Seeking the Public’s Engagement: Celebrities, Experts and the Fight Against Global Poverty

Paolo Morini

A dissertation submitted in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

of

University College London.

Department of Political Science
University College London

April 12, 2017
I, Paolo Morini, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the work.
To O, E, H, L, R, Z.
Yours are the dark sacred nights.
Yours the bright blessed days.
To G, M, C.
Everlasting lights.
To D, J.
Thanks for all the fun.
Abstract

Celebrities are a common feature of many campaigns to fight global poverty. However, increasingly, academics, practitioners, and the public express doubts on their ability to promote public engagement. Expert messengers, such as activists or NGO workers, could pose an alternative to celebrities.

To contribute to this debate, the thesis asks whether celebrities and experts can be used as effective messengers in global poverty campaigns aimed at engaging the British public. The work integrates insights from the literature on political engagement, theoretical models on persuasive communication from social psychology, and experimental social science research methods.

Research on political engagement looks at individuals’ attitudes and political behaviours towards a political issue. Effective campaigns are recognised as an important driver of both factors, with current research analysing the effectiveness of different communication strategies aimed at engaging the public.

I propose an adapted version of a dual-pathway model of information processing which looks at the persuasive role of experts and celebrities in charity campaigns. I hypothesise that trust in experts and celebrities depends on the recipients’ personal characteristics. Furthermore, I hypothesise that a celebrity endorsements of a message can act as heuristic cues to a temporary attitude and behaviour change. Expert endorsements can also work as heuristic cues, but they can also stimulate cognition around the campaign’s message. This promotes stronger changes in attitudes and behaviours.

The thesis includes three results. First, I provide evidence of the effectiveness of expert messengers, who can engage both previously uninvolved
members of the public and reinforce the engagement of previously involved ones. Secondly, I find only limited evidence on the celebrity endorsements hypothesis, with mixed results on their effectiveness at engaging uninvolved individuals. Thirdly, I find that individuals’ characteristics drive their credibility perceptions of experts and celebrities, positing that more targeted messages could increase the campaigns’ effectiveness.
Acknowledgements

Four years of work potentially require a few dozen pages to be written to thank every person who helped me and my thesis. I’ll try and keep it concise for the benefit of the reader.

Thank you Dr David Hudson, Dr Jennifer Hudson, Prof Peter John, the best supervisors I could have asked for. Thank you David: you helped me take my idea on forgotten development campaigns and celebrities all the way up to this manuscript. Your feedback, guidance, knowledge, kindness and interest were invaluable assets to complete my thesis. Thank you Jennifer, you are an inspiration: before meeting you, I had never met anyone who takes so much care in providing feedback, guidance, and precious opportunities for a student. I have grown immensely as a researcher thanks to you. Thank you Peter for the inspiration to learn how to use experimental research methods, they truly are the future of social science.

Thanks also go to the Department of Political Science at UCL for funding my PhD research, providing me with teaching and research opportunities, and, most importantly, for providing the nicest environment to do all of this in. The last five years I have spent in Bloomsbury have been the best of my life. Thank you to the administrative team, past and present, for oh-so-much-support. Helen, Gen, Ajay, Alex, Kayt, Kat, to name a few, I owe you big time. Thank you to the academic members of staff who also provided invaluable opportunities to learn, work, and grow in the Department: Lucas, Slava, Roland, and Cathy.

Thanks to the organisations with whom I worked to collect data and
disseminated results, Oxfam and The Bill and Melinda Gates Foundation. With them, the research experience and its results have come to life. I sincerely hope that my research can help out charities as they pursue the goal of making this world a better place to live.

A wider thank you also goes to everyone who commented, gave feedback and discussed the thesis with me: from audiences at the PSA, APSA, EPOP, IMEBESS conferences, to friends and colleagues at UCL. I learned a lot from all of you, and I am grateful.

Thank you to my past and present fellow PhD students, especially Javier, Orly, Sara, Florian, Ruxandra, and Manu, for your feedback, proofreading, great discussions, and, most importantly, companionship. Each and every one of you are amazing and brilliant in your own ways, and it fills my heart with joy to know that you are out there pushing boundaries, making research, and improving the world. Many people say a PhD is a lonely experience, but you allowed me to escape that curse. Thanks also go to those of you who volunteered for the task of proofreading the final manuscript, especially Orly, Charlie and Ruxandra, who put so much care in their work to help me and left me a bit tearful.

Thank you to my friends, old and new, who provided me with the most incredible support network I could have ever wished for. I might have not been lucky with my life six years ago, but coming to London and meeting all of you turned my luck upside-down. Among many, thank you Juliana, for the food, laughs, and all the other crazy things, Alessandro, who is about to start his own PhD, Leonardo, for your true friendship, and the long walks in Scotland, well punctuated by amazing fish and chips, and Eleonora, for your unmatched love of all things cultural. Also: Alisa, Sanja, Alice, Olivia, Gabrielle, Jillian, the world is a better place thanks to people like you. I am so glad I get to be your friend.

Finally to the people to whom this thesis is dedicated, who know who they are. With you, I am stronger.
Contents

1 Seeking the public’s engagement ........................................ 18
  1.1 Introduction ................................................................ 18
  1.2 UK Public Engagement with the Fight Against Global Poverty . 21
  1.3 Celebrities Join the Fight Against Global Poverty ................ 26
    1.3.1 Defining celebrity .............................................. 26
    1.3.2 Celebrities and Global Poverty .............................. 28
  1.4 Enter the Experts ..................................................... 30
    1.4.1 Defining Expertise .............................................. 30
    1.4.2 The Case for Experts ........................................... 31
  1.5 Contributions ........................................................ 33
  1.6 Structure of the thesis ............................................... 35
    1.6.1 Chapter 2: Literature Review ................................. 35
    1.6.2 Chapter 3: Theoretical Model ................................. 36
    1.6.3 Chapter 4: Methodology .................................... 37
    1.6.4 Chapter 5: Survey Data Models ............................ 37
    1.6.5 Chapter 6: Survey Experiment Analysis ................ 38
    1.6.6 Chapter 7: Conjoint Experiment Analysis ............ 39
  1.7 Moving forward ..................................................... 40

2 Literature review ........................................................ 42
  2.1 Defining political engagement ...................................... 42
    2.1.1 Political Action ................................................ 43
    2.1.2 Political Attitudes and Public Opinion .................. 46
## Contents

2.1.3 Public Knowledge and Information .......................... 50

2.2 Determinants of Political Engagement .......................... 51
  2.2.1 Public Attitudes and Public Opinion .......................... 51
  2.2.2 Political Actions: Donations and Volunteering ............... 55
  2.2.3 Campaigns and Appeals to Engage the Public ................. 58

2.3 Conclusion .................................................. 68

### 3 Theoretical framework 70

3.1 Persuasion in social psychology ............................... 70

3.2 Two pathways to persuasion .................................... 77
  3.2.1 The Elaboration Likelihood Model ............................ 79
  3.2.2 The Heuristic Systematic Model .............................. 85

3.3 Adapted and modified model .................................... 88
  3.3.1 Exogenous factors .......................................... 90
  3.3.2 Choosing source cues ....................................... 92
  3.3.3 Endogenous factors ......................................... 99
  3.3.4 Celebrity endorsement, source likability .................... 101
  3.3.5 Expert endorsement, source expertise ........................ 103
  3.3.6 Other source traits and persuasion .......................... 106
  3.3.7 Overall model and elaboration processes .................... 107

### 4 Methodology 110

4.1 Drivers of expert and celebrity credibility judgements ........ 113
  4.1.1 Recipient characteristics models ............................ 114

4.2 Source characteristics and effects of persuasion ............... 117
  4.2.1 Experiment 1: Source characteristics treatment model ........ 118
  4.2.2 Experiment 2: source characteristics scales model .......... 122
  4.2.3 Experiment 3: conjoint analysis model ....................... 124
  4.2.4 Manipulation checks across the empirical tests .............. 127

4.3 Conclusion .................................................. 127
5 Messengers credibility: a survey data approach 129
  5.1 Introduction ................................................. 129
  5.2 Survey data descriptive statistics .......................... 130
    5.2.1 Credible sources of information ....................... 131
    5.2.2 Comparing source credibility across countries ........ 135
    5.2.3 Recipient characteristics .............................. 137
  5.3 Drivers of overall credibility judgements .................... 139
    5.3.1 Age ..................................................... 139
    5.3.2 Education .............................................. 141
    5.3.3 Gender ................................................. 142
  5.4 Credibility judgements models .............................. 144
    5.4.1 Hypotheses test: expert credibility .................... 147
    5.4.2 Hypotheses test: celebrity credibility ................ 148
    5.4.3 Other drivers of credibility judgements ............... 148
  5.5 Limitations ................................................. 151
  5.6 Conclusions ................................................ 153

6 Messengers as endorsers: online survey experiments 156
  6.1 Introduction ................................................ 156
  6.2 Experimental design ........................................ 157
    6.2.1 Screening participants ................................ 157
    6.2.2 Experimental treatments ............................... 158
    6.2.3 Outcome measures ...................................... 164
    6.2.4 Personal characteristics ............................. 168
  6.3 Experiment 1 ................................................ 169
    6.3.1 Experiment 1 results: descriptives and inference .... 171
  6.4 Experiment 2 ................................................ 185
    6.4.1 Experiment 2 results: descriptives and inference .... 189
  6.5 Discussion of the results and hypothesis feedback .......... 196
  6.6 Limitations and further research steps ..................... 199
  6.7 Conclusions ................................................. 200
7 Persuading the public to take action: conjoint experiments

7.1 Design of the conjoint experiment
   7.1.1 Messenger attributes
   7.1.2 Message attributes
   7.1.3 Choices format

7.2 Sampling and descriptive statistics
   7.2.1 Manipulation checks
   7.2.2 Descriptive statistics for outcome variables

7.3 Analysis of results
   7.3.1 Experiment 1 replication
   7.3.2 Experiment 2 replication
   7.3.3 Conjoint analysis

7.4 Limitations and extensions

7.5 Discussion of the results

7.6 Conclusions

8 Conclusions

8.1 Discussion of the main findings

8.2 Implications of the findings
   8.2.1 Theoretical model feedback
   8.2.2 Methodology feedback
   8.2.3 Policy implications

8.3 Future research and limitations

Appendices

A Scripts for experiments 1, 2 and 3

A.1 Script for experiments 1 and 2
   A.1.1 Full script
   A.1.2 Treatments
   A.1.3 Post-treatment measures - attitudes and cognition
   A.1.4 Post-treatment measures - behaviour intentions
List of Figures

3.1 Flowchart of the theoretical model ........................................ 89
6.1 Generic version of the appeal used in the survey experiment .... 160
6.2 Interaction effects plot ..................................................... 183
7.1 A version of the appeal used in the conjoint design endorsed by
    a volunteer .................................................................... 211
7.2 Replication 1: interaction plot for donation intentions ............ 224
7.3 Replication 1: interaction plot for petition intentions ............. 226
7.4 Replication 2: interaction plot for petition intentions ............. 229
7.5 Replication 2: interaction plot for donation intentions ............ 230
7.6 Experiment 3: interaction plot for donation intentions .......... 236
8.1 Flowchart of the theoretical model ........................................ 255
A.1 Generic appeal without endorsement used as control treatment . 267
A.2 Expert endorsed appeal as expert treatment .......................... 268
A.3 Celebrity endorsed appeal as celebrity treatment ................. 269
A.4 Activist 1 ..................................................................... 273
A.5 Activist 2 ..................................................................... 273
A.6 Activist 3 ..................................................................... 273
A.7 Activist 4 ..................................................................... 273
A.8 Aid recipient 1 .................................................................. 273
A.9 Aid recipient 2 .................................................................. 273
A.10 Aid recipient 3 ................................................................. 274
List of Figures

A.11 Aid recipient 4 ...................................................... 274
A.12 Celebrity 1: Idris Elba ........................................... 274
A.13 Celebrity 2: MIA .................................................... 274
A.14 Celebrity 3: Bill Nighy .......................................... 274
A.15 Celebrity 4: Emma Watson ...................................... 274
A.16 Frontline 1 .......................................................... 275
A.17 Frontline 2 .......................................................... 275
A.18 Frontline 3 .......................................................... 275
A.19 Frontline 4 .......................................................... 275
A.20 Volunteers 1 .......................................................... 275
A.21 Volunteers 2 .......................................................... 275
A.22 Volunteers 3 .......................................................... 276
A.23 Volunteers 4 .......................................................... 276
A.24 Appeal A ............................................................. 280
A.25 Appeal B ............................................................. 280
List of Tables

4.1 Summary of the methodological approaches of the thesis . . . . 112

5.1 Sources in the credibility question . . . . . . . . . . . . . . . . . 131
5.2 Summary statistics for source credibility questions . . . . . . . 132
5.3 Factor loadings from principal-component factor analysis . . . . 133
5.4 Credibility rates of experts and celebrities across the four AAT
countries . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 135
5.5 Summary statistics for demographics . . . . . . . . . . . . . . . 137
5.6 Descriptive variables coding schema . . . . . . . . . . . . . . . . 138
5.7 Age group differences in credibility evaluations . . . . . . . . . . 140
5.8 Education group differences in credibility evaluations . . . . . . 141
5.9 Gender differences in credibility evaluations . . . . . . . . . . . 143
5.10 Gender differences considering undecided answers . . . . . . . 144
5.11 Full credibility judgement models . . . . . . . . . . . . . . . . 146
5.12 Summary table for regression model findings . . . . . . . . . . . 154

6.1 Trait scores for expert and celebrity . . . . . . . . . . . . . . . 163
6.2 Behaviour intentions actions . . . . . . . . . . . . . . . . . . . . 167
6.3 Factor loading scores for the overall intention to get involved
index . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 168
6.4 Factor loading scores for the overall intention to get involved
index . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 168
6.5 Summary statistics for whole sample . . . . . . . . . . . . . . . 170
6.6 Summary statistics broken down by treatment groups . . . . . . 171
### List of Tables

<table>
<thead>
<tr>
<th>Section</th>
<th>Table Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.7</td>
<td>Treatment groups and completion/treatment times</td>
<td>171</td>
</tr>
<tr>
<td>6.8</td>
<td>Information retention indicators</td>
<td>173</td>
</tr>
<tr>
<td>6.9</td>
<td>Thoughts indicator</td>
<td>174</td>
</tr>
<tr>
<td>6.10</td>
<td>Interaction term models for information retention and cognition</td>
<td>176</td>
</tr>
<tr>
<td>6.11</td>
<td>Attitudinal measures</td>
<td>179</td>
</tr>
<tr>
<td>6.12</td>
<td>Regression results</td>
<td>182</td>
</tr>
<tr>
<td>6.13</td>
<td>Marginal effects on intention to get involved</td>
<td>184</td>
</tr>
<tr>
<td>6.14</td>
<td>Single scale scores broken by treatment group</td>
<td>186</td>
</tr>
<tr>
<td>6.15</td>
<td>Expertise and attractiveness scores frequency by treatment group</td>
<td>186</td>
</tr>
<tr>
<td>6.16</td>
<td>Summary statistics for whole sample</td>
<td>188</td>
</tr>
<tr>
<td>6.17</td>
<td>Summary statistics broken down by treatment groups</td>
<td>188</td>
</tr>
<tr>
<td>6.18</td>
<td>Treatment groups and completion/treatment times</td>
<td>189</td>
</tr>
<tr>
<td>6.19</td>
<td>Scale models: cognition and information retention</td>
<td>190</td>
</tr>
<tr>
<td>6.20</td>
<td>Treatment group models: Information retention and cognition</td>
<td>191</td>
</tr>
<tr>
<td></td>
<td>indicators</td>
<td></td>
</tr>
<tr>
<td>6.21</td>
<td>Scale models: attitude indicators</td>
<td>192</td>
</tr>
<tr>
<td>6.22</td>
<td>Minima-to-maxima effects for scale models on attitudes</td>
<td>193</td>
</tr>
<tr>
<td>6.23</td>
<td>Treatment group models: attitude indicators</td>
<td>193</td>
</tr>
<tr>
<td>6.24</td>
<td>Scale models: behaviour intentions</td>
<td>195</td>
</tr>
<tr>
<td>6.25</td>
<td>Treatment group model: intention to get involved</td>
<td>196</td>
</tr>
<tr>
<td>6.26</td>
<td>Summary table for experimental findings</td>
<td>197</td>
</tr>
<tr>
<td>7.1</td>
<td>List of messengers included in the conjoint design</td>
<td>210</td>
</tr>
<tr>
<td>7.2</td>
<td>Sample summary statistics</td>
<td>214</td>
</tr>
<tr>
<td>7.3</td>
<td>Median response times by messenger category</td>
<td>215</td>
</tr>
<tr>
<td>7.4</td>
<td>Median response times by task</td>
<td>216</td>
</tr>
<tr>
<td>7.5</td>
<td>Manipulation checks results</td>
<td>217</td>
</tr>
<tr>
<td>7.6</td>
<td>Intentions to donate by messenger category</td>
<td>219</td>
</tr>
<tr>
<td>7.7</td>
<td>Intentions to sign a petition by messenger category</td>
<td>220</td>
</tr>
<tr>
<td>7.8</td>
<td>Probability of choosing an appeal by messenger category</td>
<td>220</td>
</tr>
<tr>
<td>7.9</td>
<td>Experiment 1 replication - chosen messengers</td>
<td>222</td>
</tr>
</tbody>
</table>
List of Tables

7.10 Experiment 1 replication results .................................. 223
7.11 Experiment 2 replication results .................................. 228
7.12 Conjoint analysis results .......................................... 234
7.13 Odds ratios for the conjoint choice models ....................... 237
7.14 Summary table for the findings of chapter 7 ....................... 244

B.1 Results of pilot study on choice format ............................ 283
B.2 Coherence in behaviour intention measures ....................... 284

C.1 Effects of treatments in the conjoint experiment broken down
   by choice tasks ....................................................... 286
C.2 Likelihood of choosing the default option across choices .......... 287
C.3 Choice models from chapter 7 revised with further controls .... 288
Chapter 1

Seeking the public’s engagement

This thesis aims to establish whether celebrities and experts can be used as effective messengers to engage the public with campaigns fighting global poverty in the United Kingdom.

In this introduction I begin this discussion by contextualising and motivating my question. I look at the involvement of celebrities in global poverty campaigns, their shortcomings in maintaining the already weak levels of public engagement with global poverty in the UK, and propose experts as a more effective alternative for the task. Following the discussion around context and motivation, I present an overview of the thesis, and show my theoretical, empirical, and practical contributions to the literature and practice of global poverty campaigns.

1.1 Introduction

In the past thirty years, the celebrities’ supposed capacity to raise awareness on global poverty, and to engage the public in the fight against it have been one of the most defining features of high profile campaigns run both by development charities and international organisations.

In the autumn of 2014 Victoria Beckham, former Spice Girls singer and world-famous fashion icon, was appointed as UN Ambassador for the UNAIDS campaign\(^1\). In many ways, her acceptance speech encapsulates the nature of

\(^1\)See: http://www.unaids.org/en/aboutunaids/unaidsembassadors/VictoriaBeckham
celebrities’ involvement in humanitarian causes. In her acceptance speech, she portrays herself as a triple character. Firstly, she’s a celebrity: “for some reasons, people will listen to what I have to say. [...] I have a voice that people will listen to”. Secondly, she’s inexperienced but feels the necessity to take action to fight global poverty: “I want to do whatever it is that I can do to lend my voice to raise awareness. [...] I didn’t know what I had to do, but I had to do something”. And finally, she is a symbolic bridge between a world of potential donors and a world of people who suffer: ”I am a passionate supporter of women [...] as a woman and a mother, I have a responsibility to support other women”.

Victoria Beckham is also not alone. In a study by Samman et al. (2009), the authors show a list of 30 celebrities, including singers like Bono, Geri Halliwell or Beyonce, and actors such as Pierce Brosnan, Richard Gere and George Clooney, as being recognised by the Irish audience as highly involved with global poverty campaigns and causes. The famous website Look to the Stars\(^2\), a search engine for potential donors who can look for the charities which their celebrity idols support, includes entries for 3,811 celebrities. Highly active figures such as Elton John are listed as supporting 57 charities and 33 causes. Victoria Beckham, on the other hand only supports 14 charities and 23 causes. Littler (2008), reflecting on this context, affirms that the endorsement of charities “has become part of the contemporary celebrity job description” (ibid. p.238).

For Victoria Beckham, and, in general, for celebrities, their visibility and social attractiveness are their instruments to engage the public on issues surrounding global poverty. However, as skepticism about their roles as change-makers rises and their capacity to actually engage the public with global poverty without the required expertise on the topic is questioned, the celebrity-based engagement approach deserves to be researched further.

Furthermore, challenges such as the rise of political and economic nar- 

\(^2\)https://www.looktothestars.org/celebrity
1.1. Introduction

Narratives which prioritise slashing aid expenditure and focusing on poverty at home increase the importance of research on how to build effective campaigns to engage the public with the fight against global poverty. This is important both at the macro level, as campaigns become instruments to convey images of global poverty and mobilise resources to fight it, and at the micro level, with members of the public making decisions to get involved with global poverty in an increasingly complicated information environment.

In this thesis I ask whether celebrities, working as messengers in charity campaigns, can achieve the goals of engaging the public by raising their concern for global poverty, increasing their knowledge of it, and promoting action towards solving it. As concerns are raised in academic research about their connection with transactional engagement frames, their lack of credibility in the public eye, and their role as symbols of inequality, I ask whether expert messengers, such as researchers, NGO workers, or volunteers, can work as alternative effective messengers to engage the public. Expert messengers, potentially, could be a source of better (and more credible) information on global poverty, and could promote deeper forms of political engagement, moving away from the transactional and consumeristic engagement frames often associated with celebrity humanitarianism. I introduce, contextualise and analyse these two categories, which is at the heart of this thesis, in this introductory section.

These questions on the effectiveness of expert and celebrity endorsers are elaborated further into more specific sub-questions. First, I ask whether the personal characteristics of members of the public are associated with different perceptions of celebrities’ and experts’ credibility, and show how tailor-making charity campaigns can increase their effectiveness as public engagement instruments. Using observational data I show that when the public is seeking information on global poverty, expert messengers are seen as more credible than their celebrity messengers counterparts. Furthermore, younger individuals, who identify as women and who are on the left of the political spectrum, are more likely to trust expert messengers. Moreover, younger individuals
are also more likely to trust celebrities. An effective engagement campaign would benefit from explicitly considering how specific messengers can be used to target specific segments of the public to increase the persuasive power of its messages.

Secondly, using three experimental tests, I ask whether celebrities or experts used as messengers in charity campaigns can affect public attitudes, information retention, and behavioural intentions to get involved with the campaign. I find that the evidence of the effectiveness of celebrity endorsements as part of charity campaigns engaging the public is, at best, weak. When looking at levels of public engagement generated through different appeals, celebrity endorsed appeals often perform comparably to (or, in some instances, underperform) generic appeals, with no evidence of celebrity endorsements producing any significant positive effect. Conversely, the effectiveness of expert endorsers is confirmed throughout the tests. An expert endorsed appeal, compared to a generic appeal, will result in participants caring more for global poverty, remembering more about the contents of the appeals, and intending to get more involved, taking action to support the campaign itself.

In this introduction presenting the empirical investigations of the thesis, I first look at the three core concepts of political engagement with the fight against global poverty in the UK, celebrities, and experts.

1.2 UK Public Engagement with the Fight Against Global Poverty

In 2015, the United Kingdom allocated £12.2 billion to Official Development Assistance (ODA), 0.7% of the country’s Gross National Income (GNI) (DFID, 2015). Political commitment to keeping the ODA expenditure to 0.7% of GNI is ensured by the International Development Act of 2015 (DFID, 2015), in what is recognised, worldwide, as a leading position on fighting global poverty (House of Commons, 2009; Glennie et al., 2012). The public sector’s commitment, together with the fact that many British charities, such as Oxfam, have
been at the forefront of the global response to poverty, and that many of the most famous campaigns, such as the Live Aid and Live Eight concerts, or Make Poverty History and the IF campaigns were ideated by British celebrities and academics, make Britain an interesting setting to study public engagement with global poverty.

While the public sector’s commitment has been recognised as world-leading, on the other hand, in the individual sphere, looking at levels of public support for aid expenditure, and levels of concern for issues associated with global poverty, the current state of affairs in the UK is not particularly encouraging. Smillie (1999) famously speaks of support as being “a mile wide and an inch deep” (ibid. p.78), as levels of concern for global poverty in the UK remained relatively high in the last decade (Henson and Lindstrom, 2011), but this has not translated to strong support for aid expenditure or, in the private sphere, to more behavioural engagement with the work of charities who fight poverty in poor countries (Darnton and Kirk, 2011). Darnton and Kirk’s Finding Frames report (2011) also argues that UK citizens are “stuck in the 1980s” (ibid. p.6) when it comes to certain aspects of their political engagement with global poverty: they have out of date knowledge, declining levels of interest in poverty-related topics and are not supporting new, courageous political actions to tackle global poverty in the long run.

The importance of healthy levels of public engagement to address political issues and create political change is widely debated in the political science literature. Specifically, Darnton and Kirk (2011) see public engagement as fundamental in tackling global poverty. The authors discuss the triple role of the UK public in tackling global poverty. First, the public can express support for government expenditure on development aid. Secondly, the public can also take direct action to support charities with money or personal time (which is the object of discussion of this thesis). Finally, the public’s engagement matters, as, according to Darnton and Kirk (2011), there can be no systemic change on issues as profound as global poverty if the public is not involved
The study of public support and political engagement with global poverty is complicated by the lack of a valid indicator to measure these concepts or a simple strategy to observe and discuss them (Hudson and VanHeerde-Hudson, 2012). For example, when considering public attitudes, on the one hand the UK public is in favour of cutting aid to reduce the public budget deficit (Lindstrom and Henson, 2011), but on the other hand levels of concern for global poverty remain relatively high among public members (Bond, 2015a). If, instead, behavioural engagement indicators are considered, the total amounts donated by the UK public has decreased in the last four years (Charities Aid Foundation, 2015), even though the public’s support for the work of charitable organisation in developing countries has remained strong in the last decade (Lindstrom and Henson, 2011).

Levels of UK public engagement with global poverty are also facing challenges from three further directions. First, the rising influence of UKIP in British politics; secondly, the aftermath of the 2007 financial crisis; and finally, issues around corruption in poor countries promoting narratives of aid expenditure being wasted.

In the most recent elections, UKIP included an explicit pledge to cut expenditure on development aid in their political programme (Samarasekera, 2015). This might have not been considered a noteworthy challenge three years ago, as all three major parties were agreeing to ring-fence aid expenditure allocation in the UK budget (Henson et al., 2010). However, the party’s relevance in political discourse has increased, especially after the results of the 2016 referendum on the UK membership of the European Union. As an example, consider the petition which appeared on the official UK Government and Parliament website (2016), backed by the Daily Mail and UKIP, asking Parliament to reconsider the current legal provision that ensures that 0.7% of the UK GNI is spent on aid. The petition, which received widespread coverage and was debated in parliament, had received 235,232 signatures a month prior
its closing deadline. The arguments advanced by UKIP to cut development aid expenditure are often based in the two further challenges which I consider next: the weak post-financial crisis economic recovery, and the issues with corruption in developing countries.

Public support for development aid could be negatively affected by the aftermaths of the 2007 financial crisis (Lindstrom and Henson, 2011), with the weak economic recovery reinforcing a charity begins at home discourse among the British public. There are political and economic dimensions to this issue. As I discussed above, political parties in the UK have relied on the narrative of the weak recovery to push for a slashing of aid expenditure, as the nation’s wealth can be better used at home. Furthermore, as empirical data became available, works started discussing the extent of the impact of the financial crisis on aid expenditure. For example: Fuchs et al. (2014) shows a correlation between recessions and decreases in aid expenditure, while Leach-Kemon et al. (2012) and Mundial (2009) show how international institutions and charities had to step in to maintain health and poverty-reduction expenditure levels in developing countries after the financial crisis.

Finally, in this climate of new political challenges and slow economic recovery, concerns for levels of corruption in developing nations (Marquette, 2014) have become more widespread in public discourse. These concerns pose doubts on money earmarked for development aid being wasted by corrupted leaders, with development interventions portrayed as ineffective, irrespective of many stories of successes in the fight against global poverty in the last fifteen years. The recent work by Bauhr et al. (2013) confirms these concerns, as the authors uncover a negative effect of perceptions of corruption on support for aid expenditure in the EU.

These threats to the current levels of public engagement with global poverty could have negative effects on the UK’s role as a European, or even global, leader on development aid expenditure if a political mandate ceased to exist (House of Commons, 2009). Furthermore, the threats I discussed could
also affect NGOs legitimacy and capacity to seek and reach goals in fighting
global poverty, as less money and time are donated to charities and levels of
social trust in the development sector decrease.

In the current climate of unsatisfactory (and potentially threatened) lev-
els of political engagement, understanding how to effectively campaign to get
the public involved with global poverty becomes a relevant question for both
academics and practitioners. Darnton has focussed on campaigns throughout
many of his works (see, for example, Darnton, 2006; Darnton, 2007; TNS,
2010), discussing how narratives and communication strategies are fundamen-
tal in driving public support for fighting global poverty. If levels of public
engagement are not satisfactory, the author argues, it is because the current
campaigning frames are not effective at engaging the public. Specifically, in
Finding Frames, Darnton and Kirk (2011) look at issues with short term, trans-
actional frames of public engagement, often including celebrity endorsements,
which are unable to promote sustained forms of engagement.

Furthermore, in the same report the authors discuss the lack of informa-
tion about global poverty in the public, the lack of awareness about the results
which have been achieved in the fight against it and the future goals in the
broader poverty reduction framework. Campaigns are once again to blame
here, as transactional engagement frames, or emotional celebrity-endorsed ap-
peals, might have been effective to create spikes in public attention\(^3\), but have
failed to promote deeper levels of engagement (Fransman and Lecomte, 2004,
McDonnell et al., 2003).

In the realm of effective and ineffective campaigns, I focus on issues related
to the types of messengers in these campaigns. Throughout the thesis I look at
celebrities as messengers in global poverty campaigns, as questions are raised
about their effectiveness to increase the concern of the public and increase their
willingness to donate. By contrast, I look at experts as messengers in the same
campaigns, and how they could promote deeper forms of engagement, moving

\(^3\)This is discussed, for example with regards to Make Poverty History in 2007 in the work
by Hilder et al., 2007
forward from the transactional and material frames associated with celebrity endorsements. I look at each of these messengers in the next two sections.

1.3 Celebrities Join the Fight Against Global Poverty

Celebrities involved in humanitarian causes have captured the attention of the global public, the media, and, more recently, political scientists. From Audrey Hepburn’s UNICEF ambassadorship, through Bob Geldof’s Live Aid or Bono Vox’s RED campaign, to the most recent examples such as Emma Watson’s UN He for She campaign, celebrities have been a prominent feature of many global campaigns which seek to address issues around global poverty.

In this context, celebrities have worked as messengers of stories of distant suffering, endorsers of charity campaigns, while some even started their own charities. Some celebrities involved with global poverty even become political figures in their own right, as is the case, for example, of Bob Geldof, who was invited by Tony Blair, then UK Prime Minister, to become a member of the UK Commission for Africa.

Academics have recently joined the debate on the importance of celebrities in politics (Mostafanezhad, 2015) and, more specifically, in humanitarian causes and global poverty affairs (Brockington, 2014a) In this section I first discuss how past research defines the concepts of celebrity and celebrities, introducing the arguments for and against the involvement of celebrities in global poverty and humanitarian campaigns.

1.3.1 Defining celebrity

Finding a useful way to define celebrity, is source of academic debates and a few headaches, especially if one considers Boorstin’s (2012, p. 61) definition of the celebrity as someone “known for [their] well-knownness”. However, with an

---

4The list is is rich with examples including famous organisations such as George Clooney’s and Brad Pitt’s Not On Our Watch, Ben Affleck’s East Congo Initiative or Matt Damon’s Water.org
increasing academic interest in the figure of celebrities and their involvement in politics and humanitarian affairs. Many works now offer their perspectives on ways to define the concept at hand.

Alberoni, who looks at celebrity and fame as part of his sociological research, titles his work looking at stardom and celebrity, the “[p]owerless elite” (2007), seeing celebrities as members of the elite, known to the public for their charisma, and, in certain cultures, for their god-like fame, which keeps them separated from other members of the same society. Boltanski and Thévenot (1991), in a similarly sociological key, talk of celebrities as socially visible or recognisable individuals characterised by “a state of superiority, in a world where opinion is the defining instrument for measuring different orders of ‘greatness’” (quoted in the work by Richey, 2015 p.8).

Other useful perspectives emerge in works on topics of celebrity humanitarianism. Chouliaraki (2006, 2010, 2013) sees celebrities as theatrical figures, who perform as actors of post-humanitarian societies. For Chouliaraki, celebrities act as links between the general public and the more selective elite groups, representing the feelings and concerns of the broader society (Chouliaraki, 2013). Brockington, similarly, discusses the meaning of celebrity both informally and formally in his book (2014). He sees celebrities as “stars, artists, talent or personalities” (ibid. p. xxii), who exist as part of a post-democratic system, and who try to act as bridges between the masses and the elites, but end up being an expression of that same elitism they seek to connect with the public. More concretely, he then specifically defines celebrities as “sustained public appearances that are materially beneficial, and where the benefits are at least partially enjoyed by people other than the celebrities themselves” (ibid. p.xxi). Finally, Richey (2015) remarks how celebrities and their public act as mutually constituted categories, as one cannot exist without the other, even though research on effective charity campaigns often does not explicitly consider the interaction of audiences and celebrity endorsers.

The work by Driessens acknowledges the fact that many definitions exist
1.3. Celebrities Join the Fight Against Global Poverty

in the literature. In an attempt to unify these conceptualisations, the author discusses how celebrity is an “unstable category” (Driessens, 2013, p.557), an apparatus made up by celebrities, the industries surrounding them, their public, and the media (ibid.). A further useful common criterion to identify celebrities, discussed across many of the definitions, is their visibility, their capacity to use the media for their own or other people’s gains, and their recognisability by an audience, or a public. Thinking more specifically about global poverty campaigns, Alberoni’s idea of the powerless elite or Boorstin’s well knownness are equally important in capturing the idea of celebrities as individuals whose social merits come down to their social desirability and attractiveness, and not to their relevant talents, or knowledge of global poverty and humanitarian causes.

Overall, when this thesis refers to celebrities, I am thinking of individuals who enjoy the benefits of social visibility and attractiveness in the eyes of the public, and who can use their connections with the media to increase the persuasiveness of causes and campaigns, but who are not experts in matters of global poverty. As I discuss in later sections, other factors could also be associated with celebrities, and messengers more in general, such as trustworthiness or authenticity. However, the focus on attractiveness facilitates a test of the existing literature on the effect of celebrity endorsements in the specific case of charity appeals, and presents an useful contrast to messengers who rely on their expertise in persuasive communication.

1.3.2 Celebrities and Global Poverty

A growing collection of contemporary research on celebrities has aimed to evaluate the positive and negative sides of their involvement with global poverty and humanitarian campaigns. While these are discussed in more detail in the next chapter, here I introduce the debate surrounding celebrities as effective messengers in global poverty campaigns.

Some academic voices have been fully in support of celebrities as they got involved with global poverty and politics, with authors arguing that celebrities
can increase the attention of the public and, higher up, of decision makers on issues related with global poverty (Cooper, 2007; Wheeler, 2013). Other voices have taken a more critical approach, discussing both the positive and negative sides of celebrities. For example Chouliaraki (2013) discusses how celebrities can work as bridges between donors and audiences in the North, and distant others who suffer in the South, but also observes that this bridging act simultaneously reinforces the distances separating sufferers and northern audiences. Brockington (2014a) instead focuses on the potential of celebrities as awareness-raising actors, and as channels for the public and NGOs to influence the decisions of governments fighting global poverty, but also shows that their involvement, at best, promotes apolitical and shallow forms of public engagement.

Finally, academics such as Darnton and Kirk (2011), Dieter and Kumar (2008), and Kapoor (2012) have been much more critical of the involvement of celebrities with global poverty and humanitarian campaigns, arguing that celebrities oversimplify issues of global poverty, profit from the pains of distant others, maintain the structural inequality which they claim to fight, and are too closely linked with consumeristic frames of political engagement to promote meaningful engagement with a long term issues such as global poverty.

The most important issues raised in the literatures on celebrities and their involvement with global poverty campaigns, which I discuss in the next chapter, are summarised in four statements: firstly, although decisions to use celebrity endorsements in charity campaigns rest on the assumption that the public care about the thoughts, actions, and interests of celebrities, this assumption does not rest on strong evidence and needs to be researched further; secondly, celebrities as messengers of charity campaigns fail to provide an authentic, knowledgeable, or valuable account of global poverty issues. Furthermore, the public demands to know more from sources which they see as more credible; thirdly, celebrities are inherently linked with consumeristic frames of engagement when they get involved with global poverty, which might work
to increase the public’s willingness to donate to humanitarian causes, but fail at promoting deeper and more meaningful forms of engagement. Moreover, evidence is still scarce on celebrities’ capacity to promote such forms of transactional engagement; fourthly, celebrities promote such weak forms of engagement with top-down strategies for which they are not able to be held accountable to the public.

The test of celebrities’ efficacy in increasing the public’s involvement with global poverty and mobilising resources to fight it is the first half of my theoretical and empirical contributions to this thesis. In the next section I argue that experts could pose a valid alternative to celebrities as instruments to engage the public in global poverty campaigns.

1.4 Enter the Experts

Expert and experienced messengers such as NGO workers, volunteers, and activists could pose a solution to many of the celebrity-related issues I discussed in the last section. Theories from social psychology, and a small but growing literature on effective charity campaigns, show that these messengers can be seen as more credible sources of information, can share their direct experiences of global poverty with the public, and can promote deeper forms of public engagement in charity and global poverty campaigns. In the next subsection, I first begin by reviewing theoretical discussions around the concepts of experts and expertise, following which, I discuss how experts can specifically work to address the shortcomings associated with celebrities.

1.4.1 Defining Expertise

If a celebrity is a person known for their well-knownness, then an expert is known for their knowledge or experience on a specific matter. Experts are individuals who, the public can assume, will make valid assertions (Hovland et al., 1953) and will have correct stances on an issue (McGuire, 1969). Works in the field of persuasive communication also distinguish between experts, such as academics, scholars, researchers, and actors with expertise, such as a volun-
1.4. Enter the Experts

Expertise, theoretically, is defined as the trait comes from the “ability to provide information because of [their] experience, education, or competence” (Horai et al., 1974). When I consider experts in this thesis, I refer to both expert messengers and messengers with expertise, such as researchers who work with charities, NGO workers intervening in developing countries, but also activists and volunteers.

Although expert voices feature in academic debates around global poverty, and in charity campaigns, to date there is no specific or comprehensive study presenting evidence on the importance of expert (and the expertise of) messengers in charity and global poverty campaigns. This is, largely, the second half of the final goal of the empirical investigations composing this thesis. In the next subsection I discuss how experts can overcome the shortcomings of celebrities.

1.4.2 The Case for Experts

There are two main arguments supporting the use of expert messengers over celebrities in charity campaigns: first, if the public is uninterested to celebrities, and skeptic of appeals endorsed by them, experts are more likely to be trusted by the public (Cialdini, 2001), and can be used as messengers to promote deeper forms of engagement with the contents of messages in campaigns (Iyengar and Valentino, 2000), and to increase the persuasiveness of the campaigns’ demands (Biswas et al., 2006); secondly, celebrities fail as effective messengers of global poverty campaigns in view of both the broad call for educating the public in donor countries about development, global poverty and inequality (Bryan, 2013; Biccum, 2011), and the public’s own demand for more (and more credible) information (Glennie et al., 2012, Orgad and Vella,

---

5Pantti (2015) thinks of these two categories as common members of the public transformed in NGO workers, fundraisers, and campaigners. These figures have featured in charity appeals starting in the 1980s, before the focus of campaign switched back more heavily towards donors in the 1990s (Vestergaard, 2014).
Experts here have both the advantage of their knowledge, and their experience of global poverty, and, especially for messengers such as volunteers, can be seen as more authentic mediators of stories of distant suffering (Pantti, 2015). Expert messengers, however, also raise questions pertaining to their untested effectiveness as part of charity campaigns: can experts be as good as celebrities at increasing the involvement of the public with development and charity causes and at mobilising resources to fight global poverty?

Some of the academics involved in the current debate surrounding engagement with global poverty have also raised questions on the use of experts in charity campaigns. Kapoor (2012), for example, expresses caution at the idea of technocratising humanitarianism by devolving choices and conveyance of stories of global poverty to experts, as experts could be used as depoliticised figures to push for policies and decisions which are unpalatable to the global public. Furthermore, volunteers and voluntary organisations have fallen under criticism as the experience of volunteers could privatise and individualise the experience and significance of global poverty issues, in the long term contributing to a depoliticisation and a de-democraticisation of the fight against these, as private citizens are put in charge of poverty reduction and public engagement strategies (Pantti, 2015).

Finally, the assumption that experts can be trusted as credible sources of information may not hold in the real world for members of the public. In what is an anecdotal but interesting case, consider Michael Gove’s declarations during the UK referendum on the EU membership, that people had “had enough of experts in this country”\(^6\). Some researchers are already heralding a new era of post-truth politics, in which heuristic rules become more important than hard facts (Achen and Bartels, 2006). Evidence on this matter is scarce, and the question is worth asking and investigating in this thesis. This final point connects to the debates around the failure of pity-based frames in the portrayal of distant suffering (Chouliaraki, 2010), and the inevitable questions

---

\(^6\)As quoted on the Financial Times on the 3rd of June, 2016: http://on.ft.com/20XWALR
of what should be done next, and whether less emotional and more factual or informational frames could work better.

To sum up, expert messengers propose a useful alternative to celebrities as instruments to engage the public with global poverty. Both messenger categories however come with their relative strengths and weaknesses. On the one hand, celebrities are seen as visible, socially attractive and persuasive messengers who can increase engagement with global poverty causes and promote engagement with the fight against it. However, their credibility and their promotion of consumeristic and apolitical engagement in the public has been criticised, and little evidence actually exists on their capacity to even promote transactional engagement in the public. On the other hand, expert messengers are potentially more credible and could be used to move away from transactional frames of engagement and to promote a better understanding of global poverty through campaigns. However, critics of the involvement of experts in global poverty have also suggested that their credibility in the public’s eyes might be limited, and that, potentially, experts too could depoliticise and personalise the fight against global poverty. Evidence of the effectiveness of expert messengers as instruments to engage the public is also scarce in current research, giving space for empirical research to assess these questions and compare their performance with the celebrities’.

1.5 Contributions

The most important contribution of this thesis is to the literature on effective campaigns seeking to engage the public with the fight against global poverty (see, for example, Kotler and Kotler, 1999; Newman, 1999). The theoretical approaches which I adopt from the social psychology literature allow me to explicitly consider whether and by what means experts and celebrities as messengers in charity campaigns can be used to effectively engage the public with global poverty.

More specifically, I contribute to the discussions surrounding the funda-
mental role of messengers in campaigns as heuristic cues for members of the public who seek to get involved with a specific issue (DeBono and Harnish, 1988; Homer and Kahle, 1990; Iyengar and Valentino, 2000; Mondak, 1993; Petty and Cacioppo, 1984b; Petty et al., 1987; Wilson and Sherrell, 1993). Expert and celebrity heuristics are popular in the psychology and marketing literatures, but these insights are just as important in political science. This is especially true in the light of the growing interest in behavioural insights in policy, politics and economics (Hausman and Welch, 2010; Thaler and Sunstein, 2008). Furthermore, while works in this literature show how heuristics can be used to produce policy and political change in the public, works often don’t consider the conditions of such heuristics becoming available to individuals in the public, or the differences between short and long term effects of using heuristics to engage with politics. However, dual pathway models from social psychology, applied to this political choices scenario, explicitly allow me to understand the conditions under which heuristics are activated, and their effects on political engagement.

My second contribution to the academic literature, and specifically to methodological research, is on the use of conjoint designs to test for the effectiveness of multiple components of a political campaign at engaging the public (Hainmueller et al., 2014b,a). Conjoint-designed experiments offer the advantage of modelling choice experiments with a level of complexity much closer to real world choices than classic treatment allocation designs. In this thesis I discuss how the design of choice formats, and the inclusion of manipulation checks, are fundamental to guarantee the internal and external validity of the experimental findings.

The empirical evidence from the tests of this thesis is also positioned to have useful implications for actors in the charity sector who wish to design more effective campaigns. My results show new perspectives on how explicitly considering audiences when choosing messengers for a charity campaign can increase its overall effectiveness. Audiences aside, the evidence on the effec-
tiveness of celebrity messengers is very limited and confined to their impact on the public’s attitudinal responses. On the other hand, expert messengers, especially NGO workers and volunteers, affect the public’s attitude, engagement with the contents of the appeal, and the intentions of the audiences to get involved with the campaigns’ demands. These experts can be used to move away from the celebrity endorsement strategies of engagement in these campaigns, to promote public engagement which goes deeper than simple charity donations, to increase the public’s knowledge, and move from awareness of global poverty issues to action in the fight against it.

1.6 Structure of the thesis

The thesis is articulated in 8 chapters, from this introduction, to the conclusions of chapter 8. The core chapters are discussed in more detail in the next six subsections.

1.6.1 Chapter 2: Literature Review

In the literature review I discuss how past works such as those by Putnam (1995), Verba et al. (1995), Carpini et al. (2004), and Brady (1999) have discussed the need for a broad definition of political engagement, but also acknowledge a lack of conceptual consensus in the literature. Following the work of Adler and Goggin (2005), and Ekman and Amna (2012), I look specifically at three indicators of individual engagement with politics: seeking information and knowledge, holding attitudes and opinions, and taking political actions.

I discuss works on determinants of political engagement, including evidence on determinants including personal characteristics such as income, political identity, personal values, and education. I highlight the need for further research which more specifically considers the determinant of public engagement with global poverty. More specifically, I analyse works on situational engagement-driving factors, such as effective campaigns, as instruments to engage the public with political issues. As part of this body of work, I discuss research which analyses how celebrities have been used as endorsers of charity
campaigns to increase the public’s willingness to donate. Works in this area show conflicting evidence on the effectiveness of celebrity endorsements (Park and Cho, 2015; del Mar Garcia de lo Salmones et al., 2013). This, together with a lack of work on expert endorsements, or analysis of how celebrity or expert messengers influence other forms of political engagement, is the gap in the literature which I seek to address with my research.

1.6.2 Chapter 3: Theoretical Model

In this chapter, I show how models on information elaboration from social psychology are helpful both in understanding persuasive communication, how this can be implemented in political campaigns, and in how experts and celebrities factor in as part of these attempts to engage the public.

I begin by presenting an overview of the concept of persuasion, and how its study evolved through time, from the Yale school approach (Hovland et al., 1953), to contemporary dual pathway models like the Elaboration Likelihood Model (Petty and Cacioppo, 1986), and the Heuristic Systematic Model (Chaiken and Eagly, 1989). I focus on dual pathway models and adapt my own version, which looks more closely to persuasion in the case of charity appeals. In my adapted model, I discuss how individuals who are not engaged with global poverty, can heuristically process the contents of a charity appeal seeking to change their attitudes and behaviours (Todorov et al., 2002). The heuristics I consider in my model are derived by recipients of expert and celebrity endorsements (DeBono and Harnish, 1988; Petty and Cacioppo, 1984b; Petty et al., 1987).

The first question which emerges from this model is how recipients select heuristics when multiple messages with multiple possible endorsements are available. I look at previous theoretical and empirical works on determinants of celebrity and expert credibility, regarding credibility as an indication of heuristic availability and applicability for message recipients. I discuss how the characteristics of recipients will affect how credible they find experts and celebrities as messengers in charity campaigns (Mehta, 1999; Slater and
The second question which emerges from the model is whether celebrities or experts can provide expertise-based or attractiveness-based persuasion cues when they endorse a charity message, and whether these persuasion cues can affect the recipients’ attitudes, cognitive engagement with the appeal, and behaviour intentions. I show how a celebrity endorsement can work as a heuristic cue to engagement for recipients with no previous engagement. Furthermore, I discuss how an expert endorsement can work as a cue with triple valence: it can work as a heuristic for previously unengaged individuals, and it can work as a cue to cognition or as a reinforcer of the arguments in the message for individuals with higher levels of previous engagement (Petty and Brinol, 2008).

1.6.3 Chapter 4: Methodology

In this chapter I discuss the methodological approaches used in chapter 5, 6, and 7 to test my hypotheses. Chapter 5 relies on observational data from a survey to test hypotheses surrounding recipient characteristics as determinants of source credibility judgements. Chapters 6 and 7 rely on experimental data from three separate experiments to test hypotheses surrounding the effectiveness of expert and celebrity endorsers at engaging the recipients of charity appeals. Chapter 6 relies on a classic experimental design which, by using random treatment allocation, seeks to test causal effects. Chapter 7 uses a more complicated conjoint experimental design, which tests hypotheses surrounding behaviour engagement with a multitude of expert and celebrity treatments. These are discussed more in depth in the next three subsections.

1.6.4 Chapter 5: Survey Data Models

Chapter 5 investigates the association between individuals’ characteristics, such as their age, gender and education, and their credibility judgements of celebrities and experts. Data from a UK survey of 8,412 responses is used to model credibility judgements as a function of the respondents’ personal char-
acteristics. I show that expert and celebrity messengers are more likely to be seen as credible by individuals with statistically significantly different characteristics, such as their gender, political identification, income and knowledge of global poverty.

The results show that when it comes to campaigns about global poverty, expert messengers such as NGO workers or researchers are seen as more credible than their celebrity counterparts. Furthermore, exploratory findings suggest that individuals who identify as women and who are on the left of the political spectrum, are more likely to trust expert messengers, while younger individuals are more likely to trust celebrities.

However, with the exception of the expectation that younger people are more likely to find celebrities as credible, none of the hypotheses are supported in the model. I discuss how this is likely the consequence of two factors. Firstly, the original works in the literature had not employed adequate control strategies in their respective studies. This is the case with works which discussed the effects of education on the likelihood of finding experts as credible, which, as I discuss in my model, in the original works was likely proxying the effect of income. Secondly, credibility judgements, and their determinants, are sensitive to the context of communication, making replication studies a key goal for future research in this area.

1.6.5 Chapter 6: Survey Experiment Analysis

Chapter 6 investigates the effectiveness of celebrity and expert endorsements in a charity campaign to promote public engagement, measured by looking at attitudes, information retention from an appeal, and behaviour intentions of the respondents. In this chapter I use data from two experimental designs (N=250 and N=150, respectively) embedded in two surveys. The endorsed appeal used as an experimental treatment is taken from a real campaign run by Oxfam, which seeks to raise the public’s awareness and to engage them with the issue of global hunger, and includes both information and multiple calls to action. In the first design, the engagement outcomes of respondents
exposed to celebrity or expert-endorsed appeals are compared to the outcomes of respondents exposed to a generic unendorsed appeal. In the second design, looking more closely at manipulation checks, I use scales for the perceived expertise, attractiveness, and trustworthiness of the messengers as treatment and manipulation check variables.

Throughout my models I find empirical evidence showing that when celebrities endorse an appeal to fight global hunger the attitudes and behaviour intentions of respondents do not change significantly. However, an expert messenger leads to more information being retained from the appeal, increases levels of concern for global hunger for appeal recipients, and has a positive effect on the intentions to get involved with the campaign for individuals who had previously been engaged with the fight against global poverty.

1.6.6 Chapter 7: Conjoint Experiment Analysis

Chapter 7 uses experimental data from a conjoint design investigating the effects of expert and celebrity endorsements in a charity campaign on the message recipients’ intentions to get behaviourally involved with the campaign’s demands. The conjoint design allows me to consider a wide group of celebrities, and multiple examples in multiple categories of expert messengers, which here include activists, frontline workers and volunteers. Data from the conjoint design, is collected in a two-wave study (N=2,034 and N=1,706) and used in three empirical models. Firstly I replicate the results of the experimental designs from the previous chapter. Secondly, I analyse the results of a choice experiment.

Throughout my models I find evidence that multiple types of expert endorsed appeals have a positive effect on the recipients’ intentions to get behaviourally involved with the campaign’s demands. Empirical evidence on the effect of celebrity endorsements on recipients’ behaviour intentions is only very limited across the tests. Furthermore, in the choice experiment I also uncover an unexpected negative effect for celebrity endorsed appeals. When individuals are faced with choices between celebrity-endorsed appeals and appeals
endorsed by generic supporters (which works as a control condition in the experiment), they are more likely to choose the generic appeal than the celebrity endorsed one.

1.7 Moving forward

Celebrity endorsements have been one of the most prominent features of high profile global poverty campaigns seeking to engage the global public with the fight against global poverty. In this introduction I discussed how the visibility of celebrities and their capacity to mobilise resources have been assumed to be effective instruments of public engagement. However, a growing academic literature expresses valid concerns on celebrities and shows how, in the last thirty years, these figures have failed to deliver credible information on global poverty, have promoted consumeristic and self-serving forms of personal involvement with distant sufferers, and reinforced inegalitarian structures.

Furthermore, new political and economic challenges for political engagement with poverty in poor countries have emerged in the last ten years in the UK. These include the arrival of new political parties who oppose expenditure on development aid, a weak economic recovery which followed the financial crisis in 2007, and the rising prominence of negative discourse around corruption in developing countries. Effective campaigns, including their use of messengers, are key instruments in facing these challenges to the levels of political engagement in the public.

In view of the shortcomings of celebrities and these challenges, I propose that expert messengers, such as volunteers, activists, or NGO researchers and workers, could address many of the celebrities’ shortcomings as messengers in global poverty campaigns. However, questions are still to be asked on the experts’ capacity to increase the involvement of the public and to encourage their willingness to take action to fight global poverty. Consequently, my thesis seeks an answer to the question of whether celebrities and experts can be used to effectively engage the public of a charity campaign.
In the next chapter, I begin by looking at the literature on political engagement forms such as attitudes, knowledge and political behaviours, the studies on determinants of such forms, and the importance of effective campaigns to foster more political engagement in the public.
Chapter 2

Literature review

In this chapter I provide a broad review of the existing works in multiple disciplines to help myself and the reader understand more about the concept of political engagement. I take an interdisciplinary approach to write the literature review, as the topic of engagement is relevant in a variety of contexts both within political science and in other disciplines.

In section 2.1, I discuss how academic research and practitioners from charities and NGOs have defined and measured political engagement. In section 2.2 I review the core debates around the determinants of two indicators of political engagement: attitudes, and political actions. Here, finally, I also consider the body of work on effective campaigns and psychological insights into fostering political engagement.

2.1 Defining political engagement

The concept of political (or public) engagement (participation, or involvement) is at the core of disciplines such as political science and sociology (Lamprianou, 2013). The most influential works in the political science literatures usually define it in very broad terms. This is the case with Verba et al. (1995) who simply write of it as “doing politics”, or Carpini et al. (2004) who talk of engagement as participation in public life. Other definitions instead focus on actions and behaviours as ways in which people get involved with politics. Brady et al. (1999) talk of “actions by ordinary citizens directed toward in-
fluencing some political outcomes” (ibid. p.737), a conceptualisation echoed in the work by Parry et al. (1992), who define participation as an “action by citizens which is aimed at influencing decisions which are, in most cases, ultimately taken by public representatives and officials” (ibid. p.16), or even Rowe and Frewer (2005) who describe it as “the practice of involving members of the public in the agenda-setting, decision-making, and policy-forming activities of organisations/institutions responsible for policy development” (ibid. p.253).

The lack of conceptual specificity and consensus around engagement is evident even by looking at these definitions. Works by Adler and Goggin (2005) and Rowe and Frewer (2005) lament how in political participation research “the key concepts are not generally well defined” (ibid. p.252) even following years of research in this field. However, Rowe and Frewer acknowledge that the lack of conceptual specificity is due to involvement and participation “taking many forms, in many different situations with many different types of participants, requirements and aims” (ibid. p.252). Furthermore, consensus is also lacking on the behaviours or forms of involvement which qualify as indicators of political engagement (Gibson and Cantijoch, 2013).

Academics have proposed a variety of ways of systematising the debate surrounding this concept, as discussed in the works by Adler and Goggin (2005) and Ekman and Amn˚a (2012), from which three fundamental forms political engagement emerge. The authors define political engagement firstly as taking political actions; secondly, as holding and discussing attitudes and opinions; and thirdly, as seeking and producing information (or knowledge). The remainder of this literature review is organised around these three macro-indicators of political engagement. In section 2.1.1 I begin by looking at political actions.

### 2.1.1 Political Action

Works which discuss political action as a form of political engagement have looked at a wide array of topics including the study of forms which political actions take, or of the quality and potential impact of the actions themselves.

The work of Stanyer (2005), which is part of the first strand of the liter-
2.1. Defining political engagement

ature, discusses actions such as: demonstrations, strikes, occupations, street protest, voting, leafleting, writing letters, donating money, signing petitions or boycotting. As another example, Keeter et al. (2002) include: volunteering, charity fundraising, voting, contributing to political campaigns, engaging in discussions with others, contacting officials, and boycotting products or organisations.

