How Much is One American Worth?

Diana Mutz
mutz@upenn.edu
University of Pennsylvania

Hye-Yon Lee
hyeylee@upenn.edu
University of Pennsylvania

Abstract:

When forming policy opinions, mass publics may implicitly or explicitly value some human lives more than others. In this study, we examine how both ethnocentric valuation and moral exclusion affect attitudes toward trade policies. Using two large-scale survey-experiments conducted on representative samples of both Americans and Canadians, we examine how differential valuation of in-country and out-country job gains and losses influences attitudes toward trade.

We hypothesize that attitudes toward competition will condition the extent of ethnocentric valuation and moral exclusion. Although all citizens are expected to value their co-nationals' livelihoods systematically more than those of people in trading partner countries, greater ethnocentric valuation and greater moral exclusion is expected in competitive contexts and in the presence of more positive attitudes toward competition. We test these hypotheses using multiple operationalizations of competitive attitudes across two countries.

How Much is One American Worth?

As crass as it may sound, people obviously value some human lives more than others. In politics, this tendency is probably most obvious in the realm of international affairs. In his inaugural address, Trump celebrated "the right of all nations to put their own interests first."[1] On trade policy in particular, he denounced "the ravages of other countries, making our products, stealing our companies, and destroying our jobs." Trump referred to trade deals as the “raping” of the United States by other countries, benefitting trading partner countries while exploiting Americans.[2]

This perspective glorifies the idea of favoring one’s fellow Americans over the citizens of other countries. The “America First” argument encourages Americans to value the well-being of distant others less than those closer to home. Not surprisingly, people do not always choose the policy option that produces the greatest collective benefit. Perhaps more surprisingly, they sometimes do not choose the option that produces the greatest benefit for their own country.

Economists typically assume that attitudes toward trade are a function of individual self-interest; however, a burgeoning collection of studies demonstrates that whether people or their families are personally helped or hurt by trade has little effect on their policy opinions (see Rho and Tomz 2017). Instead, trade is supported or opposed for collective, symbolic reasons, without reference to its economic impact on self or family (e.g., O’Rourke et al. 2001; Sabet 2013). Indeed, most studies of trade opinion show little evidence of self-interest calculations based on

[1] https://www.whitehouse.gov/briefings-statements/the-inaugural-address/
[2] https://www.bbc.com/news/av/world-us-canada-36185275/china-accused-of-trade-rape-by-donald-trump

industry of employment or level of skill as a worker (Hafner-Burton et al. 2017; Hainmuller and Hiscox 2006; Mansfield and Mutz 2009). At the same time, trade opinions are heavily influenced by whether citizens think trade has positive or negative consequences for the nation as a whole, that is, the collective national interest (Mansfield and Mutz 2009). Those consequences are viewed first and foremost in terms of how they affect jobs. We know little, however, about whether trade's perceived effects on the availability of jobs in other countries also matters. Do people pay attention to the collective interest beyond their national borders?

In contrast to economists' focus on self-interest, psychologists generally assume that social motivations trump self-interested ones. For example, they note that when faced with social dilemmas, people often cooperate even when they have no self-interested incentive to do so (Caporael et al. 1989). Evolutionary psychology emphasizes the importance of cooperation with others as a survival skill. People generally want to alleviate others' suffering, but when those others are outgroup members, they may be motivated not to (Batson and Ahmad 2009; Cikara, Bruneau and Saxe 2011). Although one would expect cooperation with outgroup members to be less common than with ingroup members, research suggests that people at times include others, those outside their ingroup, in their "scope of moral concern" (Caporael et al. 1989). This perspective raises the possibility that people also may take into account the effects of trade policies on people in other countries.

Ethnocentric Valuation and Moral Exclusion

In this study we suggest that differences in levels of trade support are in part functions of variations in ethnocentric valuation, that is, ingroup favoritism. Because nations serve as highly

salient group memberships, trade agreements are expected to trigger ingroup-outgroup dynamics that favor the national ingroup. Since it is well established that people favor ingroups over outgroups in allocating resources (e.g., Brewer 1979; Mutz and Kim 2017; Tajfel et al. 1971), we expect citizens to consider their own and other nations largely as they do other ingroups and outgroups, with greater favoritism toward the ingroup. However, as Pratto and Glasford (2008) note, "It is not known whether favoring ingroups under competition implies that outgroup lives themselves are assigned a lesser value."

In addition to ethnocentric valuation, our study also examines the role of moral exclusion in forming views of trade. By moral exclusion, we mean "when individuals or groups are perceived as outside the boundary in which moral values, rules, and considerations of fairness apply" (Opotow 1990: 1). At its extreme, moral inclusion refers to the polar opposite of ethnocentrism, that is, to incorporating all of humanity as part of the ingroup (McFarland, Webb and Brown 2013). Moral exclusion suggests that at least some people are deemed undeserving and thus outside the scope of one's moral concern.

To the extent that effects on trading partner countries are deemed irrelevant to attitudes toward trade policies, citizens can be said to engage in moral exclusion. Even when trade does not produce winners and losers and instead benefits *all*, to the extent that citizens engage in moral exclusion, they will be indifferent to positive effects on others in evaluating the desirability of a policy, and rely exclusively on how much their own country benefits. Comparing reactions to a trade scenario in which all countries gain to one in which the home country gains the same amount, but so do trading partner countries, allows us to quantify the extent of moral exclusion.

Our study is designed to systematically evaluate what happens when people have the opportunity to take into consideration effects on *both* the home country and trading partner nations when evaluating trade policies. Further, it assesses reactions to policies that are explicitly framed around winners and losers, as well as policies that provide mutual benefits along the lines that classic economic theory implies for trade agreements.

The Role of Competition

In studies of intergroup relations, competition plays a central role in exacerbating ethnocentric valuation. When benefits to one group are perceived to go hand in hand with losses to another group, then people will devalue the outgroup (e.g., Campbell 1965; Rabbie et al. 1974; Sherif and Sherif 1953). In an international intergroup context, Pratto and Glasford (2008) found that Americans valued ingroup and outgroup lives equally when outcomes for the two nations did not compete, but Americans valued American lives more under competitive conditions.

Although human lives and livelihoods are obviously not the same thing, these results suggest that a competitive context in which one group's loss is another group's gain should discourage consideration of the other, and encourage greater valuation of ingroup relative to outgroup lives. Competitive attitudes will thus result in greater favoritism toward the home country in a context with trade winners and losers.

People's moral circles contract when they feel threatened and competition is routinely seen as threatening (Bloom 2004). As a result, competition also circumscribes the extent of moral inclusion and exclusion. Competitive contexts are known to constrict people's scope of moral concern and thus to increase the extent to which others are deemed outside of the

boundaries of those who "count." Thus we expect moral exclusion to lead to greater devaluation of lives in other countries even when both countries benefit from a trade agreement. In the context of trade, this would manifest itself in exclusive attention to a policy's effects on the home country and lack of consideration to effects on trading partner countries. In short, we expect that competition will increase both ethnocentric valuation and moral exclusion, because both involve the extent to which people take effects on trading partner countries into account in evaluating trade policies.

When trade is viewed as a competition that produces losers and winners, those who do not embrace competition as a positive force in society will naturally view it more negatively. For example, dislike of competition is one of the key reasons posited to explain why women are less likely than men to support trade (Mansfield, Mutz and Silver 2015). On average, men across industrialized democracies are 8% more likely to support trade than women (Baker 2005; Beaulieu, Benarroch, and Gaisford 2004; Mayda and Rodrik 2005).[3]

Competitive personality types should also be more likely to want to defeat the outgroup. In the classic minimal group experiment, when people are given a choice between their ingroup's maximum benefit, which also provides the same benefit to the outgroup, as opposed to an option in which the ingroup benefits less, but benefits more than the outgroup, they typically choose the latter. Sacrificing ingroup benefits in order to maximize the difference in the amounts the two groups receive is a competitive act. As the authors of this classic study note, "It is the winning

[3] To be clear, valuing competition is not the same as competitiveness, that is, being *able to* compete successfully. For example, women are known to prefer cooperation to competition, even when they would benefit more under competitive conditions (Croson and Gneezy 2009; Flory, Leibbrandt, and List 2010; Ortmann and Tichy 1999; May, McGarvey, and Whaples 2014).

that seems more important to them" (Tajfel et al. 1971: 172). Likewise, in a series of experiments focused on neglect of the interests of outsiders, Baron (2012) documents the importance of the value people place on doing not just well, but doing better than others in conditioning their extent of cooperation.

Based on this research, we predict that when international trade is viewed through the lens of competition, it will lead to greater ethnocentric valuation and moral exclusion. Further, we suggest that ethnocentric valuation and moral exclusion will vary with the extent to which people value competition. Both phenomena support a tendency to believe that livelihoods in one's home country are worth more than those outside of it.

Trade Attitudes in the United States and Canada

We test our predictions in the context of attitudes toward trade agreements using representative national samples of both Americans and Canadians. These two countries provide an excellent basis for comparison because of both their similarities and differences. In both countries, trade policies are viewed in terms of their potential effects on job availability, thus lending a common currency for evaluating how much a person in one country is worth relative to another. Both countries are also high-skill, wealthy democracies.

Key differences between these two countries are equally useful for purposes of our study. In Lipset's (1989) comparison of U.S. and Canadian culture, he suggests that Americans emphasize individualism and achievement whereas Canadians are more collectivist in their value orientations. Canadians are described as self-deprecators, who can tolerate losing, whereas Americans are "descended from winners" (Lipset 1989: 1). Whether one agrees with these

characterizations or not, American enthusiasm for competition is unmatched by any other industrialized country in the world (Duina 2010). Data from the World Values Surveys confirm that the U.S. is significantly more positive about the role of competition in society than Canada. On a scale anchored at the low end by "Competition is good. It stimulates people to work hard and develop new ideas" and at the high end by "Competition is harmful. It brings out the worst in people," Canadians are significantly less enthusiastic about the benefits of competition than Americans ($p<.001$). For this reason, we expect Americans to exhibit greater ethnocentric valuation and moral exclusion than Canadians. Examining variations in ethnocentric valuation and moral exclusion by country as well as by groups and individuals within countries highlights the role that an affinity for competition has in conditioning attitudes toward trade.

Canadians are known to be generally more supportive of trade than Americans, and this is true in our surveys as well. This may seem counter to the supposition that more competitive people or countries will favor trade more. However, differences in absolute levels of support for trade may occur for a whole host of reasons, including the relative size of nations, their historical dependence on trade and availability of natural resources. Trade also may be viewed in more or less competitive terms in one country versus another. By using experiments to systematically manipulate and hold constant the costs and/or benefits of specific trade agreements to the home country and to trading partner countries, we can observe how much people take the ingroup and the "other" into account when forming policy preferences, independent of their pre-existing preferences and beliefs about international trade.

We draw on several sources of variation in competition for purposes of multiple tests of our hypotheses. First, we expect Americans' greater enthusiasm for competition to produce significantly more evidence of both ethnocentric valuation and moral exclusion in the U.S. than

in Canada. To be clear, it is not the case that we expect any country's citizens to be completely selfless, or even to value all people's livelihoods equally. Ingroup favoritism is far too pervasive a force for that expectation to be reasonable (Tajfel et al. 1971). But variation in the extent to which lives are valued equally is expected to correspond to degree of competitiveness.

H1: Americans will be more likely than Canadians to support a trade agreement in which the home country gains jobs and trading partner countries lose jobs, whereas Canadians will be more likely than Americans to support an agreement in which the home country loses jobs and trading partner countries gain jobs (*Ethnocentric Valuation Experiment*).

This hypothesis predicts a significant interaction between country and experimental conditions representing identical total job gains, but manipulation of whether it is the home country or trading partner country that gains or loses jobs.

The country with higher levels of enthusiasm for competition is also expected to display more moral exclusion in the extent to which they take into consideration outgroup gains even when both countries benefit:

H2: When a trade policy benefits both the home country and trading partner countries, it will receive greater support from Canadians than Americans, whereas a trade policy that benefits the home country but hurts trading partner countries will be more favored by Americans than by Canadians *(Moral Exclusion Experiment)*.

This hypothesis would be confirmed by a significant interaction between country and experimental conditions in which the home country gains the same amount of jobs in both cases, but the trading partner also benefits in one condition, but not in the other.

In addition to national differences in affinity for competition, we anticipate that within

both countries, individual differences in characteristics that bear on attitudes toward intergroup competition will condition their reactions to trade policies.

In particular, social dominance orientation (SDO) should facilitate greater ethnocentrism and moral exclusion because it indicates a propensity to see the world in competitive terms. People high in SDO believe in the appropriateness of hierarchy, of some groups dominating others; some groups are simply better and more deserving and meritorious than others, therefore it is fitting that there are winners and losers (e.g., Pratto et al. 1994). Social dominance orientation is also known to be a strong correlate of generalized prejudice, further recommending it as a concept tapping an important facet of people's orientation toward intergroup relations. Thus, across both countries, we expect people with high levels of SDO to demonstrate greater ethnocentric valuation as well as greater moral exclusion in their support for trade agreements. Those who view hierarchy as appropriate will see their ingroup as more deserving, and the outgroup as less worthy of consideration.

