Public Support for Economic Sanctions: An Experimental Analysis

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What are the determinants of public support for the government’s foreign policy? We shed light on this question using experiments investigating public support for economic sanctions. Our results suggest that humanitarian concerns are associated with individuals’ decisions to support the use of sanctions against a target country. We find that high levels of public pain in the target country have a negative relationship with the likelihood of supporting sanctions, and tailored sanctions, which aim to shift damage from the targeted country’s population to its leadership, have a higher probability of support than comprehensive sanctions. At the same time, policy effectiveness shapes public support, but only indirectly—through individuals’ subjective evaluations rather than given estimates of policy success. When subjective evaluations of effectiveness are higher, sanctions receive more public support. Recalled effectiveness, on the other hand, has no direct effect on the decision to support the sanction policy.

What are the determinants of public support for the government’s foreign policy? From the perspective of public opinion, do ends justify the means, or are means in fact a top priority? Answering these questions has important implications for democratic policymaking because public opinion is one of the main constraints on democratic leaders. Furthermore, these implications extend into the realm of international relations, when democratic leaders make decisions regarding international conflict or cooperation. Although some studies have questioned the extent to which public opinion matters in foreign policymaking, existing research provides substantial evidence that politicians do take public opinion into account (e.g., Page and Shapiro 1983; Canes-Wrone 2006). IR scholars have relied on the concept of public opinion in developing their theoretical accounts of international conflict: For instance, public opinion is central to the model of audience costs (Fearon 1994), the diversionary war theory (Russett 1990a, 1990b), and Jentleson’s (1992) description of a “pretty prudent” public.

We study the issue of public support and its determinants with a focus on economic sanctions. Sanctions are an increasingly popular, coercive policy option: approximately 57 percent of the 1,412 sanction episodes initiated between 1945...
and 2005 were imposed in the 1990s and early 2000s (Morgan, Bapat, and Kobayashi 2014). The frequency of sanction use has prompted the sanctions literature to focus on the origins of this policy, and this focus has resulted in a debate over different motivations that leaders may have in using sanctions policies. Two motivations have been identified and examined extensively in the literature: namely, instrumental and symbolic motivations. Studies that have emphasized and elaborated the instrumental role of sanctions focus on the range of outcomes that sanctions can achieve and conditions that make sanctions more effective (Hufbauer, Schott, and Elliott 1990; Miyagawa 1992; Morgan and Schwebach 1995, 1997; Smith 1995; Dashti-Gibson, Davis, and Radcliff 1997; Drury 1998; Eaton and Engers 1999; Drezner 2000; Hart 2000; Nooruddin 2002; Lektzian and Souva 2003, 2007; Allen 2005; McLean and Whang 2010; Whang, McLean, and Kuberski 2013). The other side of this debate highlights the high rate of sanction failures and questions the instrumental motivation in policymakers’ decisions to impose sanctions. Instead, this research advances the symbolic, or expressive, function of sanctions as the primary reason for their use (Galtung 1967; Barber 1979; Daoudi and Dajani 1983; Nincic and Wallensteen 1983; Whang 2011).

We do not take a side in this sanctions debate; instead, we believe that both motivations for using economic sanctions have the same origin. We argue that these motivations are linked to public opinion. Consequently, to understand the use of this foreign policy instrument better, we turn our attention to public support for economic sanctions.

Existing research provides useful insights into possible determinants of public support. One important influence is the instrumental value of a policy—that is, its effectiveness. When voters consider a policy implemented in a given issue area by the country’s government, the voters care about the outcome of this policy (Canes-Wrone 2006). A more effective policy is preferable to a less effective policy, all else being equal (Jentleson 1992; Larson 1996; Jentleson and Britton 1998; Herrmann, Tetlock, and Visser 1999; Eichenberg 2005; Gelpi, Feaver, and Reifler 2006). Therefore, to understand public support for sanctions, we need to consider sanction effectiveness as one factor that influences voters’ decision to support sanctions.

We argue that voters are not only outcome oriented, but they also care about the means used to achieve a given outcome. In particular, while the instrumental value of a policy is an important determinant of public support, voters also care about symbolic aspects of the policy, that is, voters want the policy to represent their values. Consequently, voters expect foreign policies chosen and implemented by their leaders to reflect the voters’ values. In democratic countries, the voters favor policy instruments that are consistent with democratic values, including respect for human life. Therefore, we expect that, in their decision to support economic sanctions, voters will prefer a more humane sanction policy—that is, less damaging for the population of the targeted country—to a less humane one, all else being equal.

The remainder of the article is organized as follows. The first part lays out our theoretical approach that links public support for sanction policy with expected policy outcomes as well as symbolic characteristics of sanction policies. We then formulate our theoretical predictions about the relationship between public support and sanction effectiveness, on the one hand, and the type of sanctions imposed, on the other.

The second part of this article tests these hypotheses in a controlled laboratory environment. We believe that the use of experiments has two main benefits for the study of public opinion and foreign policymaking. First, lab experiments allow us to manipulate the decision environment in a way that isolates the importance of the factors specified by our theoretical approach: We can change the values of the variables that we are interested in while controlling other parts of the decision
context (Ostrom 1998). Second, experiments allow us to obtain evidence about the causal relationship that is at the core of our theoretical framework: we can determine whether individuals express their support for a given sanction policy in ways predicted by our theoretical argument.

The third part of the article presents our results. We find that individuals take humanitarian concerns into account in their decision to support sanctions against a target country. More specifically, high levels of public pain in the target country decrease the probability of support for sanctions. More participants decided to support tailored sanctions, which tend to be less damaging for the targeted country’s population, than comprehensive ones. We also show that individuals care about policy effectiveness, but only indirectly, by forming their subjective evaluations rather than accepting an external estimate of policy success. Participants were more likely to support sanctions when their subjective evaluations of effectiveness were higher, while effectiveness based on the estimate of sanction success provided in the experiment had no direct effect on the participants’ decisions. This result suggests that individuals may not accept policymakers’ assessments of expected policy effectiveness; instead, decisions regarding policy support are related to subjective expectations of sanction success.

The final section considers implications of the analysis for understanding foreign policymaking and, in particular, the use of economic sanctions. Our research presents novel findings and makes an important contribution to the study of public opinion in democratic countries: We show that the public do not prioritize ends over means; instead, the support for sanction policies depends on the public’s humanitarian values. Our results identifying the factors that influence voters’ decisions serve as a valuable insight into the origins of democracies’ foreign policies.

When Does Public Policy Receive Public Support?

Existing studies of security and economic issues show that voters in democratic countries hold policymakers accountable for their performance while in office (e.g., Barro 1973; Ferejohn 1986; Keech 1995). The policymakers’ performance is a basis for determining their competence, which is an important consideration for voters since they prefer to have competent, rather than incompetent, leaders in office. Even though performance is partly a function of the policymakers’ competence, it is obviously an indirect indicator because policy outcomes are not completely under the policymakers’ control. Consequently, voters are expected to form subjective evaluations of observable outcomes and then rely on these evaluations in forming their opinion of the policymakers’ competence and in determining whether or not to support the policymakers’ decisions.

