning elsewhere. The damage, structural engineers said, was a sober reminder that these collapses would also probably occur elsewhere should a massive temblor strike.
"What you're seeing in Taiwan in this recent earthquake is a microcosm of what could happen in a large earthquake occurring in developing countries, where there are thousands more older susceptible buildings," said Saif M. Hussain, who heads Seismic Structures International, a California-based structural engineering firm that specializes in earthquake resilience and safety.

Taiwan generally has not been following the same international building standards as California, Hussain said.

A proposed Taiwanese law, spearheaded by several different Members of the Legislative Yuan (Parliament), would order apartment building owners to retrofit older concrete buildings as well as wood-frame apartment complexes with weak first floors. The action will save lives, they argue.

The law caps decades of efforts to strengthen these buildings. Past efforts to require retrofitting — or simply identify the most vulnerable buildings — died in Taipei over the question of cost. Landlords have long been concerned with the financial burden of retrofitting, which could cost as much as $130,000 for a wooden apartment and millions for a larger concrete building.

But some have questioned whether the proposed law's deadlines should be accelerated, given the unpredictable nature of massive earthquakes. Under the proposed law, property owners have seven years, upon notification, to fix wood apartments and 25 years to fix concrete buildings.

**Outcome Variables**

You will now be asked to answer a series of questions about a proposed law requiring property owners to retrofit buildings to strengthen buildings in California.

Retrofitting involves providing existing structures with more resistance to seismic activity due to earthquakes. In buildings, this process typically includes strengthening weak connections found in roof to wall connections, continuity ties, shear walls and the roof diaphragm to make them safer in the event of an earthquake.

11. Do you support, oppose, or neither support nor oppose a California State Government law that would require property owners to retrofit apartment buildings to make them safer in the event of an earthquake?

- Strongly oppose (1)
- Oppose (2)
- Somewhat oppose (3)
- Neither support nor oppose (4)
- Somewhat support (5)
- Support (6)
- Strongly support (7)
12. Answer If you support, oppose, or neither support nor oppose a California State Government law that would require property owners to retrofit apartment buildings to make them safer in the event of an earthquake? Somewhat support, support, or strongly support Is Selected

Would you still support the law if the costs of retrofitting for owners of apartment buildings to make them safer in the event of an earthquake are up to $50,000?
• No (0)
• Yes (1)

13. Answer If Would you still support the law if the costs of retrofitting for owners of apartment buildings to make them safer in the event of an earthquake are up to $50,000? Yes Is Selected

Would you still support the law if the costs of retrofitting for owners of apartment buildings to make them safer in the event of an earthquake are between $50,000 and $100,000?
• No (0)
• Yes (1)

14. Answer If Would you still support the law if the costs of retrofitting for owners of apartment buildings to make them safer in the event of an earthquake are between $50,000 and $100,000? Yes Is Selected

Would you still support the law if the costs of retrofitting for owners of apartment buildings to make them safer in the event of an earthquake are between $100,000 and $150,000?
• No (0)
• Yes (1)

15. Answer If Would you still support the law if the costs of retrofitting for owners of apartment buildings to make them safer in the event of an earthquake are between $100,000 and $150,000? Yes Is Selected

Would you still support the law if the costs of retrofitting for owners of apartment buildings to make them safer in the event of an earthquake are between $150,000 and $200,000?
• No (0)
• Yes (1)

16. Answer If Would you still support the law if the costs of retrofitting for owners of apartment buildings to make them safer in the event of an earthquake are between $150,000 and $200,000? Yes Is Selected
Would you still support the law if the costs of retrofitting for owners of apartment buildings to make them safer in the event of an earthquake are between $200,000 and $250,000?

- No (0)
- Yes (1)

17. Answer If Would you still support the law if the costs of retrofitting for owners of apartment buildings to make them safer in the event of an earthquake are between $200,000 and $250,000? ... Yes Is Selected

Would you still support the law if the costs of retrofitting for owners of apartment buildings to make them safer in the event of an earthquake are over $250,000?

