

**Does the messenger matter? An experimental test of political engagement and messengers' effectiveness in global development campaigns**

Paolo Morini  
Department of Political Science  
University College London  
[p.morini.11@ucl.ac.uk](mailto:p.morini.11@ucl.ac.uk)

Jennifer vanHeerde-Hudson  
Department of Political Science  
University College London  
[jennifer.hudson@ucl.ac.uk](mailto:jennifer.hudson@ucl.ac.uk)

David Hudson  
International Development Department  
University of Birmingham  
[d.e.hudson@bham.ac.uk](mailto:d.e.hudson@bham.ac.uk)

Draft: Please do not cite without authors' permission. Comments welcome. This research was supported by the Bill & Melinda Gates Foundation.

## ABSTRACT

Charities, NGOs and governments are involved in ongoing efforts to increase public engagement with global development. One of the main ways such organisations do so is through messaging and campaigns that ask the public to take an action such as signing a petition or donating money. Typically, organisations will either use well-known public personalities – celebrities or politicians – or aid recipients in their campaigning. The assumption is that such messengers make the appeals more persuasive. Yet there is little evidence about the effectiveness of different messengers or the mechanisms through which they help to change hearts and minds. This paper addresses this gap by drawing on social psychology theories of endorser or messenger persuasiveness, such as Petty and Cacioppo's elaboration likelihood framework and Fiske's warmth-competence dimensionality approach. We use a two-wave experimental panel design fielded in the United Kingdom (n=2,034) to examine the persuasiveness of 42 messengers across ten categories, including celebrities, aid recipients, philanthropists and NGO workers. In the first wave, we collect data on the messengers' perceived warmth and competence, which we use to predict their overall credibility. In the second wave, we use a conjoint experimental design to test for the effect of both traits and messenger categories on respondents' willingness to donate or sign a petition. We show that while messengers can be rated positively overall if they are perceived as either warm or competent, only those messengers who are both warm and competent can be used to shift respondents' behaviour intentions. Messages that use messengers who are both warm and competent result in significant increases in the intentions of recipients to donate or sign a petition. The insights have policy implications for organisations seeking to improve the persuasiveness of their efforts to build support for global poverty reduction goals.

## 1. INTRODUCTION

Charities, non-governmental organisations (NGOs), governments and international organisations have long been trying to increase public engagement with global poverty and development. Public engagement and support matter because they can create the political will to increase expenditure on development aid, or direct actions such as donations or volunteering (Darnton and Kirk, 2011).

Most observers agree that current levels of public engagement with development issues in the UK are low. While the public tends to express 'concern' for global poverty (Bond, 2015), this does not translate in concrete support for current aid expenditure allocations in the UK (Lindstrom and Henson, 2011). And concern has not seen increases in donations or other forms of direct support for charities and NGOs (Charities Aid Foundation, 2015). Smillie (1999, p.78) famously described such support as 'a mile wide and an inch deep'.

Two contemporary challenges have further undercut support for and engagement with overseas development. First, support for aid expenditure and willingness to donate or volunteer were both negatively affected by the aftermath of the 2007 financial crisis (Fuchs et al., 2014, Leach-Kemon et al, 2012, Mundial, 2009), with the weak economic recovery reinforcing a 'charity begins at home' narrative among the British public. Second, parties such as UKIP, have explicitly campaigned to cut expenditure on development aid in the UK (Samarasekera, 2015).

Given this, understanding how campaigns work (or not) to engage the public with global issues has become an increasingly salient question for both researchers and practitioners. In this paper we choose to focus on the role of messengers in global poverty campaigns and how they can be used to increase their willingness to donate money or time to charities.

Solicitation – often through campaigns – has consistently been shown to be one of the key factors driving public engagement with global poverty (Bekkers and Wiepking, 2010; Piliavin and Charng, 1990). Specifically, looking at donations to charity, Bryant et al. (2003) and Bekkers (2005) in their cross-sectional studies, show that more than 80% of all donations of money and time to charity happen following solicitations to contribute to a cause.

Research has shown how different parts of an appeal (its argument, source, or, perhaps, its request) can be tweaked to improve the persuasiveness of the solicitation attempt. Some research focuses on how to improve an appeal's argument. Cryder et al. (2013) show how campaigns that provide more concrete information about their humanitarian interventions increase people's willingness to donate. Small et al. (2007) show that a campaign including an appeal based around the needs of a specific person will be more effective at eliciting donations from its recipients, an effect the authors call the identifiable victim effect.

Other research has focussed on the kind of request included in the appeal. Weyant and Smith (1987) show that framing a request for money in terms of small contributions will be more effective at eliciting donations than an appeal which asks for generous contributions. More recently, Cotterill et al (2010) showed that charity appeals that ask recipients to pledge their intention to donate and promise local advertisement of the good deed as a reward increase the likelihood of households donating, compared to more simple appeals.

Finally, and relevant to this paper, marketing researchers and social psychologists have also investigated how messengers can improve the message's persuasiveness. A lot of attention has been paid to celebrities specifically, who have been well used by charities and NGOs in their campaigns. Park and Cho (2015) and Mar Garcia de los Salmones et al. (2013), show that celebrity endorsements in charity appeals (both for domestic and international causes) have limited effectiveness in increasing the likelihood of donations from those who receive the appeal. More broadly, Becker (2012) shows that when individuals are exposed to celebrity-

endorsed advocacy appeals, they will report higher levels of issue engagement, but only on condition that they see the celebrity endorser as a credible source of information. To our knowledge, no work exists which considers the persuasiveness of other messengers such as aid recipients, or NGO workers. The question of messenger credibility is, however, our starting point.

## **2 THEORETICAL FRAMEWORK**

In this paper, we adopt insights from social psychology on processes of persuasion and information elaboration to understand how behaviour intentions can be shaped using messengers as heuristic cues in global poverty campaigns. We begin by discussing persuasion, its study in social psychology, and how this is applied in the existing literature to the study of political campaigns and political engagement. We then consider the importance of source cues as part of a campaign to engage the public with global poverty and international development. We discuss how existing works, which consider source characteristics as a potential cue in persuasion, can be improved by adopting more recent insights into interpersonal judgements based on a warmth/competence dimensionality.

Overall, our theoretical expectations are that a messenger can persuade the public to change their intentions to act in support of a global development campaign when they are seen as credible. We then consider two competing theoretical frameworks: one predicts that overall credibility depends on messengers being rated highly on their warmth or competence, while the second assumes that high ratings for both warmth and competence are necessary conditions in credibility judgements. We test these hypotheses using data from a conjoint experiment fielded in the UK in 2016, which we discuss in section 3 of this paper.

### **2.1 Persuasion in the social psychology literature**

The study of persuasion has taken many paths in the literature (Petty, Briñol, 2008), but in general terms most research is interested in how a message and its source seek to influence the recipient to change their attitudes, opinions and behaviours (Perloff, 2010). The study of persuasion has many fields of application, but is especially important in the study of campaigns seeking to change people's political attitudes and behaviours.

A wide body of works testifies to the importance of psychological insights on persuasion for political scientists. Cobb and Kuklinski (1997) argue that 'persuasion, changing another's beliefs and attitudes, is about influence; and influence is the essence of politics' (ibid. p.89). Persuasion is discussed, for example, in studies of political psychology such as Milburn (1991), shedding light on the effects psychological factors such as personalities or cognitive processes on public opinion.

More specifically, the study of persuasion is used to understand political campaigns. Brader (2006) looks at the role of emotions such as fear or enthusiasm in making political appeals effective. Other research topics span the effects of exposure to campaigns during election (Freedman, Franz, Goldstein, 2004), to the cognitive response in negatively framed political campaigns (Meirick, 2002), affective responses to political adverts as moderators of candidates' evaluations (Chang, 2011), and information seeking behaviours as consequences of exposure to political adverts (Valentino, Hatchlings, Williams, 2004).

In sum, first, campaigns promote political engagement in the public, even before persuasion mechanisms set in, through simple exposure to new information (Freedman, Franz, Goldstein, 2004). Second, the specific persuasive intent and the persuasion-related dynamics of political campaigns affect citizens' political engagement, especially for those with low levels of previous political engagement (Valentino, Hatchlings, Williams, 2004). Third, the literature disagrees on just how persuasive political campaigns are, which mainly comes down to differences in the methodological approaches employed and the theoretical frameworks tested (Valentino, Hatchlings, Williams, 2004).

Regarding the methodological differences, the field has recently started moving from observational to experimental approaches, but some still question the external validity of these new experimental findings (Krasno, Green, 2008). Theoretically, researchers have highlighted just how limited our understandings of the persuasion processes underlying attitude and behaviour change (Chang, 2007; Franz, Ridout, 2007). In the next section, we address these conceptual concerns by turning to the social psychology literature on dual-pathway information processing models and the importance of source effects, plus the interpersonal evaluation literature on warmth and competence as universal dimensions of judgement. In section 3, we address the methodological concerns about external validity by proposing a conjoint experimental framework to test our hypotheses.

## **2.2 Dual pathway models and source effects**

Dual pathway models of information elaboration are the most recent manifestations of a 60-year long process in the theoretical formalisation of persuasion processes. Contemporary theoretical accounts show that information is processed through two potential routes; called *heuristic* and *systematic* in the Heuristic/Systematic Model (HSM) by Chaiken and Eagly (1989) and *peripheral* and *central* in the Elaboration Likelihood Model (ELM) by Petty and Cacioppo (1986).

In both models, the systematic / central route works as follows. Individuals who have enough cognitive resources, capacity to understand a message, and engage with its contents will consider the argument and decide whether to accept it or reject it and, consequently, update or keep their existing attitudes and behaviours. On the other hand, other individuals who are uninvolved with the contents of the message or don't have the necessary cognitive resources to engage with the arguments directly, will judge the information by using quick cues or heuristic rules to decide whether they can accept or reject the message and its arguments.