When the government imposes economic sanctions, voters engage in the same evaluation process. The instrumental approach to explaining the use of sanctions asserts that governments utilize sanctions to force target countries to change some controversial policies. From this standpoint, when sanctions are imposed, voters in sender countries evaluate their leaders’ performance in a given international dispute by taking note of sanction outcomes. In particular, voters consider the target’s decision to offer concessions or not. The voters’ support for the leaders’ policy choice should increase as the sanctions policy results in more favorable outcomes for the sender country.

Studies of public opinion suggest that we need to differentiate between direct and indirect impacts of policy outcomes on voters’ support for leaders’ decisions. While traditionally, researchers focused on the direct effect of policy outcomes (e.g., Mueller 1973; Gelpi, Feaver, and Reifler 2006), other analyses find that voters’ subjective evaluations, that is, the indirect effect, are equally or even more important for the voters’ support (MacKuen, Erikson, and Stimson 1992; Voeten
and Brewer 2006). Therefore, we expect public support for economic sanctions to be shaped not only by the objective effectiveness of the sanction policy but also by voters' subjective assessments of sanction effectiveness.

In addition to policy outcomes, we argue that voters care about the type of policy instrument chosen by leaders to achieve their foreign policy goals. The issue of instrument choice is particularly important in understanding the use and design of economic sanctions because sanction effectiveness is generally low. After analyzing 115 cases of economic sanctions, Hufbauer, Schott, and Elliott (1990) find only 34 percent of them to have been effective in forcing the target country to change its behavior. Pape's (1997) assessment is even more pessimistic: He argues that only five of the forty purported sanction successes deserve to be labeled as such and concludes that this rate of sanction success leaves “no sound basis for even qualified optimism about the effects of sanctions” (66).

Despite the low likelihood of sanction success, and therefore, its expected negative effect on public opinion, policymakers continue relying on this policy instrument. Some sanction researchers address this puzzle by arguing that sanctions are useful for symbolic (or expressive) purposes regardless of their instrumental value (Galtung 1967; Barber 1979; Daoudi and Dajani 1983; Nincic and Wallensteen 1983; Whang 2011). Therefore, the policymakers' use of sanctions is shaped by the citizens' disapproval of the target country's actions and their expectation that their government will adopt a policy expressing the country's moral position.

The symbolic function of economic sanctions requires the voters in the sender country to hold a set of values, which serve as a basis for judging the appropriateness of the government's policy. The role of moral and other values remains understudied in the sanction research and in foreign policy research in general. Existing studies primarily focus on moral, and more specifically humanitarian, aspects of using military force (Welch 1993; Price 1998; Herrmann and Shannon 2001). Morgenthau (1973) stated that “certain things are not done on moral grounds, even though it would be expedient to do them” (231). Similarly, Harman (1977) argued that individuals can act out of concern for other people—a motivation that “does not arise from considerations of self-interest” (69). More

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1Although we remain agnostic about the origins of our participants' subjective assessments of sanction effectiveness, previous research on public opinion suggests that the public may form their opinion regarding foreign policies not only based on decision-makers' claims about the expected success of a given foreign policy, but also through informational shortcuts (Sniderman, Brody, and Tetlock 1991; Popkin 1993), such as politicians' statements or information presented in mass media (Iyengar and Kinder 1987; Krosnick and Kinder 1990; Larson 2000). Extant research suggests that mass media play a particularly prominent role in shaping public opinion. In particular, Wanta, Golan, and Lee (2004) demonstrate that when individuals are exposed to more negative coverage in mass media about foreign countries, these individuals have more negative views of these countries. Moreover, Peksen, Peterson, and Drury (2014) argue that more extensive media coverage of human rights violations by foreign governments results in greater public awareness and, consequently, in greater pressure on leaders to do something about the abuses. Such pressure, in turn, increases the likelihood of economic sanctions. In addition, mass media facilitate leaders' accountability, especially in crisis situations: Baum and Groeling (2009) suggest that mass media tend to over-report critical elite assessments of a president's policies. The finding that mass media are more likely to inform the public when policies implemented by political leaders are ineffective may help to explain why participants in our study appear to be skeptical of given assessments of policy success.

2Some scholars have expressed skepticism regarding public awareness of foreign affairs (e.g., Holsti 2004; Guisinger 2009). However, other studies provide evidence suggesting that the public pays attention to and forms coherent opinions regarding international issues in the area of security as well as economic affairs. For instance, Aldrich, Sullivan, and Borgida (1989) show that voters in fact notice differences between candidates' foreign and defense policy positions and take these differences into account when voting. Other studies suggest that public opinion serves as a constraint on policymakers, but there may also be an effect that policymakers exert on public beliefs (Canes-Wrone, Brady, and Cogan 2002). Milner and Tingley (2011, 2013) find that public opinion is an important influence on foreign policy decision-making in the area of foreign aid as well as trade. See Aldrich et al. (2006) for a detailed review of this literature.

3A few sanction studies that do focus on the role of values include Christiansen and Powers (1995), Weiss et al. (1997), and Gordon (2010).
recently, McElroy (1992) suggested that American foreign policy reflects moral considerations of the country’s leaders and the public: Policymakers may consider moral norms when weighing alternative policy options. The channel that transmits the pressure of public moral norms to policymakers in democracies is democratic institutions. This idea can be traced back to Kant’s expectation that democracy will lead to more peaceful international relations in part due to moral constraints on the use of force. McElroy (1992, 45) points out that the reason policymakers pay attention to the public’s moral concerns is “the desire of presidents and congressional representatives for reelection and popularity”. The presence and influence of such moral norms have been demonstrated in experiments that identify mechanisms that reduce conflict in democratic dyads: Microlevel evidence shows that “morality plays an important role in the democratic peace” (Tomz and Weeks 2013, 862).

Studies of moral aspects of foreign policy also emphasize the trade-off between the objective of a country’s foreign policy and its costs. Jentleson (1992) and Jentleson and Britton (1998) suggest that the public will support policy actions that are very costly for their country as long as such actions counter other countries’ aggression; otherwise, policy costs have a significant negative effect on policy support. Similarly, Gelpi, Feaver, and Reifler (2006) and Eichenberg (2005) show that individuals’ perceptions of whether conflict was right or wrong, as well as expectations of success, make individuals more tolerant of human costs of conflict. Others have identified a more general aversion to killing and military responses to aggression as an important determinant of public support for military actions (Hurwitz and Peffley 1987; Liberman 2006). Finally, the public appears to be sensitive to humanitarian consequences of their countries’ foreign policies for other countries as well: Some studies demonstrate that, while public support for military intervention increases when the intervention is expected to succeed, support drops when individuals’ are informed of civilian casualties (Eichenberg 2005).