Looking more specifically to public engagement with global poverty, works on behaviours and actions have mostly come from outside academia. In the charity sector, such as in a report by Oxfam (2008), research has focused on the suggested actions the public finds in appeals or campaigns, such as donating money, volunteering time, buying products, or discussing global poverty issues with friends, relatives, or other members of a community. Other reports focus on similar indicators of behavioural engagement. The technical report by the House of Commons (2009), for example, specifically looks at actions such as donating money or buying fair trade goods. In Henson et al. (2010) the authors similarly focus on buying fair trade products, but also include discussion of actions such as lobbying MPs or joining an activist group to fight global poverty.

On the other hand, academics have been more interested in the question of which forms of behaviours or actions qualify as form of political engagement. A classic strand of the literature focuses on institutional forms of political participation such as voting (Berelson and Paul, 1963), while others have included other activities such as campaigning, or joining protests as part of their research (Verba and Nie, 1972). Research in the second strand of works has grown particularly in the last ten years, in light of developments such as the increasing importance of online politics and political participation through social media. Gibson and Cantijoch (2013), for example, re-contextualises the question of what qualifies as behavioural political engagement, now debating whether “virtual forms of civic political engagement form credible alternatives to their real world counterparts” (ibid., p. 703).
2.1. Defining political engagement

Studies which propose less inclusive definitions of political participation would argue that non-traditional forms of political action, such as online activism or many of the actions found in the lists by Keeter et al. (2002) and Stanyer (2005), are characterised by a lack of real political impact and low transaction costs, which ultimately means the action is only taken out of a selfish need to feel good about being active (Morozov, 2009). On the other hand, empirical evidence is now overwhelmingly supportive of theories which equate the importance of traditional, institutional forms of engagement, with non-traditional ones. Christensen (2011) and Karpf (2010), for example, look at political actions that people can take offline or online - such as leafletting or appeal sharing - to engage with an issue, and conclude that, at best, the differences between them are in the intensity of participation, more than in the kind, although their effectiveness remains up for discussion. Furthermore, Karpf (2010) discusses the lack of evidence that online participation has replaced or negatively affected offline political engagement, which, implicitly, supports the adoption of a more inclusive definition of political engagement.

More specifically, a plethora of reports produced by policymakers and practitioners from political organisations and charities include interesting discussions on what constitutes forms of public engagement with global poverty. Darnton (2009) distinguishes between issue engagement (attitudes and opinions) and active engagement (political action, with no clear lists of indicators), and, in Finding Frames (Darnton and Kirk, 2011), criticises cheap engagement, such as one-off donations, liking campaign pages on social media, or uncritically sharing global poverty information. Cheap engagement, according to the authors, is also dangerous for only allowing incremental forms of political change and for locking the public in forms of low commitment forms of involvement, at odds with the long-term horizons of fighting global poverty.

To sum up, research in the field of political action as a form of political engagement has proved the importance of looking at a variety of behaviours, with different settings, different opportunity costs attached to them, and diff-
2.1. Defining political engagement

Different effectiveness at achieving political goals. Looking more specifically at political engagement with global poverty, reports have looked at actions such as charity donations, discussing poverty-related issues within a community, but also lobbying MPs, or joining activists or protest goods. In the next section, I discuss how researchers have also found a renewed interest on the importance of public attitudes and opinions both on domestic and international issues and politics (Stanyer, 2005).

2.1.2 Political Attitudes and Public Opinion

Attitudes are the second sub-group of political engagement included in the definitions by Adler and Goggin (2005) and Ekman and Amnå (2012). These works acknowledge how public opinion and attitudes are extremely important to political participation, as I discuss through this section.

*Attitude* is, by far, the concept with the longest standing tradition of research in fields such as social psychology, political psychology, and behavioural sciences (Banaji and Heiphetz, 2010). Much like the concept of political engagement, the literature abounds in definitions which have accumulated through almost a century of research from the original work on attitudes by Allport (1935). Attitudes, as explained in one of the most cited and used definitions of the concept, are evaluations of objects or individuals, “a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor” (Eagly and Chaiken, 1993 p.1).

*Opinion*, on the other hand, is a concept which in the literature, and in this study, is used interchangeably with the concept of attitude (or, in the realm of political science, with the terms support or opposition). However, following Glynn et al. (2015), opinions can also more specifically be thought of as an expression of the underlying attitude; a verbalisation of existing evaluative structures stored in the memory of individuals. Attitudes have, classically, been studied across a realm of social scientific subjects through surveys, which, increasingly, include experimental components Asher (2011).

Looking at the study of public engagement, attitudes are seen as a *dis-
2.1. Defining political engagement

cursive and deliberative form of public participation, in which problems are identified or solved through debates and discussion of opinions (Carpini et al., 2004).

Furthermore, the expression of political attitudes can be seen as a form of bottom-up political engagement, in which elected officials, under the incentive structure of seeking re-election, will listen to the opinions of their voters when adopting or discarding policies (Boyle et al., 2006; Coleman and Gotze, 2001). (Scheufele and Eveland, 2001) also discusses how the expression of attitudes and opinions can become a tool for individuals to engage other members of the public in political discourse.

In many cases, the literature shows that public opinion matters in shaping policy choices, diplomacy, and international relationships (Mosley, 1985; Mendel, 1961; Page and Shapiro, 1983; Sobel, 2001; Holsti, 2004). However, researchers are divided on the capacity of public opinion to influence policies around development aid expenditure. On one hand, a group of work expresses optimism on the matter, showing that politicians are bound to listen to the people when support for aid expenditure is high, especially in nordic countries such as Norway, Denmark, Sweden and the Netherlands (Smillie, 1999; Stern, 1998). Risse-Kappen (1991) finds empirical support for the optimist hypothesis as well, showing that public opinion directly affected foreign policy decisions in France, the US, Germany, and Japan both directly, by setting limits during policy decisions, and indirectly, by influencing the processes of coalition-building in elite groups.

The optimist view is however unsupported in the empirical tests by Page and Shapiro (1983) and Olsen (2001). Page and Shapiro (1983) discuss how public opinion can have an effect on policy decisions in the US, but also that the effect depends on how salient the policy issue is, and how strong and stable the public’s opinion are on the matter. In the same work, the authors also acknowledge evidence that their general theory does not work across all policy domains, and that, specifically with aid, public opinion and policies in the US
have been often observed to be incongruent. More recent research in the UK by Henson and Lindstrom (2010) shows that the salience of global poverty or aid expenditure in the public political agenda remains extremely low. If this were the case in the US in the 1970s and 1980s, this could possibly explain Page and Shapiro’s findings.

Moreover, the work of Olsen (2001) looks more closely at public support for aid expenditure and its effects on aid-related policies in member countries of the EU and finds no evidence of a link between the two factors. The evidence, as a whole, suggests that the politics of development aid are likely to be top-down, although a normative call for politicians to listen to their people on this matter remains strong (Smillie, 1999).

Issues of association between public opinion and policy decisions put aside, academic interest in public opinion and attitudes towards global poverty and development aid in the UK, has been on the rise. However, as Hudson and VanHeerde-Hudson (2012) discuss in their work, the current data from attitude and public opinion trackers are often unreliable, difficult to compare, with models explaining attitudes towards aid and global poverty only now starting to appear in academic research. I discuss this further in the next section.

This renewed interest might be due at least in part to the fears that the 2007 financial crisis could affect the public’s support for aid. Research, including the work by Heinrich et al. (2016), provided evidence that these fears are indeed justified. The authors, in their article, discuss how the financial crisis has affected support in EU member states for expenditure to address poverty in poor countries.

The longest running study of UK public opinion on aid and global poverty is a series of works commissioned by DFID which ran from 1999 until 2011 (the most recent available report being authored by TNS, 2010), before being revived in 2013 as the Aid Attitude Tracker (AAT) study (Bond, 2015a). The studies include attitudinal questions on levels of concern for global poverty, perceived aid effectiveness, support for increases or decreases in UK aid ex-
penditure, and opinions on prioritising policy interventions for poverty at home or abroad. The data are analysed both in technical reports and, increasingly, academic works, including chapter 5 and 7 of this thesis. As the existing academic works look more closely to the factors driving public attitudes, I discuss these in section 2.2.

Technical reports studying current attitudes towards aid expenditure and global poverty provide valuable insight on attitudinal structures on issues surrounding the attitude objects. The core question that the reports consider is whether levels of concern for global poverty, and support for aid expenditure have decreased in time. Decreases were first discussed in reports such as the one authored by TNS (2010). However, more recently, (Bond, 2015a) pointed to a marked decrease in the number of individuals showing concern for global poverty, which went from 70% in 2011 to 46% in 2014. It is worth noting that a change in the panel management, and, subsequently, in research methodologies used to survey public opinions, could be overstating the differences between the two values (Bond, 2015a).

Attitudes towards global poverty and aid are also connected to attitudes towards corruption in poor countries, and attitudes towards welfare spending at home. Attitudinal structures are discussed more in depth in the qualitative research composing the Narrative Project, the sister project of the AAT study (Bond, 2015b). This report, for example, shows that respondents who express negative attitudes towards corruption, or higher levels of concern for poverty or welfare cuts at home are also less supportive of aid expenditure (Bond, 2015b). Further discussion on how attitudinal structures determine overall concern for global poverty and aid expenditure is also included in section 2.2.

In the next subsection I finally discuss levels of knowledge and information about global poverty in the public. Following that, in section 2.2, I discuss

---

1 The survey run by DFID between 1999 and 2011 took place through in-person interviews, which could increase social desirability bias in responses. On the other hand, from 2013 forward, with the beginning of the AAT project, surveys have been moved online on the YouGov platform. It is argued that house effects could be explaining for at least part of the differences between 2011 and 2013 levels of concern.
2.1. Defining political engagement

works on the determinants of the three forms of political engagement.

2.1.3 Public Knowledge and Information

Levels of knowledge of politics and political issues, and information-seeking behaviours from the public are the final area of interest in the definitions of political engagement by Adler and Goggin (2005) and Ekman and Amnå (2012).

Citizens’ attempts to gather knowledge and discuss information features in a number of works on political engagement, which discuss the importance of how political organisations disseminate information (Coleman and Gotze, 2001), or how citizens seek and use information in political choices (Verba et al., 1995), or how information seeking can show “motivation or disposition inclining people to become involved in politics” (Brady et al., 1999, p.737). These definitions allow knowledge and information to be analysed as part of behavioural forms of political engagement. However, a set of existing reports and academic works also show the importance of levels of public knowledge on political issues.

Existing research and reports looking more closely at global poverty have considered three key areas of interest: knowledge of global poverty (Darnton and Kirk, 2011), knowledge of the policy responses to it (TNS, 2010), and information as an outcome of communication between donors and recipients (Chouliaraki, 2013). On all three aspects, as I discussed in the introduction of this thesis, authors have conducted research which laments the current unsatisfactory levels of knowledge and informational engagement (Darnton and Kirk, 2011), but little has been said about the way information and knowledge are structured for members of the public, which kind of knowledge is taken as an indication of levels of public engagement, or even if information matters particularly in stimulating other forms of political engagement. I return to this final topic in the next section, discussing how information and subjective perceptions connect both with attitudes and behaviour intentions.
2.2 Determinants of Political Engagement

In this section I look at the factors determining or influencing people’s attitudes towards global poverty, and their willingness to take political action towards fighting it. Research which looks more specifically to public engagement with global poverty is still in its infancy, but many works in different disciplines such as politics, economics and psychology, more or less related to engagement with global poverty, have already contributed to the debate in the past. While older works have focused mostly on personal characteristics of individuals as determinants of political engagement, new efforts, especially in psychology, are instead directed in understanding how campaigns can be effective (or not) in engaging the public. All of these are discussed in the next two subsection. I divide my discussion in two parts to first consider works looking specifically at the determinants of attitudes and and then works on the determinants of behaviours.

2.2.1 Public Attitudes and Public Opinion

Works that seek to understand the determinants of public opinion on global poverty are rare, often in the form of reports, and descriptive in nature (Bond, 2015a,b). This is a confusing reality considering the quantity of data available to investigate this topic (Hudson and VanHeerde-Hudson, 2012). Existing academic research has focused on the public’s opinion on prioritising fighting domestic poverty or poverty in poor countries. Lindstrom and Henson (2011), for example, provide evidence of the existence of a trade off in the attitude of people, with most individuals arguing that poverty at home should be prioritised (Bond, 2015b).

In the same debate, the work by Noël and Thérien (2002), which consider broader frames of global justice and the duty to redistribute resources, finds empirical support for the idea that poverty at home is more important to the public than poverty abroad. However, the authors also argue that when domestic institutions are strongly based on principles of justice, and support for welfare policies is strong, this can result in higher levels of support for aid
2.2. Determinants of Political Engagement

expenditure among the public.

On the other hand, a well established literature discusses the determinants of attitudes towards foreign policy and development aid expenditure (Milner and Tingley, 2013). The existing works consider three classes of factors influencing these attitudes: personal characteristics, psychological factors, and attitudinal and behavioural structures.

It is worth discussing some of the methodological issues which affects many works in the literature across the three areas upfront. These works use data which are often affected by issues in conceptualisation such as unclear differences between development aid and humanitarian aid as objects of attitudinal response, both in the survey instruments and in the eyes of the survey respondents (Hudson and VanHeerde-Hudson, 2012). Furthermore, studies included in the literature so far have failed to engage with questions on the effects of humanitarian campaigns on attitudes towards global poverty.

A way to surpass these impasses, as suggested by Milner and Tingley (2013), is to move towards the use of experimental methods embedded into surveys, as is the case with the empirical investigations of my thesis. This would allow researchers and policymakers not only to have a clearer view of the individual profiles of public opinion, but also how to effectively target messages and campaigns to change attitudes to different public groups. I discuss more experimental research in section 2.2.3 of this chapter, as I consider works analysing effective campaigns as instruments to promote public engagement.

Keeping these issues in mind, the literature on determinants of attitudes towards foreign aid is still growing in depth and richness of insight. When considering personal characteristics, the consensus is that individuals from donor countries who are women, left wing, educated, interested in politics, with a high income, young, living in cities, and identifying as religious, are more likely to support expenditure on development aid (Minato, 2015; Bauhr et al., 2013; Van Heerde and Hudson, 2010; Paxton and Knack, 2011; Prather, 2011; Diven and Constantelos, 2009; Chong and Gradstein, 2008; Czaplińska,
2.2. *Determinants of Political Engagement*

A further set of works also considers the question of attitudes from a more political-psychological perspective, looking at personality traits and values, providing evidence that people with a strong sense of morality, not highly self-interested, altruistic, and with high life satisfaction are more likely to support expenditure on development aid (Lindstrom and Henson, 2011; Prather, 2011; Van Heerde and Hudson, 2010; Chong and Gradstein, 2008; Rye Olsen, 2001).

This is a new area of interest for academics studying attitudes towards aid expenditure, which could help policymakers and researchers to better understand cultural settings as important determinants of attitudes towards aid and global poverty, as argued also by Milner and Tingley (2013). Diven and Constantelos (2009), for example, show that the different role of personal values in EU countries than in the US is correlated with higher support for aid expenditure in the EU. Connectedly, Bayram (2016) shows that individuals who are less selfish and who believe more in personal freedom and self determination are more likely to support expenditure on development aid.

A final set of works looks at the complex attitudinal and (in very limited part) behavioural structures within which the attitudes towards global poverty and aid exist. Individuals expressing confidence in their governments or international organisations like the United Nations, or who find aid an effective way to spend public money are more likely to support development aid (Bauhr et al., 2013; Prather, 2011; Diven and Constantelos, 2009; Chong and Gradstein, 2008), making for a strong argument in favour of governments sharing information on aid expenditure and its effectiveness with the citizens of their countries (Diven and Constantelos, 2009).

Attitudes (and often discrimination) towards foreigners play an equally important role, with individuals who report better attitudes towards foreigners, towards immigration, or who are more internationalist being more likely to support development aid. Minato (2015), for example, shows that when
individuals hold a negative attitude towards rising levels of immigration, they are less likely to support aid expenditure. Brewer et al. (2004), more broadly, show that the pursuit of internationalist or isolationist foreign policy agendas is affected by the US public’s levels of trust for other nations. Prather (2013), in the same broad area, investigates the determinants of attitudes towards redistribution at home and abroad, Prather finds that when members of the public in the US deem that their government has a moral obligation to help the poor at home, they are less likely to support aid expenditure to fight global poverty. Finally, Paxton and Knack (2011), in a cross-country empirical investigation find empirical support for the association of negative attitudes towards poor people in poor country (such as seeing them as undeserving or lazy), or of their capacity to escape poverty, with lower support for aid expenditure.

The relationship between behaviours, knowledge and attitudes is also a point of interest for researchers in the literature. I discuss this topic more in depth in section 2.2.2, where I discuss how attitudes have been shown to be associated with behavioural forms of political engagement. A few works on knowledge and perceptions of global poverty and attitudes and behaviours are worth adding to this section.

In the realm of knowledge and perceptions of global poverty, Bauhr et al. (2013) find evidence of a relationship between perceptions of corruption in poor countries and a lower willingness to support aid expenditure in EU member states. Equally importantly, the authors also show that if respondents perceive that aid improves governance structures in poor countries or that it serves the donors’ national interests, they will be more likely to support aid expenditure. On the other hand Van Heerde and Hudson (2010) discuss how awareness of global poverty in the news negatively affect attitudes towards global poverty, as the coverage of poverty on the TV and in newspapers is often negative to the point of, potentially, reducing the individuals’ perceived capacity to address the issue. However, similarly to the findings by Bauhr et al. (2013), Van Heerde and Hudson also show that if individuals with a positive evaluation of progress
in fighting global poverty are more likely to be concerned about poverty in poor countries.

In the domain of attitudes and behaviours, Prather (2011), finds that individuals who participate in the activities of charitable institutions are more likely to support aid expenditure. The discussion of the finding in this article is, however, one example of a series of works in which authors assume that attitudes fully reflect behaviours and vice-versa (Foy and Helmich, 1996). However, as I discuss in section 2.2, and later in chapter 3, it is more likely that the relationship between these two factors is more complex, and, that it causally runs the other way around, with attitudes influencing behaviours.

In conclusion, while the literature on the determinants of attitudes towards aid expenditure is now rich in empirical insights, works which look at attitudes towards global poverty are somewhat rarer, even though data are abundant for research to take place in this field. Research has shown how the personal characteristics of individuals’, such as their demographic characteristics, values and personalities, all affect their attitudes towards global poverty (both in absolute and compared to domestic poverty) and towards aid expenditure. Attitudes towards global poverty and aid expenditure are also part of more complex attitudinal and behavioural structures, interacting with other attitudes on the undeserving poor, or on the importance of internationalist or isolationist policies. In the next section I consider studies on the determinants of behavioural forms of political engagement, and, connectedly, discuss the importance of campaigns as situational factors which can encourage political involvement and participation.

2.2.2 Political Actions: Donations and Volunteering

From marketing, politics and economics to psychology, different traditions have contributed a lot to the current knowledge of what the determinants of many forms of political and philanthropic behaviours such as donating money or volunteering time are. Furthermore, importantly, the literature includes important insights on what can be done to convince people to donate more money
2.2. Determinants of Political Engagement

and/or time to humanitarian causes.

The studies in this field have been reviewed in many papers, including the work by Smith (1994) who makes the case that contextual factors (such as culture, territory, institutions), attitudes (morality and group attractiveness), other forms of political and social participation (religiosity, information seeking) and situational variables (even simply being asked to join in) matter in determining charitable donations and volunteering choices.

More recently, the literature was reviewed in the 500-article strong paper by Bekkers and Wiepking (2010), which expanded on the original review by Smith. The authors identify eight areas for determinants of philanthropic behaviours: donors’ awareness of needs, the use of solicitation methods, considerations on costs and benefits of philanthropic actions, altruism, reputation gains, other psychological benefits, personal values, and personal efficacy. I look at solicitation for donations and volunteering in the next section, but a few works studying the other determinants and which specifically refer to charity and volunteering for global poverty appeals, are worth discussing here.

For example, looking at need awareness and perception, when individuals are aware of the needs of poor people in poor countries, they are more likely to support charitable institutions and donate money to them (Cheung and Chan, 2000). However, as I already discussed in the case of attitudes, if individuals perceive poor people in poor countries as unwilling to work to raise themselves from poverty, they are less likely to donate to poverty relief causes (Bennett and Kottasz, 2000; Taormina et al., 1988). Finally, looking at personal efficacy, works show how this is positively correlated with individual’s willingness to donate money and time, and, more importantly, that the relationship is particularly strong in the cases of donation to poverty relief causes (Bekkers and Wiepking, 2006).

The main issue with the existing literature, according to Bekkers and Wiepking (2010) is that although works exist across the eight realms of interest, progress in understanding philanthropic behaviours has been hampered by
2.2. Determinants of Political Engagement

a lack of theoretical advancements including the formulation of formal models based in strong theoretical foundations. One of the very rare examples of a theoretical model considering specifically the determinants of charitable behaviours is presented by Sargeant (1999), who looks at charitable decisions (donating money, time, being loyal to a charity) are a function of inputs (appeals, information and asks), mediated by extrinsic determinants (age, gender, social class, income), intrinsic determinants (pity, empathy, social justice, self esteem), perceptual reactions (how does the appeal fit with the self), and cognitive processing (based on past experiences and judgements). However, the intervening order and interaction of the variables still remains unclear and under-theorised, as most works only focus on studying the effect of variables from one group.

For example, Rajan et al. (2008) looks at Canadians' money donations to charity, showing that individuals identifying as women, who volunteer, of foreign origins, with high income, high levels of education, who identify as religious, and politically aware and engaged, are more likely to donate to charity. However, specifically, the effect of higher education and higher religiosity has a bigger effect on donating to international causes and charities rather than domestic ones.

The findings on personal characteristics are also discussed in the works by Wilson (2000), who looks more specifically at volunteering. In his work, Wilson shows that both personal characteristics (age, gender, race) and resources available to individuals (human capital, social resources, self-understanding), can affect volunteering decisions, as predicted in the model by Sargeant (1999). However, differences in volunteering behaviours determined by personal characteristics disappear once resources are included in empirical models.

What remains unclear from reviewing the literature is whether insight on the determinants of charity donations can be applied to the case of volunteering decisions as well and vice-versa. The work of Bekkers (2010) is one of the rare cases that considers this question. In their work the authors look at
the importance of psychological and social distance between donors and recip-
ients and find that it has a positive effect on the willingness to volunteer, but
a negative one on the willingness to donate money to fight poverty abroad.
More research is needed on the different effects of different determinants of
behavioural political engagement.

What, finally, of any other forms of political actions? Although, on
one hand, the literature on political engagement has acknowledged that
extra-institutional and unconventional forms of political participation such as
protests, signing petitions or debating opinions are important components, the
study of what determines these behaviours is in its infancy. (Bond, 2015a),
for example, shows that - broadly speaking - behaviourally engaged members
of the public who take various actions such as seeking information, signing
petitions or buying fair trade products, are highly educated, politically more
liberal and more informed on issues surrounding global poverty. On the other
hand individuals who are not behaviourally engaged with global poverty tend
to be older than their engaged counterparts.

Academic works have also considered how individuals could be classi-
fied on an engagement continuum by looking at the actions they take to sup-
port charities and governmental institutions. For example, Peloza and Hassay
(2007) propose a support typology which divides actions into high involve-
ment (volunteering, taking part in events, gifts) and low involvement (recy-
cling goods to be sold in charity shops, donations to avoid paying taxes). If low
and high involvement forms of participation could have different determinants,
and how this relates to long term engagement with the work of the charitable
organisation remains unclear in the work and the literature.

In the next section I discuss the growing literature on how charities can
promote behavioural and attitudinal engagement with global poverty.

2.2.3 Campaigns and Appeals to Engage the Public
Solicitation of donations of money and time has consistently been shown in the
literature reviews (see Bekkers and Wiepking, 2010) to be one of the most im-
important factors affecting engagement with global poverty (Piliavin and Charng, 1990). Bryant et al. (2003) and Bekkers (2005), in their cross-sectional study of altruistic behaviours show that more than 80% of all donations of time and money for individuals in their sample have happened following solicitations to contribute to a cause. On the other hand, the existing literature does not consider whether campaigns can be used to shift attitudes in the public as well as actions. In this section I review works which look at charity campaigns as instruments to drive awareness of global poverty and public engagement with humanitarian causes (McDonnell et al., 2003).

More specifically, I look at studies analysing how appeals can be used to engage the public. Classically, charity appeals have been studied by marketing researchers and social psychologists with an interest in persuasive communication, which I discuss more thoroughly in chapter 3. Micklewright and Wright (2004) discuss how the literature has focused on understanding how aspects like the portrayal of individuals in need in charity campaigns, the urgency of needs of the campaign itself, and the fit between donor self image and charity goals can drive charitable donations.

In respect to this, Cryder et al. (2013), for example, show how campaigns that provide concrete information about their humanitarian intervention intentions, their target issues and groups, and the results they obtain, can increase both the people’s willingness to donate and the amounts donated.

Dolinski et al. (2005) show that appeals which explicitly present the needs of specific victims or recipients of charity help can increase the individuals’ willingness to donate to the cause, but can also decrease the quantity of money people are willing to donate. The so-called identifiable victim effect, has then featured in the work by Small et al. (2007), who find that campaigns are more effective at eliciting donations if they present an identifiable victim instead of a statistical one.

On the other hand, Ein-Gar and Levontin (2013), returning to the theme of social distance which appeared in Bekkers (2010), find that distance can
nullify the positive effect of the identifiable victim, but that if the appeal features information of a charitable institution engaged in fighting poverty then individuals are still more likely to donate.

Solicitation techniques are not necessarily leading to increases in behavioural participation, as works such as Diepen et al. (2009) and Wiepking (2008) show how an excessive number of requests for contribution can produce donor fatigue - lowering both the likelihood that individuals will donate, and the amount they choose to donate.

Overall, however, evidence is vastly in support of the capacity of requests to contributions to engage the public. More specifically, the quality and frame of the information provided in the appeals can affect the willingness to donate time or money and also the quantity of resources individuals are willing to donate. While these works focus on the information included in appeals, a growing literature focused on celebrities and their roles as messengers as instruments to engage the public with global poverty in charity campaigns. Works in this area of the literature either broadly consider celebrity humanitarianism, its limits and significance, or, more specifically, the effectiveness of celebrity endorsements as instruments to convince individuals to donate money to charity. I discuss these works in the next two subsections.

2.2.3.1 Celebrities and humanitarianism

Studying the involvement of celebrities in humanitarian causes and global poverty campaigns is an interdisciplinary effort, with scholars from politics, sociology, anthropology and communication studies all contributing to a nascent but fascinating debate on the topic. In this section I focus on the debates surrounding celebrities’ involvement with politics, humanitarian causes. While some academic voices praise the capacity of celebrities to raise awareness about issues in the South and to convince governments and politicians to take action to tackle these, other researchers have been more critical of celebrities and highlighted their incapacity to nurture political engagement. Furthermore, one of the objectives of this thesis is to expand the breadth of the existing
debate on celebrities by looking at their role as messengers in more common
development and global poverty campaigns.

One of the first academics to discuss the involvement of celebrities with
humanitarian causes is Andrew Cooper (2008). His work, which looks specif-
ically at figures such as Bono Vox, Angelina Jolie, and Bob Geldolf, casts a
positive light on celebrities. Cooper welcomes their roles as advocates and
diplomats, as they can exercise influence on global politics and its institutions
through their wealth, visibility, and their capacity to access elite environments
to influence decision-making processes. The importance of celebrities as diplo-
mats, increasing the attention of global political leaders towards issues such
as the debt of poor countries or expenditure on development aid echoes in the
works of Wheeler (2013) as well.

Cooper and Wheeler’s optimistic take on the matter has been directly
criticised by Dieter and Kumar (2008), who find danger in the liaisons be-
tween celebrities and global politics for their lack of political mandate from
the global public, but also because of the (willing or unwilling) promotion of
an oversimplified outlook of the challenges associated with development and
global poverty.

The work by Ilan Kapoor also sits at the opposite pole from the optimistic
views of Cooper. In his work (2012), Kapoor portrays celebrities involved in
humanitarian causes as figures that profit from the pains of distant others and
global inequality, which they claim to address, but, inevitably, sustain as ne-
oliberal capitalist actors. According to Kapoor, the involvement of celebrities
can potentially have negative consequences for the South, which is inevitably
harmed in the processes by which celebrities sustain themselves and the indus-
tries which surround them. Furthermore, celebrities can also do harm in the
North, as their lack of accountability and their interest in depoliticising global
poverty potentially works to disengage the public.

The work of Lilie Chouliaraki (2013, 2010, 2006) in the field of media
and communication ethics, which echoes the critical spirit of Kapoor, is a
sharp and fascinating analysis of the involvement of celebrities in humanitar-
ian causes. Chouliaraki sees celebrities as bridges between donors and distant
others who suffer. The celebrity’s intent through their testimony of stories
of distant sufferers is to provide emotional identification for audiences in the
North, and to mobilise affective involvement with addressing global poverty
(see also Schwittay, 2015). However, in this process, celebrities also act as fil-
ters and shapers of the realities of suffering in the eyes of their audiences, cre-
ating a post-humanitarianism performance of emotions and structures within
which appeals, organisations, celebrities, audiences and sufferers are mutually
constituted.

Celebrities, according to Chouliaraki, promote an emotive focus on the
self before the other or the distant sufferers, and construct the act of care as
a lifestyle choice more than a moral one. Inevitably, Chouliaraki’s conclusions
are very similar to Kapoor’s position, as the politicisation of global poverty is
diminished, and celebrities end up promoting narcissistic or even vouyeristic
and emotively shallow forms of solidarity and political engagement. The au-
thor, however, in a more moderate fashion, recognises the need to still work
with celebrities in the effort to connect distant sufferers with donors in develop-

ing nations

The work of Dan Brockington, to a certain extent, is also skeptical of
celebrities (2014a, 2014b, Brockington and Henson, 2014). Brockington sees
celebrities as figures with “access to places, events and people that most of
us do not [have]” (Brockington, 2014a p.113). This means that, potentially,
celebrities could be used by NGOs and charities in the North to influence
the work of politicians and global institutions which fight global poverty. On
the other hand, Brockington also focuses on the figure of the celebrity as a
post-democratic political phenomenon (a concept first discussed in the work
by Crouch, 2004). Celebrity politics might promise to create bridges between
elites and the public, but it ends up being just another form of elite politics
and elite rule. According to Brockington, the UK public has a very limited
interest in celebrity affairs and the advocacy they conduct, especially when it comes to global-poverty-related causes. However, the media and charitable organisations often act on the believed power of celebrities to engage the public with their causes and call on them to take action. Celebrities end up creating means through which the public “disengage from agonistic politics, at the same time as political elites perceive them to be engaged in politics” (Brockington, 2014 p.15), at best promoting minimal forms of engagement like one-off charity donations.

The work by Richey and Ponte (2011) engages with issues of consumerism and commodification of political engagement with global poverty in deeper detail. Specifically, the authors look at how celebrities were instrumental in promoting and adding value to brand aid, a process through which international aid was and is rebranded to move away from the defeatist frames of the 1990s global poverty campaigns towards a new approach in which western consumers shop for products with parts of the profits going towards helping people in poor countries. In the rebranding process celebrities also position themselves as instrumental actors which both bring legitimacy to the process of commodification of help and which pressure elites and policymakers to deliver more funding for developing countries. On one hand Richey and Ponte (2011) show that celebrities are effective at promoting commodified engagement, but inevitably, this approach ends up reproducing and relying on the images of the powerless distant sufferer, and negating potential for deeper forms of engagement in richer countries.

These forms of minimal and commodified engagement are also criticised by Darnton and Kirk (2011), who suggest that part of the public engagement problem is related with the persistent use of consumeristic frames, often in charity campaigns in association with celebrity endorsements, which do not promote deeper forms of personal and political engagement with long term development and poverty-related issues. Furthermore, with the exception of a few marketing studies set in the US and the work by which I discuss in the next
Commodification of poverty, furthermore, is not the only critique moved to celebrities and their involvement with the fight against global poverty, as many academics such as Müller (2013), Kapoor (2012), or Littler (2008), also criticise celebrities for intrinsically maintaining structures of inequality. Littler (2008) discusses how celebrities involved in humanitarian causes portray themselves as wanting to address inequality. However, celebrities themselves personify global inequality, as, in the eyes of their public in the North, their wealth and fame clashes with their demands for money to be donated to help the poor. This tension between preaching against inequality and being its ultimate symbol, according to Litter, ends up at best supporting ironic forms of emotional identifications for northern audiences of southern sufferers. Pity frames used in celebrity advocacy, and not global justice ones, won’t encourage public engagement with an issue as deeply rooted in injustice as global poverty (ibid., 2008; but also Darnton and Kirk, 2011).

To sum up, many academic voices remain very skeptical as to the potential of celebrities as fosterers of public engagement with the fight against global poverty. Academics are also not alone, as, increasingly, the media, charities, and the public are starting to voice their discontent with celebrity advocacy as well (Vestergaard, 2014). This was visibly the case with the media coverage surrounding the #IF: Enough Food If campaign in 2013, raising important questions about the overly-abundant use of celebrities at the campaign launch event (Beckett, 2013), with researchers continuing their reflection on how celebrities cannot help with the public’s demand for more (and more qualified) information on global poverty (Glennie et al., 2012, Orgad and Vella, 2012).
2.2.3.2 Effectiveness of Celebrities as Promoters of Political Engagement

Although celebrity endorsements of political and charity campaigns have received widespread interest in the media and in public debates, this interest is not, to date, matched fully by academic research (Brockington, 2014b). However, a few works still discuss the effectiveness of celebrities at promoting public engagement with global poverty campaigns and, looking more closely to the US, their effectiveness as political endorsers during elections.

The works on the latter topic look, more specifically, at the effect of information about celebrities endorsing a political candidate on the voters’ opinions of parties, voting intentions, or attitudes towards political issues. In the experimental analysis carried out by Nownes (2012), for example, the authors show that information on celebrity endorsements of a party will result in respondents attaching their positive or negative evaluations of celebrities onto the parties. Garthwaite and Moore (2008) looks even more specifically to one American celebrity, Oprah Winfrey, and shows that her endorsement of Barack Obama in 2008 potentially increased the number of votes for the presidential candidate, as the number of votes for Obama were higher in areas where audiences of Winfrey were bigger. The *Winfrey effect* is also discussed in the experimental analysis by Pease and Brewer (2008), which confirmed that information on her endorsement of Obama increased his perceived viability as a candidate and the respondents’ willingness to vote for him.

Looking broadly at patterns of media consumption in the UK public and how this associates with political engagement, Couldry and Markham (2007) do not find evidence that an interest in celebrity culture and affairs is conducive to more engagement with political issues and political debates, and that, at least descriptively, individuals who follow celebrities appear as the least politically active members of the UK population.

Looking more closely at public engagement with global poverty, the work of Darnton (2007) in the context of UK public engagement finds that when
celebrities are used in charity campaigns they both attract and distract the public from the contents of the campaign message (information and requests). This is because individuals are drawn to the endorsed campaign, but often end up focusing on assessing the motives of the endorsement choice made by the celebrity. Overall, practically, celebrities might not be useful to promote attitudinal or behavioural engagement, according to Darnton, but they might raise awareness and interest in campaigns, where other mechanisms could engage the members of the public.

In the field of communication studies Wheeler (2009) discusses how research has looked at celebrity endorsements in marketing advertising, but that works have not explicitly considered whether these endorsements work for nonprofit advertising. In his own empirical investigation Wheeler concludes that celebrity endorsements in charity appeals do not affect the willingness to donate money and time for individuals who receive the endorsed appeals.

More recently, following Wheeler’s original work (2009), marketing scholars have started looking at celebrity endorsements in nonprofit advertising as well. These endorsements are investigated in the two very recent works by Park and Cho (2015) and del Mar Garcia de los Salmones et al. (2013). In both studies the authors find limited evidence on the effectiveness endorsement of celebrity endorsements in charity campaigns (not necessarily related to global poverty), mostly depending on the celebrity’s perceived credibility and inferred motives for endorsing appeals to increase the willingness to donate of the appeal recipients. Neither study, however, tackles issues related to effects of celebrity endorsements on attitudes towards global poverty and on the willingness to take other actions which are not donations, both essential indicators in understanding whether they can actually affect public engagement. One of the rare studies which engages with this under-researched area is the work by Becker (2012). In her experiment, Becker shows that when individuals are exposed to celebrity-endorsed advocacy appeals, they will report higher levels of issue engagement conditionally on their perceptions of how credible
the celebrity is, and how important the issue advocated is for them. I expand the discussion on both issues of celebrity credibility and issue relevance in the following chapters of this thesis.

2.2.3.3 Experts and the Promotion of Political Engagement

If only a few works in the literature directly address the role of celebrities in promoting political engagement, to date there is even fewer works looking at the role of experts in involving the public with political issues, and, even more specifically, in global poverty campaigns. However, many works in the social psychology literature, which I discuss in the next chapter, have looked at source expertise as a route to increase the persuasiveness of communication processes. Wilson and Sherrell (1993) show that when looking at many traits a source of a message can have, expertise is the one that most effective sources of persuasiveness. One of the contributions of this thesis is to address this gap in the practical and academic understanding of expert sources endorsements as instruments to increase a message’s persuasiveness in the specific domain of global poverty and charity campaigns. Some works in the existing literature still touch on useful aspects related to expert sources and their role as promoters of behaviour and attitude change in the realm of politics.

Firstly, although expert messengers receive little attention, source expertise as a trait in messengers has figured in a series of works, including those which consider the role of Celebrities as messengers in global poverty campaigns. Richey and Ponte (2011), in their analysis of brand aid, look at how celebrities who are active in the debates surrounding aid and global poverty attempt to perform expertise on these topics in an effort to confer legitimacy to the new, rebranded and commodified form of public engagement with these political issues. However the book neither considers whether this performance is convincing or persuasive, nor does it consider the role of actual experts, exception made for iconic figures such as Jeffrey Sachs, who have transcended both categories of experts and celebrities to become a species of their own.

In broader breath, source expertise also appears in the work by Yoon
et al. (2005), who look at politicians and negative political campaigns. In their research the authors show that politicians who are perceived as being more expert (and, therefore, more credible) will increase the credibility of their campaigns against their adversaries, and convince more members of the public to vote for them. Finally, in the field of health communication, Braunsberger and Munch (1998) distinguishes between the effect of expert endorsements and endorsements of messengers with relevant experience. The author finds that while recipients of a hospital advert evaluate both expertise and experience as positive traits in a messenger, only the former increases the persuasiveness of the advert. The findings are in clear contrast with the broad definitions of expertise as a trait that can derive from personal experience on specific matters. Consequently, the difference between expertise and experience will inform analysis and research design choices in this thesis.

2.3 Conclusion

In conclusion, in this chapter I discussed a definition of political engagement which encompasses attitudes, behaviours and knowledge of a political issue. In section 2.2 I discussed how the existing multidisciplinary literature has studied determinants of attitudes and altruistic behaviours like charitable donations and volunteering, such as personal characteristics, values, other behaviours and attitudes, and being exposed to appeals which request a contribution. While the literature is clearly vast and insightful when it comes to the broad mechanisms which include these indicators of engagement, there is still a lot to explore by looking specifically at attitudes towards global poverty, behaviours aimed at addressing it, and at how campaigns to fight global poverty can promote public engagement around this issue.

In the empirical contribution I present in this thesis I aim to take on some of the gaps I discussed in this chapter; firstly, I contribute to a better understanding of political engagement as the sum of attitudinal responses and multiple behavioural forms of involvement; secondly, by engaging with the
debates around effective means to campaign to fight global poverty, but not only in focus to donations, but also to other actions and attitudes. Specifically, I expand on the limited existing knowledge on the effectiveness of celebrity endorsements, and also propose new evidence on the effectiveness of expert endorsers, as I discuss in the next section; thirdly, I contribute to the literature by building a strong theoretical framework within which attitudes, behaviours, campaigns and message features can all be connected together.

In the next chapter of this thesis I look at dual-pathway models from social psychology Chaiken and Eagly (1989); Petty and Cacioppo (1986) to theorise how experts and celebrities, working as messengers in charity campaigns, can affect attitudes, behaviour intentions and behaviours in campaigns to fight global poverty.
Chapter 3

Theoretical framework

How can a charity appeal persuade an individual to get involved with a political campaign or to change their attitudes towards global poverty? In this section I review, discuss and adapt theoretical insights from social psychology to understand political engagement in the context of charity campaigns. More specifically, as I discuss the theories of persuasive communication, I focus on source cues to explain the role of experts and celebrities as messengers in charity campaigns.

3.1 Persuasion in social psychology

A core issue in the contemporary literature on political engagement is to understand whether and how campaigns can be effective in engaging members of the public with the issues they seek to address. Campaigns seek to create engagement through communicating their messages to the public, hoping their argument will persuade individuals to change their attitudes towards the problem discussed in the campaign, and to spur them into action in support of its goals. Understanding whether and how these campaigns and messages can be persuasive is what I discuss in this section.

Social psychologists have a long-standing tradition of studying how persuasion works both to understand how attitudes change, and how individuals interact and communicate in the social realm. The wealth of insight spans from the first theoretical models introduced by Hovland et al. (1953), to the
more recent studies on how persuasion changed in the XXI century by Perloff (2010), with applications in areas like marketing, communication, political science, and behavioural economics.

Political scientists too, unsurprisingly, have shown interest in the subject of persuasion. 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). The study of persuasion is important in understanding the effectiveness of political campaigns. This is argued in the work by Brader (2006), who looks at the role of emotions such as fear or enthusiasm in making political appeals effective. Persuasion is also discussed 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. In this thesis I investigate persuasion as part of campaigns aimed at changing the public’s attitudes and behaviours.

Persuasion is defined as a form of communication, not coercive or coincidental, “designed to influence others by modifying their beliefs, values, or attitudes” (Simons and Jones, 2011, p.21). Other scholars, taking into account that not every persuasion attempt is necessarily successful, define it as a “procedure with the potential to change someone’s […] specific beliefs [or] a person’s attitudes” (Petty and Brinol, 2008, p.137). In political science researchers have investigated how political figures (often elites) can affect and change attitudes (Cobb and Kuklinski, 1997; Dewan et al., 2014; Mutz et al., 1996). Two elements are common to the definitions I include here: first, the objectives of persuasion: beliefs and attitudes. Second, the actors taking part in the communication, sources, and recipients. I discuss these in the following paragraph.

Firstly, attitudes feature in the theoretical models as the object of persuasion, but, as discussed in the literature review, also constitute an indicator of political engagement (Maio and Haddock, 2009). Attitudes are a core concept in social psychology, defined by Eagly and Chaiken (1993, p.1) as “a psycho-
logical tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor”, by Petty and Cacioppo (1996, p.7) as an “enduring positive or negative feeling about some person, object or issue”, or, with a more general flavour, by Zanna and Rempel (1988, p.319) as “the categorization of a stimulus object along an evaluative dimension”.

The broadness of the definitions of attitudes from the psychology literature allow for flexibility in understanding and using a concept in very different contexts, such as researching persuasion or understanding social relations (Eagly and Chaiken, 2007). The broad definitions have also often been refined, as explained by Eagly and Chaiken (2007). These refinements allowed, for example, for a better understanding of attitudinal strength, attitudinal structures, and the differences between implicit and explicit attitudes (Chaiken et al., 1995). In other cases authors have also created useful topologies of objects of attitudes, classifying them into abstract (altruism, political violence) or concrete (an immigration bill of law, South Korea), individual (a poor person from Nigeria, Bob Geldolf) or collective (poor people, protesters at a demonstration) (Eagly and Chaiken, 2007). The insights of attitude research from social psychology are applied in many strands of political science, such as the study of public opinion, looking more specifically at political attitudes.

It is worth noting that none of the definitions I discuss above explicitly consider behaviour change as a direct result of persuasive communication. This is because the models of persuasion from social psychology are focussed on attitude change, but further models then posit that attitude change is connected with behaviour change as well. This attitudes-behaviours nexus is discussed in the theory of planned action (Ajzen and Fishbein, 1980; 1977) and the theory of planned behaviours (Ajzen, 1989; Ajzen and Fishbein, 2000; Ajzen and Fishbein, 2005).

In these theories, the authors posit the existence of a causal relationship between attitudes and behaviours. Ajzen and Fishbein state that attitudes include behavioural intentions as part of their structures. Behavioural intentions
are defined as a person’s subjective understanding of the likelihood they will enact certain actions (see also Rosenberg and Hovland, 1960). The authors theorise that behaviour intentions predict the behaviour of individuals (Ajzen and Fishbein, 2005). Looking at the full process, in the theories, individuals first create attitudes as items to store cognition around the social world that surrounds them (Fiske, 2009). Attitudes then include behaviour intentions (Ajzen and Fishbein, 2005), which cause the realisation of specific behaviours (Hogg and Vaughan, 2009).

The reasons for the existence of cognitive links between attitudes and enacted behaviours is discussed in more depth in more recent works, such as the articles by Crano and Prislin (2006), Cooke and Sheeran (2004) and Ajzen and Fishbein (2005). Crano and Prislin (2006) posit that individuals will seek to be consistent in holding attitudes and enacting behaviours. This reflects a common assumption in models of human behaviours that individuals will act rationally or, at least, will fulfil assumptions of bounded rationality (see: Gigerenzer and Selten, 2002; Kallgren and Wood, 1986). Therefore, for example, if an individual is concerned about a famine in a developing nation, they will enact strategies to address their concern.

However, attitude change does not always spur changes in behaviour. In a meta-analytic review by Cooke and Sheeran (2004) the authors study mediating factors of the attitude-behaviour connection and conclude that attitude strength is a necessary condition for attitudes to influence individuals’ behaviours (Petty and Krosnick, 2014). More specifically, among many factors which constitute attitude strength, the stability of the attitude over time is the most important predictor of behaviours Cooke and Sheeran (2004). Stability in attitudes is understood as durability and consistency in the evaluations in time (Ajzen and Fishbein, 2005).

Practically, for example, if individuals are exposed to the story of a group of women in poor countries who cannot access health services, they will store this information in the form of an attitude, and express concern for the prob-
3.1. Persuasion in social psychology

If their concern is only temporary or they are not particularly concerned about the issue, then their initial attitude will revert to its original neutral status and will unlikely result in changes in behaviours. If, however, their levels of concern are stronger, and the attitude persists as a cognitive structure in their memory, this will instead affect their behaviours, as they are more likely to get involved with campaigns to help the group of women. As I introduce persuasive communication models in section 3.2, my core objective is to understand the conditions under which messengers can be used to stimulate attitude strength and stability, so that both the individuals’ attitudes and behaviours are affected when reading charity appeals.

The third and final aspect of the definition of persuasion is the act of communication through which persuasion takes place. Models concerned with persuasion in social psychology are aimed at understanding how a communication process can influence individuals to change their attitudes and behaviours. The theoretical discussions around these processes evolved from a relatively simple factors-listing approach (Hovland et al., 1953), to modelling cognitive responses of the individuals at the receiving ends of the communication (Greenwald, 1968), to the contemporary process-based models of information elaboration and persuasion (Petty et al., 2003; Todorov et al., 2002). Here I provide a historical overview of the most salient characteristics of these models and how they evolved, before moving my focus to dual-pathway process models of persuasion in the next section.

The theoretical foundations in the study of persuasive communication are laid by Hovland and his colleagues at the Yale lab (Hovland et al., 1953) in the so called Hovland-Yale Model. The authors present a simple account that looks at communication as the sum of the effect of three variables: a source of communication, a message including the information (or arguments), and a recipient to whom the message is directed. The Yale school theory is scarce on details on how each part of the model connects together and interacts beyond the source-message-recipient chain, leaving empirical works at risk of oversim-
3.1. Persuasion in social psychology

plifying reality. However, the *Hovland-Yale* model was directly responsible for opening up avenues of research on how the characteristics of each of the three communication factors contributed to the phenomena of persuasive communication.

Research around source characteristics has looked at factors such as perceived expertise, attractiveness, trustworthiness, and credibility of messengers, as reviewed in the works by Wilson and Sherrell (1993), Berscheid and Walster (1974), McCroskey (1969), and Sternthal et al. (1978), with evidence of experimental and qualitative research pointing to how sources that are perceived as expert, attractive, or credible, can increase the persuasiveness of a message, or stimulate different forms of cognitive engagement with the messages themselves. I discuss source factors further in section 3.2 and 3.3.

Message characteristics have also been studied as persuasive cues in an extensive literature reviewed in the works by O’Keefe and Jackson (1995), Fiske (2009), and Areni and Cox (1995), with works reviewed showing the persuasive power of arguments perceived as strong from the recipients, but also how the use of examples or counterarguments in the message can also increase its persuasiveness.

Finally, recipient characteristics are also relevant for the study of persuasive messages. Efforts in this literature are mainly aimed at understanding how tailor-making campaigns and appeals for specific audiences can increase the persuasive power of source or message characteristics (see, for example, Hirsh et al., 2012). Reviews on this topic (such as Baumeister and Finkel (2010)) show the importance of factors such as intelligence, personality and emotional responses to messages as mediators of the persuasive effectiveness source and message characteristics.

As I discuss in sections 3.2 and 3.3, the most relevant factor for this research is the level of personal involvement of recipients. Johnson and Eagly (1989) define involvement as a “motivational state induced by an association between an activated attitude and the self-concept” (ibid. p.290), and dis-
3.1. Persuasion in social psychology

tinguish between three forms of personal involvement. This interaction antici-
pulates discussions around recipients' cognition around persuasive messages,
which I introduce at the end of this section, and discuss in section 3.2.

Johnson and Eagly (1989) look at value-relevant involvement, where the
association takes place between attitudes and personal values. Secondly, they
look at impression-relevant involvement, where the association instead takes
place between attitudes and the impression of the self which the recipient wants
to give. Thirdly, they look at outcome-relevant involvement, where the asso-
ciation takes place between attitudes and the outcomes a recipient wants to
obtain. The role of involvement as a mediator of source and message character-
istics in persuasion depends on the conceptual form researchers adopt. John-
son and Eagly (1989), in their review shows that value-relevant involvement
will decrease the positive and negative persuasive effect of source and message
factors. On the other hand outcome-relevant involvement will increase the
effectiveness of positive source and message factors, and impression-relevant
involvement will not affect source and message factors either way. I discuss
further details on recipients' involvement in sections 3.2 and 3.3.

To sum up, the Hovland-Yale Model inaugurated three fields of research
which look at the effect of source, message and recipient characteristics in pro-
cesses of persuasive communication. The main criticism to the model concerns
its assumption that recipients will always passively learn and store the infor-
mation of the message (Perloff, 2010). Scholars such as Festinger and Maccoby
(1964) were quick to question the realism of the model, as in reality individuals
do not automatically store the information they are given in their memories.

This opened up two new avenues of research, which brought back into
the theoretical picture the cognitive responses of recipients, such as thoughts
about sources and message contents, or lack thereof, information storage into
memory, or perceived dissonances between multiple characteristics of a per-
suasive message (Petty et al., 2014). Researchers in the first research avenue
theorised that persuasion is the result of thoughts (or cognitive activity) about
the contents and characteristics of the message (see Petty et al., 1981b; Perloff and Brock, 1980). In parallel, a second group of works considered that persuasion can also happen for individuals who do not wish to or cannot cognitively engage with the contents and the characteristics of a message (see (Perloff, 2010); Buller and Hall (1998)).

Dual process models emerged as synthesis of both approaches (Chaiken and Trope, 1999; Petty and Cacioppo, 1986), allowing theoretical accounts to include both cognitively-intense or cognitively-light processes of information elaboration in contexts of persuasion, discussing how source, message and recipient characteristics contribute to shaping the attitudes and behaviours of individuals.

3.2 Two pathways to persuasion

Dual process models from social psychology are at the core of studies ranging from behavioural economics and public policy, to marketing and cognitive psychology. The models posit that individuals exposed to information can attend to it through two pathways (Chaiken and Trope, 1999). In the Heuristic-Systematic Model (HSM) by Chaiken and Eagly (1989) these pathways are called systematic and heuristic, while in the Elaboration Likelihood Model (ELM) by Petty and Cacioppo (1986), these are called central and peripheral.

In both models a source communicates a message to a recipient. The recipient can process the information in the message systematically, closely scrutinising the message, its contents, its arguments, and carefully considering how this information can be used to update their attitudes. This is called systematic processing by Chaiken and Eagly (1989), or elaboration through the central route by Petty and Cacioppo (1986).

If, however, the individual can’t, or won’t, pay close attention to the contents of the message they can still get involved in the communication process by using heuristics or peripheral cues. Both heuristics and peripheral cues are
3.2. Two pathways to persuasion

simple rules that recipients can rely on when elaborating information through the peripheral/systematic route. Chaiken and Eagly (1989) discuss how a heuristic is a relevant cue in cognition, a specific characteristic of a message which the recipients use to accept or reject the message as a whole.

Heuristic cues in persuasive communication can include the use of multiple examples in the argument, or the use of complex lexicon as a proxy for the communicator’s expertise (Fiske, 2009). For example, an individual exposed to a really long message on the importance of money being spent on development aid might not have the time to read through the whole text, but, heuristically, they might still think that the as the text is so long, it is likely to make a good argument and can be trusted to be right.

On the other hand a peripheral cue might also be irrelevant to the contents of the message, but still work as a simple cue to accept or reject the arguments of the message itself (Petty and Cacioppo, 1986). For example, consider an individual who evaluates the political leaflets of two parties and decides to vote for the first, as a woman is the candidate of the second party. In this case there is no cognitive engagement with the contents of the manifestos, but the recipient of the leaflets still uses an informational cue, the sex of a candidate, which is irrelevant to the merits of the arguments, to accept or reject the contents of two messages.

These forms of processing are called heuristic processing by Chaiken and Eagly (1989) or elaboration through the peripheral route by Petty and Cacioppo (1986). In the next two sections I begin by discussing each model in-depth, especially with regards to the importance of source cues. I also look at both theoretical strengths and limitations of each model. In section 3.3, I then build on the existing theoretical models to present a dual pathway model which looks more specifically at expert and celebrity source cues in the context of a charity appeal.
3.2. The Elaboration Likelihood Model

The ELM is arguably the most influential and most researched social psychology model on elaboration in persuasive communication (Choi and Salmon, 2003). In their original work, Petty et al. (1981a) assume that individuals are motivated to hold correct attitudes, trying to avoid cognitive effort when considering issues that don’t have personal relevance, and that the attitudes they hold can affect behaviours. If these conditions hold, a subsequent set of factors such as motivation, ability to process the information, situational factors and personal involvement determines whether the individual exposed to a persuasive message will elaborate through the central route, considering the arguments critically, or the peripheral route, using peripheral cues and heuristics (Booth-Butterfield and Welbourne, 2002).

Personal involvement with the contents of a message is the core factor of the ELM, as it determines whether recipients are more likely to process the information of the message itself through the central or peripheral routes (Petty and Wegener, 1999). Involvement is defined by Petty and Cacioppo as the “personal relevance of a message”: a situation in which arguments or their consequences are meaningful and relevant for recipients (1986, p.144). The broad conceptualisation of personal involvement and its determinants confers flexibility to the ELM, making it applicable to a variety of contexts. However, a lack of conceptual clarity around personal involvement remains one of the main issues with the strength of the model (Johnson and Eagly, 1989), as I will discuss in the conclusions to this section. Issues of conceptual clarity put aside, as personal involvement vary on a continuum between no involvement and very high involvement, so does the individual’s elaboration, which varies between peripheral-routed and central-routed elaboration.

1The concept of correct attitudes is somewhat vague in the original work by Petty and Cacioppo (1981). Visser and Cooper (2007), discusses how individuals will seek to reach two correctness goals when processing information. Firstly, they will seek to have coherence between the information they elaborate and their pre-existing attitudinal structures. Secondly, they will seek to have attitudes which are regarded as socially acceptable.

2This condition is known as the cognitive miser, and is discussed in the work by Nisbett and Ross, 1980
3.2. Two pathways to persuasion

For example, consider a British citizen who receives a campaign appeal describing the usefulness of investment on fertilisers in Kenya. As the recipient has got no direct involvement with the outcomes or, likely, a particular interest in fertilisers, they will more likely decide to save cognitive resources and process the information through the peripheral route. On the other hand, a British citizen who receives an appeal to vote in a forthcoming local election is affected by the outcomes argued in the message, and can directly consider the relevance of the argument. In this case, the recipient is more likely to process the information through the central route.

As illustrated in the examples, according to Petty and Cacioppo (1986), one of the two routes of persuasion dominates over the other, with attitude and behaviour change assumed to happen either predominantly through the central or peripheral route\(^3\) (Petty and Cacioppo, 1984b). Highly involved individuals, at the net of the other personal factors, predominantly follow the central elaboration route when confronted with the information included in a message. They think not only by reiterating the contents of the message, but also by generating new thoughts (Petty and Wegener, 1999). If the recipients, perceiving the argument to be strong and convincing, generate thoughts about the arguments included in the appeal, they will update their currently held attitudes to be consistent with the contents of the argument itself. This cognitive-intensive form of attitude change is persistent, more resistant to attempts to counter-persuade, and more predictive of behaviour intentions and behaviours (Petty et al., 1995). The ELM research shows how the increase in attitude strength is due to the combined effect of two factors. Firstly, central elaboration increases the accessibility of the attitudinal construct and the confidence with which recipients hold it (Petty et al., 1995). Secondly, central elaboration increases the amount of information from the message which is memorised by the recipient, creating cognitive structures which support the attitude (Chaiken et al., 1995).