The characteristics of a source – i.e. the messenger – are among the most studied cues in persuasion. According to the Yale approach (Hovland, Janis and Kelley, 1953) credible sources facilitate cognitive activities such as learning, paying attention and comprehension among recipients. Since their original work, other researchers have shown that source credibility can come from a variety of potential traits, all of which can be used as cues during information elaboration. For example, an attractive, expert, or trustworthy source is more credible, and, therefore, persuasive than a non-attractive, non-expert or untrustworthy one (Wilson and Sherrell, 1993; Berscheid and Walster, 1974; McCroskey, 1969), making it more likely that their message and its arguments will be accepted by recipients to update their attitudes and behaviours.

Thinking specifically about dual-pathway models, source cues can work on multiple levels. Individuals who are not involved with the message and its content (the argument does not concern them, it has no connection or effect on them) can use source characteristics such as their expertise or trustworthiness to accept or reject the message *tout court*. Individuals with higher levels of involvement instead can look at these traits in the source to decide how much attention and cognitive resources to dedicate to scrutinising the argument, or see the perceived expertise, attractiveness or trustworthiness as an additional strength-in-argument (or weakness) cue (Petty and Briñol, 2008).

The models, however, do not usually consider questions related to the effect of more than one source trait at once, adopting instead more of a trait listing approach: sources which are more expert, more attractive more trustworthy, are more credible, and therefore persuasive, than other sources. However, it is perfectly plausible to imagine examples in which multiple source cues are available, not all of which potentially are positive. What happens when a message source is an expert but is also judged as unlikeable?

The only two exceptions considering the effect of more than one source trait, to our knowledge, are the work by Wilson and Sherrell (1993) comparing the effectiveness of multiple source traits in persuasion, and the work by Ziegler et al. (2002) on argument scrutiny effects. When comparing the persuasive power of many possible traits such as attractiveness, trustworthiness and expertise, Wilson and Sherrell (1993) conclude that it is expertise that is one of the most effective source traits in persuasion processes. Consequently, according to these authors, source traits are ranked, and the most important ones, such as source expertise, are the ones that influence the overall credibility evaluation. On the other hand, the work by Ziegler et al. (2002) shows that when source cues are inconsistent (or, some cues have positive effects, while others have negative ones), this will result in the argument of the message being more closely scrutinised. What remains unclear however, is how overall credibility is affected, and how the inconsistent cues affect the behaviours and attitudes of the message recipient.

Taking a step back, to try and understand this better, we consider literature and insights on how traits in other people are assessed, and, more generally, how interpersonal judgements work. In the next section, we introduce theories of interpersonal judgement based on a warmth-competence dimensionality as a potential way to refine our understanding of source cues in dual-pathway models of persuasion.

### **2.3 Warmth and competence in persuasion sources**

Psychologists from many sub-disciplines, including those who study organisations, stereotyping, and personalities, agree that two dimensions underlie the way individuals assess each other, including personalities and credibility (Cuddy, Fiske, Glick, 2008). The first dimension, which looks at people's intentions to harm or not, is described as the social good/bad dimension in a pioneering work by Rosenberg et al (1968), while more contemporary takes on the matter use the label *warmth* to indicate a similar and overlapping construct (Cuddy, Glick, Beninger, 2011; Fiske, Cuddy, Glick, Xu, 2002; Fiske, Cuddy, Gluck, 2006). The second dimension of interpersonal evaluations instead looks at the ability of individuals to realise their intentions. The dimension is called intellectual good/bad in the work by Rosenberg et al (1968), but appears as *competence* in more contemporary scholarship (Cuddy, Glick, Beninger, 2011; Fiske, Cuddy, Glick, Xu, 2002; Cuddy, Fiske, Glick, 2008).

Evidence that our judgements of others happen in the warmth-competence space is available in works from a variety of psychology sub-fields. For example, Cuddy, Glick and Beninger (2011) show how warmth and competence evaluations influence the hiring, managing, and marketing choices of organisations. Judd, James-Hawkins, Yzerbyt and Kashima (2005) directly consider how warmth/competence judgements and their dimensionality change when the object of the judgements are groups or single individuals.

One of the most complete accounts of the workings of the warmth/competence dimensionality can be found in the 2006 work by Fiske, Cuddy and Glik. In their article, the authors show that warmth and competence are the essential dimensions of inter-group stereotyping, arguing that individuals tend to see out-groups as low on both warm and competence, or, more often, as low on one of the two traits and high on the other, creating and reinforcing stereotypical representations. Evaluations which are high on both warmth and competence are reserved to members of the in-group.

This research, and to our knowledge other work, does not specifically consider these insights about in-groups and out-groups when thinking about persuasion and attitude change. While much of the research examining interpersonal judgement is concerned with the role of perceived warmth and competence in building credibility (and persuasiveness) in individuals (Cuddy, Glick and Beninger, 2011; Fiske and Dupree, 2014). The main difference between the two approaches' understanding of source traits is that (1) with dual pathway models the focus tends to be on the effect of one trait, while (2) in research considering warmth-

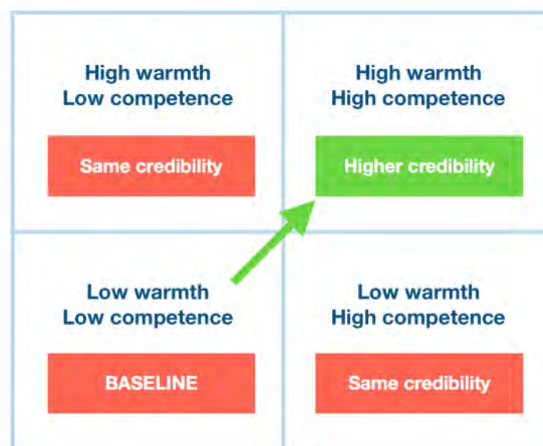
competence dimensionality issues, the two traits are considered as foundation for overall credibility. Putting these differences aside, the understanding (or labelling) of source traits overlaps significantly. For example, the research that refers to cues related to source expertise, knowledgeableability or experience are using traits which map on the competence dimension of interpersonal evaluations. On the other hand, works looking at source attractiveness, trustworthiness, or likability are considering traits mapping on the warmth dimension.

We argue that a warmth-competence approach to source effects in persuasion could refine our understanding of the effect of these cues in information elaboration. However, the *joint effect* of warmth and competence on overall credibility and, consequently, attitudes and behaviour change needs to be formally tested. This is the first objective of the paper. On the other hand, the simpler theories based on single trait effects could still hold in persuasion processes without needing the multidimensionality of the warmth-competence dimensionality works. Consequently, we also test for the effect of source cues in the dual-pathway tradition.

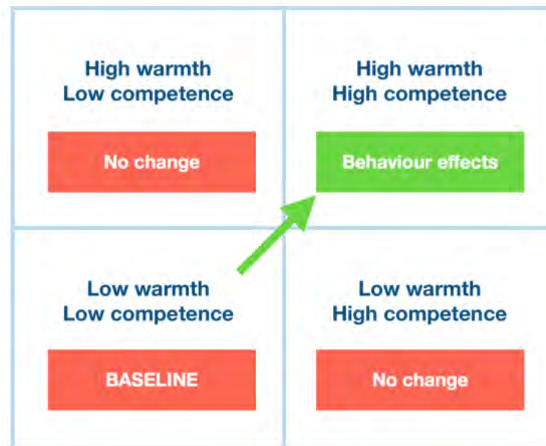
If we consider the insights of both traditions we can produce two sets of alternative hypotheses. If we follow the research in the dual-pathway tradition we would consider that positive evaluations in a messenger’s warmth or competence is a sufficient condition to improve a messenger’s overall credibility and their capacity to persuade a recipient to change their attitudes and behaviours. On the other hand, if we follow the insights from the dimensionality theories of interpersonal judgements, messengers will be perceived as credible and be persuasive if they are rated as being high in *both* warmth and competence traits. The competing explanations are summarized in the following hypotheses and diagrams. The diagram in this section, and the rest of the paper, adopt a matrix-based visualisation approach, used in much of the warmth-competence research literature (Fiske et al., 2008), in which the *evaluative* space is divided in four quadrants, one for each combination of levels of warmth and competence.

### WARMTH-COMPETENCE DIMENSIONALITY APPROACH

H1a: A messenger who is perceived as being high in both warmth and competence will more likely be judged as credible overall than messengers with low warmth or competence, or both.

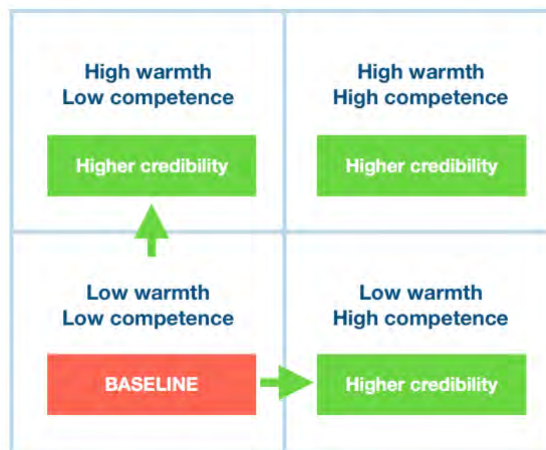


H2a: A messenger who is perceived as being both high in warmth and competence will more likely persuade message recipients to change their behaviour intentions.

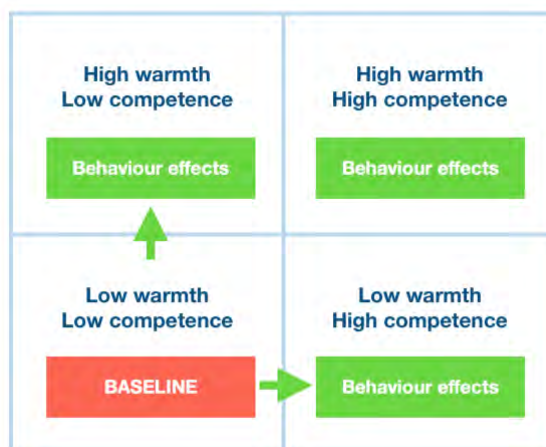


### SINGLE TRAIT APPROACH

H1b: A messenger who is perceived as being high in either warmth or competence will more likely be judged as overall credible than messengers who low warmth and competence.