If voters in the sender country view economic sanctions as an expression of their moral values in a given international dispute, the voters should also expect their moral values to be reflected in the choice of a sanction instrument and evaluate policymakers’ performance based on the morality of the chosen sanction measures. Existing research suggests that voters hold their leaders accountable for choosing between doing nothing about the target country’s objectionable policy and imposing sanctions (Whang 2011; McLean and Whang 2014), that is, voters care about the symbolic role of sanctions and they expect their government to adopt a moral position in international disputes. We take this line of research further by looking at different types of sanction instruments and argue that, all else being equal, voters prefer their policymakers to choose a sanction instrument more in line with their values.

We focus on the humanitarian dimension of voters’ values and the influence of humanitarian concerns on the choice of a sanction instrument, building on insights from existing foreign policy research. Economic sanctions can often be designed to accommodate humanitarian values of the sender country’s citizens. Existing sanction studies demonstrate that the implementation of sanction policies can have significant humanitarian repercussions for target countries, which citizens in sender nations may wish to avoid. In particular, economic sanctions have negative public health effects; the scale of these effects increases as sanction costs to the target grow (Peksen 2011) and is comparable to the damage associated with military conflicts (Allen and Lektzian 2013). Sanctions also weaken target governments’ respect for human rights, making torture, extrajudicial killings, and politically motivated imprisonment more common in sanctioned countries, and the detrimental consequences are more substantial in the case of comprehensive sanctions (Peksen 2009). Moreover, more vulnerable societal groups, such as women, tend to bear the brunt of sanctions’ negative political and economic
consequences (Drury and Peksen 2014). Finally, voters in democratic sender nations are likely to be concerned about the general weakening of democratic freedoms in target countries: Sanctions create incentives for target countries’ leaders to suppress opposition and consolidate their authoritarian rule, and such incentives appear to be more powerful when targets experience comprehensive sanctions (Peksen and Drury 2010). In sum, sanctions have a range of negative humanitarian consequences, and sender countries often have the ability to tailor their sanction policies in a way that reduces the costs imposed on the target country’s population. More specifically, tailored, or targeted, sanctions aim to avoid harming innocent people in target countries and impose sanction costs primarily on the target’s leaders (Cortright and Lopez 2002). Since targeted sanctions are more consistent with democracies’ regard for human life than comprehensive sanctions, we expect citizens to show more support for the use of targeted measures than a comprehensive sanction policy.

**Theoretical Predictions**

Our theoretical approach generates predictions about public support for sanction policy. Because the success of a sanction regime is directly linked to the successful outcome of the dispute with the target country, public support should be higher for sanctions when their expected effectiveness is high, as opposed to moderate. Additionally, public support is expected to be higher for tailored sanctions as opposed to the comprehensive type because of their different impacts on vulnerable or innocent foreign civilians. We also expect to find interactive effects of the chosen type of sanction policy and its assessed effectiveness on public support for the sanction policy. When the expected effectiveness of sanctions is only moderate, the public should have a strong preference for tailored sanctions rather than a comprehensive sanction policy, with its higher humanitarian costs that are inconsistent with democratic voters’ humanitarian values. On the other hand, we expect that in the case of highly effective sanctions, there should be no difference in the level of public support for comprehensive and targeted sanctions. In sum, we can state our testable hypotheses as follows:

**H1:** When expected sanction effectiveness is higher, support for sanction policy will be higher, irrespective of sanction type.

**H2:** Support for comprehensive sanctions will be lower than support for tailored sanctions when expected sanction effectiveness is modest, but this difference will diminish as expected effectiveness increases.

In addition to testing the predictions derived from our theoretical approach, as presented in H1 and H2, we conduct robustness checks to examine the possibility that framing effects may affect public support for economic sanctions. Kahneman and Tversky (1979) argue that the manner in which the likelihood of success is presented may influence the degree of risk that individuals perceive. Hence, individuals who receive effectiveness descriptions of a sanction policy presented in terms of the probability of failure (a negative frame) are expected to be less likely to support this sanction policy than individuals who receive the same information but presented in terms of the probability of success (a positive frame). If our participants’ decisions to support sanction policies are indeed affected by framing

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4Such sanctions can also be labeled as “smart” sanctions.

5A frequently cited example of framing effects is individuals’ preference ordering for two surgical procedures, one of which has a 10 percent mortality rate and the other—a 90 percent survival rate (Levy 1997, 90). These are mathematically equivalent descriptions, yet individuals prefer the latter option (a positive frame) to the former (a negative frame).
effects, we are likely to find the following results: When sanction effectiveness is framed negatively—in terms of the probability of failure—participants will be, on average, less likely to support the sanction policy than when the frame is positive but offers the same informational content. This means, for example, that our participants should be less likely to support a sanction policy with a 40 percent likelihood of failure than a policy, which has a 60 percent probability of success, but is otherwise identical to the former.

**Experimental Design**

One hundred fifty-eight male and female undergraduate students enrolled in political science courses at Texas A&M University took part in our experiment. Each participant was randomly assigned to an experimental condition by a blind draw of one out of eight different scenario booklets. After receiving instructions, the participants read the scenarios contained in their booklets at their own pace. The scenarios described a hypothetical international conflict in which the use of sanctions is considered as a possible policy choice. All participants then made a choice to support or not support the economic sanctions presented in their booklets.

We use a $2 \times 2 \times 2$ between-groups factorial design for this experiment. The three factors correspond to the independent variables identified in our theoretical expectations: sanction effectiveness, sanction type, and framing. Combinations of the three bi-level factors result in eight experimental conditions as shown in Table 1. The main dependent variable is a participant’s choice regarding his or her support for the proposed economic sanctions. We also performed several manipulation checks to assess the internal validity of our research design.

Experimental materials were presented in eight different paper booklets specific to the assigned experimental condition. The booklets described a hypothetical situation in which the US president was preparing to announce economic sanctions against the fictitious country of Erqat. In describing this country and the disputed issue, our scenarios hold constant many of the factors identified in the existing literature as determinants of sanction imposition. Specifically, this country has an autocratic and repressive government, an economy dependent on exports of raw materials, and a population that is largely poor. In addition, the scenarios present a highly salient issue as the motivation for sanction imposition—the target country develops a uranium enrichment program, which is a national security threat to the United States. We made a hypothetical country the focus of our scenarios in order to avoid preconceptions that the participants might have about actual countries and that could interfere with the controlled experimental manipulations. Figure 1 shows the flow of the experiment.

