

# Helping us or helping them? What makes aid appeal to Australians

Terence Wood and Chris Hoy

## Abstract

This paper reports on a survey experiment designed to test whether support for aid is more readily increased by emphasising aid's benefits to the donor country, or by emphasising aid's role in helping people in developing countries. The survey experiment was pre-registered and involved a large, nationally-representative sample of over 4000 Australians. Information based on a real Australian government aid project was presented in the form of a newspaper article. Participants were randomly assigned to one of five groups: a control group, which was given no information on the project; a basic treatment group, which was given basic information on the project; an 'enlightened national interest' group, which was told about benefits the project would bring Australia; a 'global leader group', which was told how the project would make Australia a global leader; and an 'altruism' group, which was given information on how the project would help people in need in developing countries. All of the treatment groups including the basic treatment group outperformed the control group in eliciting increased approval of aid, and in reducing the share of people who thought Australia gave too much aid. Both the altruism and enlightened national interest treatments outperformed the control in increasing the share of people who thought Australia did not give enough aid. However, only the enlightened national interest treatment outperformed the basic treatment group in this area. Results were complicated by the altruism treatment's limited success in convincing people that the aid project was actually being run for altruistic ends. When we limited our analysis only to those people who appeared to accept the narrative used in the treatment, altruism actually proved to be the most effective treatment.

## **Helping us or helping them? What makes aid appeal to Australians?**

Terence Wood and Chris Hoy<sup>1</sup>

Terence Wood is a Research Fellow at the Development Policy Centre.

Chris Hoy is a Research Associate at the Development Policy Centre.

Wood, T and Hoy, C 2018 "Helping us or helping them? What makes aid appeal to Australians?"

*Development Policy Centre Discussion Paper #75, Crawford School of Public Policy, The Australian National University, Canberra.*

The Development Policy Centre is a research unit at the Crawford School of Public Policy, The Australian National University. The discussion paper series is intended to facilitate academic and policy discussion. Use and dissemination of this discussion paper is encouraged; however, reproduced copies may not be used for commercial purposes.

The views expressed in discussion papers are those of the authors and should not be attributed to any organisation with which the authors might be affiliated.

For more information on the Development Policy Centre, visit

<http://devpolicy.anu.edu.au/>

---

<sup>1</sup> The authors are grateful to Ben Day, David Hudson, Jennifer vanHeerde Hudson, Ben Goldsmith, Camilla Burkot, Johnny Blades and Jo Spratt, for their advice on survey questions. We are particularly grateful to the Bill & Melinda Gates Foundation for funding that made this research possible.

# Helping us or helping them? What makes aid appeal to Australians?

## 1. Introduction

When discussing foreign aid budgets, politicians frequently emphasise the importance of public support if government aid is to be increased (for example, Bishop 2017; Fierravanti-Wells 2017). Such claims are backed up by a number of academic studies which provide evidence of an association between public support for aid and increased government aid budgets (Milner and Tingley 2010; Milner and Tingley 2011; Stern 1998). Yet, while there has been considerable research on what types of people support aid (Cheng and Smyth 2016; Chong and Gradstein 2008; Heinrich et al. 2016; Paxton and Knack 2012; Wood 2018a), much less study has been devoted to whether information, and appeals based on particular types of information, can shift public support for aid (for a discussion of existing work see: Wood 2018b).

This paper reports on new research studying whether public support for government aid is most readily improved by emphasising potential benefits that aid may bring to donor countries, or whether support for aid is more readily increased by emphasising the benefits aid can bring to those in need in aid recipient countries. Politicians and aid campaigners often draw on these different rationales as they attempt to sell government aid to the public; yet, to date there has been no evidential basis for the different approaches taken. As we discuss, there are good theoretical reasons to believe that each of the different approaches may work, but evidence has been lacking.

The paper reports on the findings of a pre-registered survey experiment conducted on a socio-demographically representative sample of over 4000 Australians. The experiment involved providing participants with a short vignette, written in the style of a newspaper article, which described a real Australian government aid project. Participants were randomly allocated to one of the following groups:

1. A control group, which received no article.
2. A 'basic treatment' group that received an article which provided only basic facts on the aid project, as well as a short endorsement from an independent academic. The basic treatment group was included so as to allow us to isolate

the effects of the different specific treatments outlined below from the simple effect associated with neutrally describing a specific project and providing endorsement from an independent expert.

3. An 'altruism group' that received an almost identical article, that differed in that the independent academic emphasised the need for the project and its ability to help people in developing countries. The endorsement sought specifically to appeal to Australians' compassion or their beliefs about the moral desirability of helping people in need living in other countries.<sup>2</sup>
4. An 'enlightened national interest' group, which received the same article but rewritten so that the endorsement from the academic emphasised the way the project could benefit Australians.
5. A 'global leader' group, which received the same article but with the academic's emphasis now placed on the way the project would make Australia a global leader in this area of work.

All groups were then asked whether they broadly approved of Australia giving aid as well as their views on aid volume.

The central findings of the experiment are that all of the treatments including the basic treatment were equally effective at increasing participants' general approval of aid. Their effect was both statistically significant and substantively meaningful. Findings were similar with respect to aid volume in that a lower proportion of respondents in all of the treatment groups, including the basic treatment group, responded that Australia gave too much aid than was the case in control group. Once again, the difference was both statistically significant and substantively meaningful. However, matters were more complicated in the case of the belief that Australia gave too little aid. In this area, both enlightened national interest and altruism groups outperformed the control group, but the enlightened national interest treatment also brought a statistically significant increase in the belief that Australia gave too little aid beyond that elicited by the basic treatment, which the altruism treatment did not.

---

<sup>2</sup> Strictly speaking such a desire does not have to be altruism in the psychological sense of the term. However, the meanings are close, and we use 'altruism' a convenient shorthand throughout the paper.

Part of the reason for the altruism treatment's failure to elicit a statistically significant increase in the share of respondents who thought Australia gave too little aid vis a vis the basic treatment group appears to stem from the fact that not all participants who received the altruism treatment believed the purpose of the aid project was actually to help poor people in developing countries. When we restricted our analysis only to those participants who believed the purpose of the aid project was the purpose emphasised in the treatment they received, the altruism treatment outperformed the control group and the basic treatment group in reducing the share of respondents who thought Australia gives too little aid. Moreover, the altruism treatment actually had a treatment effect that was slightly larger than that of the enlightened national interest group (although the difference between the two groups was not statistically significant.)

More broadly, when we restricted our sample to only those who believed the purpose of the aid project was the purpose emphasised in their treatment, the altruism treatment actually outperformed all of the other treatments when it came to reducing the proportion of respondents who thought Australia gives too much aid, and in increasing overall approval of aid.

Ultimately, the most effective means of increasing the share of Australians who think Australia gives too little aid may actually be by emphasising aid's ability to help those in need. However, this will only be the case if a doubting public can be persuaded that helping those in need is the real motivation underpinning government aid giving.

The rest of the paper starts by examining existing literature, before detailing the experiment and the justification for each treatment used. We then provide details on the methodology we used before reporting on findings and concluding with discussion.