H2b: A messenger who is perceived as being high in warmth or competence will more likely persuade the message recipients to change their behaviour intentions.



### 3 EXPERIMENTAL DESIGN

To test our hypotheses, we design a conjoint experiment collecting data on a sample of 2,034 respondents from Great Britain in two waves. In the first wave of the study, which took place in May 2016, respondents were asked to rate a set of messengers on traits such as likability, which we use to capture a messenger's warmth, and knowledge, used to capture a



messenger's competence. In the second wave of the study, which took place in June 2016, 1,706 participants were re-contacted (84% of the sample from the first wave) to take part in a choice-based conjoint experiment using the same messengers from the first wave of the study in a series of choices between appeals of a global poverty campaign.

Both in the first and second wave of the study we include a total of 42 messengers, of which respondents in the first wave rate seven messengers chosen at random. In the second wave respondents see up to 20 random couplets in the choice experiment in the second wave. Messengers vary across three main characteristics: their gender, ethnicity and category. With respect to categories, we include messengers from 10 categories spanning aid recipients to celebrities to politicians. Within all categories except the 'Couples' and 'Iconics' groups, we included four messengers varying in their gender (male or female) and ethnicity (white or other) to get all possible combinations of the two attributes. Ethnicity, gender, and category variations are included in the design to increase the external validity of our findings as we know that warmth and competence judgments vary across both groups (Krasno, Green, 2008). Furthermore, their inclusion reduce concern about confounding effects on the core manipulations based on messengers' warmth and competence.

The full list of messengers, their category, gender and ethnicity, is included as Table 1. In the surveys for both waves of the study, we identify the messengers by using pictures, their name and identify their category as a tagline, e.g. 'Alice Harris, International development volunteer'. The name of the messenger shown in the picture is either their real name if the messenger is publicly known, such as is the case with celebrities or politicians, or if not we anonymise them and use a plausible name for unknown messengers, such as is the case for volunteers and aid recipients. We delve deeper into the details of each wave in the next two sub-sections.

**TABLE 1**

Name and experiment tagline	Category	Gender	Ethnicity	Recognisable
Robert Cass, International development activist	Activists	Male	White	No
Devon Kessan, International development activist	Activists	Male	Non-white	No
Frances Winnow, International development activist	Activists	Female	White	No
Marie Mukanda, International development activist	Activists	Female	Non-white	No
Gideon Matenga, Aid recipient	Aid recipients	Male	White	No
Nasad Nawabi, Aid recipient	Aid recipients	Male	Non-white	No
Riyan Homsi, Aid recipient	Aid recipients	Female	White	No
Adina Chibuzo, Aid recipient	Aid recipients	Female	Non-white	No
Tidjane Thiam, Businessman and entrepreneur	Business	Male	Non-white	Yes
Elon Musk, Businessman and entrepreneur	Business	Male	White	Yes
Karen Blackett, Businesswoman and entrepreneur	Business	Female	Non-white	Yes
Amanda Sourry, Businesswoman and entrepreneur	Business	Female	White	Yes
Idris Elba, Actor	Celebrities	Male	Non-white	Yes
Bill Nighy, Actor	Celebrities	Male	White	Yes
MIA, Singer	Celebrities	Female	Non-white	Yes
Emma Watson, Actor	Celebrities	Female	White	Yes
Ronan Keaney, Doctor	NGO frontline	Male	White	No
Adjo Khouri, Doctor	NGO frontline	Male	Non-white	No
Anne Front, Doctor	NGO frontline	Female	White	No
Abiewmense Okonjo, Nurse	NGO frontline	Female	Non-white	No
Mark Conden, Military personnel	Military	Male	White	No
Abdul Karimi, Military personnel	Military	Male	Non-white	No
Jane Cook, Military personnel	Military	Female	White	No
Hamsa Malek, Military personnel	Military	Female	Non-white	No
Azim Premji, Philanthropist	Philanthropists	Male	Non-white	Yes
Melinda Gates, Philanthropist	Philanthropists	Male	White	Yes
Christopher Hohn, Philanthropist	Philanthropists	Female	Non-white	Yes
Bill Gates, Philanthropist	Philanthropists	Female	White	Yes
Ross Caldwell, International development volunteer	Volunteers	Male	White	No
Samuel Chiedozie, International development volunteer	Volunteers	Male	Non-white	No
Alice Harris, International development volunteer	Volunteers	Female	White	No
Hiruni Sadupama, International development volunteer	Volunteers	Female	Non-white	No
Tim Black, from *location*	People like you	Male	White	No
Karim Burdak, from *location*	People like you	Male	Non-white	No
Sarah Williams, from *location*	People like you	Female	White	No
Rani Takk, from *location*	People like you	Female	Non-white	No
Justine Greening, UK Secretary of State DFID and volunteer	Couples	n/a	n/a	Yes
Barbara Frost, CEO of WaterAid and aid beneficiaries	Couples	n/a	n/a	Yes

William Hague, UK Member of Parliament and Angelina Jolie, Actor	Couples	n/a	n/a	Yes
Malala Yousafzai, Nobel Prize winner	Iconics	Female	Non-white	Yes
Justine Greening, UK Secretary of State DFID	Iconics	Female	White	Yes
Jon Snow, Journalist	Iconics	Male	White	Yes

### 3.1 Wave 1 design

During the first wave of the study, which was fielded in May 2016, 2,034 participants were contacted to participate in a survey.<sup>1</sup> Respondents were asked to rate a set of messengers using ten traits, listed in Table 2.<sup>2</sup>

**TABLE 2**

Trait list
Unlikeable-likeable
Untrustworthy-trustworthy
Cares for themselves first-cares for others first
Unattractive-attractive
Fake-authentic
Boring-inspirational
Inexperienced-experienced
Ignorant-knowledgeable
Someone I cannot relate to at all – someone I can relate to a great deal
Not at all believable - believable

Each participant is assigned seven of the 42 messengers and rates them on 10 traits. At the end of the rating exercise we also ask the participants to rate messengers overall (positive, neutral, negative) on their capacity to engage the public with a hypothetical campaign on global poverty. Furthermore, as a more exploratory exercise and to check for the robustness of our survey instrument, we also include an open-ended question asking people for their thoughts on the messengers and their involvement with global poverty. Respondents, finally, answer a set of questions related to their demographic characteristics, attitudes towards global poverty and past actions they took to get involved with it.

### 3.2 Wave 2 design

Participants are re-contacted one month later, in June 2016, for the second part of the study. In total we successfully re-contacted 1,706 respondents, or 84% of the first wave sample. The second wave includes what is effectively a conjoint experiment, pitching messengers against each other in a set of choices and questions to measure the respondents' intentions to support a generic campaign against global poverty. More specifically, participants are randomly shown two appeals 10 times, and are asked which one they would be more likely to support through a donation (for the first five choices), or a petition (for the remaining five choices). Following each of these 10 forced choices, respondents are also asked to rate their intentions to support each of the specific appeals (and therefore messengers) using a scale to indicate the strength of their intentions both for the chosen appeal and the one they did not choose.

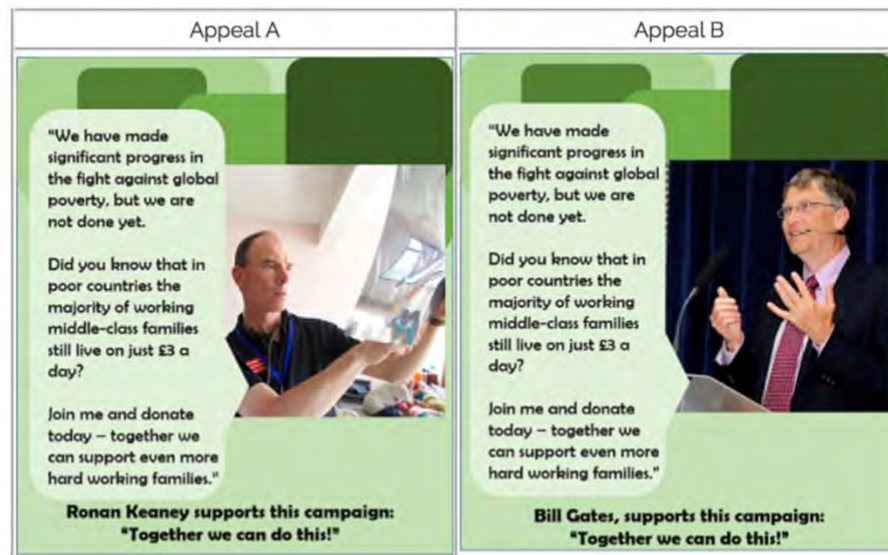
The appeals presented in the choices are identical in everything but the action requested of the respondent, and a picture of a messenger, together with their name and short description of their category (identical to the first wave of the study). The text of the appeal, reported in

<sup>1</sup> Fieldwork is provided by YouGov. Final data are then statistically weighted to the national profile of all adults aged 18+ (including people without internet access), age, gender, social class, region, level of education, how respondents voted at the previous election and level of political interest.

<sup>2</sup> While in this paper we focus on two traits which we used as proxies the warmth and competence dimensionality, likability and knowledgeability, we also included further traits which we use to conduct robustness checks and traits which were collected through discussions with practitioners from the leading British non-governmental organisations from the international development sector.

Figure 1 with an example choice screen, refers to a broad appeal to improve the lives of people living in poor countries.

**FIGURE 1**



Thinking about the two appeals, which one do you think you would be more likely to make a donation to?