\(^3\)Later in this chapter I discuss how this assumption has been criticised in works (such as Stiff (1986))
Individuals who are low on involvement, on the other hand, follow the peripheral route to elaboration. They are cognitively more parsimonious in considering the argument, spending less time elaborating its strengths and weaknesses, using peripheral cues such as heuristics or other cues unrelated to the core contents of the message or its source (Booth-Butterfield and Welbourne, 2002). Heuristics, which are quick cognitive shortcuts (Gigerenzer and Todd, 1999a), allow individuals to avoid considering the arguments in-depth by deciding whether to accept them or reject them on the basis of some more easily accessible characteristic of the message. For example, longer arguments can work as a heuristic proxy for good quality arguments (Booth-Butterfield and Welbourne, 2002), or consensus on an opinion implies that the opinion in question is likely to be correct (Todorov et al., 2002).

From the pool of all message characteristics that can act as peripheral cues or heuristics for recipients, in this thesis I focus on cues related to the sources of a message - the messengers. Source cues and heuristics are some of the most important instruments of peripheral processes studied by social psychologists (Petty and Cacioppo, 1984b), and, more recently, political scientists (Iyengar and Valentino, 2000). The characteristics of sources, such as their expertise, attractiveness, or trustworthiness can work as heuristics or peripheral cues, with the persuasive strength of the cue depending on how expert, attractive, or trustworthy sources are perceived to be by recipients (Mondak, 1993).

Source cues are useful to individuals seeking to elaborate political judgements and make political choices in a complex informational or decisional environment (Mondak, 1993), by working as simple information accept or reject shortcuts based on a characteristic, or trait of the message source (Petty and Cacioppo, 1984b). In the meta-analytical study by Wilson and Sherrell (1993) the authors investigate how source traits such as expertise, attractiveness, or trustworthiness rank in terms of potential persuasiveness effect across a range of research designs considering different topics. By looking at 114 empirical works, they conclude that expertise, by far, ranks as the most effective source
3.2. Two pathways to persuasion

cue in influencing attitudes and behaviours through persuasive communication (Wilson and Sherrell, 1993).

When source cues are used as part of the recipient’s peripheral elaboration, the attitudes generated are not as strong as those resulting from central processing; these attitudes are easier to attack by counter-persuasive arguments, are likely to revert back to their pre-communication state, and are less predictive of future behaviour intentions (Booth-Butterfield and Welbourne, 2002). However, under a set of conditions, source cues also affect information elaboration in different ways. If individuals are moderately involved, a source cue can guide the extent of cognitive activity the recipient is willing to do in considering the arguments of the message (Petty and Cacioppo, 1984b). Moreover, if individuals are moderately or highly involved, a source cue can add to the power of the argument, providing the source characteristic is relevant to the contents of the arguments and context of the message (Petty and Cacioppo, 1984b).

Thinking for example of an expert message source, their expertise can work as a shortcut for individuals who have no involvement with the issue presented in the message. For individuals in higher involvement elaboration conditions, on the other hand, an expert source can work as a cue to think more about the issue at hand (‘if an expert is discussing this message then it’s worth thinking about it’), or as an extra cue of argument strength (‘if an expert says this, it is likely to be right’). Wilson and Sherrell (1993) posit that this triple role of expertise cues is the reason why in their meta-analysis expert sources rank as the most effective source-based persuasion cue. I return to this topic in subsection 3.2.2 as I discuss the HSM, and in the final model presented in section 3.3, where I discuss how expert and celebrities rely on their perceived expertise and attractiveness to increase the persuasive power of a message.

However, before moving on to the HSM and my adapted dual-pathway model, I consider some of the core limitations of the ELM. Firstly, I will
3.2. Two pathways to persuasion

look at the theoretical limit of theorising that only one of the two routes of persuasion is activated by the recipient. Secondly, I discuss the issues with a lack of conceptual clarity with the concept of personal involvement as used in the ELM model.

The core criticism of the ELM is the idea that processing is understood (or at least predominantly) as happening exclusively through either the central or peripheral route, denying the possibility of multi-route information processing (Stiff, 1986). This assumption might not be seen as strongly descriptive or reality, as individuals could rely on a mixture of cognition around the argument and its strengths, but also informational cues contained in it. Furthermore, if the routes are separated, then the ELM’s explanation of how cues can affect elaboration, both through the central and peripheral route, remain unclear to the readers and researchers.

Petty et al. (1987) have responded to this critique by showing that the ELM is mostly concerned with understanding which of the two processes, overall, has the biggest impact on attitudes and behaviours. According to the authors, attitude change in the end is either obtained through the central or peripheral route, as if one of the two has prevailed on the other, with routes adopted depending on the levels of personal involvement with the issue at hand. This might be true at the very poles of the continuum of personal involvement. If an individual is completely uninvolved with the issue included in a message, and is still called to make a choice on how to value the information they receive, they can at best rely on peripheral cues. On the other hand, a heavily involved individual can directly elaborate the contents of the message and its arguments without having to rely on peripheral cues. In reality, however, individuals are mostly at points on the continuum in-between the two poles. A theory that can speak to elaboration strategies on a continuum has an advantage in the power to explain attitude and behaviour change. The HSM, which I discuss in the next section, explicitly discusses attitude and behaviour change as a result of both processes mixed together.
A second issue raised by Johnson and Eagly (1989) considers the conceptualisation of personal involvement in the model. The authors criticise the strictly outcome-oriented understanding of involvement, looking at involvement as the state in which a respondent is directly affected by the outcomes of the arguments presented in the persuasive message. The authors argue, convincingly, that the ELM focus on outcome-relevance leaves personal values or social acceptability in the background.

For example, the ELM would always predict that a British individual who considers a charity appeal to donate money to farmers in Ethiopia will be more likely to engage with the contents of the appeal through the peripheral route, as the recipient sees no outcome-relevance of the charity campaign for themselves.

Values and social acceptability are also forms of personal involvement (Johnson and Eagly, 1989). In this case, a British citizen who is concerned for issues surrounding global poverty could process the arguments in the appeal using the central route. Petty and Cacioppo (1990) argued in response that any of the three conceptualisations can work as long as they broadly reflect forms of personal relevance of the message for the recipient. This, however, brings the discussion back to a state of theoretical lack of clarity. Furthermore, inevitably, in multiple testing contexts, multiple definitions of personal involvement emerge, making replication tests of the ELM model a fundamental instrument to assess the validity and scope of the theory. I discuss my contribution to this theoretical debate when I present my adaptation of the ELM and HSM model in section 3.3 of this chapter.

Finally, the ELM has been criticised as it is difficult to formalise the theorised mechanisms into causal models as they are used in political science (Morgan and Winship, 2014). In the ELM, variables can have multiple (or even ambiguous) roles, be activated or remain deactivated depending on the fulfilment of other situational conditions, and interact more in a flowchart fashion than a cause-and-consequence ordered model (Mongeau and Stiff, 1993). One
3.2. Two pathways to persuasion

of the objectives for this section of this chapter is therefore to build a specific causal model to specify the role of each variable in the specific case of charity campaigns, with discussion included in section 3.5.

3.2.2 The Heuristic Systematic Model

The HSM is the ELM’s theoretical sibling. The models share the dual-process structure, although with slightly different nomenclature, and produce similar theoretical predictions on the importance of similar factors in persuasive communication. Just as is the case with the ELM, individuals elaborate information either with a heavily cognitive process or by relying on informational cues as heuristics to form or update their attitudes (Todorov et al., 2002). If in the ELM the focus is on which elaboration route prevails, in the HSM the core of theoretical interest for Chaiken and Eagly is specifically on heuristics and heuristic processing (Chaiken and Eagly, 1989).

In the HSM, heuristics work as any other form of knowledge stored in memory, as discussed in the work by Higgins (1996). Heuristics have to be accessible, available, salient, and applicable. By availability Higgins indicates that recipients must have the heuristic rule stored in their memory, while by accessibility the author means that the heuristic cue must be activated by the recipient in their cognitive process. Salience is defined as the extent to which the heuristic cue can attract the recipient’s attention, and, finally applicability is defined as the degree of fit between the concept in the mind of the recipient and the actual heuristic cue in communication (Chen et al., 1999).

As an example, think of an individual who deems that experts can be trusted to hold correct opinions (availability), and who notices that an expert is endorsing a political candidate in an election message (accessibility). The individual is more likely to be influenced to a greater extent by messages where the source is explicitly presented as an expert through information like their educational attainment, or the fact that they work in a research institution (salience), as is the case in the election message, where the endorser of the political candidate woks as a director in a famous university and holds multiple
3.2. Two pathways to persuasion

PhDs and Masters’ degrees (applicability).

The second, and most important core difference from the ELM is that in the HSM the two processes are theorised to happen simultaneously, allowing for formal theorisation of specific heuristic-systematic interactions (Gilbert, 1999). In the HSM, the levels personal involvement of the recipient work as a factor establishing the relative importance of heuristic or systematic processing (Chen et al., 1999).

Heuristic and systematic processing can work additively (Maheswaran et al., 1992), with heuristic cues working to strengthen the argument found in the message. For example, think of a message which includes an argument that the rainforest should be protected from deforestation. An expert messenger conveying this message can work as a heuristic cue to accepting the arguments in the message as correct, but can also reinforce the quality of the argument, which is now qualified as being sourced from a credible expert in the eyes of a recipient. This interactive mechanism is not dissimilar from the ELM prediction that relevant peripheral cues can be processed through central route elaboration as extra arguments or by increasing the persuasiveness of the arguments itself (Wilson and Sherrell, 1993).

However, the HSM also theorises that heuristic and systematic processes can interact in two additional different ways. Firstly, heuristic and systematic processes can attenuate each other’s effects if they have contrasting directions (Maheswaran and Chaiken, 1991). A message can be heuristically persuasive but have a very unconvincing argument, or, vice-versa, the argument might be really strong, but some heuristic shortcuts still suggest the arguments in the message can’t be trusted. Think, for example, of a well thought and articulated political campaign to reduce corruption in political institutions of a country which, however is endorsed by a politician with past criminal charges for corruption. The personal involvement of the recipient, as a factor activating heuristic and systematic processing, will decide which bit of evidence will prevail in the cognitive process (Todorov et al., 2002), although, differ-
3.2. Two pathways to persuasion

ently from the ELM which posits a trade-off relationship between central and peripheral processing, in the HSM the final attitudinal outcome will still be influenced by both processes.

Secondly, the heuristic and systematic routes can interact when the persuasive power of the message is mixed, such as in the case when the arguments made are sometimes weak and sometimes strong in the same message (Todorov et al., 2002). Heuristic cues can help in solving the cognitive conundrum for the recipient by attributing more importance to the weak or strong arguments included in the message if the source, for example, is found to be less or more credible (Chaiken and Maheswaran, 1994).

Differences apart, the ELM and HSM share so much in theoretical nature, it is not surprising that many of the limitations that apply to the ELM also carry over to the HSM. One among many is the issue with translating the theoretical insight of the theory to a causal model representation, as factors such as the personal involvement of recipients or source cues appear at multiple points in the process. This concern is slightly attenuated here by the possibility of explicitly considering multiple-route processing as discussed above, reducing the role of contextual factors in activation of variables and mechanisms, posited here to work simultaneously. On the other hand, the concerns with the conceptualisation and operationalisation of personal involvement remain strong with the HSM as well. As personal involvement determines the weight recipients will give to heuristic and systematic elaboration, a key definition of the concept is a necessary component of the theory.

In the next section, I build on the theoretical wealth of the ELM/HSM tradition to build a modified and integrated model to understand persuasion in the specific case of political and charity campaigns to fight global poverty. The model I propose relies on dual-processes theories to explain how individuals’ attitudes towards global poverty, and their intentions to get involved with the fight against it, can be changed by messages endorsed by experts or celebrities, based on studies of source cues as heuristics or peripheral cues in the ELM
3.3 Adapted and modified model

In this section I discuss my adapted version of the ELM/HSM models. Before moving to the discussion, in the following page I present a causal schematisation showing all the intervening factors of my modified model. The schematisation represents the two poles of an elaboration continuum, with one pole looking at heuristic elaboration for individuals with no previous engagement with global poverty issues, and the second pole looking at systematic elaboration for individuals who have some level of previous engagement with global poverty.

The flowchart in figure 3.1 discusses how individuals who receive a message from a charity, can elaborate the information if they rely on heuristic or systematic processing. The message includes an argument that individuals should take action, and a source which endorses the message. Individuals who are not involved with global poverty will rely more heavily on the heuristic route and look for message cues, if any are available, such as expert or attractive sources. Individuals who have some degree of involvement with global poverty and the object of the campaign, on the other hand, will think more about the argument and its strengths when deciding whether they want to update their attitudes and behaviours. I divide my discussion of the routes and intervening factors by looking at processes which include exogenous and endogenous factors and their results.
Figure 3.1: Flowchart of the theoretical model

3.3. Adapted and modified model
3.3.1 Exogenous factors

The model includes two sets of exogenous factors: the recipient’s personal characteristics, and their levels of involvement with the arguments and topics of the message. These personal characteristics play two roles in the model. Firstly, they determine source cue availability for individuals using heuristic processing, which I discuss more in depth in section 3.3.2. Secondly, they determine the levels of personal involvement of individuals, the fundamental factor affecting the recipients’ choice of a predominantly heuristic or systematic elaboration strategy. In my adapted version I conceptualise personal involvement as the levels of the recipients’ previous engagement with global poverty and the fight against it. I discuss this choice in this section.

Classically, the ELM has been used to study issues in marketing of products, and in this research world it makes sense to talk about personal relevance of a product or service. For example, when an advertisement is trying to sell a product to stop smoking, smokers with an interest in quitting are more likely to pay close attention to the claims of the ad, with other non-smoking members of the audience more likely relying on heuristic cues, and so on.

When it comes to political problems and political campaigns the concept of personal relevance is not as easily applicable in all situations. This is the case with charity campaigns that seek to engage members of the public in donor countries to address political and social issues in developing countries. The vast majority of individuals in donor countries, who support the fight against global poverty, will have little to no ties or direct personal involvement with it, and yet they are asked to care and get involved by the campaign. When discussing some of the limitations of the ELM I noted that Petty and Cacioppo (1990) look favourably to a broad understanding of what they meant by involvement in their model, but also acknowledge the need for formalising and specifying the theoretical model and the conditions under which variables can have their effects in the context of persuasion.

My contribution in this adapted version of the original models is to adapt
3.3. Adapted and modified model

the generic language of involvement from social-psychological theories, to the study of political engagement. While Johnson and Eagly (1989) reflected on outcome, value and social dimensions of personal involvement, I seek to expand the applicability of dual pathway models by using the concept of individual political engagement. Reflecting on the literature review I presented in chapter 3, indicators of engagement come in the three groups of information and knowledge, attitudes, and behaviours. The combination of levels of these factors for an individual can act as a proxy for their level of involvement with a political issue. However, I specifically choose to focus behavioural engagement as a dimension of personal involvement as it incorporates both levels of knowledge on global poverty, and attitudes towards it. The first can be understood as a form of behavioural engagement as individuals who seek to get involved with charity campaigns will inevitably both need and obtain information about the issues associated with global poverty. Attitudes, as I discussed in this theory section can also be assumed to be coherent with the individuals’ behaviours Visser and Cooper (2007).

Using previous levels of engagement as a measure of personal involvement also comes with a series of theoretical and practical advantages. Firstly, using previous behavioural engagement allows me to formally consider how persuasion changes for individuals with no (or little) previous involvement or individuals who were previously involved with similar campaigns. This might not be crucial from the more agnostic perspective of a psychology researcher, but is fundamental when understanding the effectiveness of campaigns in political science research. I understand campaign effectiveness as its capacity to engage previously disengaged individuals, and to reinforce the engagement levels of previously engaged individuals. The difference between these two forms of effectiveness goals should be reflected in a deeper understanding of the characteristics of a charity campaign message that can achieve neither, either, or both of these goals.

Using previous behavioural engagement as the elaboration-determining
factor in an adapted ELM/HSM model can provide insight. This choice not only contributes to the theoretical debates of how we understand the concept of personal involvement in the ELM/HSM, but also, crucially, fully imports the social-psychological insights into the study of effective campaigns in political science.

Secondly, an information elaboration model which includes previous political engagement with a political issue allows me to understand more about heuristic rules in political campaigns, by investigating not only the conditions under which heuristic processing is activated, but also, and more importantly, whether it is sustainable to rely on heuristics to politically engage the public.

Two elements of the ELM/HSM theories are relevant here. First, from both models, is the prediction that peripheral/heuristic processing will result only in temporary changes in attitudes, which are not reflected in long-term behaviour changes. Second, under conditions of higher elaboration likelihood, is the prediction that heuristic cues can work as cues to strengthen systematic/central elaboration of the message arguments as well. When the ELM/HSM theories are applied to the study of political campaigns\(^4\), they highlight the importance of studying factors in a political campaign that could work both as an engaging factor (as a foot-in-the-door strategy), but also produce long-term willingness to get involved with the campaign. This also allows me to import in political science the deeper understanding of heuristics and cognition from the HSM/ELM, constituting an improvement over the current labelling but not causally modelling approach to heuristics found, for example, in choice architecture research Leonard (2008).

### 3.3.2 Choosing source cues

The second important role of the recipients’ characteristics is in determining whether heuristic cues are available to recipients to facilitate their elaboration of the information. Classically, in the ELM/HSM tests, source cues are theo-

\(^4\)To my knowledge, the ELM/HSM models have not been applied to study political campaigns, the models have been used in the past to study public opinion. See for example: Hoekstra and Segal (1996)
3.3. Adapted and modified model

Theoretically isolated and artificially made available for use by the message recipient in their elaboration as part of experimental treatments (O’Keefe, 2015). However, closer scrutiny to real world scenarios would beg the question of what happens when multiple source cues exist in a message, or multiple messages relying on different source cues are available.

While in this thesis I focus on experts and celebrities and their expertise and attractiveness-based cues, discussed in more depth in section 3.3.3, 3.3.4 and 3.3.5, in a real information environment sources can be perceived as having a longer list of further traits such as warmth, being influential, or ambitious (Fiske et al., 2007).

Heuristic processing, as discussed by Gigerenzer and Todd (1999a), means the recipient will only search for and use only one cue, stopping information processing after that. The HSM or ELM however don’t touch on the issue of heuristic selection or cue availability. In an artificial setting such as the experiments I discuss in chapter 6 and 7 this is achieved by making only one heuristic cue available and applicable (Higgins, 1996), with the recipients either receiving an expert-endorsed message, or a celebrity endorsed message. However when cognition around source characteristics becomes more complicated, individuals rely on other mechanisms to heuristically process the information. I discuss these mechanisms in this section.

A first theory posits that human cognitive structures, including decisions on which heuristic to use, can adapt to the environment in which individuals make choices (Simon, 1956). This fits with empirical discussions around the influence of cultural environments on the persuasive power of celebrities in the US and the UK as studied by Brockington (2014a) and presented in theoretical discussions in the work by Schaefer et al. (2010). However, within a specific environment it still leaves the question of how heuristics are chosen unanswered.

A second theory instead posits that the structures of heuristics have been hardwired as part of the process of human evolution (for example: Kleffner
3.3. Adapted and modified model

3.3. Adapted and modified model

3.3. Adapted and modified model

and Ramachandran, 1992). Even though evolutionary processes are very important, this too won’t help in telling why attractiveness or other source cues are used more often than not by individuals with certain characteristics.

More recent theories have therefore moved forward from this narrative and consider that the way individuals decide which heuristic strategy to use might be learned either individually or socially (Gigerenzer and Gaissmaier, 2011; Rieskamp and Otto, 2006; Gigerenzer and Todd, 1999b). In these theories the social and individual characteristics of individuals are seen as determinants of which cues will be more likely to be used in complex information environments.

Specifically, in this thesis, I look at heuristics connected with expert and celebrity sources of information. Source-related heuristics, in this context, can be used as simple cues to accept or reject the validity of information or arguments with the intent of persuading a recipient, and are activated under the condition that the sources, due to their characteristics such as expertise or attractiveness, are seen as credible by the message recipients (Ohanian, 1990).

Consequently, a question arises of what makes specific message recipients judge experts or celebrities to be credible as messengers in charity campaigns. In this context where the specific theory on drivers of credibility judgements of messengers in persuasive communication are still in their infancy, I begin answering this question by systematising the theoretical and empirical works on recipient characteristics as determinants of credibility judgements of experts and celebrities as sources of information. A recipient’s judgement of credibility towards experts and celebrity is index of persuasion cues based on their expertise or attractiveness being available and salient in the recipient’s typical cognitive processes of communication (Higgins, 1996).

In the first instance, the theoretical literature looks at recipients’ personal characteristics as drivers of such credibility judgements, as discussed in the theoretical accounts by Wathen and Burkell (2002), Mehta (1999), and Slater and Rouner (1996). All three works adopt more of a listing approach of potential personal characteristics which drive credibility judgements. These include
personal values and social location (Wathen and Burkell, 2002) or age and education levels (Mehta, 1999). I will explore these factors further below. Many works, however, don’t move past the listing approach, lamenting the lack of theoretical specification of how these factors intervene in the assessments of credibility.

Wathen and Burkell (2002) talk of interaction between information, recipient and source characteristics in the construction of credibility judgements, echoing the Yale school approach discussed earlier in this chapter. On the other hand, most other works in the literature completely sidestep the theoretical relationship issues and just test hypotheses on grounds of expectations that the recipient’s personal and social characteristics have no effects on credibility judgements (Alsmadi, 2006), or by investigating broad research questions on the importance of recipients’ characteristics (this approach is employed, for example, in Freed et al., 2011, Greer, 2003, and Feng and MacGeorge, 2006), either by directly testing hypotheses on these factors, or using them as controls, as I further discuss below in this section.

A further lack of insight in the current literature is in the research around the credibility of expert sources, with most works focussing on the credibility of celebrities. This, once more, might come down to celebrities being an easily identifiable and commonly used form of endorsement in marketing, while expertise is seen as a source trait, more than a category of messengers in most empirical investigations (O’Keefe, 2015). Nevertheless, celebrities feature in 7 of 16 empirical works I reviewed as part of my efforts to systematise knowledge around questions of source credibility, with the remaining works looking at a mixture of other sources such as governmental agencies (Peters et al., 1997), or online media (Greer, 2003; Wathen and Burkell, 2002), with varying degrees of focus and interest on expertise of the sources.

Finally, while the literature is relatively rich in methodological approaches, with both qualitative, quantitative, and theoretical inquiry pieces, many works only consider the issue of recipient characteristics as part of the empirical
control strategy. In my review of 16 works use recipient characteristics such as gender or sex (Samman et al., 2009; Silvera and Austad, 2004), age (Becker, 2013; Flanagin and Metzger, 2007; Peters et al., 1997), or education (Flanagin and Metzger, 2007; Darley and Smith, 1995) as control variables. On the other hand, the remaining 11 works explicitly consider recipient characteristics also including race and ethnicity (Freed et al., 2011; Greer, 2003), income (Alsmadi, 2006; Greer, 2003), and social and political identity (Feng and MacGeorge, 2006; Wathen and Burkell, 2002).

Whether through broad research questions or as a result of control strategies, the literature still finds two important results, which I use to state my own hypotheses, and to reiterate the need for further research in this area. Firstly, I look at the broad results confirming the importance of recipient characteristics in shaping credibility judgement. Then I look at more specific evidence on credibility judgements of celebrities and experts. I use this information to state research hypotheses and to reiterate the broad research question which connects this field of research.

Firstly personal characteristics matter in the formation of credibility judgements. Education is found to be a significant factor in all five papers which investigate its importance. O’Reilly (1982) finds that more educated individuals will find more information sources as credible, and that, broadly, differences in education lead to differences in use of information sources such as experts. This is echoed generally in Greer (2003), and Flanagin and Metzger (2007), who control for education in their designs and find further significant effects.

The importance of other factors such as age, gender, race/ethnicity is less clear from reviewing the literature. Gender is only significant in 3 of the 11 studies which check for gender difference in credibility judgements (these are the studies by Becker, 2013; Freed et al., 2011; Alsmadi, 2006), and research mostly looks at celebrity sources of information, which I will talk about below. Age appears in 6 of the 16 empirical studies, and is significantly affecting
credibility judgement in 3 of these. In a theoretical piece Phillips and Sternthal (1977) also discusses how the age effect could be reflecting different learning and information-seeking strategies, which people acquire and use through a life-span, connecting age, knowledge, and education as factors in the broader discussion.

Many other factors appear sporadically in the literature as well, but these remain relatively under-explored. However, the limited evidence that exists right now still points to significant effects of factors such as income (as in Peters et al., 1997, where the authors show differences in credibility judgements of governmental agents by income groups) race (Freed et al., 2011, which shows changes in information processing strategies across race groups), political identity (Lavine et al., 1999, in which the authors show that authoritative recipients trust expert-sourced information more), and cultural settings (for example Schaefer et al., 2010, in which the authors investigate cultural nearness to power and how it confers credibility power to celebrities).

To sum up: recipient characteristics matter in shaping credibility judgements, but evidence so far on interactions between recipient and source characteristics is limited both theoretically and empirically. Furthermore, theoretically, both are thought to interact with the content of the message (Slater and Rouner, 1996), making investigation on the matter sensitive to the context of the communication. In consequence of the empirical evidence and theoretical push for further investigation on this important matter I adopt the broad research question which underpins most of the research I presented in this subsection:

**Research Question 1**: Do the social characteristics of individuals, including gender, age, education, race, political and social identity, and cultural settings, affect their credibility judgements of celebrities and experts?

A few existing studies provide useful ground to state hypotheses that
look more specifically at drivers of credibility judgements towards expert and celebrities, which I look at next.

When it comes to expert sources of information, Feng and MacGeorge (2006) show that men are more likely than women to judge experts as credible. Rieh and Hilligoss (2008), connectedly, find that older people are more likely to judge experts as credible as well. Finally Darley and Smith (1995) show that educated individuals have a preference for expert-sourced information as well. Taken all together, this shows a demographic profile of expert information audiences, which I summarise in the hypotheses below:

**Hypothesis 1:** Men are more likely to judge experts as credible than women.

**Hypothesis 2:** Older individuals are more likely to judge experts as credible than younger ones.

**Hypothesis 3:** More educated individuals are more likely to judge experts as credible than less educated individuals.

When it comes to celebrity sources of information, Alsmadi (2006) finds that men are more likely to trust celebrity endorsements of products. On the other hand, Couldry et al. (2016) show that in their UK-specific analysis of media consumption patterns and their effect on political engagement women were more likely to show trust and interest in celebrity culture and information from celebrity sources. While the literature does not provide a clear sense for the direction of the effect of the recipient’s gender, this factor is still, overall, important in the general model. Given the focus on political engagement in the work by Couldry et al. (2016), their finding is more closely related to the context of my model test and is reflected in my hypothesis. Age is an important factor here as well, with Becker (2013) showing that younger individuals are more likely to find celebrity-endorsed political campaigns as
credible, and Couldry et al. (2016) showing that celebrity audiences are one of the younger media consuming populations analysed in their work set in the UK. I seek to replicate these findings which I incorporate in the hypotheses listed below:

**Hypothesis 4**: Women are more likely to judge celebrities as credible than men.

**Hypothesis 5**: Younger individuals are more likely to judge celebrities as credible than older ones.

To sum up, the important question of how recipients select source cues in the case of political campaigns remains unanswered. While this problem is unaccounted for in the literature studying the HSM/ELM models, the works on credibility judgement I discussed in this section have provided me with useful guidance to reassert the importance of this research question. I also start shaping an answer by looking at the social and individual characteristics of the recipient which make it more or less likely to find celebrities and experts as credible. These include their demographic characteristics, such as age, education, and gender, but also the cultural settings within which they communicate and the topic of the communication itself. In the next section I look at the other intervening factors of my model, before moving to empirical tests starting in the next chapter.

### 3.3.3 Endogenous factors

The adapted model includes two core endogenous factors: the arguments in the message, and the sources of the message. Sources, their characteristics, and their valence as cues in the elaboration processes are my core focus, but the message and its arguments feature, in limited part, are considered in the model as well. The quality of messages, the strength of the arguments, and the capacity of individuals to cognitively engage with these have been one
of the most researched areas in the study of the ELM/HSM models (see, for example, Klein and Webster, 2000; Petty and Cacioppo, 1984a; Petty and Wegener, 2014).

Individuals whose previous engagement with global poverty is particularly strong will elaborate the information included in the argument, weigh the convincingness of the arguments made, and adapt their attitudes and behaviours consequently. As in the rest of the model and in my empirical tests I focus on the effect of source cues; I assume that the argument-related effects are positive (i.e. the argument is easily accessible and provides strong reasons to engage with the campaign’s topic and demands) and fixed. The remainder of the discussion in this section focuses on source cues.

This specific model on campaign effectiveness looks at the effects of the characteristics of two types of sources: celebrities and experts. Heuristics associated with celebrities have been discussed by authors such as Erdogan, (2001; 1999), while expertise-based heuristics feature in a wide array of works such as Cialdini (2001) and Biswas et al. (2006).

Celebrities might see widespread use in marketing campaigns, but evidence on their effectiveness in charity campaigns, is limited. Messengers in the expert categories are also used in many campaigns, with theoretical and empirical literatures showing how expertise cues are among the most effective in persuasive communication (Sherrell, 1993). Expert endorsements can work as heuristic cues or cues to further cognition (Fiske, 2009), acting both as a theoretical and substantively interesting alternative to celebrity-based cues in the theoretical model. In the larger theoretical landscape, a specific celebrity and expert contraposition speaks to broader debates around source attractiveness and expertise as determinants of communication persuasiveness (Ohanian, 1990; DeBono and Harnish, 1988; Maddux and Rogers, 1980).

Furthermore, more recently, research has discussed the relevance warmth and competence as universal dimensions of social cognition (Cuddy et al., 2008; Fiske et al., 2007). In their meta-analysis work, Fiske et al. (2007) “firmly es-
establish[ed] that people everywhere differentiate each other by liking (warmth, trustworthiness) and by respecting (competence, efficiency)” (ibid., p76). In their model, the authors apply the dimensions to the study of stereotypes and social interactions, while in my model, the fundamental question is one of the capacity of a warm or competent person to stimulate behavioural engagement.

Interestingly, however, in Fiske et al. (2007), the authors find that judgements based on warmth are more immediate and precede those based on competence. Here, parallels are easy to draw with the ELM/HSM ideas of quick heuristic cues, such as an attractive celebrity endorsing a message, as opposed to cognitive engagement around the strength of the messages’ arguments.

Overall, the theoretical discussions around the role of expert and celebrity source cues based in expertise and attractiveness, as part of persuasive communication, provide the foundations to my second research question:

**Research Question 2**: Can celebrities and experts be used as effective messengers as part of charity campaigns aimed at changing the public’s attitudes towards global poverty and their willingness to take action to fight it?

Celebrity and expert source cues are discussed in the next two sections.

### 3.3.4 Celebrity endorsement, source likability

A member of the public receives a message from a charitable organisation. The most attention-grabbing part of the message is the endorsement of a celebrity, which the individual recognises through pictures and information included in a text. The charity has chosen to use the celebrity endorsement in the hope that the celebrity’s attractiveness and status (Erdogan, 1999) can exert a persuasive effect on the recipient. Famously, “beauty sells” (Brumbaugh, 1993, p.1), as it increase the recipient’s interest in the appeal (Petroshius and Crocker, 1989), as attractive messengers are perceived to be more believable (Kamins,
1990), and, finally, as attractive messengers are perceived to be more likeable, strengthening the power of their persuasion cues (O’Keefe, 2015).

If the recipient has got no previous engagement with global poverty, they are unlikely to automatically care about the actual contents of the message, but could be drawn in by the celebrity endorsement to find out more about the campaign. In this case the celebrity’s attractiveness can work as a peripheral cue to accept the message argument that the recipient should care about global poverty, triggering a change in their attitudes. However, as the celebrity’s physical appearance is not relevant to the merits of the arguments included in the message, its effectiveness as a cue to stimulate further thoughts, or to increase the perceived strength of the argument will be limited. Therefore, for previously involved individuals the celebrity cue will be irrelevant, and for individuals with little to no previous involvement it can work as a trigger of temporary attitude and behaviour intention shifts, which, however, will not be sustained in time.

On the other hand, consider a message which is equal in every aspect to the one endorsed by the celebrity, as discussed above, but which does not present said endorsement. In this case the individual on the receiving end does not have the celebrity heuristic cue available to them in their elaboration. This will not make a difference for individuals who have high levels of previous engagement, who still consider the arguments of the message without having to recur to the celebrity endorsement cue. However for individuals who are low on elaboration, the absent cue means the message is perceived as less persuasive. Comparing the two messages, and building on the theoretical insights discussed so far, I come to hypotheses 6 and 7 of the model.

**Hypothesis 6**: A celebrity-endorsed message will more likely result in attitude change than a generic message for people with no previous engagement.
Hypothesis 7: A celebrity-endorsed message will more likely result in behaviour intentions change than a generic non-endorsed message for people with no previous engagement.

3.3.5 Expert endorsement, source expertise
Consider a similar comparison as the one I made in the precedent subsection. However, instead of using a celebrity endorsement, the charity now relies on an expert to convey their campaign’s message. Expertise is a more multidimensional concept than attractiveness. In general expertise looks at the “assessment of whether the communicator is in a position to know the truth” (O’Keefe, 2015, p.210), but, in the specific expertise is also “the degree to which the endorser is perceived to have the adequate knowledge, experience or skills to promote the product” (van der Waldt et al., 2009 p.104).

O’Keefe (2015) laments a lack of a unified theoretical framework which considers how these factors contribute to the overall perceived expertise, and how this contributes to persuasiveness. However, the author notes that expertise-based manipulations are among the most common in research around persuasive communication. Among the most important research outputs on the topic, the experimental investigations by Chaiken (1987) show how expert-sourced evidence is more compelling than generic evidence. More recent research explains expert-based effects as a combination of a perceived higher authoritativeness of expert sources (Perez et al., 1995), and due to a conferred extra value to their message, which is not only seen as informative, but as grounds for concrete action (Holtgraves, 1994).

In the message of the example at the opening of this subsection, the recipient receives a message from an expert endorser. On one hand, the endorser’s expertise can work as a heuristic cue for the individual receiving the message, who thinks the message can be seen as credible if it comes from an expert. However, both the ELM and HSM models theorise that expertise as a cue is relevant to the message and its arguments (Wilson and Sherrell, 1993). Relevant cues work as a cue stimulating further cognition on the matters included
in the message (if an expert talks about global poverty it is worth paying attention to it and thinking about it), and it can reinforce the persuasiveness of the argument (working as an *extra argument* in favour of the position advocated in the message).

In sum, an expert endorsement can increase persuasiveness and cognition for individuals at different points on the political engagement continuum, and not only for previously uninvolved individuals who use it as a heuristic cue. In line with the HSM theoretical framework, the expert cue also works for individuals whose levels of previous engagement are not extremely high or low, who could rely on heuristic or systematic processing with equal likelihood. In this case it works as a cue-to-cognition, increasing the recipients’ engagement with the contents of the message (Todorov et al., 2002). Finally, the expert endorsement also works to strengthen the perceived convincingness of the arguments for individuals who are high on levels of previous engagement (Petty and Cacioppo, 1986). Consequently, the expert-based cue affects attitudinal responses across the continuum of previous engagement, as stated in hypothesis 8. Furthermore, the increased cognitive activity for individuals who were previously engaged should be observable as well, as predicted in hypothesis 9.

**Hypothesis 8**: An expert-endorsed message will more likely result in attitude change than a generic non-endorsed message.

**Hypothesis 9**: An expert-endorsed message will more likely result in higher levels of cognitive activity than a generic non-endorsed message or a celebrity-endorsed message. The strongest effect is observed for recipients who have medium levels of previous engagement.

The effect of expertise-based cues on behaviour intentions can be summarised in two hypotheses following (Booth-Butterfield and Welbourne, 2002).
The effect of the expert-based cue on behaviour intentions is positive for individuals at all levels of previous engagement. However, the expert cue effect on behaviour intentions is weaker for individuals with no previous engagement, as these intentions are associated with changes in attitudes which are not sustained in time. On the other hand, the effect will be stronger when the cue is used as part of the systematic process, with stronger changes in behaviour intentions made possible by the increases in the cognitive activity of recipients and the increased perceived strength of the arguments in the messages. These expectations are stated in hypotheses 10 and 11.

**Hypothesis 10**: An expert-endorsed message will more likely result in behaviour intentions change than a generic non-endorsed message.

**Hypothesis 11**: The effect of the expert cue in the message on behavioural intentions is stronger for individuals who were previously engaged with global poverty.

It is worth noting that previous engagement, combined with the expert cue effect, works in two different ways in Hypotheses 9 and 11. In the case of the effect of the expert endorsement on cognition around the contents of the appeal, the effect is stronger for people with medium levels of previous engagement, or, in other words, people on the fence of cognitive engagement. Todorov et al. (2002) shows that for these individuals, the expert endorsement acts as a cue to cognition, increasing their interest and their retention of information from the appeal. On the other hand, the cue is not available for uninvolved individuals, who use the expert endorsement as a cue to right-out acceptance of the argument, without further cognition, and does not increase the already high cognitive activity for highly involved individuals, who with or without endorsement engaged in depth with the contents of the message. Overall, therefore, the effect of previous engagement is not linear, and peaks in intensity
3.3. Adapted and modified model

for individuals with medium levels of previous involvement. On the other hand, looking at hypothesis 11, the effect of previous engagement combined with the expert cue effect is linear in nature, as the cue exist at all three ideal points on the continuum, but is weaker at the low-previous-involvement side of the continuum, and stronger at the high-previous-involvement side of the continuum, as it acts as an argument strengthener in the eyes of the message recipient.

3.3.6 Other source traits and persuasion

While the vast majority of the existing theoretical and empirical debates focus on the study of attractiveness and expertise in sources as drivers of persuasion (Till and Busler, 1998), other works still show the importance of other potential source traits, such as trustworthiness, experience, or authenticity. While in this thesis I focus on celebrities, their attractiveness, and on experts, and their expertise, in this section I still discuss the potential importance of these traits. Furthermore, in the empirical analyses of chapter 6 and 7, I return to these traits as part of my experimental manipulation checks, in an effort to strengthen the test of the theoretical model presented in this chapter.

Trustworthiness, or the degree of trust a recipient has towards the source of a message Ohanian (1990), has been shown to increase the message’s persuasiveness Till and Busler (2000). Trustworthiness is discussed in works such as Priester and Petty (1995), who show that messengers who are perceived as honest increase the recipient’s trust in the information of their messages, and, consequently, its persuasiveness. On the other hand, Smith (1973) discusses how a messenger who is perceived as untrustworthy will make their message appear as more unconvincing in the eyes of recipients. While there is no specific expectation that experts or celebrities are more likely to be trustworthy per se, empirical tests in this thesis seeking to test expertise and attractiveness-related persuasion effects should exclude the possibility of an unobserved effect of source trustworthiness levels in experts and celebrities.

Looking more specifically to celebrities and their involvement in global
poverty campaigns, the literature also discusses the importance of two further traits: the level to which a source is perceived to be authentic, and the levels to which a source is perceived to be selfish or selfless, or, the perception that messengers care for themselves first or care for others more. Authenticity is discussed in the work by Brockington (2014b) as a driver of source and message credibility. The perception of a messenger and their message as authentic, for Brockington (2014a), can derive from a messenger’s perceived personal experience of an issue they discuss in the message, or from a recipient’s capacity to feel that the messenger is someone they can relate to and empathise with. As authenticity can potentially interact at different levels both with expertise and levels of social attractiveness, empirical tests in this thesis control for its effects too.

3.3.7 Overall model and elaboration processes

In conclusion, the adapted dual pathway model looks at the effect of a set of exogenous and endogenous intervening factors which influence, to different degrees, the elaboration of information included in an appeal, and, consequently, trigger more or less sustained changes in attitudes and behaviour intentions.

The exogenous factors include the personal characteristics of the recipient, and their levels of previous engagement with global poverty. The endogenous characteristics include the arguments made in the message’s appeal, the sources of the message. These factors appear in the model as part of two connected processes. Specifically, the message recipient can follow, predominantly, a heuristic or systematic route to attitude and behaviour intentions changes, depending on their levels of previous engagement, which, as I discussed in the literature review of chapter 2, is determined by their personal characteristics.

If the recipient’s level of engagement with global poverty is low or non-existent, they are more likely to engage with the appeal through the heuristic route. In this case they will search for available relevant or irrelevant cues to accept or reject the message’s requests without engaging with the contents of its arguments. Out of many possible options, in my model I focus on the
importance of source cues based on the attractiveness of celebrity endorsers, or the expertise of expert endorsers. If individuals are exposed to multiple messages with different sources, or a single message with multiple source cues, their personal characteristics will determine whether they find attractiveness or expertise-based cues available as part of their information elaboration. Both celebrity and expert endorsements can work as heuristic cues, and will result in individuals changing their attitudes and, temporarily, with a higher likelihood than in the case of a generic message that does not include the endorsements. In association with attitudes, the cues also affect the behavioural intentions of recipients. However, as the changes in attitudes are not sustained in time, the effect on behaviour intentions will be limited in strength.

If the recipient has been previously engaged with global poverty, they are more likely to consider the information within the appeals through the systematic route. In this case the recipients with very high levels of previous engagement will directly consider the merits of the argument in the message, which, if convincing, will result in a change in their attitudes and behaviour intentions. In this case an expert endorsement can also increase the perceived strength of the arguments, triggering more sustained changes in the attitudes and, consequently, behaviour intentions. For individuals with previous levels of engagement which are not too high or too low, both expertise-based cues and arguments become relevant. Specifically, an expert endorsement will work as a cue-to-cognition, increasing the recipient’s attention for the contents of the message, triggering more information retention, and changing their attitudes and behaviour intentions.

Overall, consequently, while celebrity endorsements can only work as heuristics for individuals with no previous engagement with global poverty issues, expert endorsements are effective across the engagement continuum, with their triple heuristic, cognitive, and argument cue roles. This concludes the discussion of the theoretical framework and the presentation of the 11 research hypotheses I consider in this thesis. In the next chapter I discuss the
methodological approach for the empirical tests of the hypotheses included in chapters 5, 6 and 7.
Chapter 4

Methodology

In this chapter I provide an overview of the methodological strategies to test the hypotheses presented in chapter 3. In this thesis I rely on quantitative methods for the analysis of observational data in chapter 5, and experimental data in a variety of formats in chapter 6 and 7. As the specific design of data collection instruments, experimental treatments, and limitations of each approach is vastly different I will discuss these in depth within each of the three empirical chapters. The objective of this chapter is instead to summarise, justify, and discuss the overall methodological approaches to test my hypotheses.

The adapted theoretical model I presented in chapter 3 looks at the impact of three groups of factors: factors which exist exogenously to the act of persuasive communication, factors of the act of persuasive communication, and factors resulting from the act itself (Mongeau and Stiff, 1993).

Section 4.1 of this chapter looks at the relationship between the recipient’s characteristics as exogenous factors, and the perceived credibility of sources as endogenous factors. As the recipients’ personal characteristics are not manipulable through experimental methods, I rely on observational data to investigate their effect on credibility judgements. Section 4.2, instead, looks at the relationship between expert and celebrity sources as endogenous model factors and their effect on recipient’s attitudes, information retention and behaviour intentions. Expert and celebrity endorsements of an appeal can be manipulated as part of experimental research designs, allowing for a comparison of the
endorsed appeals with a generic appeal, as I discuss in section 4.2. In this case I consequently rely on experimental methods to test my research hypotheses.

Before moving onto the discussion of specific methodological approaches, Table 4.1 provides an opening summary of the tests, methods, and data discussed in the following subsections and tested in chapter 5, 6 and 7 of the thesis. These studies look at subquestions of the overall research question of this thesis: are celebrities and expert messengers in charity campaigns effective at engaging the public with the fight against global poverty?

In chapter 5, I consider the question of effective campaigns by investigating whether recipients with specific characteristics are drawn to find expert or celebrity-endorsed appeals more credible (RQ1). In chapter 6 and 7 I then look at endorsement effects by comparing the engagement levels of individuals exposed to expert-endorsed and celebrity-endorsed appeals to individuals who receive generic endorsed appeals (RQ2).
### Table 4.1: Summary of the methodological approaches of the thesis

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Study kind</th>
<th>Dependent variables</th>
<th>Independent variables</th>
<th>Sample size</th>
<th>Hypotheses tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ch 5</td>
<td>Survey</td>
<td>Expert and celebrity credibility</td>
<td>Recipient characteristics</td>
<td>N=26,599</td>
<td>H1, H2, H3, H4, H5</td>
</tr>
<tr>
<td>Ch 6</td>
<td>Online experiment 1</td>
<td>Attitudes, cognition, behaviour intentions</td>
<td>Treatment allocation</td>
<td>N=250</td>
<td>H6, H7, H8, H9, H10, H11</td>
</tr>
<tr>
<td>Ch 6</td>
<td>Online experiment 2</td>
<td>Attitudes, cognition, behaviour intentions</td>
<td>Source characteristics scales</td>
<td>N=150</td>
<td>H6, H7, H8, H9, H10, H11</td>
</tr>
<tr>
<td>Ch 7</td>
<td>Conjoint experiment 1</td>
<td>Behaviour intentions</td>
<td>Treatment allocation</td>
<td>N=1,706</td>
<td>H7, H9, H10</td>
</tr>
<tr>
<td>Ch 7</td>
<td>Conjoint experiment 2</td>
<td>Behaviour intentions</td>
<td>Source characteristics scales</td>
<td>N=1,706</td>
<td>H7, H9, H10</td>
</tr>
<tr>
<td>Ch 7</td>
<td>Conjoint experiment 3</td>
<td>Behaviour intentions</td>
<td>Conjoint analysis</td>
<td>N=1,706</td>
<td>H7, H9, H10</td>
</tr>
</tbody>
</table>
4.1 Drivers of expert and celebrity credibility judgements

Research Question 1 (RQ1) and hypotheses 1, 2, 3, 4, and 5 all concern the effect of recipient characteristics on source credibility. As I discussed in chapters 2 and 3 this issue is severely under-researched, both theoretically and empirically. However, as expressed both in my discussion and by other scholars in past works (for example: Wathen and Burkell, 2002; Mehta, 1999; Slater and Rouner, 1996), the issue of recipient characteristics matters in understanding them as parts of the dual-pathway model test summarised in table 4.1.

The relationship between recipient characteristics and source characteristics is associational or correlational in nature, making observational data ideal for this section of my thesis. In chapter 5, I will therefore analyse the data from a survey study on public attitudes towards aid and global poverty through descriptive analysis and regression models to provide evidence in support of the hypotheses and insight towards RQ1 in the specific context of information sources on global poverty.

The survey includes 26,600 responses from individuals from the UK, France, Germany and the US. The sampling method is a mixture of invitation-only panel membership, combined with sampling stratification corrections, and random selection to partake in the study, administered online by YouGov (YouGov, 2016). Demographic data are collected for personal characteristics such as gender, age, education levels, political identification, ethnicity, religiosity and income. Source credibility data are collected on a battery of seven items, considering individual’s judgements of credibility for information coming from sources such as academics, NGO workers, and celebrities. The data are therefore ideal to test hypotheses and explore RQ1 in full.

The data was collected as part of the Aid Attitudes Tracker (AAT) study, conducted by UCL and funded by the Bill and Melinda Gates Foundation (BMGF) in cooperation with global charity partners.\(^1\)

\(^1\)The AAT study has multiple objectives, including understanding attitudes towards
Bias in sampling and response to the online surveys of the AAT study is a potential issue with these data, since the population which has access to the internet can be systematically different from the overall population of the four countries (Callegaro, 2013; Kellner, 2004), or because respondents who are more interested in global poverty issues will tend to self select to participate in the panel. Methodological research however shows that a historical increase in the percentage of individuals who have access to an internet connection, together with the use control variables or weighting strategies attenuates concerns of sample selection bias (Callegaro, 2013).

Response bias is another potential problem, as participants who express their opinions might do so in a more socially desirable way, for example by reporting higher levels of concern for global poverty, or more interest in being informed on the matters related to the political issue itself. Methodological research however shows how online surveys can reduce social desirability bias (Callegaro, 2013).

In section 4.1.1 I discuss the models I estimate using the survey data, while the details on the levels of measurement, descriptive statistics, analysis of missing data, and the assessment of internal and external validity of the findings are all discussed in chapter 5.

4.1.1 Recipient characteristics models

Hypotheses 1, 2, 3, 4 and 5 posit the existence of a relationship, associational or correlational, between the social position of survey respondents and their judgement of credible towards sources of information. I test the hypotheses using the model presented in equation 4.1.

\[
Credibility_k = f(\beta_0 + \beta_i X_i + u_i)
\] (4.1)

The recipient characteristics model, represented in equation 4.1, considers global poverty and development aid, measuring levels of public engagement with the work of governments and charity institutions, understanding how much people know about poverty and development, and how they seek information about these topics.
dependent variables from a vector \( k \) of dichotomous credibility judgement variables: an individual either finds or does not find a category of messengers as credible. The \( k \) categories of messengers differ for the core characteristic from which messengers draw their credibility in the eyes of the individual, such as expertise and attractiveness. The set \( k \) of messengers is open, but, in practice, constrained by the data collected in the survey. In this thesis, specifically, I look at messengers who draw on their expertise or attractiveness as a source of credibility: celebrities and experts.

The likelihood of finding a source credible is a function of a constant term \( \beta_0 \), a vector of covariates including all the personal characteristics of the respondents, \( X_i \), and their marginal effect on \textit{Credibility}, represented by the vector of coefficients \( \beta_i \). These personal characteristics are made of observable and unobservable factors, such as a respondent’s income, levels of education, or their personal connection with realities of global poverty. Thinking specifically of the survey data I use in chapter 4, information is collected on a respondent’s sex, their age, and levels of education, but other factors remain unobserved, either because data are not collected on them (for example: the gender identity of the respondent) as opposed to the sex) or because of the limits of the survey to capture data on them (for example: the mood of the respondent at the time of the study). These factors are assumed to be uncorrelated with the vector \( X_i \) and are included in the error term \( u_i \).

As \textit{Credibility} is a dichotomous variable, a \textit{logistic link function} is used to constrain the effect of the covariates on the dependent variable. The covariates include age, education, levels of political engagement, ethnicity, gender, income, political identity, religiosity, and social class. Hypotheses 1, 2, 3, 4 and 5 specifically theorise the existence of a relationship between the age, education and gender of the recipients and their credibility judgements of celebrities and experts, which I specify in equations 4.2 and 4.3.
4.1. Drivers of expert and celebrity credibility judgements

\[ Credibility_{expert} = f(\beta_0 + \beta_1 Men + \beta_2 Education + \beta_3 Age + \beta_i X_i + u_i) \]

\[ H1 : \beta_1 > 0 \]
\[ H2 : \beta_2 > 0 \]
\[ H3 : \beta_3 > 0 \] \hspace{1cm} (4.2)

\[ Credibility_{celebrity} = f(\beta_0 + \beta_1 Women + \beta_2 Age + \beta_i X_i + u_i) \]

\[ H4 : \beta_1 > 0 \] \hspace{1cm} (4.3)
\[ H5 : \beta_2 < 0 \]

The adapted equations now specifically look at the effect of gender, education, and age on the credibility judgements on experts or celebrities. Specifically individuals identifying as men, more educated or older, are more likely to find experts as credible. On the other hand younger men are more likely to find a celebrity as credible. Significant coefficients in either model would support hypotheses H3 and H4. The vector of remaining covariate factors is still included in the model, both as a control for the effects of the main personal characteristics of interest, and as means of providing evidence to discuss RQ1. These include indicators of engagement with global poverty (knowledge, attitudes and behaviours), income, social class, ethnicity, and social identity (political leaning and religiosity). In the next section I look at the relationship between message sources and their effects on attitudes, cognitive activity, and behaviour intentions tested with three experimental designs.
4.2 Source characteristics and effects of persuasion

RQ2 and hypotheses 6, 7, 8, 9, 10, and 11 all concern the effect of experts and celebrity endorsements, and their perceived expertise and attractiveness, on recipients’ attitudes, information retention from a charity appeal, and their intentions to get involved with the asks of the appeal itself. The adapted dual pathway model I discussed in chapter 3 shows how celebrities, relying on attractiveness to exert persuasive power on recipients, can affect their attitudes when they endorse a message. Furthermore, an expert endorser can affect recipients’ attitudes, the attention they pay to the content of the appeal (their cognitive activity), and, for individuals with previous involvement on the issue included in the campaign message, their behaviour intentions.

As the effects I investigate are causal in nature I rely on experimental methods to investigate differences between baseline (or control) groups and recipients which received an expert or celebrity-endorsed version of the appeal. Two strategies have been used in the past to build the baseline measure. In the vast majority of the social psychology works, expert and attractive (in this case celebrity) messengers are compared with each other, avoiding the use of a true control group (see, for example: Petty et al., 2014; Petty and Cacioppo, 1996). However Pornpitakpan (2004) discusses the importance of a second kind of approach, in which the effects of source characteristics are investigated through a comparison between generic appeals, without endorsements or endorsed by generic messengers, and expert or celebrity-endorsed appeals. Pornpitakpan also makes an important point about the use of manipulation checks to verify whether experts and celebrities have been perceived, respectively, as knowledgeable and attractive.

Chapters 6 and 7 consequently rely on both a control-versus-treatment and no-control scale-based approaches to test hypotheses 6, 7, 8, 9, 10, 11 as part of RQ2 on the effectiveness of celebrity and expert endorsements as fosterers of political engagement in recipients. In chapter 6, I present the results
of a control-versus-treatments comparison design, followed by the findings of a replication study that instead compares the characteristics of the messengers and uses manipulation checks to investigate similar treatment effects. In chapter 7, focusing more on hypothesis H1b, H2c, and H2d, I instead rely on a conjoint-based design and model source characteristics and the effect of messenger types (generics, experts and celebrities) in appeals on behaviour intentions as marginal component effects. Furthermore while the control strategy of Experiment 1 from chapter 6 relies on a non-endorsed version of an appeal, compared to expert-endorsed or celebrity-endorsed appeals, in chapter 7 the control condition receives an appeal endorsed by a generic messenger\(^2\), perceived by survey respondents as neither particularly expert or attractive. In the following subsections I discuss the broad details of the three experimental designs, while the specifics of how treatments have been designed, implemented, administered, and how data was collected are all discussed within each chapter.

### 4.2.1 Experiment 1: Source characteristics treatment model

The experimental data for the tests of Experiment 1 are collected with an online survey with embedded treatments, which are discussed in chapter 5. 250 observations, randomly assigned to one of three treatment groups are used in the analysis of source characteristics effects on indicators of political engagement, affected as a result of persuasive communication. Data were collected in February of 2015 and the study was approved by the UCL Ethics board\(^3\). The only elements of ethical concern were the sensitivity of questions on political opinion and the possibility that participants would think the charity campaign presented in the treatments is real. Consequently the study was anonymised and data protected according to UCL regulation, and a debrief and explanation section was added at the end of the survey.

With this first experimental design I specifically look at the effect of the

---

\(^2\)In this specific design I use pictures, location taglines and the role of *supporters* to convey the idea that these messengers are *people like you* in the eyes of survey respondents

\(^3\)Reference number 5031/001, approved in May 2014
expert or celebrity treatments on indicators of political engagement including attitudes, cognitive activity, and behaviour intentions. Each of these are presented in equations 4.4, 4.5, 4.6, and 4.7.

\[
ATE_{exp} = E[\text{Attitude}(T_1) - \text{Attitude}(C)]
\]

\[
ATE_{cel} = E[\text{Attitude}(T_2) - \text{Attitude}(C)]
\]

\[
H_6 : ATE_{cel} > 0
\]

\[
H_8 : ATE_{exp} > 0
\] (4.4)

Following Rubin (1974) and Morton and Williams (2010), equation 4.4 shows the Average Treatment Effects (ATEs) as the difference between the expected value for the attitude measure of individuals allocated to the expert \((T_1)\) or celebrity \((T_2)\) treatment conditions and those allocated to the control condition.

I use two variables to measure \textit{Attitude} in the models, and use both to test for the presence of significant experimental effects. Both variables use a 5 point ordinal scale, with higher values being better. The first variable considers levels of concern for global poverty, while the second looks at respondents’ agreement with issues of global justice. The coding of the variables is discussed in more depth in chapter 6. A positive and significant value for \(ATE_{cel}\) supports hypothesis 6, while a positive and significant value for \(ATE_{exp}\) supports hypotheses 8. I use t-tests to analyse differences in mean responses across group, check for their significance and find evidence in support of the hypotheses.

\[
ATE_{exp} = E[\text{Cognition}(T_1) - \text{Cognition}(C)]
\]

\[
H_9 : ATE_{exp} > 0
\] (4.5)

Equation 4.5 is identical to equation 4.4, but instead of attitudes it con-
4.2. Source characteristics and effects of persuasion

considers differences between the control and expert treatment groups in average levels of cognition. I measure \textit{Cognition} using a set of five indicators which capture information retention\(^4\) and thoughts generation after reading the appeal\(^5\). More detail on these is included in chapter 6.

