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How Dehumanization Influences Attitudes Towards Immigrants

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Abstract

Immigrants, as a group, are frequently described in ways, such as vermin or disease, that portray them as less than human. This type of dehumanizing language leads to negative emotional responses and negative attitudes towards the dehumanized group. This paper examines how the dehumanization of immigrants influences immigration policy attitudes I use original experimental data to show that dehumanization leads to more negative immigration attitudes. I further find that these negative attitudes are mediated by the role of emotion. Dehumanization increases anger and disgust towards immigrants, which causes anti-immigrant sentiment.

Keywords: political psychology, dehumanization, language, emotions

> *"Crooked Hillary Clinton wants to flood our country with Syrian immigrants that we know little or nothing about. The danger is massive. NO!"*
>
> - Donald Trump via Twitter, July 27, 2016[ii]

Political elites can employ numerous strategies to convince the public to agree with their policy positions. Perhaps one of the most powerful ways is to denigrate the out-group affected by the legislation. Discriminatory attitudes towards outgroups, and preferential treatment of in-groups, is a long established trait of human behavior (see Sumner 1906). One tactic used to denigrate out-groups is dehumanization, which denies groups of individuals the same human status given to others (Haslam 2006). I focus on a type of dehumanization referred to by social psychologists as "animalistic dehumanization."[iii] This type of dehumanization denies outgroups traits that are uniquely human – things such as the ability to reason, think critically, or feel emotions – that are typically thought of as what separates human beings from other living organisms (Haslam 2006). Dehumanization leads to harsher judgments of a wide array of groups across a range of political issues, such as the Japanese in World War II (Dower 1986; Russell 1996), African-Americans on trial for murder (Goff et al. 2008), natural disaster victims (Cuddy et al. 2007; Andrighetto et al. 2014) and terrorists (Waytz and Epley 2012).

In the above Tweet, Trump argues that Hillary Clinton wants to *flood* the United States with Syrian immigrants. In this comment, Trump not only takes a tone opposed to Clinton's (supposed) policy position, but uses a form of dehumanizing language to refer to Syrian immigrants as a "flood." This comparison of individuals to a natural disaster is a frequent way political elites use dehumanization. By using analogies to disasters, vermin or disease, political elites are able to deny dehumanized individuals or groups some level of humanity, which makes it easier for the American public to support harsh and punitive action against them.

Despite Trump's often inflammatory rhetoric, dehumanization is not new rhetoric in American political life. In the early 20th century, dehumanizing language was used frequently to describe immigrants entering the country (O'Brien 2003). Frequently, dehumanization takes the form of comparing out-groups to vermin or disease. This form of dehumanization is especially powerful, as it denies attributes of affect and cognition to the group that is dehumanized

(Tipler and Ruscher 2014). At its most extreme, dehumanization can create severely negative images of entire groups in society. During World War II, American propaganda typically dehumanized the Japanese as apes or other lower forms of animals, while Nazi propaganda displayed Jewish individuals as pests and vermin, such as roaches (Dower 1986; Russell 1996). Perhaps most troubling, this dehumanization seemed to be quite effective at engendering hatred towards the dehumanized groups. I argue that dehumanization can occur more subtly, through minor changes in wording, rather than outright dehumanizing images like those present during World War II. This provides an important perspective for scholars of race and ethnic politics, as dehumanizing language is most often used against minority groups, and can have substantial negative consequences for these groups.

This dehumanizing language creates both cognitive and emotional responses in individuals. Directly, dehumanization should lead to more negative attitudes towards immigrants, as it provides a moral justification for punishment of out-groups. Additionally, I focus in greater depth on the emotional responses caused by dehumanization. I expect that the direct effect of dehumanization on attitudes towards immigrants is partially mediated by the role of emotion. That is, dehumanizing language should increase negative emotional responses of fear, anger, and disgust towards immigrants, which will in turn cause more anti-immigrant attitudes. I draw upon original experimental data to determine how dehumanizing immigrants as a disease influences attitudes towards immigration to test these predictions. Given that rhetoric that dehumanizes out-groups is relatively common in current political speech, it is important to understand how this rhetoric can influence attitudes towards immigrants.

Dehumanization, Language and Political Attitudes

Language is an important factor in determining political attitudes. The language an individual speaks (Perez and Tavits 2017), or the language in which an interview is conducted (Perez 2016), have been shown to have consequences in determining attitudinal responses. This work frequently focuses on how language of interview can influence Latino/a attitudes towards immigration policy, though it extends into other policy areas (Lee and Perez 2014). From this emerging literature, it is clear that language matters. However, even within the same language, word choice itself can provide different cognitive influence on decision making.

Politicians, and political elites in general, are heavily focused on political rhetoric. Politicians frequently use words or language that they believe will increase public support of their preferred policies (Riker 1996), and have long encouraged the tailoring of these comments to specific audiences to maximize their impact (Aristotle 1991). However, this rhetoric can have increasing concerns for those groups who are targets of the negative rhetoric. When Latino/as are exposed to rhetoric that devalues their group, those with a strong Latino/a identity respond by being more willing to defend their group and take political action, while those who identify more weakly do not take such action (Perez 2015a). Similarly, when exposed to xenophobic rhetoric, strongly identifying Latino/as are increasingly supportive of ways to emphasize their in-group, in a way that weaker identifiers are not (Perez 2015b). When African-Americans are exposed to rhetoric emphasizing minority health concerns, they tend to view the issue as more important, in a way that whites do not (Gillion 2017). Additionally, rhetoric is often affect-laden and emotional. Simply seeing words one has strong negative reactions towards leads to increasingly negative evaluations of politicians and policies (Utych 2017).

Emotional responses, however, do not operate in a vacuum. Literature on cognitive appraisals of emotions can inform how individuals respond emotionally to rhetoric. Depending on how an individual appraises the situation they are in, they are likely to respond with different emotions (Roseman 1991). This suggests that the same events can trigger difference emotions in different individuals, depending upon how they perceive them (Lerner and Keltner 2000). Anger, in particular, has many distinct appraisals that predict its development: an external cause, coping potential, perceptions of unfairness of the situation, and familiarity of a threat (Brader and Marcus 2013). In this case, a study of a policy such as illegal immigration is ripe to produce anger, since individuals can view immigration as caused externally by foreign nationals, many individual believe the problem can be combatted, it is perceived as a crime, and has been present in America for a long time. Another important discrete emotion, related to dehumanization generally and immigration specifically, is disgust, or the fear of contamination. Immigrants are frequently displayed as potential contaminants (O'Brien 2003), and describing individuals as subhuman often leads to this contamination threat (Haslam 2006).