H3/H4: In both countries, those high in social dominance orientation will be more likely to exhibit ethnocentric valuation and more likely to demonstrate moral exclusion by neglecting a policy's effects on trading partners.

Empathy is another individual characteristic that conditions reactions to intergroup competition. Empathy alters people's scope of moral inclusion (e.g., Batson et al. 1997). Thus people high in empathy as a general personality trait should be more likely to consider a policy's impact on others, and should be more likely to take into account the effects a trade agreement has on people in trading partner countries.

H5/H6: Because they are more likely to take into account a trade policy's effects on

trading partners in addition to effects on the home country, in both countries, those high in empathy will be less likely to demonstrate ethnocentric valuation and moral exclusion in their support for these policies.

Finally, whether people viewed trade policy in general as a competitive, zero-sum competition prior to the experiment should also matter. Economists see trade as an opportunity for agreements in which countries mutually benefit through cooperation (Alston, Kearl and Vaughan 1992). Nonetheless, it is common for citizens to perceive trade as simply the reshuffling of a finite number of jobs. Those who view trade as a zero-sum competition are predicted to demonstrate greater ethnocentric valuation and moral exclusion as a result.

H7/H8: In both countries, those who already perceive trade in zero sum, winner-loser terms will be more likely to exhibit ethnocentric valuation and more likely to exhibit moral exclusion in our experiments by ignoring a policy's effects on trading partners.

Each of these last six hypotheses about individual differences is tested by looking for significant interactions between each characteristic (high social dominance orientation for H3/H4, low empathy for H5/H6, and zero-sum perceptions of trade for H7/H8) and the experimental conditions tapping ethnocentric valuation and moral exclusion. Since individual differences in personality characteristics should matter similarly in both the U.S. and Canada, we expect no significant interactions by country.

In addition to testing these formal, directional hypotheses about reactions to job gains and losses, we predict that the *magnitude* of job gains and losses to the home country and trading partner countries will make little difference to people's support for trade policies. Studies of price elasticity, that is, the extent to which demand for a product goes down as its cost increases,

demonstrate that public goods are highly inelastic relative to private consumer goods (Green 1992). For example, even small increases in the cost of a consumer good reduce the proportion of people willing pay for it. But the willingness of people to pay more in taxes for a public good such as the environment is far less sensitive to the price tag attached to it. Even the exact same good framed as a public versus a private good will generate less variance in willingness to pay across a broad range of costs (Green and Blair 1995). Trade is often framed in terms of the private, personal benefits of jobs to individuals, so-called pocketbook concerns, but if jobs are not perceived as consumer goods so much as collective goods, then they may well follow the same pattern described for public goods.

Given that support for trade is largely based on symbolic considerations rather than material self-interest, we expect that the magnitude of the job gains and losses due to trade will make little difference to levels of support. Consistent with this prediction, Pratto and Glasford's (2008) experimental study of ethnocentric valuation systematically varied how many outgroup and ingroup lives were lost in a competitive context in order to quantify how competition alters the valuation of ingroup and outgroup lives. Even when very large numbers of enemy civilian lives were at stake, the magnitude of loss mattered little.[4]

[4] Drawing on prospect theory, one might expect the magnitude of anticipated losses to play a greater role in influencing attitudes than the magnitude of gains. However, prospect theory applies specifically to choices made under conditions of *uncertainty*; that is, participants choose between certain and probabilistic options. For example, when considering losses, the kinds of choices offered are between a) a policy for which 400 Americans will die, or b) a policy for which there is a 1/3rd probability that that no Americans will die, and a 2/3rds probability that 600 Americans will die. We do not expect predictions based on prospect theory to generalize well outside the laboratory among educationally diverse mass publics. Moreover, policy options are seldom described to the public in probabilistic terms, and mass publics tend to have limited understanding of probabilities in any case (Pelham, Sumarta and Myaskovsky 1994).

Using systematic variation in the extent of job gain and job loss in our experiments, we also quantify how much Americans and Canadians believe one home country job is worth relative to one trading partner's livelihood. Although people in different countries may have myriad reasons to favor or oppose trade, surely there is a point at which the net gain to humanity makes such a policy worthwhile, even without concomitant home country benefits. We address this question by evaluating where convergence occurs in the absolute levels of support for the policy when the home country gains and the trading partners loses, relative to when the opposite occurs.

Research Design

Our data come from two population-based survey experiments. The U.S. study was executed by Gfk Research[5], and the Canadian data were collected by YouGov.[6] In both cases, data collection took place at two sequential points in time. First, surveys were conducted to

[5] GfK recruits a nationally representative probability sample of Americans using a dual frame sampling method involving random digit dialing and address-based sampling. Panel members are provided with Internet access if they lack it, and the surveys are administered online.

[6] YouGov operates a large online panel that represents citizens demographically based on age, gender, race, income, and regional categories of the target. Participants who opt into their large pool of potential respondents are strategically selected via matching to construct a nationally representative sample. YouGov requires that individuals have internet to join the panel, but once the survey is completed, the final data are weighted to the national profile of all adults, including people without internet access. Interviews were conducted in French and English.

gather data on respondents' general policy preferences concerning trade[7] (see Appendix A for question wording). Responses to five items were used to create a *Pre-treatment trade preference index*, which was included as a covariate in the experimental analysis. Because people's pre-existing attitudes toward trade are likely to account for much of the variance in attitudes toward a specific trade policy, this covariate increased the efficiency of our statistical models.

In addition, the pre-experiment survey also measured levels of *Social dominance orientation,* and *Empathy* as a general personality trait using previously validated scales (see Pratto et al. 2013; Davis 1980, respectively). Finally, in order to identify those who already viewed trade in zero-sum terms with respect to jobs in particular, in the initial pre-treatment survey, we asked whether the respondent thought international trade had increased, decreased or had no effect on the availability of jobs in their home country. In a separate question, respondents were asked about the availability of jobs in our trading partner countries. The order of these two questions was randomized. Those who indicated that trade *decreased* the availability of jobs in the US while *increasing* the availability of jobs in other countries were labelled as having *Zero-sum perceptions*.[8] In other words, they view trade through the lens of winners and losers. Approximately 50 percent of Americans met the criteria for *Zero-sum perceptions*, whereas significantly fewer—only 27 percent—of Canadians did.

Two to three months later, respondents were re-contacted for purposes of the population-

[7] For the U.S study, pre-experimental data was collected in October 2013 with a sample size of 3,170. The Canadian pre-treatment survey was conducted in February 2016 with 4,332 subjects.

[8] Technically speaking, those who view trade as helping the home country and hurting trading partners also hold zero-sum perceptions. However, the proportion of people holding such views was under 1 percent in both the US and Canada, thus making it more accurate to characterize zero-sum perceptions as described here. Results do not change regardless.

based survey experiment (n=2,350 for U.S. and n=2,000 for Canada).[9] Although this time lag reduced the sample sizes somewhat due to attrition, it facilitated collection of observational pretreatment data well before the actual experiments so that subjects' responses to the experimental treatments would not be associated with the initial survey.

Both American and Canadian respondents were presented with identical descriptions of a trade agreement that varied whether the home country and/or their trading partners would gain or lose jobs if the agreement were approved. Using a between-subject design, respondents received a description in which the trade agreement

(a) increases the availability of jobs in trading partner countries while decreasing jobs in respondents' home country;

(b) decreases the availability of jobs in trading partner countries while increasing jobs in their home country, or

(c) increases the availability of jobs in trading partner countries as well as in their home country.

Given that both Americans and Canadians evaluate international trade primarily based on its perceived impact on employment (Beaulieu 2002; Hiscox 2006; Slaughter 1999, 2001), altering the number of jobs gained or lost due to trade is the most effective way of manipulating the extent of trade winners and losers.

[9] U.S. subjects were re-contacted in December 2013. For Canada, 2,350 subjects were re-contacted in May 2016 and then matched down to a stratified sampling frame on gender, age, education and region, resulting in a sample size of 2,000. In both studies, the re-contact interviews were unknown to be connected to the pre-treatment surveys.

The purpose of these three conditions was to facilitate two key experimental comparisons. First, by comparing levels of support for trade in conditions (a) and (b), we quantify the extent of ethnocentric valuation. In other words, how much more do people value home country jobs relative to the same number of jobs in trading partner countries? In this *Ethnocentric Valuation Experiment*, we compare conditions with the same number of total gains/losses, and vary only which country receives the gains versus the losses.

Second, comparisons between conditions (b) and (c) facilitate our *Moral Exclusion Experiment*. What is constant across conditions (b) and (c) is that the home country gains the same number of jobs due to the trade agreement. What varies is strictly whether the trading partner countries *also* gain jobs. This comparison allows us to quantify the extent to which respondents engage in moral exclusion, in this case, failing to take into account job gains that would accrue to other countries as well as gains for the home country.

A second between-subjects experimental factor was fully crossed with the three conditions above. In this case, we manipulated the *Magnitude* of the policy's impact on jobs. Seven possible levels of this factor were assigned to systematically alter the extent of total job gains or losses resulting from the trade agreement (see Appendix D).

When using highly diverse representative population samples, it is always risky to use treatments involving numbers, percentages or ratios that may not be easily or uniformly understood by the public. For this reason, we pretested manipulations of the extent of gain/loss using subjects from Amazon Mechanical Turk. Following the pretest experiment, respondents were asked who would gain and who would lose jobs based on the description of the agreement they read, and to assess the magnitudes of those gains/losses on a semantic scale for both the home country and trading partner countries.

Based on our pretest results, the most successful form of manipulation for magnitude occurred when using ratios to express how many jobs were gained and/or lost in the home country and trading partner countries. For example, a respondent might receive a description stating that for each person in the home country who loses a job, 100 people in a country that we trade with will gain jobs. These pretest responses also helped us identify a range within which we might expect that support for trade that benefits other countries would equal support for a policy favoring the home country. Home country and trading partner gains and losses were described in ratios ranging from 1 to 1, 1 to 10, 1 to 100, and 1 to 1000.

The description of the trade policy was brief and to the point:

> The [United States/Canada] is considering a trade policy that would have the following effects: For each [1/10/100/1000] people in the [U.S./Canada] who [gain/lose] jobs, [1/10/100/1000] people in a country that we trade with will [lose/gain] jobs.

After reading the description, respondents were asked whether they would support or oppose the trade policy. S*upport for trade policy* was measured on a four-point scale, running from strongly oppose (1) to strongly support (4).

To ensure that respondents correctly understood the description of the policy they were given, after measuring the dependent variable, we asked them whether the home country gained or lost jobs according to the policy they had read about earlier, and to what extent. In addition to the MTurk pretest, the experimental manipulations worked as intended in both the American and Canadian samples. The results of these manipulation checks are shown in Appendix C. The treatments successfully changed perceptions of who gained and lost jobs according to the policy description. The *Magnitude* manipulations also produced more extreme perceptions of trading

partner gains/losses in the appropriate conditions for both American and Canadian samples.

Results

To reiterate, our *Ethnocentric Valuation Experiment* is designed to assess the extent to which gains for people in one's own country are more highly valued than gains for citizens of other countries when the total number of jobs is held constant. Our *Moral Exclusion Experiment* is designed to hold constant the benefits to people in one's home country, while assessing the extent to which benefits to other countries matter in increasing support for trade policies. We hypothesize that attitudes toward competition will moderate the extent of ethnocentric valuation and moral exclusion.

Our first hypothesis predicted that Americans, who are known to value competition more than any other country, would demonstrate higher levels of ethnocentric valuation than Canadians. In other words, the tendency to value some people's livelihoods more than others—even when the total number of gains and losses are held constant—should be stronger among Americans than Canadians. The null hypothesis in this experiment means that the number of jobs gained/lost at home or overseas affects people's favorability toward a policy equally, regardless of who gains or loses.

Figure 1 illustrates the results of this analysis. Not surprisingly, both Americans and Canadians are ethnocentric in that they favor the trade policy to a greater extent when it benefits the home country instead of trading partner countries. This produces a significant main effect of the experimental conditions ($p<.001$). However, as also shown in Figure 1, the differences between experimental conditions are significantly larger for Americans than for Canadians, thus

confirming a significant Country by Condition interaction ($p<.001$). When the trading partner gains, and the home country loses, Canadians are more supportive than Americans of the policy. When the home country gains and the trading partner loses, Americans are significantly more supportive than Canadians, thus demonstrating greater ethnocentrism.