- No (0)
- Yes (1)

18. Answer If Would you still support the law if the costs of retrofitting for owners of apartment buildings to make them safer in the event of an earthquake are over $250,000? ... Yes Is Selected

How much would the costs of retrofitting for owners of apartment buildings to make them safer in the event of an earthquake have to be before you do not support the law?

- Between $250,000 and $500,000 (1)
- Between $500,000 and $750,000 (2)
- Between $750,000 and $1,000,000 (3)
- Over $1,000,000
- I support the law regardless of the costs imposed on costs of retrofitting for owners of apartment buildings to make them safer in the event of an earthquake

19. How likely are you to participate in a campaign to support/oppose a California State Government law that would require property owners to retrofit and strengthen apartment buildings to make them safer in the event of an earthquake?

- Very likely (1)
- Likely (2)
- Neither likely nor unlikely (3)
- Unlikely (4)
- Very unlikely (5)

20. Will you sign a petition to Governor of California, Jerry Brown, to support/oppose a California State Government law that would require property owners to retrofit and strengthen apartment buildings to make them safer in the event of an earthquake?

- No (0)
• Yes (1)

Please sign your name if you would like to add your name to the petition.

21. If your local State Assembly Member voted against the California State Government law, do you think it would affect how you vote in the next election?
• Yes, I would be more likely to vote for the State Assembly Member in the next election (1)
• Yes, I would be less likely to vote for the State Assembly Member in the next election (-1)
• No, it would not affect how I vote in the next election (0)

22. If your local State Senator voted against the California State Government law, do you think it would affect how you vote in the next election?
• Yes, I would be more likely to vote for the State Senator in the next election (1)
• Yes, I would be less likely to vote for the State Senator in the next election (-1)
• No, it would not affect how I vote in the next election (0)

23. If Governor Jerry Brown voted against the California State Government law, do you think it would affect how you vote in the next election?
• Yes, I would be more likely to vote for Governor Jerry Brown in the next election (1)
• Yes, I would be less likely to vote for Governor Jerry Brown in the next election (-1)
• No, it would not affect how I vote in the next election (0)

Demographics 2

24. Which statement best describes your current employment status?
• Working - as a paid employee (1)
• Working - self-employed (2)
• Not working - on temporary layoff from a job (3)
• Not working - looking for work (4)
• Not working - retired (5)
• Not working - disabled (6)
• Not working - other (7)

25. Generally speaking, do you think of yourself as a...
• Republican (1)
• Democrat (2)
• Independent (3)
26. Answer If Generally speaking, do you think of yourself as a... Republican Is Selected

   Would you call yourself a...
   • Strong Republican (1)
   • Not very strong Republican (2)

27. Answer If Generally speaking, do you think of yourself as a... Democrat Is Selected

   Would you call yourself a...
   • Strong democrat (1)
   • Not very strong Democrat (2)

28. Answer If Generally speaking, do you think of yourself as a... Independent Is Selected And Generally speaking, do you think of yourself as a... Another party, please specify: Is Selected And Generally speaking, do you think of yourself as a... No preference Is Selected

   Do you think of yourself as closer to the...
   • Republican Party (1)
   • Democratic Party (2)

29. In general, do you think of yourself as...
   • Extremely liberal (1)
   • Liberal (2)
   • Slightly liberal (3)
   • Moderate, middle of the road (4)
   • Slightly conservative (5)
   • Conservative (6)
   • Extremely conservative (7)

30. What is your religion?
   • Baptist - any denomination (1)
   • Protestant (e.g. Methodist, Lutheran, Presbyterian, Episcopal) (2)
   • Catholic (3)
   • Mormon (4)
   • Jewish (5)
   • Muslim (6)
• Hindu (7)
• Buddhist (8)
• Pentecostal (9)
• Eastern Orthodox (10)
• Other Christian (11)
• Other non-Christian (12)
• None (13)

31. How often do you attend religious services?
• More than once a week (1)
• Once a week (2)
• Once or twice a month (3)
• A few times a year (4)
• Once a year or less (5)
• Never (6)
Appendix B. Full Experimental Results.