To examine the interplay of political rhetoric and negative emotional responses, I examine a specific type of rhetoric, dehumanization, which influences judgments of out-groups through multiple channels. The first channel is cognitive, through moral exclusion of dehumanized groups. Dehumanization allows individuals to morally disengage from reprehensible conduct by changing how they look at the victim of the conduct (Bandura 2002). When groups are dehumanized, they are excluded from the typical moral consideration given to other human beings (Haslam 2006). By denying cognition to dehumanized groups, individuals will view them as less capable of realizing they have been treated poorly, which leads to an increased willingness to punish these groups (Bandura, Underwood and Fromson 1975). Additionally, dehumanized groups are assigned lower levels of worth than non-dehumanized groups, which allows individuals to morally justify harsh punishment against those who are dehumanized (Bandura et al. 1996). Moral exclusion causes dehumanized groups "lose the capacity to evoke compassion and moral emotions, and … be treated as means toward vicious ends" (Haslam 2006, p.254).

The cognitive process of moral disengagement is not the only mechanism through which dehumanization should lead to harsher treatment of and attitudes towards out-groups. Dehumanization also frequently produces a negative emotional response towards groups that are dehumanized. Typically, dehumanization leads to increased disgust or contempt towards a dehumanized group (Haslam 2006). When comparing humans to other, lower-level organisms, the distinction between humans and other living things is reduced, leading people to think of basic traits like death and excretion, leading to feelings of being debased (Rozin, Haidt and McCauley 2000). At the same time, another group has been lowered beneath an individual's in-group, which leads to contempt (Miller 1997). When an individual feels disgust, they are the most likely to engage in dehumanization (Buckels and Trapnell 2013). Existing empirical work on dehumanization demonstrates that dehumanization decreases empathy (Andrighetto et al. 2014; Stevenson et al. 2014) towards dehumanized groups, and humanization increases empathy towards humanized groups (Costello and Hodson 2010).

While emotions such as anger, disgust and fear are all negative, they have distinct consequences for political engagement. Anger tends to mobilize all forms of political participation, while fear only mobilizes relatively costless forms of participation (Valentino et al. 2011). Those who feel anger or aversion are more likely to rely on their dispositions, while those who are fearful or anxious will seek out new information (Marcus, Neuman and Mackuen 2000). Individuals who are disgusted with politics, however, are less likely to participate in politics (Vandenbroek 2011). Considering these distinct consequences of emotions, it is important to consider how each discrete negative emotion is influenced by the dehumanization of immigrants, and how these emotions mediate the relationship between dehumanization and anti-immigrant attitudes.

Illegal immigrants are one group who are prime targets of dehumanizing rhetoric. Since the early 1900s, metaphors used to dehumanize immigrants as invaders or diseased organisms have been prevalent in the American media (O'Brien 2003). More recently, this metaphor has continued to be used, describing immigrants as a virus or a pollutant (Cisneros 2008), in addition to direct reports that show immigrants as spreaders of infectious diseases (Esses, Medianu and Lawson 2013). Dehumanization of others as vermin or disease can have especially troubling uses, as it is a frequent tactic used by groups who commit genocide (Russell 1996). Dehumanizing language related to disease and vermin may be even more powerful than language comparing humans to non-human animals. Human beings are generally attributed affect, behavior, and cognition. When compared to wild animals, dehumanized groups are denied cognition, but retain affect and behavior. However, when compared to disease or vermin, these groups are attributed only behavior, and denied both affect and cognition (Tipler and Ruscher 2014).

On the topic of immigration, Esses, Medianu and Lawson (2013) find that Canadian political cartoons that are negative towards immigrants can lead individuals to express dehumanizing views of immigrants, and these views lead to contempt for immigrants. Beliefs about a conflictual relationship between immigrants and nationals also lead to contempt, which leads to negative attitudes towards immigrants (Louis, Esses and Lalonde 2014). Individuals who are more prone to see outgroups as subhuman are more likely to advocate more harsh treatment of these groups (Kteily et al. 2015). Stereotyping groups who are considered to be low in both competence and warmth (a category that typically includes migrant workers) leads to judgments of contempt, disgust and anger towards these groups (Fiske et al. 2002). Those higher in disgust sensitivity are more supportive of detaining illegal immigrants (Kam and Estes 2016), and generally exhibit more negative attitudes towards immigrants and foreigners (Costello and Hodson 2007). Anxiety plays an important role in individual level political decision making (Gadarian and Alberston 2014), particularly as it relates to the issue of immigration (Brader, Valentino and Suhay 2008). On the topic of immigration, it seems that individuals want both protection and punishment. Given that responding with anger predicts a desire to

punish, and fear or disgust predict a desire for protection (Brader and Marcus 2013), it makes sense to think that these emotions are working in concert on the issue of immigration. While knowledge of the effects of emotional response to immigrants and dehumanization has made some strides, I extend upon this line of research by examining *how* emotion is evoked by rhetorical choices, and I examine these discrete negative emotions together in that context.

Taking advantage of experimental data, I examine how dehumanization of immigrants through disease metaphors influences political attitudes. Experimental data is especially important to study the effects of language, as there is reason to expect that those who are exposed to dehumanizing rhetoric may be different than those who are not (for example, they may pursue more ideological news outlets, or pay more attention to political news generally). Further, dehumanization is often subtle, and a psychological concept. In this instance, individuals may not even recall being exposed to dehumanizing language, or may not be aware of what constitutes dehumanization. Review of the existing literature has led to multiple hypotheses, which I will test through the following two experimental studies. I expect that dehumanization of immigrants will lead to more negative attitudes towards immigrants. This relationship should be mediated by increased levels of negative emotions. Based on existing literature, I expect that dehumanization will lead to increased levels of anger and disgust. Also, since I focus on dehumanization through disease metaphors, I expect that this will make individuals more fearful of immigrants. That is, when individuals are exposed to anti-immigrant rhetoric that is dehumanizing, this should make them feel more anxiety, anger, and disgust, which will in turn lead to more restrictive policy preferences. Rhetoric about immigration also takes on multiple dehumanizing contexts; the term "coyotes" is a dehumanizing term frequently used against those who transport illegal immigrants, often in an exploitative way, across the U.S. border. Here, I expect that dehumanizing coyotes will lead to *more* support of pro-immigrant policies, but that this effect may be mitigated by having immigrants dehumanized as well.