Once more, the sign and significance of the difference in mean responses across the two groups is analysed using a t-test. As there is no theoretical expectation that cognition is affected by the celebrity endorsement, the average treatment effect for the celebrity treatment is not considered, although any descriptive differences between these two groups will be discussed in chapter 5. The theoretical framework also refers more specifically to a higher effect of the expert endorsement on cognition for individuals who hold medium levels of previous engagement.

As a test of this further expectation, I consider a linear regression model employing a categorical-by-categorical interaction term to test for the significance of the expert treatment at a given level of previous engagement. In this and all other models in the thesis, \textit{Engagement} is measured as a continuous scale which adds all the actions taken from a list of 5 to 7 options (depending on the design). These include having donated to charity, having shared appeals online, or having volunteered with a charity. The actions in the list are taken from the AAT survey.

Treatment effects broken down by previous engagement levels are represented in equation 4.6.

\[
\text{Cognition} = \beta_0 + \beta_1T_1 + \beta_2T_2 + \beta_3\text{Eng}_{\text{med}} + \beta_4\text{Eng}_{\text{high}} + \beta_5T_1 \ast \text{Eng}_{\text{med}} + \\
+ \beta_6T_2 \ast \text{Eng}_{\text{med}} + \beta_7T_1 \ast \text{Eng}_{\text{high}} + \beta_8T_2 \ast \text{Eng}_{\text{high}} + u_i
\]

\[H9 : \beta_5 > 0\]

\[\text{(4.6)}\]

\(^4\)four categorical indicators are coded 1 if respondents remember the two core topics of the appeal, the charity name, and any ways to get involved with the campaign

\(^5\)A categorical indicator is coded 1 if respondents have reported any relevant thoughts about the contents of the appeal
The dependent variable of equation 4.6, *Cognition* is a function of a constant term, $\beta_0$, here the average response for the control group when previous engagement is at the baseline (here assumed to be low or no previous engagement), the effects of the two treatments ($\beta_1$ and $\beta_2$), the effects of moving from the baseline level of previous engagement to medium or high levels of previous engagement ($\beta_3$ and $\beta_4$) and the effects of the interactions between treatment allocation and levels of previous engagement. A positive and statistically significant coefficient for the expert treatment effect for individuals with medium levels of previous engagement ($\beta_5$) supports hypothesis H2b in this stricter test. Finally, in equation 4.7, I look at the effect of the expert treatment, combined with levels of previous engagement, in affecting behaviour intentions.

\[
Behaviour = \beta_0 + \beta_1 T_1 + \beta_2 T_2 + \beta_3 Eng_{scale} + \\
+\beta_4 T_1 \times Eng_{scale} + \beta_5 T_2 \times Eng_{scale} + u_i
\]

\[H7 : \beta_2 > 0\]  
\[H10 : \beta_1 > 0\]  
\[H11 : \beta_4 > 0\]  

The dependent variable of equation 4.7, *Behaviour* is a function of a constant term, $\beta_0$, which here represents the average response of the control group for individuals with no previous engagement, the effects of the two treatments ($\beta_1$ and $\beta_2$), the effects of levels of previous engagement, here taken as a continuous scale ($\beta_3$), and the combined effects of treatments and previous engagement ($\beta_4$ and $\beta_5$). The continuous-times-categorical interaction terms here can be interpreted as the slope changes in $Eng_{scale}$ when moving from the control to one of the two treatment groups. Consequently, the effect of the two variables combines into one. Hypothesis 10 is supported if the slope of previous engagement for individuals in the expert treatment group $T_1$ is statistically significantly steeper than its control counterpart.

The results of this experiment have two interconnected methodological
limitations. Firstly, in an effort to isolate the causal effects of source expertise and source attractiveness as the basis for the persuasiveness of the appeal, all other source characteristics, such as gender and ethnicity, are kept constant. A one-dimensional approach like this is strong in internal validity, as it artificially isolates endorsement effects in the test. However, it brings into question whether the results are externally valid, as the test is only conducted by comparing unendorsed appeals with appeals endorsed by one single messenger, either seen as a celebrity or expert. Secondly, and connectedly, the baseline responses obtained from the control group, as a point of empirical reference, affect the way the treatment effects are interpreted. As Hainmueller et al. (2014b) discuss, this means that the causal effect is tested as a whole (in this case the effect of the endorsement together with the source expertise effect), not allowing for a broken down analysis of all aspects that make up the overall treatment.

To address to the two limitations I replicate this first experiment using two new designs. The first, discussed in section 4.2.2, relies on a no-control design to test for the effect of source characteristics including expertise and attractiveness. The second, discussed in subsection 4.2.3, employs a conjoint design to enhance the realism of the experimental treatment, considering a wider variety of messengers with different characteristics but still focussing on their expertise and attractiveness, in an effort to increase both the internal and external validity of the findings.

4.2.2 Experiment 2: source characteristics scales model

The second experiment included in the thesis replicates the design of the first relying on a no-control approach, using source characteristics scales as treatment variables and as manipulation checks for successful treatment allocations in a control-comparison design. Broadly, the rationale for the replication, discussed in chapter 5 in more depth, is that although treatment manipulations

---

6This is one of the reasons why other messenger categories are included in the designs, working as placebo categories
were on average successful in Experiment 1, there is still evidence that respondents have different perceptions of the levels of expertise of the expert messenger and the levels of attractiveness of the celebrity messenger.

An expertise and attractiveness rating scale approach is used in lieu of the treatment allocation variable discussed in experiment one. The scales are measured through two ordinal variables with values between 1 and 7, with higher values being better. This changes the interpretation of the findings as it is the perceived increases in expertise or attractiveness that are correlated with changes in indicators of political engagement. In a second part of the replication study I also use the expertise and attractiveness scores as manipulation checks to replicate the findings of the first experiment. The scales models are represented in equations 4.8, 4.9, and 4.10

\[
\text{Attitude} = \beta_0 + \beta_1 \text{Scale}_{\text{expertise}} + \beta_2 \text{Scale}_{\text{attractiveness}} + u_1
\]

\[H_6 : \beta_2 > 0\] (4.8)

\[H_8 : \beta_1 > 0\]

\[
\text{Cognition} = \beta_0 + \beta_1 \text{Scale}_{\text{expertise}} + \beta_2 \text{Scale}_{\text{attractiveness}} + u_1
\]

\[H_9 : \beta_1 > 0\] (4.9)

\[
\text{Behaviour} = \beta_0 + \beta_1 \text{Scale}_{\text{expertise}} + \beta_2 \text{Scale}_{\text{attractiveness}} + \]

\[+ \beta_3 \text{Eng}_\text{scale} + \beta_4 \text{Scale}_{\text{expertise}} \times \text{Eng}_\text{scale} + u_i \]

\[H_7 : \beta_2 > 0\] (4.10)

\[H_10 : \beta_1 > 0\]

\[H_11 : \beta_4 > 0\]

Both the expertise and attractiveness scales are treated as continuous variables. Consequently, treatment effects are calculated using linear regres-
sion models, with attitudes, cognition and behaviour intentions as dependent variables, and both scales as independent variables. The interpretation and test of the hypotheses is the same as the one I discussed in the preceding subsection, with positive effects for the treatments (and their interactions with previous engagement) providing evidence towards hypotheses 6, 7, 8, 9, 10, and 11.

4.2.3 **Experiment 3: conjoint analysis model**

The final experiment seeks to replicate the results of Experiments 1 and 2 on hypothesis 7, 10, and 11, which look at the effect of expert and celebrity endorsements on the respondents’ intentions to get behaviourally engaged with the campaign’s demands. In this experiment I rely on a different, more realistic and complex design based on the conjoint analysis of survey experimental data following the work by Hainmueller et al. (2014b). I worked on the design, which is part of a broader research project funded by the BMGF, in collaboration with Dr David Hudson and Dr Jennifer Hudson. The study was approved by the UCL Ethics Committee\(^7\).

The experimental data is collected online through a survey instrument administered in two waves. The first wave includes the responses of 2,000 participants, and is aimed at understanding their perceptions of a set of 42 messengers of different categories, including experts such as frontline medical staff, volunteers, NGO activists, but also celebrities, of different genders, ages and ethnicities. The second wave includes the responses of 1,706 participants, recontacted from the first wave of the study. In this survey, participants are asked to make a choice between two global poverty appeals for action (either asking for a donation or for a signature on a petition) which are endorsed by one of the 42 messengers of wave 1. Each participant makes ten choices, expressing their preference for one of the two appeals, followed by measurements of single intentions to donate or sign a petition for each appeal.

The data allow for three different tests of hypotheses 7, 10, and 11. The

---

\(^7\)Reference number 5031/002, approved in April 2015
first test replicates the findings of experiment 1 using new messengers, but relying on a generic messenger-endorsed message as a control treatment. The second test replicates the findings of experiment 2 using source expertise and attractiveness scales for a pool of expert or celebrity messengers. Finally the third test uses a full conjoint design testing for the average marginal component effect of using expert or celebrity messengers (tested for at the individual or messenger group level) on the likelihood of choosing an appeal between two. As the former two tests are identical to the ones proposed above, I won’t discuss them again. Equation 4.11, presented below, focuses on the estimation of treatment effects using a conditional logistic regression model as specified by McFadden et al. (1973). The details of the design, administration and analysis of these data are presented in chapter 7, but in this section I broadly introduce the model to test the experimental effects.

Each participant of the study, which includes a sample of 1,706 individuals, is asked to make 10 choices between two alternatives. The choice is coded in a variable, Behaviour\textsubscript{choice} which takes a value of 1 if the alternative is chosen, and 0 otherwise. Following McFadden et al. (1973), I assume the respondents’ choices reflects their payoffs (or latent utilities) drawn from the characteristics of the alternatives, so that if a respondent chooses alternative 1 over 2, the latent utility associated with alternative 1 is higher than the latent utility associated with 2. I also assume that their choices between the two alternatives happen independently from irrelevant alternatives, or, in other words, that every choice is always made between the two alternatives and no other information becomes relevant.

In this specific experiment, the characteristics of the alternative, or, in the language of Hainmueller et al. (2014b), the attributes, include the messenger’s category, gender, and ethnicity. In total I consider messengers from 10 categories, with 4 messengers in each category (one for each gender and ethnicity), for a total of 42 messengers\textsuperscript{8}. My hypotheses are tested exclusively

\textsuperscript{8}One of the ten category, named miscellanea includes six messengers as hypotheses for another study were also tested on couples of messengers, which are not of interest in this
on the effect of having a generic, expert, or celebrity messenger endorsing the appeal, while gender and ethnicity are used to broaden the external validity of the findings across a variety of messengers within each category. As the recipients make a choice between two alternatives, I use a conditional logistic regression model to estimate treatment effects, which, in this case, are the differences in the odds of an alternative being chosen between generic, expert or celebrity endorsed appeals, with generic endorsements acting as the baseline control group.

\[ Behaviour_{choice} = f(\beta_0 + \beta_1 T_{1i} + \beta_2 T_2 + \beta_3 \text{Eng}_{scale} + \\
+ \beta_4 T_{1i} \times \text{Eng}_{scale} + \beta_5 T_2 \times \text{Eng}_{scale} + u_k) \]

\[ H7 : \beta_2 > 0 \quad (4.11) \]

\[ H10 : \beta_{1i} > 0 \]

\[ H11 : \beta_{4i} > 0 \]

Equation 4.11 summarises the whole model, where \( Behaviour_{choice} \) is a function of a constant term \((\beta_0)\), a vector of expert treatment effects \((beta_{1i} T_{1i})\), the celebrity treatment effect \((\beta_2 T_2)\), the levels of previous engagement measured through a scale \((\beta_3 \text{Eng}_{scale})\), its interaction with the treatments \((\beta_4 T_{1i} \times \text{Eng}_{scale} \text{ and } \beta_5 T_2 \times \text{Eng}_{scale})\), and the error term \((u_k)\). While in previous experiments I used only one messenger for each treatment, in this case each group includes four messengers with treatment effects calculated at the average of all four single treatments in each group.

Furthermore, I also add multiple expert treatment groups, which I explain in more depth in chapter 7. These include activists, frontline staff and volunteers. While the importance of multiple sources of expertise is acknowledged in the theoretical literature (O’Keefe, 2015), there is no formal expectation that they will have different effects. Consequently, hypotheses 9 and 10 are supported if the coefficients associated with all expert treatments are significant.
4.3 Conclusion

In this chapter I briefly discussed the broad methodological landscape of this thesis. In chapter 5 I rely on observational data from the AAT survey to test hypotheses 1, 2, 3, 4, and 5 on the effect of recipient characteristics on celebrity and expert credibility judgements. In chapter 6 and 7 I instead test hypotheses cant and positive. On the other hand I only include one celebrity treatment group, as a result, the test of hypothesis 7 is unchanged in this model.

4.2.4 Manipulation checks across the empirical tests

One of the core empirical investigation concern which applies across the tests of chapter 6 and 7 is with the omission of potential causal pathways, specifically looking at unobserved source characteristics other than attractiveness and expertise. In chapter 4, while presenting my adapted theoretical framework, I discussed the importance of two further source traits: trustworthiness, authenticity. If message recipients perceive messengers as being high in such traits, the overall persuasiveness and credibility of the message could increase, as it does when a messenger is perceived as being an expert, or a celebrity is perceived as being attractive. To avoid the confuding effect of these further traits, in each of the experimental designs I rely on a set of manipulation checks showing that these extra traits are controlled-for in the experimental treatments. In experiments 1 and 2 in chapter 6 I use items from the source trustworthiness scale from the work by Ohanian (1990) to show that the perceived trustworthiness of the expert and celebrity messengers are not statistically significantly different. In experiment 3, found in chapter 7, I further the scopes of these manipulation checks relying on a wider battery of tests confirming that experts and celebrity messengers are not perceived as significantly more trustworthy or authentic than their control counterparts, and, in a final test, control for other traits collected in the survey such as selfishness, believability, or relatability. The specific results of the manipulation checks are presented in the chapters and appendix C.
4.3. Conclusion

6, 7, 8, 9, 10, and 11 using three experimental designs. The first experiment relies on a treatment-versus-control design with single celebrity or messenger endorsements compared to a non-endorsed version of the same appeal. The second experiment relies on source expertise and attractiveness scales as treatment variables, either using them directly in the statistical models, or using them as manipulation checks in a treatment-versus-control study which fully replicates Experiment 1. Finally, the third experiment relies on a conjoint design with multiple expert treatments and multiple messengers within each expert and celebrity category. The conjoint data, which focuses on testing the effects of expert and celebrity endorsements on behaviour intentions, is first used to replicate Experiment 1 and Experiment 2. Furthermore, I present a conjoint model analysis which looks at behaviour intentions in a choice scenario, and extends the external validity of the findings from the two former experiments. As the approaches of the three empirical tests are relatively different, the discussion on experimental designs, treatment allocation, and the description of the data is presented in chapters 5, 6, and 7.

The empirical chapters are next, followed in chapter 8 by an analysis of the results, the overall strength, limitations and possible extensions of the thesis, and a final conclusion to the work.
Chapter 5

Messengers credibility: a survey data approach

5.1 Introduction

The chapter uses the AAT data to test hypotheses around the characteristics of individuals who find celebrities or experts credible sources of information on global poverty. The tests speak to the wider question of how individuals receiving different charity appeals would pick their preferred message on the basis of their perceptions of the endorsers’ credibility. Hypotheses 1, 2, and 3 posit that experts are more likely to be seen as credible by male, older and more educated individuals. Hypotheses 4 and 5 posit that celebrities are more likely to be seen as credible by female and younger individuals.

The AAT data are rich with information on the respondents’ social and personal background, including questions asking about their preferred sources of information on issues surrounding global poverty. Among seven sources of information, I focus on modelling credibility judgements of celebrities and two categories of experts (academics, and NGO representatives) using both descriptive data analysis and regression models.

Each of these categories are presented in the questionnaire in a generic category form, and not as individuals, as it would be the case with the typical campaign endorsements. Using categories of messengers allows to examine the
idea of source credibility with a broad angle, which lends itself more easily to generalisations.

The empirical evidence from the models points to two main results. Firstly, with the exception of hypothesis 5, which states that younger individuals are more likely to find celebrities as credible, no other hypothesis is supported in the models. I discuss how the differences between theoretical expectations and empirical findings are due to flaws in past studies, such as omission of relevant variables, and to the fact that source credibility is more context-dependent than past research had shown.

Secondly, throughout the models other personal characteristics emerge as significant factors associated with different source credibility judgements. These include the gender, levels of previous engagement, and political ideology of survey respondents. More specifically, younger individuals, who identify as female, and who are on the left of the political spectrum are more likely to trust experts. On the other hand, celebrities are more likely to be seen as credible by younger individuals, with lower levels of knowledge about global poverty.

In section 5.2, I describe the BMGF survey data and how these can be used to explore the determinants of source credibility when it comes to information about foreign aid. In section 5.3, I then look at the data both descriptively and inferentially to analyse such determinants in the case of the British public, and then briefly consider how these findings compare to other countries. Section 5.4 tests the hypotheses with regards to celebrity and expert credibility using two multiple regression models. Finally section 5.5 and 5.6 reflect on the limitations and learning points from the empirical investigation, bringing the chapter to a close.

5.2 Survey data descriptive statistics

The data I use in this chapter are comprised of the responses from the second wave of the AAT study, which I introduced in the previous chapters. The
survey was fielded in four countries (United Kingdom, United States, Germany, France) in the summer of 2014 through YouGov’s online platform. The dataset includes a total of 26,599 observations. In keeping with the rest of the thesis, in this chapter I only use data from respondents in the United Kingdom. In total, 8,412 responses are collected in the UK sample. However, in subsection 5.2.2 I also present some comparison findings addressing the importance of cultural settings in the formation of credibility judgements following the initial evidence presented in the work by Schaefer et al. (2010). In the next sections I look at the indicators which are used as a dependent variables throughout the analysis, and describe the questions measuring personal and social characteristics of respondents, used as independent variables in the models.

5.2.1 Credible sources of information

The source credibility question from the survey asks individuals to consider how credible some sources of information are when they talk about global poverty and development aid\(^1\). As part of the survey, respondents go through the categories reported in Table 5.1 and choose whether the source is credible or not, or whether they don’t know.

Table 5.1: Sources in the credibility question

- Academic or other expert
- Person like yourself
- Representative of a non-governmental aid organisation
- Someone who has received aid
- Movie star or other celebrity
- Prominent politician
- Successful businessperson

As I discuss below, messengers can be seen as part of multiple categories. Expert messengers include academics and NGO representatives. On the other hand, only a specific category exists for celebrities. Other categories are also included for generic messengers (such as campaign supporters), politicians,

\(^1\)The question specifically asks: “If you got information about international assistance from each of the following people, how credible would that information be to you?”
and businesspeople, which are not considered in the models of this chapter. When a respondent deems a source to be credible they are coded as 1, with 0 used for non-credible sources. Undecided respondents are excluded from the analysis, unless patterns in non-response emerge in association with the personal characteristics of respondents, as I discuss throughout section 5.3. The mean evaluated credibility for all the sources is reported in Table 5.2.

Table 5.2: Summary statistics for source credibility questions

<table>
<thead>
<tr>
<th>Variable</th>
<th>$\bar{x}$</th>
<th>$\sigma$</th>
<th>$n$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic or other expert</td>
<td>0.789</td>
<td>0.408</td>
<td>6063</td>
</tr>
<tr>
<td>Person like yourself</td>
<td>0.748</td>
<td>0.434</td>
<td>5479</td>
</tr>
<tr>
<td>Representative of an aid NGO</td>
<td>0.766</td>
<td>0.424</td>
<td>6056</td>
</tr>
<tr>
<td>Someone who has received aid</td>
<td>0.800</td>
<td>0.400</td>
<td>6043</td>
</tr>
<tr>
<td>Movie star or other celebrity</td>
<td>0.228</td>
<td>0.420</td>
<td>5746</td>
</tr>
<tr>
<td>Prominent politician</td>
<td>0.286</td>
<td>0.452</td>
<td>5842</td>
</tr>
<tr>
<td>Successful businessperson</td>
<td>0.464</td>
<td>0.499</td>
<td>5151</td>
</tr>
</tbody>
</table>

Looking at the table, academics (78.9%), NGO representatives, (76.6%) and generic messengers, (74.8%) are the most credible sources of information. Celebrities, on the other hand, are the least credible messengers, seen as credible by 22.8% of the respondents, while politicians (28.6%) and businesspeople (46.4%) score somewhat better. Individuals could also pick a *don’t know* option, and some interesting patterns emerge if this is not coded out. The highest numbers of *don’t know* responses is observed in the businesspeople category (with 39.3%), followed by the generic messenger category (35.5%), celebrities (33.2%) and politicians (32.7%), while academics, NGO representative and aid recipients all have observed frequencies for *don’t know* of about 29%.

The higher level of uncertain answers is understandable for the generic category, with people perhaps failing to concretely think about the category as a whole as credible or not credible. However, the difference between credibility judgements and use of the *don’t know option* observed for the celebrities and expert messengers is an important figure as well. Celebrities are not only seen as less credible than their expert counterparts, but are also the messengers on which respondents feel most unsure in terms of credibility. If celebrities are
not seen as credible, or, for other respondents, raise questions on their credibility, then their effectiveness as endorsements for public engagement campaigns could be compromised. I discuss this further in the experiments of chapter 6 and 7, but the high levels of uncertainty about celebrity credibility can be interpreted as a sign of celebrity cues not being available for recipients of charity campaigns messages.

These results come with a caveat. Respondents who are answering the question, are required to think in a relatively abstract way when answering the question, yielding more of an overall picture of sources’ credibility than an in-depth credibility judgement assessment, in which individuals would score specific messengers along different dimensions (such as expertise, authenticity, and warmth). However, on the other hand, this overall credibility judgement approach manages to abstract from person-specific evaluations, from which, as I will discuss in chapter 6 and 7, it might be more difficult to draw externally valid inferences to wider contexts.

As part of the question, respondents can also indicate that they find multiple messengers as credible. This data is analysed below to give a sense of which traits bring together messengers across different categories in the eyes of respondents. I analyse all seven credibility judgements together through a principal-component factor analysis, with a varimax factor rotation to uncover information about how people group together categories of messengers around latent factors. Two factors have an eigen value higher than 1, with factor loadings after varimax rotation reported in Table 5.3.

<table>
<thead>
<tr>
<th>Messenger</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Uniqueness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic</td>
<td>0.7074</td>
<td>0.2472</td>
<td>0.4384</td>
</tr>
<tr>
<td>Generic person</td>
<td>0.3714</td>
<td>0.3540</td>
<td>0.7367</td>
</tr>
<tr>
<td>Ngo rep</td>
<td>0.8186</td>
<td>0.1371</td>
<td>0.3111</td>
</tr>
<tr>
<td>Celebrity</td>
<td>0.1076</td>
<td>0.7560</td>
<td>0.4169</td>
</tr>
<tr>
<td>Politician</td>
<td>0.1665</td>
<td>0.7054</td>
<td>0.4747</td>
</tr>
<tr>
<td>Businessperson</td>
<td>0.1800</td>
<td>0.7539</td>
<td>0.3993</td>
</tr>
</tbody>
</table>
Factor loadings for factor1 are higher for the three sources with expertise and experience on matters of global poverty and international aid and lower for celebrities, politicians and businesspeople. It is not surprising that expertise is an underlying factor of credibility evaluations from the survey respondents. Interestingly, participants see expertise in multiple messengers, drawing their credibility either from their education, as is the case for academics, or through direct professional or personal experiences of global poverty, as is the case for NGO workers and individuals who received aid.

While some social psychologists had discussed the importance of acknowledging multiple forms of expertise\(^2\), there is no clear theoretical indication that credibility judgements will be driven by different factors for different expert messengers. However, as noted in Braunsberger and Munch (1998), while expertise is expected to increase the persuasiveness and trustworthiness of information, experience is not. Consequently, I test hypotheses 1, 2 and 3 on the effect of gender, age and education on the credibility judgements of experts on both academics and NGO workers, excluding instead aid recipients, keeping in mind that exploratory findings could emerge and provide preliminary answers to the broader question on the determinants of credibility judgements as well.

Factor 2 is essentially behaving in the opposite way to Factor 1. The underlying logic bringing together the messengers of Factor 2 could be thought of as visibility, or social attractiveness, with the fact that any messenger from the categories of celebrity, politics and business will enjoy higher levels of exposure in the media and fame in the public eye. As politicians and businesspeople are not my core point of interest in this thesis, I will focus on celebrity credibility to test H4 and provide broad evidence towards answering RQ1.

An important difference between the two groups, which is worth noting, is the level of messenger personalism. Academics and NGO workers make sense as categories, out of which individuals mostly think of nameless examples, exception made for a few iconic figures. For messengers in the categories of

\(^2\)O’Keefe, 2015, for example, explicitly refers to multiple forms of expertise, even though he acknowledges a lack of theoretical or empirical study of these forms.
Factor 2, names are everything and individuals will rarely think of a generic celebrity, minor politician or local entrepreneur as quickly as they can name Bono, David Cameron or Richard Branson.

In the next section I look at differences in credibility judgements of experts and celebrities across four countries which participated in the AAT study. Following that, by looking specifically at data from the UK, I present descriptive statistics around respondents’ personal characteristics of interest to test H3 and H4, and provide more evidence towards RQ1.

5.2.2 Comparing source credibility across countries

In the introduction to this chapter I mentioned that the AAT study collects data in four countries: Britain, the United States, Germany and France. A comparative analysis of credibility rates across the four countries is just as important as models based on personal characteristics, as it highlights the importance of cultural and societal factors in driving perceptions of messengers credibility. I think, for example, of the differences in importance of celebrity culture in the UK or the US, as discussed in the field of celebrity studies (Brockington, 2015). Furthermore, in the theoretical work by Schaefer et al. (2010) the authors also discuss the importance of investigating cultural factors and social norms such as nearness to power in a culture influencing individuals’ judgements celebrity and expert credibility. Table 5.4 reports the percentage of respondents who found celebrities and expert sources credible.

Table 5.4: Credibility rates of experts and celebrities across the four AAT countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Academics</th>
<th>NGO reps</th>
<th>Celebrities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Britain</td>
<td>74.68</td>
<td>71.43</td>
<td>22.81</td>
</tr>
<tr>
<td>United States</td>
<td>52.17</td>
<td>60.02</td>
<td>23.56</td>
</tr>
<tr>
<td>Germany</td>
<td>59.45</td>
<td>64.22</td>
<td>35.27</td>
</tr>
<tr>
<td>France</td>
<td>59.94</td>
<td>60.64</td>
<td>26.14</td>
</tr>
</tbody>
</table>

Academics and NGO representatives hold a strikingly higher credibility rate in the UK, higher by almost 20% compared to the US and by about 15% when compared with Germany and France. NGO representatives fare better
in the UK where the credibility rate is over 71.4% with average credibility rates in other countries in the range of 60-64%. Once again, celebrities don’t perform as well as the expert messengers in any of the four countries. The highest credibility rate for celebrities is observed in Germany at 35%, with averages in other countries being around the 24% mark. This is interesting, particularly in the light of the trust that charities have in celebrity endorsers, their assumed capacity to work as messengers of global campaigns to fight poverty, and considering the expectations of higher credibility for celebrities at least in the US.

Although with the survey data, and more generally with quantitative methods, it is difficult to dig down as to the nature and the determinants of the cultural differences between countries, there are still some learning points worth discussing. Firstly, looking at Britain, audiences are more likely to find information which comes from the three expert messengers as credible. Schaefer et al. (2010), who quote Zandpour et al. (1994), show that countries where hierarchies and structures matter in society, such as is the case in the UK, individuals are more likely to follow authorities when making decisions or looking for credible information. In this case expertise is seen by the study participants as an authoritative source, or, in the language of the ELM/HSM models, act as a cue for the study participants (Homer and Kahle, 1990).

Secondly, thinking about the implications of these results, it is useful to think of the differences between countries as a whole. These differences pose both an issue and a challenge to the external validity of source credibility and political campaigns research, often heavily reliant on findings from US-focused research. Results from previous research should be replicated in different contexts. Further research should seek to move beyond the US and Britain, investigating the issue of messengers credibility in the EU, but also, crucially, in emerging countries. Finally, and more practically, if charities in the future will rely more on global campaigns to raise awareness and engage the public with global poverty, then they should take into account the possible
cultural *barriers* to different forms of communication and different messengers. In the next subsection I look specifically at data from the UK and consider the effect of social characteristics on source credibility judgements.

### 5.2.3 Recipient characteristics

The survey includes items to measure a variety of respondent’s personal characteristics such as age, gender, political ideology, income, and religiosity. As the survey instrument was created and data were collected by other researchers with other finalities, other variables which could be relevantly affecting credibility judgements, or correlating with these variables, are unfortunately not present in the dataset. In the conclusions to this chapter I reflect on the potential for omitted variable bias which the missing variables might create, and how that affects my results. A further series of survey items look at levels of personal engagement with the fight against global poverty: these include levels of knowledge, behavioural engagement, and concern for the issue. The descriptive statistics for the sample are presented in Table 5.5.

<table>
<thead>
<tr>
<th>Variable</th>
<th>$\bar{x}$</th>
<th>$\sigma$</th>
<th>$n$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>47.369</td>
<td>16.593</td>
<td>8412</td>
</tr>
<tr>
<td>Concern</td>
<td>3.286</td>
<td>1.065</td>
<td>8057</td>
</tr>
<tr>
<td>Education</td>
<td>1.330</td>
<td>0.617</td>
<td>8098</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>0.065</td>
<td>0.247</td>
<td>6628</td>
</tr>
<tr>
<td>Engaged public</td>
<td>0.305</td>
<td>0.460</td>
<td>8411</td>
</tr>
<tr>
<td>Gender</td>
<td>0.515</td>
<td>0.500</td>
<td>8412</td>
</tr>
<tr>
<td>Income</td>
<td>1.91</td>
<td>0.709</td>
<td>1464</td>
</tr>
<tr>
<td>Knowledge - Expenditure</td>
<td>17.578</td>
<td>21.248</td>
<td>6143</td>
</tr>
<tr>
<td>Knowledge - Millennium Goals</td>
<td>0.197</td>
<td>0.398</td>
<td>1883</td>
</tr>
<tr>
<td>Knowledge - UN Secretary</td>
<td>0.644</td>
<td>0.479</td>
<td>1883</td>
</tr>
<tr>
<td>Political ideology</td>
<td>2.01</td>
<td>0.724</td>
<td>6762</td>
</tr>
<tr>
<td>Religious identity</td>
<td>0.449</td>
<td>0.498</td>
<td>1820</td>
</tr>
<tr>
<td>Social grade</td>
<td>0.424</td>
<td>0.494</td>
<td>5972</td>
</tr>
</tbody>
</table>

The coding schema for the variables in table 5.5 is summarised in table 5.6.

Attitudes towards global poverty, behavioural engagement with cam-
5.2. Survey data descriptive statistics

Table 5.6: Descriptive variables coding schema

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>continuous scale</td>
</tr>
<tr>
<td>Concern</td>
<td>Scale - 1 for <em>not at all concerned</em> and 5 for <em>very concerned</em></td>
</tr>
<tr>
<td>Education</td>
<td>0 for <em>no qualifications</em>, 1 for <em>high school degree</em>, 2 <em>university degree</em></td>
</tr>
<tr>
<td>Ethnicity</td>
<td>1 for <em>non-white ethnicity</em>, 0 for <em>white</em></td>
</tr>
<tr>
<td>Engaged public</td>
<td>1 for <em>engaged individuals</em>, 0 otherwise</td>
</tr>
<tr>
<td>Gender</td>
<td>1 for <em>female</em>, 0 otherwise</td>
</tr>
<tr>
<td>Income</td>
<td>Scale between 1 for <em>less than £20,000</em> and 3 for <em>£50,000+</em></td>
</tr>
<tr>
<td>Knowledge Qs</td>
<td>1 for <em>right answer</em>, 0 otherwise</td>
</tr>
<tr>
<td>Knowledge - Expenditure</td>
<td>Scale - 0-100</td>
</tr>
<tr>
<td>Political ideology</td>
<td>1 for <em>left-leaning</em>, 2 for <em>centre leaning</em>, 3 for <em>right-leaning</em></td>
</tr>
<tr>
<td>Religious identity</td>
<td>1 for <em>identify as religious</em>, 0 otherwise</td>
</tr>
<tr>
<td>Social grade</td>
<td>1 for <em>C2DE</em>, 0 for <em>ABC1</em></td>
</tr>
</tbody>
</table>

The question asks individuals “Which best describes how you feel about levels of poverty in poor countries?”

The dummy is a reduced version of another variable included in the AAT study, the segmentation variable. This variable is obtained by analysing how individuals have got involved with global poverty using a set of 17 further questions on their past behaviours.
5.3 Drivers of overall credibility judgements

In the following subsections I will look more in depth at whether different demographic characteristics are associated with different overall credibility judgements. This analysis aims in particular to provide evidence towards the hypotheses on the effect of age, education, and gender on the credibility judgements of experts and celebrities. In each of the following subsections I look at the effect of age, education, and gender, as these were used in these hypotheses to state judgements of credibility towards experts and celebrities. I then expand on these descriptive findings in section 5.4, where a multiple logistic regression is estimated using factors included in the hypotheses, and other variables which work both as controls and as initial tests to investigate RQ1.

5.3.1 Age

Age is measured in the survey as a continuous variable. To compare credibility judgements, I have recoded the variable in four brackets to make the results easier to compare: 18-25; 26-50; 51-75; and 76-100. These categories also allow me to get more insight on the youngest and oldest respondents to provide initial evidence towards hypothesis 2, which states that older individuals are more likely to find experts as credible, and hypothesis 5, which states that younger individuals are more likely to find celebrities as credible. There is no clear pattern when it comes to respondents that choose the don’t know option across the age groups, so these are coded out before the analysis. Table 5.7 reports the mean credibility scores by age group. Statistically significant

---

5 The first question asks participants: “In 2000, wealthy countries agreed a set of objectives to improve the lives of poor people in developing countries by the year 2015. These objectives are known as.”. The second question asks participants: “Which of the following is the current Secretary-General of the UN?”.
5.3. Drivers of overall credibility judgements

Differences are calculated with a logistic regression using weights and robust standard errors. Stars indicate the level of significance if the mean responses are statistically significantly different from the baseline mean for respondents who are 18-25.

Table 5.7: Age group differences in credibility evaluations

<table>
<thead>
<tr>
<th></th>
<th>18-25</th>
<th>26-50</th>
<th>51-75</th>
<th>76-100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic</td>
<td>85.32%</td>
<td>82.57%</td>
<td>72.82%***</td>
<td>61.88%***</td>
</tr>
<tr>
<td>NGO rep</td>
<td>74.41%</td>
<td>77.91%</td>
<td>74.26%</td>
<td>66.83%</td>
</tr>
<tr>
<td>Celebrity</td>
<td>18.70%</td>
<td>23.86%</td>
<td>17.96%</td>
<td>12.25%*</td>
</tr>
</tbody>
</table>

Significance levels: * 10%, ** 5%, *** 1%.

H2 and H5 specifically look at the effects of credibility judgements towards celebrities and experts. H2 states that older individuals find experts more credible than younger individuals. H5 states that younger individuals will find celebrities more expert than older individuals.

Descriptively, younger individuals find celebrities more credible than older ones, supporting H5. The percentage of respondents who find celebrities credible is relatively low across the four groups, but is higher for people with ages between 26 and 50, and lowest for individuals aged 76 or more. Overall the association with age is negative, but the peak in credibility rates for 26-50 respondents is still interesting, as it could reflect a cultural heritage of the Live Aid and Make Poverty History times, when these respondents were younger, and the involvement of celebrities with humanitarian and global poverty causes was still newsworthy.

On the other hand, the descriptive statistics do not support hypothesis 2, as younger people are more likely to find both experts credible than older ones. The highest levels of credibility rates across the three messenger groups are observed once more, on average across the three groups, for individuals in the 26-50 group, but individuals in the 51+ groups are finding experts less credible than their 18-25 counterparts. In the case of academics, the differences are also strongly significant at the 1%, with a decrease in credibility rates of 12.5% when moving from the 18-25 to the 51-75 category, and of 23.4% when
5.3. Drivers of overall credibility judgements

Taken as a whole, the descriptive findings could be showing a generational trend in the perceived credibility of sources and their information about global poverty. However, the results on the overall differences in credibility of expert and celebrity sources still hold when the sample is broken down into age groups. The worst faring experts, academics, are still seen as credible by 62% of individuals aged 76 or more, while celebrities at best are seen as credible by 24% of individuals aged between 26 and 50. Age is considered once more in the multiple regression models later in this chapter, while the next section looks at the education of respondents.

5.3.2 Education

The education variable splits the sample into three categories. In the first category I include individuals with no formal qualifications, while the second category includes respondents who have completed high school, and the third includes individuals who have obtained a university-level title. Individuals in the no education category are using the don’t know options in the credibility questions more often than their counterparts in the university group. However, the results I discuss below don’t change if these respondents are considered in the contingency distributions or not. Descriptive statistics broken down by educational attainment are presented in table 5.8. Significance levels are tested using a logistic regression with weights and heteroskedasticity-robust standard errors, with the no education group serving as the baseline in the model.

Table 5.8: Education group differences in credibility evaluations

<table>
<thead>
<tr>
<th></th>
<th>No qualifications</th>
<th>High school</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic</td>
<td>58.77%</td>
<td>72.80%***</td>
<td>83.76%***</td>
</tr>
<tr>
<td>NGO rep</td>
<td>61.54%</td>
<td>74.68%***</td>
<td>78.80%***</td>
</tr>
<tr>
<td>Celebrity</td>
<td>22.74%</td>
<td>22.65%</td>
<td>16.25%***</td>
</tr>
</tbody>
</table>

significance levels: * 10%, ** 5%, *** 1%.

Hypothesis H3, which states that more educated individuals are more likely to trust experts more than less educated individuals, is supported by
the descriptive findings of the table. In all three of the expert categories, a higher level of education increases the rate of respondents who find the source credible. All differences are statistically significant at the 1% level. Moving from the baseline no education group, to the university group increases the credibility rates by 25% for academics, and 17% for NGO representatives. The differences in the magnitude show that the effect of education is stronger for the Academic messengers, coherently with the idea that individuals who have been in education for longer will value the information from these sources more than their less educated counterparts.

Equally interesting, although not accounted for in the hypotheses, individuals who have completed university are less likely to find celebrities as credible than individuals with no formal qualifications or who have just completed high school. This effect is significant at the 1% level as well. Moving from the baseline group to the highest group decreases the credibility of celebrities by 6.5%. The effect, in magnitude, is much smaller than the positive ones observed for expert credibility rates. Furthermore, the decrease in credibility rates is really only observed for individuals who hold a university degree, with the mean rates of the other two groups being statistically and substantially identical.

5.3.3 Gender

The gender question allows respondents to choose an option between male and female. This question, treated as a simple dichotomous variable can be used to test for differences in credibility judgement responses across the two groups. A caveat before I move forward: in every one of the four credibility questions the rates of female respondents who choose the don’t know option is significantly higher than with their male counterparts - on average by 8.94%. As data is not missing at random every inference drawn from gender-related findings might not be externally valid on their own. Research discussed in the works by Mondak and Anderson (2004) show that gender-related patterns in survey responses and the use of the don’t know option have been observed in other fields of political science research as well. The authors find that men
are more likely to avoid using the *don’t know* option in surveys and give their best guesses as answers, while Lizotte and Sidman (2009) show that these differences in behaviours are due to higher levels of risk aversion for female. Keeping this issue in mind, Table 5.9 presents the descriptive findings broken up by gender, once again looking at significant differences through a logistic regression with weight and robust standard errors.

**Table 5.9: Gender differences in credibility evaluations**

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic</td>
<td>76.13%</td>
<td>81.90%***</td>
</tr>
<tr>
<td>NGO rep</td>
<td>70.58%</td>
<td>82.72%***</td>
</tr>
<tr>
<td>Celebrity</td>
<td>19.74%</td>
<td>26.31%***</td>
</tr>
</tbody>
</table>

significance levels: * 10%, ** 5%, *** 1%.

H1 and H4 both look at the effect of gender on the credibility of experts and celebrities. The former states that men are more likely than female to find experts as credible, while the latter states that men are more likely than female to find celebrities as credible. Hypothesis 4 is supported in the data, while hypothesis 1 is not, with female-identifying respondents finding all four sources of information significantly more credible than men. The difference is smallest for celebrity credibility rates, higher by 6.6% for female, and biggest for NGO representatives, higher by 12.1% for female.

However, looking at contingency tables which include the *don’t know* answers, the evidence is put into a new perspective which is at least partly supporting hypothesis 1. These descriptive statistics are presented in Table 5.10. I use a multinomial logistic regression model as a test to identify whether differences in credibility rates are statistically significant while keeping *don’t know* answers in account as part of the model.

When the percentage of respondents who chose the *don’t know* option is factored in, the data becomes more interesting. Men find academics more credible than female, but female find NGO representatives, and celebrities more credible than men. All differences are small in magnitude, with effects sizes observed between 2% and 3% for all sources. Hypothesis 4 is therefore
still supported in these data, and hypothesis 1 is at least partially supported, given the difference in credibility rates observed for the academic messengers.

The bivariate analysis which I presented in these sections and which is used in the majority of existing works in the literature is clearly affected by omitted variable bias when they consider only one personal characteristic at a time. To improve on the bivariate approach, in the next section I consider multiple regression models with a stronger control strategy to strengthen the validity of these preliminary results.

### 5.4 Credibility judgements models

Three logistic regression models are fitted, estimated and discussed in this section, one for each messenger credibility variable. The variables I include in each section fall under two categories. The first category includes age, education and gender - the variables which appear in H1, H2, H3, H4, and H5, as I discussed in the descriptive statistics section. The second category is formed by other variables acting as controls in the models. These include other social characteristics variables, such as income, social grade and ethnicity, and variables capturing the respondents’ levels of engagement with global poverty, including variables such as their knowledge of global poverty-related information, behavioural engagement, and levels of concern for global poverty. Furthermore, these variables are also considered to provide preliminary evidence towards the overall research question analysed in this chapter, which states that recipient characteristics matter in establishing levels of credibility for experts and celebrities.

In this section, I first look at the regression models overall, and then move
my attention to specific findings for expert and celebrities in their respective models. The number of observations used in the models range from 528 to 579. The small sample sizes are due to missing values for demographic factors, especially income and religiosity, both of which have missing values for about 85% of the sample, but also to varying rates of don’t know answers for the credibility variables. As the number of missing values is so high, I also estimated the models omitting the income and religiosity variables. These models are estimated with samples of sizes ranging between 3,789 and 3,189 observations. The results are for the most part similar, although some differences are worth discussing. Education is a stronger predictor for credibility judgement in the bigger sample models, returning more significant results, but it acts as a proxy for the income variable which has been omitted from the model. Other variables such as gender or social grade acquire a few extra significant effects, possibly due to the stronger power of the statistical model. However, the effects of the variables always have the same signs as in the smaller sample models.

On grounds that these differences are expected, and that most findings are similar, in this section I only discuss the results from the models that include the income and religiosity variables. The results are presented in Table 5.11 below. All models correctly classify cases in excess of the naive guess (in this case the modal category of the credibility judgement variable). Naive guesses are in the region of approximately 72% for each of the credibility variables, with all models outperforming these by about 10% in each case. Multicollinearity was not an issue affecting the findings, thus no further modelling choices were made. As I noted at the beginning of the chapter, however, further relevant variables are still missing from the model, such as whether the respondent lives in urban or rural settings, general trust in institutions and information, or personality traits. As data on these variables were not collected as part of the AAT survey, the potential for omitted variable remains. This is discussed in the conclusions to this chapter.
### Table 5.11: Full credibility judgement models

<table>
<thead>
<tr>
<th></th>
<th>Academics</th>
<th>NGO reps</th>
<th>Celebrities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>-0.681***</td>
<td>-0.360*</td>
<td>-0.488**</td>
</tr>
<tr>
<td></td>
<td>(0.261)</td>
<td>(0.209)</td>
<td>(0.220)</td>
</tr>
<tr>
<td><strong>Concern</strong></td>
<td>0.854***</td>
<td>0.794***</td>
<td>0.320**</td>
</tr>
<tr>
<td></td>
<td>(0.136)</td>
<td>(0.119)</td>
<td>(0.144)</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>0.224</td>
<td>-0.0440</td>
<td>-0.331</td>
</tr>
<tr>
<td></td>
<td>(0.242)</td>
<td>(0.224)</td>
<td>(0.250)</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td>-0.563</td>
<td>-1.446**</td>
<td>-0.45</td>
</tr>
<tr>
<td></td>
<td>(0.700)</td>
<td>(0.630)</td>
<td>(0.636)</td>
</tr>
<tr>
<td><strong>Engaged public</strong></td>
<td>-0.174</td>
<td>0.0580</td>
<td>0.221</td>
</tr>
<tr>
<td></td>
<td>(0.327)</td>
<td>(0.295)</td>
<td>(0.270)</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td>-0.551</td>
<td>-1.318***</td>
<td>-0.191</td>
</tr>
<tr>
<td></td>
<td>(0.361)</td>
<td>(0.325)</td>
<td>(0.275)</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td>0.628***</td>
<td>0.0329</td>
<td>0.292</td>
</tr>
<tr>
<td></td>
<td>(0.219)</td>
<td>(0.191)</td>
<td>(0.188)</td>
</tr>
<tr>
<td><strong>Knowledge - expenditure</strong></td>
<td>-0.0110</td>
<td>-0.00725</td>
<td>0.0257***</td>
</tr>
<tr>
<td></td>
<td>(0.01000)</td>
<td>(0.00866)</td>
<td>(0.00733)</td>
</tr>
<tr>
<td><strong>Political ideology</strong></td>
<td>-0.474***</td>
<td>-0.338**</td>
<td>-0.227</td>
</tr>
<tr>
<td></td>
<td>(0.178)</td>
<td>(0.163)</td>
<td>(0.174)</td>
</tr>
<tr>
<td><strong>Religious identity</strong></td>
<td>-0.328</td>
<td>0.375</td>
<td>0.394</td>
</tr>
<tr>
<td></td>
<td>(0.274)</td>
<td>(0.254)</td>
<td>(0.263)</td>
</tr>
<tr>
<td><strong>Social Grade</strong></td>
<td>-0.462</td>
<td>-0.602**</td>
<td>-0.116</td>
</tr>
<tr>
<td></td>
<td>(0.293)</td>
<td>(0.307)</td>
<td>(0.337)</td>
</tr>
<tr>
<td><strong>Constant</strong></td>
<td>1.001</td>
<td>1.784</td>
<td>-1.671</td>
</tr>
<tr>
<td></td>
<td>(1.341)</td>
<td>(1.273)</td>
<td>(1.384)</td>
</tr>
<tr>
<td><strong>Observations</strong></td>
<td>579</td>
<td>563</td>
<td>528</td>
</tr>
<tr>
<td><strong>Correctly classified</strong></td>
<td>86.7%</td>
<td>81.9%</td>
<td>83.9%</td>
</tr>
</tbody>
</table>

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Looking across the models, some similarities emerge in the results. Firstly, the concern variable looking at attitudes towards poverty has a positive and significant effect in all three models. It is worth noting that the effects are however weaker in significance in the celebrity model. Secondly, in all models age has a negative effect, which is significant in the case of academics and celebrities, but is not significant in the NGO representatives model. As I discuss below, this does not fully support the predictions made in hypothesis 2, but it supports hypothesis 5. The effect of all the other variables varies in significance, sign and magnitude in the models. I look at these by first
returning to H1, H2, H3, H4, and H5, and then by looking at all the other variables which I included to provide broader evidence towards RQ1.

5.4.1 Hypotheses test: expert credibility

H1, H2, and H3 state that individuals identifying as men, older individuals and more educated individuals are more likely to find experts as credible sources of information. H1, which looks specifically at gender effects, is not supported in the data, with evidence in the NGO representatives model pointing instead to higher credibility rates for female respondents, with the effect of gender being significant at the 1% level. The marginal effect of identifying as a man instead of a woman in the survey, holding all other variables at the mean, is approximately a 16% decrease in the likelihood of finding an NGO representative as credible. The effect of gender is not significant in the academics and celebrities model. Taken together, the evidence does not support H1.

H2 looks specifically at the effect of age on credibility judgements of experts. Here as well, there is no empirical support for the hypothesis, with the results instead showing that younger people are more likely to find academics as credible, but no significant effect being found in the NGO representatives model. The effect of age is significant at the 1% level and negative in the academics model, with a minimum to maximum marginal effect at the mean of other covariates of approximately -20%. Overall, the evidence generated through the models does not therefore support H2.

H3, finally, looks at the effect of education on the credibility of experts. The effects of education, however, are not significant in any of the expert messenger models. Furthermore, effect signs are positive for the academics, and negative for the NGO representative models. There are two explanations for the lack of significant results. A first explanation is that in the studies I used to build my hypotheses (Greer, 2003; Flanagin and Metzger, 2007; Darley and Smith, 1995; O’Reilly, 1982), education was studied on its own, and could have been proxying the effects of other variables, such as income, political ideology, and social grade. In the descriptive statistics sections I
5.4. Credibility judgements models

had replicated these findings in a single variable approach, but once further controls are added, significance is lost. Secondly, as pointed out by Slater and Rouner (1996), the context of persuasive communication matters in building credibility judgements. Education, specifically could be an example of a factor which matters less in the specific context of assessing the credibility of global poverty messengers.

5.4.2 Hypotheses test: celebrity credibility

H4 and H5 state that individuals who identify as women, and younger individuals, are more likely to find a celebrity as credible. Firstly, H4 looks specifically at the effects of gender on celebrity credibility judgements. The effect is not statistically significant in the celebrity model, leaving no room to empirically support H4. Secondly, H5 looks specifically at the effect of age. The findings from the celebrities model support the hypothesis, as the effect is negative and significant at the 5% level. Magnitude-wise, the minimum to maximum effect for the variable, keeping all other covariates at the means, shows a decrease of approximately 21% in the likelihood of finding a celebrity credible.

In the next section I consider all the social characteristics of respondents, both significant and not significant, to build an audience profile of expert and celebrity messengers.

5.4.3 Other drivers of credibility judgements

In this section I present three results. I look at the effects of all other social characteristics variables on credibility judgements. Furthermore, I look at differences in the driving factors behind credibility judgements of celebrities and Finally, looking within the expert category, I discuss the differences in driving factors for the credibility of each of the expert sources.

Respondents’ levels of concern for global poverty positively and significantly affect the likelihood of finding expert or celebrities as credible. However, the effect is much stronger for expert messengers. Minima to maxima marginal effects, with other covariates held at the means, are of +43% in the academics
model, and +50% in the NGO representatives model. The effect is much smaller in the celebrity model, with a smaller +15% effect on the likelihood of finding celebrities as credible. The differences between the two categories are clear, with experts regarded in much higher esteem by individuals who express higher levels of concern for global poverty. There are two ways to interpret this result. In the first instance the models could be showing that celebrities have wider audiences than their expert counterparts, who are instead deemed credible by individuals who are, at least attitudinally, engaged with global poverty issues and information. Secondly, the results could arise due to the existence of an inverted relationship, which would show that finding any source of information on global poverty as credible, and consuming information from these sources can make an individual show higher levels of concern for global poverty. I return to this second interpretation more in depth in chapter 6 and 7, when I test for the effectiveness of celebrity or expert-endorsed messages as triggers of attitude change.

The ethnicity of respondents, a dummy coded 1 for individuals who come from non-white ethnic backgrounds, is not significant in 2 out of 3 models, but it has a significant and negative effect on the credibility rates of NGO representatives. This could speak of underlying dynamics of trust between charities and individuals who are more likely to have a personal connection with the developing world. The marginal effect for the ethnicity variable is a decrease in the likelihood of finding NGO representatives as credible of approximately 23%, all other factors kept at their means.

Levels of behavioural engagement are also not significant in any of the models. From the perspective of this specific research the lack of significance is good news: in the next two chapters I look at the effectiveness of experts and celebrities as messengers in public engagement campaigns, with interest in their effects for individuals with different levels of previous engagement. Individuals with different levels of previous engagement will not be more or less likely to be experimentally treated effectively in the experiments, increasing the strength
of the empirical results which I will discuss in the next two chapters.

Income is also a weak and not significant predictor of credibility judgements. The only exception is the significant (1% level) and positive effect in the *academics* model. The marginal minimum to maximum effects, holding all other variables at their means, sees a $+13\%$ increase in the likelihood of finding academics as credible for the richest respondents when compared with their poorer counterparts. This, in a way, confirms that education was likely proxying the effect of income in past studies, which did not control for the variable.

Levels of knowledge on global poverty and connected issues are measured through three items in the models. These are usually not significant, with three exceptions. Firstly, individuals estimating higher levels of UK expenditure on development aid than the actual 1.6% figure are more likely to find celebrities as credible. The minimum to maximum marginal effect for this scale shows an increase of the likelihood of finding a celebrity as credible of approximately $+47\%$.

Religious identity is not statistically significant in any model, with no clear descriptive patterns emerging across celebrity and experts. Finally, the effect of social grade is statistically not significant in most models, with the exception of the *NGO representatives* model, where the effect, significant at the 5% level, shows that individuals from lower social backgrounds are less likely to find NGO representatives as credible. The marginal effect for this variable, keeping all other factors at their means, shows a 8% decrease in the likelihood of finding NGO representatives as credible for people in the lower social classes as compared with higher social classes individuals.

The landscape is complex, but considering the variables as factors in the overall audience profile of experts and celebrities can help understand these findings taken as a whole. Broadly speaking, the results of the four models show two different profiles for the audiences of experts and celebrities. Experts are more likely to be found credible by younger, more concerned individuals
who identify as female, leaning on the left of the political spectrum. However, and importantly, different expert messengers can be seen as credible by individuals with different characteristics, such as ethnicity, income, or social class. While the existing literature acknowledges the existence of multiple forms of source expertise (O’Keefe, 2015), the findings of this chapter also show that different recipient characteristics also influence the credibility of such sources. Celebrities, on the other hand, are more likely to be seen as credible by individuals who might know less about global poverty, and by younger individuals.

While most of these findings do not support three of the five hypotheses I discussed in this section, the importance of different recipient characteristics as factors associated with different credibility judgements for expert and celebrity messengers emerges clearly from the results. Overall, however, it looks like the effects of social characteristics is important in driving credibility judgements of different expert messengers, while the audiences of celebrities are wider, or less socially constrained.

In the next section I discuss the limitations of these results. Following that, in section 5.6 I conclude the chapter by reflecting on the evidence generated towards the hypotheses and the research question.

## 5.5 Limitations

There are a number of issues threatening the validity of the results I discussed in this chapter. In this section I look more closely at the violations of OLS and ML regression assumptions. Violations of models assumptions result in overestimation or underestimation bias issues with the estimates, affecting the internal validity of the model themselves.

Variables which are omitted from the model can be a source of bias if they are significantly correlated with any independent variable included in the model. Models based on observational data are always, to greater or lesser extents, affected by omission issues. In the case of the models estimated in this chapter the problem is particularly important. To address this issue, I in-
cluded both variables on which hypotheses were directly tested (age, education, gender) and further variables (such as income, political ideology, or ethnicity), which can be considered control variables as far as the hypotheses tests go, but were also useful to shed light around RQ1. The inclusion of controls made it possible to overcome one of the biggest limitations of past research, which, in most cases, investigated these relationships in bivariate models. However, concerns with omission of relevant variables remain, which were unaddressable due to the pre-existent nature of both the instrument through which data were collected, and the dataset itself. Further factors which could cause bias include, for example, living in urban or rural areas, which correlates with included variables such as income, education, or age. Furthermore, the AAT survey data does not include variables to control for general trust in institutions and information source, which correlates with most of the included demographic variables, or variables to control for personality traits which determine a more or less trusting nature in the survey respondents. Future studies which engage with these issues should consider collecting data on these factors to replicate these findings.

The second source of bias in the estimates of survey data model is to do with errors in the way variables are coded, and in the way missing data affects the information available through the estimation processes. Missing data issues affected some of the demographic variables, as data was not available for most participants on the income and religiosity indicators. Values are likely to be missing not at random, as individuals with higher incomes are less likely to disclose these during the surveys, or religious individuals might withdraw sensitive information on their religious faith. New estimation of the models which excluded variables with sizeable amounts of missing data did not however change the core results discussed throughout the chapter, increasing the robustness of results and modelling choices. However, the smaller samples used to estimate the regression models meant that significantly lower statistical power was available for statistical testing, and that, potentially, some
small significant effects appear in the results erroneously as statistically not significant. While there is no direct solution to this issue as part of this thesis, considerations around missing data and don’t know options have impacted some of the design choices I made for the experiments in chapter 6 and 7. Future research seeking to replicate these findings will have to reconsider the issue of statistical power when designing new tests.