## **2. Literature**

Although the literature on the correlates of support for government aid is now extensive, research on whether information can change people's views on government aid giving is scarce. That research that does exist produces a range of sometimes conflicting findings. An equivalent literature on attempts to elicit donations to development NGOs provides similarly mixed findings.

The most common information intervention pertaining to government aid has involved providing accurate information on government aid volumes to participants in survey experiments. This treatment makes sense as donor country publics often overestimate aid volumes substantially (Burkot and Wood 2015; Klein 2013; Van Heerde and Hudson 2010).

One of the first studies to do this was that of Gilens (2001), who experimentally treated participants with a question which provided information on how small the United States (US) government's foreign aid spend was as a share of federal spending, as well as information on declining US aid budgets. Gilens found this treatment was effective in changing views about aid volume; although the treatment was effective, foremost, amongst the politically aware. In a more recent study Scotto et al. (2017) found that treating experiment subjects in the US and United Kingdom (UK) with information on aid as a share of government spending substantially reduced the share of respondents who thought their governments gave too much aid. Interestingly, however, the treatment was less effective in increasing the share who thought their government did not give enough aid. Moreover, accompanying information on aid as a share of government spending with information on aid budgets in absolute dollar terms tended to decrease the efficacy of the treatment.

In an experiment conducted with a representative sample of Australians, Wood (2018b) found that treating Australians with information about aid as a share of federal spending did not have an effect on views about aid volume, while information on declining trends in aid only had a marginal effect. The only information that produced a clear effect was a contrast of Australian aid cuts with increases in aid in the UK. This substantially reduced the share of Australians who thought Australia gave too much aid, and had a smaller, but non-trivial, effect on the share of Australians who thought Australia gave too little aid.

Unlike other authors who have tended to focus on information on aid volumes, Nair (2018) treated US participants by showing them how affluent they were in comparison to the typical person globally. Treated participants displayed substantially greater support for aid.

In a similar vein, but focused on NGO donations, Brañas-Garza (2006) found that informing experiment subjects about recipient poverty increased donations. However, although other work on NGOs has shown it can be quite easy to influence aspects of donations such as recipient preference over the countries NGOs work in (Etang et al. 2012; Hansen et al. 2014), increasing the propensity to donate has proven more difficult (Etang et al. 2010; Karlan and Wood 2014).

In short, it appears possible to shift public preferences with respect to both government aid and NGO aid; however, efficacy is far from given.

### **3. The treatments**

The experiment described in this paper involved providing different groups with different information on a government aid project. Detail about specific methods is provided in Section 4. In this current section we outline the nature of the treatments, and explain why they might, and might not, be expected to succeed on the basis of existing work.

The experiment involved a control group and four additional groups. Members of the control group was simply asked questions about their views about aid. The other groups received the same questions but were also provided vignettes that took the form of short newspaper articles. Treating people with vignettes of this form is common in social science work (Nyhan and Reifler 2010) and provides a means of imparting information on participants in a manner similar to that which they might normally encounter it in everyday life.

Those groups that received the vignettes received one of the following articles. All of the articles are broadly based on the Indo-Pacific Centre for Health Security.<sup>3</sup> This initiative was launched in late 2017 and is funded by the Australian Government Aid Program. The initiative was well suited to our experiment as the undertaking is large and involves work aimed at preventing and tackling epidemics and infectious diseases in South East Asia and the Pacific. As such, the initiative could be framed both in terms of potential

---

<sup>3</sup> <https://indopacifichealthsecurity.dfat.gov.au/>

benefits to people living in developing countries and potential benefits to Australia (reducing health risks to Australians). Once its scale is taken into account, the initiative is also a first of its kind in the region, which meant the initiative could also be discussed in terms of how it made Australia a global leader.

In addition, while the initiative was subject to a public launch, this was not picked up on in the Australian media. Only two specialist development sites, devex and reliefweb, devoted any coverage to it.<sup>4</sup> As a result, participants in our experiment were unlikely to have any pre-formed conceptions about the undertaking. Because the initiative's name – the 'Indo-Pacific Centre for Health Security' – could be read as suggestive of a certain type of benefit, we did not use its formal name in the vignettes.

Importantly, all of the vignettes were nearly identical in their form. All except the basic treatment were effectively identical in length. The first two paragraphs, which drew on information provided in the initial press release about the initiative, were very similar in all of the vignettes.<sup>5</sup> The third paragraph took a very similar form across the different treatments too – praise for the aid initiative came from the same person and was similarly effusive. The vignettes were kept purposefully short so as to increase the probability they would be read.

The key differences between the different vignettes lay in how the project was framed. This can be seen below.

### **3.1 The basic treatment group**

The 'basic treatment' group were provided with the following vignette:

*Australian aid to join the fight against epidemics*

8 October 2017

---

<sup>4</sup> See: <https://news.google.com/search?q=%22indo-pacific%20health%20security%22&hl=en-AU&gl=AU&ceid=AU%3Aen>

<sup>5</sup> The media release from the launch can be found at: [https://foreignminister.gov.au/releases/Pages/2017/jb\\_mr\\_171008.aspx](https://foreignminister.gov.au/releases/Pages/2017/jb_mr_171008.aspx)

CANBERRA – A new Australian government aid initiative to fight epidemics has drawn praise from aid experts.

The aid funded work is intended to stop epidemics such as Ebola and Zika from spreading in the Asia-Pacific region. Aid money will be used for medicines, health workers and international emergency responses.

Dr Terence Wood, an aid researcher from the Australian National University, said: “This is a great idea. Preventing epidemics is exactly what we should be using aid for.”

A basic treatment group was included to allow us to separate the impacts of describing the benefits of the initiative in specific ways from the basic effect of simply reporting on the initiative in a positive manner that did not speak to specific types of benefits.

### **3.2 The altruism group**

The ‘altruism’ group were provided with a slightly different vignette – one focused on aid’s ability to help people in need living in other countries:

*Australian aid to join the fight against devastating epidemics in poor countries*

8 October 2017

CANBERRA – A new Australian government aid initiative to fight epidemics has drawn praise from aid experts as an excellent way of preventing suffering in poorer countries.

The aid funded work is intended to stop epidemics such as Ebola and Zika from spreading in the Asia-Pacific region. Aid money will be used for medicines, health workers and international emergency responses.

Dr Terence Wood, an aid researcher from the Australian National University, said: “This is a great idea. A major epidemic somewhere like Papua New Guinea or Indonesia would cause so much suffering and loss of life. Families and communities would be devastated, and take years to recover. It’s the right thing to do. Preventing epidemics is exactly what we should be using aid for.”

This article was similar to that provided to the basic treatment group, except that the independent expert emphasised both suffering in developing countries and the potential for the project to help reduce this. The project was described as the ‘right thing to do’.

The foremost reason for believing this treatment would work came in the form of a number of surveys showing that most Australians believe aid should be given primarily

for the sake of helping people in developing countries (Burkot and Wood 2017; Wood 2018a). It would seem a logical conclusion that appealing to people's stated preference about the purpose of aid giving would be an effective means of increasing their support for government aid.

### **3.3 The enlightened national interest group**

The 'enlightened national interest group' were provided with a vignette that appealed to the benefits the aid initiative could bring to Australia. Importantly, these were not direct benefits such as money for Australian firms, but rather involved a win-win type situation in which Australia was kept safe from illness by helping other countries – hence our description of this treatment as 'enlightened national interest' rather than simply 'national interest'.