- Appeal A
- Appeal B

We tested the format of the choice task through a pre-run of the choice experiment with a separate sample. The results of the trial indicated that the forced choice format, compared to an allocation slider approach<sup>3</sup> and a preferential ranking approach<sup>4</sup>, was the format that allowed for the clearest expression of the respondents' preferences which was still consistent with a set of a priori expectations. However, we also retained the continuous measures of behaviour intentions as follow-ups for each of the appeals, conscious that expressing a preference for one of the two appeals does not necessarily mean individuals would be willing to support it. Data from the two waves of the study were subsequently collated together, allowing for the descriptive and inferential analyses we discuss in the next section.

#### 4. ANALYSIS

We conduct two sets of tests with the data from the two surveys. The first set of tests is aimed at understanding where our messenger categories fall in the warmth-competence dimensionality, and how this influences their overall credibility ratings. The second set of tests looks at whether credible messengers can significantly affect respondents' intentions to support the appeals. Before we move to these, in the next sub-section we briefly describe the data and our randomisation checks.

##### 4.1 Descriptive statistics, randomisation and satisficing checks

<sup>3</sup> With this format participants indicate their likelihood to donate to either appeal using a five-point scale: on one side of the scale participants indicate they would be much more likely to donate to *appeal A*, while on the other they indicate they would be much more likely to donate to *appeal B*.

<sup>4</sup> With this format participants rank three options (donate to A, donate to B, donate to neither) in order from most to least favourite.

Table 3, below, reports the sample descriptive statistics for participants broken down in waves 1 and 2 of the study. Sample comparison tests show that no systematic differences emerge in the composition of the samples across the two waves of the study. YouGov sampling strategies are directly aimed at obtaining samples representative of the whole population in Great Britain through both screening and weighting techniques, which are used throughout the analysis in this paper.

**TABLE 3**

Variable	Wave 1			
	Mean	Standard error	95% low	95% high
Age	47.9	0.4	47.1	48.6
Gender (% women)	51.6%	1.1%	49.4%	53.8%
Social class (% ABC1)	57.0%	1.1%	54.8%	59.2%
Party id (Conservative)	30.1%	1.0%	28.1%	32.1%
Party id (Labour)	28.9%	1.0%	27.0%	30.9%

Variable	Wave 2			
	Mean	Standard error	95% low	95% high
Age	48.1	0.4	47.3	48.9
Gender (% women)	51.6%	1.2%	49.2%	53.9%
Social class (% ABC1)	56.9%	1.2%	54.6%	59.3%
Party id (Conservative)	30.4%	1.1%	28.2%	32.6%
Party id (Labour)	28.6%	1.1%	26.4%	30.7%

We use these descriptive indicators in our randomisation checks as well. We build a set of 42 models, one for each of the messengers, to show that none of the variables significantly predicts the likelihood of a respondent seeing a certain messenger as an option in any of the ten choices of the conjoint experiment. With average pseudo-R-squared statistics close to 0 and all Chi-squared tests returning statistically insignificant results we conclude that study participants have been randomised successfully. This is further strengthened by the way the conjoint experiment is designed, with every couplet in a choice working as a *unique treatment*, for a total of 1,764 potential choices facing the study participants.

One of the concerns with repeated choice tasks in conjoint experiments such as the one we present in this paper, is that respondents can engage in satisficing behaviour, providing quicker and less reliable responses. We test for satisficing behaviours in three ways, including the detailed results in the appendix of this paper. First, we compare the overall effects of treatments across choice tasks, and find no significant or systematic evidence that the treatment effects change in magnitude, significance, or direction across the tasks. Second, following an established approach found in the work of Hainmueller et al. (2014a, 2014b), we check for differences in the likelihood of choosing the default option<sup>5</sup> across choice tasks. Even with this test we find no statistically significant evidence for satisficing behaviour systematically affecting our data. Thirdly, we check for median response times for each of the ten choice tasks. While choices in tasks 1 and 6 take slightly longer than all other tasks because further instructions are included in these<sup>6</sup>, all other choices take on average between 5 and 4 seconds, with no evidence of response times shrinking as tasks proceed. Overall credibility judgements and treatment effects analysis comes next.

#### 4.2 Warmth, competence, and overall credibility

Our first objective in this paper is to understand whether warmth and competence are necessary or sufficient conditions for better overall evaluation of messengers, as reflected in

<sup>5</sup> In our format, the default option is the first appeal presented within every choice task.

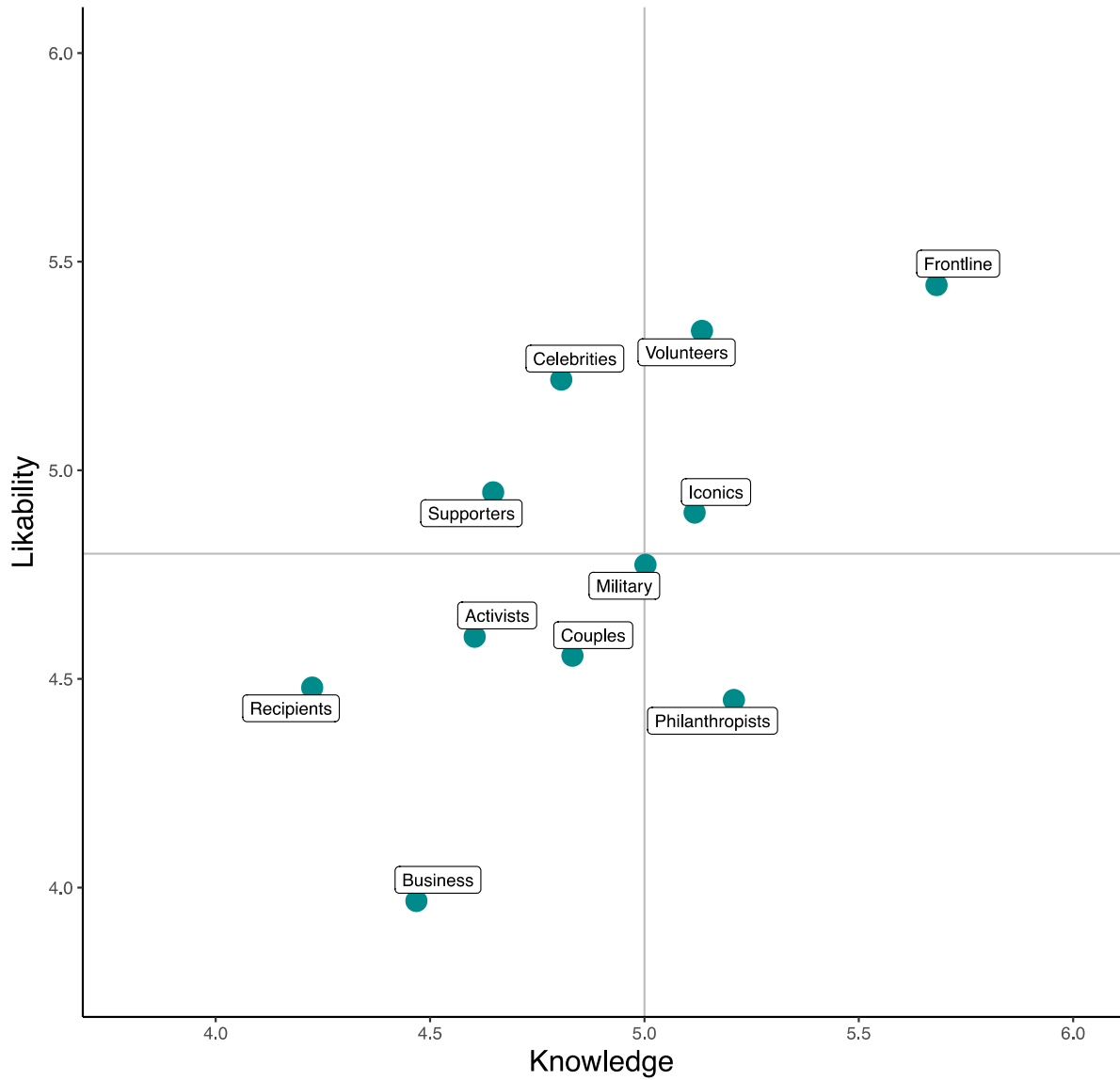
<sup>6</sup> The conjoint experiment is divided in two parts, with five choices asking respondents to consider appeals that they would donate to, and five further choices asking them to consider signing a petition. These different actions are introduced in the first choice within each of the two groups.

hypotheses H1a and H1b. To test these, we use data from wave 1 of this study, which includes trait ratings for all 42 of the messengers. Out of the set of ten traits we collected data on, we focus on knowledgeability as a measure of messengers' competence, and likeability as a measure of messengers' warmth. The appendix includes robustness checks which uses other measures such as expertise or the perceived capacity of a messenger to care for others to replicate these results.

Figure 2 shows the ten messenger categories mapped in a warmth/competence matrix.

**FIGURE 2**

Messengers in the knowledge/likability space



Average ratings for knowledgeability and likeability are also included in Table 4 below.

**TABLE 4**

Messenger category	Likeability	95% Low	95% High
Activists	4.60	4.41	4.79
Aid recipients	4.48	4.30	4.66
Businesspeople	3.97	3.79	4.14
Celebrities	5.22	5.09	5.35
Frontline	5.44	5.33	5.56
Military	4.77	4.61	4.93
Philanthropists	4.45	4.32	4.58
Volunteers	5.33	5.20	5.47
Supporters	4.95	4.77	5.12
Couples	4.56	4.40	4.71
Iconics	4.90	4.75	5.04
<b>Overall</b>	<b>4.82</b>	<b>4.77</b>	<b>4.86</b>

Messenger category	Knowledgeability	95% Low	95% High
Activists	4.60	4.43	4.78
Aid recipients	4.23	4.06	4.39
Businesspeople	4.47	4.28	4.66
Celebrities	4.81	4.69	4.92
Frontline	5.68	5.56	5.80
Military	5.00	4.86	5.15
Philanthropists	5.21	5.07	5.35
Volunteers	5.13	5.00	5.26
Supporters	4.65	4.49	4.80
Couples	4.83	4.68	4.98
Iconics	5.12	4.98	5.25
<b>Overall</b>	<b>4.93</b>	<b>4.88</b>	<b>4.97</b>

We descriptively divide the warmth/competence space in four quadrants using the mean observed likability and knowledgeability values. In the bottom left corner, we find messenger categories whose average likability and knowledgeability are both below average. These include aid recipients, activists, and figures from the world of business. Meanwhile, in the top right corner are those messenger categories who scored above average on both traits, these include volunteers and NGO frontline workers. Finally, in the top left and bottom right corner are messengers whose ratings are mixed, as they score over the average on one but under the average on others. For example, celebrities are warm, but not competent, while philanthropists are rated well as competent individuals, but not so much when it comes to their warmth.