Each experiment began with instructions that explained the purpose and general format of the experimental case presented to the participant. The scenario

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<th>Comprehensive sanctions</th>
<th>Moderately effective</th>
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<td>Positive frame</td>
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<th>Targeted sanctions</th>
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<td>Condition 1:</td>
<td>comprehensive sanctions; moderately effective; positive frame</td>
<td>Condition 2: comprehensive sanctions; moderately effective; negative frame</td>
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<td>Condition 3:</td>
<td>comprehensive sanctions; highly effective; positive frame</td>
<td>Condition 4: comprehensive sanctions; highly effective; negative frame</td>
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<td>Condition 5:</td>
<td>targeted sanctions; moderately effective; positive frame</td>
<td>Condition 6: targeted sanctions; moderately effective; negative frame</td>
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<td>Condition 7:</td>
<td>targeted sanctions; highly effective; positive frame</td>
<td>Condition 8: targeted sanctions; highly effective; negative frame</td>
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| Table 1. Experimental Conditions Combining Three Factors |
began with the following background information about the political and security situation and established a realistic scenario.

The newly elected U.S. president will address the nation tomorrow evening concerning proposed actions against the dictatorship in Erqat, the moderately-sized nation of 20 million people located on the shore of the Indian Ocean. The president will share new evidence that the Erqat regime has recently procured highly specialized equipment for enriching uranium, an essential ingredient for producing a nuclear weapon. Erqat has mined, processed and exported uranium for over 10 years to Pacific Rim nations for their use in power generation. However, Erqat has also been suspected of selling uranium to North Korea and Syria for weapons development programs, but this has not yet been proven.

The rhetoric between the U.S. and Erqat governments has been increasing in intensity over the past several months. The last few weeks have been marked with diplomatic efforts to change Erqat’s course. However, the Emir of Erqat spoke forcefully against U.S. administration yesterday, insisting that Erqat was a peaceful nation and demanding that the U.S. cease interfering in his nation’s sovereign affairs.

Evidence of the purchase of the uranium enriching equipment is claimed to be “air tight” by U.S. officials. However, the Department of Energy and the National Director of Intelligence estimate that Erqat, even with this recent acquisition, could not produce a nuclear weapon for at least another 5 years.

During his nationwide address, the U.S. president is also expected to announce unilateral economic sanctions against Erqat. He will also explain that the U.S. is already immersed in talks with its allies and the United Nations about making the sanctions multilateral. Political analysts point to the international backlash against recent U.S. military interventions as a key reason that the American administration is turning to economic sanctions to coerce Erqat into reversing its direction in its quest for a nuclear weapon.

Such a reversal is considered essential to the political, security, and economic stability of the region, which supplies over half of the world’s oil supply. The U.S. also fears the addition of another source from which a terrorist organization could gain access to a nuclear weapon. Beyond its own borders, Erqat is suspected by the United States of financing a small but deadly terrorist group. Erqat is also a member in several non-aligned, anti-US organizations. In the Emir’s domestic affairs, he openly bestows favor on his upper and middle-class supporters while neglecting the lower classes and harshly repressing political opponents.

Immediately after this introduction, the participants read a description of the economic sanctions planned by the President. Half of the participants received a
description of comprehensive sanctions, with their relatively short timeline and high humanitarian cost:

The sanctions the president will announce consist of a comprehensive trade embargo intended to force an upswell of dissent across Erqat that will cause the leadership to rapidly reverse their course toward developing a nuclear weapon.

Erqat is a naturally endowed nation, but relies heavily on exports of raw materials and imports of large amounts of grains and major manufactured goods. The proposed sanctions are expected to impact the Erqatan gross national product and induce a widespread domestic economic crisis.

The U.S. administration expects these sanctions to have particularly damaging effects on the vast lower class of Erqat. In particular, nongovernmental agencies have estimated that these least privileged masses will experience a significant increase in malnutrition and disease soon after the sanctions begin.

This is expected to result in many additional deaths within 4 months of starting sanctions and a sharply increased mortality rate thereafter, especially among children and the elderly. Over a 12-month period, these comprehensive sanctions are expected to cause the death of a large number of impoverished Erqatans. While administration sources acknowledge that unintended consequences may result from the sanctions, they stress that the embargo is an essential action to stop the Erqatan government from developing a nuclear weapon.

The remaining half of the participant group received a description of tailored sanctions, with their longer timeline and lower humanitarian cost:

The measures the president will announce are known as tailored sanctions, intended to target only the elites within the Erqat government and society and coerce them into reversing their current course, while minimizing any harm brought to the vast majority of the Erqatan people.

The president will freeze Erqatan assets within the United States, block foreign direct investment by U.S. financial institutions in Erqat, and embargo a large number of luxury items normally in high demand among the Erqatan elite. These sanctions are expected to create economic distress primarily for the government of Erqat and its wealthier and more powerful supporters, avoiding the promotion of malnutrition, disease, and death among Erqat’s lowest classes.

However, tailored sanctions usually require a longer time to work than a more comprehensive embargo. The projected 24 to 36-month timeline for the tailored sanctions to succeed is expected to permit the Erqatan government to progress to actually beginning uranium enrichment before they are expected to be coerced by economic hardships to abandon their quest for a nuclear weapon.

Participants then read one of eight different expert assessments presenting expectations that the sanctions would be either highly or moderately effective and delivering that information in either a positive or a negative frame. Those participants, who had received the comprehensive sanctions input, were given one of four assessments shown below, representing all possible combinations of the effectiveness and frame variables:

US administration sources state that their experts give the sanctions an 85% chance of successfully convincing the government of Erqat to abandon its plans to enrich uranium within 12 months.
US administration sources state that their experts give the sanctions a 15% chance of failing to convince the government of Erqat to abandon its plans to enrich uranium within 12 months.

US administration sources state that their experts give the sanctions a 60% chance of successfully convincing the government of Erqat to abandon its plans to enrich uranium within 12 months.

US administration sources state that their experts give the sanctions a 40% chance of failing to convince the government of Erqat to abandon its plans to enrich uranium within 12 months.

Those participants, who had received the tailored sanctions input, were given one of four assessments similar in form to the comprehensive sanctions input provided above, representing all possible combinations of the effectiveness and frame variables.

Finally, the booklets instructed the participants to mark their choices, indicating their support or absence of support for the sanctions planned by the President. After the participants had registered their decisions in their booklets, the participants responded to a nine-item questionnaire without referring back to their scenarios. The questions included five requests to recall information from the scenario to determine whether the participants understood key facts upon which the experimental manipulations were based. The remaining four questions asked the participants to provide additional information based on their personal assessment of factors, such as the probability of the sanctions’ success and the level of pain that the sanctions would create in the targeted country.

Note that while college students represent a readily available sample of the American public for academic research, some studies suggest that the students’ age and social status can be controversial. Sears (1986) and Mintz, Red, and Vedlitz (2006) question scholars’ ability to make appropriate generalizations to other groups from results obtained from experiments conducted with college undergraduates as participants, especially when the area of focus is foreign policy. Other studies address this concern by arguing that even when the research focus is on decisions normally made by experts, expertise should not be a prerequisite for participants in experimental research (Wright, Bolger, and Rowe 1992). In fact, naïve and expert participants exhibit similar biases in their choices. For instance, Gartner (2008) shows that differences in age and amount of education do not have a significant impact on individuals’ support for the Iraq War. More importantly, our research focus is not on policymaking; instead, we study public support for government policies. Since undergraduate students are members of the American public, their decisions to support or oppose a policy are part of the public opinion and do not need to be formulated based on any specialized knowledge about economic sanctions because the rest of the American population does not utilize such knowledge in their decision-making either.