#### *Australian aid to fight against epidemics on Australia's doorstep*

8 October 2017

CANBERRA – A new Australian government aid initiative to fight epidemics has drawn praise from aid experts as an excellent way of keeping Australia safe from disease.

The aid funded work is intended to stop epidemics such as Ebola and Zika from spreading in the Asia-Pacific region. Aid money will be used for medicines, health workers and international emergency responses.

Dr Terence Wood, an aid researcher from the Australian National University, said: "This is a great idea. Diseases do not respect borders. A major epidemic in a country like Papua New Guinea or Indonesia, right on our doorstep, would be bad news for Australia. It could easily spread here. It's in our interest to do this. Preventing epidemics is exactly what we should be using aid for."

There were a range of reasons to believe that this treatment would be effective. Australian politicians, who might be expected to have their fingers on the pulse of Australian public sentiment, have repeatedly emphasised benefits of this type when trying to promote aid to the Australian public (Wood and Burkot 2017) as have politicians in other countries (for example, Cameron 2013). Moreover, much of the aid that donor countries have given over the decades has been motivated, at least to some extent, by donors' interests (Alesina and Dollar 2000). Furthermore, although the plurality of Australians surveyed by Burkot and Wood (2017) wanted aid given for

altruistic ends, those who wanted aid given in-line with Australia's enlightened national interest formed a non-trivial share of the Australian populous.

### **3.4 The global leader treatment**

The final treatment fell somewhere between the treatment that emphasised benefits to Australia and the altruism treatment. This treatment was framed with respect to how the initiative would take Australia from a situation in which it under-performed as a donor, to one in which it would be a global leader.

*Australia to become a global leader in the fight against epidemics*

8 October 2017

CANBERRA – A new Australian government aid initiative to fight epidemics has drawn praise from aid experts who say it will make Australia a global leader.

The aid funded work is intended to stop epidemics such as Ebola and Zika from spreading in the Asia-Pacific region. Aid money will be used for medicines, health workers and international emergency responses.

Dr Terence Wood, an aid researcher from the Australian National University, said: "This is a great idea. Previously, we hadn't been pulling our weight. But internationally recognised work like this will place Australia at the forefront of global efforts to prevent epidemics. We'll be leading the way. It is exactly what we should be using aid for."

The grounds for believing this treatment would be effective came foremost in the findings of Wood (2018b). In an experiment designed to ascertain what types of information about Australia's aid budget were most likely to increase support for aid, Wood found that the only clearly effective treatment was comparing low and falling levels of government aid in Australia with the generosity of the UK government's aid budget. Wood interpreted this treatment either as having an effect through playing to Australians' desire to conform with global norms, or by provoking their desire to be a global leader. In experiments on generosity in giving to NGOs, people have also been shown to be more likely to give if their giving is made public (Ariely et al. 2009), which adds further credence to the possibility that preferences about aid giving might be endogenous to information on Australia's performance on the global stage.

## 4. Methods

We undertook our test on a representative, online survey of over 4000 Australians using the firm IPSOS Mori. In Table 1, we compare the survey respondent's characteristics to the 2016 Australian census to illustrate that the sample was broadly representative across a range of characteristics. The survey was conducted in late June and early July 2018 and the median respondent took 6.5 minutes to complete the 19 questions they were asked.<sup>6</sup> The median time taken by respondents to read the basic treatment was 21 seconds and between 27 to 30 seconds for the other three treatments.<sup>7</sup>

**Table 1 – Comparison of survey respondents to Australian population**

	Survey (percent)	Census 2016 (percent)
50 years old or over	42	43
Female	50	51
City	82	87
Academic education	38	27

Respondents were randomly allocated into one of five groups (800 in each), which are shown in Figure 1 below. This allowed us to determine the effect of each message on people's views by comparing the average response to the survey questions between the treatment and control groups. The randomisation of respondents led to each treatment group having similar background characteristics (as shown in Appendix 1). We show that the main results of this paper hold when controlling for any differences in these background characteristics (shown in Appendix 2). This study was pre-registered with the American Economic Association RCT registry (AEARCTR-0003055) and we included a detailed analysis plan outlining the hypotheses we tested.

---

<sup>6</sup> As a robustness check we excluded people who were in the fastest 10 per cent (less than 3 mins) or slowest 10 per cent (more than 16 minutes) of survey respondents. The findings we present in the body of the paper that are significant became even more statistically significant when we excluded these outliers.

<sup>7</sup> As an additional robustness check we excluded respondents who spent less than 15 seconds reading the article and the results are qualitatively similar to the main findings we present below.

**Figure 1 – Design of randomised control trial**



The survey included a series of questions about respondents’ background characteristics (e.g. gender, political preferences etc) prior to the treatment and questions about respondents’ views on aid following the treatment. The two main questions of interest about aid were respondents’ approval of aid and their beliefs about the appropriate volume of aid (shown in Table 2). We also asked respondents about their belief about the purpose of the project (also shown in Table 2). The questions about the project were not asked to the control group as they did not receive an article about the project and it is very unlikely that they would have heard of the project.

**Table 2 – Main questions of interest**

<p><b>AID APPROVAL</b> - Now thinking more broadly, do you generally approve or disapprove of the Australian government providing aid to poorer countries around the world? 1. Strongly approve 2. Approve 3. Disapprove 4. Strongly disapprove 5. Don’t know</p>
<p><b>AID VOLUME</b> - Every year the Australian government gives aid money to poorer countries. Currently just under \$1 out of every \$100 of federal government spending is given as aid. Which one of the following options best reflects your opinion about aid spending? 1. The Australian government gives far too much aid 2. The Australian government gives too much aid 3. The Australian government gives about the right amount of aid 4. The Australian government gives too little aid 5. The Australian government gives far too little aid 6. Don’t know</p>
<p><b>PROJECT PURPOSE</b> - Thinking again about the Australian government aid initiative that you read about in the article. What do you think the main purpose of this initiative is? 1. Helping prevent epidemics from causing harm in poor countries 2. Helping prevent epidemics from spreading to Australia and causing harm here 3. Helping to raise Australia’s reputation internationally 4. Don’t know</p>

We performed two types of econometric analysis. The first and most straightforward type of analysis is comparing the effect of different messages on the responses to the questions discussed above using an OLS regression in the form of a linear probability model. This involved creating a dummy variable,  $(T_i)$ , which takes on the value one if the respondent belongs to the treatment group and the value zero if the respondent belongs to the control group. In addition, we created a dummy variable for each of the

outcomes of interest discussed above ( $Y_i$ ). For example, a “too much aid” dummy was created in which the categories “far too much aid” and “too much aid” were coded as one, and “about the right amount”, “too little aid” and “far too little aid” as zero. (Don’t know was coded as missing.) A “too little” aid dummy was also created in which “too little” and “far too little” were also coded as one.

The resulting OLS regression can be written formally as follows:

$$Y_i = \beta_{0i} + \beta_{1i}T_i + \varepsilon_{it}, [1]$$

where  $i$  denotes respondents,  $\beta_{1i}$  captures the average difference between respondents in treatment group and the control group in regards to the outcome of interest ( $Y_i$ ),  $\varepsilon_i$  is the model error term and  $\beta_{0i}$  is the intercept. We conduct this analysis for each of the treatments compared to the control group and each of the treatments compared to the basic treatment group.