Table A1. The Effects of Treatments on Support for the Proposed Law.

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<td>Constant</td>
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| Observations             | 692                      | 692                      |
| $R^2$                    | 0.001                    | 0.091                    |

a) Standard errors in parentheses

b) * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

---

In the regression models presented here, the R-squared values are noticeably low. When working with observational data this would be a particularly important concern, given that this would indicate the models do not explain much of the variance. However, the objective of an experiment is not to explain variation in the dependent variables. Instead, OLS regression of experimental data is used to determine how the intervention of the treatment conditions influences the average of the dependent variable, relative to the absence of the intervention. As such, we do not consider the low R-squared values to be a concern in this study.
Table A2. The Effects of Treatments on Willingness to Sign a Petition in Support of the Proposed Law.

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sign Petition to Support Law</td>
<td>Sign Petition to Support Law</td>
<td></td>
</tr>
<tr>
<td>Othering treatment</td>
<td>0.08 (0.05)</td>
<td>0.07 (0.05)</td>
</tr>
<tr>
<td>Communalization treatment</td>
<td>0.16*** (0.05)</td>
<td>0.15** (0.05)</td>
</tr>
<tr>
<td>Age</td>
<td>-0.00 (0.00)</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>0.02 (0.02)</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>-0.14*** (0.04)</td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>-0.00 (0.01)</td>
<td></td>
</tr>
<tr>
<td>Ideology</td>
<td>-0.19* (0.08)</td>
<td></td>
</tr>
<tr>
<td>Home Ownership</td>
<td>0.00 (0.04)</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>-0.01 (0.04)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.62*** (0.03)</td>
<td>0.58** (0.18)</td>
</tr>
<tr>
<td>Observations</td>
<td>571</td>
<td>571</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.020</td>
<td>0.062</td>
</tr>
</tbody>
</table>

a) Standard errors in parentheses
b) * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Table A3. The Effects of Treatments on Willingness to Sign a Petition Opposing the Proposed Law.

<table>
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<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
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<tr>
<td><strong>Sign Petition to Oppose Law</strong></td>
<td><strong>Sign Petition to Oppose Law</strong></td>
<td><strong>Sign Petition to Oppose Law</strong></td>
</tr>
<tr>
<td>Othering treatment</td>
<td>0.31*</td>
<td>0.34*</td>
</tr>
<tr>
<td></td>
<td>(0.15)</td>
<td>(0.17)</td>
</tr>
<tr>
<td>Communalization treatment</td>
<td>-0.01</td>
<td>-0.01</td>
</tr>
<tr>
<td></td>
<td>(0.15)</td>
<td>(0.18)</td>
</tr>
<tr>
<td>Age</td>
<td>-0.01</td>
<td>-0.01</td>
</tr>
<tr>
<td></td>
<td>(0.01)</td>
<td>(0.18)</td>
</tr>
<tr>
<td>Education</td>
<td>-0.01</td>
<td>-0.01</td>
</tr>
<tr>
<td></td>
<td>(0.04)</td>
<td>(0.04)</td>
</tr>
<tr>
<td>Male</td>
<td>-0.02</td>
<td>-0.02</td>
</tr>
<tr>
<td></td>
<td>(0.15)</td>
<td>(0.15)</td>
</tr>
<tr>
<td>Income</td>
<td>-0.02</td>
<td>-0.02</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
<td>(0.02)</td>
</tr>
<tr>
<td>Ideology</td>
<td>0.21</td>
<td>0.22</td>
</tr>
<tr>
<td></td>
<td>(0.25)</td>
<td>(0.25)</td>
</tr>
<tr>
<td>Home Ownership</td>
<td>0.22</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.15)</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>-0.02</td>
<td>-0.02</td>
</tr>
<tr>
<td></td>
<td>(0.15)</td>
<td>(0.15)</td>
</tr>
<tr>
<td>Constant</td>
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<td>0.52</td>
</tr>
<tr>
<td></td>
<td>(0.11)</td>
<td>(0.56)</td>
</tr>
<tr>
<td>Observations</td>
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<td>63</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.095</td>
<td>0.152</td>
</tr>
</tbody>
</table>

a) Standard errors in parentheses
b) * $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Table A4. The Effects of Treatments on Voting Intentions towards Incumbent Elected Officials.