To address the concern regarding external validity and generality of experimental tests performed based on a purportedly unrepresentative sample of individuals, previous research points out that the question should not be whether the participants are representative of some other possible group of people, but whether the results are relevant as a test of the hypothesis (Kruglanski and Kroy 1976). The primary check of such relevance is whether the participant sample falls within the universe of applicability of the theory. In the case of our study, college students constitute a sample that clearly falls within the scope of our theoretical framework by virtue of the students’ status as members of the American public. Mook (1983) addresses the issue of generality of experimental results by emphasizing that the range of applicability of experimental results should be considered and specified in the context of a scholar’s theory. Test results should not
be evaluated by whether or not they can be generalized—they either support the theory or do not.

Finally, personal characteristics of participants, such as age, gender, or party identification, do not affect the internal validity of an experiment. Random assignment of participants to treatment groups ensures that the comparison drawn between the groups is as pure as possible, and no other factors can affect the comparison. Since we rely on random assignment, we can be confident that different treatment groups are essentially equivalent, and any differences that we may observe result from the experimental treatment. For further discussion of external validity of this study, see Appendix.

Results and Interpretation

The main dependent variable was the dichotomous measure of each participant’s choice to support the sanctions (coded “1”) or not (coded “0”). We also coded four additional measures. We assessed the participants’ recall of the probability of sanctions success, as provided in the scenario, as well as the participants’ personal beliefs about the likelihood of success. To measure recall, which represents a manipulation check to see whether participants paid attention to and remembered provided information, we asked the participants to write down the number they recalled from the booklets presented as the probability of sanctions success or failure (this provided probability is the expert effectiveness assessment or the manipulated assessment). To gauge the participants’ subjective assessment, we asked them to report their own estimations of sanctions success by marking it on a scale ranging from “0” to “100.” Similarly, the participants reported their personal beliefs about the pain that the sanctions would cause (1) for the public and (2) for the leaders in the targeted country by marking their assessments on two separate scales ranging from “1” (not painful) to “10” (very painful).

Overall, the results from the experiment are consistent with the theoretical predictions. To summarize briefly, our findings suggest that the key determinant of individuals’ support for sanctions against a target country is the moral aspect of the sanction policy. In particular, more participants favor tailored sanctions, which generally cause less harm to the targeted country’s population, than comprehensive sanctions, across all experimental conditions. Therefore, high levels of public pain in the target country are associated with participants’ decision not to support sanctions. Our results also indicate that there is a positive association between support for sanction policy and effectiveness assessment, but it only holds for individuals’ subjective evaluations. Individuals do not appear to use given (i.e., manipulated) estimates of policy success in their decision-making.

Result 1: Public Support for Tailored Sanctions Is Higher than for Comprehensive Sanctions, and Public Support for Sanctions Declines When the Level of Public Pain in the Target Country Increases

Table 2 reports the results of the ANOVA \((2 \times 2 \times 2)\) on the main dependent variable, Support, and shows that Type has a significant effect on the participants’ decision to support sanctions, consistent with H2. Across all variations of Effectiveness and Frame, 66.7 percent of the participants choose to support the sanction policy when the policy is tailored to reduce humanitarian suffering in the targeted country, as opposed to only 43.8 percent of the participants who make the same choice when presented with a comprehensive sanctions scenario \([F(1,150) = 9.11, p = .00, \text{Power} = .87]\). These results indicate that the participants are significantly concerned about harm to the population of the targeted country across all other experimental conditions.

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Note that we do not claim that political ideology or partisanship cannot influence subjects’ opinions, but in this controlled experiment, our focus is on testing the theoretical argument presented in this study.
To confirm this interpretation, we modify the analysis by adding Public pain as an ANCOVA covariate. We find that the participants’ choices regarding support for a specific sanction policy are significantly related to the participants’ assessments of pain caused to the target country’s population $[F(1,138) = 8.44, p = .00, \text{Power} = .84]$. This relationship is strong enough to become the only significant relationship between Support and the three factors and their interactions. On the other hand, when we use Leader pain as a covariate, we do not find a significant relationship with Support. Moreover, this does not change the significant effects of the experimental factors. Together, these two results indicate that the participants are focused on the potential harm to the target country’s population but not to its leadership.

A repeated-measures ANOVA on Public pain and Leader pain (PL_Pain) helps to further investigate the role of pain assessments in these decisions. The results in Table 3 show that the difference between participants’ assessments of pain experienced by the target country’s public and by its leadership was statistically significant $[F(1,146) = 6.50, p = .011, \text{Power} = .68]$. Furthermore, our analysis reveals that the mean value of assessed public pain was 6.85, whereas the mean value of pain caused to the leaders is 6.12.

Table 2. ANOVA Results for Support by Between-Groups Experimental Factors

<table>
<thead>
<tr>
<th>Factors and interactions</th>
<th>DF</th>
<th>Sum of squares</th>
<th>Mean square</th>
<th>F value</th>
<th>p value</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type*</td>
<td>1</td>
<td>2.08</td>
<td>2.08</td>
<td>9.11</td>
<td>0.00</td>
<td>0.87</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>1</td>
<td>0.01</td>
<td>0.01</td>
<td>0.03</td>
<td>0.87</td>
<td>0.05</td>
</tr>
<tr>
<td>Frame</td>
<td>1</td>
<td>0.36</td>
<td>0.36</td>
<td>1.57</td>
<td>0.21</td>
<td>0.23</td>
</tr>
<tr>
<td>Type $\times$ frame</td>
<td>1</td>
<td>0.66</td>
<td>0.66</td>
<td>2.90</td>
<td>0.09</td>
<td>0.38</td>
</tr>
<tr>
<td>Type $\times$ effectiveness</td>
<td>1</td>
<td>0.15</td>
<td>0.15</td>
<td>0.68</td>
<td>0.41</td>
<td>0.12</td>
</tr>
<tr>
<td>Effectiveness $\times$ frame*</td>
<td>1</td>
<td>1.04</td>
<td>1.04</td>
<td>4.56</td>
<td>0.03</td>
<td>0.56</td>
</tr>
<tr>
<td>Type $\times$ effectiveness $\times$ frame</td>
<td>1</td>
<td>0.50</td>
<td>0.50</td>
<td>2.19</td>
<td>0.14</td>
<td>0.30</td>
</tr>
<tr>
<td>Residual</td>
<td>150</td>
<td>34.26</td>
<td>0.23</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* $p < .05$.