The second type of analysis we conducted involved logit regression models in a similar form to equation [1]. We ran both simple logistic regression equations similar to those in equation [1] and also more complex models which included sociodemographic control variables so as to ensure that differences between our treatment and control groups were not driving findings. We used this analysis to verify the results of the linear probability model and list the full results in Appendix 2. The results are qualitatively similar.

## 5. Findings

### 5.1 Approval for aid and aid volume

The treatments led respondents to be 10.7 to 11.9 percentage points more likely to approve of the Australian government providing aid than the control group and 9.5 to 10.1 percentage points less likely to state the Australian government gives too much aid (see Table 3).

Only the national interest message resulted in a statistically significant (at  $p < 0.05$ ) increase in the proportion of respondents who thought Australia gave too little aid (Figure 2). Specifically, there was a 6.1 percentage point increase in the national interest

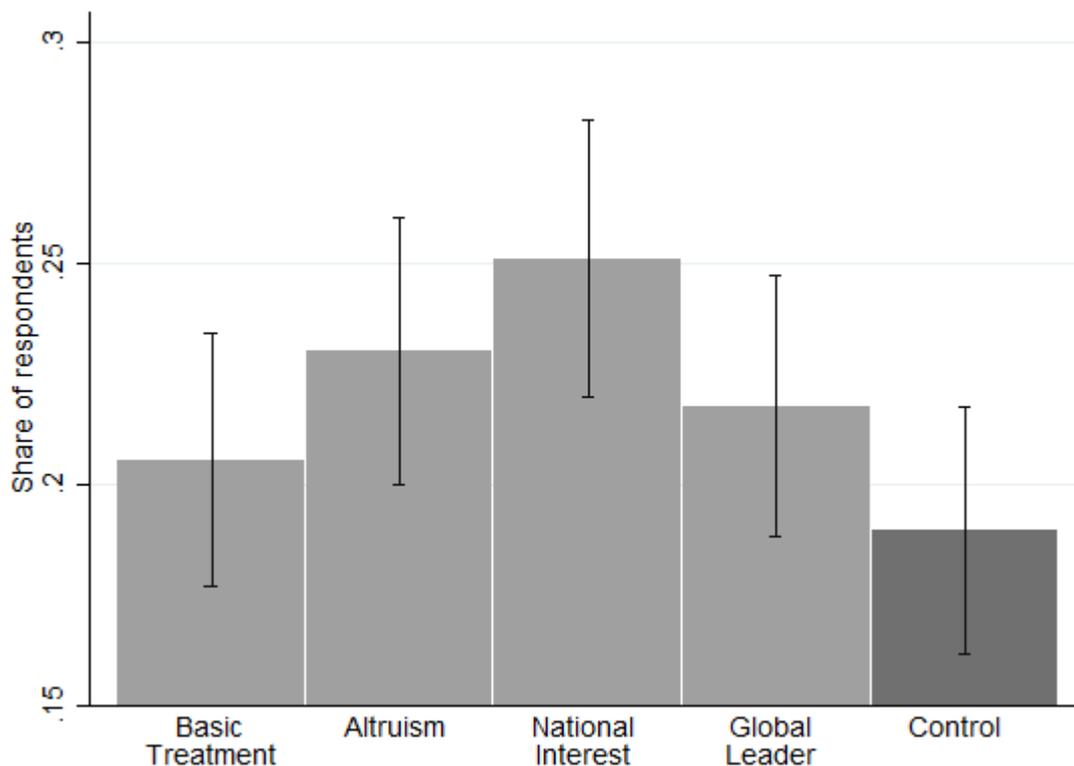
treatment group compared to the control group (19.0 per cent compared to 25.1 per cent). The altruism treatment also increased the propensity of respondents to believe Australia gave too little aid, but the substantive effect was somewhat more modest (4 percentage points), and the change was only statistically significant at  $p < 0.1$ .

**Table 3 – Effect of treatments on support for aid compared to the control**

	APPROVE		TOO LITTLE		TOO MUCH	
	Control Mean	Treatment Effect	Control Mean	Treatment Effect	Control Mean	Treatment Effect
Basic	0.691	0.109*** (0.022) 1,548	0.190	0.016 (0.020) 1,518	0.456	-0.087*** (0.025) 1,518
Altruism	0.691	0.114*** (0.022) 1,550	0.190	0.040* (0.021) 1,502	0.456	-0.095*** (0.025) 1,502
National interest	0.691	0.119*** (0.022) 1,529	0.190	0.061*** (0.021) 1,504	0.456	-0.097*** (0.025) 1,504
Global leader	0.691	0.107*** (0.022) 1,528	0.190	0.028 (0.021) 1,508	0.456	-0.101*** (0.025) 1,508

Standard errors in parentheses. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

**Figure 2 – Effect of treatments on the share of respondents who state Australia gives too little aid**



When we contrasted the altruism, national interest, and global leader treatments with the basic treatment, only the enlightened national interest message outperformed the basic treatment message, and this effect was only found on the belief that Australia gave too little aid. In this instance, the enlightened national interest treatment outperformed the basic treatment by 4.5 percentage points (see Table 4). There were no statistically significant differences between the average response of any of the specific treatment groups and the basic treatment group in regards to approval of the aid program or the belief that Australia gave too much aid.

Overall our findings suggest that approval of aid is very easily shifted by a newspaper article-type treatment involving the description of an aid project and independent endorsement. All of the treatments we tried, including the basic group, were effective in this task. The effect sizes of each of the treatments were all also similar in magnitude. This was also true when it came to the treatments' effects on people's propensity to believe Australia gave too much aid.

**Table 4 – Effect of treatments compared to the basic treatment**

	APPROVE		TOO LITTLE		TOO MUCH	
	Basic Mean	Treatment Effect	Basic Mean	Treatment Effect	Basic Mean	Treatment Effect
Altruism	0.800	0.004 (0.020)	0.206	0.025 (0.021)	0.369	-0.008 (0.025)
National interest	0.800	0.010 (0.020)	0.206	0.045** (0.022)	0.369	-0.011 (0.025)
Global leader	0.800	-0.003 (0.021)	0.206	0.012 (0.021)	0.369	-0.014 (0.025)

Standard errors in parentheses. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

On the other hand, sifting people's propensity to believe that Australia gave too little aid was harder: only the altruism and effective national interest treatments had any success in shifting people's views from those found in the control group. The enlightened national interest treatment was particularly effective in doing this, clearly outperforming not only the control group, but also the basic treatment.

## 5.2 Purpose of the Project

In the survey we asked participants what they thought the purpose of the project was (bringing benefits to Australia, helping people in developing countries, or making Australia a global leader). This allowed us to compare people's responses to the treatments they had been provided and – in effect – test whether respondents believed whether the purpose of the project was the same as the message they were provided with (results shown in Table 5). In doing this the basic treatment group (who were not steered in any way towards a particular view about the purpose of the project) served as the reference point. Interestingly, a majority amongst this group thought the initiative was designed to benefit to Australia. In other words, provided with no hints as to the project's purpose, most people's default position appeared to be that the project was intended to bring benefits to Australia.