<table>
<thead>
<tr>
<th></th>
<th>Vote for State Assembly Member</th>
<th>Vote for State Assembly Member</th>
<th>Vote for State Senator</th>
<th>Vote for State Senator</th>
<th>Vote for State Governor</th>
<th>Vote for State Governor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Othering treatment</td>
<td>-0.11</td>
<td>-0.06</td>
<td>-0.09</td>
<td>-0.05</td>
<td>-0.04</td>
<td>-0.02</td>
</tr>
<tr>
<td></td>
<td>(0.06)</td>
<td>(0.05)</td>
<td>(0.06)</td>
<td>(0.06)</td>
<td>(0.05)</td>
<td>(0.05)</td>
</tr>
<tr>
<td>Communalization treatment</td>
<td>-0.16**</td>
<td>-0.13*</td>
<td>-0.17**</td>
<td>-0.15**</td>
<td>-0.13*</td>
<td>-0.12*</td>
</tr>
<tr>
<td></td>
<td>(0.06)</td>
<td>(0.05)</td>
<td>(0.06)</td>
<td>(0.06)</td>
<td>(0.05)</td>
<td>(0.05)</td>
</tr>
<tr>
<td>Age</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>-0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
<td>(0.02)</td>
<td>(0.02)</td>
<td>(0.02)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>-0.01</td>
<td>-0.03</td>
<td>-0.01</td>
<td>-0.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.05)</td>
<td>(0.05)</td>
<td>(0.05)</td>
<td>(0.05)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.01)</td>
<td>(0.01)</td>
<td>(0.01)</td>
<td>(0.01)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ideology</td>
<td>0.49***</td>
<td>0.46***</td>
<td>0.24**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.09)</td>
<td>(0.09)</td>
<td>(0.08)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home Ownership</td>
<td>0.19***</td>
<td>0.11*</td>
<td>0.10*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.05)</td>
<td>(0.05)</td>
<td>(0.05)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>-0.08</td>
<td>-0.05</td>
<td>-0.05</td>
<td>0.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.05)</td>
<td>(0.05)</td>
<td>(0.05)</td>
<td>(0.05)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-0.20***</td>
<td>-0.29</td>
<td>-0.31</td>
<td>-0.24***</td>
<td>-0.39*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.04)</td>
<td>(0.21)</td>
<td>(0.21)</td>
<td>(0.04)</td>
<td>(0.20)</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>692</td>
<td>692</td>
<td>692</td>
<td>692</td>
<td>692</td>
<td>692</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.012</td>
<td>0.088</td>
<td>0.013</td>
<td>0.063</td>
<td>0.009</td>
<td>0.031</td>
</tr>
</tbody>
</table>
Appendix C. Comparisons of the Survey Sample and the Californian Population.

Table A5. Comparisons of Demographic Characteristics between the MTurk Sample and the Californian Population.