Table 3. Repeated-Measures ANOVA Results for Public Pain and Leader Pain (PL_Pain) as a Within Subjects Factor by the Between Groups (Experimental) Factors

<table>
<thead>
<tr>
<th>Factors and interactions</th>
<th>DF</th>
<th>Sum of squares</th>
<th>Mean square</th>
<th>F value</th>
<th>p value</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type</td>
<td>1</td>
<td>2.22</td>
<td>2.22</td>
<td>0.45</td>
<td>0.50</td>
<td>0.10</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>1</td>
<td>2.25</td>
<td>2.25</td>
<td>0.45</td>
<td>0.50</td>
<td>0.11</td>
</tr>
<tr>
<td>Frame</td>
<td>1</td>
<td>1.92</td>
<td>1.92</td>
<td>0.39</td>
<td>0.53</td>
<td>0.09</td>
</tr>
<tr>
<td>Within subjects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PL_Pain*</td>
<td>1</td>
<td>32.16</td>
<td>32.16</td>
<td>6.50</td>
<td>0.01</td>
<td>0.68</td>
</tr>
<tr>
<td>PL_Pain $\times$ type*</td>
<td>1</td>
<td>328.07</td>
<td>328.07</td>
<td>66.25</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>PL_Pain $\times$ effectiveness</td>
<td>1</td>
<td>0.27</td>
<td>0.27</td>
<td>0.05</td>
<td>0.82</td>
<td>0.06</td>
</tr>
<tr>
<td>PL_Pain $\times$ frame*</td>
<td>1</td>
<td>24.08</td>
<td>24.08</td>
<td>4.86</td>
<td>0.03</td>
<td>0.56</td>
</tr>
<tr>
<td>Residual</td>
<td>300</td>
<td>1,485.52</td>
<td>4.95</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* $p<.05$.

To confirm this interpretation, we modify the analysis by adding Public pain as an ANCOVA covariate. We find that the participants’ choices regarding support for a specific sanction policy are significantly related to the participants’ assessments of pain caused to the target country’s population $[F(1,138) = 8.44, p = .00, \text{Power} = .84]$. This relationship is strong enough to become the only significant relationship between Support and the three factors and their interactions. On the other hand, when we use Leader pain as a covariate, we do not find a significant relationship with Support. Moreover, this does not change the significant effects of the experimental factors. Together, these two results indicate that the participants are focused on the potential harm to the target country’s population but not to its leadership.

A repeated-measures ANOVA on Public pain and Leader pain helps to further investigate the role of pain assessments in these decisions. The results in Table 3 show that the difference between participants’ assessments of pain experienced by the target country’s public and by its leadership was statistically significant $[F(1,146) = 6.50, p = .011, \text{Power} = .68]$. Furthermore, our analysis reveals that the mean value of assessed public pain was 6.85, whereas the mean value of pain caused to the leaders is 6.12.

More importantly, the type of sanctions is strongly related to these pain assessments: As Figure 2 shows, participants assess the pain to be significantly greater for the public when sanctions are comprehensive, but greater for the leaders when the sanctions are tailored $[F(1,146) = 66.25, p < .00, \text{Power} = 1.00]$. This confirms that the participants understood the Type manipulation and it affected their choices. Interestingly, the participants believe that tailored sanctions
produce a somewhat lower but still unmistakable level of pain (mean $= 5.69$ on a 10-point scale), despite the fact that the tailored sanction descriptions in the scenario only mentioned their intent to prevent public pain while creating pain for the leaders and elites of the foreign country.

Result 2: Public Support for Sanctions Increases as Subjective Assessment of Sanction Effectiveness Increases, While Recalled Effectiveness Has No Relationship with Support for Sanctions

Returning to the basic ANOVA results reported in Table 2, a main effect from the factor Effectiveness is noticeably absent, offering no support for H1, which links higher sanction effectiveness with greater public support for the use of sanctions. Furthermore, the interaction of Type and Effectiveness is not significant, as expected in H2. To probe these results further, we use ANCOVAs on Support as the dependent variable first with Recalled effectiveness and then Subjective effectiveness as covariates. These analyses show that only Subjective effectiveness has a statistically significant relationship with Support [$F(1,138) = 26.68, p < .00, \text{Power} = 1.00$]. As with the earlier use of Public pain as a covariate, the inclusion of Subjective effectiveness uncovers such a strong relationship that no other factor or interaction approaches statistical significance at the .05 level (Table 4). In comparison, Recalled effectiveness has no direct or interactive effects on Support (Table 5).

These results indicate a need for an investigation of the relationship among Effectiveness, Recalled effectiveness, and Subjective effectiveness. A simple correlation of these different effectiveness measures shows that there are significant differences between the values provided in the scenario and the ones recalled and subjectively assessed by the participants. Table 6 shows the correlations between these values, demonstrating that there are significant variations between the three sets. The table shows that the correlation between “given” and “recalled” probabilities...
of success is fairly low (.45). Furthermore, the correlations between the participants’ subjective assessment of effectiveness and the other two values are even lower, which clearly indicates that the participants did not accept the probabilities of success provided in, or recalled from the scenario.

We explore these differences and the reasons behind them using another ANOVA, in which Recalled effectiveness and Subjective effectiveness are treated as repeated measures for each participant. This analysis reveals that the average recalled value of effectiveness for a given participant is 62.6 percent, but the average Subjective effectiveness for that same participant is much lower—48.1 percent \( F(1,145) = 61.16, p < .00, \text{Power} = 1.00 \). In addition, we interact this “within-group” main effect with the “between-group” effect of the value given in the scenario for sanction effectiveness. The outcome is highly significant \( F(1,145) = 7.55, p = .01, \text{Power} = .79 \). The results, presented in Figure 3, show that participants do understand the given effectiveness values but tend to recall a lower percentage on average. The probability of success for the moderate value of Effectiveness is 60 percent, whereas the participants’ average recalled value is 54 percent. Similarly, the high value of Effectiveness given in scenarios is 85 percent, whereas the average recalled value is 71 percent. Additionally, the participants’ own estimates lower the likelihood of the sanctions’ success—by almost 20 percentage points in the case of sanctions described as “highly effective” and by approximately 9 percentage points for sanctions described as “moderately effective.” These findings point to overall skepticism among the participants that sanctions work “as well as advertised.”

The Frame factor, used as a control in this study, has no main effect in generating participant support for economic sanctions (see Table 2). The ANOVA results in Table 2 indicate a significant interaction between Effect and Frame. However, a closer investigation of this interaction shows that the negative framing of effectiveness information only works as expected in one case and either has no effect or is reversed in the other four cases. Additionally, as previously discussed, Support is strongly related to Subjective effectiveness rather than the value provided in the scenario, and there is no significant interaction in the ANCOVA using Subjective effectiveness as the covariate. Hence, we find no evidence that framing affects individuals’ decision to support the use of economic sanctions.