Taking the bottom left quadrant as the baseline, our hypotheses predict two potential outcomes. If either likability or knowledge are sufficient conditions, then any messenger whose likability or knowledge ratings are higher should also overall be perceived to be more credible. If, instead, likability and knowledge are both necessary conditions, then only the messengers in the top right quadrant will be seen as overall more credible, while all other messengers should receive similar overall credibility ratings.

We seek evidence in support of either potential outcome using a binary indicator of overall rating (good messenger or bad messenger) and use it in a logistic model with a categorical indicator for the quadrants and controlling for the messengers' gender, ethnicity, and their category. The results in the model are presented in Table 5.

**TABLE 5**

**Overall rating**

High warmth / low competence	1.402*** (0.238)
High warmth / low competence	2.103*** (0.112)
High warmth / high competence	0.884*** (0.160)
Female messenger	0.0332 (0.0923)
Non-white messenger	-0.0852 (0.0926)
Category: aid recipient	-0.739*** (0.193)
Category: business	-1.433*** (0.209)
Category: celebrities	-0.00935 (0.201)
Category: frontline	0.134 (0.224)
Category: military	-1.310*** (0.202)
Category: philanthropists	-0.0874 (0.207)
Category: volunteers	-0.183 (0.216)
Category: generics	-1.402*** (0.227)
Category: iconics	0.0533 (0.195)
Constant	-0.337* (0.181)
Observations	3,287

The results show that compared to the messengers scoring under the average on both warmth and competence, any other messenger in other quadrants will score, on average, better in their overall credibility ratings. Table 6, below, reports the marginal effects for the quadrants, keeping all other covariates constant.

**TABLE 6**

Quadrants	Margin	95% Low	95% High
Low warmth/ low competence	31.4%	27.4%	35.5%
High warmth / low competence	65.1%	55.3%	74.8%
High warmth / high competence	79.0%	77.1%	80.9%
Low warmth / high competence	52.6%	46.3%	58.9%

The table shows how messengers faring poorly on both dimensions are more likely to be rated as bad messengers than good messengers, with only 31% of respondents giving a positive rating. On the other hand, messengers who are both warm and competent are judged as credible by the clear majority of respondents, with 79% of them indicating that these messengers are good. However, contrary to the predictions of H1a, messengers who are high on only one dimension – either warmth or competence – also score better than their cold and less competent counterparts. This is especially clear when it comes to the warmth dimension, with 65% of messengers in this quadrant being rated as overall good. The effect is smaller on the competence dimension, with 53% of messengers receiving good ratings.

Overall, H1b is therefore supported by the results, with evidence pointing to evaluations happening quickly along the warmth dimension, but also showing the importance of high



ratings on the competence dimension too. Another way to represent this is by modelling the overall ratings directly as a function of warmth, competence and their interaction. The expectation in this case, if H1a is not to be rejected, would be for small linear effects of the two traits, while their interaction of knowledge and likability would have a significant positive effect, representing a somewhat angular hyperbolic paraboloid. If H1b was supported, instead, the interaction would not be significant, reducing the paraboloid to a three-dimensional plane with positive slope on either dimension. The results of this model are included in Table 7, below. As with our previous test, the lack of statistical significance for the interaction term indicates that H1b is supported by the model's results.

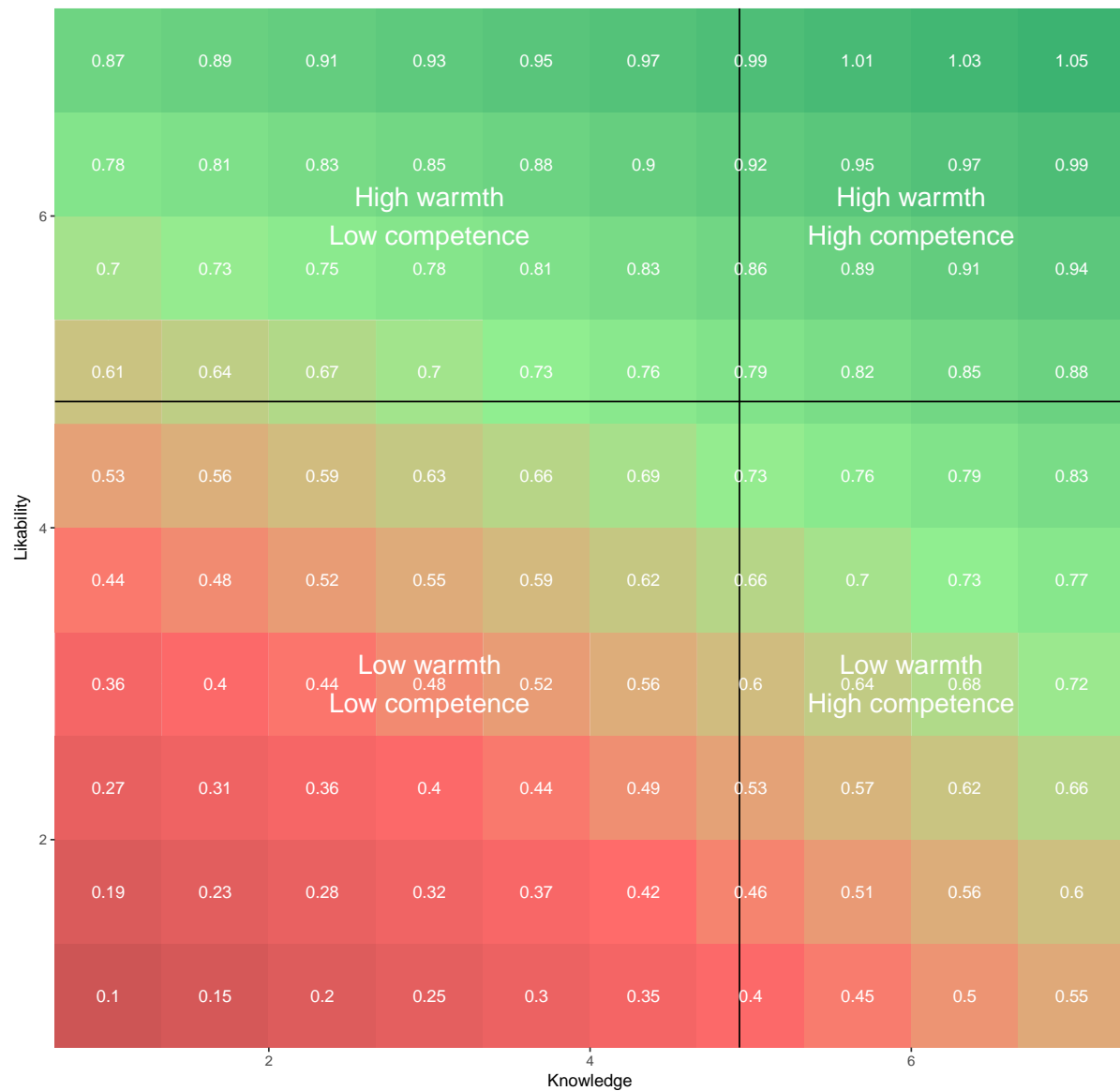
**TABLE 7**

	<b>Overall rating</b>
Knowledgeability	0.321*** (0.114)
Likeability	0.612*** (0.126)
Knowledgeability x Likability	0.00363 (0.0244)
Female messenger	0.0448 (0.108)
Non-white messenger	-0.0324 (0.113)
Category: aid recipient	-0.921*** (0.236)
Category: business	-1.372*** (0.243)
Category: celebrities	-0.0512 (0.231)
Category: frontline	-0.168 (0.252)
Category: military	-0.861*** (0.237)
Category: philanthropists	0.104 (0.232)
Category: volunteers	-0.0880 (0.263)
Category: generics	-1.290*** (0.284)
Category: iconics	0.113 (0.221)
Constant	-3.189*** (0.521)
Observations	3,142

Figure 3, below, shows a contour plot for the effect of knowledgeability, likeability and their interactions. Once again, the worst and best results are observed for those messengers scoring respectively under or over the average for both traits. The contour, however, describes a plane, with a slight difference in slopes favouring the warmth dimension over the competence one.

**FIGURE 3**

Overall messenger ratings in the warmth/competence space



Overall, while we find support for hypothesis H1b, there is still the matter of magnitude. We showed that ratings are higher for messengers rated high on warmth, competence, or both. However, the magnitude of the differences in overall ratings are different across the three groups, with messengers rated high on both warmth and competence performing better than messengers rated high on warmth alone, and, finally then, than messengers rated high on competence alone. Are higher ratings sufficient in absolute terms to guarantee the persuasive effectiveness of messengers in the appeals, or does their effectiveness depend on passing a certain rating threshold? We seek an answer in the next section through our conjoint experiment.

### 4.3 Conjoint design analysis

In the second wave of the study, participants are contacted again to take part in a conjoint experiment. This includes ten forced choices between two appeals, five concerning making a donation to the cause in the appeal, and five concerning signing a petition in support of the campaign. Our two hypotheses predict two potential outcomes with both choices and single behaviour intention measures. H2a predicts that only messengers who are perceived as both warm and competent will influence the likelihood of an appeal being chosen. Single-trait

effects theories of H2b instead predict that messengers high in warmth, competence, or both, are more likely to result in an appeal being chosen.