<table>
<thead>
<tr>
<th>Variable</th>
<th>California Population Census, July 1 2015</th>
<th>MTurk Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons under 5 years</td>
<td>6.4%</td>
<td>0%</td>
</tr>
<tr>
<td>Persons under 18 years</td>
<td>23.3%</td>
<td>0%</td>
</tr>
<tr>
<td>Persons 65 years and over</td>
<td>13.3%</td>
<td>2.02%</td>
</tr>
<tr>
<td><strong>Female Persons</strong></td>
<td>50.3%</td>
<td>49.13%</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school graduate or higher</td>
<td>81.5%#</td>
<td>99.13%</td>
</tr>
<tr>
<td>Bachelor’s degree or higher</td>
<td>31.0%#</td>
<td>53.18%</td>
</tr>
<tr>
<td><strong>Median Household Income</strong></td>
<td>$61,489</td>
<td>$40,000-$49,000</td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed in civilian labor force</td>
<td>63.4%</td>
<td>76.16%</td>
</tr>
<tr>
<td><strong>Race &amp; Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>72.9%*</td>
<td>67.20%</td>
</tr>
<tr>
<td>Black/African American</td>
<td>6.5%*</td>
<td>8.24%</td>
</tr>
<tr>
<td>American Indian/Native American</td>
<td>1.7%*</td>
<td>1.59%</td>
</tr>
<tr>
<td>Asian</td>
<td>14.7%*</td>
<td>23.84%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>38.8%+</td>
<td>6.07%</td>
</tr>
<tr>
<td>White alone, not Hispanic or Latino</td>
<td>38.0%</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Living in Own Home</strong></td>
<td>54.8%</td>
<td>42.92%</td>
</tr>
</tbody>
</table>

# Percent of persons aged 25 years and older
* Includes persons reporting only one race or ethnicity
+ People Hispanic or Latino people may be of any race, so also are included in applicable race categories
Table A6. Comparisons of Party ID between the MTurk Sample and the Californian Population.

<table>
<thead>
<tr>
<th>Variable</th>
<th>California Voter Registration Data, May 2016</th>
<th>MTurk Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Republican Party</td>
<td>27.3%</td>
<td>15.17%</td>
</tr>
<tr>
<td>Democratic Party</td>
<td>44.8%</td>
<td>49.86%</td>
</tr>
<tr>
<td>Independent</td>
<td>23.3%</td>
<td>27.75%</td>
</tr>
<tr>
<td>Other Party/No preference</td>
<td>-</td>
<td>7.23%</td>
</tr>
</tbody>
</table>
Table A7. Comparisons of Religious Identity and Religious Attendance between the MTurk Sample and the Californian Population in Religion.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pew Religious Landscape Survey</th>
<th>MTurk Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Religious Attendance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At least once a week</td>
<td>31%</td>
<td>12.14%</td>
</tr>
<tr>
<td>Once or twice a month/</td>
<td>35%</td>
<td>18.78%</td>
</tr>
<tr>
<td>A few times a year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seldom/Never</td>
<td>34%</td>
<td>69.08%</td>
</tr>
<tr>
<td><strong>Religion</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baptist</td>
<td>6%</td>
<td>2.75%</td>
</tr>
<tr>
<td>Protestant</td>
<td>21%</td>
<td>9.97%</td>
</tr>
<tr>
<td>Catholic</td>
<td>28%</td>
<td>15.90%</td>
</tr>
<tr>
<td>Mormon</td>
<td>1%</td>
<td>0.43%</td>
</tr>
<tr>
<td>Jewish</td>
<td>2%</td>
<td>1.73%</td>
</tr>
<tr>
<td>Muslim</td>
<td>1%</td>
<td>1.01%</td>
</tr>
<tr>
<td>Hindu</td>
<td>2%</td>
<td>0.58%</td>
</tr>
<tr>
<td>Buddhist</td>
<td>2%</td>
<td>3.03%</td>
</tr>
<tr>
<td>Pentecostal</td>
<td>5%</td>
<td>0.87%</td>
</tr>
<tr>
<td>Eastern Orthodox</td>
<td>1%</td>
<td>0.72%</td>
</tr>
<tr>
<td>Other Christian</td>
<td>1%</td>
<td>10.98%</td>
</tr>
<tr>
<td>Other non-Christian</td>
<td>2%</td>
<td>2.60%</td>
</tr>
<tr>
<td>None</td>
<td>45%</td>
<td>49.42%</td>
</tr>
</tbody>
</table>