Study 1 – Dehumanization of Immigrants on Mechanical Turk

In this study, I conducted a brief experiment using Amazon's Mechanical Turk (mturk) in July 2014. Subjects were U.S. citizens over the age of 18 who were recruited from the mturk platform. They were paid 50 cents for their time spent completing the study, which took an average of roughly 3 minutes. Only non-Hispanic whites were retained for analysis, giving a total *N* of 237. The sample is a convenience sample, with participants ranging in age from 18-82, with a mean of 31. The sample was roughly 35% female, and highly educated, with 50% of subjects having a bachelor's degree or higher. In the study, subjects were asked a few demographic questions, and were then randomly assigned to read one of two texts about immigration. The first text was negative towards immigration, but did not contain dehumanizing language.[iv] While this language is strong, dehumanization of immigrants remains fairly common. For example, Rep. Steve King of Iowa discussed selecting the "right" immigrants by using a metaphor comparing them to animals, saying "You want a good bird dog? You want one that's going to be aggressive? Pick the one that's the friskiest … not the one that's over there sleeping in the corner."[v] Comments such as this are used against immigrants frequently, and generally serve to deny them some elements of their humanity. While the treatment text has multiple instances of dehumanization, this may mimic the effects in the real world, where individuals are exposed to many types of information that dehumanizes immigrants. The second group was assigned to read a text with some words changed to dehumanize immigrants[vi]. In total, roughly 18% of the text was changed between the non-dehumanization and dehumanization groups. The full treatment texts are available in Appendix A.

After reading the text, subjects were asked to rate their agreement with a series of questions about immigration policy. These questions are related to increasing the level of legal immigration, increasing border security, and supporting a way for illegal immigrants to gain legal status.[vii] These results are presented in Table 1. Dehumanization[viii] has a significant impact on attitudes towards immigration. Subjects in the dehumanization treatment are about a third of a point[ix] less likely to believe the level of legal immigrants should be increased and a similar magnitude more likely to support increased border security than those in the non-dehumanization group. They are also nearly two-thirds of a point less likely to support an amnesty program granting legal status to illegal immigrants. These results suggest that, even on a hotly contested issue like immigration, even one short text dehumanizing immigrants as a virus or disease can have a negative influence on political attitudes.

Subjects were also asked the extent to which they had an emotional response to illegal immigrants.[x] This was measured on a five point scale, from "very slightly or not at all" (1) to "extremely" (5). Results of these analyses are presented in Table 2. Mean levels of these negative emotions were relatively low (1.52 for fear, 2.34 for anger, and 1.74 for disgust). Those in the dehumanization treatment were not different from the non-dehumanization group in self-

reported feelings of fear or anger, though those in the dehumanization treatment were more likely to report feeling disgusted towards illegal immigrants. This effect is small, but is equivalent to a roughly 1/5 standard deviation increase in self-reported disgust.

This emotional response should, in part, explain the effect of dehumanization on attitudes towards immigrations. To test this, I turn to a Sobel mediation analysis[xi] (Sobel 1982; Preacher and Leonardelli 2001) to determine the mediating effect of disgust on attitudes towards immigrants. First, I combine the three dependent variables in an additive scale ranging from 0-18, with 18 corresponding to the most pro-immigrant attitudes.[xii] This scale has high reliability (Cronbach's $\alpha = .81$). Then, I conduct an analysis to determine how increased feelings of disgust mediate the effect of the dehumanization treatment on these attitudes. These results are presented in Figure 1. Here, dehumanization increases feelings of disgust, which in turn decreases the likelihood of an individual having pro-immigrant attitudes. Dehumanization retains a relatively large direct effect of over a point on the scale, though disgust itself has a rather large effect of over 4 points. Roughly 20% of the effect of dehumanization on attitudes towards immigrants is explained by increased feelings of disgust.

Dehumanization of immigrants through the disease metaphor influences attitudes towards immigrants directly by causing more negative attitudes towards immigrants, and indirectly by increasing self-reported levels of disgust towards immigrants. However, the current study uses a convenience sample. While there is no reason to expect the treatment to be more effective on younger people, men, or the highly educated, it would be beneficial to see how dehumanization influences a more representative sample.

A more problematic issue is with the measurement of disgust. In this sample, self-reported disgust and anger were highly correlated ($r = .765$), suggesting that anger and disgust are hard emotions to disentangle with self-reports. Indeed, Nabi (2002) finds that lay perceptions of disgust often combines elements of what psychologists consider to be anger and disgust. In a sample of undergraduates tasked with writing a short essay, roughly 75% of those assigned to write about a time they felt disgust wrote about something that could be classified as anger, while only 25% wrote about something typically classified as disgust (Nabi 2002). To address these concerns, I turn to a similar study conducted on a representative sample of non-Hispanic whites.

Study 2 – Dehumanization of Immigrants – Survey Sampling International Study

Using the same treatment texts and group assignment as in study 1, I included an immigration dehumanization module on an omnibus study conducted in late July and early August 2014. Participants were recruited from Survey Sampling International's (SSI) survey panel. The entire survey took about 13 minutes, and participants were compensated with entries into SSI's prize drawings. Only non-Hispanic whites who are U.S. citizens and do not report having an immediate family member serving in the military were recruited for this study. Participants were sampled to be nationally representative on age, gender and education.

In this study, at total of 1,084 subjects were assigned to participate in the immigration experiment. They were assigned to receive a text that was negative towards immigrants, but not dehumanizing or a text that was negative towards immigrants and dehumanized them as a disease or toxin.[xiii] Subjects were then asked the same series of questions as in the Mturk study regarding their attitudes towards immigration, and a series of questions about their emotional responses towards illegal immigrants.