Finally, as it often happens with quantitative research designs relying on observational data, causality is called into question for the results. Specifically, the direction of some effects in the model could potentially be ambiguous: this is the case, for example, when considering the respondents’ engagement levels by adding attitudes, behavioural engagement and knowledge to the model. With these indicators both relationship directions are plausible, as engagement levels will influence the way individuals seek information from credible sources of information, and credible sources of information can influence levels of engagement. This, once more, points to the need of experimental data to test hypotheses on the effect of expert or celebrity sources on recipients’ intention to get involved with a campaign. The next section concludes the chapter by looking at the evidence accumulated to support hypotheses H1, H2, H3, H4, and H5 and investigate RQ1, and the next steps of research in the thesis.

5.6 Conclusions

In this chapter I relied on the data from the AAT survey to provide insights on the determinants of credibility judgements of messengers as sources of information on global poverty. I looked at the characteristics of respondents and how these are associated with different likelihoods of finding a messenger to be a credible source of information.

Overall, the findings from the models confirm the need for further research which reconsiders the importance of recipient characteristics in understanding dynamics of persuasive communication. Firstly, this is important as individuals with different characteristics are more likely to find different sources as
5.6. Conclusions

creditable. This matters in the era in which political campaigns are tailored to specific audiences (Nielsen, 2012).

The results show that when designing persuasive campaigns or appeals, there is no silver-bullet strategy when it comes to messengers, as different demographic categories will be seeing different messengers as more or less credible. However, at least in the case of global poverty campaigns, expert messengers will be judged to be more credible than their celebrity counterparts, potentially increasing the persuasive power of the messages they endorse. Table 5.12 recaps the evidence generated towards H1, H2, H3, H4, and H5 through the multiple regression models.

<table>
<thead>
<tr>
<th>Regression analysis</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>No support</td>
</tr>
<tr>
<td>H2</td>
<td>No support</td>
</tr>
<tr>
<td>H3</td>
<td>No support</td>
</tr>
<tr>
<td>H4</td>
<td>No support</td>
</tr>
<tr>
<td>H5</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Overall, with the exception of H5 on the effect of age on celebrity credibility, none of the hypotheses tested are supported by the empirical results. Previous results on the significance of these factors could be due to a combination of lack of strong modelling in their empirical research, with no control variables used in their tests, and to the fact that tests were conducted to consider other informational settings.

Secondly, the results I presented help us in understanding how expertise or attractiveness-based cues become available to different individuals engaging with persuasive communication part of political campaigns. The results open an important reflection on two topics.

First, source expertise comes in multiple forms, such as the knowledge of academics, or the professional expertise of NGO, and this matters. Furthermore, the personal characteristics of respondents associated with a credibility judgement towards certain kinds of expert sources, do not automatically as-
associate with credibility judgements of other sources. However, even though different factors drive the credibility of different expert messengers, expertise, overall, is an effective cue in persuasive communication. Future research should engage with the question of the differential drivers of credibility judgements of experts, as there are significant gains to be made in understanding and implementing more effective campaigns with different expert messengers. I return to this matter in chapter 7, as I introduce a conjoint experiment to test hypotheses on the effectiveness of multiple expert and celebrity messengers on political engagement indicators.

Secondly, if cue availability depends on the characteristics of the recipients, then a fair test of source effects in persuasive communication cannot be conducted on observational data, as simultaneity and self-selection would affect the internal and external validity of the results. Consequently, in chapter 6 and 7 I test the effectiveness of expert and celebrity endorsements using three experimental designs. In the experiments, individuals are randomised to receive a celebrity endorsement (with a source cue based on their attractiveness), or an expert endorsement (with a source cue based on their expertise). The cue is experimentally manipulated to be evident to participants, who do not need to select it among many possible cue choices. This method excludes the confounding effect of their demographic characteristics in the process as I investigate the effectiveness of different messengers as promoters of public engagement.
Chapter 6

Messengers as endorsers: online survey experiments

6.1 Introduction

In this chapter I discuss the results of two experiments embedded in two surveys testing hypotheses 6, 7, 8, 9, 10 and 11 on the effect of celebrities and expert endorsers on attitudes, cognitive activity and behaviour intentions. The first experiment relies on a control-versus-treatment design, while the second experiment refines and replicates the original findings through a scales and manipulation check approach.

The chapter opens with a discussion of the experimental design of the treatment and surveys of both experiments, including discussions of the study pilot. In section 6.3 I present the empirical results of the first experiment, with evidence providing support for hypothesis 6: an expert-endorsed message will result in significant changes in attitudes towards poverty, and, for

---

1As a reminder, hypotheses 6 and 8, respectively, predict that celebrity-endorsed or expert-endorsed appeals will more likely result in attitude change than generic unendorsed messages. Hypotheses 7 and 10, respectively, predict that for individuals with no previous engagement with global poverty, celebrity-endorsed and expert-endorsed appeals will more likely result in behaviour intentions change. Hypothesis 11 predicts that an expert-endorsed message will more likely result in behaviour intentions change than a generic non-endorsed message for engaged individuals. Finally, hypothesis 9 predicts that an expert-endorsed message will more likely result in higher levels of cognitive activity than a generic non-endorsed message or a celebrity-endorsed message, with the strongest effect observed with people who have medium levels of previous engagement.
previously involved individuals, in a positive change in the intentions to get involved with the campaign. I find that the celebrity-endorsed appeal is not more effective than a generic non-endorsed appeal at affecting individuals’ attitudes and behaviour intentions, leaving hypotheses 7 and 8 unsupported. Furthermore, I find some descriptive evidence that celebrity endorsements in the appeal could be producing a distraction effect, which hampers information retention for study participants. In section 6.4 I present the results of a second experiment, which largely confirm the findings around the effects of the two endorsements on attitudes and cognition around the appeal’s contents investigated through new treatment models. The second experiment, however, fails to provide strong evidence to replicate the results related to expert endorsement effects on behaviour intentions. In section 6.5 and 6.6 I reflect on the empirical evidence of both experiments, how it feeds back to the overall theoretical model and hypotheses, the limitations of the two studies, and the next steps in this pipeline of research.

6.2 Experimental design

In this section I discuss the design of the experiment script I use to test my research hypotheses. I embedded the experimental treatments in an online survey divided in four parts using Qualtrics panelling services to distribute it. In the first part, online panel members are selected according to participation criteria. In the second part, respondents are exposed to one of the experimental treatments. In the third part of the survey, dependent variables are measured through a set of questions. Finally, in the fourth part respondents complete a set of questions on their personal characteristics concluding the study. Each of these sections is discussed in the following subsections.

6.2.1 Screening participants

Potential participants are contacted by the Qualtrics panelling service and, by clicking on the link provided in an email, are brought to a page explaining the purposes of the study and asking for their informed consent to participate.
The description section presents the study as a survey on political attitudes, so that participants won’t expect that an experiment on charitable donations is included as part of their survey. If participants give their consent to participate, they still have to be resident in the UK and of at least 18 years of age to qualify to move on to the next phase of the study. Participants who don’t fulfil these criteria are screened out from the survey. Before being exposed to the experimental treatment, participants are asked a battery of 18 questions on their forms of behavioural engagement with the fight against global poverty. The items come from the AAT survey I described in chapter 4. In this battery, individuals can only choose to indicate whether they took a certain action, they didn’t, or indicate that they don’t remember.

6.2.2 Experimental treatments

The selected participants navigate to a page instructing them to look at a charity appeal, keeping in mind that questions about it will appear in the next section of the study. The appeal reports information on how survey respondents can hypothetically support the Oxfam Grow campaign. The campaign aims to raise awareness and increase public engagement with short and long term issues related with global hunger. The information in the appeal is taken from the Oxfam website\(^2\), and it includes a mixture of statistical facts about global hunger, information on how Oxfam is fighting the problem, and how individuals can get involved with the campaign. This campaign was chosen as the problem of global hunger is specific enough for the appeal to look realistic in the eyes of the study participants, while at the same time looking at a problem which was not particularly salient at the time of the experiment: no extreme event, with associated media coverage, had happened in the specific realm of food and hunger at the time of data collection, making the Grow campaign a representative example of a vast landscape of poverty-related campaigns aiming to engage the UK population.

The survey shows participants one of three possible versions of the appeal.

\(^2\)http://www.oxfam.org.uk/get-involved/campaign-with-us/our-campaigns/grow
In the first version the appeal comes generically from Oxfam itself, the logo of the organisation is used and a generic “Join Oxfam” tagline is employed to close the message. In a second version, the appeal is endorsed by a celebrity, Colin Firth, a British oscar-winning actor, who is one of the celebrity supporters of Oxfam’s campaign. Colin Firth is identified as an actor in the opening tagline. His picture is added in the initial section of the appeal, which also closes with a more specific “Join Colin and Oxfam” tagline. In a third version, the appeal is endorsed by an expert, Dr Duncan Green, the head of research at Oxfam GB at the time of the experiment. Duncan Green is identified as a researcher by indicating he holds a PhD and works as a researcher at Oxfam. His picture is included in the initial section as well, and the final appeal tagline now reads “Join Duncan and Oxfam” to conclude the appeal.

All other aspects of all three appeals are completely identical. The appeal is in plain, clear language so that individuals with different capacity to analyse the claims are all able to engage with it. The text provides some broad arguments of why it is important to get involved with the cause, including quick statistics on the phenomenon and a explanations of its roots, which the campaign seeks to address. The only difference and most salient characteristic is that two of the three versions of the appeals are endorsed by an expert or a celebrity. Colin Firth here represents the broad category of celebrities, relying on his attractiveness, while Duncan Green represents the experts both with his education, and working experience with Oxfam.

The generic appeal, depicted in figure 6.1 is used as the control condition. I made the decision to use a non-endorsed appeal as the baseline to which the two endorsed versions are compared for three reasons. Firstly, a true control group is a feature which is usually missing from ELM-testing experiments (Choi and Salmon, 2003). Designs which don’t employ baseline measures can still be used to compare the persuasiveness of different endorsers, however this neither reflects the need of clarity in testing the different ELM theoretical tenants, nor does it address the decision of whether to use specific endorsers
6.2. Experimental design

**Figure 6.1:** Generic version of the appeal used in the survey experiment

![A Message from Oxfam GB](image-url)
faced by development organisations when preparing a campaign.

Secondly, acknowledging the need for the baseline, a generic messenger instead of a non-endorsed appeal would not necessarily work as such. In chapter 4 I discussed how *generic messengers* can be seen as holding a certain degree of expertise, which would allow message recipients to use them as heuristic cues. One way around this issue would be to artificially create or select a generic messenger which does not hold any of these qualities, as I do in chapter 7. Alternatively, a generic unendorsed appeal can be used in the design, which only includes the name of the charity running the campaign. This specific control strategy is used in this chapter.

Results of a non-control comparison design, such as the ones employed in the tradition of dual-pathway persuasion models, are however useful as well. In this case the attributes of expertise or attractiveness are measured and used to compare outcomes from differently endorsed appeals, without relying on a non-endorsed appeal. This approach is discussed further in the second experiment presented in this chapter, and, later, in chapter 6, when a conjoint design is introduced as a refinement to the hypotheses tests presented in this chapter.

In the celebrity-endorsed and expert-endorsed versions of the appeals, used with the two treatment groups, I picked the messengers keeping in mind three experimental design needs. First, the celebrity messenger should rely prominently on their attractiveness to hypothetically increase the persuasive power of the appeal. This is in line with the theories I discussed in chapter 3, which showed how attractiveness is a non-relevant cue to the arguments raised in the message, which, however, could still be used by recipients to process the information through the peripheral route. On the other hand the expert messenger should rely on their *expertise* to hypothetically increase the persuasive power of the appeal. Expertise here is presented as a relevant cue, which can be both used to process information heuristically, or can be seen as a merit of the argument itself, pushing individuals to engage more with
the content of the message. To make sure that I could conduct a clear test of expertise versus attractiveness, I ran a pilot version of the study, which I describe below.

The pilot test took place online with 60 students from University College London in the summer of 2014, after ethical approval had been obtained to run the full study. This is explicitly a convenience sample, but it allowed me to check the quality of the survey design, to pick endorsers based on their most salient persuasiveness-related trait, and to measure average times of completion. Students were asked to complete the survey online as normal participants would in the actual data-collection run to follow, but also, for those in the two treatment groups, to rate the endorsers using Ohanian’s source credibility scale (1994). The scale allows participants to rate endorsers on three dimensions: attractiveness, expertise, and trustworthiness.

I focus on the first two dimensions to check for successful treatments, and check for potential undesirable differences in perceived source trustworthiness for both experts and celebrities. Each dimension is measured using 5 seven-point semantic scales. For the expertise dimension the scale is based around characteristics including expertise, experience, knowledgeable, being qualified, and skilled. For the attractiveness dimension the scale is built looking at the messengers’ attractiveness, classiness, beauty, elegance, and sexiness. Finally for the trustworthiness dimension the scale are built using items such as honesty, sincerity, and trustworthiness. Items are presented at a random order to pilot participants, and, once responses are collected, the scores are added to an overall thirty-five-point scale for expertise and attractiveness.

The scores for the overall source expertise and source attractiveness are presented in Table 6.1. Colin Firth is recognised as the overall more attractive messenger of the two, while Duncan Green is recognised as the more expert individual. No statistically significant difference is instead found on overall source trustworthiness for either messenger. The trustworthiness scores could be considered somewhat high for both messengers, but as no difference exist
between the two treatments, any difference in outcomes analysed is still much more likely to be due to the perceived expertise and attractiveness differences between the messengers. In the next chapter I adopt a different control strategy to further replicate these findings controlling for other source traits.

### Table 6.1: Trait scores for expert and celebrity

<table>
<thead>
<tr>
<th>Scale</th>
<th>Duncan Green</th>
<th>Colin Firth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attractiveness</td>
<td>15.45</td>
<td>19.74**</td>
</tr>
<tr>
<td>Expertise</td>
<td>26.40***</td>
<td>14.74</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>23.9</td>
<td>21.26</td>
</tr>
</tbody>
</table>

*** p<0.01, ** p<0.05, * p<0.1

The second aspect that informed the choice of messengers has to do with their characteristics other than attractiveness and expertise. Gender, ethnicity and age are the most visible personal characteristics of campaign endorsers, and could provide other cues based on similarity between messenger and recipient. These have to be fixed as well, hence why two white, British, mature men are employed in this specific version of the hypotheses test. In chapter 6 I relax this control assumption in a more ambitious design, which allows me to manipulate these personal characteristics as well as other credibility-related traits, increasing the external validity of the findings from this chapter.

Thirdly, the messengers were chosen as a very concrete example of what charity campaign endorsements look like in the real world. This choice, at the antipodes of the very generic categories I discussed in chapter 5, could harm the external validity of the findings of this chapter. It is easy to think of the experiment as a test of colinfirthness instead of celebrity, but in a sense this level of personality with celebrities is unavoidable. Celebrity endorsements such as the Colin Firth one I rely on in this design are what the Oxfam campaign relies on in the real world, far away from being as generalisable as academics would like. However, Colin Firth can still be thought of as a representative of a very wide category of endorsers who rely on their attractiveness and fame, as discussed above, and lacking in expertise on the matter of the campaign it-
6.2. Experimental design

self. Once more, this tension between the specific personalities and the generic characteristics is discussed further in depth in chapter 7, where I employ a conjoint design to explicitly include these differences in the model.

In conclusion, the messengers' characteristics were kept equal across the two treatments, exception made for their perceived expertise and attractiveness. These dimensions were explicitly manipulated as part of the experimental treatments, with a pilot test confirming that the expert endorser was perceived as more expert than its celebrity counterpart, and the celebrity endorser was perceived as more attractive than its expert counterpart. The three final appeals used in both experiments presented in this chapter are included in the appendix of the thesis in A.1 together with the full survey script. Once participants have seen one of the three version of the appeal, they proceed to the next section of the survey, including questions to measure all of the experimental outcomes.

6.2.3 Outcome measures

Outcome measures are divided in three groups: indicators of cognitive effort and information retention, attitudinal indicators, and behavioural indicators, which I discuss in this section.

Information retention and thought generation

This set of outcome measures includes six indicators that are used to assess how much people can remember from the appeal they read, and whether it stimulated any thought as they read it. The objective of the indicators is to observe whether individuals have engaged with the content of the appeal. Survey participants who are interested in the appeal can store some of the information they received while reading it, or can think about what it means to them, or whether it is good or not.

To capture these I rely on questions structured similarly to the ones used in the research testing the ELM (Petty et al., 2014; Petty et al., 2002; Cacioppo and Petty, 1981). These questions ask study participants to list information
they remember, or thoughts they had while reading a message. Furthermore, participants are asked to code their thoughts about the appeal as positive, negative, or neutral. This second task is of specific interest for cognitive psychologists, while the retention and listing exercises can be useful in more applied research designs like mine.

Consequently, I add two open-ended questions to the survey (without coding instructions), which require participants to list any information they recall about the appeal in a first space provided, and to list thoughts, feelings, or ideas in a second one. The instructions are left intentionally generic and responses are not mandatory, as non-responses give indication of a lack of interest in the appeal, information retention from the text, or thoughts about it. The open-ended questions are analysed and coded thematically in a series of dichotomous indicators, with 1 used if individuals retained the information or listed thoughts, and 0 if they didn’t. In the information retention question I look at whether participants have retained information on the two core problems discussed in the appeal (global hunger and food availability), information on how to get involved with the campaign (by remembering at least one of the suggested actions included in the appeal), and the name of the charity behind the campaign (Oxfam). In the thoughts generation question I simply look at whether participants have had any thoughts after reading the appeal (positive, negative, or neutral), and whether they specifically have thought that they would like to get involved and help.

Both the causes, the charity, and the list of action I consider as indicators of information retention are very specific. For example, the appeal does not mention donations as one of the possible actions that can be taken. Similarly the appeal never refers to poverty, but always to hunger and food as specific issues the campaign seeks to address. Participants who are only filling in the space with generic information to proceed in the survey are therefore easy to recognise and can be treated as cognitively disengaged.

Coding categories for the content generated through the thoughts list-
ing question were explicitly chosen to be unambiguous. Any participant who leaves the space provided empty or provides expressions such as “no”, “n/a”, “no thoughts” is treated as cognitively inactive. From there, out of those who reported thoughts, the subset that had thoughts about getting involved are coded in the second indicator. Examples of helping thoughts include a participant who reports “I want to learn more about the campaign” or “could be worth contacting my MP” or “I want to join it and fight against hunger and poverty”. Social desirability bias is possibly driving part of the content included in these answers. However there is no expectation of the bias affecting any of the three treatment groups disproportionately, leaving any differences between the outcomes of the three groups to be explained as a consequence of the treatments themselves.

Attitudes

I use two questions to measure the impact of the three appeals on attitudes. The first question concerns attitudes towards global hunger, the second looks at the global food systems. Both questions are used to test hypotheses 6 and 8 which both state that positive attitudinal responses are more likely for participants exposed to, respectively, a celebrity or expert-endorsed appeal than for participants who receive the generic appeal.

The first question simply asks participants whether they are concerned about levels of hunger in poor countries. Participants can respond using a scale of options from 1 (not at all concerned) to 5 (very concerned) or indicate they don’t know or prefer not to answer. The second question asks whether participants agree that a just food system will provide everyone with the food they need. Participants can respond using a scale of options from 1 (strongly disagree) to 5 (strongly agree) or indicate they don’t know or prefer not to answer.

Behaviour intentions

Individuals are asked about their intentions to take several actions to support a charity campaign in the six months following the reception of the appeal. The
list, included in Table 6.2, is a reduced version of the larger 18-items battery found in the AAT study discussed in chapter 5. The actions are chosen both in coherence with the demands for action made in the appeal, and to provide breadth of option to the study participants. Different actions in the lists have different involvement costs attached to them, from a simple intention to share the appeal online to a resource-demanding intention to volunteer for Oxfam.

**Table 6.2:** Behaviour intentions actions

<table>
<thead>
<tr>
<th>Intention to learn more about global hunger</th>
<th>Intention to share the Oxfam appeal on their social networks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention to write their own version of the Oxfam appeal to share</td>
<td>Intention to participate in a Oxfam Grow meeting</td>
</tr>
<tr>
<td>Intention to lobby own MP to take action against global hunger</td>
<td>Intention to discuss global hunger with friends and family</td>
</tr>
<tr>
<td>Intention to urge friends and family to support Oxfam’s Grow campaign</td>
<td>Intention to volunteer for Oxfam’s Grow campaign</td>
</tr>
</tbody>
</table>

The response to each of the indicators is recorded on a five point scale ranging from 1 (very unlikely) to 5 (very likely). The objective of the specific empirical tests presented in this chapter is to use these indicators to understand whether the different appeals are more or less effective at influencing the overall willingness to get involved with the campaign’s demand\(^3\). To this end, all indicators used as items as part of a factor analysis using a polychoric correlation matrix to create a continuous variable measuring overall intention to engage scores for participants (Flora and Curran, 2004; Rigdon and Ferguson Jr, 1991). There is only one factor with an eigen value higher than 1 (equal to 6.23), which, once retained, produces the factor loadings included in Table 6.3. The positive scores for all factors, which are comparable in magnitude, show that all variables contribute to the final score of the index created, here interpreted as a measure of individuals’ overall intention to get behaviourally involved with the campaign.

Once data is collected on the three outcome measures, participants navi-

\(^3\)Chapter 7, instead, focuses in single behavioural engagement indicators such as the respondents’ willingness to donate or to sign a petition
6.2. Experimental design

Table 6.3: Factor loading scores for the overall intention to get involved index

<table>
<thead>
<tr>
<th>Variables</th>
<th>Factor loadings</th>
<th>Uniqueness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learn more about global hunger</td>
<td>0.8142</td>
<td>0.3371</td>
</tr>
<tr>
<td>Share the appeal online</td>
<td>0.9109</td>
<td>0.1703</td>
</tr>
<tr>
<td>Write own appeal version</td>
<td>0.9079</td>
<td>0.1756</td>
</tr>
<tr>
<td>Attend campaign meeting</td>
<td>0.8120</td>
<td>0.3406</td>
</tr>
<tr>
<td>Lobby MP to take action</td>
<td>0.8497</td>
<td>0.2781</td>
</tr>
<tr>
<td>Discuss issue with others</td>
<td>0.9339</td>
<td>0.1278</td>
</tr>
<tr>
<td>Urge others to take action</td>
<td>0.9245</td>
<td>0.1454</td>
</tr>
<tr>
<td>Volunteer for campaign</td>
<td>0.8950</td>
<td>0.1991</td>
</tr>
</tbody>
</table>

gate to the final section of the study, where data on their personal characteristics is collected.

6.2.4 Personal characteristics

Measuring personal characteristics as part of this experimental design is useful for a series of reasons. Firstly, and most importantly, it allows for randomisation tests. Secondly, it allows to check how representative the sample is when considering the broader population of interest. Furthermore, any of the characteristics can be used to calculate the treatment effects for more specific subsamples, and to improve the efficiency of the estimation models by adding the variables as controls in the analysis process. To achieve these goals I collect data on the characteristics of participants listed here:

Table 6.4: Factor loading scores for the overall intention to get involved index

<table>
<thead>
<tr>
<th>Variable name</th>
<th>coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>measured continuously</td>
</tr>
<tr>
<td>Gender</td>
<td>coded 1 male, 2 female, 3 neither male nor female</td>
</tr>
<tr>
<td>Education</td>
<td>Scale between 1 for no qualifications to 6 for university degree-holders</td>
</tr>
<tr>
<td>Political ideology</td>
<td>Scale between 1 for left and 10 for right</td>
</tr>
<tr>
<td>Country of origin</td>
<td>1 for individuals who were born in the UK, 0 otherwise</td>
</tr>
<tr>
<td>Fairness</td>
<td>Scale between 1 for unfair, and 10 for fair</td>
</tr>
<tr>
<td>Heard of campaign</td>
<td>1 individuals who did, 0 otherwise</td>
</tr>
</tbody>
</table>

Once individuals have completed this section, the respondents are debriefed about the nature of the study and the survey comes to an end. Respondents who take less than approximately 3 minutes to complete the survey
are screened out as *speeders* while the rest of the responses are accepted as completed. In the next section of the chapter I present the descriptive statistics and results from the first online experiment ran in 2015. In section 6.4 I then analyse the descriptive statistics and findings from the second online experiment ran in 2016.

### 6.3 Experiment 1

A sample of 250 participants were recruited via online panelling on the Qualtrics\(^4\) platform in February of 2015 to partake in a study concerning their opinion about global politics\(^5\). Once the participation requirements are enforced and speeders screened out, the final sample includes 228 observations. In exchange for their responses, Qualtrics gives participants *points* that they can use to claim money or other prizes through the survey management company. This is a convenience sample. However, as the call for participation was open to any member of the Qualtrics online panel, the descriptive statistics show that the sample is broadly representative of the UK population.

Statistical power calculations for this experiment are complicated by the use of multiple outcome measures and multiple forms of experimental treatments. Furthermore, the literature includes only a limited number of studies focussing on behaviour intentions (but not attitudes or cognition) that can be used to establish priors for the treatment effects. Park and Cho (2015) investigate the experimental effect of celebrity endorsements on donations using a sample of 200 participants, but find no statistically significant main effects, while Pease and Brewer (2008) find significant results of an celebrity endorsement on voting intentions with a sample of 134. Using a two-sample one-sided test on the results by Pease and Brewer (2008), I find that a sample of 151

---

\(^4\)Although there is no UK specific study on the reliability of Qualtrics-sourced data, studies such as Heen et al. (2014) have concluded that their samples are representative of the US population, with Qualtrics performing better than other online panels such as Amazon’s MTurk.

\(^5\)The experiment was approved by the UCL Ethics board in 2015, reference Number 5031/001, with information provided and consent obtained by participants on the first page of the online survey.
respondents (approximately 75 per group) would be needed to replicate the finding. As this design includes three experimental treatment groups, I collected a sample of 250 observations, slightly bigger than the 225 observations I would theoretically need, allowing for the enforcement of participation criteria. The descriptive statistics for the whole sample are presented in tables 6.5.

**Table 6.5: Summary statistics for whole sample**

<table>
<thead>
<tr>
<th>Variable</th>
<th>$\bar{x}$</th>
<th>$\sigma$</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>45.51</td>
<td>15.79</td>
<td>228</td>
</tr>
<tr>
<td>Education</td>
<td>3.71</td>
<td>1.56</td>
<td>224</td>
</tr>
<tr>
<td>Fairness</td>
<td>5.63</td>
<td>2.09</td>
<td>228</td>
</tr>
<tr>
<td>Gender</td>
<td>0.48</td>
<td>0.50</td>
<td>226</td>
</tr>
<tr>
<td>Heard of campaign</td>
<td>0.13</td>
<td>0.34</td>
<td>190</td>
</tr>
<tr>
<td>UK origin</td>
<td>0.90</td>
<td>0.30</td>
<td>226</td>
</tr>
<tr>
<td>Right-left scale</td>
<td>5.85</td>
<td>2.08</td>
<td>228</td>
</tr>
</tbody>
</table>

Participants are assigned to one of the three treatment groups through a randomiser code which allocates participants fully at random without the enforcement of any quotas. Participants are not aware of treatment assignment, but are debriefed about the experimental nature of the study at the end of the survey. A first group of 74 participants are randomised in the control group (32% of the sample), with a further 75 participants randomised to the expert treatment group (33% of the sample) and 79 to the celebrity treatment group (the remaining 35% of the sample). Successful randomisation is confirmed through regression analysis in which no control variable is significantly associated with treatment allocation, and with F-stats which are always statistically not significant. Furthermore, as some of the demographic variables such as gender and the proportion of respondents born in the UK looks descriptively different, I also employ a non-parametric Kruskal-Wallis test (Kruskal and Wallis, 1952) and confirm that distributions do not differ across treatment groups. The broken down descriptive statistics are presented in Table 6.6.

The observed average completion time is of 8 minutes 45 seconds, or, at the median, of 6 minutes. The discrepancy between the two central tendency measures is down to 3 outlying time measurements, possibly due to these par-
participants completing the surveys in multiple sessions. I also measured the times for which participants were on the appeal pages. These are different in the means due to the same outliers which were affecting total completion times, but the median values are practically identical for all three groups measuring between 22 and 25 seconds. Treatment group sizes, completion times and treatment times (both in seconds) are all presented in Table 6.7. Non-parametric median tests indicate that all the observed descriptive differences are not statistically significant. However, the higher treatment times observed for participants in the expert treatment group could indicate a higher level of attention (or interest) paid to the contents of the appeal presented in the experiment.

Table 6.7: Treatment groups and completion/treatment times

<table>
<thead>
<tr>
<th>Variable</th>
<th>Control</th>
<th>T1 (Expert)</th>
<th>T2 (Celebrity)</th>
<th>Whole sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>74</td>
<td>75</td>
<td>79</td>
<td>228</td>
</tr>
<tr>
<td>Median completion T</td>
<td>352.00</td>
<td>373.00</td>
<td>353.00</td>
<td>360.00</td>
</tr>
<tr>
<td>Median treatment T</td>
<td>23.10</td>
<td>25.20</td>
<td>21.77</td>
<td>23.29</td>
</tr>
</tbody>
</table>

In the next subsection I move my attention to the results of the experiment, looking at outcome measures both descriptively and inferentially.

6.3.1 Experiment 1 results: descriptives and inference

Experimental outcomes measures fall under three groups: indicators of cognitive activity, attitudinal measures, behavioural-intentions measures, each anal-
Cognition

The first objective of the experiment is to see whether different endorsement strategies can stimulate further cognitive activity and attention towards the contents of the appeal. I test this by relying on the indicators from the two open ended questions asking participants what information they can recall about the appeal, and whether the appeal stimulated any thoughts, feelings, or ideas. I look at overall effects first, and then, specifically, to an interactive effect combining the treatments and levels of previous engagement.

Information retention is measured through four dichotomous indicators, coded 1 for individuals who remember that the appeal was about food, and hunger-related issues, how to get involved with the campaign, and that the campaign is run by Oxfam. The overall mean responses (the percentage of respondents who remembered the particular bit of information) are presented in Table 6.8. The findings from this analysis are that, overall, individuals exposed to expert-endorsed appeals retain more information about the appeal than individuals receiving the generic or celebrity-endorsed appeal.

Participants receiving the expert-endorsed appeal perform descriptively better than both celebrity treatment and control groups across all four indicators. The differences between expert-treated and control participants range between a minimum of +4% for the Oxfam indicator, and a maximum of +13% for the food indicator. The difference in information retention for the food indicator between expert treatment and control groups is also statistically significant at the 5% level.

Participants receiving the celebrity-endorsed appeal perform descriptively worse than participants in the control group or comparably to them. The differences between celebrity-endorsed and generic appeals range between a minimum of -0.7% for the food indicator, and a maximum of -5% for the hunger indicator. These differences are not statistically significant. On the other hand, when comparing expert-endorsed and celebrity-endorsed groups the differences
between them are significant at the 5% level for the food indicator and, at the 10% level, for the Oxfam indicator. The findings are evidence of the non-relevant nature of the celebrity endorsement cue in the message, working as a tout-court cue to accept the appeal, with participants more often completely disregarding the information included in the appeal itself.

Two further indicators look at whether people engaged in further cognitive activity after reading the appeal. The first indicator is coded 1 for individuals who had any thoughts following the appeal. The second appeal is coded 1 for individuals who specifically had thoughts about wanting to get involved and help. The overall mean responses (the percentages of respondents who had any thoughts or thoughts about wanting to get involved and help) are presented in Table 6.9. The findings of this analysis are that, overall, individuals who receive the expert-endorsed appeal are cognitively more active than individuals in the control or celebrity treatment groups.

If individuals are exposed to the expert endorsed appeal, they will generate

### Table 6.8: Information retention indicators

<table>
<thead>
<tr>
<th>Info - hunger</th>
<th>( \bar{x} )</th>
<th>SE</th>
<th>95% (low)</th>
<th>95% (hi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>43.24%</td>
<td>0.58</td>
<td>31.82%</td>
<td>54.67%</td>
</tr>
<tr>
<td>Expert</td>
<td>48.00%</td>
<td>0.58</td>
<td>36.56%</td>
<td>59.44%</td>
</tr>
<tr>
<td>Celebrity</td>
<td>38.46%</td>
<td>0.55</td>
<td>27.54%</td>
<td>49.39%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Info - food</th>
<th>Mean</th>
<th>Std. Err.</th>
<th>95% (low)</th>
<th>95% (hi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>12.16%</td>
<td>0.38</td>
<td>4.62%</td>
<td>19.70%</td>
</tr>
<tr>
<td>Expert</td>
<td>25.33%**</td>
<td>0.51</td>
<td>15.37%</td>
<td>35.30%</td>
</tr>
<tr>
<td>Celebrity</td>
<td>12.82%</td>
<td>0.38</td>
<td>5.31%</td>
<td>20.33%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Info - engage</th>
<th>Mean</th>
<th>Std. Err.</th>
<th>95% (low)</th>
<th>95% (hi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>16.22%</td>
<td>0.43</td>
<td>7.72%</td>
<td>24.72%</td>
</tr>
<tr>
<td>Expert</td>
<td>20.00%</td>
<td>0.47</td>
<td>10.84%</td>
<td>29.16%</td>
</tr>
<tr>
<td>Celebrity</td>
<td>12.82%</td>
<td>0.38</td>
<td>5.31%</td>
<td>20.33%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Info - Oxfam</th>
<th>Mean</th>
<th>Std. Err.</th>
<th>95% (low)</th>
<th>95% (hi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>8.11%</td>
<td>0.32</td>
<td>1.81%</td>
<td>14.40%</td>
</tr>
<tr>
<td>Expert</td>
<td>12.00%</td>
<td>0.38</td>
<td>4.56%</td>
<td>19.44%</td>
</tr>
<tr>
<td>Celebrity</td>
<td>3.85%</td>
<td>0.22</td>
<td>-0.47%</td>
<td>8.16%</td>
</tr>
</tbody>
</table>

*** p<0.01, ** p<0.05, * p<0.1
6.3. Experiment 1

Table 6.9: Thoughts indicator

<table>
<thead>
<tr>
<th>Thoughts - all</th>
<th>$\bar{x}$</th>
<th>SE</th>
<th>95% (low)</th>
<th>95% (hi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>55.41%</td>
<td>0.58</td>
<td>43.94%</td>
<td>66.87%</td>
</tr>
<tr>
<td>Expert</td>
<td>72.00%**</td>
<td>0.52</td>
<td>61.71%</td>
<td>82.29%</td>
</tr>
<tr>
<td>Celebrity</td>
<td>51.28%</td>
<td>0.57</td>
<td>40.06%</td>
<td>62.51%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Thoughts - help</th>
<th>$\bar{x}$</th>
<th>SE</th>
<th>95% (low)</th>
<th>95% (hi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>17.57%</td>
<td>0.45</td>
<td>8.79%</td>
<td>26.34%</td>
</tr>
<tr>
<td>Expert</td>
<td>25.33%</td>
<td>0.51</td>
<td>15.37%</td>
<td>35.30%</td>
</tr>
<tr>
<td>Celebrity</td>
<td>10.26%*</td>
<td>3.46%</td>
<td>3.44%</td>
<td>17.07%</td>
</tr>
</tbody>
</table>

*** p<0.01, ** p<0.05, * p<0.1

more thoughts, and more specific thoughts about wanting to get involved, than individuals in the control group. The differences are of approximately +17% for the generic any thoughts indicator, and of approximately +8% for the helping thoughts indicator. The difference in the generic indicator is also statistically significant at the 5% level.

On the other hand, individuals who receive the celebrity-endorsed version of the appeal are descriptively likely to be less cognitively active than their control group counterparts. The differences are of approximately 7% for the helping thoughts indicator, and of approximately 4% for the generic thoughts indicator. Furthermore, when comparing directly expert-endorsed and celebrity endorsed appeals, both differences are statistically significant at the 1% level.

Overall, results for the effect of expert endorsements, which positively affect levels of cognition, support hypothesis 9. Individuals use the expert endorsement as a cue to cognition, increasing both the amount of information retained from reading the appeal, and thinking more about it. Although the theory does not explicitly refer to any celebrity-endorsement effects on cognition, some interesting negative patterns emerge throughout the analysis, showing that individuals in the celebrity treatment could be less cognitively engaged than their control counterparts. This could be caused by an unexpected endorser distraction effect, as respondents focus their interest on Colin
6.3. Experiment 1

Firth and miss out other information included in the message.

As a refinement of these overall tests I also consider that the ELM/HSM theories often refer to a stronger persuasion effect of a cue to cognition specifically for individuals whose previous levels of engagement are not too low or too high. These individuals are posited to rely on the qualities of the endorser to decide how much thought to give to a message and its contents, as their engagement, which would otherwise guide this choice, is neither too high to stimulate systematic processing, or too low to stimulate a search for heuristic cues. I analyse whether the effect of the expert cue is stronger for individuals with medium levels of previous engagement through a linear regression model including the treatment allocation variable, a previous engagement grouping variable, and an interaction term between these two terms.

To estimate an overall information retention effect I add the four information retention indicators into a single dependent variable for the first model. In the second one I instead rely on the existing indicator for participants who had any cognitive activity following their exposure to the appeal.

The engagement variable splits the sample in three groups: individuals in the first group, low engagement, are those who take no action or 1 action out of the list of 8 proposed in the survey, signalling low or no previous engagement. A second group includes all individuals who took 2 to 3 actions, signalling medium engagement levels. A final group includes all individuals who took 4 or more actions, signalling high engagement levels. I also add a control for having previous knowledge of the campaign.

As both treatment and engagement variables work as grouping factors, the model calculates the effect of the expert and celebrity treatments at each of the three levels of previous engagement through a categorical by categorical interaction term. The results of the models presented in Table 6.10 show how the interaction between medium levels of previous engagement and the expert treatment effect is statistically significant, supporting hypothesis 9. Substantively, this means that individuals with medium levels of previous involvement,
who are exposed to the expert treatment, will retain more information and
generate more thoughts than their control-group counterparts from the same
engagement group.

Table 6.10: Interaction term models for information retention and cognition

<table>
<thead>
<tr>
<th></th>
<th>Information Retention</th>
<th>Thoughts Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expert treatment</td>
<td>0.0289</td>
<td>-0.0360</td>
</tr>
<tr>
<td></td>
<td>(0.229)</td>
<td>(0.138)</td>
</tr>
<tr>
<td>Celebrity treatment</td>
<td>-0.132</td>
<td>-0.159</td>
</tr>
<tr>
<td></td>
<td>(0.221)</td>
<td>(0.124)</td>
</tr>
<tr>
<td>Medium previous engagement</td>
<td>-0.286</td>
<td>-0.0683</td>
</tr>
<tr>
<td></td>
<td>(0.220)</td>
<td>(0.151)</td>
</tr>
<tr>
<td>High previous engagement</td>
<td>0.0404</td>
<td>0.361**</td>
</tr>
<tr>
<td></td>
<td>(0.394)</td>
<td>(0.149)</td>
</tr>
<tr>
<td>Expert treatment X medium</td>
<td>0.689**</td>
<td>0.413**</td>
</tr>
<tr>
<td>engagement</td>
<td>(0.343)</td>
<td>(0.198)</td>
</tr>
<tr>
<td>Expert treatment X high</td>
<td>-0.0164</td>
<td>0.161</td>
</tr>
<tr>
<td>engagement</td>
<td>(0.674)</td>
<td>(0.183)</td>
</tr>
<tr>
<td>Celebrity treatment X medium</td>
<td>0.200</td>
<td>0.368*</td>
</tr>
<tr>
<td>engagement</td>
<td>(0.333)</td>
<td>(0.198)</td>
</tr>
<tr>
<td>Celebrity treatment X high</td>
<td>-0.138</td>
<td>-0.215</td>
</tr>
<tr>
<td>engagement</td>
<td>(0.524)</td>
<td>(0.272)</td>
</tr>
<tr>
<td>Heard of campaign</td>
<td>-0.302</td>
<td>-0.00631</td>
</tr>
<tr>
<td></td>
<td>(0.195)</td>
<td>(0.108)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.997***</td>
<td>0.515***</td>
</tr>
<tr>
<td></td>
<td>(0.146)</td>
<td>(0.0872)</td>
</tr>
<tr>
<td>Observations</td>
<td>190</td>
<td>190</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.081</td>
<td>0.136</td>
</tr>
</tbody>
</table>

*** p<0.01, ** p<0.05, * p<0.1

The combined effect of medium engagement and expert treatment is sig-
nificant at the 5% level in both models. The combined engagement and expert
treatment increases the information retainment index by approximately 23%,
all else kept constant, and it increases the thought generation index by approx-
imately 41%, all else kept constant. Both findings therefore refine the original
results of the overall t-tests, and are strongly in support of hypothesis 9 of the
thesis.

In conclusion, evidence on differences in cognitive activity and informa-
tion recalling between individuals who receive the expert-endorsed or generic version of the appeal support hypothesis 9, as presented in chapter 3. The expertise of the endorser can be used as a cue to further cognition. This is observed, descriptively, overall, with higher information recall rates, and, in the interaction models, for individuals who had been previously involved with global poverty campaigns, as the theory predicted.

There is no theoretical expectation for the effect of having a celebrity-endorsed appeal instead of a generic messenger, as the celebrity cue is not relevant to the merits of the message, and won’t stimulate further thought. This is confirmed, as overall information retention and generation of thoughts are not statistically significantly different between the celebrity treatment and control groups. However, I also find evidence on both information and thoughts indicators pointing to the possibility that celebrity-endorsed messages might result in lower levels of cognitive activity. Looking at the interaction models from Table 6.9, the negative descriptive differences are happening for individuals who are either low or high on levels of previous engagement. This could be caused by an unexpected endorser distraction effect, which is, however, unaccounted for in the theoretical framework I adopted.

When looking at the open ended questions, 9%\textsuperscript{6} of the answers concerning information recall specifically refer to Colin Firth as a characteristic of the message, sometimes in negative terms. On the other hand, a lower rate of 5%\textsuperscript{7} of respondents recalls Duncan Green as the expert endorser. This could also be speaking to the conceptual tension between the generic nature of expertise, as a cued capability or characteristic of a messenger against the specific and personal nature of a celebrity, based on the recognisability of a messenger. I will explore these dynamics further in the second experiment included in this chapter.

\textsuperscript{6}This is calculated by only looking at responses from individuals in the celebrity treatment group, with 7 out of 79 respondents recalling Colin Firth as the endorser
\textsuperscript{7}See note above: 4 out of 75 respondents recall Duncan Green as the endorser
Attitudes

The second objective of the experiment is to test whether endorsed campaign messages can affect attitudes towards hunger and food distribution, two specific issues under the wider umbrella of global poverty. More specifically, hypothesis 6 states that celebrity-endorsed appeals are more effective at triggering attitude changes for individuals with no previous engagement than generic appeals, and hypothesis 9 states that expert-endorsed appeals will have a positive effect on attitudinal responses for individuals across the previous engagement continuum.

I test these hypotheses by looking at responses to the two attitudinal questions included in the post-treatment section of the experiment. Attitudinal responses are measured on 1-5 scales where higher values signal a stronger response, as they show either higher levels of concern for global hunger, or stronger agreement with the need for a just and fair food system. Table 6.11 shows the mean outcomes for both variables by treatment group. Differences in means are calculated for the whole expert-treated or control-treated sample, while celebrity treatment effects are only calculated for individuals with no previous engagement.

The findings from the analysis are that individuals exposed to an expert-endorsed appeal will report significantly higher levels of concern for global hunger, and descriptively higher levels of agreement with the *food justice* statement, supporting hypothesis 8 on the positive effect of an expert-endorsed message on attitudes. Conversely, individuals in the celebrity treatment groups perform descriptively only slightly better or comparably to individuals in the control group, with evidence failing to support hypothesis 6 on the positive effect of a celebrity-endorsed message on attitudes.

On average, responses to both attitudinal questions for members of all

---

8As the sample only includes 50 individuals with no previous engagement, I tested celebrity endorsement effects for individuals who took only one or none of the seven possible actions (an extra 47 respondents in total), and by using interaction terms in a linear regression model. The results which I discuss in the text don’t change across the tests.
6.3. Experiment 1

Table 6.11: Attitudinal measures

<table>
<thead>
<tr>
<th></th>
<th>Attitude - hunger</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Err.</td>
<td>95% (low)</td>
<td>95% (hi)</td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>3.79</td>
<td>0.11</td>
<td>3.58</td>
<td>4.01</td>
<td></td>
</tr>
<tr>
<td>Expert</td>
<td>4.04**</td>
<td>0.09</td>
<td>3.87</td>
<td>4.21</td>
<td></td>
</tr>
<tr>
<td>No engagement sample</td>
<td>Mean</td>
<td>Std. Err.</td>
<td>95% (low)</td>
<td>95% (hi)</td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>3.58</td>
<td>0.14</td>
<td>3.29</td>
<td>3.87</td>
<td></td>
</tr>
<tr>
<td>Celebrity</td>
<td>3.25*</td>
<td>0.19</td>
<td>2.87</td>
<td>3.63</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Attitude - food</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Err.</td>
<td>95% (low)</td>
<td>95% (hi)</td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>4.19</td>
<td>0.10</td>
<td>4.00</td>
<td>4.39</td>
<td></td>
</tr>
<tr>
<td>Expert</td>
<td>4.31</td>
<td>0.09</td>
<td>4.13</td>
<td>4.49</td>
<td></td>
</tr>
<tr>
<td>No engagement sample</td>
<td>Mean</td>
<td>Std. Err.</td>
<td>95% (low)</td>
<td>95% (hi)</td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>4.05</td>
<td>0.14</td>
<td>3.77</td>
<td>4.33</td>
<td></td>
</tr>
<tr>
<td>Celebrity</td>
<td>3.97</td>
<td>0.16</td>
<td>3.63</td>
<td>4.30</td>
<td></td>
</tr>
</tbody>
</table>

*** p<0.01, ** p<0.05, * p<0.1

Groups are relatively high, with values close to the fourth point on the scale. The high values could be due to a combination of overall campaign message effectiveness (no matter the presence of endorsers or not) and, perhaps, social desirability bias, with respondents not inclined to show a lack of interest for basic human rights topics such as food access.

When individuals are exposed to the expert-endorsed appeal they report higher levels of concern for global hunger and will be more in agreement with the need for a just food system. The difference for the hunger indicator is of about +5%, significant at the 5% level, and of about 2%, not statistically significant, for the food indicator. The first finding supports hypothesis 8 on the positive effect of expert endorsements on attitudinal responses to arguments included in a message. The expert-endorsement here works both as a peripheral cue, and a cue that increases the credibility of the argument presented in the message.

Individuals exposed to the celebrity-endorsed appeals do not show higher attitudinal responses to both questions, neither of which is statistically significant, and, descriptively, point to a negative endorsement effect on attitudes.

---

9 Code 4 for the hunger question corresponds to the concerned option, while for the food question it corresponds to the agree option.
This shows that, at best, individuals in the celebrity treatment group will have comparable levels of concern for global hunger as individuals who receive the generic version of the appeal. The lack of evidence means that hypothesis 6 on the positive effect of celebrity endorsements on attitudes is not supported. In the next section I finally look at the effect of the expert treatment on behaviour intentions.

**Behaviour intentions**

The final objective of this experiment is to test hypotheses 7, 10 and 11 on the effectiveness of a celebrity or expert-endorsed appeal to stimulate higher willingness to get involved with the campaign promoted in the message. Hypotheses 7 and 10 predict that experts and celebrities endorsing a message will work as a cue to behaviourally engage for previously uninvolved individuals. Furthermore, hypothesis 11 states that for previously engaged individuals the effect of the expert treatment is stronger, as the expert endorsement also acts as a cue to systematic processing of the message contents.

In the previous sections I have presented evidence that individuals in the expert treatment group will report higher levels of information retention, cognitive activity, and stronger levels of attitude change. Specifically, a first previous engagement and treatment interaction model showed that cognitive activity is particularly stronger for individuals who were previously involved in some for with global poverty campaigns, and who were exposed to global poverty. Consistently, I expect that the strongest change in behaviour intentions happens for individuals with previous engagement and exposed to the expert treatment.

I rely once more on a linear regression model, this time using a categorical by continuous interaction term to test my expectations. The dependent variable for the models is the intention-to-engage scale I produced through a factor analysis of the eight behavioural intention variables. The results are presented in Table 6.12. The findings are in support of hypothesis 11, with a significant combined effect of the expert treatment and levels of previous
engagement or attitudes. However the results do not support hypothesis 7 on the effect of the celebrity treatment on previous engagement, or hypothesis 10 on the effect of the expert treatment on behaviour intentions for previously disengaged individuals.

The interaction terms split the effect of the expert and celebrity treatments according to levels of previous engagement. Firstly, it calculates the effect of the treatments when the previous engagement scale value is 0. A significant and positive effect for either or both treatments at this level of previous engagement would be evidence in support of hypotheses 7 on the effectiveness of celebrity endorsements, and hypothesis 10 on the effectiveness of the expert endorsement. The model also calculates the effect of previous engagement, and through the interactions, calculates whether the combined effect of previous engagement and either of the two treatments is statistically significantly different from the baseline effect. A significant effect of the interactions is interpretable as a different slope, or effect, of previous engagement, as I show in figure 6.2. Specifically, a significant term for the interaction between expert treatment and previous engagement would work as evidence for hypothesis 11 on the higher effectiveness of the expert treatment at higher levels of previous engagement.

Table 6.12 shows the result of the model for the intentions to get involved regressed on previous engagement, treatments and a control for having previously heard about the campaign. The linear regression model estimates the effects of these variables by using 187 observations. 23% of the total variance in the intention to get involved scale is explained by the model. Hypotheses 7 and 10 are not supported by the model, as neither treatments are statistically significant when previous involvement is at the baseline. On the other hand, the effects of previous engagement, and the interaction between previous engagement and the expert treatment are both positive and statistically significant.

---

10 The previous engagement scale value of 0 is used for individuals who took no action to engage with global poverty. As a sensitivity test I replicated the tests by using a baseline category including both values 0 and 1 but results do not change in this specification.
### Table 6.12: Regression results

<table>
<thead>
<tr>
<th>Variables</th>
<th>Intention to get involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expert treatment</td>
<td>-0.285</td>
</tr>
<tr>
<td></td>
<td>(0.280)</td>
</tr>
<tr>
<td>Celebrity treatment</td>
<td>0.0732</td>
</tr>
<tr>
<td></td>
<td>(0.264)</td>
</tr>
<tr>
<td>Previous engagement</td>
<td>0.195**</td>
</tr>
<tr>
<td></td>
<td>(0.0866)</td>
</tr>
<tr>
<td>Expert treat X previous engagement</td>
<td>0.243**</td>
</tr>
<tr>
<td></td>
<td>(0.122)</td>
</tr>
<tr>
<td>Celebrity treat X previous engage-</td>
<td>0.0683</td>
</tr>
<tr>
<td>ment</td>
<td>(0.121)</td>
</tr>
<tr>
<td>Heard of campaign</td>
<td>0.594***</td>
</tr>
<tr>
<td></td>
<td>(0.221)</td>
</tr>
<tr>
<td>Constant</td>
<td>2.057***</td>
</tr>
<tr>
<td></td>
<td>(0.184)</td>
</tr>
<tr>
<td>Observations</td>
<td>187</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.230</td>
</tr>
</tbody>
</table>

*** p<0.01, ** p<0.05, * p<0.1

significant at the 5% level, providing support for hypothesis 11.

The interaction terms are used to check whether the slope of the previous engagement effect is different between the control, expert and celebrity treatment groups. The significant interaction term for the expert-treated group and previous involvement signals that the previous involvement linear is statistically significantly steeper for individuals who receive the expert-endorsed appeal than for individuals who receive the generic appeal. The combined effect, substantively, shows that individuals who received the expert-endorsed appeal will report increasingly higher levels of intentions to get involved with the campaign compared to participants in the control group. The differently-sloped lines, with their 95% confidence intervals are represented in figure 6.2.
Table 6.13 shows the marginal effects for all three treatment groups at each of the nine levels of previous engagement\(^\text{11}\). The ∆ column shows the percentage change in the intention to get involved variable when moving from the control group to either of the treatment groups. The distance between the control and expert treatment groups increases with the levels of previous engagement, going from a -3.56\% difference for individuals who took no action to get involved in the past year difference, which is, however, not statistically significant, to a +20.76\% difference for individuals who took 8.

Substantively, the marginal effects show that the positive distance between expert and control groups grows with previous engagement, which supports hy-

\(^{11}\)The scale is built as a sum of all actions taken in the past year, so 0 is used for the group of people who took no actions, 1 for those who took any of the actions, 2 if they took any two of the actions, and so on
Hypothesis 11 on the increasing effectiveness of the expert treatment. For individuals with medium levels of previous engagement the expert treatment increases cognitive activity, which strengthens attitude change and, consequently, positively affects behaviour intentions. Furthermore, for individuals with high levels of previous involvement the expert endorsement works as an argument reinforcer, strengthening attitude change as well, and, consequently, positively affecting behaviour intentions. Hypotheses 7 and 10, on the contrary, are not supported by the data, as the intentions to get involved for individuals who are previously not engaged are not statistically significantly different. An unexpected descriptive result, although statistically not significant, is the observed negative effect of the expert endorser on behaviour intentions for individuals in the low or no engagement group. This could be a statistical artefact generated from the model’s necessity of fitting a line through the data points, or another possible form of the endorsement distraction effect described in in other sections of this chapter.

Descriptively, another increasing distance phenomenon is observed when comparing the control group with the celebrity-treated participants. This, however, is much smaller in size, and statistically not significant in the model. However, further research could try and investigate whether the effect, although small, can be found to be statistically significant. In the next section I

<table>
<thead>
<tr>
<th>No actions</th>
<th>1 action</th>
<th>2 actions</th>
<th>3 actions</th>
<th>4 actions</th>
<th>5 actions</th>
<th>6 actions</th>
<th>7 actions</th>
<th>8 actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>2.14</td>
<td>2.33</td>
<td>2.53</td>
<td>2.72</td>
<td>2.92</td>
<td>3.11</td>
<td>3.50</td>
<td>3.70</td>
</tr>
<tr>
<td>Expert</td>
<td>1.85</td>
<td>-3.56%</td>
<td>2.29</td>
<td>-0.52%</td>
<td>2.73</td>
<td>2.52%</td>
<td>3.17</td>
<td>5.56%</td>
</tr>
<tr>
<td>Celebrity</td>
<td>2.21</td>
<td>0.92%</td>
<td>2.47</td>
<td>1.77%</td>
<td>2.74</td>
<td>2.62%</td>
<td>3.00</td>
<td>3.48%</td>
</tr>
<tr>
<td>Celebrity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.79</td>
<td>6.04%</td>
</tr>
</tbody>
</table>

Table 6.13: Marginal effects on intention to get involved
discuss the results of a second experiment, which considers both a no-control approach and a manipulation check approach to treatment effects models to test the same hypotheses I have looked at so far.

6.4 Experiment 2

The experiment which I present in this section seeks to refine on the findings of the previous one by discussing how information on source attractiveness and expertise can be used for manipulation checks or as different treatment variables. In the pilot of the first experiment, I used the scales proposed by Ohanian (1994) to show that my chosen expert endorser was seen as having more expertise than my chosen celebrity endorser, which, on the other hand, was deemed to be more attractive than its expert counterpart. In the final analysis, however, the evaluations are not considered, and only the treatment allocation variable is used to calculate treatment effects. The limit of this treatment design strategy is that, often, in the real world messengers and endorsers can be persuasive both due to their attractiveness and expertise on a specific subject. Overall, certain messengers will be seen as experts, while others, such as celebrities, will be seen as attractive, but the persuasion effect could be exerted on recipients by the presence of the expertise or attractiveness trait in any messenger, no matter the overall category in which the messengers appear in the eyes of the recipients in the appeal.

To test this extension of the original findings, I collected a new sample of 150 responses\(^\text{12}\) with the same experiment script, but I use the source characteristics scales from Ohanian’s work (1994) as treatment variables in the data analysis section, instead of relying on categorical treatment variables. Individuals are asked to rate the endorser on a set of items belonging to three categories for expertise, attractiveness and trustworthiness. I use the core items from these three groups, the expertise scale (coded between \(-3\) - \textit{Not an expert} and \(+3\) \textit{Expert}), and the attractiveness scale (coded between \(-3\) - \textit{Unattractive} and \(+3\) \textit{Attractive}).

\(^{12}\)As I discuss later in this section, the smaller sample size is due to financial constrains.
6.4. Experiment 2

and +3 - Attractive, and trustworthy (coded between -3 Untrustworthy and 3 Trustworthy. The three items are summarised by treatment group in Table 6.14.