[Figure 1 here]

Our second hypothesis was that this same between-country distinction would extend to a comparison between conditions in which the home country gains an equal numbers of jobs in both conditions, but the trading partner also gains jobs in a second condition. In this case, both experimental conditions represent identical home country job gains from trade, but in the second condition, the policy also creates job gains of various degrees for the trading partner countries. The null hypothesis in this case represents moral exclusion*,* that is, if there is no difference in levels of support when the policy benefits the home country but costs the trading partner versus a win-win, noncompetitive scenario in which *both* countries gain jobs, then citizens are not including the other within their moral sphere. Our expectation was that moral exclusion would be greater among Americans because of the competition-oriented U.S. national culture.

The results by country for the *Moral Exclusion Experiment* are shown in Figure 2. Americans were equally supportive of the trade policy regardless of how it affects the trading partner countries. Canadians, in contrast, were more supportive of the policy in which both Canadians and their trading partners gain jobs as a result. Again, we found our hypothesized interaction between country and experimental conditions ($p<.001$). Americans were more supportive of trade when the home country gained and the trading partner lost, whereas Canadians were more supportive with mutual gains.

[Figure 2 here]

The results in Figures 1 and 2 both produced transverse interactions in which one country generated significantly more trade support in one condition and the other country favored it significantly more in the other condition. This pattern suggests that differences by country in overall levels of support for trade cannot be responsible for these results. Nonetheless, it is possible that the characteristic producing these differential effects by country is something other than belief in the merits of competition. These two comparisons are consistent with our hypotheses, but by themselves, they do not isolate competitiveness as the key difference.

For this reason, we turn to measures of individual differences in characteristics that are more clearly linked to our central expectation that attitudes toward competition moderate the extent of ethnocentric valuation and moral exclusion. In Hypotheses 3 and 4, we propose that social dominance orientation, that is, the tendency to favor group hierarchy over equality, will moderate the impact of our experimental conditions in both the *Ethnocentric Valuation* and *Moral Exclusion Experiments.* As shown in Figure 3, the results from the *Ethnocentric Valuation Experiment* suggest that low and high SDO people are roughly the same in their levels of support for trade when their home country loses and the trading partner gains. But when the home country gains and the trading partner loses jobs, then people with high levels of SDO are significantly more favorable toward the policy than low SDO people ($p<.001$). So long as they end up on top, a competitive scenario is perfectly fine for those high in SDO.

[Figure 3 here]

As shown in Figure 4, results from the *Moral Exclusion Experiment* also confirm significant interactions between experimental condition and SDO in both countries ($p<.001$), but

the underlying patterns are somewhat different between the US and Canada. In the US, when the home country gains while the trading partner loses, high SDO people are significantly more supportive of the policy than low SDO people. When both countries gain, however, high SDO people are less supportive than low SDO people. Although both countries gain, high SDO people must feel that they should rightly gain *more* than those in the trading partner country, thus lowering their support for even the win-win scenario. In Canada, although the interaction is in the same direction, high and low SDO people concur on the desirability of the win-win scenario, and the interaction is driven solely by the fact that high SDO Canadians are more supportive of the policy than are low SDO Canadians when the home country gains and the trading partner loses jobs.

[Figure 4 here]

Do individual differences in empathy likewise support the hypothesis that those who do not like the idea of a policy with winners and losers are more likely to oppose trade policies? Figure 5 illustrates our experimental comparisons based on ethnocentric valuation. Regardless of empathy levels, Canadians and Americans both have low levels of support for the policy involving gains for trading partner countries and losses for the home countries. But when this is reversed in the *Ethnocentric Valuation* comparison so that the home country gains while the trading partner loses, those high in empathy are significantly less supportive of the policy ($p<.01$), most likely because high levels of empathy lead them to take into consideration the losses experienced by the trading partner countries.

[Figure 5 here]

In the experimental comparison highlighting *Moral Exclusion* in Figure 6, empathy levels produce interactions that are virtually identical in the US and Canada. In the scenario in which both ingroup and outgroup countries gain jobs, empathy does not matter; there is no entity for which one should feel bad. On the other hand, when the home country gains but the trading partner loses, those with high levels of empathy are significantly less supportive of the policy than are low empathy respondents ($p<.001$).

[Figure 6 here]

Finally, in Figure 7, we examine the one trade-specific moderator hypothesized to influence support for trade by means of ethnocentrism and moral exclusion. Using a dichotomous variable to represent those who, months prior to the experiment, already thought of trade in zero-sum terms, we again find significant interactions with the two experimental conditions. Those who began with the notion that trade helped job availability overseas at the cost of home country jobs responded differently to treatments in both Canada and the US. Ethnocentric valuation was significantly lower among those who did not have zero-sum perceptions of trade ($p<.001$). Those with zero-sum perceptions were especially likely to oppose trade when the trading partner gained jobs and the home country lost them. When the home country gained but the trading partner lost, it made little difference whether the respondent began with zero-sum ideas about trade. So long as they were the trade winners, the fact that trade produced winners and losers was not an impediment to support.

[Figure 7 here]

In the condition in which both parties gain in the *Moral Exclusion Experiment*, one would expect more support for the policy since it benefits everyone. What's not to like? But

interestingly, as shown in Figure 8, this is only the case in Canada where, regardless of whether one started out with zero-sum perceptions, the condition benefitting everyone was most popular. Among Americans, in contrast, only among those who were not predisposed to think of trade as a zero-sum competition increased support for trade due to the additional benefits to trading partner countries. In fact, for that fifty percent of Americans who viewed trade in competitive, zero-sum terms, the policy is slightly less desirable when everyone benefits than when only the home country does.

[Figure 8 here]

Discussion and Limitations

Overall, our results are highly consistent with the argument that competitive attitudes increase ethnocentric valuation of human lives and promote moral exclusion, that is, indifference to how a policy affects those outside of one's national ingroup. But how confident should we be that the results described here can be interpreted causally? Because this study involves random assignment to experimental conditions, as well as representative national surveys, we can be fairly confident of the strength of causal inference and of estimated effects sizes. It is always possible, however, that in altering these scenarios we have inadvertently manipulated something *other than* perceptions of jobs gained and lost. However, given our sparse descriptions of these trade agreements, it is difficult to imagine what that might be. Although mass publics are notoriously innumerate and often have difficulty understanding experimental treatments involving numbers and probabilities, our manipulation checks confirm that both who gained and who lost, and how much was gained or lost, were both successfully manipulated. Nonetheless, it remains possible that spillover occurred, and that we unintentionally manipulated something else as well.

Evaluating the external validity of these findings involves more complex considerations. On the one hand, the samples of respondents are highly representative and closely mirror their respective national populations, so the generalizability of the sample is high. On the other hand, we purposely described scenarios with known consequences for the home country and trading partner countries. We do not know which of these scenarios most Americans or Canadians assume when they approach any given trade agreement; we do not know their assumptions about, say, NAFTA or the TPP. Further, when it comes to knowing how trading partners are affected by a policy, observational studies suggest that many people do not hold clear impressions of how trading partners are affected. Nonetheless, our results are useful toward understanding the theoretical basis of trade preferences and how linking trade to competition may adversely affect levels of support among some groups.

Is it unrealistic to think that people might form trade attitudes based on their impressions about job losses and gains in the home country and trading partner countries? Whether accurate or not, people do form such impressions. In October 2017, steelworker Shannon Mulcahy appeared on the front page of the *New York Times* as trade's latest victim (Stockman 2017). The extensive story described the many difficulties she encountered when her job moved to Mexico. Because Shannon trained her Mexican replacement, Ricardo, they were able to compare notes. They discovered that the company could pay 16 Ricardos for the cost of one Shannon. As he marvels at the fact that she owns a car, Shannon finds it difficult to begrudge Ricardo his opportunity to be "blessed," as she puts it.

As Autor suggests (see Popper 2016: 24), the costs or virtues of trade in the US pale in comparison with the basic humanitarian benefits that people in other places have experienced as a result of trade: "The gains to the people who benefitted are so enormous—they were destitute,

and now they were brought into the global middle class. The fact that there are adverse consequences in the US should be taken seriously, but it doesn't tilt the balance."

On the one hand, when a trading partner gained a large number of jobs, many respondents were likely to claim it was "unfair." However, if trade is considered in moral terms, "it seems important to contemplate how to assign and compare the values of a new job to someone who would otherwise be stuck in dire poverty and a lost job for someone with at least some version of a safety net" (Autor in Popper 2016).

Importantly, our findings also help explain some perplexing patterns in support for trade among various groups in society. For example, the well-known finding across many societies that women oppose trade more than men turns out to be not the whole story. Women are actually significantly *more* likely than men to support trade when it is perceived as mutually beneficial. Because they have lower levels of social dominance orientation and higher levels of empathy, it is not trade per se that they dislike, but the competitive winner versus loser framework in which it is often cast.

Within the United States, these findings also help explain the relatively recent phenomenon of rising Republican opposition to trade. Since roughly 2008-2010, rank and file Republicans have been more opposed to trade than Democrats (Mutz 2017). Why would Republicans, the champions of unfettered markets, rush to oppose international trade? As it turns out, Republicans are not consistently more opposed to trade. When trade is a competition in which the home country is assured to win, and the trading partner loses, they are significantly *more* supportive of trade than Democrats. It is only a trade policy resulting in gains for trading partners and losses for the US that Republicans oppose. As the party higher in social dominance, they are more prone to ethnocentric valuation. As the perception that Americans are

disadvantaged in trading with other countries has become more popular, Republicans have come to view trade as essentially another form of foreign aid. As a result, it is not surprising that it generates greater opposition.

Nonetheless, Republicans' greater affinity for competition means that even when both the US and trading partner countries gain jobs, Republicans are less favorable than when the US alone wins. It is not strictly that Republicans are more likely to engage in moral exclusion, ignoring the effects of the policy on other countries. Republicans (as well as men) are systematically *more* favorable toward the policy when the trading partner experiences losses, than when the trading partner also gains. This result cannot be explained by economic motivations because in general, Republicans are willing to sacrifice absolute gains in order to prevent trading partner countries from enjoying even greater gains (Reich 1991). This kind of pattern, commonly called schadenfreude, suggests that the psychological benefits of winning, of dominating another group, outweigh the desire for job gains.

How much is one American/Canadian worth?

Finally, we address our informal hypothesis that the magnitude of gains and losses will not make much difference to trade support. This analysis also allows us to answer the uncomfortable question of how much one Canadian or one American livelihood is worth in the eyes of its citizens. Figure 9 allows us to quantify roughly how many foreigners must benefit for a trade policy to offset the cost of one home country job loss. As shown by the grey vertical line in the top panel of Figure 9, the answer for Canadians is that roughly 10 jobs gained by

foreigners offsets the cost of one Canadian job loss in the minds of Canadians. In other words, levels of public support for the trade policy become roughly equal at that point.

[Figure 9 here]

However, as shown in the bottom panel of Figure 9, the answer to this question is quite different for Americans. The extent of ethnocentric valuation is far greater in the US, thus the two lines never cross or even come close to one another. Even when 1,000 trading partner jobs are gained for one job loss in the US, support levels do not equalize. It is, of course, possible that they would cross if the scales went further out so that one American job loss corresponded with 100,000 jobs gained elsewhere. However, as numbers get larger and less comprehensible to the average person, we expect, if anything, greater indifference to magnitude. In both the Canadian and American samples, even though the extreme job gains or losses are 1000 times the level at the center of Figure 9, opinions never change even one point on a four point scale. Our findings in these experiments suggest that there may be no extent of gain to trading partner countries that would justify even one American job loss in the minds of Americans.

Americans clearly have a strong sense of self-worth. Relative to Canadians, Americans are significantly higher in social dominance. They are also significantly more likely to view trade policy in competitive, zero-sum terms. They are not, however, significantly more or less empathic. Nonetheless, when we take into account these differences between the populations of the two countries, it eliminates the significantly higher level of trade support among Canadians in our experiment.

There is perhaps no greater commodity to most human beings than having a job. Indeed, it is known to be essential not only to physical and material well-being, but also to human

dignity. As the quintessential instrumental good, one might expect jobs to be highly elastic in the economic sense. Yet when viewed through a moral or ideological lens as is often the case with public policy, jobs appear to be treated more like a public rather than a private good.

Conclusion

Competition plays a powerful role in most societies (Christiansen and Loeschcke 1990). Nonetheless, there is significant variance in the degree of confidence people have in the laudatory effects of competition. Our results suggest that the desirability of competition plays an important role in conditioning the formation of attitudes toward trade. We observe greater ethnocentric valuation of co-nationals' livelihoods in the more competition-oriented country (the United States), among those citizens high in social dominance, those low in empathy, and among those who see trade as a zero-sum policy in both countries. All of these operationalizations of competitiveness produce the predicted reactions to experimentally manipulated trade policies. Competition appears to exacerbate both ethnocentrism and moral exclusion.