In this study, subjects were asked to rate illegal immigrants on a feeling thermometer.[xiv] In these analyses, I have excluded[xv] those rating illegal immigrants at 0 on the feeling thermometer, which comprises 18% of the sample, and those who rate illegal immigrants at 100, roughly 4.6% of the sample.[xvi] For those rating illegal immigrants at 0, there is not likely to be any effect of dehumanization, as they already have a strong, negative affective response to illegal immigrants. As such, I have retained only those who rate illegal immigrants above zero in pre-treatment ratings. This is especially important because dehumanization should operate through causing attitudes towards immigrants to become more negative. If an individual already rates illegal immigrants at zero on the feeling thermometer, there is no way for them to feel *more* negatively about immigrants. For those rating illegal immigrants the highest on the scale, these individuals are less likely to feel negative affect towards immigrants.[xvii] As such, it is likely that the rather small treatment may be rejected by these individuals. This retains a total of 565 subjects for analysis. Results for the main dependent variables[xviii] using this restricted sample are presented in Table 3.[xix]

Here, the effect sizes of the dehumanization treatment are a bit smaller in magnitude than in Study 1, but dehumanization still has an effect on attitudes towards immigration. Compared to the non-dehumanization group, those in the dehumanization group are less likely to want to increase the number of legal immigrants and support a path to citizenship for illegal immigrants, and more likely to want to increase border security. As with the Mturk sample in Study 1, this representative sample of non-Hispanic whites is influenced by dehumanization of immigrants.

Table 4[xx] demonstrates how dehumanizing immigrants leads to an emotional response towards illegal immigrants. Fear, anger and disgust were measured on the same five-point scale as in Study 1. Again, these negative emotional responses had relatively low mean values (1.73 for fear, 2.47 for anger, and 2.12 for disgust). Here, dehumanization leads to higher reported feelings of both anger and disgust[xxi], but not fear. Both anger and disgust increase about 1/5 of a point on a five-point scale for the dehumanization treatment, compared to the non-dehumanization treatment. Again, anger and disgust are highly correlated in this sample (r = .719), suggesting that self-reported disgust may be tapping feelings of anger rather than disgust. To address this concern, I also asked respondents to indicate, on a seven-point scale, whether immigrants make Americans more prone to infectious diseases. This measure helps tap the idea of contamination disgust, which helps alleviate concerns about the lack of a lay distinction between disgust and anger (see Kam and Estes 2016). Given that immigrants are portrayed as a disease in this study, it is more likely to evoke a contamination disgust response rather than a socio-moral disgust response. This measure is still correlated with feelings of anger, though considerably less so than the self-reported disgust measure (r = .458). Further, it is still able to tap an element of disgust where illegal immigrants are clearly the target of the emotional response. Those in the dehumanization treatment are more likely to report that they believe immigrants make Americans prone to infectious disease[xxii], though the effect is small, only about 1/5 of a scale point.

To determine how emotional response mediates the effect of dehumanization on attitudes, and to determine how anger and disgust operate differently, I again turn to a Sobel mediation analysis (Sobel 1982). Since this analysis uses two mediating variables, I perform the mediation analysis according to Preacher and Hayes (2008).[xxiii] I again recode the three immigration attitude variables into an additive scale ranging from 0-18 (Cronbach's α = .76). Anger is measured through self-reported measures, while disgust is measured through the question on how much the respondent agrees that immigrants make Americans more prone to infectious diseases. Both variables are recoded from 0-1, with 1 indicating higher levels of the emotional response. This analysis is presented in Figure 2.

To further unpack this, I turn to a mediation analysis of each dependent variable separately.xxiv For the increase immigration variable, the indirect effect of anger is -0.043 (s.e.=.021), the indirect effect of disgust is -0.029 (s.e.=.020), and 35.5% of the total effect is mediated. For increasing border security, the indirect effect of anger is -0.038 (s.e.=.018), the indirect effect of disgust is -0.023 (s.e =.016), with 31.1% of the total effect mediated. For support of amnesty, the indirect effect of anger is -0.085 (s.e.=.037), while the indirect effect of disgust is -0.022 (s.e.=.016), for a 39.1% total mediation effect. While these results do not achieve the same levels of statistical significance as they do for the scaled variables, they are similar in direction and emotional responses seem to have roughly similar effects for each variable.

Both anger and disgust have a mediating effect on how dehumanization influences attitudes towards immigrants. Anger has a bit larger of an indirect effect than disgust, and both have relatively strong negative effects on attitudes towards immigrants. The direct effect of dehumanization persists, equivalent to about a half point decrease on the scale of pro-immigrant attitudes. Roughly 36% of the total effect of the dehumanization treatment on attitudes towards immigrants is mediated by feelings of anger and disgust.

Finally, in this survey, I took advantage of the common term "coyote," which refers to individuals who transport immigrants illegally into the United States (and frequently exploit them) to conduct an additional question wording experiment. I asked subjects the following question, and manipulated whether these individuals were called "coyotes" or "persons." The question text is as follows:

> "Would you favor or oppose harsher punishment for [**coyotes/persons**] who are paid by undocumented immigrants to bring them into the United States?"

Here, I analyze results from all survey respondents, as I do not necessarily expect that pre-existing attitudes towards illegal immigrants will bias how individuals feel about those who transport illegal immigrants into the U.S. should be punished. As expected, the coyote treatment has a positive direct effect, though only for those in the non-

dehumanization treatment group. In the non-dehumanization group, individuals believe about 1/3 of a point more strongly that individuals should be punished more harshly for transporting immigrants when they are called "coyotes" compared to when they are called "persons." However, this effect disappears in the group where immigrants have been dehumanized. Those in the control group are actually about 1/10 of a scale point more supportive of harsher punishment, though this effect is not distinguishable from zero. Those in the dehumanization group also are more supportive of harsher punishments generally (about a ¼ point difference, comparing those who receive the "persons" language only). The term "coyotes" itself is a dehumanizing term, comparing those transporting immigrants to wild, predatory animals. It appears that, when immigrants are not dehumanized, dehumanizing a group who takes advantage of them encourages harsher punishment. However, when immigrants are dehumanized, it appears that respondents prefer punishment generally, but dehumanizing the individuals who transport immigrants across the border does not have an effect on the level of punishment they support.

As in Study 1, dehumanization influences attitudes towards immigrants negatively. In this study, I am able to better isolate the discrete emotional responses to dehumanization of immigrants as a disease, and find that both disgust and anger partially mediate the effect of dehumanization on attitudes towards immigrants. This falls in line with existing work on dehumanization that suggests contempt and disgust are the emotional mechanisms through which dehumanization operates, and extends upon this work by testing each emotional response concurrently. The dehumanizing term "coyote" can have some *positive* consequences for illegal immigrants, as this language leads to increased support for harsher punishment for individuals who smuggle immigrants across the border, often exploiting them and putting their lives at risk. However, I find that this effect only persists in instances where illegal immigrants have not already been dehumanized.