Table 6.14: Single scale scores broken by treatment group

<table>
<thead>
<tr>
<th>Attractiveness</th>
<th>Expertise</th>
<th>Trustworthiness</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>score</td>
<td>score</td>
</tr>
<tr>
<td>Expert</td>
<td>49</td>
<td>0.39</td>
</tr>
<tr>
<td>Celebrity</td>
<td>48</td>
<td>1.14***</td>
</tr>
</tbody>
</table>

*** p<0.01, ** p<0.05, * p<0.1

As with experiment 1, I find no significant difference in the perceived trustworthiness of the messengers. On the other hand, both the differences in expertise and attractiveness are statistically significant at the 1% level, indicating that, as with the first experiment, the expert endorser is overall perceived to be more expert than the celebrity endorser, and that the celebrity endorser is perceived to be more attractive than the expert endorser. However the scores for expertise of the celebrity and attractiveness of the expert still show that both messengers have been scored positively on either dimension by some of the participants. To investigate this, in Table 6.15 I look at the distribution of responses within each scale.

Table 6.15: Expertise and attractiveness scores frequency by treatment group

<table>
<thead>
<tr>
<th>Expertise Scores</th>
<th>T1 Expert</th>
<th>T2 Celebrity</th>
<th>T1 Expert</th>
<th>T2 Celebrity</th>
<th>Attractiveness Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>-3</td>
<td>1 (2.0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>-3</td>
</tr>
<tr>
<td>-2</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>2 (4.1%)</td>
<td>0 (0%)</td>
<td>-2</td>
</tr>
<tr>
<td>-1</td>
<td>0 (0%)</td>
<td>4 (8.3%)</td>
<td>3 (6.1%)</td>
<td>2 (4.2%)</td>
<td>-1</td>
</tr>
<tr>
<td>0</td>
<td>21 (42.9%)</td>
<td>25 (52.1%)</td>
<td>40 (81.6%)</td>
<td>24 (50.0%)</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>14 (28.6%)</td>
<td>9 (18.8%)</td>
<td>2 (4.1%)</td>
<td>16 (33.3%)</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>8 (16.3%)</td>
<td>9 (18.8%)</td>
<td>0 (0%)</td>
<td>5 (10.42%)</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>5 (10.2%)</td>
<td>1 (2.1%)</td>
<td>2 (4.1%)</td>
<td>1 (2.1%)</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>49</td>
<td>48</td>
<td>49</td>
<td>48</td>
<td></td>
</tr>
</tbody>
</table>

Looking at the negative expertise and attractiveness scores for those who received the expert or celebrity-endorsed message, respectively, it is clear that for a number of participants the cues did not work as expected. Consequently,
I create a new manipulation-checked treatment allocation variable to exclude these individuals from analysis. Different dynamics could be behind the failure to pass the manipulation check. Participants could simply be cheating through the study to rush to the end of the survey and receive their reward. For other participants the stimulus might not be clear, or they could be spending too little time engaging with the appeal to notice the qualities of the endorsers.

Finally, as with every evaluation of other individual’s characteristics, there is a degree of subjectivity: respondents could dislike messengers for reasons not to do with social attractiveness or expertise and *punish* the messengers with judgements on these two dimensions. To check for the robustness of the cut-off point choice I run the analysis with similar modified treatment variables, but only excluding individuals who score messengers on their core traits with a 0 or lower, and no results (or their significance) changes substantially.

In the results I discuss in this chapter, I use both the expertise and attractiveness scales as treatment variables, as well as this modified treatment allocation variable. When relying on scales as treatment variables, my analysis does not compare outcomes for the control group and the treatment groups, as expertise and attractiveness are not measurable in the generic appeal. The models then rely on comparing messengers and evaluate whether higher levels of expertise or attractiveness lead to changes in cognitions, attitudes or behaviour intentions. When relying on the manipulation-checked treatment variable, which includes a control group, I base my analysis on the comparison between control and treatment groups.

150 participants were recruited via online panelling on the Qualtrics platform in February 2016 to partake in the second study, with the same remuneration conditions for participants, and under ethical approval of the UCL Ethics Committee as the first study\textsuperscript{13}. The smaller sample size, compared to the first study I discussed in this chapter, is due to a limit on the financial resources available to conduct the new study. The same screening-out crite-

\textsuperscript{13}Reference number 5031/001
ria of study 1 are applied here, leaving 145 observations available for the new tests. The descriptive statistics for the sample are presented in Table 6.16, with the averages of demographic variables in line with the characteristics of the broader British population from which the sample is drawn.

Table 6.16: Summary statistics for whole sample

<table>
<thead>
<tr>
<th>Variable</th>
<th>$\bar{x}$</th>
<th>$\sigma$</th>
<th>$n$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>46.17</td>
<td>14.68</td>
<td>145</td>
</tr>
<tr>
<td>Education</td>
<td>3.72</td>
<td>1.49</td>
<td>145</td>
</tr>
<tr>
<td>Fairness</td>
<td>5.75</td>
<td>1.73</td>
<td>145</td>
</tr>
<tr>
<td>Gender</td>
<td>0.54</td>
<td>0.50</td>
<td>145</td>
</tr>
<tr>
<td>Heard of campaign</td>
<td>0.11</td>
<td>0.31</td>
<td>121</td>
</tr>
<tr>
<td>UK origin</td>
<td>0.89</td>
<td>0.32</td>
<td>132</td>
</tr>
<tr>
<td>Right-left scale</td>
<td>5.35</td>
<td>2.23</td>
<td>145</td>
</tr>
</tbody>
</table>

Table 6.17 shows the descriptive statistics broken down by treatment group. No individual characteristics predicts treatment allocation as part of a linear regression model. However, as some descriptive differences still emerge from the table, I use a non-parametric Kruskal-Wallis test (Kruskal and Wallis, 1952) and confirm that there are no differences in the distributions of the variables across treatment groups.

Table 6.17: Summary statistics broken down by treatment groups

<table>
<thead>
<tr>
<th>Variable</th>
<th>Control</th>
<th>T1 (Expert)</th>
<th>T2 (Celebrity)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\bar{x}$</td>
<td>$\sigma$</td>
<td>$\bar{x}$</td>
</tr>
<tr>
<td>Age</td>
<td>44.40</td>
<td>15.36</td>
<td>47.53</td>
</tr>
<tr>
<td>Education</td>
<td>3.85</td>
<td>1.47</td>
<td>3.50</td>
</tr>
<tr>
<td>Fairness</td>
<td>5.50</td>
<td>1.83</td>
<td>5.88</td>
</tr>
<tr>
<td>Gender</td>
<td>0.65</td>
<td>0.48</td>
<td>0.52</td>
</tr>
<tr>
<td>Heard of campaign</td>
<td>0.09</td>
<td>0.28</td>
<td>0.03</td>
</tr>
<tr>
<td>UK origin</td>
<td>0.83</td>
<td>0.38</td>
<td>0.88</td>
</tr>
<tr>
<td>Right-left scale</td>
<td>5.31</td>
<td>2.05</td>
<td>5.64</td>
</tr>
</tbody>
</table>

The mean and median completion times are presented in Table 6.18. The observed overall average completion time for the second experiment is slightly longer at about 10 minutes, but with the same median value of 6 minutes. The differences between the indicators are again due to outlying time measurements. Differences in completion times for the three treatment groups are
not significant when tested with a t-test and a non-parametric median test. Times spent by participants on the treatment page at the median vary between 23 and 29 seconds, higher than was the case with the first experiment.

The reason for these differences are not evident at the time of the analysis. The differences between treatment times of different experimental groups are not statistically significant either when tested with t-tests and non-parametric median tests, with all p-values higher than 0.05. There is still some descriptive indication that individuals who were excluded from analysis through the scale manipulation check were also the quickest to go through the treatment pages, with an average time of approximately 23 seconds, or 17 at the median, adding support to the decision to exclude them on grounds of possible cheating.

<table>
<thead>
<tr>
<th>Table 6.18: Treatment groups and completion/treatment times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>T1</td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td>Median completion T</td>
</tr>
<tr>
<td>Median treatment T</td>
</tr>
</tbody>
</table>

In the next section I discuss the results of the second experiment descriptively and inferentially.

### 6.4.1 Experiment 2 results: descriptives and inference

**Cognition**

Table 6.19 reports the results of the regression models in which cognitive activity is modelled in function of the messengers' expertise and attractiveness. Descriptively, the effects in the models are very small. Individuals who are exposed to a messenger they deem to be an expert appear to remember slightly more about the content of the campaign than those who don’t deem the messenger to be an expert. The differences in recall and thought generations look smaller and are often negative for individuals who perceive their messenger as attractive.

Most effects, however, are not statistically significant, with the exception
in both approaches of the positive and significant effect of source expertise on the generation of thoughts about wanting to get involved with the campaign. The effect of source expertise is significant at the 1% level, with a minimum-to-maximum effect of moving from the bottom to the top of the expertise scale of a +30% increase in the number of individuals reporting thoughts about getting involved, with attractiveness held constant. Overall, the significant evidence in support of the hypotheses is limited, most likely due to the limited statistical power of such a small sample size. However, descriptive and inferential findings are at least in partial support of hypothesis 9, as individuals exposed to the expert treatment are more likely to have thoughts about wanting to help the campaign.

Table 6.19: Scale models: cognition and information retention

<table>
<thead>
<tr>
<th></th>
<th>Hunger</th>
<th>Food</th>
<th>Engage</th>
<th>Oxfam</th>
<th>Thoughts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expert</td>
<td>0.0429</td>
<td>0.0225</td>
<td>0.00548</td>
<td>-0.0269</td>
<td>-0.0145</td>
</tr>
<tr>
<td></td>
<td>(0.0329)</td>
<td>(0.0241)</td>
<td>(0.0223)</td>
<td>(0.0261)</td>
<td>(0.0326)</td>
</tr>
<tr>
<td>Attractive</td>
<td>0.0253</td>
<td>0.00446</td>
<td>-0.0124</td>
<td>0.0248</td>
<td>-0.0112</td>
</tr>
<tr>
<td></td>
<td>(0.0325)</td>
<td>(0.0253)</td>
<td>(0.0249)</td>
<td>(0.0236)</td>
<td>(0.0360)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.343***</td>
<td>0.177***</td>
<td>0.129***</td>
<td>0.123***</td>
<td>0.647***</td>
</tr>
<tr>
<td></td>
<td>(0.0565)</td>
<td>(0.0451)</td>
<td>(0.0423)</td>
<td>(0.0382)</td>
<td>(0.0590)</td>
</tr>
<tr>
<td>Observations</td>
<td>97</td>
<td>97</td>
<td>97</td>
<td>97</td>
<td>97</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.025</td>
<td>0.008</td>
<td>0.003</td>
<td>0.022</td>
<td>0.004</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.046</td>
</tr>
</tbody>
</table>

Table 6.20 reports the mean outcomes for information retention and cognitive activity broken down by manipulation-checked treatment group. None of the differences observed are statistically significant, although all are in line with the findings obtained with the scales approaches. Descriptively, individuals in the expert treatment group outperform both participants in the control and celebrity treatment group, with the exception of the Oxfam indicator and of the thoughts indicators. With these indicators the control group descriptively outperforms both treatment groups. However, out of the two treatments, the expert-endorsed appeal performs descriptively better than the celebrity-endorsed one when looking at the help thoughts indicator, consist-
tently with the findings of the scale models. As none of the differences in the findings are statistically significant, hypothesis 8 on the effectiveness of the expert endorsement as a cue to cognition is not statistically supported in the data\textsuperscript{14}.

Table 6.20: Treatment group models: Information retention and cognition indicators

<table>
<thead>
<tr>
<th></th>
<th>( \bar{x} )</th>
<th>SE</th>
<th>95% (low)</th>
<th>95% (hi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Info - hunger</td>
<td>Control</td>
<td>0.42</td>
<td>0.07</td>
<td>0.27</td>
</tr>
<tr>
<td></td>
<td>Expert</td>
<td>0.47</td>
<td>0.09</td>
<td>0.30</td>
</tr>
<tr>
<td></td>
<td>Celebrity</td>
<td>0.40</td>
<td>0.09</td>
<td>0.22</td>
</tr>
<tr>
<td>Info - food</td>
<td>Control</td>
<td>0.21</td>
<td>0.06</td>
<td>0.09</td>
</tr>
<tr>
<td></td>
<td>Expert</td>
<td>0.24</td>
<td>0.07</td>
<td>0.09</td>
</tr>
<tr>
<td></td>
<td>Celebrity</td>
<td>0.17</td>
<td>0.07</td>
<td>0.03</td>
</tr>
<tr>
<td>Info - engage</td>
<td>Control</td>
<td>0.13</td>
<td>0.05</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>Expert</td>
<td>0.15</td>
<td>0.06</td>
<td>0.02</td>
</tr>
<tr>
<td></td>
<td>Celebrity</td>
<td>0.10</td>
<td>0.06</td>
<td>-0.01</td>
</tr>
<tr>
<td>Info - Oxfam</td>
<td>Control</td>
<td>0.19</td>
<td>0.06</td>
<td>0.07</td>
</tr>
<tr>
<td></td>
<td>Expert</td>
<td>0.09</td>
<td>0.05</td>
<td>-0.01</td>
</tr>
<tr>
<td></td>
<td>Celebrity</td>
<td>0.10</td>
<td>0.06</td>
<td>-0.01</td>
</tr>
<tr>
<td>Thoughts - any</td>
<td>Control</td>
<td>0.69</td>
<td>0.07</td>
<td>0.55</td>
</tr>
<tr>
<td></td>
<td>Expert</td>
<td>0.62</td>
<td>0.08</td>
<td>0.45</td>
</tr>
<tr>
<td></td>
<td>Celebrity</td>
<td>0.63</td>
<td>0.09</td>
<td>0.46</td>
</tr>
<tr>
<td>Thoughts - help</td>
<td>Control</td>
<td>0.21</td>
<td>0.06</td>
<td>0.09</td>
</tr>
<tr>
<td></td>
<td>Expert</td>
<td>0.18</td>
<td>0.07</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td>Celebrity</td>
<td>0.13</td>
<td>0.06</td>
<td>0.01</td>
</tr>
</tbody>
</table>

\textsuperscript{14}In the previous experiment I had also presented the results of regression models interacting treatment with previous engagement. As the sample in this new experiment is so small, these results did not improve on the knowledge provided by the main effects I discussed in this section, so the models were left out of the discussion.
6.4. Experiment 2

6.4.1.1 Attitudes

Table 6.21 reports the results of attractiveness and expertise scale models for the two attitude indicators included in the study. With both approaches, participants exposed to a messenger they deem to be more of an expert are significantly more likely to be more concerned about global hunger and will agree more with the need for global food justice. Some significant positive results are also observed for participants exposed to a messenger they deem to be socially attractive, with the exception of the food justice model relying on full scales, in which the effect is small and not significant, but still positive.

Table 6.21: Scale models: attitude indicators

<table>
<thead>
<tr>
<th></th>
<th>Hunger</th>
<th>Food</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single items models</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expert</td>
<td>0.243***</td>
<td>0.208***</td>
</tr>
<tr>
<td></td>
<td>(0.075)</td>
<td>(0.056)</td>
</tr>
<tr>
<td>Attractive</td>
<td>0.350***</td>
<td>0.144</td>
</tr>
<tr>
<td></td>
<td>(0.115)</td>
<td>(0.098)</td>
</tr>
<tr>
<td>Attractive x engagement</td>
<td>-0.052</td>
<td>-0.021</td>
</tr>
<tr>
<td></td>
<td>(0.040)</td>
<td>(0.038)</td>
</tr>
<tr>
<td>Engagement</td>
<td>0.189**</td>
<td>0.037</td>
</tr>
<tr>
<td></td>
<td>(0.080)</td>
<td>(0.053)</td>
</tr>
<tr>
<td>Constant</td>
<td>3.164***</td>
<td>3.968***</td>
</tr>
<tr>
<td></td>
<td>(0.217)</td>
<td>(0.143)</td>
</tr>
<tr>
<td>Observations</td>
<td>97</td>
<td>95</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.303</td>
<td>0.221</td>
</tr>
</tbody>
</table>

*** p<0.01, ** p<0.05, * p<0.1

The expertise effects of both models are significant at the 1% level, with minimum-to-maximum effects (reported in Table 6.22) showing an effect of 29% in the hunger model and 25% in the food model. Both findings support hypothesis 8 on the positive effect of expert endorsements on attitudinal responses to an appeal. The attractiveness effect for previously not engaged individuals is positive and significant at the 1% level for the hunger model, with a +42% minimum to maximum effect for individuals with no previous engagement, expertise held constant. However, the effect is not statistically significant for the food justice model. This is the first empirical evidence, although partial, I find in support of hypothesis 6 on the effect of celebrity
endorsements on attitudes, contrary to the null results I discussed in the first experiment presented in this chapter.

Table 6.22: Minima-to-maxima effects for scale models on attitudes

<table>
<thead>
<tr>
<th>Single items</th>
<th>Attitudes - hunger</th>
<th>Attitudes - food</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expert</td>
<td>+29.2%***</td>
<td>+25.0%***</td>
</tr>
<tr>
<td>Attractive</td>
<td>+42.0%***</td>
<td>NS</td>
</tr>
</tbody>
</table>

*** p<0.01, ** p<0.05, * p<0.1

Table 6.23 reports the mean attitudinal outcomes broken down by treatment groups. As with experiment 1, the test of expert-related hypotheses is on the whole spectrum of previous engagement, while test of the celebrity-related hypotheses is only for individuals with no previous engagement. The effect of the expert treatment is positive and significant in both models, providing evidence in support of hypothesis 8. The celebrity treatment, descriptively, outperforms the control group in the attitudes towards global hunger model, but the effect is not statistically significant and small in magnitude. On the contrary, the positive difference observed between the celebrity treatment and control outcomes for the food justice model is not significant at the 5% level, providing no support for hypothesis 6.

Table 6.23: Treatment group models: attitude indicators

<table>
<thead>
<tr>
<th>Attitude - hunger</th>
<th>Mean</th>
<th>Std. Err.</th>
<th>95% (low)</th>
<th>95% (hi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>3.78</td>
<td>0.13</td>
<td>3.53</td>
<td>4.03</td>
</tr>
<tr>
<td>Expert</td>
<td>4.27***</td>
<td>0.13</td>
<td>4.01</td>
<td>4.52</td>
</tr>
</tbody>
</table>

no engagement sample

| Control           | 3.97 | 0.15      | 3.65      | 4.28     |
| Celebrity         | 4.35* | 0.21  | 3.91      | 4.80     |

<table>
<thead>
<tr>
<th>Attitude - food</th>
<th>Mean</th>
<th>Std. Err.</th>
<th>95% (low)</th>
<th>95% (hi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>4.20</td>
<td>0.10</td>
<td>4.00</td>
<td>4.40</td>
</tr>
<tr>
<td>Expert</td>
<td>4.44**</td>
<td>0.11</td>
<td>4.22</td>
<td>4.67</td>
</tr>
</tbody>
</table>

no engagement sample

| Control           | 4.25 | 0.12      | 4.00      | 4.50     |
| Celebrity         | 4.71** | 0.11  | 4.46      | 4.94     |

*** p<0.01, ** p<0.05, * p<0.1

Overall the models relying on the scales or treatment dummies provide
strong empirical support for hypothesis 8, with all expertise-related effects on attitudes found to be positive and statistically significant. Looking back to the theoretical model of chapter 3, individuals exposed to the charity appeal are using the expert endorsement as a cue to heuristically accept the information of the appeal, or a cue to cognitively engage further with its contents, or, finally, as a cue strengthening the appeal’s arguments to care about the issues of global hunger.

Support for hypothesis 6 on the effectiveness of celebrity endorsements is more limited, but still better than with the first experiment presented in this chapter. The scales model show that attitudes of individuals with no previous engagement are affected by endorsers with higher perceived attractiveness, but once the analysis considers the difference between a celebrity-endorsed and generic message, the effects are statistically not significant. A possible explanation for the difference in empirical evidence coming from the two experiments could be found in the celebrity endorsement used in the treatments, Colin Firth. Participants might find him more socially attractive than Duncan Green, but still not particularly attractive overall. Further replication, as the study I present in chapter 6, will reconsider this point with a wider variety of messengers with different genders, ages, and ethnic backgrounds. In the next section I conclude the analysis of the empirical results of the second experiment by considering behavioural intentions with both approaches.

6.4.1.2 Behaviour intentions

In Table 6.24 the source expertise and attractiveness scales are interacted with previous levels of engagement, both being measured as continuous variables. A continuous by continuous interaction can be interpreted as a combined effect of the two variables together. With the exception of the significant effect for previous engagement, neither source expertise nor source attractiveness have a statistically significant effect on the intentions to get involved, leaving hypotheses 7, 10, and 11 on the effects of expert and celebrity endorsements on behaviour intentions with no statistical support in this test. Descriptively,
however, signs are in line with the theoretical expectations, with positive expertise and attractiveness cues for individuals who were previously not engaged, and a small but positive combined effect for engagement and source expertise. The small sample size could be to blame for the lack of significance in the effects of this model, but scales are still useful to run an adapted version of the tests, which includes only participants who report successful manipulation checks.

The manipulation-checked model confirms the lack of statistically significant results I obtained in the previous model. Table 6.25 uses the treatment allocation variable to model intentions to get involved with the campaign presented in the experiment. Here the effects of expert and celebrity endorsements, and the combined effects of the expert treatment and previous engagement are not significant, thus no empirical support is found for hypotheses 7, 10, and 11 on the effects of the celebrity and expert endorsements on behaviour intention. This is the only finding from the second experiment which seems

| Intention to get involved | Source attractiveness 0.0157 (0.0941) | Source expertise 0.056 (0.099) | Previous engagement 0.202** (0.103) | Source expertise X previous engagement 0.003 (0.047) | Source attractiveness X previous engagement 0.085 (0.054) | Heard of campaign 0.350 (0.360) | Constant 0.350** (0.223) | Observations 80 | R-squared 0.20 |

*** p<0.01, ** p<0.05, * p<0.1
inconsistent with the hypotheses and the evidence generated in experiment 1 in the previous section, highlighting a need for further replication studies and more evidence to study these hypotheses.

**Table 6.25:** Treatment group model: intention to get involved

<table>
<thead>
<tr>
<th></th>
<th>Intention to get involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expert treatment</td>
<td>0.0261</td>
</tr>
<tr>
<td></td>
<td>(0.474)</td>
</tr>
<tr>
<td>Celebrity treatment</td>
<td>-0.278</td>
</tr>
<tr>
<td></td>
<td>(0.303)</td>
</tr>
<tr>
<td>Previous engagement</td>
<td>0.327***</td>
</tr>
<tr>
<td></td>
<td>(0.0805)</td>
</tr>
<tr>
<td>Expert treat X previous engagement</td>
<td>-0.0869</td>
</tr>
<tr>
<td></td>
<td>(0.175)</td>
</tr>
<tr>
<td>Celebrity treat X previous engagement</td>
<td>0.0837</td>
</tr>
<tr>
<td></td>
<td>(0.0985)</td>
</tr>
<tr>
<td>Heard of campaign</td>
<td>0.143</td>
</tr>
<tr>
<td></td>
<td>(0.400)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.502**</td>
</tr>
<tr>
<td></td>
<td>(0.203)</td>
</tr>
<tr>
<td>Observations</td>
<td>109</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.218</td>
</tr>
</tbody>
</table>

*** p<0.01, ** p<0.05, * p<0.1

6.5 Discussion of the results and hypothesis feedback

The two experiments presented in this chapter sought evidence in support of hypotheses 6, 7, 8, 9, 10 and 11 of this thesis. In the first experiment I relied on a classic treatment design, comparing the outcomes of individuals in the treatment or control groups. In the second experiment I instead relied on scales with which participants assessed the messengers’ expertise or attractiveness as a manipulation check and a hybrid covariate and treatment variable. In Table 6.26 I reflect on the evidence produced through the three approaches.
Table 6.26: Summary table for experimental findings

<table>
<thead>
<tr>
<th>Hypothesis 6</th>
<th>Attitudes</th>
<th>Engagement</th>
<th>Expected Effect</th>
<th>Experiment 1</th>
<th>Experiment 2a</th>
<th>Experiment 2b</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Celebrity (+)</td>
<td>no support</td>
<td>partial support</td>
<td></td>
<td>partial support</td>
</tr>
<tr>
<td>Hypothesis 7</td>
<td>Behaviours</td>
<td>Low</td>
<td>Celebrity (+)</td>
<td>no support</td>
<td>no support</td>
<td>no support</td>
</tr>
<tr>
<td>Hypothesis 8</td>
<td>Attitudes</td>
<td>All</td>
<td>Expert (+)</td>
<td>support</td>
<td>support</td>
<td>support</td>
</tr>
<tr>
<td>Hypothesis 9</td>
<td>Cognition</td>
<td>Med</td>
<td>Expert (+)</td>
<td>partial support</td>
<td>partial support</td>
<td>partial support</td>
</tr>
<tr>
<td>Hypothesis 10</td>
<td>Behaviours</td>
<td>Low</td>
<td>Expert (+)</td>
<td>no support</td>
<td>no support</td>
<td>no support</td>
</tr>
<tr>
<td>Hypothesis 11</td>
<td>Behaviours</td>
<td>Low/high</td>
<td>Expert (+)</td>
<td>support</td>
<td>no support</td>
<td>no support</td>
</tr>
</tbody>
</table>
Overall, support is stronger for hypothesis 8, with strongly significant effects in all experiments, showing how exposing individuals to expert-endorsed appeals over generic ones or messages endorsed by non-expert endorsers will result in significant positive differences in attitudinal measures across all tests. Hypothesis 6 on the effectiveness of celebrity endorsers using their attractiveness to persuade individuals to change their attitudes finds more limited support in the results of the experiments. Attractiveness should work as a cue to attitude change when comparing messengers, but the effect is not significant at all when comparing a generic appeal with a celebrity-endorsed one.

Hypotheses 9, 10, and 11 on the effectiveness of expert endorsements in stimulating cognitive activity and promoting behavioural engagement with the campaign receive some support in the experiments as well, but further replication studies should seek to confirm these findings. Specifically, the expert endorsement affects thought generation indicators in both experiments, signalling that the expert endorsement is used as a cue to further cognition around the contents of the appeals. Results of information retention tests, on the other hand, are less convincing, with some significant differences emerging for some of the indicators, but also contrasting results across the two experiments. Finally, looking at behaviour intentions models, hypotheses 7 and 10 are not supported by statistically significant results, although some descriptive evidence is consistent with the theoretical expectations at least around the effects of expert endorsements. Hypothesis 11 is supported in the first experiment, but no significant evidence emerges from the replications of Experiment 2. Chapter 7, which presents the results of a conjoint-designed experiment, addresses expert and celebrity endorsements effects on behaviour intentions more in depth.

In the next sections I reflect on the limitations of these studies, how the methodological experience feeds back to the wider debate on testing dual-pathway models of persuasion, and conclude the chapter by introducing the final experiment of the thesis, seeking to address some of these limitations.
6.6 Limitations and further research steps

A first limit of both experiments is the specificity of treatment design choices. In both experiments participants are exposed to the endorsements of either Dr Duncan Green or Colin Firth. These specific endorsements were chosen to increase the realism of the appeal, as generic expert or celebrity endorsements could have potentially confused study participants. However, as Duncan Green and Colin Firth are very specific realisations of the wider categories of experts and celebrities, further tests should seek to replicate these results with other messengers within each category, in order to avoid confusing celebrity or expert-related effects with 

colinfirthness or whiteman-ness effects. Personalism and specificity can affect the external validity of the celebrity-endorsement-related findings, but they affect the expert-endorsement results to a lesser extent in these experiments, as recognisability is less important than cues on the generic expertise of a messenger. I address these problems in the experiment presented in the next chapter by testing my hypothesis on a wider variety of messengers within each of the two categories.

However, and connectedly, one of the main findings from the second experiment shed light on the importance of the participants’ meta-cognitive processes which take place as part of their treatment: whether a messenger is perceived as an expert, or socially attractive, can matter more to participants reading the appeal than the appearance in which the messengers themselves are presented in the appeal. Some participants judged the expert endorsement as inexpert or attractive, while others saw expertise and lack of attractiveness in the celebrity endorsement. This are not necessarily cases of failure to treat, but more evidence that in complex informational environments individuals look for cognitive cues to suit their cognitive structures, as I discussed in chapter 3 and 5, and can perceive even clearly presented information in different subjective ways.

Future experiments should firstly reconsider the importance of ex-ante and ex-port manipulation checks to understand the meta-cognitive processes
which took part in the minds of the recipients. Secondly, future research should take a more fine-grained and nuanced approach in understanding how the perceived expertise and attractiveness of message sources can be used to persuade recipients, or, in more ambitious approaches, bring both source and recipient characteristics in the same testing apparatus.

A second issue, which mostly affects the second experiment, is the limited statistical power available to estimate significant treatment effects. Financial issues did not make it possible to replicate the original findings of experiment 1 with a sample of equal size. However, issues of power notwithstanding, expert related effects were replicated with success with the smaller sample size in the second experiment. This brings back into discussion the original issues I faced in conducting a power analysis in a design which considers very different behavioural engagement outcomes and different treatments, only a few of which appear in the past literature. At this stage, and for the benefit of future works, it is worth noting that the magnitude of the treatment effects is much larger for attitudinal responses than for cognitive, or behavioural intentions responses. I return to the topic of power and behaviour intention effects in chapter 7, as I present a conjoint-designed experiment which extends on the results presented in this chapter.

6.7 Conclusions

In this chapter I presented the results of two experiments which sought evidence on the effectiveness of expert and celebrity endorsers as persuasive messengers in an Oxfam campaign fighting global hunger. Participants are exposed to three varieties of the same appeal, a generic one without an endorsement, an expert-endorsed version, and a celebrity endorsed version. By comparing the generic to the endorsed appeals, and by looking at levels of messenger’s perceived expertise or attractiveness, I found significant differences in attitudinal responses, cognitive activity and behaviour intentions for participants exposed to an expert endorsed appeal.
Specifically, individuals exposed to the expert-endorsed appeal are more concerned about global hunger and food justice, think more about the contents of the appeal, and, conditionally on their previous level of engagement, plan to get involved with the campaign’s demands. Evidence on the effectiveness of the celebrity-endorsed appeal is more limited, with evidence supporting the importance of attractiveness as a cue that messengers can use to appear more persuasive, but with little evidence of celebrity-endorsed appeals performing better than the generic non-endorsed version.

In the next chapter I present the results of a final experiment based on a conjoint design that seeks to address some of the limitations of these experiments, such as the low external validity of celebrity-related findings and a lack of clarity as to cue-versus-messenger treatment effects, and to shed further light on hypotheses 7, 10 and 11 on the effect of expert and celebrity endorsements on the recipients’ behaviour intentions.
The experiments in chapter 6 produced evidence on the effectiveness of an expert endorsement as a mean to attitudinally, cognitively, and behaviourally engage the participants of the study with the issues discussed in a charity appeal. However, the experiments returned no evidence of any celebrity-endorsement effects, although the theoretical framework would have predicted a positive effect on attitudinal responses (hypothesis 6), and on behaviour intentions, for individuals with no previous engagement (hypothesis 7).

Evidence from experiments 1 and 2 on the capacity of an expert-endorsed appeal to promote changes in behaviour intentions is also mixed, with the first experiment finding a positive effect for previously involved individuals, which support hypothesis 11, but no effect for individuals with no previous engagement, although this was predicted in hypothesis 10, and the second experiment finding no significant evidence in support of hypotheses 10 or 11 at all. Moreover, in chapter 6 I relied exclusively on behavioural intention scales to measure the impact of the treatments, while other measurements, such as choice-based ones, could offer further insight on these hypotheses.

Considering the importance of behaviour intentions as part of overall political engagement, the inconsistent results and the potential for tweaked-design replications grant scope for further investigations in this chapter. Furthermore,
the experiments of last chapter tested hypotheses using only two messengers as treatments. A stronger test of the hypotheses should replicate these findings by using multiple celebrities and expert messengers. Finally, as I discussed in the last chapter, I relied on an unendorsed appeal as a treatment for individuals in the control group. However, results using this design could not have completely isolated the effect of expert and celebrity endorsements by holding constant every other aspect of the appeal. A replication study employing a different control strategy to confirm the original findings can strengthen the empirical evidence accumulated so far.

To address these three points, in this chapter I discuss the design, analysis and results of a conjoint design focused on the effects of a charity appeal endorsed by experts or a celebrities on the behavioural intentions of recipients. A conjoint design has several advantages over the simpler survey experiment I relied on in chapter 6, and allows me to improve both the internal and external validity of findings from the first two experiments.

My empirical tests are conducted on data from a two-wave online study administered to 2,034 participants\(^1\). In the first wave of the study, participants are asked to rate messengers on traits including attractiveness and expertise, and data are collected on their levels of previous engagement with global poverty. In the second wave of the study, participants go through a conjoint-designed choice experiment, making multiple hypothetical decisions concerning money donations or petitions signing to appeals endorsed by experts or celebrities. Data produced through the two waves is explored through three tests.

A first test replicates the treatment-versus-control design from Experiment 1, comparing behaviour intentions for individuals allocated to new expert or celebrity endorsed appeals, to a baseline control group using a *generic messenger* endorsement. The new control strategy extends once more the array of

\(^1\)While there is no power analysis instrument useful to plan sample sizes for conjoint designs in advance, a 2,034-responses sample is considered acceptable by using the heuristic rule presented in the work by Johnson and Orme (2010)
designs used to test the ELM/HSM predictions on persuasive communication (Pornpitakpan, 2004). A second test replicates Experiment 2 modelling the effect of sources’ attractiveness and expertise on the behaviour intentions of recipients in the classical design used in the past to test the HSM/ELM models. To provide broader breadth to the findings from last chapter, in this design I also rely on more complex conjoint treatment profiles which take into account a wider variety of expert messengers and celebrities, with different genders and ethnicities. A final test estimates treatment effects using the respondents’ choices as measures of their behaviour intentions in a conjoint model including multiple messenger categories such as activists or frontline medical staff as experts, and actors or singers as celebrities. Furthermore, in an effort to increase the external validity of the findings, the model also considers multiple messengers within each category, and controls for their genders and ethnicities.

In all three tests I find evidence in support of hypothesis 10 on the effectiveness of expert endorsements-based cues to behavioural engagement. The empirical findings from the second replication support hypothesis 7 on the effect of celebrity endorsements on behaviour intentions, but no other model replicates this result. Finally, the results provide only limited support for hypothesis 11 in most models, often returning no observable difference in the effect of the expert endorsement for individuals with higher levels of previous engagement. Consequently, while the effect of the expert endorsement treatments are significant and positive at all points on the previous engagement continuum, the effectiveness of the treatment does not differ statistically across the continuum itself. As I discuss through the chapter, if a combined effect of the expert treatment with previous engagement exists, it is likely to be very small, contingent on the kind of expert endorsement, the ethnicity of the endorser, and the ask of the campaign.

In the next section I begin by discussing how the conjoint experiment was designed, including choices for experimental treatments and conjoint profiles.
7.1 Design of the conjoint experiment

The three experiments I discuss in this chapter use data from a conjoint-designed study which includes responses to two waves of survey questions. In the first wave of the study, which took place in May of 2016, 2,034 respondents were asked to rate a set of messengers, which I discuss in more depth in section 7.1.1, on dimensions such as attractiveness and expertise. In the second wave of the study, which took place in June of 2016, 1,706 participants were recontacted to take part in a new survey which included the choice-based conjoint experiments\(^2\).

Source traits such as expertise, attractiveness, trustworthiness and authenticity are measured in wave 1 of the study, separately from the choice experiment which takes place in wave 2. The choice to separate the two waves is made to avoid response bias in participants who wish to show coherence in their reported behaviour intentions and their evaluations of the messengers included in the appeals. Source traits scales, used as manipulation checks in the first test and as messenger attributes in the second test, are discussed in the descriptive analysis of section 7.2. Expertise is measured using a scale for messengers knowledgeability (with possible scores between 1 - *Ignorant* and 7 - *Knowledgeable*), while social attractiveness is scored with scale for attractiveness (with values between 1 - *Unattractive* and 7 - *Attractive*) following the source credibility scales presented in Ohanian (1990) and Fiske et al. (2007). Further scales are added to check for the potential of other source character-

\(^2\)The study received ethical approval from UCL, reference number 5031/002

istics having an effect as part of the experimental treatments. Firstly, the instrument includes a scale for source trustworthiness, following previous research by Ohanian (1990) (with values between 1 - Untrustworthy and 7 - Trustworthy) and a scale for source authenticity, following previous research by Brockington (2014b) (with values between 1 - Fake and 7 - Authentic).

Following the rating exercise of wave 1, participants are recontacted to take part in the second part of the study which includes the conjoint-designed choice experiment. A choice-based conjoint experiment asks individuals to make multiple choices between different options. The modalities of the choice, the presentation of the options and the options themselves are the fruit of a conjoint design. The conjoint design consists of a series of vignettes, composed of multiple characteristics, or attributes. These vignettes are then randomly paired and presented to respondents who then make a choice between them by selecting one of the two.

In this section I discuss how the vignettes, attributes and choices were created to generate the experimental data. The design was generated, discussed and implemented as part of a wider research project looking at public engagement with global poverty, sponsored by the BMGF, on which I worked with Dr David Hudson and Dr Jennifer Hudson. The subsequent analysis, which focuses on specific expert and celebrity-related hypotheses test, remains original to this thesis, and independent to the objective of the BMGF research group.\(^3\)

### 7.1.1 Messenger attributes

One of the limitations of Experiments 1 and 2 is that the hypotheses are tested by relying on two messengers, a celebrity and an expert, comparing their performance to the baseline unendorsed message. The single-endorser design is commonly used in works which look at celebrity endorsements (Becker, 2012; \(^3\)This research project is related to the AAT work which I discussed in chapter 5, but specifically focuses on understanding how messengers can be used as effective tools to engage UK audiences with the work of charitable institutions. The cooperation with the research group is declared in accordance with UCL regulations as part of the Research Degrees Assessment Framework
7.1. Design of the conjoint experiment

Pease and Brewer, 2008), or which test the ELM/HSM models (Freed et al., 2011; Homer and Kahle, 1990; Petty and Cacioppo, 1984b; Wilson and Sherrell, 1993).

The only dimensions of treatment with this design are the endorsements of a single expert or a single celebrity. In an effort to increase the external validity of these findings, a conjoint analysis allows to test hypotheses related to behaviour intentions with a wider pool of messengers, which fall under a celebrity or expert category, but that hold different personal characteristics, such as their gender, ethnicity, and profession. Table 7.1 below reports all the messengers included in the final design.

Looking at experts, the theoretical work by O’Keefe (2015) acknowledges the existence and importance of multiple categories of messengers which can be used as expert-based cues in persuasive communication. However, to my knowledge, no work exists to date which specifically tests for the effectiveness of expert-based cues using an array of messengers with expertise. In the analysis of this chapter I consider messengers such as frontline medical staff, whose experiences and knowledge can be recognised by message recipients as a source of expertise. I then consider volunteers and activists, who acquire knowledge and experience on global poverty while working or collaborating with the charities.

The conjoint design also includes famous figures such as actors and musicians, all falling under the same category of celebrities in this design. The choices for these categories were made both in following the approach of chapter 5, and 6 of this thesis. Furthermore, the pool of messengers which I employed in survey and experimental analysis I presented so far was expanded by adding new messengers in conversations with practitioners from British charitable organisations. Having multiple messengers within each category, with different characteristics and working in different professions contributes to increasing the realism of the treatments, and, potentially, addresses the theoretical needs to provide wider conceptual breadth to both expert and celebrity categories in
7.1. Design of the conjoint experiment

Other messengers who are not experts or celebrities were also included in the conjoint design. Firstly a category of generic supporters messengers, which work as a baseline in the empirical investigations of this chapter, as they hold no particular expertise or attractiveness in the eyes of the respondents. Secondly, the experiment also includes a list of other messengers such as businesspeople, members of the military, or philanthropists. These are not of interest in this analysis, but as they appear as messengers in some of the vignettes, they remain part of the design.

As part of the design, I also consider other personal characteristics of the messengers, such as their gender (here understood as a dichotomous concept of male/female), and their ethnic background (another dichotomous concept of white/other ethnic background). For each combinations of these factors, one messenger was selected to be added within each of the categories. A final characteristic of the messengers is their recognisability. This speaks once again of the conceptual tension between the nature of celebrities, which exist as specific individuals grouped together, but each of whom is recognisable and named, and experts, who can be thought of as a generic group, sometimes composed of nameless individuals.

The final list of expert and celebrity messengers is presented in Table 7.1. In the appeals, messengers are identified through a picture and a tagline including their name, the messenger group to which they belong, and a short quote on their support for the campaign presented. Pictures of all messengers are included in the appendix. Pictures were sourced online from a pool made available by the AAT charity partners. Visual cues to identify messengers were used within each category, with all other aspects of the picture kept the same across all categories. For example, frontline medical staff is depicted in work clothes in medical buildings, while volunteers are in action in unspecified poor countries.

Furthermore, all messengers are depicted as talking, or in action, to give
the participants the sense that they are delivering the appeal included in the message. The only contextual cue which changes across appeals is the environment in which messengers are depicted. Frontline staff, military, and volunteers are all depicted in unidentified developing contexts. On the other hand activists, businesspeople, celebrities, generic messengers, philanthropists and the miscellanea category are depicted talking in more *western-looking* generic environments.

We ran a pilot study to investigate whether these contextual cues could influence the messengers' perceived expertise or attractiveness, and found no statistically significant difference in expertise or attractiveness ratings of messengers represented *in the field* or in more *western-looking contexts*. The campaign and its requests for action are the two attributes of the message that I look at next.
### Table 7.1: List of messengers included in the conjoint design

<table>
<thead>
<tr>
<th>Group</th>
<th>Description</th>
<th>Gender</th>
<th>Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline (generics)</td>
<td>Sarah Williams, from the UK</td>
<td>Female</td>
<td>White</td>
</tr>
<tr>
<td>Baseline (generics)</td>
<td>Karim Burdak, from the UK</td>
<td>Male</td>
<td>Other</td>
</tr>
<tr>
<td>Baseline (generics)</td>
<td>Tim Black, from the UK</td>
<td>Male</td>
<td>White</td>
</tr>
<tr>
<td>Baseline (generics)</td>
<td>Rani Takk, from the UK</td>
<td>Female</td>
<td>Other</td>
</tr>
<tr>
<td>Celebrity</td>
<td>Idris Elba, Actor</td>
<td>Male</td>
<td>Other</td>
</tr>
<tr>
<td>Celebrity</td>
<td>Bill Nighty, Actor</td>
<td>Male</td>
<td>White</td>
</tr>
<tr>
<td>Celebrity</td>
<td>Emma Watson, Actor</td>
<td>Female</td>
<td>White</td>
</tr>
<tr>
<td>Celebrity</td>
<td>MIA, Singer</td>
<td>Female</td>
<td>Other</td>
</tr>
<tr>
<td>Expert (activists)</td>
<td>Robert Cass, International development activist</td>
<td>Male</td>
<td>White</td>
</tr>
<tr>
<td>Expert (activists)</td>
<td>Devon Kessan, International development activist</td>
<td>Male</td>
<td>Other</td>
</tr>
<tr>
<td>Expert (activists)</td>
<td>Frances Winnow, International development activist</td>
<td>Female</td>
<td>White</td>
</tr>
<tr>
<td>Expert (activists)</td>
<td>Marie Mukanda, International development activist</td>
<td>Female</td>
<td>Other</td>
</tr>
<tr>
<td>Expert (frontline)</td>
<td>Ronan Keaney, Doctor</td>
<td>Male</td>
<td>White</td>
</tr>
<tr>
<td>Expert (frontline)</td>
<td>Adjo Khouri, Doctor</td>
<td>Male</td>
<td>Other</td>
</tr>
<tr>
<td>Expert (frontline)</td>
<td>Anne Front, Doctor</td>
<td>Female</td>
<td>White</td>
</tr>
<tr>
<td>Expert (frontline)</td>
<td>Abiewmense Okonjo, Nurse</td>
<td>Female</td>
<td>Other</td>
</tr>
<tr>
<td>Expert (volunteers)</td>
<td>Ross Caldow, International development volunteer</td>
<td>Male</td>
<td>White</td>
</tr>
<tr>
<td>Expert (volunteers)</td>
<td>Samuel Chiedozie, International development volunteer</td>
<td>Male</td>
<td>Other</td>
</tr>
<tr>
<td>Expert (volunteers)</td>
<td>Alice Harris, International development volunteer</td>
<td>Female</td>
<td>White</td>
</tr>
<tr>
<td>Expert (volunteers)</td>
<td>Hiruni Sadupama, International development volunteer</td>
<td>Female</td>
<td>Other</td>
</tr>
</tbody>
</table>
7.1.2 Message attributes

The campaign messages presented in the vignettes have two attributes: the content of the message, and the action suggested in the appeal. As with the experiments of chapter 6, the contents of the appeal are kept equal across all treatments, and present a generic appeal with a simple argument about the importance of fighting global poverty, the name of the endorser and a generic call to action. Differently from the experiments I previously discussed, the appeal does not come from any specific charity, and is shorter than the ones I used before. An example of the appeal is depicted in Figure 7.1.

Figure 7.1: A version of the appeal used in the conjoint design endorsed by a volunteer

"We have made significant progress in the fight against global poverty, but we are not done yet.

The majority of working middle-class families in poor countries struggle to make ends meet – imagine trying to live on just £3 a day.

Join me and donate today – together we can help hard working families help themselves."

Hiruni Sadupama, International development volunteer says: "Together we can do this!!"

The ask of the campaign changes across the appeals, with some asking for a donation to the campaign, here understood as a low cost action for recipients, and others seeking a signature on a political petition to support the aim of the campaign, here understood as a higher cost action for recipients. In each choice only one action is considered, either donations of petition signatures, so that individuals can focus on the characteristics of the messengers. These actions
were chosen both to test the effect of celebrity and expert endorsement on transactional or more political behavioural forms of engagement, following the discussion by Darnton and Kirk (2011). All analysis I present in this chapter is split up in donations and petitions models. The final characteristic of the conjoint analysis is the way in which the choices are presented to participants. These are discussed in the next subsection.

### 7.1.3 Choices format

During wave 2 of the study, for a number of times participants are shown two vignettes facing each other, and are asked to make a choice between the two options provided (Green et al., 2001). The format and the number of choices a respondent should make during the conjoint experiment is object of wide methodological debates (Hainmueller et al., 2014a), from which I derive the discussion and the terminology used in this section.

To settle on the final format of the questionnaire I relied on a pilot experiment comparing multiple potential designs. The details of the pilot experiment are included in appendix B. The pilot experiment showed that a forced choice between two appeals is the best design choice as it both performs according to prior expectations and because it preserves statistical power without biasing the choice-related results in the process.

In the full-run of this study, each participant is given two sets of five choices between two appeals to minimise satisficing behaviour and maximise the amount of data collected from respondents (Hainmueller et al., 2014a). The dichotomous choice variable, which shows the appeal chosen by the respondents, is used as a dependent variable in the third test included in this chapter.

Furthermore, after each of the choices, participants are also asked two follow-up questions to better understand their behaviour intentions. In the follow-ups each appeal which appeared in the forced choice is presented on its own on a separate page and participants are asked to indicate their intentions to donate or sign a petition on a scale from 1 - *I would definitely not make*
a donation/sign a petition to 7 - I would definitely make a donation/sign a petition. The scales-based measures of behaviour intentions are consistent with existing measuring techniques used both in the past chapter and in existing social psychology research Martin et al. (1993).

The follow-up scales measuring intentions to donate and intentions to sign a petition are used in the analysis of this chapter as dependent variables for the first and second test of this chapter, seeking to replicate the results of chapter 6. In the next sections I describe the sample used in the analysis, and present the results of the three experiments.

7.2 Sampling and descriptive statistics

Two-thousand participants were invited to participate in a study with data collected in two surveys conducted by YouGov in May and June of 2016. The first survey includes a slightly higher number of 2,034 responses\(^4\) to questions on messenger ratings and on the personal characteristics of respondents. The second survey includes the conjoint-designed choice experiments. The recontact rate for participation in the second survey is of 84%, with 1,706 observations recorded in the final dataset.

Table 7.2 shows the mean for descriptive statistics indicators collected from respondents when they joined the YouGov panel. As YouGov’s sampling strategies are aimed directly at obtaining representative samples, the descriptive indicators show mean values in line with the broad demographic characteristics of the UK population.

No demographic characteristic significantly and substantively predicts respondents’ allocation to a messenger couplet in each of the choice tasks, as message attributes are randomly picked to create one of 1,764 possible choice scenarios, which are randomly allocated to one of the 1,706 participants. I estimate 42 regression models, one for each of the messengers included in the final design, with statistically insignificant F-statistics and R-squared statistics

\(^4\)The higher number of responses is due to oversampling from the panel manager, a relatively common occurrence when collecting data online.
Table 7.2: Sample summary statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>$\bar{x}$</th>
<th>$\sigma$</th>
<th>$n$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>48.46</td>
<td>17.59</td>
<td>1704</td>
</tr>
<tr>
<td>Conservative</td>
<td>0.27</td>
<td>0.45</td>
<td>1706</td>
</tr>
<tr>
<td>Gender</td>
<td>0.54</td>
<td>0.50</td>
<td>1706</td>
</tr>
<tr>
<td>Labour</td>
<td>0.24</td>
<td>0.43</td>
<td>1706</td>
</tr>
<tr>
<td>Married</td>
<td>0.45</td>
<td>0.50</td>
<td>1706</td>
</tr>
<tr>
<td>Personal Income</td>
<td>4.60</td>
<td>2.99</td>
<td>1273</td>
</tr>
<tr>
<td>Social grade</td>
<td>0.38</td>
<td>0.49</td>
<td>1703</td>
</tr>
</tbody>
</table>

of 0 or close to 0, confirming that randomisation was successful.

The average study completion time is of 43 minutes. As outliers are present in the distribution of completion times\(^5\), I instead look at the median completion time, which is, on average, of approximately 7 minutes. Differences in completion times by treatment groups cannot be considered, as all participants are exposed to as many as twenty different messengers during the conjoint experiment. However, as an indication, Table 7.3 includes times spent on the single-vignette behavioural intentions question, where each appeal is presented on its own following the main choice experiments. At the median, average response time stands at approximately 4 seconds, while, at the median for each messenger category, respondents take approximately 3 to 5 seconds to indicate their intentions to donate or sign a petition in these questions. There are no clear differences in response times emerging across the messenger categories or among messengers in the same category.

One of the concerns with conjoint designs, where choice tasks are repeated five times for each action by each respondent, is that they will engage in *satisficing behaviours*, providing quicker, and less thought through, answers as the tasks are repeated. While this possibly happened for some participants, there is no evidence of *satisficing* having a noticeable effect when looking at three tests. Firstly, by comparing the effect of treatments in the overall conjoint experiment between the tasks, I do not find statistically significant effects that

---

\(^5\)These are, once again, respondents who left the survey uncompleted, sometimes for hours, and returned back to the study later to submit the remaining answers to end the study
7.2. Sampling and descriptive statistics

Table 7.3: Median response times by messenger category

<table>
<thead>
<tr>
<th>Group</th>
<th>Median answer time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline (generics) F/W</td>
<td>4.28</td>
</tr>
<tr>
<td>Baseline (generics) M/O</td>
<td>3.84</td>
</tr>
<tr>
<td>Baseline (generics) M/W</td>
<td>4.63</td>
</tr>
<tr>
<td>Baseline (generics) F/O</td>
<td>3.78</td>
</tr>
<tr>
<td>Celebrity M/O</td>
<td>3.97</td>
</tr>
<tr>
<td>Celebrity M/W</td>
<td>4.48</td>
</tr>
<tr>
<td>Celebrity F/W</td>
<td>4.41</td>
</tr>
<tr>
<td>Celebrity F/O</td>
<td>3.74</td>
</tr>
<tr>
<td>Expert (activist) M/W</td>
<td>4.59</td>
</tr>
<tr>
<td>Expert (activist) M/O</td>
<td>3.18</td>
</tr>
<tr>
<td>Expert (activist) F/W</td>
<td>4.20</td>
</tr>
<tr>
<td>Expert (activist) F/O</td>
<td>3.70</td>
</tr>
<tr>
<td>Expert (frontline) M/W</td>
<td>4.48</td>
</tr>
<tr>
<td>Expert (frontline) M/O</td>
<td>4.06</td>
</tr>
<tr>
<td>Expert (frontline) F/W</td>
<td>4.11</td>
</tr>
<tr>
<td>Expert (frontline) F/O</td>
<td>3.77</td>
</tr>
<tr>
<td>Expert (volunteers) M/W</td>
<td>4.43</td>
</tr>
<tr>
<td>Expert (volunteers) M/O</td>
<td>3.88</td>
</tr>
<tr>
<td>Expert (volunteers) F/W</td>
<td>4.24</td>
</tr>
<tr>
<td>Expert (volunteers) F/O</td>
<td>3.65</td>
</tr>
<tr>
<td>Overall</td>
<td>4.09</td>
</tr>
</tbody>
</table>

effects magnitudes and directions change significantly across iterations in a systematic way or with specific noticeable patterns. The results are included in appendix C. Secondly, following Hainmueller (2014), I check for the likelihood of the default option being chosen across tasks, and find no significant indications of systematic satisficing behaviour. Finally, I also test whether the number of anomalies (effects which are significant in the overall model and are not significant in the specific choice task, or vice-versa) is significantly associated with the succession in iteration tasks. Even in this second test I found no statistically significant evidence of satisficing behaviours. These further results are also included in appendix C.

Finally, I look at median response times across tasks, as presented in Table 7.4. In the first tasks for each action-specific section (the first for all donation appeals, the second for all petition appeals) respondents take between 7 and
8 seconds to gather instructions and respond. For each subsequent answer in both action-specific sections, on average, responses take approximately 4 seconds, getting slightly quicker as tasks repeat, but without a noticeable drop in response times by the end they reach the end of the study.

Table 7.4: Median response times by task

<table>
<thead>
<tr>
<th>Task</th>
<th>Median answer time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task 1</td>
<td>7.25</td>
</tr>
<tr>
<td>Task 2</td>
<td>4.55</td>
</tr>
<tr>
<td>Task 3</td>
<td>4.15</td>
</tr>
<tr>
<td>Task 4</td>
<td>4.09</td>
</tr>
<tr>
<td>Task 5</td>
<td>3.96</td>
</tr>
<tr>
<td>Task 6</td>
<td>8.16</td>
</tr>
<tr>
<td>Task 7</td>
<td>4.58</td>
</tr>
<tr>
<td>Task 8</td>
<td>4.19</td>
</tr>
<tr>
<td>Task 9</td>
<td>4.08</td>
</tr>
<tr>
<td>Task 10</td>
<td>3.85</td>
</tr>
<tr>
<td>Overall</td>
<td>4.09</td>
</tr>
</tbody>
</table>

In the next two subsections I first look at source expertise and attractiveness manipulation checks for expert and celebrity messengers, and then at the descriptive statistics for the outcome variables which I use in the analysis section.

7.2.1 Manipulation checks

Data from wave 1 of the study is used to understand whether expert messengers are perceived as such, and celebrities are perceived as attractive. Furthermore, as an extra manipulation check, messengers are also rated on dimensions of trustworthiness and authenticity, which could potentially work as omitted routes to increase the persuasiveness of an appeal. Table 7.5 shows the results of two linear multiple regression models checking for successful manipulations by using source expertise and attractiveness scales. The expertise, attractiveness, trustworthiness and authenticity of messengers are measured the seven-point scales for these traits collected in wave 1 of this experiment. The models use generic messengers as the baseline category to which other
messenger categories are compared, controlling for their gender and ethnicity. As each study participant rates six messengers on the four traits, the errors are corrected using a clustered sandwich estimator, and importance weights are applied.