Competition is clearly not the only way to view trade policy. Reactions to these experimental scenarios were fundamentally different in the United States and Canada. Canadians were more likely to support policies that benefitted both the home country and trading partner countries, whereas Americans were more likely to favor agreements in which strictly the home country benefitted. For those who see trade in highly competitive terms, trade is a policy that produces winners and losers. Highly competitive citizens will tend to favor only those trade policies that ensure that the home country wins. Further, for the highly competitive among us, even when the home country does gain a great deal, negative reactions are still likely if the home

country is not gaining *more than* the trading partner. A tie game is not a win. Far from viewing trade as a cooperative venture with mutual benefits, in a competitive mindset trade is more like a sports competition in which one must win, lose, or not play the game at all. While economists have fine-tuned complex economic arguments about why it makes sense for countries to trade with one another and why this practice is mutually beneficial, mass publics are clearly not convinced. Instead, they reason about countries involved in trade agreements the same way that small groups think about who should receive more or less of some allocation of goods.

The original rationale for trade was simple and something that individuals could relate to in their everyday lives. Adam Smith's logic was that people can produce more things of value if they specialize in producing specific things, rather than trying to do everything themselves. They can then trade what they produce themselves for the other things they need. For example, it is highly inefficient for each of us to make our own butter, although we certainly could. Based on this simple logic, trade is good for everyone because all will have access to more if we do not try to do it all ourselves. Indeed, access to more goods is one of the most frequently offered reasons for favoring international trade in Canada as well as in the United States. According to this Smithean logic, there are no losers due to open markets.

In contrast, the Ricardian logic emphasizes comparative advantage. In this view, different countries have different capacities to produce certain products. As a result, the effects of trade on different groups of people will differ. The losers will be those in lines of work that can be done less expensively in other countries. As consumers, all people should benefit under either logic, but as workers in specific areas, there will be winners and losers. The idea of global competition is inherent in this description, as those in import-competing work must compete with those overseas. This popular perspective highlights trading partner countries as competitive outgroups,

thus increasing the role that ethnocentric valuation and moral exclusion play in the formation of trade attitudes. While we would be naive to suggest that the public has either Smith or Ricardo specifically in mind, it is clear that once trade is viewed in terms of winners and losers, as it is widely viewed in the United States now, it is less surprising that competition plays such an important role.

Few would argue with the claim that trade has been a boon to the world economy (Milanovic 2012).[10] Collectively, people have benefitted and levels of worldwide inequality have dropped as a result. Nonetheless, when the norm within many countries encourages favoring co-nationals over citizens of other countries, these benefits may not be persuasive. Whether opposing trade is framed as a form of ingroup loyalty, as self-interest, or as patriotism, it is viewed as more socially acceptable to favor national ingroup members than say, racial or gender ingroup members. However, because economists do not generally view trade as involving trade-offs between benefits for the home country and trading partner countries, research on political economy seldom confronts this issue.

After measuring the dependent variable our respondents in both countries were asked to comment on what they were thinking with respect to the trade policy they had evaluated. Their responses focused heavily on two themes: the issue of fairness and desert. Interestingly, there was no consensus on what counted as a "fair trade" because people had different orientations toward who deserved these jobs. To most respondents, the term "fair trade" did not connote a

[10] "The World Has Made Great Progress in Eradicating Extreme Poverty," *Economist*, March 30, 2017, http://www.economist.com/news/international/21719790-going-will-be-much-harder-now-world-has-made-great-progress (accessed April 1, 2017).

concern for the treatment of labor or the environment in other countries so much as whether what one's country received and/or sacrificed in a deal made it a "fair" trade.

For some, particularly those who envisioned less developed countries as the recipients of these jobs, the policy was deemed unfair because it did not benefit the trading partner enough: "God wants us to love all people, not just one's of our own nationality. All people worldwide deserve the opportunity to provide for their families the best they can." Fairness for these respondents required lack of moral exclusion: "I just thought, why is anybody from any country any more deserving of a job than another." Still others saw the trading partners as *more* deserving due to their neediness: "I thought of the 3rd world countries whose children do not have enough food to eat or clean water to drink. They deserve better, and US dollars can help them survive."

On the other hand, for those who valued competition, it was perfectly fair that Americans gained and others lost because, as one respondent put it, "The American people deserve more." As another suggested, "I think the people born in this country deserve the right to make a living and no other country should gain by someone here else [sic] losing their job." Some clearly indicated that trading partner countries were not in need, stating, "The other countries can support their own, they do not need our jobs and employers in the USA. Need to remember we deserve the jobs and need an income to support our families."

How did Americans come to see themselves as more worthy and deserving of these livelihoods than citizens of other countries? The data in these studies were collected well before President Trump was elected, so we cannot in fairness attribute this to his campaign slogans or opinion leadership. The notion that America is unique and special in some regard was encapsulated long ago in the notion of American exceptionalism (Tocqueville 1835). However,

the meaning of American exceptionalism has gone awry, transmogrified into the idea that America's past somehow grants it a right to dominance and superiority. If there is no number of livelihoods that could be gained elsewhere that would be worth the loss of even one American job, then Americans are indeed quite full of themselves.

Because humans are guided by a psychology that is deeply rooted in face-to-face, interpersonal interactions, we are poorly geared to comprehend large-scale, complex systems such as international trade. To deal with this problem, people try to extend what they know about human interaction to understand multinational interactions. For purposes of understanding trade, this approach does not serve them well. Nations are abstract, distant entities that do not elicit the same levels of empathy and cooperation as do other human beings. Nonetheless, theories and evidence from studies of small group interactions may prove extremely useful for understanding the dynamics of public opinion toward trade.

References

Alston, Richard M., J. R. Kearl, and Michael B. Vaughan. 1992. “Is There a Consensus Among Economists in the 1990’s?” *American Economic Review* 82 (2): 203–9.

Baker, Andy. 2005. “Who Wants to Globalize? Consumer Tastes and Labor Markets in a Theory of Trade Policy Beliefs.” *American Journal of Political Science* 49 (4): 924–38.

Baron, Jonathan. 2012. "Parochialism as a Result of Cognitive Biases." In *Understanding Social Action, Promoting Human Rights*, eds. Ryan Boodman, Derek Jinks, and Andrew K. Woods. New York, Oxford University Press, 203.

Batson, C. Daniel, Marina P. Polycarpou, Eddie Harmon-Jones, Heidi J. Imhoff, et al. 1997. “Empathy and Attitudes: Can Feeling for a Member of a Stigmatized Group Improve Feelings toward the Group?” *Journal of Personality and Social Psychology* 72 (1): 105–18.

Batson, C. Daniel, and Nadia Y. Ahmad. 2009. “Using Empathy to Improve Intergroup Attitudes and Relations.” *Social Issues and Policy Review* 3 (1): 141–77.

Beaulieu, Eugene. 2002. “Factor or Industry Cleavages in Trade Policy? An Empirical Analysis of the Stolper-Samuelson Theorem.” *Economics and Politics* 14 (2): 99–131.

Beaulieu, Eugene, Michael Benarroch, and James Gaisford. 2004. “Trade Barriers and Wage Inequality in a North-South Model with Technology-Driven Intra-Industry Trade.” *Journal of Development Economics* 75 (1): 113–36.

Bloom, Paul. 2004. *Descartes’ Baby: How the Science of Child Development Explains What Makes Us Human*. New York: Basic Books.

Brewer, Marilynn B. 1979. "In-group Bias in the Minimal Intergroup Situation: A Cognitive-Motivational Analysis." *Psychological Bulletin* 86: 30–324.

Campbell, Donald T. 1965. "Ethnocentric and Other Altruistic Motives." In *Nebraska Symposium on Motivation*, ed. David Levine. Lincoln, NE: University of Nebraska Press, 283–311.

Caporael, Linnda R., Robyn M. Dawes, John M. Orbell, and Alphons J. C. van de Kragt. "Selfishness Examined: Cooperation In the Absence of Egoistic Incentives." *Beavioral and Brain Sciences* 12 (4): 683–739.

Christiansen, F. B., and V. Loeschcke. 1990. "Evolution and Competition." In *Population Biology: Ecological and Evolutionary Viewpoints*, eds. Klaus Wöhrmann and Subodh K. Jain. Berlin, Heidelberg: Springer Berlin Heidelberg, 367–94.

Cikara, Mina, Emile G. Bruneau, and Rebecca R. Saxe. 2011. "Us and Them: Intergroup Failures of Empathy." *Current Directions in Psychological Science* 20 (3): 149–53.

Davis, Mark H. 1983. "Measuring Individual Differences in Empathy: Evidence for a Multidimensional Approach." *Journal of Personality and Social Psychology* 44 (1): 113–26.

Duina, Francesco. 2010. *Winning: Reflections on an American Obsession*. Princeton, NJ: Princeton University Press.

Green, Donald P., and Irene V. Blair. 1995. "Framing and the Price Elasticity of Private and Public Goods." *Journal of Consumer Psychology* 4 (1): 1–32.

Green, Donald P. 1992. "The Price Elasticity of Mass Preferences." *American Political Science Review* 86 (1): 128–48.

Hafner-Burton, Emilie M., Steph Haggard, David Lake and David Victor. 2017. “The Behavioral Revolution and International Relations.” *International Organization*, 2017, Special Issue: S1-S31.

Hainmueller, Jens, and Michael J. Hiscox. 2006. “Learning to Love Globalization: Education and Individual Attitudes toward International Trade.” *International Organization* 60 (2): 469–98.

Hiscox, Michael J. 2006. "Through a Glass and Darkly: Attitudes Toward International Trade and the Curious Effect of Issue Framing." *International Organization* 60 (3):755–80.

Lipset, Seymour Martin. 1990. *Continental Divide: The Values and Institutions of the United States and Canada*. New York, Routledge.

Mansfield, Edward D., and Diana C. Mutz. 2009. “Support for Free Trade: Self-Interest, Sociotropic Politics, and Out-Group Anxiety.” *International Organization* 63 (3): 425–57.

Mansfield, Edward D., Diana C. Mutz, and Laura R. Silver. 2015. “Men, Women, Trade, and Free Markets.” *International Studies Quarterly* 59 (2): 303–15.

Mayda, Anna Maria, and Dani Rodrik. 2005. “Why Are Some People (and Countries) More Protectionist than Others?” *European Economic Review* 49 (6): 1393–430.

McFarland, Sam, Derek Brown, and Matthew Webb. 2013. “Identification With All Humanity as a Moral Concept and Psychological Construct.” *Current Directions in Psychological Science* 22 (3): 194–98.

Mutz, Diana C., and Eunji Kim. 2017. "The Impact of In-group Favoritism on Trade Preferences." *International Organization* 71 (4): 827–50.

Mutz, Diana C. 2017. “Changing Party Alignments in American Attitudes Toward Trade: Reflections on the Past, Implications for the Future.” The Future of the Global Order Colloquium. Perry World House, Philadelphia, PA.

Milanovic, Branko. 2012. *The Haves and the Have-Nots: A Brief and Idiosyncratic History of Global Inequality*. New York: Basic Books.

Opotow, Susan. 1990. "Moral Exclusion and Injustice: An Introduction." *Journal of Social Issues* 46 (1): 1–20.

O’Rourke, Kevin H., Richard Sinnott, J. David Richardson, and Dani Rodrik. 2001. “The Determinants of Individual Trade Policy Preferences: International Survey Evidence [with Comments and Discussion].” *Brookings Trade Forum*: 157–206.

Pelham, B. W., T. T. Sumarta, and L. Myaskovsky. 1994. “The Easy Path From Many To Much: The Numerosity Heuristic.” *Cognitive Psychology* 26 (2): 103–33.

Popper, Nathaniel. 2016. “How Much Do We Really Know About Global Trade’s Impacts?” *New York Times*, September 11. https://www.nytimes.com/2016/09/11/magazine/how-much-do-we-really-know-about-global-trades-impacts.html (accessed October 19, 2018).

Pratto, Felicia, and Demis E. Glasford. 2008. “Ethnocentrism and the Value of a Human Life.” *Journal of Personality and Social Psychology* 95 (6): 1411–28.

Pratto, Felicia, Jim Sidanius, Lisa M. Stallworth, and Bertram F. Malle. 1994. "Social Dominance Orientation: A Personality Variable Predicting Social and Political Attitudes." *Journal of Personality and Social Psychology* 67 (4): 741–63.

Pratto, Felicia, Atilla Çidam, Andrew L. Stewart, Fouad Bou Zeineddine, et al. 2013. "Social Dominance in Context and in Individuals: Contextual Moderation of Robust Effects of Social Dominance

Orientation in Fifteen Languages and Twenty Countries." *Social Psychological and Personality Science* 4 (5):587–99.

Rabbie, Jacob M., Frits Benoist, Henk Oosterbaan, and Lieuwe Visser. 1974. "Differential Power and Effects of Expected Competitive and Cooperative Intergroup Interaction on Intragroup and Outgroup Attitudes." *Journal of Personality and Social Psychology* 30(1): 46–56.