When it came to changing people's views about the initiative's purpose, the different treatments differed substantially in their ability to elicit a change. Although the altruism treatment increased the share of respondents who thought the treatment was about helping other countries, and although the global leader treatment increased the share of respondents who thought the project was about making Australia a global leader, the enlightened national interest treatment was twice as likely as the altruism message and three times as likely as the global leader message to shift respondent's views so that they believed the purpose of the project was the same as the message they were provided with. In other words, respondents were much more likely to be effectively treated by the national interest message than the other messages. When people were not effectively treated, the most common default position was to believe that the project was designed to bring benefits to Australia.

**Table 5 – Effect of treatments on purpose of project compared to the basic treatment**

	ALTRUISM		NATIONAL INTEREST		GLOBAL LEADER	
	Basic Mean	Treatment Effect	Basic Mean	Treatment Effect	Basic Mean	Treatment Effect
Altruism	0.334	0.110*** (0.025) 1,559	0.564	-0.115*** (0.025) 1,559	0.102	0.005 (0.016) 1,559
National Interest	0.334	-0.218*** (0.020) 1,560	0.564	0.218*** (0.023) 1,560	0.102	0.001 (0.015) 1,560
Global Leader	0.334	0.013 (0.024) 1,532	0.564	-0.083*** (0.025) 1,532	0.102	0.070*** (0.017) 1,532

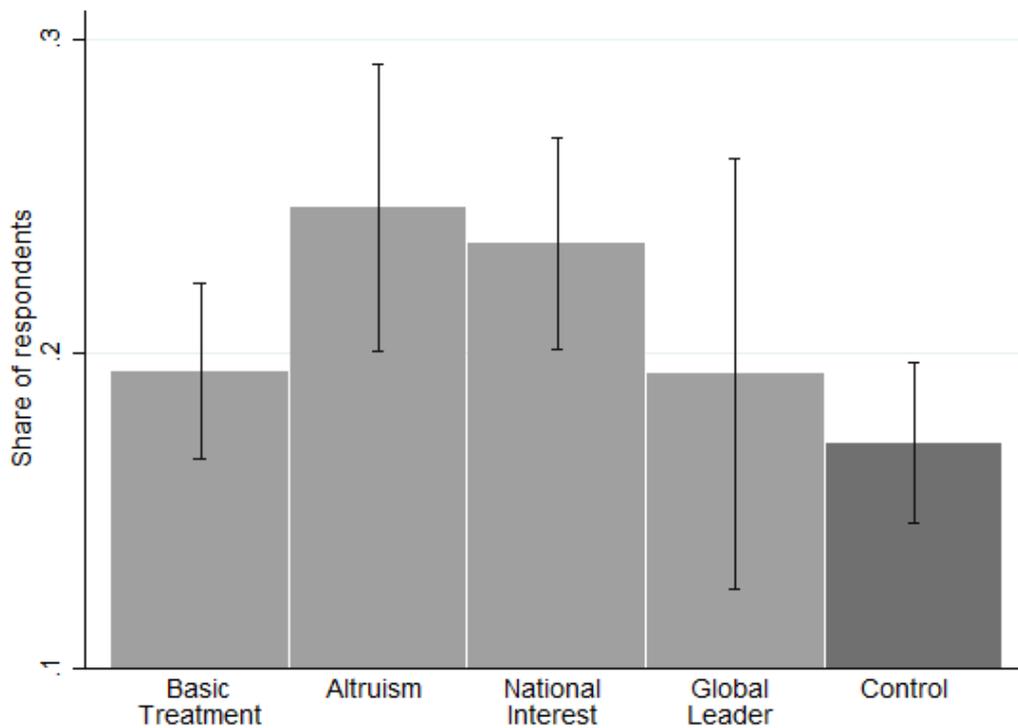
Standard errors in parentheses. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

It appears that the believability of the national interest message may be a key factor driving its efficacy in shifting views about Australia giving too little and too much aid.

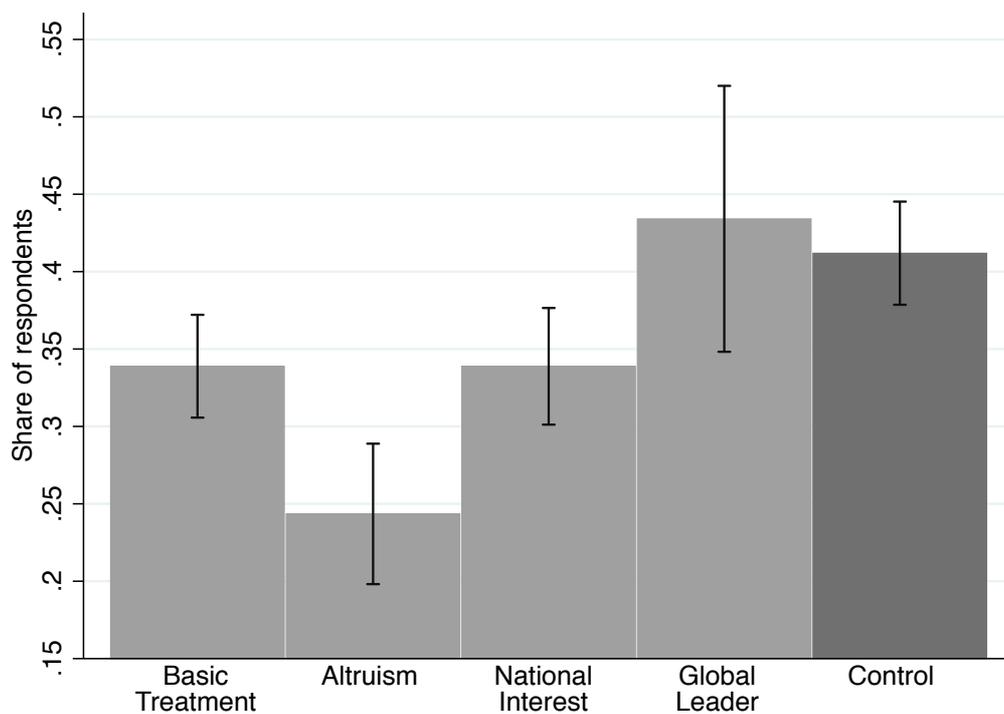
This can be seen when analysis is restricted just to those respondents who believed the purpose of the project was the same as that emphasised in the vignette they received. Among this sub-group of respondents, the national interest group still outperforms the control and basic treatment groups in terms of increasing the share of respondents who think Australia gives too little aid (see Figure 3 and Table 6).

Importantly, however, the altruism treatment is substantially more effective amongst respondents who believed the treatment – the altruism treatment is now every bit as effective as the enlightened national interest treatment in what proved to be the most difficult task: increasing the share of Australians who thought Australia gives too little aid. (If anything, the magnitude of the altruism treatment’s effect is possibly actually higher, although the difference between the two treatments is not statistically significant). In addition, the altruism treatment clearly outperformed all of the other treatments and the control in terms of reducing the share of respondents that believed the aid budget should be reduced (see Figure 4). Not only was the point estimate for altruism lower than for the other treatments, but the differences between altruism the other treatments were themselves statistically significant.