Table 7.5: Manipulation checks results

<table>
<thead>
<tr>
<th></th>
<th>Expertise</th>
<th>Attractiveness</th>
<th>Trustworthiness</th>
<th>Authenticity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activists</td>
<td>-0.0323</td>
<td>-0.501***</td>
<td>-0.0120</td>
<td>0.0265</td>
</tr>
<tr>
<td></td>
<td>(0.124)</td>
<td>(0.102)</td>
<td>(0.0616)</td>
<td>(0.0650)</td>
</tr>
<tr>
<td>Celebrities</td>
<td>0.163</td>
<td>0.251***</td>
<td>0.0271</td>
<td>0.0458</td>
</tr>
<tr>
<td></td>
<td>(0.109)</td>
<td>(0.0851)</td>
<td>(0.0563)</td>
<td>(0.0595)</td>
</tr>
<tr>
<td>Frontline</td>
<td>1.061***</td>
<td>-0.223**</td>
<td>0.0445</td>
<td>0.0243</td>
</tr>
<tr>
<td></td>
<td>(0.106)</td>
<td>(0.0890)</td>
<td>(0.0582)</td>
<td>(0.0615)</td>
</tr>
<tr>
<td>Volunteers</td>
<td>0.482***</td>
<td>0.0273</td>
<td>-0.0476</td>
<td>0.0546</td>
</tr>
<tr>
<td></td>
<td>(0.106)</td>
<td>(0.0839)</td>
<td>(0.0594)</td>
<td>(0.0627)</td>
</tr>
<tr>
<td>Messenger gender</td>
<td>0.0815</td>
<td>0.566***</td>
<td>0.0427*</td>
<td>-0.0440*</td>
</tr>
<tr>
<td></td>
<td>(0.0600)</td>
<td>(0.0538)</td>
<td>(0.0248)</td>
<td>(0.0262)</td>
</tr>
<tr>
<td>Messenger ethnicity</td>
<td>-0.132**</td>
<td>-0.230***</td>
<td>-0.0374</td>
<td>0.00988</td>
</tr>
<tr>
<td></td>
<td>(0.0610)</td>
<td>(0.0549)</td>
<td>(0.0245)</td>
<td>(0.0259)</td>
</tr>
<tr>
<td>Constant</td>
<td>4.665***</td>
<td>4.691***</td>
<td>0.127***</td>
<td>0.136**</td>
</tr>
<tr>
<td></td>
<td>(0.099)</td>
<td>(0.079)</td>
<td>(0.0630)</td>
<td>(0.0666)</td>
</tr>
<tr>
<td>Observations</td>
<td>2,518</td>
<td>3,639</td>
<td>4103</td>
<td>3,963</td>
</tr>
</tbody>
</table>

Activists, frontline staff and volunteers are the messenger categories which I expect respondents will perceive as experts (in this case, more expert than the baseline). Consequently, the expectation is that, for expert messengers, compared to the generics, the differences in the expertise measure will be significant and positive in the model. This is verified for the frontline and volunteer groups, but manipulation is not successful for activists. There are no clear explanations why manipulation failed with this category, but two factors could have contributed to this situation. Firstly, the context in which messengers are depicted in the appeals could strengthen or weaken the expertise-based cue. While I tested this in the first pilot study and found no statistically significant effect, the trial had still highlighted some positive descriptive differences in expertise ratings for messengers portrayed as being in the field when compared to being in a more neutral setting. Frontline staff and volunteer messengers are
all portrayed in action, while activists are portrayed in more western-looking environments. Secondly, the age of messengers could be playing a role in reducing or increasing perceived expertise. With 3 out of 4 activists presented as young-looking, their ratings could have been impacted negatively. The fourth activist is an older black woman, whose expertise ratings weren’t as negative, with a score of 4.94 (on a scale from 1 to 7), compared to an average rating for the younger activists of 4.49. This remains a question open for investigation in future studies.

Celebrities are the messengers which I expect respondents will perceive as attractive (in this case, more attractive than the baseline). In this case the expectation is that for celebrity messengers, compared to the generics, the difference in attractiveness will be positive and significant. The success of the attractiveness manipulation is confirmed by the positive and significant effect for the celebrities group. Interestingly, the expert groups, on the other hand, are all, except the volunteers, found as significantly less attractive, confirming the theoretical expectations that attractiveness and expertise evaluation are orthogonal to each other (O’Keefe, 2015).

The significantly lower attractiveness ratings for expert messengers is, statistically, also explained by the fact that the generic messengers used as baseline have been perceived as particularly attractive overall (with an average score of approximately 5 on a 1 to 7 scale). However, as the most evident trait for these categories is supposed to be their expertise, their ratings on attractiveness should not work as cues for respondents, as is the case clearly for the frontline staff and volunteers messengers. If anything, this creates the environment for a very clean test of the effectiveness of expertise-based cues.

Finally, the tests carried out on source trustworthiness and authenticity show no statistically significant differences between baseline and expert or celebrity treatments. In the next subsection I finally present the descriptive statistics of the three outcome variables before moving to inferential tests.
7.2.2 Descriptive statistics for outcome variables

As introduced in section 7.1, two measures of behaviour intentions are included in the conjoint experiment to test hypotheses on the effects of expert and celebrity endorsements: the first variable is a seven-point behavioural intention scale, while the second is a dummy coded 1 for the appeal chosen in the forced choice part of the conjoint experiment. Mean outcomes for the indicators are presented in tables 7.6, 7.7, and 7.10, with results showing that on both measures expert endorsements which passed the manipulation checks described in the previous section perform descriptively better than the baseline means for the control group participants (exposed to the generic appeals). Conversely, individuals who receive the celebrity-endorsed appeals report weaker intentions to get involved by donating or signing petitions.

Table 7.6: Intentions to donate by messenger category

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>$\bar{x}$</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline (generics)</td>
<td>17060</td>
<td>3.05</td>
<td>0.04</td>
</tr>
<tr>
<td>Celebrity</td>
<td>17060</td>
<td>3.00</td>
<td>0.04</td>
</tr>
<tr>
<td>Expert (activists)</td>
<td>17060</td>
<td>3.12</td>
<td>0.04</td>
</tr>
<tr>
<td>Expert (frontline)</td>
<td>17060</td>
<td>3.36</td>
<td>0.04</td>
</tr>
<tr>
<td>Expert (volunteers)</td>
<td>17060</td>
<td>3.26</td>
<td>0.04</td>
</tr>
<tr>
<td>Overall</td>
<td>17060</td>
<td>3.07</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Table 7.6 looks at mean responses for the intention to donate scale, which follows each of the first five forced choices questions of the survey. The scale is coded between 1 and 7 with higher values indicating a stronger intention to donate to a certain appeal. Descriptively, celebrity-endorsed appeals appear to underperform when compared to the baseline generic appeals. The difference, however, is small, with a negative effect of 0.8%. On the other hand, each of the four categories of expert-endorsed appeals outperforms the baseline, with the biggest positive difference of 5% observed for frontline staff endorsed appeals. In the next section I will analyse whether these differences are statistically significant through a variety of inferential approaches.

Table 7.7 looks at mean responses for the intentions to sign a petition...
Table 7.7: Intentions to sign a petition by messenger category

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>( \bar{x} )</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline (generics)</td>
<td>17060</td>
<td>3.52</td>
<td>0.04</td>
</tr>
<tr>
<td>Celebrity</td>
<td>17060</td>
<td>3.40</td>
<td>0.04</td>
</tr>
<tr>
<td>Expert (activists)</td>
<td>17060</td>
<td>3.55</td>
<td>0.04</td>
</tr>
<tr>
<td>Expert (frontline)</td>
<td>17060</td>
<td>3.78</td>
<td>0.05</td>
</tr>
<tr>
<td>Expert (volunteers)</td>
<td>17060</td>
<td>3.65</td>
<td>0.04</td>
</tr>
<tr>
<td>Overall</td>
<td>17060</td>
<td>3.51</td>
<td>0.01</td>
</tr>
</tbody>
</table>

scale, which, as the previous data, is coded between 1 and 7, with higher values being better. Once more, using the generic messengers-endorsed appeals as the baseline for comparison, celebrities are underperforming, and expert-endorsed appeals outperforming the baseline mean. Behaviour intentions scores associated with celebrity endorsed appeals are lower on average by 2%. On the other hand frontline staff-endorsed appeals are associated with 4% higher average scores on the behaviour intentions scale. These descriptive results are analysed through a variety of inferential methods in the following section as well.

Table 7.8: Probability of choosing an appeal by messenger category

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>( \bar{x} )</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline (generics)</td>
<td>34120</td>
<td>49.1%</td>
<td>0.01</td>
</tr>
<tr>
<td>Celebrity</td>
<td>34120</td>
<td>43.7%</td>
<td>0.01</td>
</tr>
<tr>
<td>Expert (activists)</td>
<td>34120</td>
<td>50.6%</td>
<td>0.01</td>
</tr>
<tr>
<td>Expert (frontline)</td>
<td>34120</td>
<td>67.4%</td>
<td>0.01</td>
</tr>
<tr>
<td>Expert (volunteers)</td>
<td>34120</td>
<td>62.8%</td>
<td>0.01</td>
</tr>
<tr>
<td>Overall</td>
<td>34120</td>
<td>50.0%</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Finally, Table 7.8 reports the percentage of times an appeal was chosen when endorsed by a messenger in any of the design’s categories. As responses are forced in the choice tasks, the overall mean stands at 50%, with all other means to be interpreted in relation to this central point. The baseline mean for generic-endorsed appeals stands at 49%, a decrease in choice probability of 1% from the overall mean. As was the case with the behavioural intentions measures presented above, celebrities still underperform when compared to the generic baseline, with a decrease of approximately 6% in the probability
of an appeal being chosen if it is endorsed by a celebrity. Furthermore, once again, expert endorsers outperform both the baseline appeals and the overall 50% central point, with both frontline staff and volunteer endorsement groups means standing over the 60% mark, increasing the probability of an appeal being chosen by 13% to 17%.

In the next section I proceed to expand on behaviour intentions and appeal choices by testing hypotheses on three models. Firstly, I replicate the results of the first experiment presented in chapter 6 by selecting three messengers from the expert, celebrity and generic categories. Secondly I replicate the second experiment presented in chapter 6 by estimating the effect of expertise and attractiveness scales, controlling for messenger gender and ethnicity, on the respondents’ behavioural intentions. Finally, I present the findings of two linear regressions and two conditional logistic models, testing for the effects of different messenger categories endorsing the appeal on the choices of participants, controlling for the messengers’ gender and ethnicity as depicted in the appeals.

7.3 Analysis of results

7.3.1 Experiment 1 replication

In this section I replicate the analysis from experiment 1 by looking at the effects of an expert or celebrity endorsement on behaviour intentions, measured through the intentions scales in the single vignette section of the overall study. Experiment 1, which compared an appeal endorsed by Colin Firth, a celebrity, and Dr Duncan Green, an expert to a non-endorsed appeal, failed to support hypotheses 7 and 10 on the effectiveness of experts and celebrities as cues to behavioural engagement for individuals with no previous engagement. Hypothesis 11 on the combined effect of previous engagement and the expert treatment, on the other hand, was supported by the data. The replication I present in this section uses the same design but uses different messengers and relies on the generic-endorsed appeals as a control category.
I select three messengers, a generic supporter, an expert and a celebrity, out of the 42 messengers included in the full conjoint-designed study. The messengers are selected on grounds of their perceived expertise and perceived attractiveness. Table 7.9 reports each messenger’s expertise and attractiveness. The generic messenger here is used as the control condition to replicate the findings of Experiment 1, which relied on a non-endorsed version of the appeal as a treatment to calculate baseline comparison means.

<table>
<thead>
<tr>
<th>Group</th>
<th>Expertise</th>
<th>Attractiveness</th>
<th>Trustworthiness</th>
<th>Authenticity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generic</td>
<td>4.94</td>
<td>3.80</td>
<td>4.99</td>
<td>5.08</td>
</tr>
<tr>
<td>Celebrity</td>
<td>4.99</td>
<td>4.6***</td>
<td>5.06</td>
<td>5.14</td>
</tr>
<tr>
<td>Expert</td>
<td>5.70***</td>
<td>3.94</td>
<td>5.10</td>
<td>5.07</td>
</tr>
</tbody>
</table>

All three messengers are non-white men. The chosen generic messenger has average levels of both expertise and attractiveness. The expert messenger (a frontline staff black man) is perceived to be significantly more expert than his generic and celebrities counterparts, and as attractive as the generic messenger used in the control treatment. On the other hand, there are no statistically significant differences in authenticity or trustworthiness. Therefore, the available cue for respondents receiving the expert-endorsed appeal is the messenger’s expertise. The celebrity messenger (Idris Elba, an actor) is perceived as more attractive than his generic counterpart, but not as more trustworthy or authentic. Table 7.10 presents the results of the two behavioural intentions models, one for intentions to donate, the other for the intentions to sign a petition, both measured with a 1 to 7 scale where higher values represent a higher chance that the respondent will take that action. Both models are fitted through OLS regression using a sample of approximately 1,200 responses to estimate average treatment effects. As with experiment 1, these models include a categorical by continuous interaction term with the previous engagement scale. The previous engagement variable in these models is measured continuously, as with the experiments of chapter 6, but it only ranges
between 0 and 5 as a shorter list of previous engagement actions was used in this design. The expectations from hypotheses 7, 10 and 11 are that the treatment variables and the interaction between the expert treatment and previous engagement will be significant and positive.

**Table 7.10:** Experiment 1 replication results

<table>
<thead>
<tr>
<th></th>
<th>Donations</th>
<th>Petitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expert treatment</td>
<td>0.511***</td>
<td>0.420***</td>
</tr>
<tr>
<td></td>
<td>(0.142)</td>
<td>(0.144)</td>
</tr>
<tr>
<td>Celebrity treatment</td>
<td>0.280*</td>
<td>0.192</td>
</tr>
<tr>
<td></td>
<td>(0.149)</td>
<td>(0.137)</td>
</tr>
<tr>
<td>Previous engagement</td>
<td>0.282***</td>
<td>0.306***</td>
</tr>
<tr>
<td></td>
<td>(0.065)</td>
<td>(0.067)</td>
</tr>
<tr>
<td>Expert treatment x previous engagement</td>
<td>-0.021</td>
<td>0.075</td>
</tr>
<tr>
<td></td>
<td>(0.079)</td>
<td>(0.082)</td>
</tr>
<tr>
<td>Celebrity treatment x previous engagement</td>
<td>0.119</td>
<td>0.094</td>
</tr>
<tr>
<td></td>
<td>(0.088)</td>
<td>(0.090)</td>
</tr>
<tr>
<td>Constant</td>
<td>2.57***</td>
<td>3.06***</td>
</tr>
<tr>
<td></td>
<td>(0.104)</td>
<td>(0.113)</td>
</tr>
<tr>
<td>Observations</td>
<td>1.206</td>
<td>1.201</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.076</td>
<td>0.082</td>
</tr>
</tbody>
</table>

Both models fail to replicate the results I obtained with experiment 1. Specifically, with these results I now find empirical support for hypothesis 10 on the positive effect of an expert endorsement on behaviour intentions, but no support for hypothesis 11 on the greater effectiveness of expertise-based cues on behaviour intentions for previously involved individuals. Furthermore, hypothesis 7 on the effect of celebrity endorsements on behaviour intentions is not supported by the results.

In the *Donations* model, the effect of the expert treatment for individuals with no previous engagement is significant at the 1% level and positive, with a +8.5% increase on the behaviour intentions scale for individuals with no previous engagement. The interaction term with previous engagement has a positive effect, but this is both very small and not statistically significant, showing that the effect of the expert endorsement remains positive and significant for increasing levels of previous engagement, but that the treatment’s
7.3. Analysis of results

effectiveness does not increase with previous engagement itself. Hypothesis 10 is supported, while there is no evidence in support of hypothesis 11.

The effect of the celebrity treatment for individuals is not significant at the 5% level. Descriptively the effect is positive but smaller in size than the expert treatment effect, with a 4.7% increase on the behaviour intentions scale for individuals with no previous engagement. Consequently, hypothesis 7 on the effect of celebrity endorsements on behaviour intentions is not supported. The interaction terms are plotted in Figure 7.2.

**Figure 7.2:** Replication 1: interaction plot for donation intentions

The plot shows how at low levels of engagement the difference between expert-treated and control average behaviour intentions is positive and statistically significant. However, at higher levels of engagement the distance between the two lines does not change, while confidence intervals become bigger.
as fewer observations are available for individuals with these levels of previous engagement. The difference between celebrity-treated and control behaviour intentions are descriptively positive, but, on average, these are small, with the confidence intervals overlapping both at low and high levels of previous engagement.

In the second model, which looks at the intentions to sign a petition, only the effect of the expert treatment is significant at the 1% level and positive, with an increase of 7% on the behaviour intentions scale observed for individuals with no previous engagement, supporting hypothesis 10 on the positive effect of the expert treatment on behaviour intentions for individuals with no previous levels of engagement. Even in this case there is no support for hypothesis 11, with the interaction term between previous engagement and expert treatment being statistically insignificant, although a descriptive positive effect is still observed. The interaction terms are plotted in Figure 7.3.

To sum up, the results of the first replication show a significant positive effect of the expert treatment on the behavioural intentions of participants. The effect, however, does not increase in magnitude as levels of previous engagement increase. Overall, consequently, the results support hypothesis 10 as a positive expert endorsement effect is observed for individuals with no previous engagement, but hypothesis 11 is unsupported. These results are somewhat different than the ones I had obtained with Experiment 1, where the expert treatment was only effective with previously involved individuals.

The strongest effect of the expert endorsement for unengaged individuals in this replication, compared to Experiment 1 from chapter 6, could be due to the different design of the appeals in the experiments. The messenger related cues are more evident in the appeals used in the conjoint analysis than in the survey experiments of the previous chapter, where the arguments and discussion of the problem the campaign sought to address took centre stage. In the appeals presented in the conjoint design, conversely, the appeal is relatively small, which could increase the recipients’ reliance on source cues to evaluate
Looking at the effect of the celebrity treatment, the models do not provide evidence in support of hypothesis 7 on the effect of celebrity endorsements on behaviour intentions, as, consistently with the experiments I discussed in chapter 6, all differences are only descriptively in line with my theoretical expectations, but never statistically significant. In the next subsection, I replicate the analysis of experiment 2 using source expertise and source attractiveness as treatment variables determining behaviour intentions.

### 7.3.2 Experiment 2 replication

In this section I replicate the analysis of experiment 2, which employed source expertise and source attractiveness scales in lieu of a baseline control approach and treatment allocation design. Experiment 2 found no support for hypothe-
ses 7, 10 or 11, showing that neither the source expertise or source attractiveness cues can affect behaviour intentions for participants at any level of previous engagement. This replication extends the original design by relying on multiple messengers within the celebrity and experts categories of the conjoint design.

As with experiment 2, I estimate the effects of source characteristics on behaviour intentions in a linear regression model that only includes in the analysis expert messengers (activists, frontline staff, and volunteers) and celebrities. The expertise and attractiveness scores are obtained for each messenger within the categories by calculating the average score they were attributed by all respondents of wave 1.

Source expertise and attractiveness, together with levels of previous engagement, treated as a continuous variable, and the continuous by continuous interaction between previous engagement and source expertise are used in two linear regression models. The models are estimated using approximately 7,600 observations, weights and cluster-corrected standard errors. The results are presented in Table 7.11. Once again, the expectations from hypotheses 7, 10 and 11 are that the effects of source expertise, source attractiveness, and the interaction between source expertise and previous engagement, will be statistically significant and positive.

Substantively, the results of both models confirm the findings on the positive effect of the expert treatment for previously unengaged individuals, which again support hypothesis 10. Furthermore, with regards to the celebrity treatment effects, the donations model provides new evidence in support of hypothesis 7.

Both source attractiveness and source expertise work as cues for message recipients with no previous engagement in the petitions model. Both effects

---

6The average scores are used in the design as, during wave 1, participants only rate 6 of the 42 total messengers that are part of the conjoint design. Furthermore, as in wave 2 messengers are drawn at random to be used in the choice based experiments, only 440 observations become available to estimate the models. If the analysis is replicated with the smaller samples, the results are broadly comparable to the ones I present in this section.
7.3. Analysis of results

Table 7.11: Experiment 2 replication results

<table>
<thead>
<tr>
<th></th>
<th>Donations</th>
<th>Petitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source attractiveness</td>
<td>0.062*</td>
<td>0.109***</td>
</tr>
<tr>
<td></td>
<td>(0.034)</td>
<td>(0.035)</td>
</tr>
<tr>
<td>Source expertise</td>
<td>0.085**</td>
<td>0.108***</td>
</tr>
<tr>
<td></td>
<td>(0.035)</td>
<td>(0.037)</td>
</tr>
<tr>
<td>Previous engagement</td>
<td>0.118</td>
<td>0.467***</td>
</tr>
<tr>
<td></td>
<td>(0.113)</td>
<td>(0.137)</td>
</tr>
<tr>
<td>Source expertise X previous engagement</td>
<td>0.016</td>
<td>-0.021</td>
</tr>
<tr>
<td></td>
<td>(0.020)</td>
<td>(0.020)</td>
</tr>
<tr>
<td>Source attractiveness X previous engagement</td>
<td>0.012</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.0018)</td>
<td>(0.026)</td>
</tr>
<tr>
<td>Constant</td>
<td>2.194***</td>
<td>2.203***</td>
</tr>
<tr>
<td></td>
<td>(0.184)</td>
<td>(0.196)</td>
</tr>
<tr>
<td>Observations</td>
<td>7,590</td>
<td>7,685</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.053</td>
<td>0.098</td>
</tr>
</tbody>
</table>

are statistically significant at the 1% level, and a one point increase on either source attractiveness or expertise scales increases the behaviour intention scale by approximately 1.6% with either factor. The positive and significant effects, consequently, support hypotheses 7 and 10 on the effects of expert and celebrity endorsements on behaviour intentions. On the other hand, hypothesis 11 is not statistically supported, as the interaction between source expertise and previous engagement is not statistically significant. The interaction term from model is also presented in Figure 7.4.

The plot shows the difference between the effect of previous engagement at the baseline of attractiveness and expertise\(^7\) and the effects of previous engagement when expertise or attractiveness are at their respective maximum observed values\(^8\). The plot shows that the effects of moving from the minimum to the maximum on the source attractiveness or expertise scales are statistically identical, as the confidence intervals of the expertise and attractiveness effects overlap across the previous engagement continuum. Looking

\(^7\)The baseline is calculated by calculating the marginal effects of previous engagement at the smallest observed values of both the source expertise (3.07) and source attractiveness (3.58) scales.

\(^8\)The maximum observed value for source expertise being 5.69 and the maximum observed value for source attractiveness being 5.98.
more closely at the effect of source expertise, even though the interaction between source expertise and previous engagement is not statistically significant, the plot still shows that descriptively the effect of source expertise could not be statistically significant for individuals who have high levels of previous engagement. The overlap between the expertise and baseline confidence intervals could, however, be mostly caused by the smaller sample size with such high levels of previous engagement.

In the donations model, only the effect of source expertise for individuals with no previous engagement is significant and positive. There are some descriptive indications that the effect of source attractiveness could be positive as well, but the effect is small in magnitude and not statistically significant. A one point increase in source expertise increases the behaviour intention scale
by approximately 1.2%, when attractiveness is kept constant. The positive and significant effect of source expertise for previously unengaged individuals supports hypothesis 10. Hypothesis 11 is not supported in this model either, as the interaction effect is not significant, signalling that the source expertise effect does not increase in magnitude as previous engagement levels get higher. The results of the model are also presented in Figure 7.5.

**Figure 7.5:** Replication 2: interaction plot for donation intentions

As with Figure 7.5, even though the unitary effect of source attractiveness is not significant at the 5% level, the minimum to maximum effects of source attractiveness and source expertise are statistically identical and positive, as their confidence intervals overlap across the previous engagement continuum.

To sum up, the results of this replication experiment, contrary to those of the original Experiment 2, provide strong evidence of the presence of an ex-
pertise cue to behavioural engagement. Some limited evidence also shows that when the perceived attractiveness of a messenger is particularly high, this will work as a cue to behavioural engagement as well. Furthermore, the results of the original experiment showed positive but not statistically significant results, which, consistently with the current results, show that the effects of source cues on behaviours are relatively small, and that significance was achieved in the replication through the use of a bigger sample size.

This is the first model of this thesis that supports hypothesis 7 on the positive effect of celebrity endorsements on behaviour intentions. As such, this raises more questions than provides answers. Two arguments could reconcile the inconsistent results. Firstly, the perceived attractiveness of celebrities might have to be very high for the source cues to become available in the information elaboration processes of recipients. This could be the case as the attractiveness cue is irrelevant to the merits of a global poverty campaign, potentially decreasing its applicability by recipients straight from the start.

Secondly, the perceived attractiveness of celebrities, which increases their persuasiveness according to the theoretical framework, could be counterbalanced, for some message recipients, by other perceptions, potentially negative, about celebrities endorsing a charity appeal. If negative perceptions, such as celebrities’ lack of authenticity in their motives or their less-than-altruistic intentions, are more easily available to recipients during the heuristic cue search process, then celebrity attractiveness will not be considered.

In contrast, other messengers, which in the design are thought of as experts, could still be perceived as attractive; although the attractiveness-related cue is unlikely to be used in the place of the expertise-based one, the model still shows that attractiveness sometimes has a positive effect on behaviour intentions. In either case, the theoretical framework potentially misses other potential dimensions in the cognitive process of recipients. I return on this topic in chapter 8 at the conclusion of this thesis.
Finally, consistent both with the results of the first replication of this chapter and with the results of Experiment 2, I do not find evidence in support of hypothesis 11, which states that the effect of the expert treatment should increase with levels of previous engagement. The results I presented so far, at best, show that the effect is significant and positive across the previous engagement continuum. In the next subsection I finally present the results of the experiment using conjoint analysis.

### 7.3.3 Conjoint analysis

In this section I present the result of four models, each relying on the full conjoint design to test hypotheses 7, 10, and 11. In all models the dependent variables measuring behaviour intentions are modelled in function of the appeal characteristics: the messengers' categories, genders and ethnicity. In this specific application of the broader conjoint design, hypotheses are tested by looking at statistically significant differences between appeals endorsed by messengers in different categories. The gender and ethnicity of the messengers are used as control-in-treatment factors to increase the external validity of the findings.

The first two models, presented in Table 7.12 as the *behaviour intentions* models, look at intentions to donate and to sign a petition using the single choice scale approach on which I relied for replications 1 and 2. To estimate the two models, I rely on a standard OLS regression, as each appeal is considered separately when recipients indicate their intentions to take action using a continuous scale. Weights and respondent-clustered standard errors are applied to both models. In the results, I look at multiple kinds of expert treatments and one celebrity treatment, with generic-endorsed appeals acting as the control and comparison condition.

In the second two models, presented in Table 7.12 as the *Choice models* I instead look at the likelihood of respondents choosing one of two appeals to donate to or to sign a petition for, presented in the forced choice questions. To estimate the two models, I use the categorical choice variable, and, taking
into account that choices happen for each participant between the two options provided, I estimate a conditional logistic regression model following McFadden et al. (1973), with weights and standard errors corrected for clusters of respondents. In these models, the expert and celebrity treatments do not affect behaviour intentions directly, but they affect the likelihood of an appeal’s request being followed, as compared to another appeal’s request. As potentials concerns could remain that other source traits are affecting the persuasiveness of an appeal, I also re-estimated these final models by adding controls for other source traits. These do not change the results discussed in this section. The results of these further checks are included in appendix C.

Both behaviour intentions models and choice-based models are presented in Table 7.12. Evidence from the behaviour intentions models supports hypothesis 10, with expert messenger categories that passed the manipulation checks exerting a positive effects on behaviour intentions. On the other hand, the models do not produce evidence in support of hypothesis 7, as the celebrity effects in the models are not statistically significant. Connectedly, in the choice models I find similar support for hypotheses 10. Hypothesis 7 is once more not supported, and, surprisingly, I uncover a negative effect for celebrity endorsements on the likelihood of an appeal being chosen to take action.

Looking at the behaviour intentions columns of Table 7.12, the results confirm that two of the expert categories of messengers, frontline medical staff and volunteers, are effective at increasing the respondents’ intentions to take action in response the demands of a charity appeal. The effects of frontline and volunteer messenger endorsements are significant at the 1% level. In the donations model, the effect of the frontline endorsement increases behaviour intentions for treated participants by 3.7%, while the volunteer endorsement increases the intention to get involved by 2.6%, both compared to the baseline generic-endorsed appeal, with all other messenger characteristics kept constant. In the petitions models effects are slightly smaller, at +3.5% for frontline endorsements and +2.1% for volunteer endorsements, respectively. The
### Table 7.12: Conjoint analysis results

<table>
<thead>
<tr>
<th></th>
<th>Behaviour intentions</th>
<th></th>
<th>Choice models</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Donations</td>
<td>Petitions</td>
<td>Donations</td>
<td>Petitions</td>
</tr>
<tr>
<td>Activists</td>
<td>0.0391</td>
<td>0.00827</td>
<td>-0.0760</td>
<td>0.0972</td>
</tr>
<tr>
<td></td>
<td>(0.0695)</td>
<td>(0.0723)</td>
<td>(0.0976)</td>
<td>(0.101)</td>
</tr>
<tr>
<td>Aid recipients</td>
<td>0.130*</td>
<td>-0.0273</td>
<td>-0.128</td>
<td>-0.152</td>
</tr>
<tr>
<td></td>
<td>(0.0673)</td>
<td>(0.0798)</td>
<td>(0.0972)</td>
<td>(0.106)</td>
</tr>
<tr>
<td>Businesspeople</td>
<td>-0.150**</td>
<td>-0.208***</td>
<td>-0.760***</td>
<td>-0.397***</td>
</tr>
<tr>
<td></td>
<td>(0.0698)</td>
<td>(0.0676)</td>
<td>(0.101)</td>
<td>(0.0993)</td>
</tr>
<tr>
<td>Celebrities</td>
<td>-0.0557</td>
<td>-0.0445</td>
<td>-0.285***</td>
<td>-0.267***</td>
</tr>
<tr>
<td></td>
<td>(0.0728)</td>
<td>(0.0716)</td>
<td>(0.100)</td>
<td>(0.0977)</td>
</tr>
<tr>
<td>Frontline</td>
<td>0.247***</td>
<td>0.244***</td>
<td>0.738***</td>
<td>0.740***</td>
</tr>
<tr>
<td></td>
<td>(0.0745)</td>
<td>(0.0694)</td>
<td>(0.0997)</td>
<td>(0.105)</td>
</tr>
<tr>
<td>Military</td>
<td>-0.109</td>
<td>-0.0107</td>
<td>-0.285***</td>
<td>0.144</td>
</tr>
<tr>
<td></td>
<td>(0.0713)</td>
<td>(0.0754)</td>
<td>(0.101)</td>
<td>(0.0975)</td>
</tr>
<tr>
<td>Philanthropists</td>
<td>-0.177***</td>
<td>-0.158**</td>
<td>-0.401***</td>
<td>-0.395***</td>
</tr>
<tr>
<td></td>
<td>(0.0713)</td>
<td>(0.0723)</td>
<td>(0.101)</td>
<td>(0.0959)</td>
</tr>
<tr>
<td>Volunteers</td>
<td>0.177***</td>
<td>0.153**</td>
<td>0.494***</td>
<td>0.568***</td>
</tr>
<tr>
<td></td>
<td>(0.0681)</td>
<td>(0.0739)</td>
<td>(0.0995)</td>
<td>(0.104)</td>
</tr>
<tr>
<td>Miscenallea</td>
<td>0.0884</td>
<td>0.149*</td>
<td>-0.0903</td>
<td>0.333***</td>
</tr>
<tr>
<td></td>
<td>(0.0784)</td>
<td>(0.0809)</td>
<td>(0.104)</td>
<td>(0.105)</td>
</tr>
<tr>
<td>Previous engagement</td>
<td>0.249***</td>
<td>0.395***</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td></td>
<td>(0.0373)</td>
<td>(0.0386)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activists X Previous engagement</td>
<td>0.0561</td>
<td>0.0400</td>
<td>0.0936</td>
<td>0.0781</td>
</tr>
<tr>
<td></td>
<td>(0.0402)</td>
<td>(0.0396)</td>
<td>(0.0616)</td>
<td>(0.0579)</td>
</tr>
<tr>
<td>Aid recipients X Previous engagement</td>
<td>0.0523</td>
<td>0.0955**</td>
<td>0.167***</td>
<td>0.254***</td>
</tr>
<tr>
<td></td>
<td>(0.0400)</td>
<td>(0.0447)</td>
<td>(0.0593)</td>
<td>(0.0640)</td>
</tr>
<tr>
<td>Businesspeople X Previous engagement</td>
<td>-0.0689</td>
<td>-0.0457</td>
<td>0.0530</td>
<td>0.0176</td>
</tr>
<tr>
<td></td>
<td>(0.0455)</td>
<td>(0.0418)</td>
<td>(0.0636)</td>
<td>(0.0637)</td>
</tr>
<tr>
<td>Celebrities X Previous engagement</td>
<td>0.00267</td>
<td>-0.00107</td>
<td>-0.0159</td>
<td>0.0470</td>
</tr>
<tr>
<td></td>
<td>(0.0423)</td>
<td>(0.0429)</td>
<td>(0.0629)</td>
<td>(0.0664)</td>
</tr>
<tr>
<td>Frontline X Previous engagement</td>
<td>0.0924**</td>
<td>0.0134</td>
<td>0.0782</td>
<td>0.0968</td>
</tr>
<tr>
<td></td>
<td>(0.0457)</td>
<td>(0.0363)</td>
<td>(0.0696)</td>
<td>(0.0618)</td>
</tr>
<tr>
<td>Military X Previous engagement</td>
<td>-0.0743*</td>
<td>-0.120***</td>
<td>-0.101*</td>
<td>-0.202***</td>
</tr>
<tr>
<td></td>
<td>(0.0417)</td>
<td>(0.0454)</td>
<td>(0.0606)</td>
<td>(0.0614)</td>
</tr>
<tr>
<td>Philanthropists X Previous engagement</td>
<td>-0.0577</td>
<td>-0.0564</td>
<td>-0.147***</td>
<td>-0.170***</td>
</tr>
<tr>
<td></td>
<td>(0.0381)</td>
<td>(0.0452)</td>
<td>(0.0611)</td>
<td>(0.0601)</td>
</tr>
<tr>
<td>Volunteers X Previous engagement</td>
<td>0.0682*</td>
<td>0.0281</td>
<td>0.0741</td>
<td>0.114*</td>
</tr>
<tr>
<td></td>
<td>(0.0401)</td>
<td>(0.0390)</td>
<td>(0.0596)</td>
<td>(0.0658)</td>
</tr>
<tr>
<td>Miscenallea X Previous engagement</td>
<td>0.0786</td>
<td>0.0442</td>
<td>0.116</td>
<td>0.0221</td>
</tr>
<tr>
<td></td>
<td>(0.0487)</td>
<td>(0.0466)</td>
<td>(0.0704)</td>
<td>(0.0644)</td>
</tr>
<tr>
<td>Messenger gender</td>
<td>0.0168</td>
<td>0.0739***</td>
<td>0.0275</td>
<td>0.00645</td>
</tr>
<tr>
<td></td>
<td>(0.0252)</td>
<td>(0.0273)</td>
<td>(0.0363)</td>
<td>(0.0360)</td>
</tr>
<tr>
<td>Messenger ethnicity</td>
<td>-0.0918***</td>
<td>-0.103***</td>
<td>-0.335***</td>
<td>-0.417***</td>
</tr>
<tr>
<td></td>
<td>(0.0270)</td>
<td>(0.0302)</td>
<td>(0.0384)</td>
<td>(0.0375)</td>
</tr>
<tr>
<td>Constant</td>
<td>2.864***</td>
<td>3.204***</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td></td>
<td>(0.0682)</td>
<td>(0.0709)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>14,900</td>
<td>14,899</td>
<td>13,910</td>
<td>13,908</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.059</td>
<td>0.096</td>
<td>0.074</td>
<td>0.076</td>
</tr>
</tbody>
</table>
positive and significant effects of the expert treatments support hypothesis 10.

In the donations model, while most interactions are not statistically significant at the 5% level, the interaction between previous engagement and frontline endorsement treatment is statistically significant and positive. The frontline endorsement and previous engagement combined effect is significant at the 5% level, with differences between treatment and control moving from a +3.5% when individuals have no previous engagement to a +10.4% effect for individuals who have very strong levels of previous engagement. The interaction term between the frontline expert treatment and previous engagement is represented in picture 7.6, which shows the increasing distance between the control line and the frontline treatment line as previous engagement increases from 0 to 5. The positive and significant effect of the interaction term provides evidence in support of hypothesis 11. However, as no other interaction term is statistically significant, the hypothesis is, overall, not supported in the data.

As the plot shows in the picture, the confidence intervals of the two groups overlap for low and medium levels of previous engagement, indicating that the effect is not statistically significantly different. To sum up, in the behavioural intentions models there is no support for hypothesis 7, as the effect of the celebrity endorsements treatment is never statistically significant for individuals with no previous engagement. Hypothesis 10 receives strong support once ethnic bias and manipulation failures are accounted for. Finally hypothesis 11 receives only very weak support, as in only one of the four expert treatments in one of the two models a positive and significant interaction effect is observed. At best, if the increased effect of expert endorsements exist for individuals who are previously engaged with global poverty, it is likely to be very small in size in most cases, and it will be contingent on the kind of expertise frame used by messengers, and the kind of demands included in the appeal.

Next, I look at the choice based models and discuss their results. The results from the conditional logistic regressions on the choices of respondents are consistent with the findings I examined for the linear models on behavioural
intentions. Specifically, respondents are significantly more likely to choose to follow the request for donations or petition signatures for an appeal when it is endorsed by frontline or volunteer messengers. Furthermore, unexpectedly, in the choice models, celebrity endorsements have a significant and negative effect on the likelihood of respondents choosing the appeal asking for donations or a signature for a petition.

Table 7.13 reports the odds ratios of the effects included in the model, together with their level of significance. In the donations model, the odds of an appeal being chosen increase by 109% if it is endorsed by frontline staff, or 64% if it is endorsed by volunteers, when compared to appeals endorsed by generic messengers, for individuals with no previous engagement. These effects are significant at the 1% level. On the other hand, a celebrity endorsement
### Table 7.13: Odds ratios for the conjoint choice models

<table>
<thead>
<tr>
<th></th>
<th>Donations</th>
<th></th>
<th>Petitions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Odds ratios</td>
<td>sig</td>
<td>Odds ratios</td>
<td>sig</td>
</tr>
<tr>
<td>Activists</td>
<td>0.93</td>
<td>**</td>
<td>1.10</td>
<td>n/a</td>
</tr>
<tr>
<td>Aid recipients</td>
<td>0.88</td>
<td>**</td>
<td>0.86</td>
<td>n/a</td>
</tr>
<tr>
<td>Businesspeople</td>
<td>0.47</td>
<td>***</td>
<td>0.67</td>
<td>***</td>
</tr>
<tr>
<td>Celebrities</td>
<td>0.75</td>
<td>***</td>
<td>0.77</td>
<td>***</td>
</tr>
<tr>
<td>Frontline</td>
<td>2.09</td>
<td>***</td>
<td>2.10</td>
<td>***</td>
</tr>
<tr>
<td>Military</td>
<td>0.75</td>
<td>***</td>
<td>1.16</td>
<td>n/a</td>
</tr>
<tr>
<td>Philanthropists</td>
<td>0.67</td>
<td>***</td>
<td>0.67</td>
<td>***</td>
</tr>
<tr>
<td>Volunteers</td>
<td>1.64</td>
<td>***</td>
<td>1.77</td>
<td>***</td>
</tr>
<tr>
<td>Miscenallea</td>
<td>0.91</td>
<td>n/a</td>
<td>1.40</td>
<td>***</td>
</tr>
<tr>
<td>Activists X Previous engagement</td>
<td>1.10</td>
<td>n/a</td>
<td>1.08</td>
<td>n/a</td>
</tr>
<tr>
<td>Aid recipients X Previous engagement</td>
<td>1.18</td>
<td>***</td>
<td>1.29</td>
<td>***</td>
</tr>
<tr>
<td>Businesspeople X Previous engagement</td>
<td>1.05</td>
<td>n/a</td>
<td>1.02</td>
<td>n/a</td>
</tr>
<tr>
<td>Celebrities X Previous engagement</td>
<td>0.98</td>
<td>n/a</td>
<td>1.05</td>
<td>n/a</td>
</tr>
<tr>
<td>Frontline X Previous engagement</td>
<td>1.08</td>
<td>n/a</td>
<td>1.10</td>
<td>n/a</td>
</tr>
<tr>
<td>Military X Previous engagement</td>
<td>0.90</td>
<td>*</td>
<td>0.82</td>
<td>***</td>
</tr>
<tr>
<td>Philanthropists X Previous engagement</td>
<td>0.86</td>
<td>**</td>
<td>0.84</td>
<td>***</td>
</tr>
<tr>
<td>Volunteers X Previous engagement</td>
<td>1.08</td>
<td>n/a</td>
<td>1.12</td>
<td>*</td>
</tr>
<tr>
<td>Miscellanea X Previous engagement</td>
<td>1.12</td>
<td>n/a</td>
<td>1.02</td>
<td>n/a</td>
</tr>
<tr>
<td>Messenger gender</td>
<td>1.03</td>
<td>n/a</td>
<td>1.01</td>
<td>n/a</td>
</tr>
<tr>
<td>Messenger ethnicity</td>
<td>0.72</td>
<td>***</td>
<td>0.66</td>
<td>***</td>
</tr>
</tbody>
</table>

will result in a decrease in the odds of the appeal being chosen by 25%, when compared to appeals endorsed by generic messengers. This effect is significant at the 1% level as well, and is, empirically, the opposite of what hypothesis 7 predicts.

Two characteristics of the conjoint design could be contributing to the significant negative effect. Firstly, the use of generic-endorsed messengers as the treatment for the control group means that the effect of celebrity endorsements is not being measured in absolute terms, as was the case with Experiments 1 and 2, but just in relation to the difference between a celebrity endorsement and a generic endorsement. Generic endorsers are not evaluated to be either attractive or experts in the eyes of the study participants, but, in comparison to celebrities, which could be evaluated negatively due to their insincere motives for endorsing the appeals, could work better as neutral endorsement.
strategies. Secondly, variation within the celebrity group could be resulting in an overall average negative effect which hides other dynamics at the single messenger level. When I re-estimate the model using the single messengers instead of the conjoint design I find that three out of the four celebrity messengers treatments, Bill Nighy, Emma Watson and Idris Elba, are not statistically significant, while the fourth treatment, using the messenger M.I.A., is significant and strongly negative. The negative effect of the M.I.A. treatment could be once again explained by the negative ethnicity bias in response. Overall, if the negative results for M.I.A. are excluded, the effect of the celebrity endorsements are still not statistically significant, leaving hypothesis 7 unsupported. The effect for activists is not statistically significant.

Results in the petitions choice model are virtually identical to their donations counterpart. Frontline staff endorsements increase the odds of an appeal being chosen by 110%, volunteer endorsements increase it by 77%, and celebrities decrease it by 33%. All these effects are significant at the 1% level. Once again, the effect of activists is not statistically significant. The combined effect of volunteers and previous engagement is also weakly significant at the 10% level, with odds ratios moving from a +77% effect for individuals with no previous engagement to +137% for individuals with strong levels of previous engagement. In both models, and in all other models presented in this chapter, the gender of messengers does not affect the behavioural intentions of respondents, but being recognisable as a non-white ethnic messenger here decreases the odds of the message being chosen to donate money or sign a petition. The ethnic-based bias decreases the odds of choosing the endorsed message by 28% in the donations model, and by as much as 34% in the petitions model.

In this final test I confirmed the results from the first and second replication studies, and produced evidence on the effectiveness of expert endorsers as cues for recipients of a persuasive campaign message. As hypothesised by the theoretical framework, when a message is endorsed by a messenger who is recognised to be an expert (or, in empirical terms, when expertise is suc-
cessfully manipulated and the expertise based-cue is available to recipients), the recipients of the message will report a higher willingness to get involved with the appeal's demands and, when a choice arises between two appeals, they will be more likely to choose the expert-endorsed appeal to take action. More specifically, the experts’ endorsements effects are statistically significant and positive for individuals with no previous engagement, supporting hypothesis 10. The effect of the expert treatments does not change with previous engagement in the vast majority of the cases, but for endorsements such as the frontline staff, and, descriptively, for volunteers, a small additional effect is also observed at higher levels of previous engagement. These initial results provide extremely limited support for hypothesis 11, and show that the additional effect of the expert endorsement treatments is in all likelihood small in magnitude and contingent on the expert endorsement type and the demand analysed in the model. Finally, hypothesis 7 on the effect of celebrity endorsement on behaviour intentions for previously unengaged individuals is not supported in the models, with no statistical significance for most effects, and, in the case of the choice models, even some significant and negative effects.

In the next section I discuss some of the important limitations of the results presented in this chapter, moving then to conclude the chapter by summarising the evidence I presented, and how this feeds back to the research hypotheses of the thesis.

7.4 Limitations and extensions

In this section I discuss three limitations of the design. Firstly, I look at the external validity of the findings and whether appeals were possibly perceived as unrealistic in the conjoint design. Secondly, I discuss whether respondents potentially found other cues in their messages and how this affects the validity of the theory tested in this chapter. Thirdly, and finally, I look at the failed test for hypothesis 11, and whether this is descriptive of reality or an issue with the statistical design.
Firstly, the potential issues with the realism of the treatments. On the balance between external and internal validity, a conjoint design is stronger on the latter and usually weaker on the former. Given the existence of this trade-off, when the research group designed the experiment I analyse in this chapter, the balance was reconsidered to increase the external validity of the findings. Consequently, appeals were designed to be simple, with treatment stimuli easily identifiable by participants, but realistic, with pictures of actual, identifiable, or at least plausible messengers, and simple calls to action. However, as the choice tasks were repeated, there is only so much complexity and realism that could have been included in the appeals. The next step in this research pathway would be to bring the design from online surveys to the field to check if the theories I test in constrained conditions also hold in the real world.

A second concern with the realism design, which I partially addressed at the beginning of this chapter, has to do with the forced choice format employed in the experiments. Individuals who decide to support charity campaigns can do so in a variety of ways such as one-off donations, allocating resources such as time and money to a pool of organisations, or deciding not to get involved with any of the charitable campaigns. There is some evidence that forced choice designs can help respondents think better about the choice they are making during the survey, but can overestimate the effects of treatments and attributes included in the conjoint design (Hainmueller et al., 2014a). Future research should seek to replicate the findings I present in this chapter by using different measures of behavioural intentions choices. Once again, however, field experiments would be the ideal setting for a final test of the theories discussed in this thesis with regards to behaviour intentions.

Secondly, I consider the issue with competing messenger cues. This thesis focuses on experts and celebrities, and, by looking at social psychology theories, tests for the importance of their expertise and attractiveness as potential cues in the information elaboration process of respondents. However, throughout
the conjoint analysis it became clear that both the cues themselves and the informational environment within which these are nested are quite complex, once more pointing to those wider debates on the nature of expertise-based cues in the theoretical literature (O’Keefe, 2015).

Additional cues that are theoretically unrelated to expertise can reduce or even cancel out the effect of expertise-based cues. This is, for example, the case with the messengers’ ethnic background, as discussed for the results of the models in this chapter. However, the ethnicity-based cue is not used by all participants, with evidence across multiple models suggesting that individuals with high levels of previous engagement are not negatively affected in their choices to get involved with a campaign by aid recipients endorsing appeals. These results once more point to the importance of reconsidering the interaction between sources and recipients factors in understanding persuasive communication processes. This remains one of the most important research objectives of future research endeavours.

Similar complex interactions between multiple components of the message are also observed for contextual cues (being depicted as being in a developing setting instead of an abstract environment), other messengers’ characteristics (potentially including their age, and, in some instances, their gender), and the kind of demand included in the appeal endorsed by the message. The results presented in this chapter are a step in the right direction, but future conjoint-designed experiments should aim at explicitly modelling these factors and their interactions with source expertise and attractiveness.

The final concern is with the lack of significant results in support of hypothesis 11 on the increased effectiveness of the expert treatments at higher levels of previous engagement. The lack of significance can be interpreted as a lack of experimental effects. However, potential limitations with the study design could affect the validity of the statistically insignificant findings. Firstly, as the increased effectiveness of the expert treatment for previously engaged individuals relies on an initial expertise-based cue to cognitive activity, there
7.5 Discussion of the results

The eight models I discussed in this chapter tell a very coherent story with two main results. Firstly, expert endorsements are effective means to engage the public with the behavioural demands of a charity campaign. More specifically, expert-endorsed messages have been shown to increase both the likelihood of a message being chosen to take action, and the behavioural intentions associated with this preliminary choice. The effect of the expert endorsement on behaviour intentions is somewhat small in magnitude, with observed differences in the 1% to 7% range across the models, for individuals with no previous

has to be room for cognition in the appeal. As I discussed when considering the realism of the experimental treatment, designing the messages was mostly about finding balance between realistic complexity and clarity in the treatments.

The appeal’s argument and message might have been oversimplified during the design phase, and, consequently, reduced the amount of cognition around the arguments included in the message itself. The differences in the formats of the appeals could explain the differences in results between experiment 1 and the conjoint experiment presented in this chapter. The first design includes more information on the appeal side, and includes a somewhat lighter messenger cue, which resulted in finding significant combined effects for the expert treatment and previous engagement, but no evidence of the heuristic effects. The conjoint design has more evident messenger-based cues, but smaller the arguments, and finds significant heuristics-based effects, but no combined expertise and engagement effect. This, in part, speaks to the second limitation I discussed before, with a need for more complex tests to be delivered in future research, in which the quality and contents of the appeals should be manipulated as well. However, once more, a field experiment could also be the ideal way to remedy to this limitation, with more realistic appeals used as experimental treatments.
engagement. The effect of the endorsement is stronger when individuals are called to make a choice between two appeals, with observed differences in the odds of choosing an expert-endorsed appeal instead of a generic-endorsed one in the 60% to 100% range.

Secondly, there is no evidence that celebrity endorsements are useful to achieve the same goal. More specifically, an appeal endorsed by generic charity supporters is as effective, if not more, at engaging the public and changing their behaviour intentions. Most effects in the eight are statistically not significant, but there are two exceptions: if the celebrities are perceived as very high on attractiveness, they are more likely to work as effective cues to behaviour engagement for unengaged individuals. The second significant effect is observed in the conjoint choice model, where the effect of an expert endorsement is negative. Overall however, with most results being statistically insignificant, provides little in the way of trust for the effectiveness of celebrity endorsements as instrument to behaviourally engage the public. Table 7.14 looks more specifically at how the evidence produced through the models feeds back to hypotheses 7, 10 and 11.
Table 7.14: Summary table for the findings of chapter 7

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Engagement indicator</th>
<th>Previous Engagement</th>
<th>Expected effect</th>
<th>Replication 1 (treatment allocation)</th>
<th>Replication 2 (scales)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis 7</td>
<td>Behaviours</td>
<td>Low</td>
<td>Celebrity (+)</td>
<td>no support</td>
<td>limited support</td>
</tr>
<tr>
<td>Hypothesis 10</td>
<td>Behaviours</td>
<td>Low</td>
<td>Expert (+)</td>
<td>support</td>
<td>support</td>
</tr>
<tr>
<td>Hypothesis 11</td>
<td>Behaviours</td>
<td>Low/high</td>
<td>Expert (+)</td>
<td>no support</td>
<td>no support</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Engagement indicator</th>
<th>Previous Engagement</th>
<th>Expected effect</th>
<th>Conjunct 1 (behaviour intentions)</th>
<th>Conjunct 2 (choice models)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis 7</td>
<td>Behaviours</td>
<td>Low</td>
<td>Celebrity (+)</td>
<td>no support</td>
<td>no support</td>
</tr>
<tr>
<td>Hypothesis 10</td>
<td>Behaviours</td>
<td>Low</td>
<td>Expert (+)</td>
<td>support</td>
<td>support</td>
</tr>
<tr>
<td>Hypothesis 11</td>
<td>Behaviours</td>
<td>Low/high</td>
<td>Expert (+)</td>
<td>limited support</td>
<td>limited support</td>
</tr>
</tbody>
</table>
Hypothesis 7 on the positive effect of a celebrity-based treatment on behaviour intentions is not supported through any of the eight models, with the exception of the source characteristics models of replication 2, pending the caveats that I discussed in that section. The lack of statistical significance is coherent with the results I had obtained from Experiments 1 and 2 from chapter 6. Hypothesis 10 is supported throughout the models, all showing a significant and positive effect of the expert endorsements both in the case of donations and petition intentions. The effects, however, are contingent on the messengers’ perceived expertise and as I discuss further below, on the absence of further negative cues associated with them. On the other hand, there is little to no evidence that the effectiveness of the expert treatment increases for individuals with higher levels of previous engagement. In these cases a small but positive increase in the effectiveness of the expert treatments is observed for individuals with higher levels of previous engagement, which limitedly supports hypothesis 11.

Another way of understanding the difference in results supporting hypothesis 11 is in thinking about the different concepts of behaviour intentions used in the single choice scale-based approach and in the forced choice-based approaches. As the nature of the choice is different, so is the role of the expert-based cue during information elaboration. In the choice-based approaches, when individuals with high levels of previous engagement are picking between two identical appeals with the same arguments, the expert-endorsement cue makes a difference to their choice, which the statistical models capture as a significant and positive effect.

On the other hand when it comes to the intentions to donate or sign a petition in favour of a single appeal, the interaction between arguments and expert endorsement becomes fundamental, and in this case the appeal is already relatively short so that individuals with high levels of previous engagement won’t need a cue to encourage them to consider the arguments more in depth or to believe it more than an unendorsed version. However, even if small, the
expert-endorsement effect is still significant for individuals at any level on the previous engagement continuum. This is important both in confirming the strong theoretical expectations on the effectiveness of source cues at different levels of previous involvement (Ziegler et al., 2002) and for charities who seek to build effective campaigns with endorsements, which can fit audiences with different levels of previous engagement with global poverty.

Finally, the results which I present in this chapter successfully increase the external validity of the findings from the experiments of chapter 6, and, in the process, uncover evidence on the importance of other messengers’ characteristics such as their ethnicity. While this thesis does not hold theoretical priors on the effect of messengers’ ethnicity and gender, these factors have been studied as cues in communication in the works of other authors such as Spira and Whittler (2004). The authors show how a messenger’s ethnicity can be used as a cue to facilitate identification for the recipients of the same or similar ethnic background. While studying the match-up between messengers and recipients is not the objective of this thesis, it is still interesting to consider the idea of identification as an issue between western publics and messengers who ask for their money or signature petitions. If the recipients perceive the distance between themselves and the recipients as a negative factor (because they are worried about corruption, portray them as individuals without agency, or undeserving as poor), then no matter their perceived experience and expertise on poverty, as the dominant cue during information elaboration becomes a negative one.

What remains unclear at this stage is whether the expertise cue becomes irrelevant for recipients who are elaborating the information included in the appeal, or whether expertise is still the most relevant cue, which, however, is negatively affected by other negative cues. The first theory would be more consistent with the idea that individuals only search for and use one heuristic cue during information elaboration, as discussed by Gigerenzer and Todd (1999a). Once more, this highlights the importance of how recipients with
different characteristics are more or less likely to choose specific cues, such as the source’s ethnicity or their expertise during information elaboration. In the second case, instead, assuming recipients engage in more effortful cognition around the source characteristics, a revised theoretical model would have to take into account multiple source characteristics in building an overall picture of persuasiveness of different message sources. In either case, the results of this chapter show that past research, which does not take into account wider varieties of sources falling under the expert or celebrity categories, is still potentially externally invalid when the designs used to test the ELM/HSM models do not account for other characteristics of the messengers or control for them a-priori. Pending further research, the chapter comes to a close in the next section.

7.6 Conclusions

In this chapter I discussed the results of four experimental tests conducted on data from a conjoint design. The first test replicated the design of the messenger treatments I employed in Experiment 1 from chapter 6. The second test replicated the design of Experiment 2 from chapter 6. The third and fourth tests look at the results of models from for experimental effects on single vignette behavioural intention choices, or in a forced-choice design comparing two appeals.

Support for the effectiveness of expert-based heuristic cues to change behaviour intentions is strong across all four tests. Expert-endorsed appeals, especially frontline staff and volunteer-endorsed ones, result in higher intentions to donate to a campaign or to sign a petition as requested by the campaign’s appeal, when compared to an appeal endorsed by a generic messenger. Expert-endorsed appeals are also more likely to be chosen when respondents have to decide which of two appeals they want to give their money or signature to. The results consequently support hypothesis 10, as I discussed in section 7.5. While the expert endorsement is effective across a horizon of previous en-
7.6. Conclusions

Engagement levels, there is no strong evidence that its effectiveness increases for individuals who were previously more involved with global poverty campaigns. At best, the experiments show that a very small positive descriptive difference might exist between the groups. Furthermore, the data show that the combined effect of engagement and expert treatments is contingent on successful manipulations in the experiments and on the kind of ask made in the appeal. These results provide only limited result for hypothesis 11.

The tests also show that there is virtually no evidence evidence on the effectiveness of celebrity endorsements as promoters of behavioural engagement. Hypothesis 7 is not supported in the first replication, with no significant celebrity treatment effects observed in the results. In the second study hypothesis 7 is supported only conditionally on the celebrities’ high perceived attractiveness, and only for some indicators of behaviour intentions. Finally, in the conjoint experiment I found no evidence in support of the hypothesis either, with some unexpected significant negative effects, which might point to a negative celebrity-endorsement effect when it comes to a recipient’s choice between two charity appeals. As a whole, support is too weak for hypothesis 7, leaving me to conclude that with specific regards to charity campaigns and behaviour intentions, celebrity endorsements do not work as theory would forecast.

This brings the empirical tests of this thesis to a close. The next chapter presents a final summary and review of all results, returning to the original theoretical framework, discussing the research and policy implications from the thesis, presenting a plan for future research on these topics, looking at questions that didn’t get an answer, and asking new ones for future investigations.
Chapter 8

Conclusions

In this thesis I asked whether experts and celebrities could be used as effective messengers to engage the public with campaigns fighting global poverty. The empirical evidence showed that experts are highly trusted as sources of information on global poverty. Their endorsements, as part of charity appeals, can change the public’s attitudes, levels of cognitive engagement with an appeal, and their intentions to become behaviourally involved with the campaign’s demands. However, I found little evidence that celebrities, who are seen as much less credible, have the capacity to do the same when looking at their effects as endorsers of messages received by members of the UK public. In times when the levels of UK public engagement with global poverty are challenged by negative economic conditions, as well as increasing pressures from isolationist political forces, ineffective campaigns could find it useful to use expert messengers to increase their persuasiveness. In this final chapter I review the empirical evidence presented in the thesis, discuss how the results feed back to the academic literature, present the policy implications of these findings, and consider the next steps in this research pipeline.