Reich, Robert B. 1990. "Do We Want US to Be Rich or Japan Poor?" *Wall Street Journal*, June 18, A10.

Rho, Sungmin, and Michael Tomz. 2017. "Why Don't Trade Preferences Reflect Economic Self-Interest?" *International Organization* 71 (S1): S85–108.

Sabet, Shahrzad. 2013. "What's in a Name? Isolating the Effect of Prejudice on Individual Trade Preferences." Working Paper. Available at https://ssrn.com/abstract=2301118

Sherif, Muzafer, and Carolyn Wood Sherif. 1953. *Groups in Harmony And in Tension*. New York: Harper.

Slaughter, Matthew J. 1999. "Globalisation and Wages: A Tale of Two Perspectives." *World Economy* 22 (5): 609–29.

_____. 2001. "International Trade and Labor-Demand Elasticities." *Journal of International Economics* 54: 27–56.

Stockman, Farah. 2017. "Becoming a Steelworker Liberated Her. Then Her Job Moved to Mexico." *New York Times*, October 14. https://www.nytimes.com/2017/10/14/us/union-jobs-mexico-rexnord.html?_r=0 (accessed October 19, 2018).

Tajfel, Henri, M. G. Billig, R P. Bundy, and Claude Flament. 1971. "Social Categorization and Intergroup Behaviour." *European Journal of Social Psychology* 1 (2): 149–78.

Tocqueville, Alexis de. 1835. *Democracy in America*. London: Saunders and Otleley.

Figures

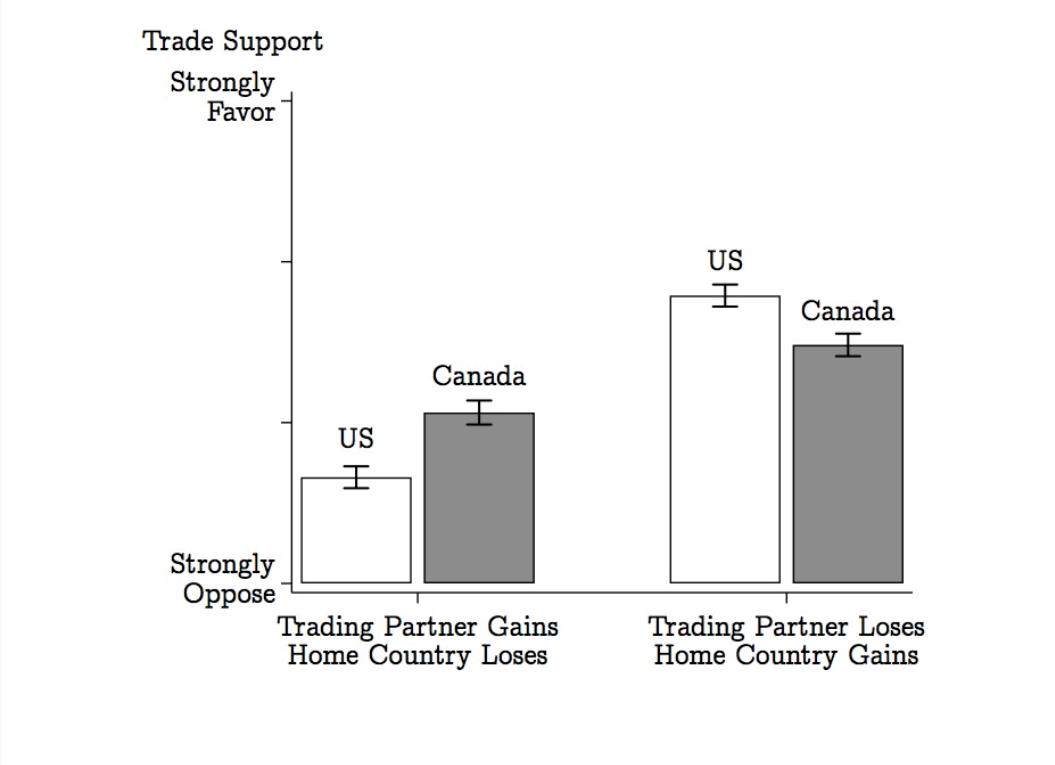

Figure 1. Ethnocentric Valuation: Trade Support by Country and Who Wins versus Loses

Note. Trade support is measured on a 1–4 scale. Error bars represent 95% confidence intervals. Bars illustrate the average level of trade support by condition adjusted for the pre-experimental trade preference index. The significant interaction between *Who Wins vs. Loses* and *Country* is confirmed in Appendix B, Table B.1 (p<.001). See Figure 9 for breakdown by *Magnitude* conditions.

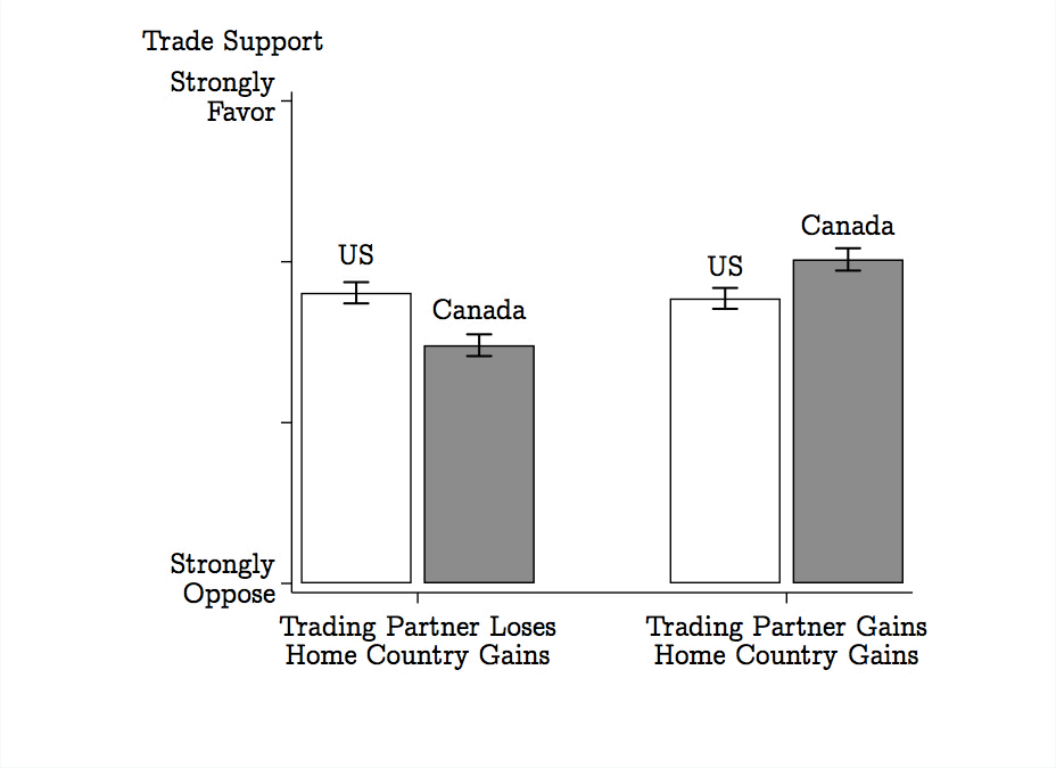

Figure 2. Moral Exclusion: Trade Support by Country and Whether Trading Partner Also Wins

Note. Trade support is measured on a 1–4 scale. Error bars represent 95% confidence intervals. Bars illustrate the average level of trade support by condition adjusted for the pre-experimental trade preference index. The significant interaction between *Whether Trading Partner Also Wins* and *Country* is confirmed in Appendix B, Table B.2 (p<.001).

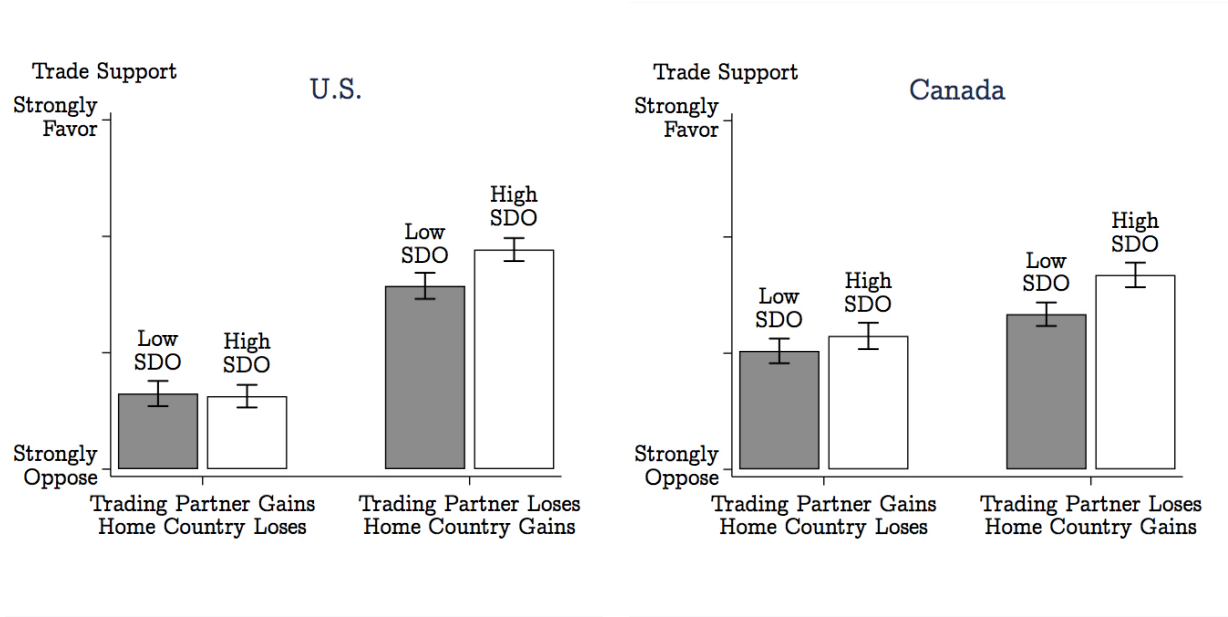

Figure 3. Social Dominance Orientation Moderates Ethnocentric Valuation

Note. Bars illustrate the average level of trade support by condition adjusted for the pre-experimental trade preference index. The pooled sample including both counties produces a significant interaction (p<.001). When analyzed separately, there are significant interactions between *Who Wins vs. Loses* and *Social Dominance Orientation* for the U.S. (*p*<.01) and a marginally significant interaction for Canada (*p*<.10). See Appendix B, Table B.3.

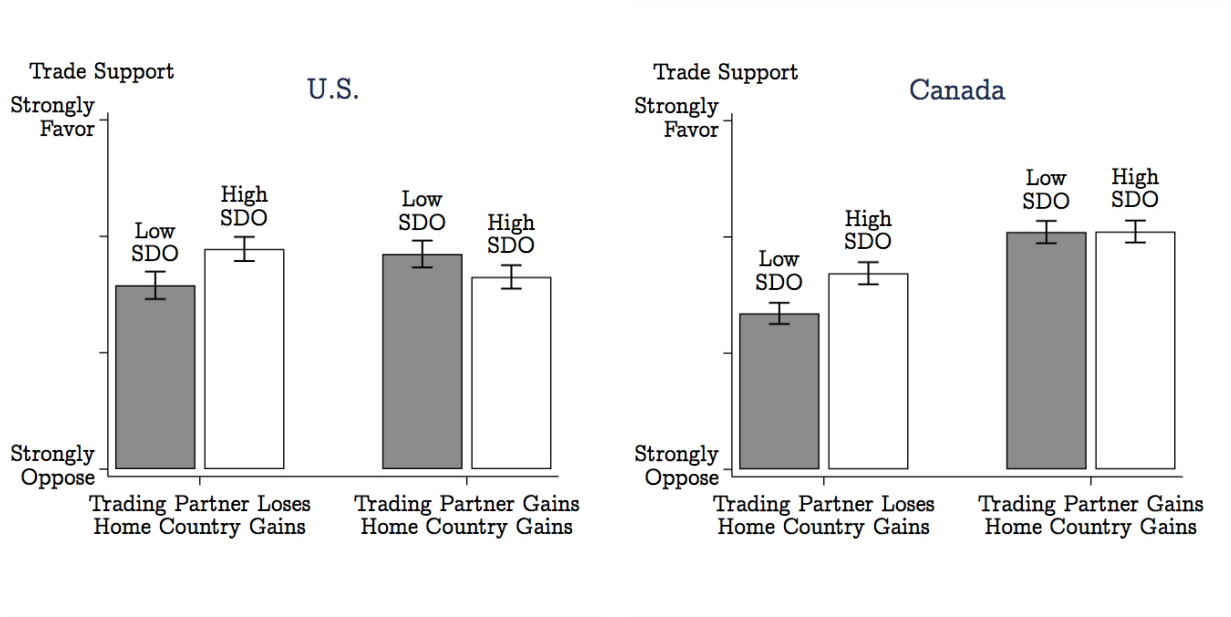

Figure 4. Social Dominance Orientation Moderates Moral Exclusion

Note. Bars illustrate the average level of trade support by condition adjusted for the pre-experimental trade preference index. The pooled sample including both counties produces a significant interaction ($p<.001$). When analyzed separately, there are significant interactions between *Whether Trading Partner Also Wins* and *Social Dominance Orientation* for both the U.S. ($p<.001$) and Canada ($p<.01$). See Appendix B, Table B.4.