<table>
<thead>
<tr>
<th>Factors and interactions</th>
<th>DF</th>
<th>Sum of squares</th>
<th>Mean square</th>
<th>F value</th>
<th>p value</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
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<td>0.32</td>
<td>0.32</td>
<td>1.37</td>
<td>0.24</td>
<td>0.20</td>
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<tr>
<td>Effectiveness</td>
<td>1</td>
<td>0.22</td>
<td>0.22</td>
<td>0.93</td>
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<td>0.15</td>
</tr>
<tr>
<td>Frame</td>
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<td>0.34</td>
<td>1.49</td>
<td>0.23</td>
<td>0.21</td>
</tr>
<tr>
<td>Recalled effectiveness</td>
<td>1</td>
<td>0.26</td>
<td>0.26</td>
<td>1.13</td>
<td>0.29</td>
<td>0.17</td>
</tr>
<tr>
<td>Type × recalled effectiveness</td>
<td>1</td>
<td>0.44</td>
<td>0.44</td>
<td>1.90</td>
<td>0.17</td>
<td>0.26</td>
</tr>
<tr>
<td>Effectiveness × recalled effectiveness</td>
<td>1</td>
<td>0.24</td>
<td>0.24</td>
<td>1.02</td>
<td>0.31</td>
<td>0.16</td>
</tr>
<tr>
<td>Frame × recalled effectiveness</td>
<td>1</td>
<td>0.25</td>
<td>0.25</td>
<td>1.10</td>
<td>2.97</td>
<td>0.17</td>
</tr>
<tr>
<td>Residual</td>
<td>141</td>
<td>32.56</td>
<td>0.23</td>
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</table>

\*p < .05.

<table>
<thead>
<tr>
<th></th>
<th>Given effectiveness</th>
<th>Recalled effectiveness</th>
<th>Subjective effectiveness</th>
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<tbody>
<tr>
<td>Given effectiveness</td>
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<td></td>
</tr>
<tr>
<td>Recalled effectiveness</td>
<td>.45</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Subjective effectiveness</td>
<td>.16</td>
<td>.33</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Table 5. ANCOVA Results for Support by Factor with Recalled Effectiveness as Covariate

Table 6. Correlations of Given, Recalled, and Subjective Effectiveness Measures
Finally, in order to understand the effects of Subjective effectiveness and Public pain, we use a simple probit model including all three factors as well as Subjective effectiveness and Public pain and investigate which of these explanatory variables determines participant support for economic sanctions. Table 7 reports the results which suggest that both Subjective effectiveness and Public pain are significant determinants in the participants’ decisions. We calculate the effect of changes in these variables on the predicted probabilities of supporting sanctions: A change of approximately 10 percentage points in Subjective effectiveness corresponds to a 28 percent higher probability of support. Similarly, a change of approximately 1 point in Public pain on the 10-point pain scale corresponds to a 13 percent drop in the probability of supporting the sanctions proposed in the scenario.

**Discussion**

The results of our experiment suggest that participants generally behave in ways consistent with our theoretical predictions. It is important to note that while these results represent a test of our theory, we should be cautious in drawing more general conclusions and extrapolating to the general public because this evidence is derived from the sample of undergraduate students. Nevertheless, this preliminary evidence yields novel and interesting insights into individuals’ decision-making regarding their support for sanction policies. First, as members of a democratic society, our participants show that they place a significant emphasis on reducing harm to foreign civilians. High levels of public pain in the target country are a primary reason to decide against supporting sanctions, and more participants choose to support tailored sanctions than comprehensive ones. Hence, for most cases, when economic sanctions are an appropriate response to

**Figure 3.** Interaction of within-group change in measures of sanction effectiveness and between-group effectiveness given in scenario.

**Table 7. Probit Results for Support by Factors and Covariates**

<table>
<thead>
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<th></th>
<th>Coefficient</th>
<th>Robust standard error</th>
<th>z</th>
</tr>
</thead>
<tbody>
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<td>1.01</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>−0.19</td>
<td>0.24</td>
<td>−0.79</td>
</tr>
<tr>
<td>Frame</td>
<td>−0.19</td>
<td>0.23</td>
<td>−0.82</td>
</tr>
<tr>
<td>Subjective effectiveness*</td>
<td>0.03</td>
<td>0.01</td>
<td>5.30</td>
</tr>
<tr>
<td>Public pain*</td>
<td>−0.15</td>
<td>0.07</td>
<td>−2.25</td>
</tr>
<tr>
<td>Residual</td>
<td>−0.40</td>
<td>0.61</td>
<td>−0.65</td>
</tr>
</tbody>
</table>

Wald $\chi^2 = 43.92$, Prob $\chi^2 = 0.00$, number of obs = 154, Pseudo $R^2 = 0.25$, *p < .05.
the target country’s behavior, our results point out the existence of individuals’ preference for minimizing harm to the target country’s population, which is consistent with the symbolic, or value-based, underpinnings for the use of sanctions. These results are particularly striking given the fixed characteristics of the sanction scenarios: That is, participants were guided by moral considerations even though the use of sanctions was suggested against an authoritarian country that presented a national security threat to the United States.

Second, our participants appear to incorporate their own evaluations of sanction effectiveness when deciding whether or not to support the proposed sanction initiative of the US president. These personal estimates reflect a consistently lower assessment of the ability of economic sanctions of both types (comprehensive and tailored) to achieve their policy objectives than the “expert” estimates included in the scenarios. Furthermore, the public’s independent conceptualization of economic sanctions extends to the participants’ expectations of public pain in the target country. The participants believe that tailored sanctions generate only somewhat less public pain than comprehensive sanctions. The participants’ own ideas about economic sanctions and their effects lead the participants to the conclusion that the target country’s population will be harmed, even if sanctions are supposed to impose costs primarily on the target country’s leaders and elites.

The inclusion of different frames in the experiment yields no evidence of framing effects on the decision to support sanctions. The absence of framing effects is likely due to the fact that the participants rely on their own assessments of sanction effectiveness. This conclusion is confirmed by the absence of any significant interaction between Frame and Subjective effectiveness.

Conclusions

The results of this study suggest that public support for the use of sanctions reflects the concern for reducing humanitarian suffering in the target country. We also find that individuals’ considerations of expected sanction effectiveness are associated with their support for sanctions; however, what matters is the subjective assessment of sanction success, rather than evaluations provided by “experts.” This finding sheds new light onto the role of externally provided and internally held information in the assessment of foreign policy decisions by members of a democratic society.