8.1 Discussion of the main findings

In the three empirical chapters of this thesis I look at two specific research questions looking at the relationship between three aspects of my dual pathway model of persuasion: source characteristics, recipient characteristics, and the
attitudinal, cognitive and behavioural outcomes of the information elaboration and persuasion process.

In chapter 5, I look at the relationships between source and recipient characteristics, considering how the characteristics of individuals receiving a message on global poverty drive their perceptions of the credibility of celebrities and experts as sources of the message. I expect that individuals who identify as men, who are educated and older are more likely to see an expert as a credible source of information, and that younger individuals who identify as men are more likely to see a celebrity as credible. Using data from a UK sample part of the AAT survey I derive three main results.

Firstly, I discuss how overall credibility rates of expert messengers, including researchers, NGO workers, and celebrities, are substantially higher than those of celebrities. The data also show that this is the case not only in the UK, but across cultural settings such as the US, France, and Germany. Secondly, looking at the effects of the age, gender, and education of recipients, I only find evidence confirming that younger individuals are more likely to judge celebrities as credible sources of information on global poverty. Thirdly, I also discuss some exploratory findings on the role of other personal and social characteristics of the message recipients as drivers of the credibility judgements of experts and celebrities. These include the recipients’ political ideologies, income levels, and levels of political engagement with global poverty. These findings show that many of these factors are associated with different levels of perceived expert and celebrity credibility. Overall, through four regression models I show that younger individuals, who identify as women, and who are on the left of the political spectrum are more likely than their male, older, more right-wing counterparts to judge expert messengers such as academics and NGO workers as credible sources of information on global poverty. Furthermore, younger individuals with lower levels of knowledge on global poverty are more likely to judge celebrities as credible messengers. These results show the importance of using more complex testing apparatus to test the predictions of the ELM/HSM
models, allowing for multiple parts to be connected between each other.

The incongruence between the theoretical expectations and my results is most likely due to bias and omission issues with the designs of the works I base my hypotheses on. These works had investigated similar relationships between source credibility and recipient characteristics either by adopting a bivariate approach, which didn’t use other variables as controls, or discussed the role of recipient only characteristics as part of a control strategy in the investigation of other questions. Both these approaches could have potentially produced biased results, which appear as inconsistent when compared to the results I present in this thesis. Moreover, these existing works tested hypotheses related to source credibility judgements in other cultural contexts (often, the United States) and in other communication contexts, such as online information or product endorsements in marketing. The results from this thesis, which instead look more closely to global poverty information and issues surrounding information sources in the UK, sought and failed to replicate the findings from these original works in this new context. Overall, this shows the importance of conducting more research to replicate these findings in even more communication areas and cultural settings.

In chapter 6 and 7 I look at the relationship between source characteristics and the outcomes of information elaboration and persuasion attempts. Using a dual-pathway information elaboration model, adapted from existing social psychology models such as the ELM/HSM, I hypothesise that expert and celebrity endorsements of charity campaigns can be used to engage the public, change their attitudes and strengthen their intentions to become behaviourally involved with the campaign’s demands.

The experiments discussed in these chapters use three similar approaches to produce evidence on the research hypothesis. The first experiments and the first replication rely on a treatment allocation model, comparing attitudinal, cognitive, and behavioural intentions outcomes of expert-treated, celebrity-treated and control groups. The second experiment and the second replication
8.1. Discussion of the main findings

rely on source expertise and source attractiveness scales as treatments, in a no-control approach which has been commonly used in past ELM/HSM research. Finally, the third experiment uses a conjoint design with single choices or forced choices between two options, and compares outcomes of generic-endorsed messages with multiple expert-endorsed versions (including messages endorsed by activists, frontline staff, volunteers), and celebrity-endorsed messages. I test my hypotheses across the three experiments using multiple attitudinal and behavioural intentions measures. The latter, more specifically, include measures of the overall intention to get involved with a campaign, as used in experiments 1 and 2, the intentions to take specific actions, appearing in experiment 3, and the choice of a preferred appeal to support through action, appearing in experiment 3 as well.

Overall, across the tests, evidence shows that experts can be used as effective messengers in charity campaigns to engage the public attitudinally, cognitively, and behaviourally. Individuals in the expert treatment groups report higher levels of concern for global poverty-related issues discussed in the charity campaigns of the experiments, they store more information from the appeals and elaborate it more, report greater intention to get involved with the behavioural demands of campaigns, and, when confronted with choices between multiple appeals, will more likely choose the expert endorsed appeals than any other celebrity or generic-endorsed appeals. Furthermore, the expert endorsement effect works for individuals with all levels of previous engagement, acting as a heuristic for previously unengaged individuals, and as a cue to cognition or as an argument-strengthen for individuals with higher levels of previous engagement. These results contribute to a long-standing literature on the effectiveness of expertise-based cues in persuasive communication, and expand the applicability of ELM/HSM models to the case of charity campaigns in the UK. All the expectations I formulate in the introductory sections of the thesis are fulfilled by expert messengers in the tests: individuals are more likely to see them and the information they provide as credible, they can be used
to increase the persuasiveness of campaigns, and they can work as a cue for individuals to pay more attention to the contents of an appeal.

Looking more specifically at the role of the expert-based persuasion cue as an argument strengthener, evidence in support of this process is limited, with effects conditional on the format of appeals, endorsements and the behaviour intentions measures considered. Evidence from experiments 1 and 3 show that the expectation of the increased effectiveness of the expert treatment is verified when appeals include longer arguments which can benefit from the expert endorsement, when specific expert messengers such as frontline staff or volunteers are used as endorsers, and when highly engaged individuals are choosing between two appeals which are identical in everything but the messenger endorsing the message. Such conditionality structures didn’t feature in the original ELM/HSM models, suggesting that our current understanding of the multiple roles of expertise-based cues is still limited, and that future research is needed to better understand these.

Results across all empirical tests are much more mixed when it comes to celebrities and their effectiveness as engaging messengers. The results of experiments 1 and 2 only provide very limited support for hypothesis 6 on the effect of celebrity endorsers on the recipients’ attitudes, with most effects observed being statistically insignificant. There is, however, an indication that a celebrity endorsement could have a small positive effect on attitudes, even though the effects are not significant in the models. Across the experiments in all three chapters, finally, I find little to no evidence that celebrity endorsements can affect the behaviour intentions of individuals receiving charity appeals. The effects are not significant in most models, with two exceptions. In chapter 7 I show that if the perceived attractiveness of celebrities is very high, then, celebrity endorsements can have a small effect on behaviour intentions for individuals with no previous engagement. Conversely, in the choice models, I find another significant effect, this time negative, showing that celebrity-endorsed appeals are less likely to be chosen than a generic-endorsed
8.2. Implications of the findings

Overall, results cast the idea of using celebrities as messengers to engage the public in a relatively negative light. I discuss the implications of these findings in the next section of this chapter. Moreover, the results show that our current understanding of source attractiveness as a peripheral cue in persuasive communication processes might need to be re-examined in connection with other elements of the process itself, including the contexts and contents of communication. I return to the future directions of research later in this chapter.

8.2 Implications of the findings

In this section I discuss how the evidence fits with the expectations formalised in my theoretical model, returning to the flowchart I presented in chapter 3, and showing which parts of the information elaboration process are confirmed through my experimental evidence. Furthermore, I consider how the findings can be implemented practically to increase the effectiveness of campaigns as instruments to engage the public with global poverty. Finally, I reflect on the methodological choices and designs I adopt in the thesis, and what can be learned from them for the benefit of future research.

8.2.1 Theoretical model feedback

Figure 8.1 shows an annotated flowchart of the adapted theoretical framework of the thesis. As part of the flowchart I add the expected effects of my variables of interest, and a note on the empirical support for the mechanisms considered through the tests of chapters 5, 6 and 7.

Most processes taking place as part of the information elaboration model are at least partly supported by the results of the empirical analyses. There are two exceptions. The expected positive effect of the celebrity endorsement for individuals with low or no previous engagement on their behaviour intentions is not supported in the tests’ results. Moreover, results are not significant with most of the different effects of recipients’ characteristics on cue choice.
8.2. Implications of the findings

Figure 8.1: Flowchart of the theoretical model

as part of the information elaboration process, out of which only the negative effect of age on celebrity credibility is statistically significant. As, however, the preliminary research I conduct in this thesis raise a few exploratory results, the link between source and recipient characteristics is potentially confirmed, while future research will be useful in understanding more in depth how source and recipient characteristics interact during information elaboration.

The results, in general, raise two points about the ELM/HSM models adopted for this research. Firstly, source cues based on a messenger’s expertise and attractiveness work differently, and are more or less effective depending on the context (and the context’s characteristics) within which the persuasion attempt and information elaboration process take place. While the general theory says that the source attractiveness of celebrities can always be used as a cue for uninvolved individuals, this is only rarely the case when looking at
8.2. Implications of the findings

celebrity endorsements of global poverty campaigns, where, at best, evidence points to limited positive effects on attitudes, but not behaviours. In addition, the theory generally assumes that expert cues have similar positive effects on attitudes, cognition and behaviours, but does not go on to specify whether different kind of expert messengers could work differently. The overall effectiveness hypothesis is verified in the models, but throughout the tests I also uncover how source expertise interacts with factors such as the messenger’s ethnicity, the sources or frames of their expertise, and the balance between the source expertise cue and the message cue in the treatments. As I argue later in this chapter, the interactions of source expertise with other elements of the overall elaboration models deserve more attention in future research.

Moreover, the tests show how the recipients’ levels of previous engagement can be used to measure their levels of personal involvement with a political issue, the core characteristic actioning the different processes in the model. Previous engagement as a measure of personal involvement has multiple advantages for this and future research designs. Firstly, it adapts ELM/HSM-based models to the more specific study of persuasive communication in politics. Relatedly, it allows the the empirical tests of this thesis, and future ones, to consider how different characteristics of political or charity campaigns can work to involve members of the public with different levels of previous engagement. Furthermore, conceptually, previous engagement surpasses classical conceptualisations of involvement extending the applicability of dual-pathway models of information elaboration to contexts in which personal relevance is not outcome-related. Finally, the adoption of dual pathway models in political science research, and the use of previous engagement levels as the elaboration-actioning factor, brings back into the theoretical study of political decision-making a more fine-grained understanding of heuristic cues, the conditions under which recipients will rely on these, and their effectiveness in different settings.
8.2. Methodology feedback

Three main characteristics of the research designs I adopt in this thesis contribute to methodological debates around the test of dual-pathway models of information elaboration, and, more in generally, to the broader methodological literature on experimental political science.

Looking specifically at tests of the ELM/HSM theoretical frameworks, the control strategies adopted in the experiment designs matter. Classically, research in this field has relied on a no-control between-sources design which compares the persuasiveness of messages for high and low credibility sources. This, however, does not provide a *true* baseline measure usable as a control condition in experimental analyses. In the thesis I show how two different control strategies can be used to address the design issue, and, when compared to the classic design approach of past research, produce different results. Firstly, I compare unendorsed appeals to expert or celebrity-endorsed appeals. Secondly, in a separate design, I replicate the original design relying on source expertise and source attractiveness scales. Finally, I compare appeals endorsed by generic messengers, which are not perceived by recipients as either experts or attractive as celebrities, to messages endorsed by experts and celebrities.

The results obtained with the three separate designs are mostly consistent among them. However, the classic approach which does not employ a control group finds different results when looking at the effects of celebrity endorsements on the recipients’ behaviour intentions. While data triangulation with multiple control approaches is a sensible design recommendation for future research, the generic endorsed or unendorsed control strategies are the better of the three solutions. This is both because a treatment comparison approach is more common in political science, and because the results speak to a more realistic campaigning design scenario where non-credible sources are never an option, but unendorsed or generic appeals are.

Looking more generally at experiments in political science, I discuss how conjoint-designed experiments can be used to increase the complexity and ex-
ternal validity of traditional treatment comparison experimental design studying the choices individual make in the realms of politics or economics. Conjoint experiments are extremely advantageous in creating more realistic choice scenarios, increasing the complexity and specificity of hypotheses testable on multiple aspects of a persuasive communication process. Moreover, designs using forced-choice questions open a new avenue of research on behaviour intentions using data on hypothetical behavioural choices, usable to test the ELM/HSM theoretical frameworks’ predictions on behaviour intentions from a different perspective in future research.

While conjoint analysis is a common instrument in marketing and economic research, political science is only recently catching up and beginning to implement the method to the study of political choice. I contribute to this process by discussing how different experimental design possibilities relate to each other. The results of a limited experimental trial show that designs based on a forced choice between multiple options produce results which are consistent with designs which are scale-based or which offer a don’t know or undecided option. Furthermore, designs based on forced choice formats allow for substantial safeguarding of statistical power, which usually is lost as participants tend to overuse the don’t know option.

### 8.2.3 Policy implications

The practical problem of messengers in charity campaigns as effective instruments of public engagement is one of the main concerns at the core of this thesis. The results of the empirical investigations provide useful guidance for individuals who are seeking to design effective public engagement campaigns, as I discuss in this section. Three core insights can be drawn from the experiments and the surveys.

Overall, celebrities do not work as effective messengers to engage the public as commonly assumed. The first argument which was made in favour of using celebrities in charity campaigns is that the public would be interested in the information coming from them, while I show that individuals do not see
them as credible messengers. The second argument made is that celebrities could engage the public to take actions such as donating money, or empathising with distant sufferers, while I show that neither attitudes nor any indicator of behaviour intentions is substantially affected with celebrity-endorsed campaigns more than in the case of a generic campaign. Furthermore, negative results in tests looking at information retaining and appeal choices show that, unexpectedly, the effect of the endorsement could well be overall quite negative. Even a generic message which does not include any endorsements would perform better than a celebrity-endorsed one in these respects.

On the other hand, expert endorsements can be used as effective means to engage the public. While the overall effectiveness of expert endorsement is confirmed across a variety of tests, experts such as NGO workers and volunteers, who are perceived as experts because they are involved on a personal basis with institutions who fight global poverty, are especially effective as messengers to attitudinally and behaviourally engage the public with the work of charities. Furthermore, evidence shows that the expert-based engagement strategy is effective for individuals at all levels of previous engagement, and that their endorsement gives an advantage to charity appeals in cases when members of the public have to choose which deserves a donation or a petition signature. The only caveat to these results is to be cautious when considering the other characteristics of the expert messengers, as the empirical results of this research suggest that members of the UK public will hold a negative bias against messengers with non-white ethnic backgrounds. Charities should consequently do more to combat the ethnicity-related bias of their audiences as part of their campaigns as well as promoting behavioural or attitudinal engagement with global poverty.

Finally, audiences matter. Members from the public with different characteristics can be more or less likely to find information in the appeals as credible if it is endorsed by experts or celebrities, even though, overall, the former are more effective at engaging the public than the others. Research is still
in its infancy in this area, but the effectiveness of campaigns can be increased by adopting a population segmentation approach, which allows for different messages (and messengers) to be targeted to specific segments of the overall public. Looking more specifically at celebrities, younger and less engaged individuals are more likely to see these sources as credible, creating an ulterior challenge for charitable institutions: if campaigns want to engage younger uninvolved individuals, they will have to work to change the narratives around the credibility of expert messengers, or, more generally, consider communicative formats which move away from the celebrity-endorsement framework in this specific segment of the population.

8.3 Future research and limitations

Throughout this concluding chapter I have touched on the topic of the limits of this work, and, connectedly, the next steps in this pipeline of research. A first area of potential for further research would be to seek to replicate the results around expert and celebrity endorsements in different cultural contexts. All of the research presented in this thesis looks at the response of the British public to experts and celebrities as sources of information or appeal endorsers. As discussed both in the existing literature and, briefly, in chapter 5, source credibility and persuasiveness are also determined by cultural settings surrounding the process of communication. Consequently the results of this thesis should be understood to have potential applicability to other contexts outside of the United Kingdom, but further research and replication studies should seek to extend the validity of this work to new countries and cultural contexts.

Furthermore, even when assessing the validity of the findings within the contexts of British audiences, further questions and limitations remain concerning other aspects of this research. Firstly, the test of effectiveness of messengers as persuasion instruments is importantly limited in two ways throughout the thesis: I focus on short term dynamics of engagement (there is an attempt to persuasion, which is reportedly successful or unsuccessful), and I
focus on very specific kinds of appeals, with very specific demands.

Looking specifically at long and short term dimensions of engagement, this thesis only partially engage with issues of temporality when discussing the qualitative side of changes in attitudes obtained through cognitive-intensive or cognitive-light processes, but leaves open questions and potential for further research for more long term studies of information retentions, public opinion change, and behavioural engagement. Future research on this topic should also seek to understand whether the positive effect of an expert endorsement on behaviour intentions also translates in positive changes of actual behaviours in the longer term. This would not only allow to incorporate an extra step in the overall models connecting attitudes to behaviours, but, practically, would provide further useful insights for institutions relying on campaigns to promote political engagement in the public.

A second limit in the design of the experimental tests of this research is both worth flagging up to contextualise the results and discuss further potential research avenues. Both for practical reasons when designing the experiments and to focus on the source-related dynamics in the overall models of persuasion, messages, their format and their contents are somewhat of a less developed and understood part of the models and the tests. These limits matter for three reasons. Firstly, as exploratory findings show through chapter 6 and 7, message and source effects interact in shaping the persuasiveness of appeals, creating a limit to the external validity of my findings. Specifically, in this research I show that expert and celebrity endorsements can, respectively, be effective as instruments to increase the persuasion of written and simple appeals. However, in other formats, such as television adverts, videos and testimonials on social networks, the effectiveness of celebrities or expert could potentially decrease or increase. Future research is therefore essential to extend the applicability of the findings in this thesis.

Furthermore, this work focuses on the effects of these appeals on the potential for a very specific conception of political engagement, which tries
to move away from commodified frames of involvement for members of the public. However, were such consumeristic frames of engagement not critiqued as hardly, then, once again, the effectiveness of messengers could and should be reassessed in future works. Finally, an implicit assumption is made that appeals and persuasion are only to be used to engage members of the public, while other actors are involved in communication processes around issues of global poverty. These actors include the media, which can act as channels through which campaigns are given exposure in the public life, and members of elite groups or policymakers, who also engage with issues of global poverty and shape its dynamics. While in a simple charity campaign aimed at average members of the public celebrities might not work particularly well, they could still capture the attention of the media on the campaigns they endorse, or have access to elite environments where the message they endorse could resonate as well. Once more, future research can engage with these points in seeking to extend these findings.

Finally, looking more specifically to methodological areas of this research, future research should seek to move from laboratory and artificial testing settings to real world scenarios as questions still remain focused on the importance of the recognisability of messengers such as celebrities, compared to the genericness of expert messengers, as instruments to attract the attention of audiences towards charity campaigns. This question was, in part, addressed in two sections of this thesis: firstly, in chapter 5, where data on source credibility demonstrated that among many messenger types individuals are not likely to trust celebrities. Secondly, in the conjoint-designed choice experiment, where the results demonstrated that individuals are less likely to choose a celebrity-endorsed appeal than a generic or expert-endorsed one.

These two results, taken together with the evidence that expert endorsers also have positive effects on the public’s attitudes and levels of cognitive engagement, would suggest that in a real world campaign expert messengers could definitely work as effective endorsers. However, questions could be raised
regarding the strength of these cues’ effects the real world, and whether a more visible or recognisable endorser could do better than a generic NGO volunteer as an instrument to attract the public’s attention, as a real world informational environment is often oversaturated with competing cues of all sorts. A randomised control trial would be a step in the right direction to shed light on this final question.

Overall, this thesis provided the basis for future research in all of these areas, with results to come which will hopefully contribute to further our knowledge of political campaigns, and to help those who fight global poverty to soon achieve this goal.
Appendix A

Scripts for experiments 1, 2 and 3

In this appendix I include the scripts used for experiments 1, 2, and 3 of this thesis.

A.1 Script for experiments 1 and 2

The scripts are divided in multiple sections, from an introduction and consent section, to screening, treatment, post-treatment measurements and demographic data collection. In total the script includes 14 questions, although some question such as Q4 and Q10 include multiple sub-questions, and other questions such as Q6 and Q7 are asking participants to list multiple points in each answer. In the Treatments section, participants are randomly assigned to receive one of the three appeal versions. See chapter 6 for the discuss of the contents.

A.1.1 Full script

A.1.1.1 Disclaimer section

You are being invited to complete a survey on your attitudes and opinions concerning important global political issues. This study is being conducted by Paolo Morini from the Department of Political Science at University College London. This page explains the rules of the study, if anything is not clear
please email us before starting the survey.

There are no known risks if you decide to participate in this survey. There are no costs for you to participate. The information you provide will be used as part of research for a PhD thesis at University College London. Further publications and conference presentations will make use of the data as well.

Data exchanged with this site are protected by encryption, and no personally identifying information is collected. The survey is also anonymous. No one will be able to identify you or your answers. Data will always be used for scientific research only, and will not be shared with third parties for commercial purposes.

The study has received ethics approval from the Ethics Committee at University College London (ref. n. 5031/001)

By navigating to the next page you will agree to participate to the study. The study is composed of three parts: it should take approximately 15 minutes to complete. Complete any question to the best of your knowledge, and don’t worry: there is no right or wrong answer. You are free to decline answering any particular answer for any reason.

You are now ready to start!

A.1.1.2 Screening

Q1: Are you currently a resident of the United Kingdom? (yes/no - if answer is no, survey ends)

Q2: What is your age? (years - if answer is less than 18 years, survey ends)

Q3: What country were you born in? (open field)

A.1.1.3 Previous engagement

Q4: Which of the following actions, if any, have you taken in the last 12 months to become engaged with global poverty as an issue? (I have done this in the last year/I’m not sure if I have done this in the last year/I haven’t done this in the last year)
A.1. Script for experiments 1 and 2

• Read, watched or listened to a news article about global poverty, including offline and online

• Learned more about topics such as development, global poverty or global inequality

• Donated money to a charity engaged in fighting global poverty

• Fundraised by asking for donations from others towards fighting global poverty

• Volunteered for an organization focused on fighting global poverty

• Organised or helped to set up an organisation or a group focused on fighting global poverty, either online or offline

• Contacted a Member of Parliament lobbying them to increase their efforts to fight global poverty

• Participated in a march, rally, sit in, or other large event focused on fighting global poverty

A.1.2 Treatments

In the following page you will read a short appeal from Oxfam GB, a British charity that fights poverty worldwide, presenting a specific campaign. This task has no time limit. Once you’re done reading proceed to the next stage of the questionnaire.
A.1.2.1 Control treatment

**Figure A.1:** Generic appeal without endorsement used as control treatment

![Image of Oxfam message]

---

“MILLIONS ARE GOING TO BED HUNGRY! TOGETHER WE CAN CHANGE THIS!”

**WHAT’S WRONG?**

Nearly 1 in 8 people regularly go hungry. This is unacceptable. Without urgent action these numbers will continue to rise – endangering the lives of millions more people, undermining the economic growth of countries around the globe, and increasing global insecurity.

**THE GROW CAMPAIGN**

The GROW campaign is about transforming our broken food system so that it works for everyone.

It is also about ensuring that the system is fit for a future where natural resources will be scarcer, when we will tackle climate change, and a growing population will make feeding the world even harder.

**HOW CAN I HELP?**

“Online, at your local market or in your kitchen, there are multiple ways to join the GROW movement and contribute to ensure that everyone on the planet will always have enough to eat.”

Whether you want to learn more about this cause, donate money to Oxfam, contact your MP, volunteer some of your time, or spread the word about the campaign, every action will help us create a fairer food system worldwide.

JOIN OXFAM TOGETHER WE CAN END GLOBAL HUNGER!
A.1.2.2 Expert appeal

Figure A.2: Expert endorsed appeal as expert treatment
Figure A.3: Celebrity endorsed appeal as celebrity treatment

A MESSAGE FROM COLIN FIRTH
OSCAR WINNING ACTOR SUPPORTS OXFAM’S “GROW” CAMPAIGN

“MILLIONS ARE GOING TO BED HUNGRY! TOGETHER WE CAN CHANGE THIS!”

WHAT’S WRONG?
Nearly 1 in 8 people regularly go hungry. This is unacceptable. Without urgent action these numbers will continue to rise – endangering the lives of millions more people, undermining the economic growth of countries around the globe, and increasing global insecurity.

THE GROW CAMPAIGN
The GROW campaign is about transforming our broken food system so that it works for everyone.

It is also about ensuring that the system is fit for a future where natural resources will be scarcer, when we will tackle climate change, and a growing population will make feeding the world even harder.

HOW CAN I HELP?
“Online, at your local market or in your kitchen, there are multiple ways to join the GROW movement and contribute to ensure that everyone on the planet will always have enough to eat.”

Whether you want to learn more about this cause, donate money to Oxfam, contact your MP, volunteer some of your time, or spread the word about the campaign, every action will help us create a fairer food system worldwide.

JOIN COLIN AND OXFAM
TOGETHER WE CAN END GLOBAL HUNGER!
A.1.3 Post-treatment measures - attitudes and cognition

Q5: Before seeing the appeal in this survey, had you heard of Oxfam’s GROW campaign? (Yes/No/I’m not sure)

Q6: What information can you recall when you think of the appeal you have read? Make a simple list in the space provided below. (Open field)

Q7: After you read the appeal did you get any thoughts, feelings or ideas? Make a simple list in the space provided below (Open field)

Q8: Which option from the list below best describes how you feel about levels of hunger in poor countries? (Very concerned/Fairly concerned/No strong feelings either way/Not very concerned/Not at all concerned/Don’t know)

Q9: How much do you agree with the following statement? A just global food system should ensure everyone gets access to the food they need (Strongly agree/Agree/Neither agree nor disagree/Disagree/Strongly disagree/Don’t know)

A.1.4 Post-treatment measures - behaviour intentions

Q10: On the basis of the appeal you’ve just read please tell us how likely/unlikely you are to carry out any of these actions in the next six months (Very unlikely/Somewhat unlikely/Undecided/Somewhat likely/Very likely)

- Learn more about hunger in poor countries
- Share the appeal on your social networks such as Twitter/Facebook
- Write your personal version of this appeal to support the campaign
- Take part into a meeting organised by Oxfam to learn more about the Grow campaign
• Sign a petition to your political representative, local councillor or other political authorities to increase/protect aid expenditure towards reducing global hunger

• Please select Somewhat likely from the options

• Discuss hunger in poor countries and related topics or news with someone else

• Urge someone outside your family to take action in favour of Oxfam’s GROW campaign

• Consider volunteering some of your personal time to Oxfam’s GROW campaign

A.1.5 Demographics
Almost there! We just want to know a bit more about you

Q11: How would you define your gender? (Male/Female/Neither male nor female/Prefer not to say)

Q12: What is your education level to date? (No qualifications/High School - GCSEs/A-levels/University degree (undergraduate)/University degree (postgraduate)/Other qualifications/Prefer not to say)

Q13: In politics people often talk about left and right. Where would you place yourself on this scale from left to right? (10 points scale with Left-Right poles)

Q14: Imagine you received a prize of £10 today! There is only one condition to you obtaining your money: you have to split this money between you and another anonymous person. If the other person doesn’t like your split proposal they can refuse it, and neither of you will get any money. However if they like the split proposal you each get your allocated part of the £10. (Unity allocation options from £0 to £10)
A.2 Script for experiment 3.

Data for experiment 3 are collected in two survey waves. In the first wave respondents are shown 6 of 42 messengers and are asked to rate them on a series of dimensions which include attractiveness and expertise. Furthermore, the first survey is also used to collect engagement and demographic data\(^1\). Study participants are then recontacted to take part in the second wave of the study, where the choice experiments take place. Respondents have to choose between 2 appeals 10 times during the survey. After each choice they also respond to single-appeal behaviour intention questions. This concludes the study. Out of the 42 messengers included in the original design, in section A.2.1 I list the expert and celebrities used in the analysis of this thesis. Section A.2.2 includes the script of the first survey wave. Section A.2.3 includes examples of the choices that participants make.

\(^1\)These are collected by YouGov at the time participants join their panel, and include variables such as age, education, sex, income, social class, and region of residence.

A.2.1 Messenger list and pictures

Figure A.4: Activist 1

Figure A.5: Activist 2

Figure A.6: Activist 3

Figure A.7: Activist 4

Figure A.8: Aid recipient 1

Figure A.9: Aid recipient 2

Figure A.10: Aid recipient 3

Figure A.11: Aid recipient 4

Figure A.12: Celebrity 1: Idris Elba

Figure A.13: Celebrity 2: MIA

Figure A.14: Celebrity 3: Bill Nighy

Figure A.15: Celebrity 4: Emma Watson

Figure A.16: Frontline 1

Figure A.17: Frontline 2

Figure A.18: Frontline 3

Figure A.19: Frontline 4

Figure A.20: Volunteers 1

Figure A.21: Volunteers 2
A.2.2 Wave 1 script: messenger ratings

The next set of questions will show you six individuals who are involved with development organisations to raise awareness and take action against global poverty. Using the list of attributes on the following pages, please tell us what you think about each of them. (7 point scales with poles listed below)

Q1: Using the list of attributes on the following pages, please tell us what you think about them.

- Unlikeable - Likeable
- Untrustworthy - Trustworthy
- Cares for others first - Cares for themselves 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
Q2: Thinking about each of the individuals you have just seen, on balance, how good do you think each one is in raising awareness and getting people to take action on global poverty? Please drag each picture in the column you think best sums up your opinion. (Drag and drop in three boxes listed below)

- Individuals who are good at raising awareness and getting people to take action
- Individuals who are not good at raising awareness and getting people to take action
- Don’t know

Q3: randomly select 1 messenger who are rated as good in Q2. Prior to seeing this messenger here, have you ever seen or come across them in any context before? (Yes, I know who they are / No, I do not know who they are/Don’t know)

A.2.3 Wave 1 script: previous engagement

Q4: Which of the following have you done, if any, to become involved with international poverty and development as an issue? (Have done in the last year/ Have done, but not in the last year/ Have never done / Don’t know)

- Used your voice to impact the issue (e.g. via social media, signing a petition, etc.)
- Shared/forwarded an article or information about it including offline and online
- Interacted with a community focused on the issue (e.g. join, follow, like/fan/friend, subscribed to a newsletter) including online and offline
- Contacted a Member of Parliament or other elected official online by clicking a petition or using Twitter, Facebook or other social media

- Donated money to an organisation focused on the issue

Q5: Which best describes how you feel about levels of poverty in poor countries? (Very concerned/ Fairly concerned/ No strong feelings either way / Not very concerned / Not at all concerned/ Don’t know)

Q6: Which best describes how you feel about levels of poverty in poor countries? (Very concerned/ Fairly concerned/ No strong feelings either way / Not very concerned / Not at all concerned/ Don’t know)

Q7: Thinking about you personally, how much of a difference do you think you can make to reducing poverty in poor countries? Please use the following scale where 0 means that you 'can’t make any difference at all’ and 10 means that you ‘can make a great deal of difference’. (11 point scale)

Q8: Most money used in efforts to reduce global poverty is wasted (Strongly agree/ Agree / Neither agree nor disagree / Disagree / Strongly agree / Don’t know)

Q9: Do you think that the UK Government should give higher priority to reducing poverty in poor countries or should it give higher priority to reducing poverty in the United Kingdom? Use this scale where 0 means 'higher priority to reducing poverty in poor countries’ and 10 means 'higher priority to reducing poverty in the United Kingdom’. (11 point scale)

Q10: The work of development organisations help to improve the lives of people living in the world?’s poorest countries ((Strongly agree/ Agree / Neither agree nor disagree / Disagree / Strongly agree / Don’t know)

Q11: In general, where have you followed news about international development and poverty in poor countries? (Tick up to three)

- I do not follow news about international development and poverty

- BBC News
- ITV News
- C4 News
- Guardian/Observer
- Telegraph/Sunday Telegraph
- Times/Sunday Times
- Independent/Independent on Sunday
- Daily Mail/Mail on Sunday
- Daily Express/The Sunday Express
- Sun/Sun on Sunday
- Mirror/The Sunday Mirror
- Free paper (e.g. Evening Standard, Metro)
- Any local newspaper
- The Huffington Post
- Facebook
- Twitter
- Other
- None of the above
A.2.4 Example choices - wave 2

Q1: Thinking about the two appeals, which one do you think you would be more likely to make a donation to?

- Appeal A
- Appeal B

Q2: The survey shows only one of the two appeals on a separate page. Thinking about Appeal A, on a scale of 1-7 where 1 indicates ?I would definitely not make a donation? and 7 indicates ?I would definitely make a donation?, what would you do? (7 point scale)
Appendix B

Pilot experiment: choice format for a conjoint design

comparing three possible options. The first design option is to rely on a scale-based choice, with a 5-point scale (with 1 - *much more likely to donate to appeal A*, 3 - *equally likely to donate to both appeals*, and 5 - *much more likely to donate to appeal B*) used to capture behaviour intentions. The second design option is a *forced choice* format in which respondents are asked to pick only one option out of the two, or indicate they prefer neither. Finally, a third option in which people rank three options *Donate to A*, *Donate to B*, and *Donate to neither* in the order of their preference.

The last two options speak broadly to issues with *don’t know* options included in surveys analysing the behaviours and attitudes of individuals, which, as I discussed in chapter 5, reduce the quantity of the data available to estimate statistical models. The rationale for a scale-based approach would be to mimic a real-life allocation choice, with the possibility of picking more than one appeal to donate to, but still expressing a potential preference for either. However, participants who are faced with a relatively abstract choice as part of a survey might overly rely on the middle option and avoid making a choice, as was the case in chapter 5. The *forced choice* designs attempt to mimic a simpler preference-based choice. In the real world respondents can choose to not donate to any of the appeals with which they are confronted, but once
more the possibility that they overly rely on the *neither of the two* option grants the pilot investigation.

Data were collected from 1,400 participants of the pilot study making 3 choices each. In the first choice participants decide between an appeal endorsed by a strong messenger and another one endorsed by an average messenger, with the expectations that more respondents will chose the strong messenger-endorsed appeal. In the second choice both appeals are endorsed by average messengers, with an expected 50/50 split in donation decisions. Finally, in the third appeal the choice is between an appeal endorsed by a weak messenger, and another one endorsed by an average messenger, with expectations of more participants choosing appeal endorsed by the average messenger.

Participants were randomised into one of the three design formats and response ratios were compared across groups. Results are presented in table 7.2. The *Format 1* column includes the results obtained with the 5 point scale format, the *Format 2* column includes the results obtained with the forced choice format, and the *Format 3* column includes the results obtained with the ranking format.

Given the strength of the endorsements and their pairings, in Q1 participants are expected to choose appeal A more often than appeal B, in Q2 they should be indifferent between the two, and, finally, in Q3, they should choose appeal B. All results presented in the table are consistent with expectations, with the exception of Format 1 in question 3, in which respondents are more likely to choose the appeal endorsed by the weaker messenger.

---

1 The strength of the messengers used in the pilot is measured by looking at their overall ratings as part of the first wave of the study. Here the survey asked participants to indicate whether a specific messenger was seen as a good spokesperson for charity campaigns fighting global poverty. Strong messengers are seen as *good* by more than 70% of the respondents. Average messengers are seen as *good* by approximately 50% of the respondents. Finally, weak messengers are seen as *good* by less than 30% of the respondents.

2 Responses are on a 1-5 scale where 1, and 2 indicate that the participants are more likely to donate to appeal A, 3 indicates indifference, and 4, and 5 indicate that the participants are more likely to donate to appeal B. The values are recoded in three categories to allow for comparison with the other two formats.

3 Here, in each of the rows I included the respondents who ranked one of the three options as their first choice.
Table B.1: Results of pilot study on choice format

<table>
<thead>
<tr>
<th>Q1</th>
<th>Format 1 Scales</th>
<th>Format 2 Forced choice</th>
<th>Format 3 Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>As likely / no donation</td>
<td>385 (60%)</td>
<td>/</td>
<td>463 (77%)</td>
</tr>
<tr>
<td>Donate to A (strong endorser)</td>
<td>147</td>
<td>349</td>
<td>278</td>
</tr>
<tr>
<td>Donate to B (average endorser)</td>
<td>117</td>
<td>273</td>
<td>236</td>
</tr>
<tr>
<td>% Appeal A</td>
<td>55.68%</td>
<td>56.11%</td>
<td>54.09%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q2</th>
<th>Format 1 Scales</th>
<th>Format 2 Forced choice</th>
<th>Format 3 Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>As likely / no donation</td>
<td>397 (61%)</td>
<td>/</td>
<td>456 (75%)</td>
</tr>
<tr>
<td>Donate to A (average endorser)</td>
<td>126</td>
<td>317</td>
<td>275</td>
</tr>
<tr>
<td>Donate to B (average endorser)</td>
<td>126</td>
<td>305</td>
<td>249</td>
</tr>
<tr>
<td>% Appeal B</td>
<td>50.00%</td>
<td>49.04%</td>
<td>47.52%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q3</th>
<th>Format 1 Scales</th>
<th>Format 2 Forced choice</th>
<th>Format 3 Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>As likely / no donation</td>
<td>361 (56%)</td>
<td>/</td>
<td>473 (78%)</td>
</tr>
<tr>
<td>Donate to A (weak endorser)</td>
<td>172</td>
<td>307</td>
<td>251</td>
</tr>
<tr>
<td>Donate to B (average endorser)</td>
<td>111</td>
<td>315</td>
<td>279</td>
</tr>
<tr>
<td>% Appeal B</td>
<td>39.22%</td>
<td>50.64%</td>
<td>52.64%</td>
</tr>
</tbody>
</table>

Formats 2 and 3, which include a middle-of-the-way option or the possibility to pick neither appeals, respondents relied very heavily on these options, with 56% to 78% of participants using them across the three choices. Once these participants are excluded from the comparison analysis, the forced choice with no undecided option performs according to expectations in all three choices, and, in most cases, with no significant differences with the results obtained with the other two designs. We adopt the forced choice format as it avoids issues with information lost in the don’t know category without biasing the final results. Furthermore, the design also retains the scale-based questions, as these are useful to replicate the results from the experiments of chapter 6 and are consistent with established measures of behaviour intentions in the social psychology literature Martin et al. (1993). As a further robustness test we check whether the respondents show consistency between their chosen appeals and their intentions to donate or sign a petition following exposure to single ap-
peals from the choice experiment. The expectations are that individuals who chose an appeal in the precedent section will coherently report higher values on the behaviour intentions scale in the follow-up. The results of the coherence test are presented in table 7.3.

Table B.2: Coherence in behaviour intention measures

<table>
<thead>
<tr>
<th></th>
<th>Donation appeal</th>
<th>Petition appeal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not chosen</td>
<td>2.75</td>
<td>3.19</td>
</tr>
<tr>
<td>Chosen</td>
<td>3.43***</td>
<td>3.89***</td>
</tr>
</tbody>
</table>

The differences in mean responses to the behaviour intentions scales are statistically significantly higher for individuals who have chosen a specific appeal for their donation or petition signature in the forced choice questions. The effects are similar in size, with a difference of +12% in the intentions to donate or sign a petition for appeals which have or haven’t been chosen. However, in both cases as mean values for the behavioural intentions scales are between 3 and 4, the respondents are still indicating they are unlikely to actually take the specific actions indicated in the questions. This, however, can be read as evidence of realism in the responses provided, as expecting simple endorsements part of an online survey to completely convince individuals to spur into action and fight global poverty would be improbable.
Appendix C

Extra materials for chapter 7

In this appendix I include the extra material from chapter 7, including tests on satisficing behaviours as part of the conjoint experiment, and the results of a model with deeper manipulation checks.

C.1 Satisficing tests

In this section I include two tables. The first details how, irrespective of the choice number, messenger effects do not change systematically. In the second, following Hainmueller (2014), I show that the likelihood of choosing the default option (the first appeal presented in the choice). In neither cases the tests show statistically significant patterns of responses indicative of satisficing, as the effects of treatments do not change systematically, and the likelihood of choosing the default option is not significantly different across responses, as indicated by the fact that confidence intervals cross each other.
### Table C.1: Effects of treatments in the conjoint experiment broken down by choice tasks

<table>
<thead>
<tr>
<th>Choice tasks</th>
<th>Donation (1)</th>
<th>Donation (2)</th>
<th>Donation (3)</th>
<th>Donation (4)</th>
<th>Donation (5)</th>
<th>Petition (1)</th>
<th>Petition (2)</th>
<th>Petition (3)</th>
<th>Petition (4)</th>
<th>Petition (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aid recipients</td>
<td>0.0298</td>
<td>0.0505</td>
<td>-0.113</td>
<td>-0.0744</td>
<td>0.0135</td>
<td>-0.122</td>
<td>-0.0934</td>
<td>-0.0042</td>
<td>-0.216</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.163)</td>
<td>(0.162)</td>
<td>(0.168)</td>
<td>(0.166)</td>
<td>(0.162)</td>
<td>(0.176)</td>
<td>(0.164)</td>
<td>(0.165)</td>
<td>(0.174)</td>
<td></td>
</tr>
<tr>
<td>Businesspeople</td>
<td>-0.393**</td>
<td>-0.733***</td>
<td>-0.667***</td>
<td>-1.125***</td>
<td>-0.771***</td>
<td>-0.282*</td>
<td>-0.407**</td>
<td>-0.743***</td>
<td>-0.565***</td>
<td>-0.406**</td>
</tr>
<tr>
<td></td>
<td>(0.167)</td>
<td>(0.174)</td>
<td>(0.168)</td>
<td>(0.178)</td>
<td>(0.180)</td>
<td>(0.160)</td>
<td>(0.175)</td>
<td>(0.168)</td>
<td>(0.172)</td>
<td>(0.170)</td>
</tr>
<tr>
<td>Celebrities</td>
<td>-0.0779</td>
<td>-0.507***</td>
<td>-0.403**</td>
<td>-0.667***</td>
<td>-0.180</td>
<td>-0.236</td>
<td>-0.245</td>
<td>-0.498***</td>
<td>-0.193</td>
<td>-0.556***</td>
</tr>
<tr>
<td></td>
<td>(0.164)</td>
<td>(0.171)</td>
<td>(0.165)</td>
<td>(0.177)</td>
<td>(0.170)</td>
<td>(0.178)</td>
<td>(0.169)</td>
<td>(0.170)</td>
<td>(0.168)</td>
<td>(0.165)</td>
</tr>
<tr>
<td>Frontline</td>
<td>0.705***</td>
<td>0.906***</td>
<td>0.670***</td>
<td>0.608***</td>
<td>0.778***</td>
<td>0.624***</td>
<td>0.754***</td>
<td>0.676***</td>
<td>0.930***</td>
<td>0.724***</td>
</tr>
<tr>
<td></td>
<td>(0.176)</td>
<td>(0.183)</td>
<td>(0.168)</td>
<td>(0.173)</td>
<td>(0.178)</td>
<td>(0.163)</td>
<td>(0.179)</td>
<td>(0.178)</td>
<td>(0.176)</td>
<td>(0.170)</td>
</tr>
<tr>
<td>Military</td>
<td>-0.141</td>
<td>-0.382**</td>
<td>-0.424**</td>
<td>-0.551***</td>
<td>-0.309*</td>
<td>-0.0319</td>
<td>-0.0949</td>
<td>-0.217</td>
<td>0.0655</td>
<td>-0.0539</td>
</tr>
<tr>
<td></td>
<td>(0.168)</td>
<td>(0.173)</td>
<td>(0.168)</td>
<td>(0.171)</td>
<td>(0.164)</td>
<td>(0.168)</td>
<td>(0.167)</td>
<td>(0.171)</td>
<td>(0.170)</td>
<td>(0.170)</td>
</tr>
<tr>
<td>Philanthropists</td>
<td>-0.497***</td>
<td>-0.372**</td>
<td>-0.649***</td>
<td>-0.518***</td>
<td>-0.596***</td>
<td>-0.715***</td>
<td>-0.757***</td>
<td>-0.637***</td>
<td>-0.397**</td>
<td>-0.762***</td>
</tr>
<tr>
<td></td>
<td>(0.168)</td>
<td>(0.177)</td>
<td>(0.169)</td>
<td>(0.175)</td>
<td>(0.175)</td>
<td>(0.179)</td>
<td>(0.178)</td>
<td>(0.163)</td>
<td>(0.164)</td>
<td>(0.169)</td>
</tr>
<tr>
<td>Volunteers</td>
<td>0.615***</td>
<td>0.447***</td>
<td>0.329*</td>
<td>0.529***</td>
<td>0.547***</td>
<td>0.596***</td>
<td>0.528***</td>
<td>0.127</td>
<td>0.609***</td>
<td>0.398**</td>
</tr>
<tr>
<td></td>
<td>(0.162)</td>
<td>(0.170)</td>
<td>(0.169)</td>
<td>(0.172)</td>
<td>(0.171)</td>
<td>(0.170)</td>
<td>(0.168)</td>
<td>(0.165)</td>
<td>(0.165)</td>
<td>(0.170)</td>
</tr>
<tr>
<td>Generics</td>
<td>0.0633</td>
<td>0.0157</td>
<td>-0.0596</td>
<td>-0.0621</td>
<td>-0.209</td>
<td>0.244</td>
<td>-0.288*</td>
<td>-0.378**</td>
<td>-0.157</td>
<td>-0.185</td>
</tr>
<tr>
<td></td>
<td>(0.164)</td>
<td>(0.175)</td>
<td>(0.163)</td>
<td>(0.170)</td>
<td>(0.165)</td>
<td>(0.168)</td>
<td>(0.168)</td>
<td>(0.165)</td>
<td>(0.166)</td>
<td>(0.162)</td>
</tr>
<tr>
<td>Miscellanea</td>
<td>0.268</td>
<td>0.0315</td>
<td>-0.152</td>
<td>0.0459</td>
<td>-0.0485</td>
<td>0.125</td>
<td>0.344*</td>
<td>8.61e-06</td>
<td>0.0229</td>
<td>0.259</td>
</tr>
<tr>
<td></td>
<td>(0.186)</td>
<td>(0.183)</td>
<td>(0.179)</td>
<td>(0.190)</td>
<td>(0.181)</td>
<td>(0.180)</td>
<td>(0.189)</td>
<td>(0.186)</td>
<td>(0.183)</td>
<td>(0.180)</td>
</tr>
<tr>
<td>Messenger gender</td>
<td>-0.0502</td>
<td>0.159**</td>
<td>-0.0336</td>
<td>0.0898</td>
<td>0.0235</td>
<td>0.0400</td>
<td>0.0786</td>
<td>0.0694</td>
<td>-0.0202</td>
<td>0.0225</td>
</tr>
<tr>
<td></td>
<td>(0.0691)</td>
<td>(0.0690)</td>
<td>(0.0701)</td>
<td>(0.0708)</td>
<td>(0.0717)</td>
<td>(0.0696)</td>
<td>(0.0703)</td>
<td>(0.0701)</td>
<td>(0.0715)</td>
<td>(0.0706)</td>
</tr>
<tr>
<td>Messenger ethnicity</td>
<td>-0.351***</td>
<td>-0.256***</td>
<td>-0.252***</td>
<td>-0.240***</td>
<td>-0.410***</td>
<td>-0.442***</td>
<td>-0.241***</td>
<td>-0.327***</td>
<td>-0.399***</td>
<td>-0.407***</td>
</tr>
<tr>
<td></td>
<td>(0.0703)</td>
<td>(0.0721)</td>
<td>(0.0697)</td>
<td>(0.0714)</td>
<td>(0.0700)</td>
<td>(0.0704)</td>
<td>(0.0698)</td>
<td>(0.0709)</td>
<td>(0.0715)</td>
<td>(0.0716)</td>
</tr>
<tr>
<td>Observations</td>
<td>2,994</td>
<td>2,986</td>
<td>2,980</td>
<td>2,998</td>
<td>2,982</td>
<td>3,010</td>
<td>2,962</td>
<td>2,974</td>
<td>2,980</td>
<td>3,000</td>
</tr>
</tbody>
</table>
Table C.2: Likelihood of choosing the default option across choices

<table>
<thead>
<tr>
<th>Choice number</th>
<th>Mean</th>
<th>SE</th>
<th>95% Low</th>
<th>95% High</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>54.7%</td>
<td>1.2%</td>
<td>52.3%</td>
<td>57.1%</td>
</tr>
<tr>
<td>2</td>
<td>51.4%</td>
<td>1.2%</td>
<td>49.0%</td>
<td>53.8%</td>
</tr>
<tr>
<td>3</td>
<td>52.2%</td>
<td>1.2%</td>
<td>49.9%</td>
<td>54.6%</td>
</tr>
<tr>
<td>4</td>
<td>52.0%</td>
<td>1.2%</td>
<td>49.6%</td>
<td>54.4%</td>
</tr>
<tr>
<td>5</td>
<td>54.0%</td>
<td>1.2%</td>
<td>51.7%</td>
<td>56.4%</td>
</tr>
<tr>
<td>6</td>
<td>55.6%</td>
<td>1.2%</td>
<td>53.3%</td>
<td>58.0%</td>
</tr>
<tr>
<td>7</td>
<td>51.2%</td>
<td>1.2%</td>
<td>48.8%</td>
<td>53.5%</td>
</tr>
<tr>
<td>8</td>
<td>53.9%</td>
<td>1.2%</td>
<td>51.5%</td>
<td>56.2%</td>
</tr>
<tr>
<td>9</td>
<td>54.3%</td>
<td>1.2%</td>
<td>51.9%</td>
<td>56.6%</td>
</tr>
<tr>
<td>10</td>
<td>56.0%</td>
<td>1.2%</td>
<td>53.6%</td>
<td>58.3%</td>
</tr>
</tbody>
</table>

C.2  Deeper manipulation checks model

In this section I include a table showing a revised version of the conjoint experimental model presented in chapter 7. Specifically the model calculates the effects of receiving appeals endorsed by messengers in 10 different categories, with different ethnicities and genders, controlling for all other traits for which data were collected as part of wave 1 of the study. This is in an effort to avoid the omission of potential other mechanisms related to source characteristics, at play during the process of persuasion. In the new model I include the ratings for how caring of others the messenger is perceived to be, how likeable, trustworthy, authentic, inspirational, relatable and believable. As scores of these factors are strongly correlated with each other, inflation of the effects is potentially affecting these estimates, but as no hypothesis is directly tested on these factors, no further action is taken. As the results show, even when controlling for these further source traits, the results are consistent with the original models from chapter 7.

It is worth noting that for the categories of aid recipients and businesspeople, the results differ in direction and significance. These categories are however not object of analysis for the specific hypotheses of this thesis, while all results of the experts categories and the celebrity category do not change significantly with the extra controls being added in.
Table C.3: Choice models from chapter 7 revised with further controls

<table>
<thead>
<tr>
<th></th>
<th>Donations</th>
<th>Petitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activists</td>
<td>0.0837</td>
<td>0.139</td>
</tr>
<tr>
<td></td>
<td>0.114</td>
<td>0.114</td>
</tr>
<tr>
<td>Aid recipients</td>
<td>0.313**</td>
<td>0.237</td>
</tr>
<tr>
<td></td>
<td>0.146</td>
<td>0.147</td>
</tr>
<tr>
<td>Businesspeople</td>
<td>0.0522</td>
<td>0.367***</td>
</tr>
<tr>
<td></td>
<td>0.141</td>
<td>0.140</td>
</tr>
<tr>
<td>Celebrities</td>
<td>-0.317**</td>
<td>-0.309**</td>
</tr>
<tr>
<td></td>
<td>-0.130</td>
<td>0.129</td>
</tr>
<tr>
<td>Frontline</td>
<td>0.579***</td>
<td>0.621***</td>
</tr>
<tr>
<td></td>
<td>0.137</td>
<td>0.136</td>
</tr>
<tr>
<td>Military</td>
<td>0.00956</td>
<td>0.435***</td>
</tr>
<tr>
<td></td>
<td>0.139</td>
<td>0.139</td>
</tr>
<tr>
<td>Philanthropists</td>
<td>0.199</td>
<td>0.178</td>
</tr>
<tr>
<td></td>
<td>0.135</td>
<td>0.135</td>
</tr>
<tr>
<td>Volunteers</td>
<td>0.321***</td>
<td>0.358***</td>
</tr>
<tr>
<td></td>
<td>0.122</td>
<td>0.123</td>
</tr>
<tr>
<td>Miscellanea</td>
<td>0.328***</td>
<td>0.630***</td>
</tr>
<tr>
<td></td>
<td>0.123</td>
<td>0.125</td>
</tr>
<tr>
<td>Activists X Previous engagement</td>
<td>0.0650*</td>
<td>0.0682*</td>
</tr>
<tr>
<td></td>
<td>0.0379</td>
<td>0.0350</td>
</tr>
<tr>
<td>Aid recipients X Previous engagement</td>
<td>0.0895***</td>
<td>0.129***</td>
</tr>
<tr>
<td></td>
<td>0.0339</td>
<td>0.0370</td>
</tr>
<tr>
<td>Businesspeople X Previous engagement</td>
<td>0.0132</td>
<td>-0.0291</td>
</tr>
<tr>
<td></td>
<td>0.0377</td>
<td>0.0377</td>
</tr>
<tr>
<td>Celebrities X Previous engagement</td>
<td>-0.0202</td>
<td>0.0175</td>
</tr>
<tr>
<td></td>
<td>0.0379</td>
<td>0.0386</td>
</tr>
<tr>
<td>Frontline X Previous engagement</td>
<td>0.0403</td>
<td>0.0718*</td>
</tr>
<tr>
<td></td>
<td>0.0380</td>
<td>0.0392</td>
</tr>
<tr>
<td>Military X Previous engagement</td>
<td>-0.0630*</td>
<td>-0.111***</td>
</tr>
<tr>
<td></td>
<td>0.0379</td>
<td>0.0374</td>
</tr>
<tr>
<td>Philanthropists X Previous engagement</td>
<td>-0.0761**</td>
<td>-0.113***</td>
</tr>
<tr>
<td></td>
<td>0.0374</td>
<td>0.0401</td>
</tr>
<tr>
<td>Volunteers X Previous engagement</td>
<td>0.0374</td>
<td>0.0591</td>
</tr>
<tr>
<td></td>
<td>0.0363</td>
<td>0.0405</td>
</tr>
<tr>
<td>Miscellanea X Previous engagement</td>
<td>0.0678</td>
<td>0.0293</td>
</tr>
<tr>
<td></td>
<td>0.0414</td>
<td>0.0413</td>
</tr>
<tr>
<td>Messenger gender</td>
<td>-0.0474</td>
<td>-0.0964</td>
</tr>
<tr>
<td></td>
<td>0.0350</td>
<td>0.0347</td>
</tr>
<tr>
<td>Messenger ethnicity</td>
<td>-0.236***</td>
<td>-0.353***</td>
</tr>
<tr>
<td></td>
<td>0.0462</td>
<td>0.0469</td>
</tr>
<tr>
<td>Cares for others</td>
<td>0.228</td>
<td>0.361**</td>
</tr>
<tr>
<td></td>
<td>0.147</td>
<td>0.146</td>
</tr>
<tr>
<td>Likability</td>
<td>0.840***</td>
<td>0.977***</td>
</tr>
<tr>
<td></td>
<td>0.200</td>
<td>0.202</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>0.246</td>
<td>0.101</td>
</tr>
<tr>
<td></td>
<td>0.208</td>
<td>0.210</td>
</tr>
<tr>
<td>Authenticity</td>
<td>-0.155</td>
<td>-0.547**</td>
</tr>
<tr>
<td></td>
<td>-0.221</td>
<td>-0.218</td>
</tr>
<tr>
<td>Inspirational</td>
<td>0.0871</td>
<td>0.193</td>
</tr>
<tr>
<td></td>
<td>0.146</td>
<td>0.149</td>
</tr>
<tr>
<td>Relateable</td>
<td>-0.0217</td>
<td>-0.148</td>
</tr>
<tr>
<td></td>
<td>0.147</td>
<td>0.148</td>
</tr>
<tr>
<td>Believability</td>
<td>-0.714***</td>
<td>-0.495**</td>
</tr>
<tr>
<td></td>
<td>0.238</td>
<td>0.239</td>
</tr>
<tr>
<td>Observations</td>
<td>13,910</td>
<td>13,908</td>
</tr>
</tbody>
</table>
Appendix D

Colophon

This thesis was completed in September 2016 and revised in March 2017.

The document was set using \LaTeX and \BibTeX, and composed using
TexShop. I collected my data through the Qualtrics Surveying Software, and
the YouGov online panel. I conducted my data analysis using Stata (version
13), R (version 3.2.1), and RStudio (version 0.99.467). Plots were realised
using the \texttt{ggplot2} package on R by Wickham (2009).
Bibliography


Allport, G. W. (1935). Attitudes. APA.


Cooper, A. (2007). Celebrity diplomacy and the g8: Bono and bob as legitimate international actors. Technical report, CIGI.


Gigerenzer, G. and Todd, P. M. (1999b). *Simple heuristics that make us smart*. Oxford University Press, USA.