Summary and Conclusions

Philosopher Martha Nussbaum explains dehumanization by saying that "People find a group of humans onto whom they can project the discomfort they feel about their own bodies, calling them smelly, slimy, disgusting" (2008, p.85). Media portrayals of immigrants have long followed this formula (O'Brien 2003; Cisneros 2008). I find that dehumanizing immigrants by portraying them as a virus or disease leads to more negative attitudes towards immigrants and more restrictive policy preferences. The impact of dehumanization is mediated by the emotional responses of disgust and anger. Using a nationally representative survey, I further find that anger and fear have distinct consequences for policy preferences and attitudes on immigration.

This research has implications for scholars of political psychology and language in politics. Using language that dehumanizes out-groups leads to harsher evaluations of those groups, and predicts more restrictive policy preferences. While these effects are small, they are based only on a single instance of dehumanization of the out-group. As dehumanization of out-groups occurs more frequently, it may lead to increasingly negative attitudes towards these groups among the public.

There are also implications for those who study how emotions mediate the role of political rhetoric. In this study, I use a measure of disgust that is more distinguishable from anger than a self-report, and am able to examine distinct emotional responses to dehumanization together in the same study. I show that anger and disgust both mediate the effect of dehumanization on attitudes, suggesting that the emotional response to dehumanizing language is relatively complex. This could explain why scholars have found such varied emotional mediation mechanisms in previous research on dehumanization. It's clear that dehumanization leads to a negative affective response to out-groups, but it is unclear which responses are triggered in which types of individuals. Future research could examine how dehumanization influences individuals high in trait aggression and disgust sensitivity in different ways. Individual level disgust sensitivity serves to predict a host of public health (Clifford and Wendell 2016) and moral (Kam and Estes 2016) issues, so it is important to consider how trait level disgust sensitivity works with dehumanization in future research.

Further, there are implications for the study of emotions and immigration. Feeling anxiety about immigration causes a biased information search – that is, individuals who feel anxious about immigration are more likely to read and agree with information about immigrants that is more threatening (Gadarian and Alberston 2014). It is important to consider how dehumanization can influence such information gathering. Since dehumanization operates through increasing both anger and disgust towards dehumanized immigrants, how may this influence information seeking about immigration, in concert with anxiety? Additionally, anger and disgust are emotions with unique behavioral

consequences. This study was not able to adjudicate a difference in policy preference between anger and disgust towards immigrants, but future work could examine how these emotions may predict different reactions to immigrants. Once could imagine, for example, that disgust may trigger protectionist policies, such as increased barriers to entry or removal from the country of immigrants, while anger may lead to more confrontational policy preferences, such as incarceration or even violence. This study only asked individuals about general immigration policies, but future work on dehumanization and emotional responses towards immigrants could examine how different policy areas are predicted by emotional response.

This research also has implications for scholars of race and ethnic politics. Since dehumanized groups are typically racial or ethnic minorities, it is important to consider how contextual effects like dehumanization can influence racial attitudes. Scholars who use survey or observational data to examine racial attitudes could be influenced by dehumanization, especially chronic dehumanization, of these groups by political elites. I have shown that attitudes towards immigrants can be influenced by dehumanizing language, so it is important to consider the possibility that how political elites and the public talk about minority groups could influence individuals' attitudinal responses towards these groups.

There are some limitations to this study that must be adjudicated in future work. First, it is possible that the dehumanization text is simply stronger information than the control text. In the current study, I was unable to test that. However, increased disgust towards a dehumanized group is a common prediction in literature on dehumanization, and showing that suggests that, to some extent, dehumanization is occurring. Future work could use a manipulation check to verify that the dehumanized treatment actually works to dehumanize the target group. Additionally, it is difficult to contextualize the effect size of dehumanization. How would these effects hold up to standard types of information that biases decision making, like partisan cues? Given the effect sizes, I imagine the cues of language would be mitigated at least partially, if not completely, by a partisan cue, but the current study does not allow one to draw such conclusions.

Dehumanization is a normatively troubling concept. When a group is referred to as vermin or disease, they are denied the human traits of affect and cognition. This leads to preferences that are in line with how individuals would treat a disease or infestation – through extermination or eradication (Tipler and Ruscher 2014). These troubling metaphors are shockingly similar to those used in Nazi Germany (Russell 1996). Given that dehumanization has historically led to catastrophic consequences for dehumanized groups, it is important for both scholars and practitioners of politics to understand how this language operates and the serious consequences it may have for marginalized groups.

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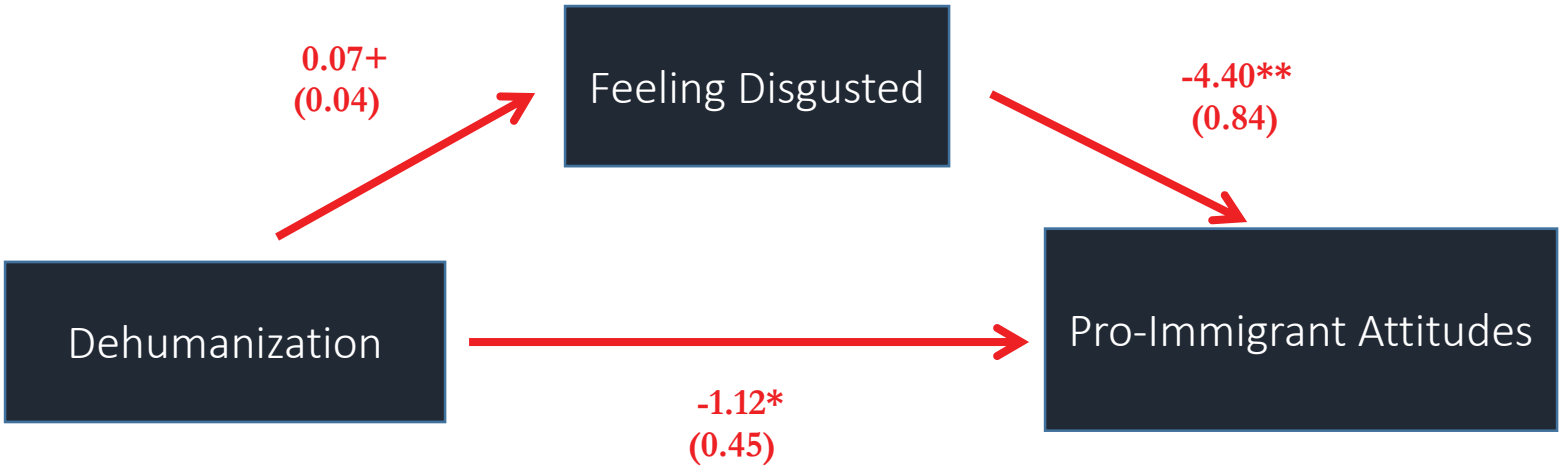
Figure 1. How Disgust Mediates the Effect of Dehumanization on Attitudes towards Immigrants – Study 1