Although our results make an important contribution to the understanding of factors influencing public opinion in democratic countries, there are several areas in which this research can be extended in the future. This study only focuses on the distinction between tailored and comprehensive sanction types; hence, our experiment does not address numerous other aspects of sanctions—aspects that are well worth further study. The experimental method requires us to focus the investigation on only a handful of factors in order to ensure control of manipulations; therefore, we do not explore other dimensions of the sanction policy, such as, for instance, unilateral vs. multilateral sanctions, or less costly sanctions (e.g., minor trade restrictions) vs. more costly sanctions (e.g., a blockade) during this iteration. In particular, if the sanction policy imposes costs on the sender country’s domestic industries and businesses, the public may prioritize domestic interests over humanitarian concerns and support a policy that produces less domestic harm, even if this policy leads to higher levels of foreign civilians’ suffering. The investigation of a potential trade-off of more immediate domestic pain with foreign pain would be a promising extension of this work. Another important aspect

7It is also possible that our finding is in part driven by participants’ decision to support the proposed sanction policy, given that we collected information on their subjective effectiveness assessments after the participants recorded their choice to support sanctions or not. We thank our reviewer for pointing this out.
that requires further research is the level of security threat and its effect on public support for sanctions: Variations in the security environment may affect subjects' decision to support sanctions. Furthermore, we do not investigate origins of subjective assessments of policy success in this study—we leave this as another important direction for future research. All these extensions would further enhance not only sanction research but also foreign policymaking in democratic countries, which continue using economic sanctions quite frequently today and view sanctions as possible means of coercion in the future.

Acknowledgments
We thank our anonymous reviewers, the editor, Nehemia Geva, and Joseph Ura for their very helpful comments and suggestions.

References


Appendix

We address the question of external validity of our experimental findings by examining two factors that can enhance external validity. First, as Mintz, Red, and Vedlitz (2006, 769–70) point out: “student experiments may actually tell us a great deal about the behavior of the public” and hence “experiments can be conducted when students represent [the public].” Therefore, we need to consider whether our student sample is more or less representative of the US population. In our case, the sample is drawn from students at a large state school with a demographic profile more similar to the US population than would be at a small liberal arts college or a private university. The students were enrolled in introductory political science courses; hence, their political knowledge is unlikely to be much greater than that of an average American. Similarly, their educational levels are not too different from that of the general population since 85.7 percent of Americans have at least a high school education. Therefore, the only dimension on which our sample is significantly different from the US population is the age.

Second, we searched for surveys that were conducted on nationally representative samples of people and that included questions regarding sanctions. While no survey is similar to our experimental research design, and hence we do not seek to replicate our findings here, our objective is to establish whether demographic factors exert a significant and robust influence on participants’ responses to questions regarding sanctions policies. The Roper Center for Public Opinion Research has three surveys that fit our objectives: (1) Pew Research Center Poll: October 2009 Political Survey; (2) Los Angeles Times Poll #1982-049: Reagan Retrospect; and (3) 2005 PIPA/CCFR/Knowledge Networks Poll: Americans on Promoting Democracy.

As Table A1 shows, these survey data provide no evidence of a relationship between important political and demographic factors and opinions about sanctions in the presence of a control for generalized attitudes about sanctions’ effectiveness. The only exception is that the model indicates marginal evidence that older respondents may be more inclined to support sanctions against one (out of seven) countries than other participants, all else being equal. Yet, the insignificant coefficients on the age variable in the remaining six columns of Table A1 and the first column of Table A2 question the robustness of that result. Even if this one model permitted us to reject the null hypothesis of no effect due to age, all seven models in Table A1 still support one of the key findings in our article: Participants’ willingness to support sanctions is motivated by their subjective assessments of sanctions’ effectiveness in achieving a stated policy goal.

The last column in Table A1 also shows that partisanship is negatively correlated with perceptions of sanctions effectiveness: Democratic participants were less likely to agree that sanctions do more good than harm. However, democrats are not more (or less) willing to support sanctions than republicans, all else being equal. Table A2 offers a slightly different measure of participants’ political views: Instead of party affiliation, we use data on ideology, ranging from very conservative (1) to very liberal (5). Here, ideology has no effect on participants’ perceptions of sanctions effectiveness. In this case, the issue is Iran’s nuclear program, as opposed to democracy promotion as in Table A1.

Note that the Pew poll presented the questions about sanctions’ effectiveness and support for sanctions to two different subsets of participants; hence, we cannot conduct a test similar to that in Table A1—that is, to test the relationship between effectiveness perceptions and support for sanctions. As in Table A1, however, we find no evidence of a relationship between important political and demographic factors and two dependent variables: opinions...
### Table A1. Model of Support for Sanctions Policy: Sanctions Effectiveness as an Explanatory Variable (2005 PIPA/CCFR/Knowledge Networks Poll)

<table>
<thead>
<tr>
<th>D.V.</th>
<th>Sanctions against</th>
<th>Sanctions effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Myanmar</td>
<td>China</td>
</tr>
<tr>
<td>Sanctions effectiveness</td>
<td>0.60* (0.10)</td>
<td>0.60* (0.10)</td>
</tr>
<tr>
<td>Age</td>
<td>0.01 (0.00)</td>
<td>0.01* (0.00)</td>
</tr>
<tr>
<td>Education</td>
<td>0.02 (0.03)</td>
<td>0.02 (0.03)</td>
</tr>
<tr>
<td>Gender</td>
<td>0.07 (0.13)</td>
<td>0.08 (0.13)</td>
</tr>
<tr>
<td>Party</td>
<td>-0.01 (0.07)</td>
<td>-0.03 (0.07)</td>
</tr>
<tr>
<td>Observations</td>
<td>518</td>
<td>524</td>
</tr>
</tbody>
</table>

Dependent variable: *Support for Sanctions Policy*. Survey question: “Do you favor or oppose US using economic sanctions to encourage greater democracy in the following countries?” (Responses: 1 = oppose strongly; 2 = oppose somewhat; 3 = favor somewhat; 4 = favor strongly).

Variable *Sanctions Effectiveness*. Survey question: “Please evaluate the effectiveness of following methods the US can employ to promote democracy: Pressuring a nondemocratic government with some economic sanctions such as reduced trade with the US.” (Note: this is taken directly from the survey, so preserve the exact language of the cited text.). (Responses: 1 = Does a lot more harm than good; 2 = Does a little more harm than good; 3 = Does a little more good than harm; 4 = Does a lot more good than harm).

Ordered probit regression with survey data, standard errors in parentheses.

*p < .05.*
The coefficient on this variable is positive and significant in the model of support for sanctions, indicating that more educated people may be more likely to approve sanctions against Iran. However, more educated participants are not any more convinced that these sanctions would work than less-educated participants.

Finally, in the third column of Table A2, we investigate whether concerns regarding humanitarian suffering caused by sanctions are greater among any demographic or political groups. This model does not yield any evidence of such differences. No group of participants stands out as being more concerned about harm to innocent civilians than others.

Although these survey data alone do not allow us to evaluate causal relationships between support for sanctions and participants’ beliefs about sanctions effectiveness and sanctions effects on ordinary citizens, establishing causality is precisely the role that our experimental evidence plays. Here, the observational data merely provide a simple yet powerful tool for evaluating the external validity of the experiment that relies on a student subject pool.