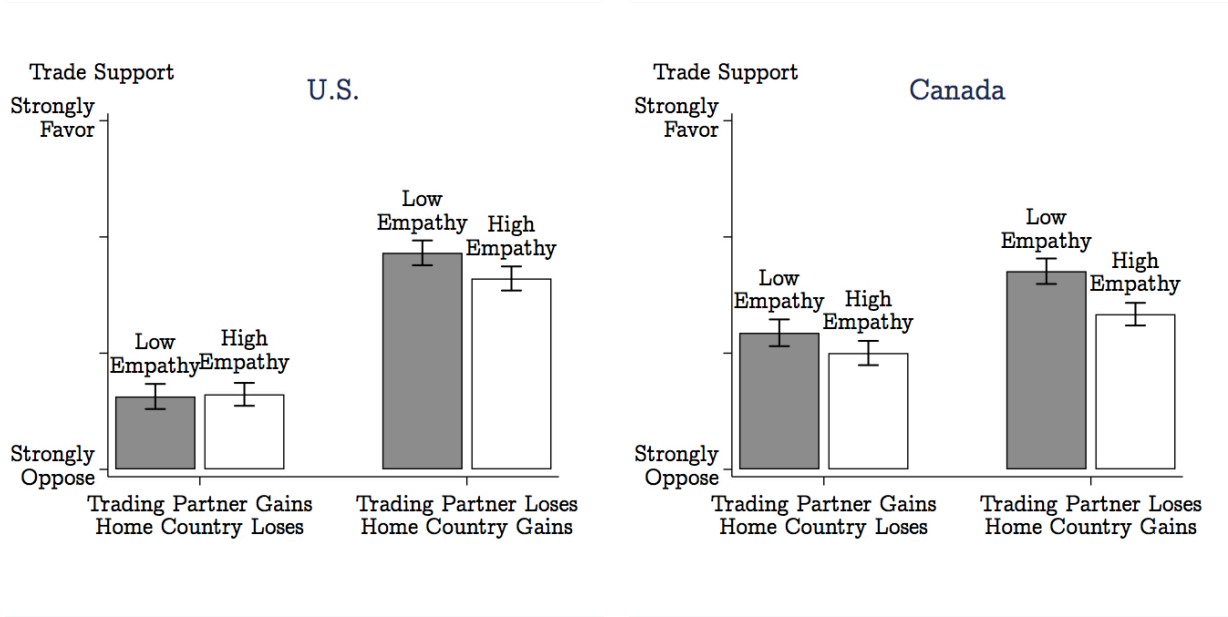

Figure 5. Empathy Moderates Ethnocentric Valuation

Note. Bars illustrate the average level of trade support by condition adjusted for the pre-experimental trade preference index. The pooled sample including both counties produces a significant interaction ($p<.01$). When analyzed separately, there are marginally significant interactions between *Who Wins vs. Loses* and *Empathy* for the U.S. ($p<.05$) as well as a marginally significant interaction within Canada ($p<.10$). See Appendix B, Table B.5.

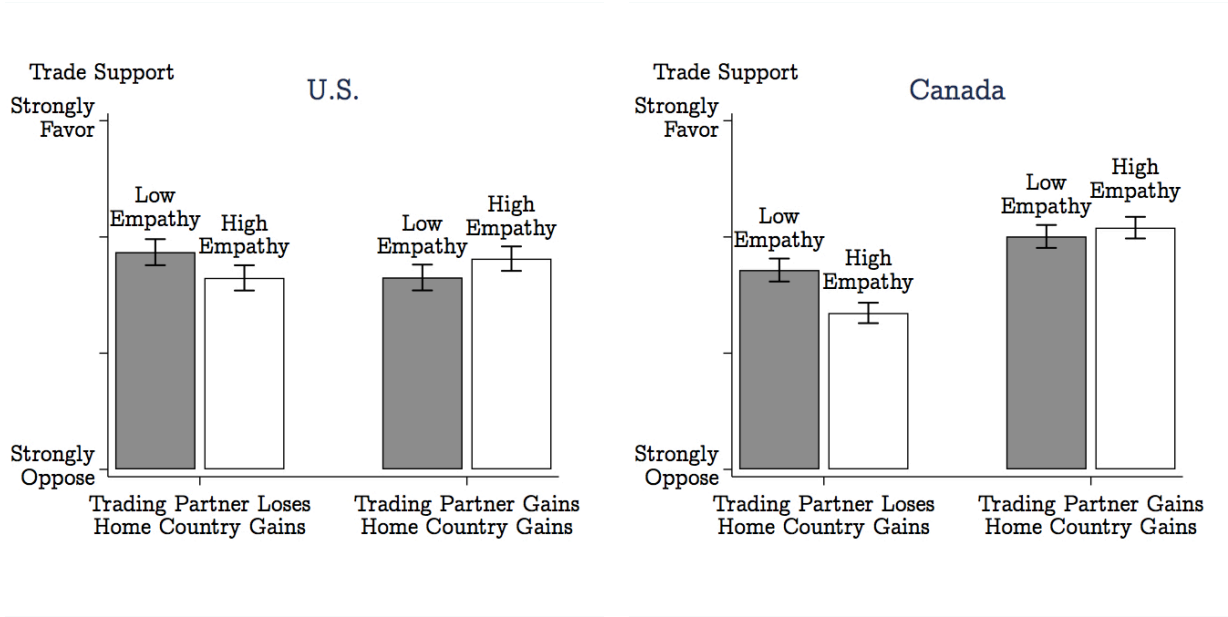

Figure 6. Empathy Moderates Moral Exclusion

Note. Bars illustrate the average level of trade support by condition adjusted for the pre-experimental trade preference index. The pooled sample including both counties produces a significant interaction ($p<.01$). When analyzed separately, there are significant interactions between *Whether Trading Partner Also Wins* and *Empathy* for both the U.S. ($p<.001$) and Canada ($p<.001$). See Appendix B, Table B.6.

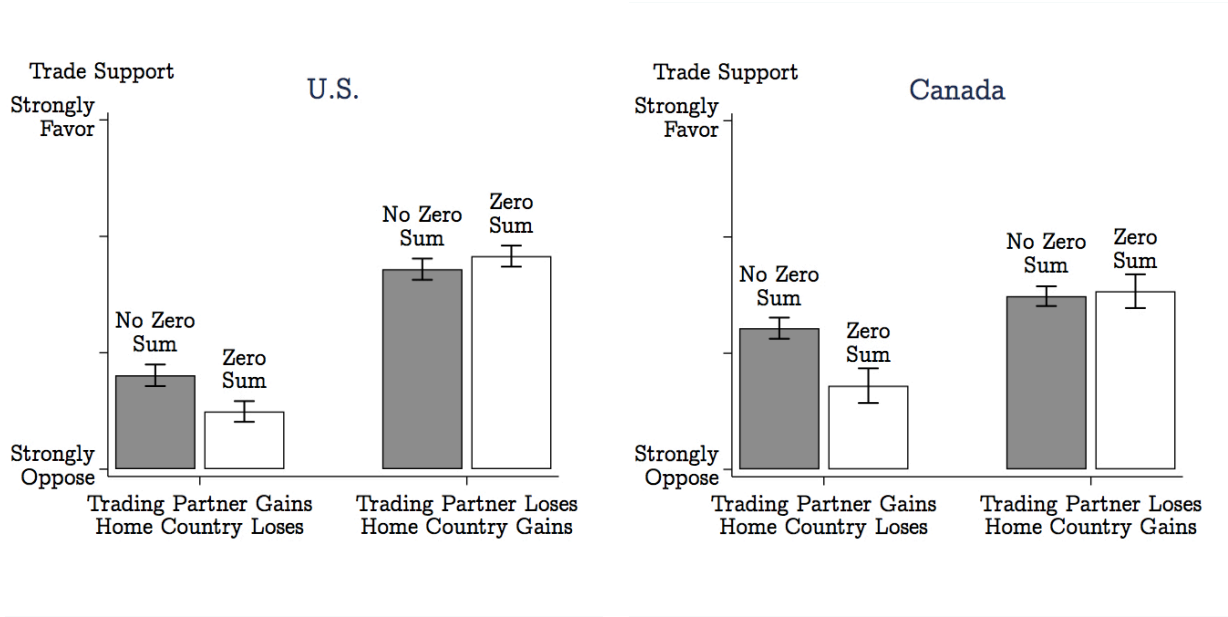

Figure 7. Zero Sum Perceptions Moderate Ethnocentric Valuation

Note. Bars illustrate the average level of trade support by condition adjusted for the pre-experimental trade preference index. The pooled sample including both counties produces a significant interaction ($p<.001$). When analyzed separately, there are significant interactions between *Who Wins vs. Loses* and *Zero Sum Perception* for both the U.S. ($p<.001$) and Canada ($p<.001$). See Appendix B, Table B.7.

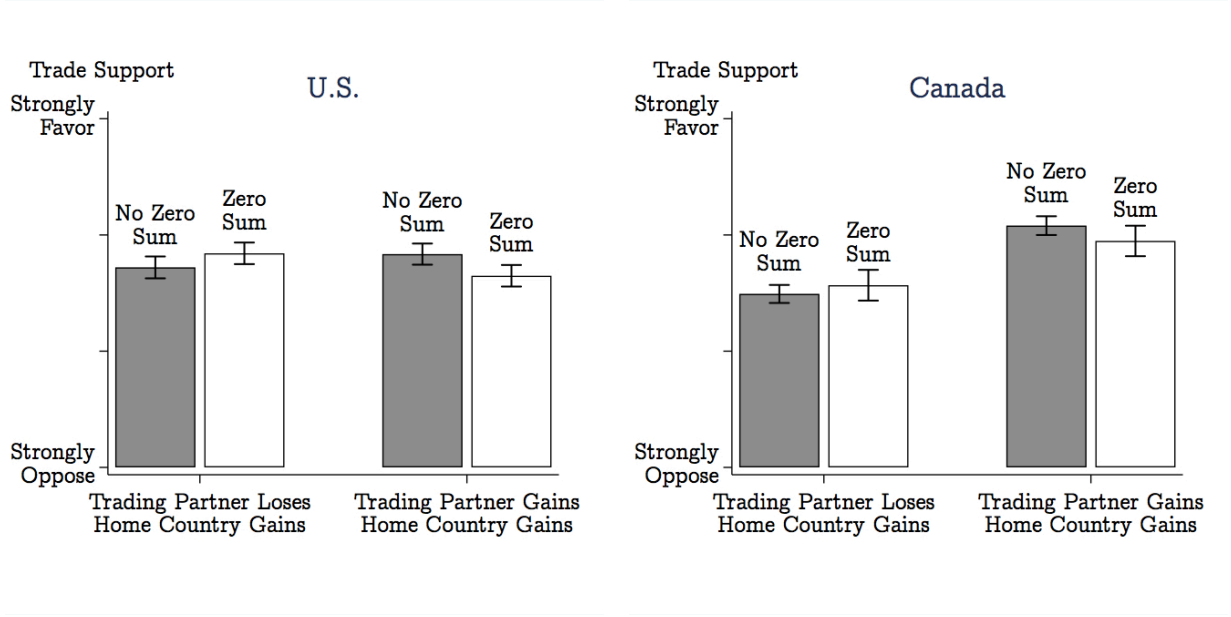

Figure 8. Zero Sum Perceptions Moderate Moral Exclusion

Note. Bars illustrate the average level of trade support by condition adjusted for the pre-experimental trade preference index. The pooled sample including both counties produces a significant interaction (p<.001). When analyzed separately, there is an interaction between *Whether Trading Partner Also Wins* and *Zero Sum Perception* for the U.S. (*p*<.001) and a marginally significant interaction for Canada (*p*<.10). See Appendix B, Table B.8.