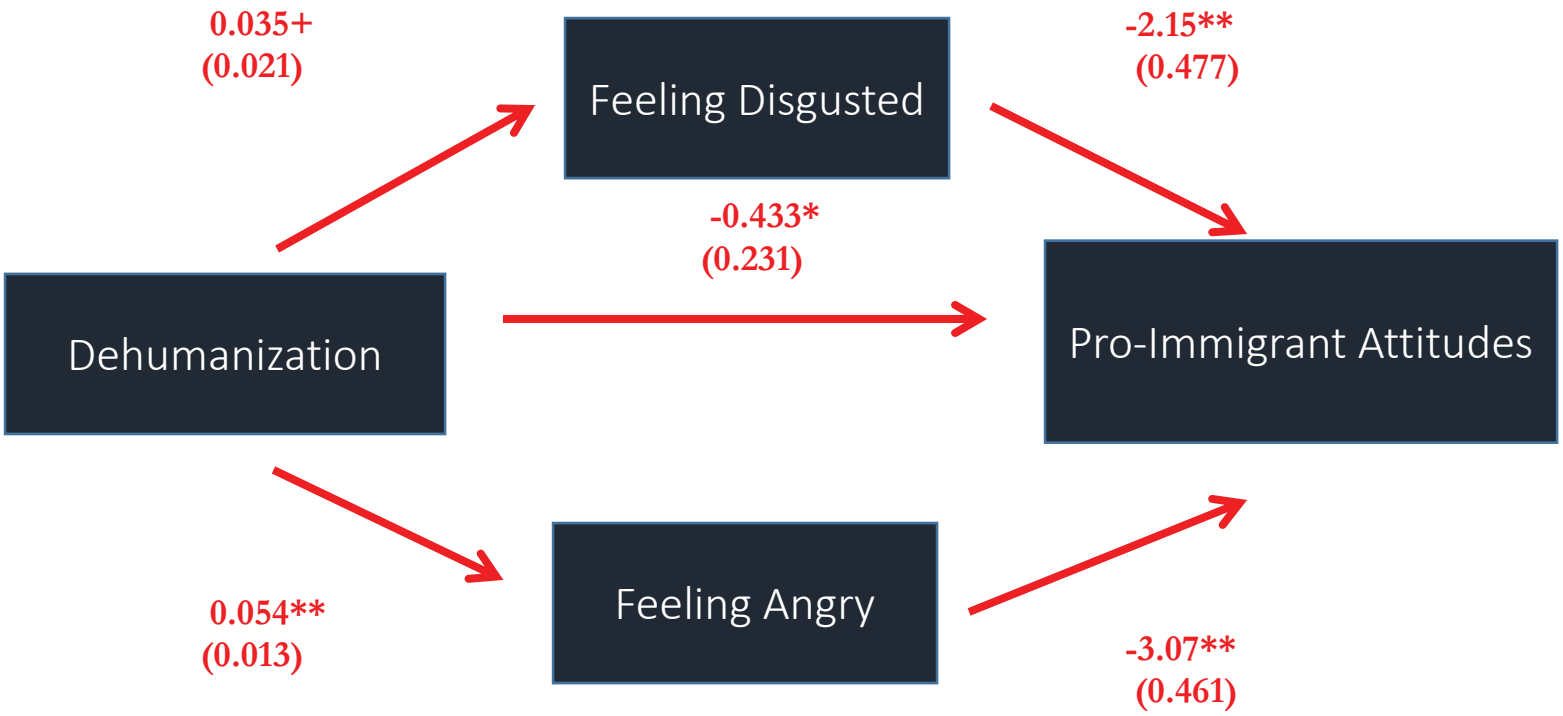


Sobel Coefficient: -0.29+ (0.16)

Proportion of total effect mediated: .204

+ p<0.10, * p<0.05, ** p<0.01

Figure 2. How Disgust and Anger Mediate the Effect of Dehumanization on Attitudes towards Immigrants – Study 2



Indirect effect of Anger:	-0.165*	Proportion of total effect mediated:	.358
	(0.057)		
Indirect effect of Disgust:	-0.075^		
	(0.048)		
Total indirect effect:	-0.241*		
	(0.093)		

^ p<.12, + p<0.10, * p<0.05, ** p<0.01

Table 1. *Impact of Dehumanization on Immigration Attitudes – 2014 Mturk Survey*

	Increase Level of Immigrants	Increase Border Security	Support Amnesty for Illegal Immigrants
Dehumanization treatment	**-0.37+** **(0.19)**	**0.39*** **(0.20)**	**-0.65**** **(0.21)**
Age	-0.01 (0.01)	0.01 (0.01)	-0.00 (0.01)
Female	0.26 (0.19)	-0.35+ (0.20)	0.27 (0.22)
Education	0.55 (0.45)	-0.26 (0.47)	0.38 (0.52)
Text realistic	-0.28 (0.39)	0.74+ (0.40)	-0.66 (0.44)
Text persuasive	-2.27** (0.35)	3.88** (0.36)	-3.47** (0.40)
Text unnatural	0.69+ (0.37)	-0.09 (0.39)	1.03* (0.42)
Constant	4.61** (0.52)	2.25** (0.54)	6.29** (0.59)
N	237	237	237
R^2	0.2875	0.4915	0.4275

Table entries are OLS coefficients with standard errors in parentheses.
Sample restricted to non-Hispanic whites only
+ p<0.10, * p<0.05, ** p<0.01