Before we proceed with discussing the results of the experiment, we need to consider the issue of using controls (or baselines) in our conjoint design. We can use messengers who are not perceived as warm or competent as our baseline to compare to other cases, which would more closely resemble other experimental designs in the literature around persuasion and information elaboration. Otherwise, given the essence of a messenger-based treatment is typically the presence of a well-known, recognisable or relevant individual (recipient or volunteer) in an appeal, we can therefore compare the effectiveness of messengers to a baseline ‘generic’ messenger, which is our supporter category. That is, they are people like the respondents, members of the public. What we gain in controlling for simple endorsement effects we however lose in controlling for the traits, as generic supporter messengers are perceived as neutral on their warmth, and slightly negatively on their competence. This potentially matters more when testing the single-trait effect hypothesis H2b, as H2a predicts that any messengers who are not high in warmth and competence should not be effective. Agnostically, we conduct and discuss tests using both approaches. Model 1 uses messengers who are not perceived as warm or competent as the baseline, and Model 2 uses the generic supporters category as the baseline.

#### 4.3.1 Donation choices

Table 8 reports the descriptive rates at which appeals are chosen in the forced choice tasks. If we assume messengers make no difference, each appeal would be chosen 50% of the times. Deviations from the overall average can be descriptively understood as due to messenger-related effects. The three messenger categories which are associated with higher choosing rates – volunteers, frontline staff and iconic messengers – are all located in the high warmth / high competence quadrant, while none of the other categories score significantly above the 50% mark, indicating that their messages are less likely to be chosen.

**TABLE 8**

Messenger category	Quadrant	Times chosen	95% Low	95% High
Activists	Low warmth/ low competence	50.6%	48.0%	53.2%
Aid recipients	Low warmth/ low competence	49.7%	47.1%	52.2%
Businesspeople	Low warmth/ low competence	34.6%	32.1%	37.0%
Celebrities	High warmth/ low competence	44.3%	41.7%	46.9%
Frontline	High warmth/ high competence	68.1%	65.6%	70.6%
Military	Neutral	43.8%	41.2%	46.4%
Philanthropists	Low warmth/ High competence	42.3%	39.7%	45.0%
Volunteers	High warmth/ high competence	63.5%	61.0%	65.9%
Generics	High warmth/ low competence	50.7%	48.1%	53.3%
Couples	Low warmth/ low competence	49.1%	45.9%	52.4%
Iconics	High warmth/ High competence	53.9%	50.9%	57.0%

To formalize the descriptive findings, we estimate a conditional logistic regression model to predict changes in likelihood of an appeal being chosen in a choice task conditional on the messenger category, controlling for their gender and ethnicity. The results of the regression are presented in Table 9, while Table 10 presents the marginal effects of the messenger

categories on the likelihood of an appeal being chosen from model 2 (although effects are basically identical no matter the baseline considered).

**TABLE 9**

	Donation choice (Model 1)	Donation choice (Model 2)
Category: activists	0.00812 (0.0794)	0.00100 (0.0803)
Category: aid recipient	<b>Baseline</b>	-0.00712 (0.0781)
Category: business	-0.726*** (0.0822)	-0.733*** (0.0829)
Category: celebrities	-0.281*** (0.0805)	-0.288*** (0.0811)
<b>Category: frontline</b>	<b>0.770***</b> <b>(0.0842)</b>	<b>0.763***</b> <b>(0.0837)</b>
Category: military	-0.321*** (0.0792)	-0.328*** (0.0791)
Category: philanthropists	-0.486*** (0.0808)	-0.493*** (0.0812)
<b>Category: volunteers</b>	<b>0.564***</b> <b>(0.0801)</b>	<b>0.557***</b> <b>(0.0798)</b>
Category: supporters	0.00712 (0.0781)	<b>Baseline</b>
Category: couples	/	/
Category: iconics	-0.00358 (0.0873)	-0.0107 (0.0872)
Female messenger	0.0406 (0.0337)	0.0406 (0.0337)
Non-white messenger	-0.350*** (0.0339)	-0.350*** (0.0339)
Observations	14,940	14,940

**TABLE 10**

Messenger category	Margin	95% Low	95% High
Activists	46.4%	42.4%	50.4%
Aid recipients	46.2%	42.3%	50.1%
Businesspeople	29.5%	26.0%	33.0%
Celebrities	39.4%	35.4%	43.4%
<b>Frontline</b>	<b>64.8%</b>	<b>61.0%</b>	<b>68.7%</b>
Military	38.4%	34.7%	42.2%
Philanthropists	34.6%	30.8%	38.5%
<b>Volunteers</b>	<b>60.0%</b>	<b>56.2%</b>	<b>63.9%</b>
Supporters	46.4%	45.3%	47.4%
Iconics	46.1%	41.8%	50.5%

Overall the conditional logistic model confirms our descriptive results: appeals with messengers perceived as being high on both warmth and competence, frontline staff and volunteers, are more likely to be chosen than all others. Iconic messengers, who had a slightly positive descriptive effect, are statistically not significantly different from a null effect, once gender and ethnicity are controlled for. A message coming from frontline staff is 15% more likely to be chosen for a donation, while a message coming from a volunteer is 10% more

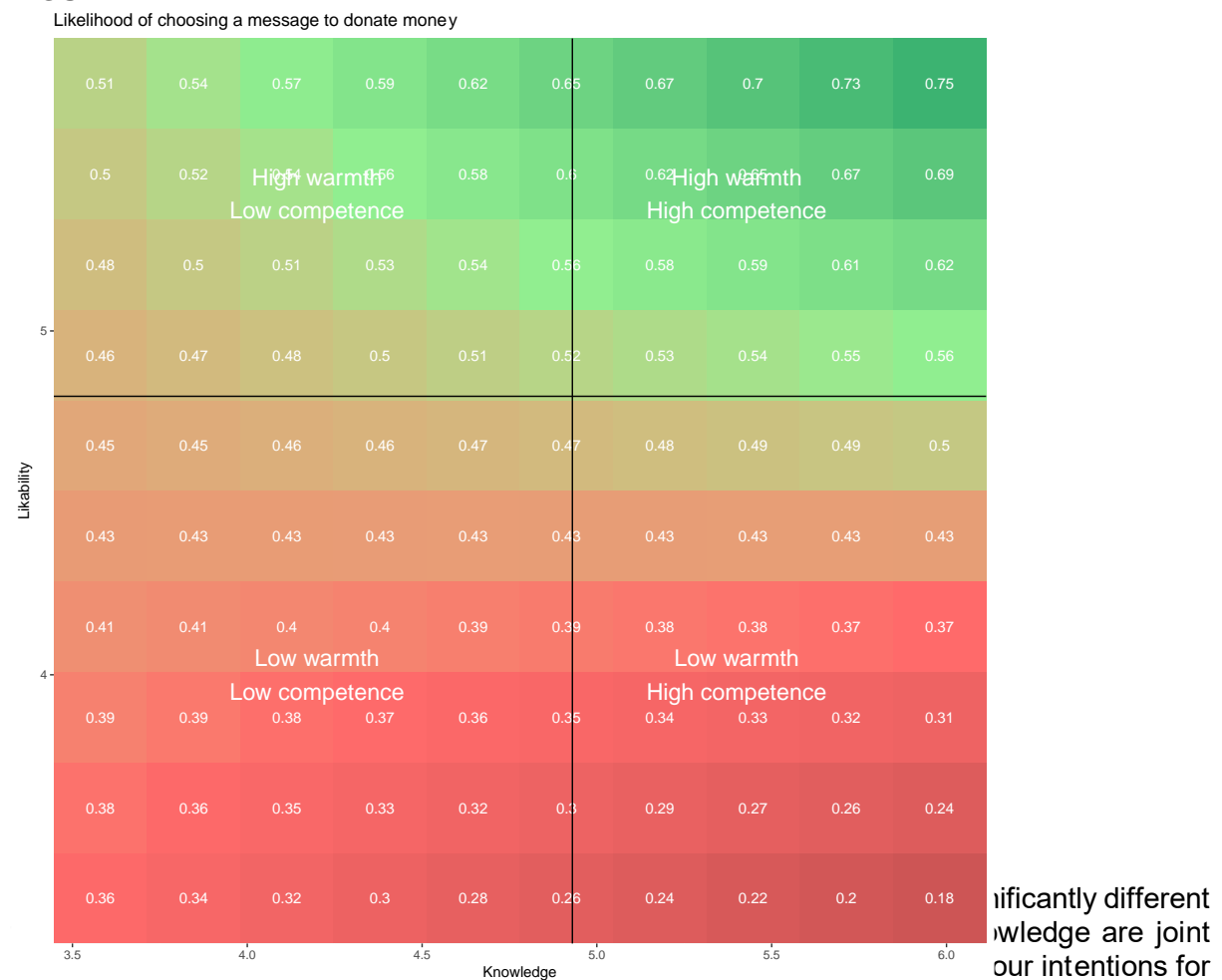
likely to be chosen. All other messengers are significantly more likely to be chosen than average, with a few examples of messengers which are significantly less likely to be chosen.

Businesspeople, who on average were rated low on both warmth and competence, are 21% less likely to be chosen for donations, followed by philanthropists (high in competence but low in warmth) at 15%, military (seen as neutral on both dimensions) at 12%, and celebrities at 11%, and, finally, supporters (seen as high on warmth but low on competence) at 4%. Overall, the empirical evidence supports hypothesis H2a: being perceived as both warm and competent is a necessary condition for significantly affecting respondents' behavior intentions.

### Back to the warmth/competence space

As a further illustration, consider Figure 4, below, which shows the likelihood of an appeal being chosen in the warmth-competence space we had used for overall evaluation analysis in section 3. While overall ratings were a linear function of each of the two dimensions, independently of the other, we find significant changes in behavior intention measures only for those messengers who are perceived as being both likable and competent, with the interaction term between the two terms being statistically significant at the 1% level and positive in combined effect.