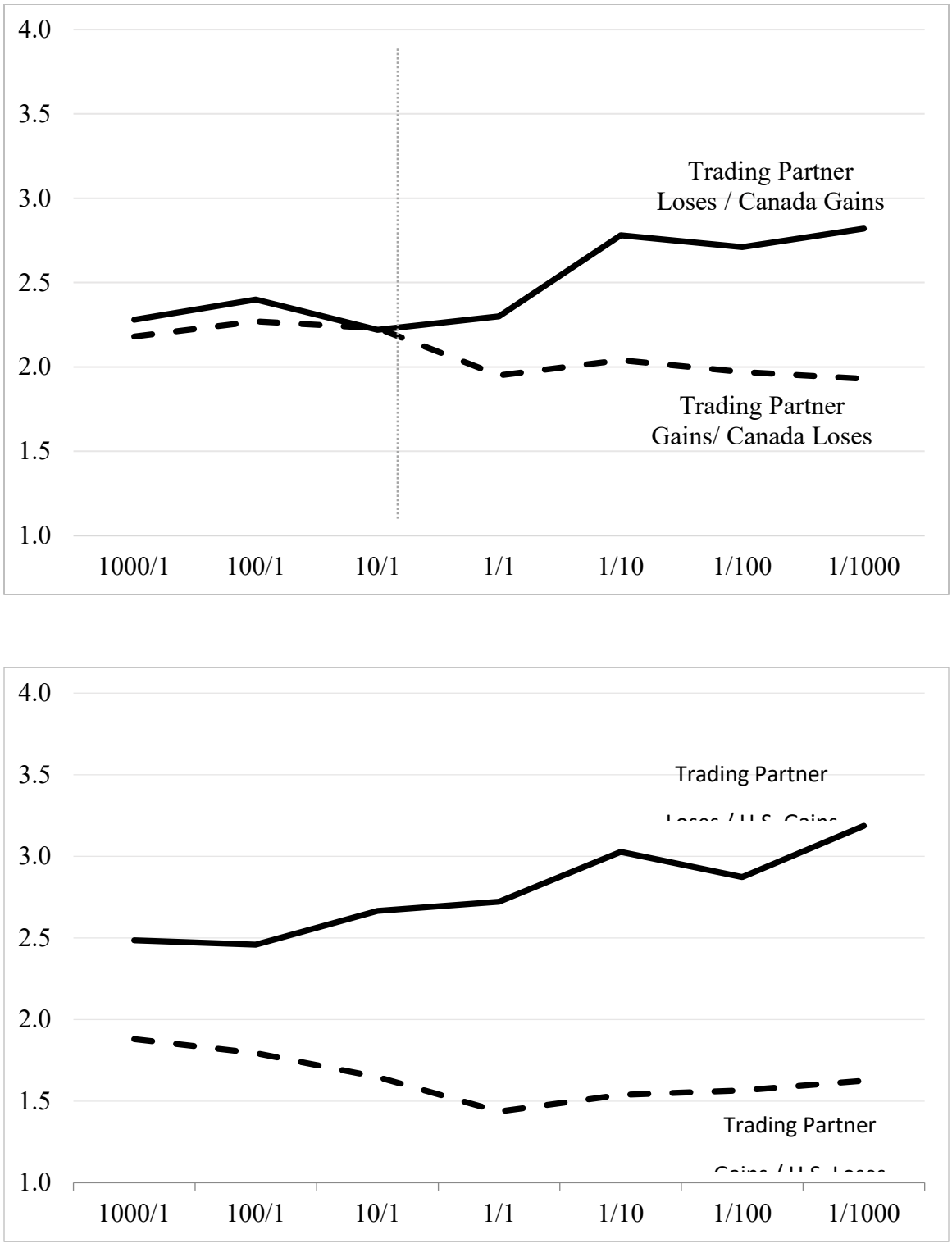

Figure 9. How Much is One [Canadian/American] Worth?

Note. After reading a description of the trade policy, respondents were asked whether they would be likely to support or oppose, and subsequently how strongly they would support/oppose a given trade

policy. Their responses were coded from '1' strongly oppose, to '4' strongly support. The Canadian lines are not significantly different from one another to the left of the dashed vertical line.

Appendix A. Question Wording/Coding

Country

Canada (0)

United States (1)

Pre-Experiment Survey:

Pre-Treatment Trade Preference Index

Do you think government should try to encourage international trade or try to discourage international trade?

Do you believe that globalization, especially the increasing connections of our economy with others around the world, is good or bad for the United States?

Should foreign companies be encouraged or discouraged from investing in the United States, for example, by building one of their factories in this country?

Do you favor or oppose the federal government in Washington negotiating more free trade agreements like NAFTA?

Do you have a very favorable, somewhat favorable, somewhat unfavorable or very unfavorable opinion of the WTO, the World Trade Organization?

Respondents answered each item using a four-point scale. Their responses were averaged across the five items (α=.83 for U.S., and .85 for Canada) to construct *Pre-Treatment Trade Preference Index.*

Survey Experiment:

Condition

Trading partner country gains jobs/Home country loses jobs

Trading partner country loses jobs/Home country gains jobs

Trading partner country gains jobs/Home country gains jobs

Within each three condition, we varied how much the home country and trading partner country gain or lose from a given trade policy, by 1, 10, 100, and 1,000 jobs. Using this 3 by 7 full-factorial design, respondents were randomly assigned to see one of the twenty-one descriptions of the trade policy.

Example: Condition 1 [1/10]
English: "For each 1 person in the [US/Canada] who loses a job and has less money to support their family, 10 people in a country that we trade with will gain new job and now be better able to provide for their family."

French: "Pour chaque 1 personne au Canada qui perd un emploi et a moins d'argent pour soutenir sa famille, 10 personnes dans un pays avec lequel nous commerçons obtiendront de nouveaux emplois et seront plus en mesure de soutenir leur famille."

Trade Support (Dependent Variable)

Would you be likely to support this trade policy or oppose this trade policy?

Strongly support

Somewhat support

Somewhat oppose

Strongly oppose

Social Dominance Orientation

There are many kinds of groups in the world: men and women, ethnic and religious groups, nationalities, political factions. How much do you support or oppose these ideas about groups in general?

In setting priorities, we must consider all groups.

We should not push for group equality.

Group equality should be our ideal.

Superior groups should dominate inferior groups.

Responses were initially measured on a '1' (extremely oppose) – '10'(extremely favor) scale. After taking the mean across four items, respondents were split into two groups based on their levels of social dominance orientation: low '0' and high '1' in social dominance orientation. The split point was the sample median, 4.25.

Manipulation Check

Perceptions of Trade Benefits

1. Think back to the trade policy that was described to you earlier in the survey. Based on what you were told, will people in [the U.S./Canada] or people in other countries benefit more, or will they both benefit the same amount from this trade policy?
2. Will our trading partners benefit a lot more or a little more than [the U.S./Canada]?
3. Will [the U.S./Canada] benefit a lot more or a little more than our trading partners?

Manipulation check items were coded for the home country and trading partner countries on a 0-2 scale, with '0' does not gain more, '1' gains a little more, and '2' gains a lot more, to represent *Perception of the Home Country Gain*, and *Perception of Trading Partner Gain*.

Appendix B. Table

Table B1. Ethnocentric Valuation: Trade Support by Who Wins versus Loses

	Partial SS	**df**	**F**
Model	660.771	16	46.56***
U.S. (vs. Canada)	1.498	1	1.69
Trading Partner Loses/Home Country Gains (vs. Trading Partner Gains/Home Country Loses)	424.107	1	478.15***
U.S. x Trading Partner Loses/Home Country Gains	87.828	1	99.02***
Magnitude of Trade's Impact	23.166	6	4.35***
Magnitude of Impact x Trading Partner Loses/Home Country Gains	75.340	6	14.16***
Pre-Experiment Trade Preference	14.248	1	16.06***
Residual	2477.339	2793	
Total	3138.110	2809	
Number of Observations	2810		

****p*<.001

Note. The table presents the results of an analysis of variance.

Table B2. Moral Exclusion: Trade Support by Whether Trading Partner Also Wins

	Partial SS	**df**	**F**
Model	252.504	16	19.17***
U.S. (vs. Canada)	1.175	1	1.43
Trading Partner Gains/Home Country Gains (vs. Trading Partner Loses/Home Country Gains)	44.943	1	54.59***
U.S. x Trading Partner Gains/Home Country Gains	57.742	1	70.14***
Magnitude of Trade's Impact	95.264	6	19.29***
Magnitude of Impact x Trading Partner Gains/Home Country Gains	13.163	6	2.66*
Pre-Experiment Trade Preference	35.683	1	43.35***
Residual	2351.963	2857	
Total	2604.467	2873	
Number of Observations	2874		

***p*<.01, ****p*<.001

Note. The table presents the results of an analysis of variance.

Table B3. Social Dominance Orientation Moderates Ethnocentric Valuation

U.S.	**Partial SS**	**df**	**F**
Model	421.253	16	34.51***
Trading Partner Loses/Home Country Gains (vs. Trading Partner Gains/Home Country Loses)	324.095	1	424.85***
High Social Dominance Orientation (vs. Low SDO)	5.574	1	7.31**
High SDO x Trading Partner Loses/Home Country Gains	7.518	1	9.86**
Magnitude of Trade's Impact	14.829	6	3.24**
Magnitude of Impact x Trading Partner Gains/Home Country Gains	44.776	6	9.78***
Pre-Experiment Trade Preference	8.225	1	10.78**
Residual	826.169	1083	
Total	1247.422	1099	
Number of Observations	1100		

Canada	**Partial SS**	**df**	**F**
Model	142.066	16	9.19***
Trading Partner Loses/Home Country Gains (vs. Trading Partner Gains/Home Country Loses)	58.995	1	61.06***
High Social Dominance Orientation (vs. Low SDO)	17.760	1	18.38***
High SDO x Trading Partner Loses/Home Country Gains	3.575	1	3.70
Magnitude of Trade's Impact	12.865	6	2.22*
Magnitude of Impact x Trading Partner Gains/Home Country Gains	37.241	6	6.42***
Pre-Experiment Trade Preference	12.353	1	12.79***
Residual	1261.804	1306	
Total	1403.870	1322	
Number of Observations	1323		

*p<.05, **p<.01, ***p<.001

Note. The table presents the results of an analysis of variance.

Table B4. Social Dominance Orientation Moderates Moral Exclusion

U.S.	**Partial SS**	**df**	**F**
Model	95.854	16	7.13***
Trading Partner Gains/Home Country Gains (vs. Trading Partner Loses/Home Country Gains)	.054	1	0.06
High Social Dominance Orientation (vs. Low SDO)	.889	1	1.06
High SDO x Trading Partner Gains/Home Country Gains	17.441	1	20.76***
Magnitude of Trade's Impact	57.803	6	11.47***
Magnitude of Impact x Trading Partner Gains/Home Country Gains	10.488	6	2.08
Pre-Experiment Trade Preference	9.101	1	10.83***
Residual	914.765	1089	
Total	1010.619	1105	
Number of Observations	1106		

Canada	**Partial SS**	**df**	**F**
Model	198.597	16	15.82***
Trading Partner Gains/Home Country Gains (vs. Trading Partner Loses/Home Country Gains)	95.874	1	122.17***
High Social Dominance Orientation (vs. Low SDO)	10.312	1	13.14***
High SDO x Trading Partner Gains/Home Country Gains	9.826	1	12.52***
Magnitude of Trade's Impact	30.493	6	6.48***
Magnitude of Impact x Trading Partner Gains/Home Country Gains	14.871	6	3.16**
Pre-Experiment Trade Preference	28.549	1	36.38***
Residual	1061.000	1352	
Total	1259.597	1368	
Number of Observations	1369		

*p<.05, **p<.01, ***p<.001

Note. The table presents the results of an analysis of variance.

Table B5. Empathy Moderates Ethnocentric Valuation

U.S.	**Partial SS**	**df**	**F**
Model	414.391	16	33.67***
Trading Partner Loses/Home Country Gains (vs. Trading Partner Gains/Home Country Loses)	341.694	1	444.17***
High Empathy (vs. Low Empathy)	2.765	1	3.59
High Empathy x Trading Partner Loses/Home Country Gains	3.855	1	5.01*
Magnitude of Trade's Impact	14.524	6	3.15**
Magnitude of Impact x Trading Partner Gains/Home Country Gains	45.940	6	9.95***
Pre-Experiment Trade Preference	6.915	1	8.99**
Residual	832.370	1082	
Total	1246.761	1098	
Number of Observations	1099		

Canada	**Partial SS**	**df**	**F**
Model	147.904	16	9.60***
Trading Partner Loses/Home Country Gains (vs. Trading Partner Gains/Home Country Loses)	61.751	1	64.11***
High Empathy (vs. Low Empathy)	23.872	1	24.78***
High Empathy x Trading Partner Loses/Home Country Gains	3.093	1	3.21
Magnitude of Trade's Impact	11.419	6	1.98
Magnitude of Impact x Trading Partner Gains/Home Country Gains	34.444	6	5.96***
Pre-Experiment Trade Preference	10.713	1	11.12***
Residual	1258.854	1307	
Total	1406.758	1323	
Number of Observations	1324		

*p<.05, **p<.01, ***p<.001

Note. The table presents the results of an analysis of variance.