Table 2. *Impact of Dehumanization on Emotional Responses to Immigrants - MTurk*

	Fear	Anger	Disgust
Dehumanization treatment	**0.11 (0.10)**	**0.14 (0.15)**	**0.26+ (0.14)**
Age	0.01 (0.00)	0.00 (0.01)	0.00 (0.01)
Female	-0.29** (0.10)	-0.43** (0.15)	-0.58** (0.14)
Education	-0.10 (0.24)	-0.31 (0.37)	0.07 (0.34)
Text realistic	0.05 (0.21)	0.12 (0.32)	0.30 (0.29)
Text persuasive	0.73** (0.19)	1.98** (0.28)	1.46** (0.26)
Text unnatural	0.20 (0.20)	-0.23 (0.30)	-0.36 (0.28)
Constant	1.06** (0.28)	1.32** (0.42)	0.92* (0.39)
N	237	237	237
R^2	0.1234	0.2855	0.2580

Table entries are OLS coefficients with standard errors in parentheses.
Sample restricted to non-Hispanic whites only
+ p<0.10, * p<0.05, ** p<0.01

Table 3. *Impact of Dehumanization on Immigration Attitudes – 2014 SSI Survey*

	Increase Level of Immigrants	Increase Border Security	Support Amnesty for Illegal Immigrants
Dehumanization treatment	**-0.20+**	**0.20+**	**-0.27***
	(0.12)	**(0.10)**	**(0.13)**
Conservative	-0.12	0.08	-0.18
	(0.16)	(0.13)	(0.18)
Liberal	0.16	-0.50**	0.37*
	(0.16)	(0.13)	(0.18)
Republican	0.21	0.07	-0.32
	(0.21)	(0.18)	(0.24)
Education	0.28	0.09	0.14
	(0.26)	(0.22)	(0.29)
Female	0.11	0.07	0.22
	(0.12)	(0.11)	(0.14)
Political knowledge	0.27	0.07	0.48+
	(0.25)	(0.21)	(0.27)
Political news	-0.36	-0.33	0.26
	(0.25)	(0.22)	(0.28)
FT Illegal Immigrants	2.19**	-2.14**	2.81**
	(0.26)	(0.22)	(0.29)
Text realistic	-1.62**	1.43**	-0.97**
	(0.32)	(0.27)	(0.36)
Text persuasive	-0.03	0.37	-0.34
	(0.29)	(0.25)	(0.33)
Text unnatural	-0.13	-0.45*	-0.04
	(0.25)	(0.21)	(0.28)
Constant	1.99**	5.58**	2.10**
	(0.37)	(0.31)	(0.41)
N	565	565	565
R^2	0.2816	0.4061	0.3188

Table entries are OLS coefficients with standard errors in parentheses.
Sample excludes those who illegal immigrants at 0 or 100 on the feeling thermometer.
+ p<0.10, * p<0.05, ** p<0.01

Table 4. *Impact of Dehumanization on Emotional Responses to Immigrants*

	Fear	Anger	Disgust	Immigrants Make Americans More Prone to Disease
Dehumanization treatment	**0.07**	**0.21***	**0.16+**	**0.21+**
	(0.08)	**(0.09)**	**(0.09)**	**(0.13)**
Conservative	0.06	-0.05	-0.10	0.29+
	(0.11)	(0.12)	(0.12)	(0.17)
Liberal	-0.20+	-0.41**	-0.39**	-0.28+
	(0.11)	(0.12)	(0.12)	(0.17)
Republican	0.12	-0.01	-0.03	0.07
	(0.14)	(0.16)	(0.17)	(0.23)
Education	-0.10	-0.26	-0.28	-0.19
	(0.17)	(0.19)	(0.20)	(0.28)
Female	0.04	-0.03	0.02	-0.07
	(0.08)	(0.09)	(0.10)	(0.13)
Political knowledge	-0.33*	-0.13	-0.24	-0.54*
	(0.17)	(0.18)	(0.19)	(0.27)
Political news	-0.02	-0.15	-0.24	-0.31
	(0.17)	(0.19)	(0.20)	(0.28)
FT Illegal Immigrants	-0.71**	-2.42**	-1.87**	-2.18**
	(0.17)	(0.19)	(0.20)	(0.28)
Text realistic	0.27	0.85**	1.00**	1.50**
	(0.22)	(0.24)	(0.25)	(0.35)
Text persuasive	0.43*	0.48*	0.32	0.05
	(0.20)	(0.22)	(0.23)	(0.32)
Text unnatural	0.46**	0.05	0.55**	-0.32
	(0.17)	(0.19)	(0.20)	(0.27)
Constant	1.63**	2.93**	2.36**	4.47**
	(0.25)	(0.28)	(0.29)	(0.40)
N	565	565	565	565
R^2	0.1434	0.4101	0.3052	0.2950

Table entries are OLS coefficients with standard errors in parentheses.
Sample excludes those who illegal immigrants at 0 or 100 on the feeling thermometer.
+ p<0.10, * p<0.05, ** p<0.01

Table 5. *Impact of Dehumanization of Immigrants and Name of Smugglers on Attitudes towards Punishment*

	Support Harsher Punishment
	0.28*
	(0.12)
Coyote treatment	**0.36****
	(0.12)
Dehumanization x Coyote	**-0.44***
	(0.17)
Text realistic	0.57**
	(0.22)
Text persuasive	0.52*
	(0.21)
Text unnatural	-0.24
	(0.17)
FT Illegal Immigrants	-1.77**
	(0.15)
Constant	5.49**
	(0.16)
N	1082
R^2	0.2002

Table entries are OLS coefficients with standard errors in parentheses.
+ p<0.10, * p<0.05, ** p<0.01

Appendix A. Treatment Texts

Non-Dehumanization Text

I understand that immigration has become a *controversial* issue these days. However, the *movement* of immigrants across our border must be *controlled*. Our nation is *negatively impacted* by illegal immigration; this *situation* is getting worse, not better. Some have suggested amnesty as a *solution*; I believe this is a *solution that just exacerbates the problem*. Offering amnesty will not *end* the problem of illegal immigration – it will only make our country *let in* more immigrants. We have to *address* this problem at its *location*. Only increased border security and deportation will serve to *control* the *danger* of illegal immigration.

Dehumanization Text

I understand that immigration has become a *toxic* issue these days. However, the *transmission* of immigrants across our border must be *contained*. *The body of* our nation is *plagued* by illegal immigration; this *disease* is getting worse, not better. Some have suggested amnesty as a *cure*; I believe this is a *remedy that kills the patient*. Offering amnesty will not *eradicate* the problem of illegal immigration – it will only make our country *absorb* more immigrants. We have to *attack* this problem at its *nucleus*. Only increased border security and deportation will serve to *quarantine* the *poison of* illegal immigration.