**Figure 3 – Effect of treatments on support for increasing the aid budget among respondents who believed the message they received**



**Figure 4 – Effect of treatments on support for decreasing the aid budget among respondents who believed the message they received**



As can be seen in Table 6, altruism was also more effective than the other treatments in raising approval for aid once the sample was limited to those who believed the treatment they were provided.

**Table 6 – Effect of treatments on support for aid compared to the basic treatment amongst those who believed treatment**

	APPROVE		TOO LITTLE		TOO MUCH	
	Basic Mean	Treatment Effect	Basic Mean	Treatment Effect	Basic Mean	Treatment Effect
Altruism	0.812	0.046* (0.025) 1,072	0.209	0.062** (0.028) 1,040	0.365	-0.096*** (0.032) 1,040
National interest	0.812	0.010 (0.022) 1,314	0.209	0.047** (0.024) 1,286	0.365	0.004 (0.027) 1,286
Global leader	0.812	-0.112*** (0.039) 866	0.209	-0.006 (0.040) 850	0.365	0.091* (0.047) 850

Standard errors in parentheses. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Taken together, these findings provide further evidence that if the public can be convinced there really are altruistic intentions underpinning Australian aid, appealing to their kinder side is likely to be the most effective means of raising support for aid. On the other hand, a public that cannot be convinced, will probably be more effectively swayed by appeals to the national interest.

## 6. Discussion

There are three main implications to emerge from this study.

### 1. The ease of increasing approval of aid and of reducing people’s propensity to believe Australia gives too much aid

Simply providing people with a description of the project accompanied by an endorsement from an independent researcher often led them to be more likely to approve of the entire aid program and reduced the likelihood they stated that Australia spent too much money on aid. This can be seen by the efficacy of all of the treatments including the basic treatment as reported on in Table 3.

Up to a point, this finding is encouraging for aid’s supporters in Australia. It suggests that a more positive inclination towards aid may be fostered simply through basic

actions such as providing details on what aid funds, and through providing independent endorsement of aid work.

This ease in shifting views is also interesting in a more theoretical sense when contrasted with Wood's (2018b) limited ability to shift views about aid volume by providing Australians with accurate information on Australian aid as a share of federal spending. Quite possibly the difference between the two sets of findings reflects the ability of tangible details (in this case of a specific aid project) to shift people's views when more abstract arguments appealing to concepts such as percentages of federal spending fail. If this is true, the difference may be a function of psychological processes akin to those that drive the identifiable victim effect (Small et al. 2007). When aid is spoken about in the abstract it is hard to change people's views about it, but when aid is spoken about in tangible terms, relating to what it actually does, shifting views appears to be easier.

The fact that all of our treatments were similarly efficacious in shifting respondents' views may also indicate that not much is needed by the way of details – simply enough for participants to understand what the project is about, and some endorsement from an independent commentator to reassure them the project is sound. There is scope for future work to identify whether project details alone would have shifted views, or whether independent endorsement was also required.<sup>8</sup>

## 2. The national interest message is the most likely to increase people's propensity to believe that Australia does not give enough aid

Although it was easy to increase the share of respondents who said they approved of Australian aid giving and also to decrease the share of respondents who thought Australia gave too much aid, it was harder to increase the share of Australians who thought Australia gave too little aid. This asymmetry is in-line with the findings of both

---

<sup>8</sup> To try to disentangle whether the effect of the simple treatment was driven by the expert endorsement or basic information we took two steps. Firstly, we examined the correlation between support for aid and trust in experts in the control group. It was only 0.13, which is a very low positive correlation. Secondly, we examined the heterogeneous treatment effects based upon whether respondents trusted experts. The overall effect of the treatment was mainly driven by respondents who trusted experts. Both of these pieces of suggestive evidence point towards the expert endorsement being more likely to be causing the effect of the simple treatment than information about the project.

Wood (2018) and Scotto et al. (2017). Neither the basic treatment, nor the global leader treatment were effective at increasing the share of Australians who thought Australia did not give enough aid. However, both the enlightened national interest treatment and the altruism treatment were able to increase the share of Australians who thought Australia did not give enough aid. The enlightened national interest appears to have been the most effective of the two treatments. Not only was the magnitude of its effect probably largest, but it also outperformed the basic treatment – something that the altruism treatment did not do.<sup>9</sup>

### 3. The altruism message was more powerful than the national interest message when it was believed

The altruism message had as large an effect as the national interest message in increasing the share of Australians who thought Australia gave too little aid when respondents ‘believed’ the message they received (see Figure 3). What is more the altruism treatment was actually more effective than the other treatments in reducing the share of Australians who think Australia gives too much aid, and in improving overall approval of aid amongst people who believed the treatment. Taken together these facts suggest that one of the reasons the altruism message was not as efficacious as the national interest message overall was because people did not believe it. Aid advocacy groups could learn from this finding by realising that trying to persuade people to support increasing the aid program on altruistic grounds alone may only be effective if the public can be convinced that aid is really being given with altruistic motives.

A useful area for future research will be studying whether different project attributes make people more likely to believe that aid work is actually being conducted for the sake of helping people in other countries. Perhaps Australians will be more likely to believe aid given to more distant parts of the world is more altruistic, for example. Similarly, perhaps they may be more inclined that aid work is being conducted selflessly

---

<sup>9</sup> These results should be interpreted with a degree of caution. The difference between the three specific treatment messages (national interest, altruism and global leader) on beliefs that Australia gave too little aid were not statistically significant. This means we cannot rule out the possibility that each of the messages performed just as well as each other.

if it is conducted through NGOs. Similarly, endorsement from a different expert – possibly a representative of an NGO or someone from a developing country – might also be more efficacious in convincing people that the project was really about helping people in developing countries. Finally, future research that involved follow up surveys over time would be interesting. None of the existing experimental research on aid and public opinion tests whether the effects of interventions are long lasting or whether they rapidly wear off. Learning more about treatment longevity would be of clear utility for aid campaigners.

## **7. Conclusion**

This paper has reported on a survey experiment in which we tested whether discussing a large Australian government aid project in different ways lead to differing views about aid. Specifically, we contrasted responses from a control group with responses from people who only received basic information about the project and with responses from participants who had the project either framed in terms of its ability to help people in developing countries, the benefits it could bring Australia, or its ability to make Australia a global leader.

All of the treatments proved capable of increasing overall approval for aid, and able to reduce the share of Australians who thought Australia gave too much aid. The task of increasing the share of Australians who thought Australia gave too little aid proved harder, however. The treatment that was most clearly successful in doing this was one which appealed to Australians' enlightened national interest. However, the altruism treatment appears to have been constrained in eliciting change because Australians were not easily convinced that the aid project was actually about helping other countries. Amongst those Australians who were convinced by the way the project was sold in the treatment, the altruism treatment appeared as effective if not more effective than the enlightened national interest treatment.

Australians' support for aid, and views about aid volume are not immutable. They can be shifted by information about aid – and information about specific aid projects. For the time being it appears as if framing projects in terms of enlightened national interest is probably the most effective means of doing this. However, there is more to be learned

about whether Australians can be convinced that at least some of their government aid is given for beneficent reasons. If it is possible to convince Australians of this fact, treatments that appeal to the more altruistic side of their nature may well prove to be the most effective means of eliciting more positive views about aid.