**FIGURE 4**



### 4.3.2 Petition choices

As with the donation choices, we include the descriptive statistics of petition choices broken up by messenger category in Table 11.

**TABLE 11**

Messenger category	Times chosen	95% Low	95% High
Activists	50.5%	47.9%	53.1%
Aid recipients	47.5%	44.9%	50.2%
Businesspeople	39.4%	36.8%	41.9%
Celebrities	43.1%	40.5%	45.7%
Frontline	66.7%	64.2%	69.1%
Military	49.0%	46.3%	51.6%
Philanthropists	39.0%	36.4%	41.5%
Volunteers	62.1%	59.5%	64.6%
Generics	47.5%	44.9%	50.0%
Couples	49.6%	46.4%	52.9%
Iconics	57.1%	54.0%	60.2%
<b>Overall</b>	<b>50.0%</b>		

The results are all consistent with those we obtained when analysis donation-related data. Once more, frontline staff, volunteers and iconic messengers all have positive results in the forced choice test, while all other messengers are either not significantly different from the overall mean of 50% or underperform it. Table 12, below, estimates the same conditional logistic model now considering instead the choice to sign a petition, once more finding consistent results. Finally, Table 13 reports the marginal effects of messenger categories on petition choices, controlling for the gender and ethnicity of the messengers.

**TABLE 12**

	Petition choice (Model 1)	Petition choice (Model 2)
Category: activists	0.125 (0.0812)	0.133* (0.0787)
Category: aid recipient		0.00745 (0.0817)
Category: business	-0.359*** (0.0822)	-0.351*** (0.0806)
Category: celebrities	-0.205** (0.0830)	-0.198** (0.0813)
<b>Category: frontline</b>	<b>0.802***</b> <b>(0.0853)</b>	<b>0.810***</b> <b>(0.0832)</b>
Category: military	0.0330 (0.0820)	0.0404 (0.0796)
Category: philanthropists	-0.502*** (0.0829)	-0.494*** (0.0807)
<b>Category: volunteers</b>	<b>0.594***</b> <b>(0.0839)</b>	<b>0.602***</b> <b>(0.0811)</b>
Category: generics	-0.00745 (0.0817)	
Category: couples		
Category: iconics	0.286*** (0.0903)	0.294*** (0.0881)
Female messenger	0.0262 (0.0339)	0.0262 (0.0339)
Non-white messenger	-0.408*** (0.0337)	-0.408*** (0.0337)
Observations	14,926	14,926

**TABLE 13**

Messenger category	Margin	95% Low	95% High
Activists	48.8%	44.8%	52.7%
Aid recipients	45.7%	41.6%	49.7%
Businesspeople	37.1%	33.3%	40.9%
Celebrities	40.7%	36.7%	44.7%
Frontline	65.0%	61.2%	68.8%
Military	46.5%	42.5%	50.4%
Philanthropists	33.8%	30.0%	37.6%
Volunteers	60.2%	56.3%	64.1%
Generics	45.5%	44.4%	46.5%
Iconics	52.7%	48.4%	57.1%

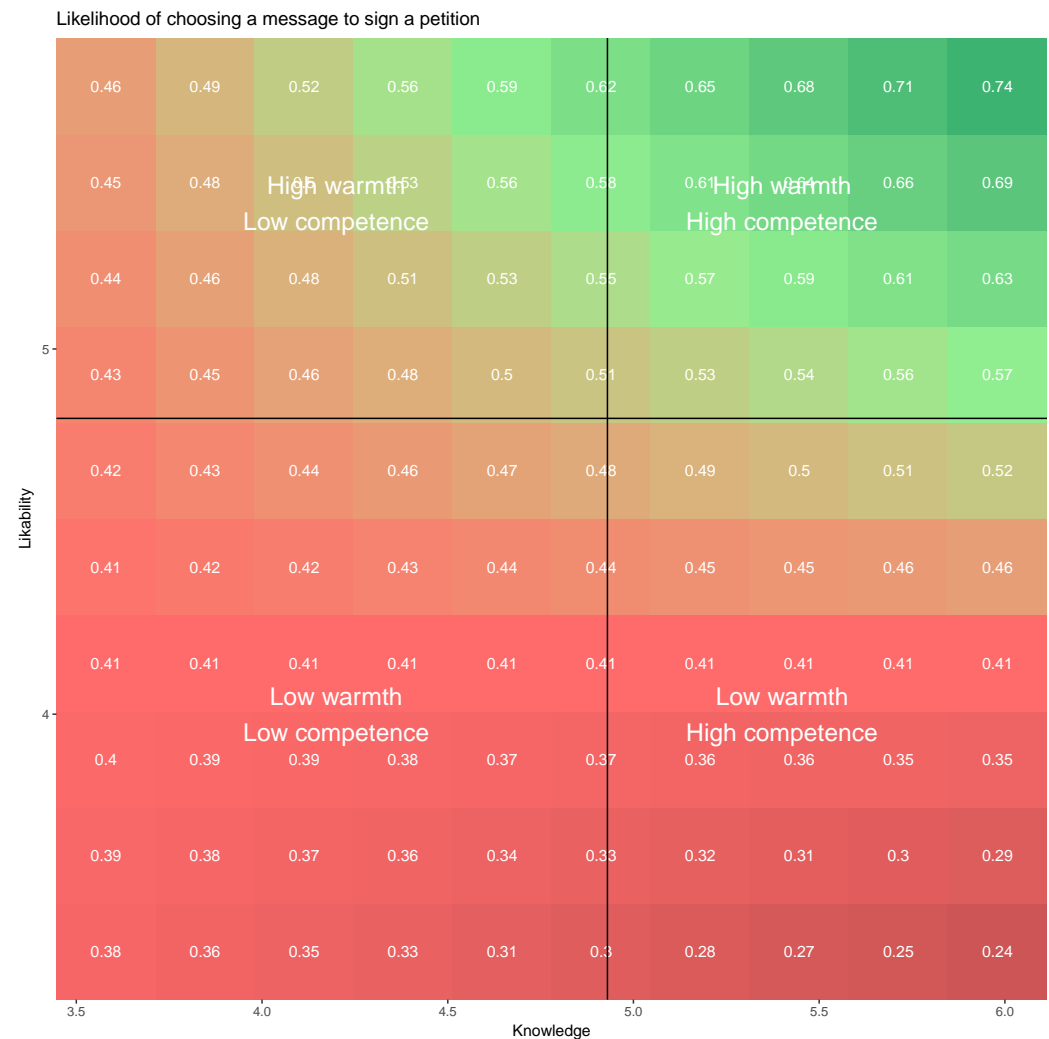
The magnitude of the effects observed for the frontline and volunteer messengers is essentially in line with that observed for donation choices, although all effects are somewhat smaller than with the donation data. In this case, NGO workers and volunteers, both of which were rated highly on both warmth and competence respectively increase the likelihood of an appeal being chosen by 15% and 10%. On the other hand, the effect for the rest of the messengers are either not significantly different from the 50% mark, or underperform it, as is the case with philanthropist messengers (competent but not warm, -16.2%), celebrities (warm but not competent, -9%) or businesspeople (neither warm, nor competent, -13%). Overall,

once more, our empirical evidence supports hypothesis H2a, as both warmth and competence are necessary conditions for messengers to affect the behavior intentions of respondents. We discuss these results overall in the next section.

### Back to the warmth/competence space

As we did with the likelihood to donate to an appeal, Figure 5, below, shows the likelihood of a respondent choosing an appeal as a reason to sign a petition. As we observed with donations, once again only messengers in the top-right corner have a positive and significant effect on the likelihood of appeals being chosen, compared to the bottom-left quadrant. In other words, for a messenger to be persuasive they need to be perceived as both likable and knowledgeable, while high likability or high knowledge alone are not statistically significant in the regression model.

**FIGURE 5**



### 4.3.3 Bringing together evaluations and persuasion

Figures 4 and 5, above, returning to our metaphor of the matrix space of warmth and competence, show that messengers in the high-warmth, high-competence quadrant in the top right are the most likely to affect behaviour intentions in respondents. These findings, together with the regression models, support hypothesis H2a, which predicted that both warmth and competence are necessary conditions for the persuasiveness of an appeal to increase due to a messenger. On the other hand, instead, we don't find support for hypothesis H1a when it comes to overall messenger ratings, as either warmth or competence ratings are sufficient conditions for a messenger to be seen as credible. How can we square these findings with the



evidence on the single effects of warmth and competence we discovered when looking at overall ratings? We consider a few explanations below.

First, there might be a ‘threshold point’ effect with overall ratings. While it’s true that messengers who were rated higher on warmth, competence, or both, were overall rated higher than their counterparts, the biggest differences in ratings are still observed on messengers rated highly on warmth and competence. This could suggest that although evaluations for messengers who are at least warm or competent are not as bad as those for messengers who are both cold and less competent, the higher overall credibility rating is not a good predictor of whether or not a messenger will be persuasive when it comes to behaviour intentions. This could have been exacerbated by the fact that in this specific rating exercise, which considers individuals on their own, respondents have underused the mixed evaluation cells, something observed by Fiske (2007). Future works should engage with the theoretical possibility of such threshold effects as a refinement of existing theoretical models.

Second, respondents might have treated the overall evaluation question differently from our expectations: we were thinking of persuasiveness, while participants could have been focussing on evaluating the messengers’ warmth for more moral or ethical considerations, both of which are less at play in a fast decision scenario as our experimental choice tasks. Another possibility for future works is therefore to further unpack the overall evaluation box. This is likely to involve more qualitative than quantitative research, and, to large extents, goes beyond the scope of our paper.

## 5. CONCLUSIONS AND IMPLICATIONS

In this paper we – for the first time – tested the persuasiveness of messengers or endorser of international development campaign appeals. The conventional wisdom was that messengers can improve the message’s persuasiveness, but little was known about the mechanisms behind the process of persuasion. We drew on long standing theories of endorser persuasiveness from social psychology – such as Petty and Cacioppo’s elaboration likelihood framework and Fiske’s warmth-competence dimensionality approach – to develop expectations around the necessary and sufficient combinations of messenger warmth and competence to affect audience attitudes and behaviour intentions.