Appendix B. Question Texts

Dependent Variables – Study 1 and 2

Do you think the number of immigrants from foreign countries who are permitted to come to the United States to live should be INCREASED, LEFT THE SAME as it is now, or DECREASED?

Increased a lot

1	2	3	4	5	6	7

Would you favor or oppose legislation to increase border security in order to make it more difficult for individuals to enter the country illegally?

Strongly Oppose — Strongly Favor

1	2	3	4	5	6	7

Would you favor or oppose legislation that would allow undocumented immigrants already in the country to apply for legal status?

Strongly Oppose — Strongly Favor

1	2	3	4	5	6	7

Disgust measure – Study 2

Please rate the extent to which you agree or disagree with the following statement.
Illegal immigrants make Americans more prone to infectious diseases

Strongly Agree

1	2	3	4	5	6	7

i Supplemental materials, including data and replication files, can be found at <LINK>.
ii https://twitter.com/realDonaldTrump/status/758242674646323200
iii This is in contrast to what psychologists refer to as "mechanistic dehumanization," which compares a dehumanized individual or group to non-living entities (Haslam 2006). While vermin and disease are not what lay persons may typically thing of as animalistic, these groups are still made of living organisms and considered variants of animalistic dehumanization.
iv These texts were adapted from language used in U.S. Senate floor speeches coded as dehumanizing, done for an unrelated project. While this text was related to a foreign policy scenario, I find that dehumanization of immigrants is common, with over 1/3 of news articles in the New York Times providing some dehumanization of immigrants over a two-month period in April-May 2010.
v Quoted in http://www.politico.com/gallery/2012/06/10-wild-immigration-quotes-126972?slide=2
vi For the purposes of this study, dehumanization of immigrants focused on the contagion or disease metaphor. I have selected only one type of dehumanization to avoid conflating the effects of types of dehumanization in the analyses.
vii Full question texts are available in Appendix B.

[viii] The dehumanization treatment is coded as 1 for those in the dehumanizing language group, and coded as zero for those in the non-dehumanizing language group.

[ix] All dependent variables on immigration are measured on a seven-point scale.

[x] This emotional response was measured immediately after the treatment, but before the dependent variables, in both studies.

[xi] Sobel mediation analysis is presented for ease of interpretation. Results are robust to the Average Causal Mediation Effect analysis (ACME) (Imai et al. 2010). These results are presented in Table O1 of the online appendix. Effects are calculated using the Stata package created by Hicks and Tingley (2011). Effects using this method are statistically significant at $p = .065$.

[xii] Legal and illegal immigration are considered to be different domains (Wright, Levy and Citrin 2016). However, I find similar results across all questions. As such, I have scaled all three questions together for ease of interpretation.

[xiii] Treatment texts and variable wording are the same as in the Mturk study, and are available in Appendix A.

[xiv] This rating was made pre-treatment, in a battery of 7 other feeling thermometer ratings. There are no differences between the treatment and control group on these ratings, and those who are dropped are just as likely to be in the treatment or control group.

[xv] Results are somewhat robust to including all subjects, regardless of feeling thermometer ratings of illegal immigrants. While there is no effect of dehumanization on desire to increase the number of immigrants ($\beta = -.031$, $p = .77$), those in the dehumanization treatment still show a preference for increased border security ($\beta = .163$, $p = .06$) and are marginally less likely to favor a pathway to citizenship ($\beta = -.171$, $p = .13$).

[xvi] Those excluded vary a bit on demographics, with those who rate illegal immigrants at 0 more likely to be Republican, less educated, and less likely to follow political news than the sample retained for analysis. Those who rate illegal immigrants at 100 are less likely to be Republicans, and marginally more likely to be female, compared to the sample retained for analysis. However, both groups differ from the retained sample in their emotional reactions. Those who rate illegal immigrants more negatively are much more likely to feel anger and disgust towards immigrants, and those who rate illegal immigrants more positively feel less anger and disgust, regardless of assignment to the treatment or control group. This suggests that their emotional responses may be harder to move, making dehumanization less effective on these groups.

[xvii] While it is true that not all individuals who rate illegal immigrants at zero will continue to do so in the future, they will likely rate them quite low and feel considerably negatively towards them already – this is similar with those who rate them at 100, in the opposite direction. Given that the treatment is quite small, I have chosen to focus on those who are more ambivalent towards illegal immigrants, given that their attitudes are more likely to change. The scale endpoints of 0 and 100 were chosen specifically to only reflect those with the strongest feelings towards illegal immigrants.

[xviii] A total of 219 subjects who clicked through the page containing the treatment, which included an introductory text and a 100 word treatment text, in less than 7 seconds are excluded from analysis. Reading speeds faster than 900 words per minute (or 15 words per second) are not possible due to anatomical limitations (Bremer 2016) – meaning the minimum possible timing for one to read and comprehend the treatment is 6.67 seconds.

[xix] In both studies, post-treatment controls are included for ratings of the text. On average, the dehumanization text is rated as less realistic, less persuasive, and more unnatural than the treatment text in both studies. This essentially functions as another mediating variable – those who do not believe the dehumanization text are less persuaded by it – but one with minimal theoretical interest for the present study.

[xx] Table 4 includes analysis with controls for observed covariates in the study. This is done to increase statistical precision of my estimates, as dehumanization leads to small observed effects.

[xxi] Results are robust to including those excluded based on feeling thermometer ratings for self-reported anger ($\beta = .207$, $p = .01$) and disgust ($\beta = .143$, $p = .10$)

[xxii] When including all subjects, regardless of feeling thermometer ratings of illegal immigrants, these results become smaller in magnitude and do not reach standard levels of statistical significance ($\beta = .085$, $p = .46$). When only excluding those rating illegal immigrants at 100 on the feeling thermometer, results become a bit stronger, but still do not achieve statistical significance ($\beta = .140$, $p = .23$).

[xxiii] Results are robust to the Average Causal Mediation Effect analysis (ACME) (Imai et al. 2010) on each mediator independently (using a *p-value* threshold of .10). These results are presented in Tables O2 and O3 of the online appendix. Effects are calculated using the Stata package created by Hicks and Tingley (2011).

[xxiv] Full results are available in the online appendix.