## References

- Alesina, Alberto & Dollar, David. 2000. Who Gives Foreign Aid to Whom and Why? *Journal of Economic Growth*, 5(1), 33-63.
- Ariely, Dan, Bracha, Anat & Meier, Stephan. 2009. Doing Good or Doing Well? Image Motivation and Monetary Incentives in Behaving Prosocially. *American Economic Review*, 99(1), 544-55.
- Bishop, Julie. 2017. *Speech to 2017 ANU Australasian Aid Conference* [Online]. Available: [https://foreignminister.gov.au/speeches/Pages/2017/jb\\_sp\\_170215.aspx?w=tb1CaGpkPX%2FIS0K%2Bg9ZKEg%3D%3D](https://foreignminister.gov.au/speeches/Pages/2017/jb_sp_170215.aspx?w=tb1CaGpkPX%2FIS0K%2Bg9ZKEg%3D%3D) Accessed 27/10/17.
- Brañas-Garza, Pablo. 2006. Poverty in dictator games: Awakening solidarity. *Journal of Economic Behavior & Organization*, 60(3), 306-320.
- Burkot, Camilla & Wood, Terence. 2015. Australian Public Opinion About Foreign Aid, 2011–2015. *Development Policy Centre Discussion Paper*, 40, 1-32.
- Burkot, Camilla & Wood, Terence. 2017. The public and the aid community. Canberra: The Development Policy Centre.
- Cameron, David. 2013. *Plan for Britain's success: speech by the Prime Minister* [Online]. Available: <https://www.gov.uk/government/speeches/plan-for-britains-success-speech-by-the-prime-minister> Accessed 16/08/18.
- Cheng, Zhiming & Smyth, Russell. 2016. Why Give it Away When You Need it Yourself? Understanding Public Support for Foreign Aid in China. *The Journal of Development Studies*, 52(1), 53-71.
- Chong, Alberto & Gradstein, Mark. 2008. What determines foreign aid? The donors' perspective. *Journal of Development Economics*, 87(1), 1-13.
- Etang, Alvin, Fielding, David & Knowles, Stephen. 2010. Giving to Africa and perceptions of poverty. *University of Otago Economics Discussion Papers*, 1008, 1-28.
- Etang, Alvin, Fielding, David & Knowles, Stephen. 2012. Giving to Africa and perceptions of poverty. *Journal of Economic Psychology*, 33(4), 819-832.
- Fierravanti-Wells, Concetta. 2017. *Address to the Australian Council for International Development National Conference* [Online]. Available: [http://ministers.dfat.gov.au/fierravanti-wells/speeches/Pages/2017/cf\\_sp\\_171101.aspx?w=p2wUlmE1t7kKl1%2BiOm3gqg%3D%3D](http://ministers.dfat.gov.au/fierravanti-wells/speeches/Pages/2017/cf_sp_171101.aspx?w=p2wUlmE1t7kKl1%2BiOm3gqg%3D%3D) Accessed 6/11/17.
- Gilens, Martin. 2001. Political Ignorance and Collective Policy Preferences. *American Political Science Review*, 95(2), 379-396.
- Hansen, Paul, Kergozou, Nicole, Knowles, Stephen & Thorsnes, Paul. 2014. Developing Countries in Need: Which Characteristics Appeal Most to People when Donating Money? *The Journal of Development Studies*, 50(11), 1494-1509.
- Heinrich, Tobias, Kobayashi, Yoshiharu & Bryant, Kristin A. 2016. Public Opinion and Foreign Aid Cuts in Economic Crises. *World Development*, 77, 66-79.

- Karlan, Dean & Wood, Daniel H. 2014. The Effect of Effectiveness: Donor Response to Aid Effectiveness in a Direct Mail Fundraising Experiment. *NBER Working Paper Series*, 2014(20047), 1-27.
- Klein, Ezra. 2013. *The Budget Myth that Just Won't Die: Americans Still Think 28 Percent of the Budget goes to Foreign Aid* [Online]. Available: <https://www.washingtonpost.com/news/wonk/wp/2013/11/07/the-budget-myth-that-just-wont-die-americans-still-think-28-percent-of-the-budget-goes-to-foreign-aid/> Accessed 9/8/18.
- Milner, Helen V. & Tingley, Dustin H. 2010. The Political Economy of U.S. Foreign Aid: American Legislators and the Domestic Politics of Aid. *Economics and Politics*, 22, 200-232.
- Milner, Helen V. & Tingley, Dustin H. 2011. Who Supports Global Economic Engagement? The Sources of Preferences in American Foreign Economic Policy. *International Organization*, 65(01), 37-68.
- Nair, Gautam. 2018. Misperceptions of Relative Income and Preferences for International Redistribution in the United States. *Journal of Politics*, 80(3).
- Nyhan, Brendan & Reifler, Jason. 2010. When Corrections Fail: The Persistence of Political Misperceptions. *Political Behavior*, 32(2), 303-330.
- Paxton, Pamela & Knack, Stephen. 2012. Individual and country-level factors affecting support for foreign aid. *International Political Science Review*, 33(2), 171-192.
- Scotto, Thomas J., Reifler, Jason, Hudson, David & vanHeerde-Hudson, Jennifer. 2017. We Spend How Much? Misperceptions, Innumeracy, and Support for the Foreign Aid in the United States and Great Britain. *Journal of Experimental Political Science*, 4(2), 119-128.
- Small, Deborah A., Loewenstein, George & Slovic, Paul. 2007. Sympathy and callousness: The impact of deliberative thought on donations to identifiable and statistical victims. *Organizational Behavior and Human Decision Processes*, 102(2), 143-153.
- Stern, Marc. 1998. Development Aid: What the Public Thinks. *ODS Working Paper*, 4.
- Van Heerde, Jennifer & Hudson, David. 2010. 'The Righteous Considereth the Cause of the Poor'? Public Attitudes towards Poverty in Developing Countries. *Political Studies*, 58(3), 389-409.
- Wood, Terence. 2018a. Aid Policy and Australian Public Opinion. *Asia & the Pacific Policy Studies*, 5, 235-248.
- Wood, Terence. 2018b. Can Information Change Public Support for Aid? *The Journal of Development Studies*, 1-15.
- Wood, Terence & Burkot, Camilla. 2017. *Want to sell aid to the Australian public? Look to values, not national interests* [Online]. Available: <http://www.devpolicy.org/want-sell-aid-australian-public-values-not-national-interests-20170323/> Accessed 9/8/18.