We found that frontline development workers (doctors, nurses, engineers, etc.) was considered the warmest and most competent, with volunteers and iconic individuals also scoring above average warmth and competence. While celebrities and development supporters (individual citizens like you or I) scored above average on warmth, they were seen as less competent than the average messenger in our sample. Meanwhile, military personnel and philanthropists were seen as competent but sub-average in terms of warmth. Finally, activists, aid recipients or beneficiaries, and business or private sector individuals were seen as below average warmth and competence when it can to matters of global poverty.

In the paper we sought to use these measures of warmth and competence to predict (1) whether a messenger was seen as credible by respondents, and then (2) whether they persuaded respondents to express an intention to make a donation or sign a petition in support of the messenger’s appeal. We used a two-wave experimental panel design fielded in the United Kingdom (n=2,034) to examine 42 messengers that represented ten categories, including celebrities, aid recipients, philanthropists and NGO workers.

Our results are clear and consistent. When it comes to how people rate the credibility of a messenger, *either* above average warmth *or* competence will suffice (hypothesis H1b). However, when it comes to changing audiences’ behavioural intentions, messengers need to be perceived as *both* warm and competent. This is true for both donation intentions and intentions to sign a petition. The results are robust of different specifications and measures.

Our results have implications for how charities, NGOs and governments communicate to the public in an attempt to build support for international development efforts. While messengers might be felt to be credible, because they possess warmth or experience or expertise, this is not sufficient to persuade citizens to change their behaviour. Again, we find that when it comes to perceived messenger credibility, this 'support' may well be 'a mile wide and an inch deep' (Smillie 1999, p.78). The ability to convert good feeling towards the endorsers of appeals into concrete behaviour (intentions) requires that a messenger is perceived as competent *and* warm. Charities, foundations, NGOs and governments would be well advised to steer away from the typical celebrity fare on the basis of their perceived lack of competence (knowledge, expertise, experience), just as they are advised to steer away from specialists and experts on the basis of their perceived lack of warmth. There are, of course, exceptions to these categorical generalisations, for example one might think of Bono or Hans Rosling who manage to combine both dimensions. But organisations would do well to make the most of their frontline staff and volunteers who – even though not famous – most consistently and effectively persuade people to support an international development campaign.

## BIBLIOGRAPHY

- Becker, A. B. (2012). Engaging celebrity? measuring the impact of issue- advocacy messages on situational involvement, complacency and apathy. *Celebrity studies*, 3(2):213–231.
- Bekkers, R. (2005). Participation in voluntary associations: Relations with resources, personality, and political values. *Political Psychology*, 26(3):439– 454.
- Bekkers, R. and Wiepking, P. (2006). To give or not to give, that is the question: How methodology is destiny in dutch giving data. *Nonprofit and Voluntary Sector Quarterly*, 35(3):533–540.
- Berscheid, E. and Walster, E. (1974). Physical attractiveness. *Advances in experimental social psychology*, 7:157–215.
- Bond (2015). *UK public attitudes towards development: Aid attitude tracker summary*. Technical report, Bond.
- Brader, T. (2006). *Campaigning for hearts and minds: How emotional appeals in political ads work*. University of Chicago Press.
- Chaiken, S. and Eagly, A.H., 1989. *Heuristic and systematic information processing within and unintended thought*, 212, pp.212-252.
- Chang, C., 2001. The impacts of emotion elicited by print political advertising on candidate evaluation. *Media psychology*, 3(2), pp.91-118.
- Charities Aid Foundation (2015). *Uk giving 2014*. Technical report, CAF.
- Cobb, M. D. and Kuklinski, J. H. (1997). Changing minds: Political arguments and political persuasion. *American Journal of Political Science*, pages 88– 121.
- Cotterill, S., John, P. and Richardson, L., 2010. Pledge campaigns to encourage charitable giving: a randomised controlled trial. In *Paper to the Political Studies Association Annual Conference* (Vol. 29).
- Cryder, C. E., Loewenstein, G., and Scheines, R. (2013). The donor is in the details. *Organizational Behavior and Human Decision Processes*, 120(1):15– 23.
- Cuddy, A. J., Fiske, S. T., and Glick, P. (2008). Warmth and competence as universal dimensions of social perception: The stereotype content model and the bias map. *Advances in experimental social psychology*, 40:61–149.
- Cuddy, A.J., Glick, P. and Beninger, A., 2011. The dynamics of warmth and competence judgments, and their outcomes in organizations. *Research in Organizational Behavior*, 31, pp.73-98.
- Darnton, A. and Kirk, M. (2011). *Finding frames: New ways to engage the UK public in global poverty*. Technical report, Bond.
- Fiske, S.T., Cuddy, A.J., Glick, P. and Xu, J., 2002. A model of (often mixed) stereotype content: competence and warmth respectively follow from perceived status and competition. *Journal of personality and social psychology*, 82(6), p.878.
- Fiske, S.T. and Dupree, C., 2014. Gaining trust as well as respect in communicating to motivated audiences about science topics. *Proceedings of the National Academy of Sciences*, 111(Supplement 4), pp.13593-13597.
- Freedman, P., Franz, M. and Goldstein, K., 2004. Campaign advertising and democratic citizenship. *American Journal of Political Science*, 48(4), pp.723-741.

- Franz, M.M. and Ridout, T.N., 2007. Does political advertising persuade?. *Political Behavior*, 29(4), pp.465-491.
- Fuchs, A., Dreher, A., and Nunnenkamp, P. (2014). Determinants of donor generosity: A survey of the aid budget literature. *World Development*, 56:172– 199.
- Hainmueller, J., Hangartner, D., and Yamamoto, T. (2014a). *Do survey experiments capture real-world behavior? external validation of conjoint and vignette analyses with a natural experiment*. Harvard Dataverse.
- Hainmueller, J., Hopkins, D. J., and Yamamoto, T. (2014b). Causal inference in conjoint analysis: Understanding multidimensional choices via stated preference experiments. *Political Analysis*, 22(1):1–30.
- Hovland, C. I., Janis, I. L., and Kelley, H. H. (1953). *Communication and persuasion; psychological studies of opinion change*. Yale University Press.
- Judd, C.M., James-Hawkins, L., Yzerbyt, V. and Kashima, Y., 2005. Fundamental dimensions of social judgment: understanding the relations between judgments of competence and warmth. *Journal of personality and social psychology*, 89(6), p.899.
- Krasno, J.S. and Green, D.P., 2008. Do televised presidential ads increase voter turnout? Evidence from a natural experiment. *The Journal of Politics*, 70(1), pp.245-261.
- Leach-Kemon, K., Chou, D. P., Schneider, M. T., Tardif, A., Dieleman, J. L., Brooks, B. P., Hanlon, M., and Murray, C. J. (2012). The global financial crisis has led to a slowdown in growth of funding to improve health in many developing countries. *Health Affairs*, 31(1):228–235.
- del Mar Garcia de los Salmones, M., Dominguez, R., and Herrero, A. (2013). Communication using celebrities in the non-profit sector: Determinants of its effectiveness. *International Journal of Advertising*, 32(1):101–119.
- McCroskey, J. C. (1969). A summary of experimental research on the effects of evidence in persuasive communication. *Quarterly Journal of Speech*, 55(2):169–176.
- Meirick, P., 2002. Cognitive responses to negative and comparative political advertising. *Journal of advertising*, 31(1), pp.49-62.
- Milburn, M. A. (1991). *Persuasion and politics: The social psychology of public opinion*. Thomson Brooks/Cole Publishing Co.
- Mundial, B. (2009). *Swimming against the tide: how developing countries are coping with the global crisis*. Background paper prepared by World Bank Staff for the G20 finance Ministers and Central Bank governors meetings. Washington-DC: World Bank.
- Park, S.-y. and Cho, M. (2015). Celebrity endorsement for nonprofit organizations: The role of celebrity motive attribution and spontaneous judgment of celebrity-cause incongruence. *Journal of Promotion Management*, 21(2):224–245.
- Piliavin, J. A. and Charng, H.-W. (1990). Altruism: A review of recent theory and research. *Annual review of sociology*, pages 27–65.
- Perloff, R. M. (2010). *The dynamics of persuasion: communication and attitudes in the twenty-first century*. Routledge.
- Petty, R. E. and Brinol, P. (2008). Persuasion: From single to multiple to metacognitive processes. *Perspectives on Psychological Science*, 3(2):137– 147.

- Petty, R. E. and Cacioppo, J. T. (1986). *The elaboration likelihood model of persuasion*. Springer.
- Rosenberg, S., Nelson, C. and Vivekananthan, P.S., 1968. A multidimensional approach to the structure of personality impressions. *Journal of personality and social psychology*, 9(4), p.283.
- Samarasekera, U. (2015). UK political parties make pledges for the wider world. *The Lancet*, 385(9979):1713–1715.
- Small, D. A., Loewenstein, G., and Slovic, P. (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.
- Smillie, I. (1999). Public support and the politics of aid. *Development*, 42(3):71–76.
- Valentino, N.A., Hutchings, V.L. and Williams, D., 2004. The impact of political advertising on knowledge, Internet information seeking, and candidate preference. *Journal of Communication*, 54(2), pp.337-354.
- Weyant, J.M. and Smith, S.L., 1987. Getting more by asking for less: The effects of request size on donations of charity. *Journal of Applied Social Psychology*, 17(4), pp.392-400.
- Wilson, E. J. and Sherrell, D. L. (1993). Source effect in communication and persuasion research: A meta-analysis of effect size. *Journal of the Academy of Marketing Science*, 21(2):101–112.
- Ziegler, R., Diehl, M., and Ruther, A. (2002). Multiple source characteristics and persuasion: Source inconsistency as a determinant of message scrutiny. *Personality and Social Psychology Bulletin*, 28(4):496–508.