Table B6. Empathy Moderates Moral Exclusion

U.S.	**Partial SS**	**df**	**F**
Model	87.761	16	6.47***
Trading Partner Gains/Home Country Gains (vs. Trading Partner Loses/Home Country Gains)	.188	1	0.22
High Empathy (vs. Low Empathy)	.234	1	0.28
High Empathy x Trading Partner Gains/Home Country Gains	9.912	1	11.69***
Magnitude of Trade's Impact	56.576	6	11.12***
Magnitude of Impact x Trading Partner Gains/Home Country Gains	11.011	6	2.16*
Pre-Experiment Trade Preference	8.503	1	10.03**
Residual	922.795	1088	
Total	1010.556	1104	
Number of Observations	1105		

Canada	**Partial SS**	**df**	**F**
Model	201.266	16	16.06***
Trading Partner Gains/Home Country Gains (vs. Trading Partner Loses/Home Country Gains)	89.207	1	113.88***
High Empathy (vs. Low Empathy)	7.173	1	9.16**
High Empathy x Trading Partner Gains/Home Country Gains	16.489	1	21.05***
Magnitude of Trade's Impact	27.272	6	5.80***
Magnitude of Impact x Trading Partner Gains/Home Country Gains	13.215	6	2.81*
Pre-Experiment Trade Preference	26.592	1	33.95***
Residual	1059.847	1353	
Total	1261.112	1369	
Number of Observations	1370		

*p<.05, **p<.01, ***p<.001

Note. The table presents the results of an analysis of variance.

Table B7. Zero Sum Perception Moderates Ethnocentric Valuation

U.S.	**Partial SS**	**df**	**F**
Model	566.408	16	44.87***
Trading Partner Loses/Home Country Gains (vs. Trading Partner Gains/Home Country Loses)	472.008	1	598.30***
Zero Sum Perception (vs. No Zero Sum Perception)	3.518	1	4.46*
Zero Sum Perception x Trading Partner Loses/Home Country Gains	16.485	1	20.90***
Magnitude of Trade's Impact	15.254	6	3.22**
Magnitude of Impact x Trading Partner Gains/Home Country Gains	46.313	6	9.78***
Pre-Experiment Trade Preference	2.547	1	3.23
Residual	1158.921	1469	
Total	1725.330	1485	
Number of Observations	1486		

Canada	**Partial SS**	**df**	**F**
Model	148.375	16	9.64***
Trading Partner Loses/Home Country Gains (vs. Trading Partner Gains/Home Country Loses)	76.832	1	79.90***
Zero Sum Perception (vs. No Zero Sum Perception)	12.390	1	12.89***
Zero Sum Perception x Trading Partner Loses/Home Country Gains	18.384	1	19.12***
Magnitude of Trade's Impact	12.143	6	2.10
Magnitude of Impact x Trading Partner Gains/Home Country Gains	34.209	6	5.93***
Pre-Experiment Trade Preference	5.118	1	5.32*
Residual	1251.926	1302	
Total	1400.302	1318	
Number of Observations	1319		

*p<.05, **p<.01, ***p<.001

Note. The table presents the results of an analysis of variance.

Table B8. Zero Sum Perception Moderates Moral Exclusion

U.S.	**Partial SS**	**df**	**F**
Model	102.123	16	7.65***
Trading Partner Gains/Home Country Gains (vs. Trading Partner Loses/Home Country Gains)	.586	1	0.70
Zero Sum Perception (vs. No Zero Sum Perception)	.392	1	0.47
Zero Sum Perception x Trading Partner Gains/Home Country Gains	8.864	1	10.62**
Magnitude of Trade's Impact	71.650	6	14.31***
Magnitude of Impact x Trading Partner Gains/Home Country Gains	8.245	6	1.65
Pre-Experiment Trade Preference	9.659	1	11.57***
Residual	1241.185	1487	
Total	1343.308	1503	
Number of Observations	1504		

Canada	**Partial SS**	**df**	**F**
Model	176.092	16	13.74***
Trading Partner Gains/Home Country Gains (vs. Trading Partner Loses/Home Country Gains)	62.872	1	78.48***
Zero Sum Perception (vs. No Zero Sum Perception)	0.199	1	0.25
Zero Sum Perception x Trading Partner Gains/Home Country Gains	2.824	1	3.52
Magnitude of Trade's Impact	28.018	6	5.83***
Magnitude of Impact x Trading Partner Gains/Home Country Gains	13.104	6	2.73**
Pre-Experiment Trade Preference	23.451	1	29.27***
Residual	1079.084	1347	
Total	1255.175	1363	
Number of Observations	1364		

*p<.05, **p<.01, ***p<.001

Note. The table presents the results of an analysis of variance.

Appendix C. Manipulation Checks

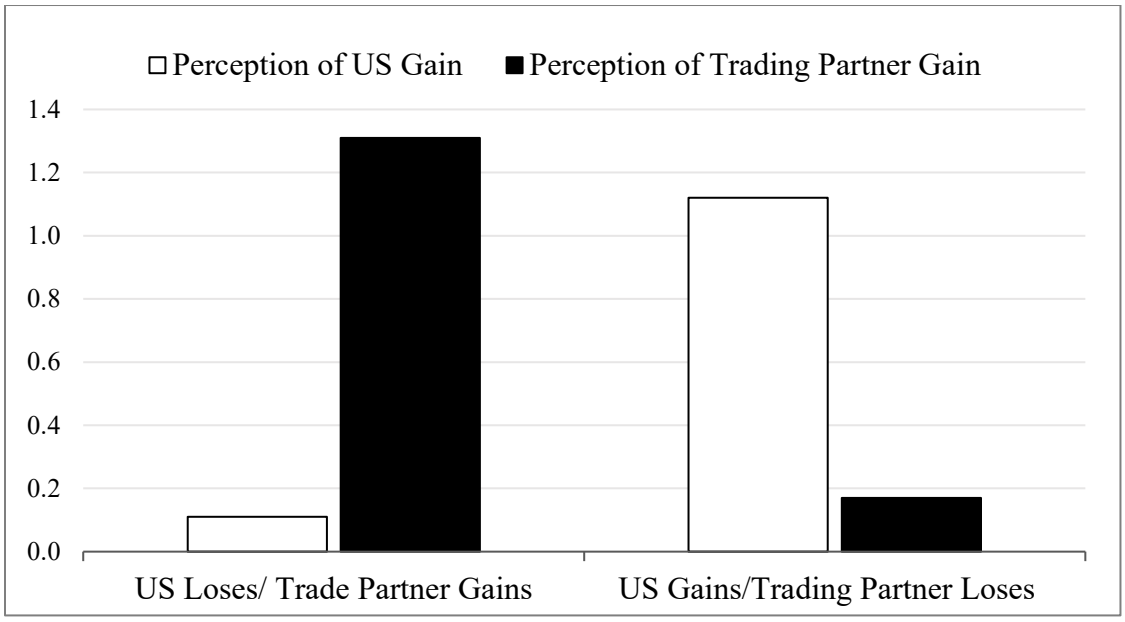

Figure C1. Manipulation Checks for Perception of U.S. Gain and Trading Partner Gain, by Experimental Conditions 1 and 2 in Figure 2

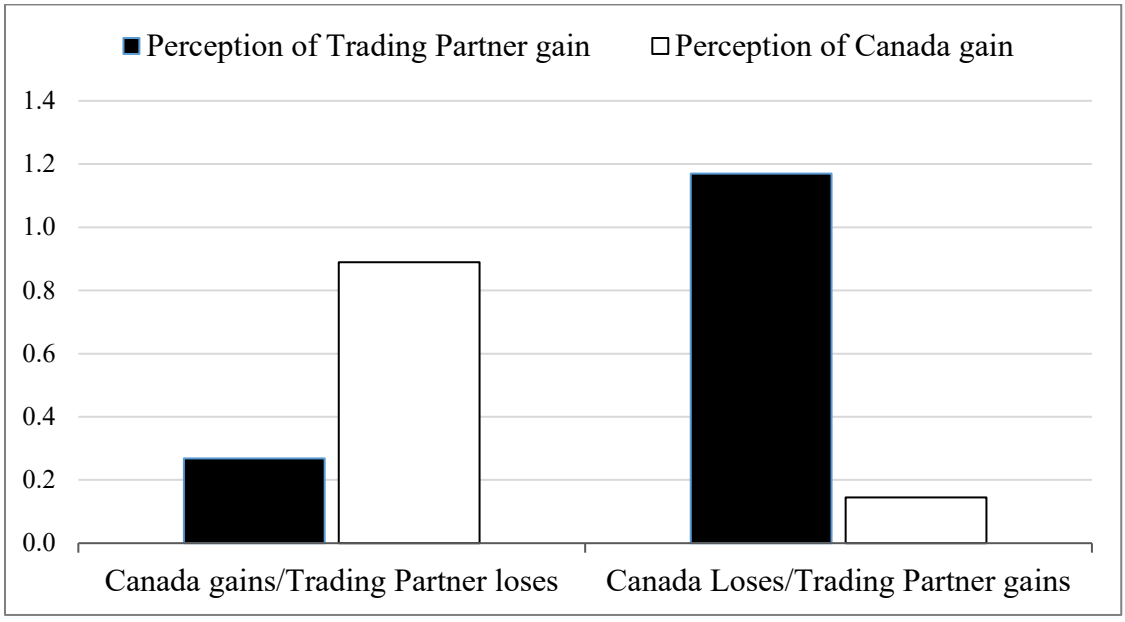

Figure C2. Manipulation Checks for Perception of Canada Gain and Trading Partner Gain, by Experimental Conditions 1 and 2 in Figure 2

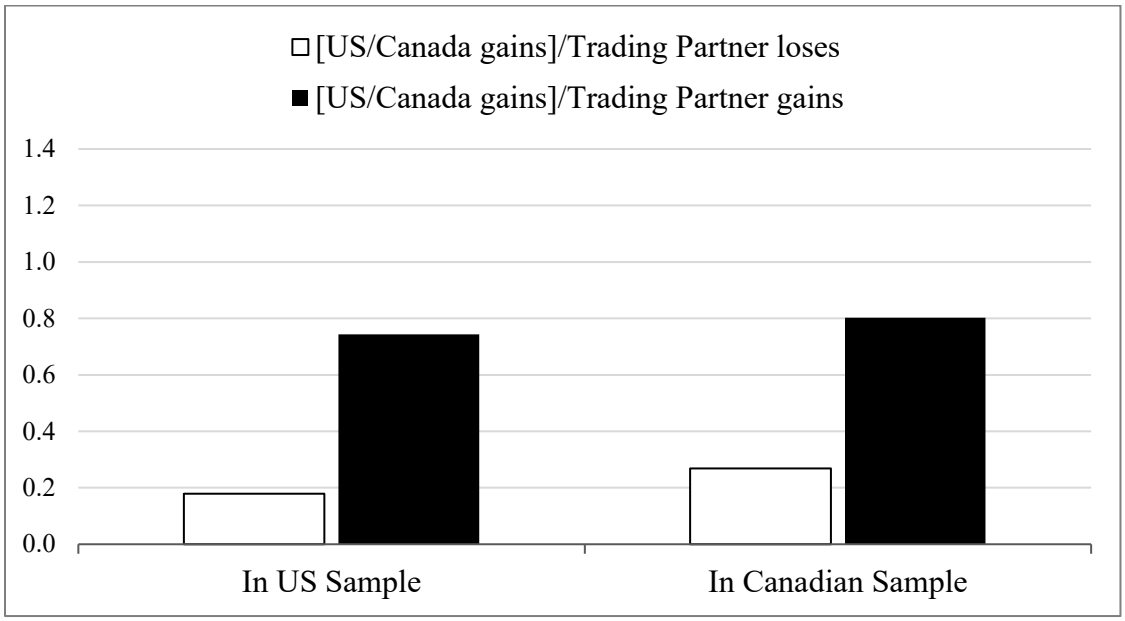

Figure C3. Manipulation Checks for Perception of Trading Partner Gain in US and Canadian Experiments, by Experimental Conditions 2 and 3 in Figure 2

Note. Bars represent mean perception of extent to which a country is perceived to gain more than the other on 0-2 scale where 0=does not gain more, 1=gains a little more, and 2=gains a lot more. Mean values were significantly different by experimental condition in the direction anticipated for all manipulation check comparisons in Figures C1, C2 and C3 above ($p<.001$).

Appendix D. Experimental Conditions

		How Much is Gained or Lost						
		1000 / 1	100 / 1	10 / 1	1 /1	1 / 10	1 / 100	1/ 1000
Who Gains and Who Loses Jobs	***Condition 1*** Trading Partner Gains/ Home Country Loses							
	Condition 2 Trading Partner Loses/ Home Country Gains							
	Condition 3 Trading Partner Gains/ Home Country Gains							

Note. In each cell, the number before the slash corresponds to the number of jobs gained or lost by the trading partner. The number after the slash corresponds to the number of jobs gained or lost by the home country on each row.