## APPENDIX 1

**Table A1 – Balance of background characteristics across groups**

Variable	(1) Basic Mean	(2) Altruism Mean	(3) National interest Mean	(4) Global Leader Mean	(5) Control Mean	t-test Diff (1)-(2)	t-test Diff (1)-(3)	t-test Diff (1)-(4)	t-test Diff (1)-(5)	t-test Diff (2)-(3)	t-test Diff (2)-(4)	t-test Diff (2)-(5)
Location - City	0.812 [0.013]	0.821 [0.013]	0.832 [0.013]	0.811 [0.014]	0.792 [0.014]	-0.009	-0.021	0.000	0.020	-0.011	0.009	0.029
Age - Atleast50	0.427 [0.017]	0.413 [0.017]	0.425 [0.017]	0.428 [0.017]	0.426 [0.017]	0.013	0.001	-0.001	0.000	-0.012	-0.014	-0.013
Gender - Male	0.514 [0.017]	0.497 [0.017]	0.500 [0.017]	0.497 [0.018]	0.483 [0.017]	0.017	0.014	0.017	0.031	-0.003	0.000	0.014
Education - Uni	0.429 [0.017]	0.442 [0.017]	0.424 [0.017]	0.442 [0.018]	0.382 [0.017]	-0.013	0.004	-0.013	0.046*	0.017	0.000	0.059**
Income Per Person	38243 [1095]	37934 [1062]	37275 [1109]	37514 [1067]	37018 [1032]	308	967	729	1225	659	420	916

Standard errors in parantheses. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

## APPENDIX 2

**Table A2 – Effect of treatments on support for aid compared to control (logit)**

	APPROVE Treatment Effect	AID UP Treatment Effect	AID DOWN Treatment Effect
Altruism	0.610*** (0.12) 1550	0.244* (0.13) 1502	-0.395*** (0.11) 1502
National interest	0.643*** (0.12) 1529	0.359*** (0.13) 1504	-0.405*** (0.11) 1504
Global leader	0.566*** (0.12) 1528	0.172 (0.13) 1508	-0.420*** (0.11) 1508

Standard errors in parentheses. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

**Table A3 – Effect of treatments on support for aid compared to basic treatment (logit)**

	APPROVE Treatment	AID UP Treatment	AID DOWN Treatment
	Effect	Effect	Effect
Altruism	0.028 (0.13) 1552	0.145 (0.13) 1502	-0.035 (0.11) 1502
National interest	0.061 (0.13) 1531	0.259** (0.12) 1504	-0.045 (0.11) 1504
Global leader	-0.016 (0.13) 1530	0.072 (0.13) 1508	-0.060 (0.11) 1508

Standard errors in parentheses. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

**Table A4 – Altruism treatment compared to control group (with controls)**

Variable	APPROVE	AID UP	AID DOWN
Altruism	0.089*** (0.02)	0.028 (0.02)	-0.082*** (0.03)
Location - City	0.099*** (0.03)	0.042 (0.03)	-0.135*** (0.03)
Age - Atleast50	-0.068*** (0.02)	-0.058** (0.02)	0.076*** (0.03)
Gender - Male	-0.044** (0.02)	0.017 (0.02)	0.050* (0.03)
Education - Uni	0.141*** (0.02)	0.089*** (0.02)	-0.162*** (0.03)
HH Income per person	0.000 (0.00)	-0.000 (0.00)	0.000 (0.00)
Constant	0.611*** (0.03)	0.160*** (0.03)	0.560*** (0.04)
Observations	1404	1363	1363

Standard errors in parentheses. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

**Table A5 – National interest compared to control group (with controls)**

Variable	APPROVE	AID UP	AID DOWN
National interest	0.101*** (0.02)	0.046** (0.02)	-0.081*** (0.03)
Location - City	0.053* (0.03)	0.013 (0.03)	-0.046 (0.03)
Age - Atleast50	-0.079*** (0.02)	-0.033 (0.02)	0.085*** (0.03)
Gender - Male	-0.067*** (0.02)	-0.000 (0.02)	0.049* (0.03)
Education - Uni	0.099*** (0.02)	0.088*** (0.02)	-0.147*** (0.03)
HH Income per person	0.000 (0.00)	-0.000 (0.00)	-0.000 (0.00)
Constant	0.667*** (0.04)	0.171*** (0.03)	0.498*** (0.04)
Observations	1385	1364	1364

Standard errors in parentheses. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

**Table A6 – Global leader compared to control group (with controls)**

Variable	APPROVE	AID UP	AID DOWN
Global leader	0.100*** (0.02)	0.017 (0.02)	-0.084*** (0.03)
Location - City	0.094*** (0.03)	0.031 (0.03)	-0.090*** (0.03)
Age - Atleast50	-0.045* (0.02)	-0.038* (0.02)	0.087*** (0.03)
Gender - Male	-0.053** (0.02)	-0.004 (0.02)	0.047* (0.03)
Education - Uni	0.150*** (0.02)	0.105*** (0.02)	-0.172*** (0.03)
HH Income per person	-0.000 (0.00)	-0.000 (0.00)	-0.000 (0.00)
Constant	0.614*** (0.04)	0.169*** (0.03)	0.538*** (0.04)
Observations	1383	1373	1373

Standard errors in parentheses. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

**Table A7 – Altruism treatment compared to basic treatment (with controls)**

Variable	APPROVE	AID UP	AID DOWN
Altruism	-0.006 (0.02)	0.024 (0.02)	-0.007 (0.03)
Location - City	0.066** (0.03)	0.046 (0.03)	-0.159*** (0.03)
Age - Atleast50	-0.039* (0.02)	-0.052** (0.02)	0.034 (0.03)
Gender - Male	-0.054** (0.02)	-0.001 (0.02)	0.069*** (0.03)
Education - Uni	0.087*** (0.02)	0.082*** (0.02)	-0.136*** (0.03)
HH Income per person	0.000 (0.00)	-0.000 (0.00)	-0.000 (0.00)
Constant	0.752*** (0.03)	0.154*** (0.03)	0.510*** (0.04)
Observations	1400	1359	1359

Standard errors in parentheses. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

**Table A8 – National interest treatment compared to basic treatment (with controls)**

Variable	APPROVE	AID UP	AID DOWN
National interest	0.001 (0.02)	0.041* (0.02)	-0.002 (0.03)
Location - City	0.018 (0.03)	0.016 (0.03)	-0.066* (0.03)
Age - Atleast50	-0.050** (0.02)	-0.029 (0.02)	0.042 (0.03)
Gender - Male	-0.076*** (0.02)	-0.017 (0.02)	0.067*** (0.03)
Education - Uni	0.044* (0.02)	0.083*** (0.02)	-0.123*** (0.03)
HH Income per person	0.000 (0.00)	0.000 (0.00)	-0.000 (0.00)
Constant	0.812*** (0.03)	0.166*** (0.04)	0.443*** (0.04)
Observations	1381	1360	1360

Standard errors in parentheses. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

**Table A9 – Global leader treatment compared to basic treatment (with controls)**

Variable	APPROVE	AID UP	AID DOWN
Global leader	0.003 (0.02)	0.012 (0.02)	-0.009 (0.03)
Location - City	0.059** (0.03)	0.036 (0.03)	-0.111*** (0.03)
Age - Atleast50	-0.016 (0.02)	-0.033 (0.02)	0.044* (0.03)
Gender - Male	-0.062*** (0.02)	-0.020 (0.02)	0.066*** (0.03)
Education - Uni	0.093*** (0.02)	0.098*** (0.02)	-0.147*** (0.03)
HH Income per person	-0.000 (0.00)	-0.000 (0.00)	-0.000 (0.00)
Constant	0.758*** (0.03)	0.162*** (0.03)	0.487*** (0.04)
Observations	1379	1369	1369

Standard errors in parentheses. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .