Antecedents of helping: Social descriptive norms and empathy as drivers of monetary donations

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Declaration of Authorship

I, Siugmin Paz Lay Martínez, hereby declare that this thesis and the work
presented in it is entirely my own. Where I have consulted the work of others,
this is always clearly stated.

Signed:	·	 	
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Abstract

In literature, feelings of empathy and perceived social norms have been related to intentions to donate. People are more likely to donate and help others when they empathise with them, as well as when they perceive social descriptive norms that support and encourage helping. However, previous work has not considered empathy and perceived social descriptive norms jointly as antecedents of disposition to help. Across seven studies with diverse samples, I assessed the interplay between empathy and perceived social descriptive norms as predictors of disposition to donate. Studies 1 (N = 1300), 2 (N = 144), and 4 (N = 449) were correlational studies, while Studies 3 (N = 209), 5 (N = 103), 6 (N = 141), and 7 (N = 407) had all experimental designs. I expected social descriptive norms and situational empathy to predict general disposition to give monetary donations, and the association of situational empathy with general disposition to give monetary donations to be weaker when social descriptive norms were high.

Mixed results were obtained, but in general, consistent with the hypotheses, across studies perceived social descriptive norms and empathy were significant positive predictors of disposition to donate. However, in the experimental studies only the norms manipulation check measure, and not the norms manipulation itself, was related to disposition to donate. Importantly, in Studies 1, 2, and 3 the association between empathy and donation disposition was markedly weaker, but still significant, when perceived social norms were high, i.e. when norms were in favour of helping.

These results suggest that it is critical to consider the normative context in which helping occurs. Perceived social descriptive norms unmistakably have an effect on behavioural choices, and they might also regulate the impact of other variables previously known to consistently predict helping.

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Chapter 1

Introduction and Contextualisation

Many people donate money around the world, and donations are an indispensable resource to charity organisations. For instance, in Chile in 2015, 92% of the respondents in the Estudio Nacional de Voluntariado (National Study of Volunteering) reported having donated money to organisations and/or people in need (Fundación Trascender, 2015). Moreover, in the United Kingdom, the UK Giving 2017 study suggested an estimated total amount of £9.7 billion GBP donated to charities by adults during 2016 (Charities Aid Foundation, 2017). In addition, during the same year in the U.S., a total amount of \$390.05 billion USD was donated to charities, from which 72% was donated by individuals (Giving USA Foundation, 2017).

The importance of charitable giving has also been reflected in the scientific literature. A PsycINFO search using the following key terms: 'charitable giving', 'donations', and 'philanthropy' in peer-reviewed journal articles returned 21,421 references, which confirms what an important topic charitable giving is to researchers in psychology and across other related disciplines.

In this work, I will focus on a number of related questions about charitable giving. Research has evinced that people will be more likely to donate when they empathise with the target; also, studies have shown that people will be more likely to donate when they perceive that social descriptive norms support giving. But empathy and perceived social descriptive norms have not been studied jointly as precursors of disposition to donate. Thus, do situational empathy and social descriptive norms predict monetary donations even when

controlling for each other's effect? Do situational empathy and social descriptive norms interact? If they do, how do they interact? I studied these questions in seven studies, conducted in a range of diverse settings. Study 1 (N = 1300) was a correlational study that used face-to-face interviews with an adult sample in the main cities of Chile. Study 2 (N = 144) was a correlational online study with an undergraduate student sample. Study 3 (N = 209) was an experimental online study advertised on Reddit with a highly diverse sample. Study 4 (N = 449) was a correlational online study advertised on Crowdflower also with a highly diverse sample. Study 5 (N = 103) was an experimental online study in Crowdflower with participants living in the UK. Study 6 (N = 141) was an experimental online study with an undergraduate student sample. And Study 7 (N = 407) was an experimental online study in Crowdflower with a highly diverse sample.

Apart from empathy and social norms, many drivers of charitable donations and numerous factors that affect monetary donations have been identified. For instance, charitable giving differs by a number of demographic and individual variables, such as gender. Evidence suggests women are more likely to donate to charity than men (Bryant, Jeon-Slaughter, Kang, & Tax, 2003); however, men donate higher mean amounts than women (Charities Aid Foundation, 2017; Wiepking & Bekkers, 2012; Wunderink, 2002). Income also affects charitable giving, since those with higher income donate more frequently and in larger amounts than those with less financial resources (Bryant et al., 2003; Wiepking & Bekkers, 2012; Wunderink, 2002). Elderly people donate more often, and donate larger amounts of money to charities than younger people (Bekkers & Wiepking, 2011; Charities Aid Foundation, 2017; Wunderink, 2002). Charitable giving is associated too with higher educational attainment (Bekkers & Wiepking, 2011; Bryant et al., 2003; Choi & Chou, 2010; Wunderink, 2002), as well as with higher community engagement (Charities Aid Foundation, 2016) and with religious identification (Bekkers & Wiepking, 2011; Bryant et al., 2003; Choi & Chou, 2010). Finally, studies also indicate that married people engage more in monetary donations (Bryant et al., 2003), and that the number of children in a household is also positively related to charitable giving (Wiepking & Bekkers, 2012).

Research has also identified a number of situational variables that are positively associated with charitable giving, such as solicitation of a donation (Bryant et al., 2003; Wiepking, 2010), since people who are asked to donate are more likely to engage in charitable giving than those who are not. Mortality salience, i.e. the awareness of the inevitability of our own death, also sometimes enhances donation in people (Ferraro, Shiv & Bettman, 2005). Moreover, evidence suggests that media coverage increases donations in individuals (Feeny & Clarke, 2007; Simon, 1997), whereas perceived responsibility of the recipient of help for their plight seems to decrease charitable giving (Osborne & Weiner, 2015; Weiner, Osborne, & Rudolph, 2011; Zagefka, Noor, Brown, de Moura & Hopthrow, 2011).

Still, apart from all the factors described above that have an impact on charitable giving, one of the most frequently cited antecedents of helping is empathy (e.g. Batson, Early, & Salvarani, 1997; Hoffman, 2000; Wunderink, 2002). Empathy refers to the emotional reaction we have when we witness or know about another person's situation. Another factor that can affect charitable giving is social norms (e.g. Croson, Handy, & Shang, 2009; Croson & Shang, 2008; Reyniers, & Bhalla, 2013; van Leeuwen, & Jongh, 2015). Social norms refer to the behaviour that is perceived to be common, or the behaviour that is perceived to be appropriate in a given context. In general terms, more feelings of empathy and congruent social norms have been related to more intention to donate. However, this evidence has been obtained in isolation, without using empathy and social norms at the same time. Joint consideration of both variables might be better suited to do justice to the complex context in which charitable giving occurs.

Given the importance of charitable monetary donations, understanding the psychological drivers of donations and the interplay between those different antecedents seems highly relevant. This thesis focuses on charitable giving, and on how empathy and social norms might jointly and interactively motivate donations. The literature on empathy and norms will be summarised more indepth in the following sections.

What is empathy?

The discussion about the selflessness nature of humans has a long history. Some philosophers have argued that people are basically egoistic. In other words, proponents of this view see people as constantly driven by self-interested motivations (Bentham, 1781; Hobbes, 1651). On the contrary, there are others who have defended the view that human beings sometimes act based on altruistic motivations (Hume, 1740; Nagel, 1979). Some social and developmental psychologists who have studied helping behaviours and the motivations behind it adhere to this more optimistic view of human nature (Batson, 1990; Hoffman, 1984), arguing that empathy is one of the most relevant drivers of helping.

But what is empathy? For instance, Smith's (2006) definition of empathy is the "sensitivity to, and understanding of, the mental states of others" (p. 3). Hence, there is an affective and a cognitive element to empathy, which has also been recognised in neuroscience (Shamay-Tsoori, Aharon-Peretz & Perry, 2009). Furthermore, Hoffman defines empathy as "an affective response more appropriate to another's situation than one's own" (Hoffman, 2000, p. 4). At first glance, only the affective element is acknowledged in this definition, but the differentiation of the self and the other requires a cognitive effort. De Waal's (2008) evolutionary definition of empathy helps clarify this distinction. He explains that the empathic processes comprise emotional contagion, then sympathetic concern, and finally empathic perspective-taking. In the emotional contagion stage, one party will be affected by other's arousal or emotional state by reflex. An example would be the contagious cry of babies. In the sympathetic concern stage, there is an appraisal of the other who is the source of emotions. Hence, it requires making a distinction between the other and the self. Feelings of concern for others or acts of giving consolation would be manifestations of sympathetic concern, since they require the realisation that the issue resides within another person separate from the self. Finally, empathic perspective-taking refers to the understanding of another person's point of view.

In the psychological literature, there are some concepts that are closely related to empathy. I will briefly review these to achieve a greater conceptual clarity. Some psychologists and philosophers (Baldner & McGinley, 2014;

Darwall, 1998; Eisenberg & Miller, 1987; Gerdes, 2011; Maibom, 2014) have highlighted a differentiation between empathy and sympathy. Researchers have defined empathy as an emotional reaction that is congruent with the emotion that another person feels because of his or her situation. There is a component of sharing the same emotion of the other person, i.e. an isomorphic affective state. Whereas sympathy would be an emotional reaction of concern, sorrow or compassion in response to another person's situation, emotional state or lack of well-being, thus is not the same affective state of the target. In other words, according to this distinction to feel sad because another person is sad would correspond to empathy, but if in this same situation the feeling triggered is mainly compassion or sorrow for that person, that would correspond to sympathy. Also, Baldner and McGinley (2014) state that sympathy can only be felt when the target is suffering (as opposed to when the target is glad or joyful), making empathy and sympathy clearly different concepts. However, Batson, Fultz and Schoenrade (1987) restrict their definition of empathy to situations where the target is in need and define it as feeling a vicarious emotion that is congruent to another person's feelings and that is more other-focused than selffocused. In this way, Batson et al. (1987) merge sympathy and empathy in their definition, and other researchers have followed suit (Hoffarth, & Hodson, 2014; Ma-Kellams, & Blascovich, 2013; Negd, Mallan, & Lipp, 2011; Oceja, Ambrona, López-Pérez, Salgado, & Villegas, 2010). Considering that both empathy and sympathy are focussed on the target in need and not on the self, and that I focus on helping, for the purpose of this thesis I also merge empathy and sympathy and use them synonymously. This also is in line with the concept of empathic distress that Hoffman (2000) uses which combines empathy, i.e. feeling what the other person is feeling, and sympathy, i.e. feeling compassion for the other person.

Batson et al.'s (1987) definition points to another important distinction that should be made between feelings of empathy and personal distress. While empathy in this thesis, as already defined above, consists of feelings such as concern for the other person, warmth, sympathy, compassion, and tenderness, personal distress would be equivalent to feeling disturbed, alarmed and troubled

(Batson, Early, & Salvarani, 1997). The main difference between these two types of feelings is the focus of attention triggered by the emotional reaction. That is, empathy is an other-oriented emotional reaction (Batson, 1990) -focussed on the target of help- whereas personal distress is more self-oriented. Along these lines, Batson, Early and Salvarani (1997) found that imagining how another person in need felt in a given situation triggered different feelings than imagining what one would feel in that same situation. Participants who were instructed to imagine another person's feelings in a certain context (i.e. imagine other condition) reported more feelings of empathy than distress, whereas those who imagined themselves in that same situation (i.e. imagine self condition) reported high levels of both distress and empathy. Hence, distress can be triggered when the self is the focus of attention, which confirms that personal distress is a self-oriented emotional reaction. Research on these two feelings suggests that empathy fosters helping behaviour because helping decreases the need and distress of the target of help. In contrast, since personal distress is focussed on the self, it triggers avoidant behaviours designed to decrease the uncomfortable feelings that the target of help evokes (Batson, 1987, 1991). In other words, empathy would trigger an impulse to 'fix' the source of the problem (i.e. the other person's need), whereas distress might be more likely to trigger a desire to avert one's attention from the problem to obtain immediate relief from the negative emotions. However, in line with the negative-state relief model, Cialdini and his colleagues have shown that feelings of sadness and sorrow can be related to helping (Cialdini, Kenrick, & Baumann, 1982), and that people can help motivated by the egoistic reason of relieving their own sadness rather than the target's grief (Baumann, Cialdini, & Kenrick, 1981; Cialdini & Kenrick, 1976; Cialdini et al., 1987; Kenrick, Baumann, & Cialdini, 1979; Manucia, Baumann, & Cialdini, 1984).

Hoffman (2000, 2008) also makes a differentiation between empathy and distress, although he adds a quantitative difference between them. In particular, he posits that sometimes the distress cues that elicit empathic arousal are so extreme that the level of distress becomes too much to bear. This personal distress draws attention to the self and away from the target of help, which

triggers aversive behaviours instead of helping the target. This is what Hoffman calls 'empathic overarousal'. According to this view, the positive relationship between the target's distress, the empathy felt and posterior likelihood of helping should have a threshold, because big amounts of distress could lead to an empathic overarousal, which will then reduce the likelihood of helping.

Authors also distinguish between situational and trait empathy (Baldner & McGinley, 2014; Maibom, 2014; Verhaert & Van den Poel, 2011). Situational empathy refers to an emotional state with empathic feelings for a particular target in a specific setting, while trait empathy refers to a more stable personality aspect. In order to clarify this distinction, it is useful to review the most wellknown measures that researchers have developed for each type of empathy. Batson (1987) developed an emotional response questionnaire in which he measured situational empathy and personal distress in reaction to a person in need. Participants completing the measure have to indicate how strongly do they feel or to what extent do they experience each of the emotion adjectives in a list in relation to the target. The six empathy items are 'sympathetic', 'moved', 'compassionate', 'tender', 'warm', and 'soft-hearted'. The 8 personal distress items are 'alarmed', 'grieved', 'upset', 'worried', 'disturbed', 'perturbed', 'distressed', and 'troubled'. Since my definition of empathy is in line with what Batson et al. (1987) posits, for the purpose of this thesis I use this measure of situational empathy.

Besides situational empathy, there is the construct of empathy as a personality trait. Davis (1980, 1983) developed the Interpersonal Reactivity Index, which is a measure of trait empathy that has four dimension subscales with 7 items each. The *perspective-taking* subscale reflects the ability and the ease with which one can put oneself in other person's place (e.g., 'I try to look at everybody's side of a disagreement before I make a decision', and 'I sometimes find it difficult to see things from the "other guy's" point of view' (reversed item)). The *fantasy* subscale refers to the ability to identify with characters in fictional situations, such as novels (e.g., 'I really get involved with the feelings of the characters in a novel' and 'Becoming extremely involved in a good book or movie is somewhat rare for me' (reversed item)). The *empathic concern* subscale

refers to the extent in which we have feelings of concern and warmth for others (e.g., 'When I see someone being taken advantage of, I feel kind of protective toward them' and 'Other people's misfortunes do not usually disturb me a great deal' (reversed item)). And finally, the *personal distress* subscale reflects the extent in which we feel anxiety or discomfort when we witness somebody having a bad experience (e.g., 'In emergency situations, I feel apprehensive and ill-at-ease' and 'I am usually pretty effective in dealing with emergencies' (reversed item)). Davis's (1980, 1983) empathic concern and personal distress dimensions tap into more general personality traits than Batson's (1987) situational empathy and personal distress. Also, Davis's perspective-taking and empathic concern subscales can be seen to correspond to a cognitive and an affective element of empathy, respectively.

In sum, trait empathy would correspond to a general tendency to react in an empathic or non-empathic way across different situations. It is a personality trait; thus, it is stable. Situational empathy would be an emotional reaction with empathic feelings in a particular context. Therefore, one person can have different levels of situational empathy depending on the setting and the target, whereas his/her level of trait empathy would not change. Since trait empathy is a general predisposition of having empathic thoughts and feelings towards others, it is not surprising that both indexes -trait and situational empathy- are moderately correlated (Baldner & McGinley, 2014). Indeed, people with high levels of trait empathy are more responsive to situational cues, as well as emotionally vulnerable (Archer, Foushee, Davis, & Aderman, 1979; Foushee, Davis, & Archer, 1979). Having said that, this thesis will focus on situational empathy and not on trait empathy. The rationale behind this decision is that a wide range of possible targets of help can be found in charitable giving situations, for example homeless people, elders, sick people, children in need, animals in need, etc. These various targets can each trigger contrasting emotions such as pity, warmth or disgust (Fiske, Cuddy, Glick, & Xu, 2002, Harris & Fiske, 2006; Sevillano & Fiske, 2016), making settings very different from each other. Hence, it makes more sense to consider situational empathy instead of trait empathy, since the last one does not take into account differences in context and target. In other words, situational empathy would be more proximate to behaviour than trait empathy. In addition, there is an extensive line of research conducted mainly by Batson and colleagues (e.g. Batson, 1987, 1990) that has focus on the effect of situational empathy on helping behaviours. This thesis will be based on that work.

To summarise, empathy for the purpose of this thesis is defined as a consistent or congruent emotional state in response to how another person is feeling in a given situation, that is, it is other-oriented. In this definition, I also include those emotions that sometimes have been called 'sympathy', such as concern for the person in need.

Empathy as a driver of prosocial and helping behaviour

Having pondered these theoretical and definitional issues, I am now in a position to consider the empirical evidence around empathy and monetary donations. Some psychologists have studied empathy and have presented it as one of the main antecedents of prosocial behaviour, indicating that people who feel for those in need are more likely to help them (e.g., Eisenberg & Miller, 1987, Habashi, Graziano, & Hoover, 2016; Hoffman, 2000, 2008). Moreover, the more distress the target of help is feeling and the more empathy one feels, the quicker is our helping reaction (Hoffman, 2008).

This relationship between empathy and helping behaviour has been largely evidenced in the literature (e.g. Batson, 1991; Coke, Batson & McDavis, 1978; Davis, 1994). For instance, Pavey, Greitemeyer, and Sparks (2012) conducted three studies in which they showed evidence supporting the empathyhelping association, considering both situational and trait empathy. In particular, the first study was an online questionnaire in which participants had to read a vignette about a person who was involved in a car accident and thus could not go to work. Then, situational empathy and willingness to help the person were measured. This study showed evidence supporting the link between situational empathy and willingness to help the target, whereby indicators of help were both offers of time and money.

The second study in Pavey et al. (2012) consisted of two self-report questionnaires. In the first questionnaire, the researchers measured trait empathy using three of the four subscales of the Interpersonal Reactivity Index mentioned above: Empathetic concern, Perspective taking, and Personal distress (Davis, 1980, 1983). Prosocial intentions were also measured with various items in which participants indicated to what extent they intended to help friends, strangers, and the community, to what extent they intended to help charities by giving monetary and material donations, and to what extent they intended to volunteer during the following two weeks. In the second questionnaire two weeks later, participants were asked to what extent they performed each of those same prosocial behaviours during the previous two weeks. Data in Study 2 supported the association between trait empathy –particularly empathic concern– and prosocial intentions. Trait empathy –but only the empathic concern dimension– was related to self-reported prosocial behaviour measured two weeks later.

Finally, in study 3, the authors replicated the results of the first study but in an experimental design in which they manipulated situational empathy. The manipulation consisted of participants reading a vignette about a woman with depression. Participants in the high empathetic arousal condition were instructed to focus on the woman's emotions, while those in the low condition were instructed to focus on objective details of the story. This type of perspective-taking instruction manipulation has been widely used previously in research about empathy (e.g., Batson, & Ahmad, 2001; Batson et al., 1991; Batson, Chang, Orr, & Rowland, 2002; Batson et al., 1988; Batson, Early, & Salvarani, 1997; Batson, Sager, et al., 1997). The authors measured willingness to help by offering financial help and time. Participants in the high empathetic arousal condition were more willing to help the woman in the vignette by giving money and time than those in the low condition.

Along the same lines, Eisenberg and Miller (1987) conducted a metaanalysis that showed that the relationship between empathy and prosocial behaviour largely depended on how empathy was measured. When picture/story procedures were used, the relationship between empathy and prosocial behaviour was non–significant. Picture/story procedures consist of telling the participants a story while showing them some pictures of the protagonist. Then participants are asked about how they feel, and if they report an emotion which is congruent or similar to that of the protagonist in the story, this is considered an empathetic response. When empathy was not measured with picture/story procedures but when procedures such as self-reports or physiological indices were used, the relationship between empathy and prosocial responses became significant. Hence, most of the empathy measures in the studies considered in the meta-analysis were positively related to prosocial behaviours.

There is also evidence for the association between empathy and helping behaviour within the field of neuroscience. In a neuroimaging study, Morelli, Rameson and Lieberman (2014) found that an area in the brain called septal area was the only common region that became activated when participants were asked to empathise with individuals feeling three different emotions: pain, anxiety and happiness. They also found that the activity in the septal area predicted daily helping behaviours towards strangers or acquaintances across 14 consecutive days. In addition, the septal area has been previously associated with prosocial sentiments (i.e. guilt, pity and embarrassment) and charitable donations (Moll et al., 2006, 2011).

Batson (1987, 1990) has been a strong advocate of the empathy-helping relationship, maintaining that at the base of this connection there is an important altruistic element (i.e. empathy-altruism hypothesis). The driver for helping is seen to be that people care for another person's wellbeing. He argues that helping is not egoistically motivated. Thus, there are several factors which Batson does not consider to be driving forces of helping behaviour: he disregards motivations to reduce aversive feelings of personal distress, motivations to avoid aversive experiences such as social disapproval, shame, sadness, and guilt about not helping, and seeking rewards and positive connotations that come with helping (Cialdini et al., 1987; Manucia et al., 1984; Olthof, 2012; Wakefield & Hopkins, 2017).

However, others have found that the motivation for helping may not be altruistic after all, and that empathy as a predictor of helping may vary across contexts. For instance, Cialdini, Brown, Lewis, Luce, and Neuberg (1997) coined

the term 'oneness' to refer to a self-other overlap or merger in terms of their cognitive representation. The concept was developed based on the idea of a fluid and malleable sense of self, and on evolutionary theory that posits that some cues would signal genetic commonality, which would trigger oneness. The authors measured oneness with two items. The first one asked participants how much overlap was perceived between the target of help and the self with a set of 7 Venn diagrams. Each diagram had a pair of circles that were gradually overlapping. The second item asked to what extent the participants would use the word 'we' to describe their relationship with the target. Cialdini et al. (1997) found that empathy disappeared as a significant predictor of helping when oneness was entered into the equation, leading the authors to conclude that helping is egoistically motivated (i.e., driven by a concern for the self) and not altruistically motivated (which would imply behaviour to be driven by a 'true' or 'pure' concern for the other). This view clearly contradicts Batson's position (1987, 1990), as offering help in a situation in which the other and the self are strongly overlapped would help the self as well, casting doubt on the altruistic nature of helping.

Indeed, previously Sole, Marton and Hornstein (1975) found that people were more likely to help a stranger when the similarity of opinions between both people was high. Later, Hornstein (1978) posited that similarity might increase the sense of we-ness, which might have helped produce the previous results. Moreover, James and Zagefka (2017) found in two experiments that the target of help's ingroup membership –rather than outgroup– had a positive effect on helping. In addition, Stürmer, Snyder, and Omoto (2005) showed in two studies – one longitudinal and the second one an experimental study –that empathy was a good predictor of helping intentions only when the target of help was part of the ingroup. This effect was not found when the target was a member of the outgroup. According to these findings, the closer the relationship with the target of help –that is the less social distance between helper and target –the more empathy will arise towards the target, and the more likely it will be that an intention to help is prompted. Therefore, the closeness between helper and helpee can be considered in different terms, such as an overlap between the self and the

other, the sense of we-ness, the similarity, or the shared ingroup membership with the target of help (Small, 2011). The take-home message of all these studies is that they cast some doubt about the ubiquity of the claim that altruistic concerns for the person in need, and empathy, are always good predictors of helping.

Taking one step back in the causal chain, there are various variables that can be assumed to increase help-inducing empathy. One way of decreasing perceived social distance between the helper and the helpee, and therefore of potentially increasing empathy, is to give details about the target's life, making that person identifiable. The identifiable victim effect (Schelling, 1968) shows that when a previously anonymous target of help is made recognisable, and when distinct individuals are presented rather than abstract statistics, helping is increased. Moreover, it is not even necessary to give detailed information about the victim; merely determining the target of help without any extra personalised information (versus an undetermined victim) is enough to increase feelings of empathy and donations (Small & Loewenstein, 2003). Furthermore, the effect is larger with one identifiable victim than with a group of identifiable victims (Kogut & Ritov, 2005). This suggests that people are more likely to feel empathy towards a person with a face and/or a name, than towards an abstract number of people in need. Having an identified (rather than anonymous) victim can decrease social distance, increasing empathy, and likelihood of helping.

Moreover, empathy may also be affected by previous exposure to different experiences. For instance, people with previous experiences of rape and abuse reported feeling more empathy towards victims of this type of violence than those without any previous experiences of the same type, and consequently the former group of people were more likely to help (Barnett, Tetreault, Esper, & Bristow, 1986; Christy & Voigt, 1994). Also, people with friends and loved ones who have suffered a particular hardship are likely to feel more empathy towards others suffering from those same difficulties. In other words, previous friendship with a victim can have an effect on empathy and prosocial behaviour towards another victim of the same misfortune (Small, & Simonsohn, 2008).

Another important issue is the stimuli that are used to generate empathy. Hoffman (2008) posits that there are different modes of arousing empathic reactions. One of those is the preverbal mode that uses images and sound (e.g. cries, sobbing) to trigger empathy. Normally, when we read about someone else's plight, we have to decode that message using semantic processing (i.e. a higherorder processing of the meanings of words). This procedure can increase social distance with the target by separating emotions from written text, making it less likely that empathy is evoked. However, one might expect different reactions if the stimulus is the image of a distressed face. The image, but not the text, can activate preverbal arousal modes and decrease the social distance between the helper and the target of help. These preverbal modes, according to Hoffman, are present in infants and all throughout life. However, in adulthood semantic processing also becomes important as a way of decoding messages that may arouse empathy. This is supported by research in advertising and persuasion, which has shown that images play a very important role in semantic processing, learning, and attitudes (Childers, & Houston, 1984; Finn, 1988; Miniard, Bhatla, Lord, Dickson, & Unnava, 1991; Mitchell, 1986).

In sum, although numerous studies –notably by Batson (1987, 1990)– have supported the claim that altruistic empathy leads to helping, other work–such as that by Cialdini (Cialdini et al., 1997) – has challenged this view. An important issue that has emerged is that empathy might only be effective under conditions of oneness/self-other overlap/ingroup membership, although again not all researchers agree with this proposition. While some researchers see oneness as the 'real' force behind the observed (and falsely interpreted, they claim) empathy effects (e.g., Cialdini et al., 1997), others see it as a necessary condition, i.e. a moderator (e.g., Stürmer et al., 2005), and yet others (e.g., Hornstein, 1978) see it as the alternative reason why helping towards strangers occur, preferring this more cognitive explanation than empathy. Various variables (e.g. identifiability, previous experiences, and type of stimulus) can be thought to affect the extent to which the person in need is experienced as close to or distant from the helper, and the extent to which empathy and helping intentions are triggered. Thus, the literature seems to suggest that in general empathy is a good

predictor of helping. However, it also seems that sometimes empathy may be difficult to trigger, and there is debate about the preceding conditions that give rise to empathy, and the boundary conditions that might limit its effect.

In addition to the theoretical arguments for the limits of the effectiveness of empathy, there are some practical concerns, which raise questions about whether this variable is one of the most important drivers of helping in the specific context of people responding to a charitable donation appeal. Specifically, these appeals do not take place in an interpersonal setting in which only the potential donor and the target of help are present, but there are also social factors (i.e. related to social groups) that are implicitly working behind the scenes, and that might have an effect not only on helping but also on the relationship between empathy and helping. For example, as explained above, Stürmer et al. (2005) showed that group memberships, a social factor, can have an impact on how empathy relates to helping. As Simpson and Willer (2015) state, social factors external to the individual, such as social norms, social networks or social categories, can have extensive effects on helping. These forces can interact with factors internal to the individual or at an interpersonal level, like empathy, therefore reducing the causal effects of individual differences on prosocial behaviour. Hence, social variables may have powerful effects too on donation decisions in charitable donation appeals. Moreover, research on empathy has characteristically focussed on helping between individuals (i.e. at an interpersonal level), without giving much consideration to group or social influences (van Leeuwen, & Zagefka, 2017). How do social factors interact with more internal factors, such as empathic reactions? Is it possible that monetary donations, rather than being affected mostly by empathic emotions, might be affected at the same time by social factors as well? Those are central questions the present thesis attempts to answer.

So, according to what has been presented, a relevant line of research conducted mainly by Batson and colleagues, has identified empathy as a strong antecedent in the study of helping behaviours – the empathy-altruism hypothesis. In an effort to add social factors to this picture, other researchers have considered not only the effect of empathy on helping, but the effect of group membership too

(e.g., James & Zagefka, 2017; Stürmer et al., 2005; Tarrant, Dazeley & Cottom, 2009). In this thesis, to support this endeavour to expand the focus to a social level instead of focusing only on the interpersonal level, social norms will be studied as an antecedent of charitable giving along with empathy. According to Self-Categorization Theory (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), people internalise norms of the group with which they identify. Therefore, all members of the group will share that group's norms. Moreover, people will express their social identity by following ingroup norms as a way to achieve positive distinctiveness (Jetten et al., 1996; Marques et al., 1998). Social norms, descriptive norms specifically, were considered in this thesis since there is extensive research that has supported its effect on behaviour and in helping behaviour in particular, as will be described in the following sections (e.g., Agerström, Carlsson, Nicklasson, & Guntell, 2016; Croson & Shang, 2008; Frey & Meier, 2004). It is expected that empathy and norms will predict charitable donations and also that they both will interact. This based on the logic behind Focus Theory (Cialdini, Kallgren & Reno, 1991), that is, that behaviour will be consistent with the source of information or motivation that is more salient at the moment. Therefore, it is expected that empathy will guide behaviour more strongly when norms are not salient, and that this effect will be weaker when norms become more salient. This rationale is also supported by the importance of group membership that make people strive to conform to norms (Jetten, Spears & Manstead, 1996; Marques, Abrams, Paez & Martinez-Taboada, 1998), by the moderating role of the strength of the situation on the influence of personality on behaviour (Cooper & Withey, 2009; Mischel, 1977), and the limited attentional resources we have that make it difficult to focus on different sources of information (Chajut & Algom, 2003; Stothart, Mitchum, & Yehnert, 2015). I will come back to these points later when discussing the expected interaction between norms and empathy.

What are social norms?

Cialdini, Reno and Kallgren (1990) distinguished between two types of social norms: descriptive and injunctive norms. The first one refers to what is

typical behaviour or what is normally done -a description of the normative conduct—. Injunctive norms refer to what we perceive other people think is best to do -it is related to beliefs about what constitutes approved conduct (i.e. what we ought to do)-. Social norms can affect our behaviour through two types of influence (Cialdini et al., 1990). Firstly, the behaviour of others can affect ours through informational influence, because it communicates to us what is the most effective and adaptive way to behave in a given situation. Hence, descriptive norms may have an informational influence on our own behaviour, because following others' usual demeanour might be the easiest and more effective way of conducting oneself (Cialdini, 2001; Cialdini et al., 1990). Secondly, social norms can influence us in a normative way, because we strive for our behaviour to be socially acceptable since there may be negative social consequences if we do not do what it is expected from us. Thus, by acting in a certain way we can get others to like us, and non-compliance may lead to punishment (e.g. rejection) (Campbell & Fairey, 1989; Cialdini et al., 1990; Deutsch & Gerard, 1955). Thus, injunctive norms can impact us by normative influence. Moreover, Focus Theory (Cialdini et al., 1991) states that in order for social norms to inform behaviour, norms must be activated first. This because the source of information more prominent at the time will inform behaviour more strongly. Therefore, people must first focus on social norms so they can adjust their behaviour to those guidelines.

For purpose of this thesis I will focus on the effects of descriptive norms on charitable giving, since this effect has been consistently evinced in multiple studies (Croson, & Shang, 2010; Everett, Caviola, Kahane, Savulescu, & Faber, 2015; Frey & Meier, 2004; Hysenbelli, Rubaltelli & Rumiati, 2013; Nook, Ong, Morelli, Mitchell, & Zaki, 2016), and it has been shown to be more substantial than the effect of injunctive norms on behaviour (Mollen, Rimal, Ruiter & Kok, 2013; Park & Smith, 2007; Robinson, Fleming & Higgs, 2014; Silke, Swords & Heary, 2017; Smith et al., 2012). Moreover, being generous is often considered as a good and desired quality. Hence, helping others usually would be perceived as a socially approved conduct. Considering this, it can be assumed that there will

be more variability in people's perceived descriptive norms than perceived injunctive norms about helping.

There are numerous studies that evince the influence of others' behaviour on our own conduct. What other people usually do in a given situation can guide our behaviour when we find ourselves in that same situation. This is especially true in novel and ambiguous contexts (Baron, Vandello, & Brunsman, 1996; Crutchfield, 1955; Festinger, 1954; Levine, Higgins, & Choi, 2000; Tesser, Campbell, & Mickler, 1983), and in public settings (Argyle, 1957; Campbell & Fairey, 1989), because people have an inherent motivation to act upon perceived social norms (Deutsch & Gerard, 1955; Jetten et al., 1996; Marques et al., 1998). Because of these demonstrated strong effects, descriptive norms were given particular attention in the current thesis.

One of the most well-known studies on the importance of the behaviour of others is the one conducted by Goldstein, Cialdini, and Griskevicius (2008). They investigated the impact that social descriptive norms have on pro environmental behaviour. They designed two field experiments in hotels in the U.S. in which they used different messages printed on signs to invite guests to reuse their towels. In the control conditions, they used the common message in which they asked for guests to participate in the programme because it would help the environment (which was the one that was already used by the hotel). Guests in the other condition saw the exact same sign with a message that read that 75% of the guests have participated in the programme. As hypothesised, there were more guests that participated in the programme in the descriptive norms condition than in the control one. Also, they found that the social norms message had a stronger effect when the guests in the description were of a more immediate contextual reference group to the participants (i.e. when the normative message was about guests who stayed in the same room rather than about hotel guests in general, citizens and men/women).

It should be acknowledged that Goldstein et al.'s (2008) study has not unequivocally stood up to replication attempts. Reese, Loew and Steffgen (2014) conducted a similar study in hotels located in Switzerland and Austria. The towel usage in the standard message condition (i.e. control condition with an

environmental message) was no different than in the global descriptive norms (i.e. the normative message about hotel guests in general), and in the provincial descriptive norms conditions (i.e. the normative message about hotel guests in the same room). But they did find a significant drop in the number of towels used in the provincial descriptive norms in comparison to the global descriptive norms condition. Thus, they found a difference that supported Goldstein et al.'s (2008) finding related to provincial social norms, i.e. norms that describe the conduct of those of the immediate contextual reference group were more effective in changing behaviour than those describing conduct of people globally. However, Reese et al. (2014) did not replicate the result that messages with a social norm – either provincial or global norm- was more effective than the standard message. Reese et al. (2014) suggested that this could have happened because the 75% that was used in the message as a descriptive norm might be regarded differently in the U.S. (the context of Goldstein et al.'s (2008) study) and in Europe, specifically considering the difference between CO2 emissions in those contexts. That is, in Europe 75% might be deemed as a low proportion, while in the U.S. it could be seen as a large one, considering the difference in general pro environmental attitudes in those contexts.

Furthermore, Bohner and Schlüter (2014) also tried to replicate Goldstein et al.'s (2008) study in a hotel in Germany. In their first study, they did not find any difference between the standard message condition and the combined descriptive norms conditions. Additionally, the provincial norms condition triggered less towel reuse than the general social norms condition, which significantly differed from what was found by Goldstein et al. (2008) and Reese et al. (2014). In their second study, Bohner and Schlüter (2014) added a no message condition. The no message condition was less effective than the standard and norms conditions combined, whereas this time the standard message condition was more effective than the descriptive norms conditions combined. This last result greatly differed from the results obtained in their first study, and in Goldstein et al.'s (2008) and Reese et al.'s (2014) studies. After looking at the different results yielded, Bohner and Schlüter (2014) suggested that 75% might mean different things in the U.S. and in Germany, as Reese et al. also speculated,

and that to replicate the study they might need to use a higher percentage (e.g., 90%). This interpretation is supported by the higher rates of towel reuse found in all conditions in the hotel in Germany, including the no message condition, in comparison to those in the U.S. reported by Goldstein et al. (2008). Indeed, Schultz and his colleagues posit that descriptive norms can have a boomerang effect, since they provide a standard that attracts all people that deviate from the norm, i.e., those who are above and below that norm (Schultz et al., 2016; Schultz, Nolan, Cialdini, Goldstein, & Griskevicius, 2007).

Nonetheless, despite the differences in results in these three papers (i.e. Bohner and Schlüter (2014), Goldstein et al. (2008), and Reese et al. (2014)), overall there seems to exist some evidence that descriptive social norms can influence behaviour. However, the context in which norms are invoked seems to be important for shaping behavioural outcomes. The effect of social norms on behaviour has also been evinced in other studies and contexts, such as Cialdini et al.'s (1990) studies about littering in public spaces, Doran and Larsen's (2015) study about eco-friendly travel options, Nolan, Schultz, Cialdini, Goldstein and Griskevicius's (2008) and Schultz et al.'s (2007) studies regarding energy conservation, and Schultz et al.'s (2016) study about water consumption, among others.

Social descriptive norms as a driver of prosocial and helping behaviour

The effects of social norms on behaviour have also been observed in the context of monetary donations. Shang and Croson (2009) conducted a field experiment involving a fundraising appeal aired on a public radio station. In this study, they modified the message given to potential donors who called in to contribute. Before asking for the amount participants would pledge, the researchers told them that the previous donor allegedly gave a certain amount of money. In the control condition, participants did not receive information about the previous donation. It was found that monetary donations increased in line with the amount allegedly given by the previous donor. However, this effect of social information was only present in new donors, and not in those that had contributed to the radio in the past.

A similar effect was found in a previous study from the same authors (Croson & Shang, 2008). They conducted a field experiment involving a fundraising effort by a public radio station, but now with existing benefactors that were going to renew their membership. Participants were told that another contributor had allegedly donated more, the same, or less than what the participants donated in the previous year, depending on the experimental condition. Researchers observed the impact of these messages on the change between the participants' current and previous donations. The authors found that participants' current contributions were influenced by information about what others had allegedly contributed. When participants were told that the other contributor donated more than what the participant donated last year, participants' current donation increased in comparison to last year's contribution. And as expected, when they were told that the other contributor donated less than the amount participants donated the previous year, their donation decreased.

Even though the previous studies (Croson and Shang, 2008; Shang & Croson, 2009) seem very consistent in their support of the effect of social descriptive norms on monetary donations, when they are examined in detail one important issue can be noticed. While social norms refer to what is normally done or accepted by a reference group, in these studies the researchers designed the manipulation by giving the participants information of just one other donor. The authors considered this a manipulation of social information that could be related to social norms, but it is not a social norms manipulation per se. As a way of bridging the gap between social information and social norms, Croson et al. (2009) conducted an experiment in which they manipulated social information, and measured descriptive social norms and amount of future monetary donation. Participants read a short vignette in which they were presented with a hypothetical scenario. In the scenario, they had decided to donate in a fundraising campaign of a local public radio station. They read that they had called the station and contributed \$25, and the volunteer had told them that another contributor had donated a certain amount of money. Participants in the high social information condition read that the other contributor has donated \$50, while those in the low social information condition read that the amount given by the other donor was \$10. Then participants were asked how much money they thought an average listener would donate (i.e. perceived descriptive norms). And finally, they were asked how much money they would donate next year to the radio station. The researchers found that the effect of social information on future donation was fully mediated by perceived descriptive social norms. Hence, despite the fact that in the previous studies social norms were not manipulated or measured, it can be assumed that by manipulating social information, perceived descriptive social norms were affected too.

Agerström et al. (2016) conducted a field study to test the effect of local and global descriptive norms on donations. The design involved a fundraising campaign for a real non-profit charity organisation in Sweden focussed on improving living conditions of children in Uganda. The experimenters had a charity stand in one of the university corridors with brochures and posters advertising the fundraising. Participants consisted of students who walked through that corridor and who received brochures from the experimenters regarding the charity fundraising campaign with a paper attached asking for a donation of 20 Swedish crowns. In the local norms condition, students also read in the paper attached that allegedly 73% of the students in that university had donated 20 crowns when asked to do so. In the global norms condition, students instead read that allegedly 73% of the students from universities in Sweden had donated 20 crowns. Finally, in the control condition participants only read the charity's 20 crowns appeal. The authors found that participants in the norms conditions combined donated larger amounts of money and were more likely to donate than those in the control condition. Moreover, those participants in the local norms condition donated larger amounts and were more likely to donate than those in the global norms condition. Hence, Goldstein et al.'s (2008) results about pro environmental behaviour were consistently replicated in this study about charitable giving. The effects of other relevant variables were controlled for, such as volunteering role modelling, parenting dimensions, and demographic and economic variables. Furthermore, the effect of descriptive norms on prosocial behaviour and charitable giving in particular has been supported by multiple other studies (Croson, & Shang, 2010; Everett, Caviola, Kahane, Savulescu, & Faber, 2015; Frey & Meier, 2004; Hysenbelli, Rubaltelli & Rumiati, 2013; Nook, Ong, Morelli, Mitchell, & Zaki, 2016).

Thus, research states that what other members of a relevant reference group do in a given context, shape social norms that can impact our own behaviour. For this to happen, norms must be made salient or focused upon. This effect holds across a range of different behaviours, e.g. pro-environmental behaviours (Cialdini et al., 1990; Doran & Larsen, 2015; Nolan et al., 2008; Reese, Loeschinger, Hamann, & Neubert, 2013), alcohol drinking (Glider, Midyett, Mills-Novoa, Johannessen, & Collins, 2001; Haines & Spear, 1996; Perkins & Berkowitz, 1986), safe-sex practices (Buunk, Bakker, Siero, Van den Eijnden & Yzer, 1998; Latkin, Forman, Knowlton & Sherman, 2003; Yang, Latkin, Luan & Nelson, 2010), consumer behaviour (Clark, Zboja & Goldsmith, 2007; Goldsmith & Clark, 2012), healthy behaviour (Lally, Bartle & Wardle, 2011; Sieverding, Decker & Zimmermann, 2010), and -most importantlyhelping behaviours and charitable giving as well (Agerström et al., 2016; Croson et al., 2009; Croson & Shang, 2008; Croson, & Shang, 2010; Everett et al., 2015; Frey & Meier, 2004; Ottoni-Wilhelm, Estell, & Perdue, 2014; Shang & Croson, 2009).

The joint effects of empathy and social norms on helping

From the research reviewed previously it can be concluded that empathy and social descriptive norms are powerful antecedents of prosocial behaviour and monetary donations. However, both lines of research have been largely developed in isolation from each other. Apart from this, research on helping has been mostly conducted considering behaviour between individuals, without much consideration of social variables (i.e., that take into account factors related to social groups), such as group membership or social norms (van Leeuwen & Zagefka, 2017). For example, Batson's extensive line of research on the effects of empathy on helping (e.g. Batson, 1990, 1991; Batson et al., 2003; Batson, Sager, et al., 1997) do not ponder the potential impact of social variables. Yet helping behaviours do not happen in a social vacuum, and multiple variables at different levels (i.e. intrapersonal [e.g. personality traits], interpersonal [e.g.

emotional reactions like empathy or attraction] or social [e.g. social categories or social norms]) might have an impact on donations. Not only that, but these variables may very likely interact with each other (Cooper & Withey, 2009; Mischel, 1977; Simpson & Willer, 2015), such as the interaction of group membership and empathy on helping (Stürmer et al., 2005). This is a relevant shortage in social research, as the effects of empathy and social norms on charitable giving might be overestimated if by design these variables are not considered jointly, since the effects of the respective other variable will be unaccounted for. Also, the interplay between empathy and social norms has not previously been considered. Therefore, the purpose if this thesis is to evaluate jointly the distinct and unique effects of social descriptive norms and situational empathy towards the recipient of help on charitable giving, as well as to examine the possible interplay between these two variables.

There are a few exceptions to this trend of looking into the effects of empathy or social norms on helping separately. For instance, Sierksma, Thijs and Verkuyten's (2014) study aimed to evaluate the effect of perceived descriptive norms towards the outgroup and of trait empathy, among other variables, on intra/intergroup charitable giving within a sample of children. The authors manipulated the recipient of help's need (low vs. high) and the donation's privacy (public vs. private). They found that trait empathy had an effect on participants' intention to donate across conditions, but there was no main effect of norms. Finally, when the donation was public and in the low need situation, there were higher levels of intergroup help than intragroup help, particularly when norms were positive towards the outgroup. Despite the obvious similarity that the objective of Sierksma et al.'s (2014) study seems to have with the purpose of the current thesis, there is an important issue to consider. In Sierksma et al.'s study, descriptive norms were assessed by asking how much participants thought that their classmates liked the outgroup. Hence this measure seems to capture perceived social descriptive norms regarding ingroup attitudes towards the outgroup, and not descriptive norms related to charitable giving. In the current thesis, I aim to assess the effect of descriptive social norms regarding the same behaviour as the one measured in the dependent variable (DV), i.e.

descriptive social norms regarding charitable donations. In addition, I will assess situational empathy and not trait empathy, since the former is a more proximate factor to behaviour.

Tarrant et al. (2009) also examined social norms and empathy. In their second study the authors manipulated perceived norms about empathy (i.e. if the norm was to feel empathy for others or to remain detached from others' experiences), and the target's ingroup/outgroup membership to evaluate the effects on empathy. The authors found that participants who were told that the ingroup norm was to feel empathy for others reported feeling more empathy towards the target compared to those who were told that the norm was to remain detached from others' experiences. There was also an interaction effect, in which the ingroup/outgroup membership affected empathy only in participants that were exposed to the detached norm, without having an effect on empathy in participants in the empathy norm condition. In other words, in the detached norm condition participants felt more empathy towards the ingroup member than the outgroup member. However, there was no difference in empathy by target membership within the empathy norm condition. Also, there was an effect of norms on empathy only in participants in the outgroup target conditions. Finally, in their third experiment, Tarrant et al. (2009) showed that norms about empathy affected empathy and attitudes towards the outgroup. Results also showed that the effect of norms on attitudes towards the outgroup was fully mediated by empathy. Again Tarrant et al.'s (2009) studies are similar in focus to the central questions of this thesis, since they consider normative effects on propensity to help and experience empathy. However, Tarrant et al. did not evaluate the effects of norms and empathy jointly on helping. Moreover, their measure of norms was related to feeling empathy for others and not to donations per se, which will be the focus of the present thesis.

Another exception is the study of Nook et al. (2016), in which they analysed the effect of norms regarding donations on participants' donations, and how donation norms impacted participants' prosocial behaviour by affecting empathy. In the first two studies, they found that social norms impacted participants' donations. In the third study, they found that the effect of social

norms on helping behaviour was mediated by feelings of empathic concern towards the recipient of help only when the target of help felt low distress. However, the main objective of this third study was to evaluate if there was a generalisation of prosocial conformity across different behaviours. Hence, the context in which Nook et al. measured norms and helping behaviour was not the same. In a fourth study, Nook et al. (2016) studied whether social norms regarding empathic responses affected participants' own empathic responses, and they confirmed this effect was stronger with low distress targets compared to high distress targets. Finally, in a fifth study, the authors found that empathic social norms impacted on participants' charitable giving in a different domain. Thus, empathic social norms towards target A and monetary donations towards target B were assessed. In the current thesis, my goal is to test the predictive power of empathy and norms on donations jointly, and to test for interactive effects between empathy and norms, when all constructs refer to the same target of help.

Ottoni-Wilhelm, & Bekkers (2010) used data from the General Social Survey with a representative sample to assess the effects of trait empathy and of the moral principle to care on helping. Ten items from which two were related to monetary donations measured frequency of helping during the last 12 months. One of these two items assessed how often the participant gave money or food to a homeless person, while the other regarded the frequency of monetary donations to a charity. The results of their study showed that the relationship between care and helping was stronger than the empathy-helping association. Furthermore, the authors tested a mediation model in which the empathy-helping relationship was fully mediated by principle of care. Later on, they confirmed the mediation results in four cross-sectional and experimental studies about charitable giving (Bekkers & Ottoni-Wilhelm, 2016). However, their definition and measure of principle of care is different from the concept of social norms. The researchers defined principle of care as a moral position to help those in need, and they measured it with three items to which participants had to indicate their level of agreement. The items were 'People should be willing to help others who are less fortunate', 'Personally assisting people in trouble is very important to me', and 'These days people need to look after themselves and not overly worry about others' (reversed item). Thus, based on the definition they gave and the measures they used, principle of care is more related to an internalised moral value and personal norms regarding helping, than to social norms.

In this thesis, I aim to assess the role of situational empathy and social descriptive norms as antecedents of monetary donations. Based on previous findings described previously I hypothesise that throughout this thesis empathy as well as social norms will be significant predictors of monetary donations.

Moreover, I hypothesise that there will be an interaction between norms and empathy. There is abundant evidence in social psychology for the importance of group memberships in shaping human thought, emotions, well-being, and behaviours (Baumeister, DeWall, Ciarocco, & Twenge, 2005; Baumeister, & Leary, 1995; Gleibs, Haslam, Haslam, & Jones, 2011; Wakefield et al., 2017). Because of the pivotal importance of group memberships, I hypothesise that in situations in which people perceive group norms to be present, these norms will be experienced as prescriptive. That means that people will strive to conform to the norm, regardless of their levels of empathy with a target in need. In other words, norms might 'overpower' and cancel out the effects of other variables which would ordinarily be strong predictors of helping. Hence, even though people may have weak or strong feelings of empathy towards the target of help, the resulting helping behaviour will be particularly driven by group norms, given the severe consequences that follow not conforming to ingroup norms (Abrams, Marques, Bown & Henson, 2000; Abrams, Palmer, Rutland, Cameron & Van de Vyver, 2014; Marques, Yzerbyt, & Leyens, 1988). To put it differently, one can say that it is predicted that 'group norms will trump all'.

In contrast, when group norms are low, i.e. when participants do not perceive that there is a norm which suggests that helping is indicated, they will not feel bound to conform to what is expected of them, and other forces might affect their decision to donate or not, such as empathy felt towards the target of help. Thus, when social norms are low, I expect the empathy-donation association to be stronger than when social norms are more prescriptive.

This prediction is also supported by work that posits that the strength of a situation moderates the association between personality and behaviour (Cooper & Withey, 2009; Mischel, 1977). In situations in which there is no clear guidelines to follow, personality would influence behaviour without much interference. However, in stronger situations, i.e. situations in which there are salient cues that point towards the expected behaviour, the range of behaviours would be restricted and the association between personality and behaviour would be interfered with. Therefore, inner traits would inform behaviour in less extent when situations are strong than when they are weak. Similar mechanisms might be at play here: An affective reaction such as empathy (not as a trait, but situational empathy in this instance) will exert a strong influence on the DV donation, but only if it is not overridden by strong situational forces, i.e. strong perceived social norms. It is important to notice that throughout this thesis situational empathy is used and not trait empathy (this decision was explained in the empathy section). Hence, the strong situation hypothesis might not fit completely, since it refers to personality traits. However, as explained in the empathy section, research has shown that trait and situational empathy are moderately correlated (Baldner & McGinley, 2014) and that those with high levels of trait empathy are more emotionally vulnerable (Archer et al., 1979; Foushee et al., 1979). Therefore, even though the strong situation hypothesis only considers inner traits, it could be argued that because of the relationship between situational and trait empathy, it can still be applied to this context.

A further rationale can be presented on the basis of which an interaction between norms and empathy can be expected. We have limited attentional resources, and consequently we experience difficulties when we try to focus on another stimuli at the same time as we are focusing on one particular cue (Biesanz, Neuberg, Smith, Asher, & Judice, 2001; Chajut & Algom, 2003; Stothart et al., 2015). Empathy requires the person in need to be the focus of attention, while social norms require for fellow ingroup members to be in the spotlight. In situations in which social norms are high, norms will be perceived as prescriptive and they will exert a considerable influence on behaviour. In this situation, people's attention will be focussed on the ingroup members and the

norm established by them, and less attentional resources will be left to attend to the person in need. Because of this, emotional reactions to the person in need will be less relevant in informing behavioural choices; hence empathy effects on donation will decrease. In contrast, when social norms are low, norms will be perceived as more flexible, and there would be more attentional resources to focus on the person in need, as people will not feel compelled to follow an established norm. Thus, empathy will have more space to inform people's behavioural choices. Focus Theory (Cialdini et al., 1991) also points towards this direction. Since behaviour will be consistent with the more prominent source of information at the time, then it is expected that if social norms are perceived as prescriptive, people will act in a norm-consistent way. When norms are perceived as more flexible, they will not be perceived as salient, hence people will act in an empathy-consistent way.

In order to situate the present work within the broader social psychological context, it is useful to provide a brief but broad overview of the theoretical traditions which informed my work. This will be achieved in the following section.

Situating the present work within the broad social psychological literature Social Identity Theory and Self-Categorization Theory

A central theory in Social Psychology is Social Identity Theory (SIT) developed by Tajfel and Turner (1986). It posits that the self can be extended beyond the individual self to other social identities. Whereas the personal identity refers to those qualities and characteristics that help differentiate one person from the other, social identities extend the self to a social unit. By doing this, the identity is no longer personalised, since a social category, a group membership, provides the sense of self. Therefore, the characteristics of the self that will define us will be in line with the social identity made salient at the moment, and these features will differentiate us from other social categories we are not part of (Brewer, 1991; Turner et al., 1987). Moreover, these social identities are an important source of self-esteem. Indeed, ingroup favouritism or intergroup bias refers to the tendency of favouring the ingroup over the outgroup as a self-

enhancing strategy to achieve a positive identity and group distinctiveness (Tajfel & Turner, 1986; Turner et al., 1987).

Social identities affect helping when they are made salient. For instance, Levine, Prosser, Evans, and Reicher (2005) conducted two field experiments to test this. In their first study, Manchester United Football Club fans first answered a few questions designed to make their social identity as Manchester United fans salient. After that, they were told to go to another building for the second stage of the study. While they were walking towards the second building a confederate who was jogging supposedly had an accident and hurt his ankle. The confederate was wearing a Manchester United (ingroup), a Liverpool (outgroup), or an unbranded shirt (neutral), depending on the experimental condition. Results showed that participants were more likely to help the confederate when he was part of the ingroup than when he was part of the outgroup or when he wore a neutral shirt. In the second experimental field study, Levine et al. (2005) replicated the exact same study but in the first stage of the experiment, instead of making salient the Manchester United fans identity, they made salient a more general football fans identity. The results showed that participants were more likely to help the confederate when he was wearing a Manchester United and a Liverpool shirt than a neutral shirt.

James and Zagefka (2017) in their first study also manipulated the ingroup/outgroup membership of the target of help. Participants read a news report that informed participants that floods had left several victims in their own country (ingroup victim condition) or in an outgroup country (outgroup victim condition). Those in the ingroup victim condition were more willing to donate to the victims compared to those in the outgroup victim condition. This effect was supported by the results in their third study, in which the effect of victim group membership on donations was mediated by empathy. This effect of social identities on helping has been evinced in other studies as well (Levine, Cassidy, Brazier, & Reicher, 2002; Levine & Thompson, 2004; Wakefield et al., 2011).

Social identities can not only affect helping directly, but they can also modulate the impact of well-known antecedents of helping. For instance, Stürmer, et al.'s (2005) study already cited in the previous sections, showed the

moderating role of the target of help's group membership on empathy and intention to help. The authors conducted the first study with volunteers of AIDS service organisations that were about to start with a 'buddy/home helper' programme in which they were going to help a client with HIV/AIDS who was homosexual. In this programme, participants were going to have direct contact with the client. Participants had to identify themselves as heterosexual or homosexual. Hence, if volunteers were heterosexual they perceived the client as an outgroup member, whereas homosexual volunteers perceived the client to be a member of the ingroup. Empathy was a better predictor of helping behaviours when volunteers were homosexual than when they were heterosexual. In other words, empathy was a stronger predictor of helping when the target of help was part of the ingroup. In a second study, heterosexual undergraduate students had to allegedly chat online with another person of their same sex. However, the researchers pre-programmed all of the messages participants received, i.e. the interaction was staged not real. In the middle of the conversation the other person told the participant that he/she was homosexual or heterosexual, depending on the experimental condition, and that he/she was having a hard time because his/her partner disclosed that he/she had hepatitis. Empathy predicted helping intentions only when the other person was heterosexual, i.e. an ingroup member.

In their first study, Tarrant et al. (2009) manipulated the ingroup/outgroup membership of the target of help. In a first stage, the researchers made salient the social identity of students from Keele University. After this they showed participants a radio interview transcription in which a university student who had recently lost her parents in a car accident described how she had to take care of her younger siblings. Those in the ingroup condition read that she was a Keele University student, whereas participants in the outgroup condition read that she was a Staffordshire University student. Results showed that participants reported more intentions to help the target, and more empathy, when the target was part of the ingroup in comparison to when it was an outgroup member. The effect of target membership on intention to help was fully mediated by empathy. The studies previously mentioned by Sole et al. (1975), Honstein (1978), and Cialdini et al. (1997) are in the same line as Stürmer et al.'s (2005), and Tarrant et al.'s

(2009) studies, since they show the importance of group-level processes on helping.

Self-Categorisation Theory was developed to explain the mechanisms by which people identify with a group (Turner, et al., 1987). It posits that when a person identifies as a member of a group, he/she will internalise norms and values related to that group. The characteristics associated to these norms and values will generalise to all members, hence there will be a shared stereotype of what a typical member is (Turner, 1982). The features shared by members of the group help keep distinctiveness from relevant outgroups (Turner et al., 1987). Research on social influence has shown the impact that the group has on the self, our attitudes, and behaviour (Guimond, 2000; Turner, 1991). Social identities can affect our behaviour and attitudes through ingroup norms (Jetten, Postmes, & McAuliffe, 2002; Livingstone, Haslam, Postmes & Jetten, 2011; McAuliffe, Jetten, Hornsey, & Hogg, 2003). Because people strive to achieve positive distinctiveness, they will follow ingroup norms as a way of expressing their social identity (Jetten et al., 1996; Marques et al., 1998).

Social identities, however, are not only associated with positive outcomes for all ingroup members. For instance, the black sheep effect (Abrams, Rutland, & Cameron, 2003; Marques et al., 1988) shows that there can be negative effects for ingroup members who deviate from norms. The black sheep effect states that ingroup peer members will evaluate those ingroup members who follow norms, i.e. likeable members, more positively than outgroup members who conform to those same norms. However, this same effect will not happen with those ingroup members who do not conform to norms, i.e. unlikeable ingroup members. In this case, ingroup peer members will evaluate deviant ingroup members more negatively than outgroup members that deviate from those same norms (Abrams et al., 2000; Abrams et al., 2014; Marques & Paez, 1994; Marques et al., 1988).

Prosocial Behaviour

Even though the main focus in this thesis is on monetary donations, there is a large literature focussed on general prosocial behaviour that encompasses volunteering, helping behaviour, altruism, as well as charitable giving. This work

has already been revised in the empathy section, since works from Pavey et al. (2012), Eisenberg and Miller, (1987), Batson (Batson, Sager, et al., 1997), Morelli et al. (2014), and Cialdini (Cialdini et al., 1997) were about prosociality per se, not specifically monetary donations. Considering that monetary donations are a form of prosocial behaviour, and that they were included within the measure of prosocial behaviour in several of those studies, much of the general work examined above is relevant. However, there are some differences between types of prosocial behaviour.

For instance, in general people do not consider giving money to charities to be as valuable as volunteering. We can find evidence supporting this statement in the Helping Out study conducted by the National Centre for Social Research (NatCen) and the Institute for Volunteering Research (IVR) in the UK (Low, Butt, Ellis Pane & Davis Smith, 2007). Participants in the study were presented with two persons with the same amount of spare time and the same income. One of them donated £50 a month to a charity, while the other volunteered monthly to that same charity an amount of 8 hours. 52% of the participants considered that the volunteer was more committed to the charity than the donor, while 44% considered that both showed the same commitment. Thus, it seems that donating money is seen by lay people to implicate less commitment compared to volunteering. Moreover, when respondents were asked about their perception of how valuable these two persons were for the charity, 31% answered that the volunteer was more valuable than the donor, 58% answered that both were equal, and only 5% considered that the donor was more valuable than the volunteer. Thus, the donor appeared as equal as or less valuable than the volunteer to the general public – only in rare occasions the donor was more appreciated.

This is complemented by data from Chile, specifically data from the Estudio Nacional de Voluntariado 2015 (National Study of Volunteering 2015). In this study, 1,931 people aged 14 and over from 30 main municipalities in Chile were interviewed. 71% of the respondents agreed with the statement 'To only give money is not being generous' (Fundación Trascender, 2015). The same study was conducted during the previous year, in which 3,200 people aged 15 and over from the main 23 cities in Chile were interviewed. On that occasion,

respondents were asked about what was better, if donating money or being a volunteer to aim for each of the following objectives: 'To build a more generous country', 'Decreasing poverty', 'To reduce inequality', 'Citizen participation', 'To build a more developed country', and 'To build a country with more social integration'. For each of the objectives, between 61% and 72% of the respondents agreed that being a volunteer was better than giving monetary donations. The only exception was 'Decreasing poverty' in which 48% of the respondents agreed that volunteering was better, while 51% reported that giving monetary donations was better for this particular case; thus, the proportions were more even in this dimension (Fundación Trascender, 2014).

Even though these results can make monetary donations look as having little value, this type of help is very common in the general population. In the UK Giving 2017 study (Charities Aid Foundation, 2017), 8,000 online surveys were responded by adults aged 16 and over. In this study, 61% of the respondents reported giving money to a charity in the 12 months prior to the data collection, and 33% reported doing this in the previous four weeks. Combined, 39% of respondents had donated to charities and/or sponsored someone on the last four weeks before answering the survey. Moreover, and as seen above, in Chile monetary donations are also very common. Not only 92% of the respondents of the National Study of Volunteering in 2015 reported to have donated money to organisations and/or people in need, but 58% reported to always or almost always engage in donations to charities' national collections and campaigns. Additionally, 65% of the respondents indicated that they always or almost always engaged in donations of their spare change in supermarkets or pharmacies (Fundación Trascender, 2015). This type of donation is similar to a round up to the next pound scheme, in which the amount collected goes to a charity or a nonprofit organisation.

Besides being a common behaviour, the amount of money involved also suggests that monetary donations are indeed a relevant phenomenon. As previously mentioned, the UK Giving study suggested an estimated total amount of £9.7 billion GBP donated to charity organisations in 2016 in UK, which is a similar amount to the one shown in previous years (Charities Aid Foundation,

2017). The mean amount that donors reported giving monthly to charity or donating to sponsor someone was £40 GBP, with a median of the distribution of £18 GBP. Furthermore, according to the National Study of Volunteering 2015 (Fundación Trascender, 2015) in Chile the average monthly amount donated to organisations and/or people in need was \$4,160 CLP (equivalent to £5 GBP approximately), which is also a considerable amount considering that the minimum salary in Chile was \$225,000 CLP per month at the time of the data collection (equivalent to £271 GBP approximately). Therefore, even though monetary donations to charities may not be perceived as evidence of high commitment/sacrifice compared to volunteering, it is a common behaviour in British and in Chilean society.

Furthermore, donors may not be appreciated as much as volunteers, but for charities, individual monetary donations are an indispensable resource. As already stated, in 2016 \$390.05 billion USD was donated to charity organisations in the U.S. (equivalent to £283.2 billion GBP approximately; Giving USA Foundation, 2017). 72% of this total was from individuals, which corresponds to \$281.86 billion USD (equivalent to £204.65 billion GBP approximately), while the rest was from corporations (5%), bequests (8%) and foundations (15%). In addition, U.S. adults donated \$1,155 USD per capita that year (equivalent to £839 GBP approximately), and the charitable giving was \$2,240 USD per household (equivalent to £1,626 GBP approximately). In Australia, charities in 2015 received \$11.2 billion AUD in donations and bequests (equivalent to £6.47 billion GBP approximately), corresponding to 8.3% of their total income (Cortis et al., 2016). This proportion may seem small, however 62.8% of charity organisations received certain amount of contribution from donations and bequests, and 26% of charities had half or more of their total income come from these types of donation.

Based on these numbers it is evident that even though monetary donations may not seem to lay people as important and valuable as volunteering, individual charitable giving is a behaviour that is extended in the general population, refers to large figures in money, and is considered an indispensable source of income by charities. Having provided a brief overview of the general context in which

the work was situated, I am now in a position to introduce my work more specifically, and to outline the current hypotheses.

The present thesis

To recapitulate, previous research has shown that social descriptive norms and situational empathy are consistent antecedents of helping and monetary donations. These predictors have been studied extensively in line with the empathy-altruism hypothesis (Batson et al., 1988; Batson et al., 1991) and with Focus Theory (Cialdini et al., 1991). However, these work streams have been developed in isolation from each other. Moreover, for a long time studies have focused on interpersonal helping, without giving at the same time proper consideration of social/group variables (Van Leeuwen & Zagefka, 2017). An exception to this is the line of research that has studied ingroup/outgroup memberships and its impact on empathy and helping (e.g. James & Zagefka, 2017; Stürmer et al., 2005; Tarrant et al., 2009). In the same effort to consider different levels of analyses in conjunction (i.e. interpersonal and social levels) in research on helping behaviours, in this thesis I will examine the joint and interactive effects of social descriptive norms and situational empathy on disposition to give monetary donations.

At this point, a parenthesis is due to underline the replication crisis that has also motivated this research. The importance of replicating results that has been previously highlighted by multiple researchers as a way of tackling this crisis (Bardi & Zentner, 2017; Koole & Lakens, 2012; Maxwell, Lau, & Howard, 2015) is a guideline for this thesis. Since situational empathy and social descriptive norms are well known antecedents of monetary donations, and in light of the replication crisis in social psychology, I will use paradigms that have been applied already with positive results in previous research. Hence, the manipulations and measures in this thesis are largely based on or adapted from previous studies that have consistently shown a relationship between those antecedents and helping.

I will strive to accomplish this in seven studies. Study 1 was a correlational study conducted in Chile (N = 1300) that used face-to-face

interviews with an adult sample. Study 2 was a correlational online study (N = 144) with undergraduate students. Study 3 was an experimental online study (N = 209) conducted in Reddit with a diverse sample. Study 4 was a correlational online study (N = 449) conducted in Crowdflower also with a diverse sample. Study 5 was an experimental online study (N = 103) conducted in Crowdflower with a sample that consisted of people living in the UK. Study 6 was an experimental online study (N = 141) with an undergraduate student sample. Finally, Study 7 was an experimental online study (N = 425) conducted in Crowdflower with a diverse sample. The hypotheses tested throughout this thesis are the following:

Hypothesis 1 (H1): Social descriptive norms and situational empathy will predict general disposition to give monetary donations, even when controlling for each other.

Hypothesis 2 (H2): There will be an interaction between situational empathy and social descriptive norms, in which situational empathy will be a weaker predictor of general disposition to give monetary donations when social descriptive norms are high.

Chapter 2

Study 1. A correlational study in Chile: Empathy and norms predicting past frequency of donations

As seen in Chapter 1, previous research has evidenced the strong link between empathy and helping behaviours (e.g. Morelli et al., 2014; Pavey et al., 2012). In a different line of research, other authors have identified social descriptive norms as a relevant antecedent of prosocial behaviour and charitable donations (e.g. Nolan et al., 2008; Shang & Croson, 2009). Considering these two distinct and mainly independent research approaches, as a first objective I wanted to identify the unique association that empathy and perceived descriptive norms based on the behaviour of family and friends have with frequency of monetary donations. Moreover, and in line with the rationale explained in the introduction, I wanted to assess if there was an interaction between empathy and social descriptive norms. Hence the hypotheses are the following:

H1: Perceived descriptive norms based on the behaviour of family and friends and situational empathy will predict frequency of monetary donations, even when controlling for each other.

H2: There will be an interaction between situational empathy and perceived descriptive norms, in which situational empathy will be a weaker predictor of frequency of monetary donations when descriptive norms are high.

The hypotheses were tested in the Chilean context. Chile is one of the countries in Latin America that has substantially developed during the last three decades. This development has translated into significant poverty reduction. Since 1990 the population living below the poverty line has been reduced from

38.6% to 11.7% in 2015. Extreme poverty has also been largely reduced from 13% in 1990 to 3.5% in 2015 (Ministerio de Desarrollo Social, 2012, 2015, 2016). Chile has also experienced economic growth in the last 30 years, increasing its Gross Domestic Product (GDP) per capita from \$2,500.6 USD in 1990 to \$13,792.9 USD in 2016 (The World Bank, 2017b). This sustained growing economy has allowed for reducing income inequality in Chile from a Gini index of 57.3 in 1990 to 47.7 in 2015 (The World Bank, 2017a). However, despite this large reduction Chile is still nowadays one of the most unequal countries in the Organisation for Economic Co-operation and Development (OECD, 2016).

Moreover, Chile is prone to numerous natural hazards because of the subduction of the Nazca and Antarctic tectonic plates beneath the South American plate (Cecioni & Pineda, 2009). This translates into earthquakes, tsunamis, landslides, and volcanic eruptions among other possible natural disasters. For instance, two volcanic eruptions in the south of Chile, multiple floods and mudslides in the north, a storm similar to a hurricane with rough seas along the coast, forest fires in the south, and an earthquake and subsequent tsunami in the north-centre part of the country took place only in 2015. As already alluded to in the introduction, private monetary donations made by individuals are very common in Chile (Fundación Trascender, 2015). Given the wealth disparity in the country and its several potential natural disasters, donations represent an important tool within the fabric of Chilean society, and have gained importance as a way of promoting social cohesion.

The MIDE UC Measurement Centre from the School of Psychology of Pontificia Universidad Católica de Chile (PUC), in collaboration with Hogar de Cristo – one of the most renowned charities in Chile that helps people living in extreme poverty – conducted in 2009 a survey to study helping behaviours with a sample of participants in Santiago de Chile (González & Cortés, 2009). Since then, MIDE UC has conducted this study in 2010 and 2012 with a sample of participants in the main cities in Chile and with a special focus on monetary donations (González, Cortés, Lay, Valencia, & Castillo, 2010; González, Cortés, Manzi, Lay, & Herrada, 2012). In 2015 this survey was incorporated to a larger

study conducted by MIDE UC about attitudes, helping behaviours, politics and civic engagement called Foco Ciudadano (Civil Focus) (González, Lay, & Cortés, 2016). This survey was conducted in the main cities in Chile and one of its sections was focussed on monetary donations. The hypotheses were tested using this data.

In this study, the measure of monetary donations tapped into contributions which participants recalled having made in the past 12 months. This measure considered the main types of monetary donations that are frequently used in Chile, such as donations in response to natural disasters, or donations to people begging on the street. As will be seen below, norms were operationalised by asking participants how frequently they thought their friends and family contributed in those same types of donations in the past year. Empathy was assessed by asking participants how much empathy they generally feel towards the targets of help associated to those same types of donation, such as disaster victims or people begging on the streets.

However, a few of these types of donations might need further elaboration to become clearer for those not familiar with the Chilean context. Teletón is the name of one of the most renowned charities in Chile that is focussed on the rehabilitation of children with developmental disabilities. Once a year Teletón conducts a special campaign to elicit donations in which all the main Chilean television networks join in a 27-hour transmission with the objective of raising a predetermined amount of money. In this TV broadcast, they present different cases of children that have received treatment in the Teletón rehabilitation centres. During that 27-hour programme, people can donate in several ways, such as by going personally to a bank to make a deposit or by online banking. People can also participate in the campaign without donating by buying branded goods that sponsor Teletón. Companies can also donate money to Teletón. In addition, in every campaign there is a poster child who is the most visible face of all Teletón during that year. However, even though this is a once-in-a-year televised campaign, Teletón receives donations throughout the year.

Another elicitation method typically used in Chile with which the reader may not be familiar with is national collections. These are once-in-a-year

campaigns that charity organisations organise in which unpaid volunteers of that organisation, during a whole day across the country, dress with a distinct t-shirt and/or badge provided by that particular charity and ask pedestrians for monetary donations in cash.

In this study, the measure of norms used 'family and friends' together as the reference group. The reason behind this was that there were practical constraints to measure norms regarding the behaviour of family members and of friends separately, since this study was part of a larger survey. However, it can be expected that these two groups act similarly, based on Chile's predominant collectivistic culture (Hofstede, Hofstede, & Minkov, 2010). As it is usual in Latin America, in Chile there is high interdependence among members of society, while there can be exclusion of outsiders (i.e., those who do not belong to groups with which one identifies). In addition, friendship is predetermined by one' family or group. High levels of segregation in Chile also support the idea that family and friends act alike (Madrid, 2016; Santos & Elacqua, 2016).

Another issue that might draw the attention of the reader is that religious identification was considered in this study as a control variable along with household income. This course of action was based on three facts. First, most of the Chilean population identify with a religion (Universidad Católica-GfK Adimark, 2017). Secondly, the history of Catholicism in Chile –the most prevalent religion in the country– is strongly linked with social activism and volunteerism (Botto, 2008). And third, during the last years in Chile there has been a growing secularisation and an increasing feeling of distrust towards the Church (Corporación Latinobarómetro, 2018; Palma, 2008). Indeed, helping is a central element in the majority of religions (Furrow, King & White, 2004) and research has shown that people that are affiliated to a religion are more likely to help a stranger in comparison to those who are not affiliated (Bennett & Einolf, 2017).

Method

Participants

One thousand and three hundred participants were interviewed face-to-face in five geographically widespread regions in Chile from a total of fifteen regions: II region of Antofagasta, V region of Valparaíso, VIII region of Bío Bío, IX region of Araucanía, and XIII region of Santiago Metropolitan (687 women, 613 men; 18-24 years old: 193, 25-34 years old: 238, 35-54 years old: 529, 55-64 years old: 340). This survey was distributed in large cities in Chile using a three-stage random sampling stratified by socioeconomic status. Participants were recruited by probability sampling (i.e., by random selection) in its three stages: blocks (i.e., a small group of houses and/or buildings bounded by usually four streets), housing units, and persons. Thus, in a first step, blocks were randomly selected. In a second stage, residences were randomly selected within the blocks. In the last step, individuals older than 18 years old were randomly selected within those selected households.

Procedure

The measures relevant for this study were part of the section about monetary donations within the survey Foco Ciudadano (Civic Focus) about attitudes, helping behaviours, politics and civic engagement (González et al., 2016; to see a list of other measures considered in the study see Appendix A). MIDE UC Measurement Centre of the School of Psychology of PUC conducted this survey. The author was part of the research team that developed the 2009, 2010, and 2012 survey on which this section was based (González & Cortés, 2009; González et al., 2010; González et al., 2012). This connection facilitated access to a large sample, however the intellectual ownership of the results reported here (i.e., development of the hypotheses, data analytic approach, and writing up) are solely the author's. All studies presented in this thesis were scrutinised by the ethics committee of the relevant institution, i.e. PUC in this instance and RHUL for the rest of the studies.

Measures

Empathy (α = .87) was measured with the following items: 'How much empathy do you feel towards the following people...' (1) '...people begging on the street', (2) '...people that are helped when you are asked to donate your spare change to charity organisations (i.e. in supermarkets or pharmacies)', (3) '...people that are helped by Teletón', (4) '...disaster victims when donation campaigns are run', (5) '...people that are helped when you are asked to donate in national collections', and (6) '...beneficiaries of collections organised in your workplace, study place, neighbourhood or among friends'. Participants answered using a response scale ranged from 1 to 5 (1 'Nothing or a little', 2 'Somewhat', 3 'Much or less', 4 'Quite', and 5 'A lot'). The mean between all the items was used as an overall index of empathy. However, in order to analyse each type of donation, I also used each item separately. This was the case with the empathy measure, as well as with the norms and donation measures described below.

Perceived descriptive norms based on the behaviour of family and friends (α = .90) was measured with these items: 'In general, how often do your family and friends...' (1) '...donate money to people begging on the streets', (2) '...donate part of their change to charity organisations (i.e. in the supermarkets or pharmacies)', (3) '...donate money to the Teletón campaign', (4) '...donate money in response to natural disasters (e.g. earthquakes, floods, etc.)', (5) '...donate money to national collections (e.g. Coanil, Coaniquem, etc.)', and (6) '...donate money to people in need in collections organised in the workplace, study place, neighbourhood and among friends'. Coanil and Coaniquem listed as examples in item 5 are well-known charities in Chile. Coanil is a national nongovernmental organisation that promotes the inclusion of people with intellectual disabilities. Coaniquem is a charity organisation that focuses on the rehabilitation of children that have suffered burns. Participants answered using a response scale ranged from 1 to 5 (1 'Never or almost never', 2 'Rarely', 3 'Sometimes', 4 'Often', and 5 'Almost always or always').

Past frequency of donations (α = .79) was measured using the following 6 items that were used in the previous versions of the study (González & Cortés, 2009; González et al., 2010; González et al., 2012): 'Over the last 12 months,

how often have you...' (1) '...donated money to people begging on the streets', (2) '...donated part of your change to charity organisations (i.e. in the supermarkets or pharmacies)', (3) '...donated money to the Teletón campaign', (4) '...donated money in response to natural disasters (e.g. earthquakes, floods, etc.)', (5) '...donated money to national collections (e.g. Coanil, Coaniquem, etc.)', and (6) '...donated money to people in need in collections organised in the workplace, study place, neighbourhood and among friends'. The response scale ranged from 1 to 5 (1 'Never or almost never', 2 'Rarely', 3 'Sometimes', 4 'Often', and 5 'Almost always or always').

There were other measures assessed in this study that previous research has considered relevant to explaining helping behaviour and monetary donations. Research has shown that people with more financial resources donate in larger amounts and more frequently than those with lower income (Bryant et al., 2003; González & Cortés, 2009; Independent Sector, 2002; Wiepking & Bekkers, 2012; Wunderink, 2002). Also, religious identification has been associated with charitable donations (Bekkers & Wiepking, 2011; Bryant et al., 2003; Choi & Chou, 2010) and, as was explained in the introduction of this chapter, the Catholic Church has played an important role in Chile fostering helping behaviours (Botto, 2008). Hence, household income and religious identification were added as control variables.

Household income was measured with a single item 'In what of the following income groups is your household?' The response scale was 1 'Less than \$200,000 monthly net', 2 'From \$200,001 to \$360,000 monthly net', 3 'From \$360,001 to \$540,000 monthly net', 4 'From \$540,001 to \$913,000 monthly net', 5 'From \$913,001 to \$1,567,000 monthly net', 6 'More than \$1,567,001 monthly net'. To have a general estimate of the amounts of money used in the items, it is useful to consider that \$100,000 CLP is equivalent to £121 GBP approximately. Because of the nature of this survey, participants could also answer 'I don't know/I don't want to answer'; such responses were coded as missing values. In total, 50 participants had missing values on this variable.

Religious identification was computed based on what participants answered to the question 'Which religion do you practise?' Participants who

reported practising a religion in particular (e.g. Catholicism or Mormonism) were considered as having a religious identification. Also, those who identified with the option 'I am a believer, but I don't adhere to any religion in particular' were considered in this group. Only those participants who identified themselves as being an Atheist or an Agnostic were considered as not having a religious identification. This variable was coded as 0 'No', 1 'Yes'.

Results

Descriptive statistics and correlations of the measures used in this study are found in Table 1. All the variables were normally distributed, taking into account the cut-off points in normal distributions of 2 for skewness and 7 for kurtosis (West, Finch, & Curran, 1995). As expected, empathy and perceived descriptive norms were positively associated with frequency of donations. All of the correlations between the main variables of interest corresponded to large effect sizes (Cohen, 1988).

Table 1Study 1. Descriptive statistics and correlations

	Mean	SD	(1)	(2)	(3)	(4)
Empathy	3.58	0.89	.65***	.56***	.06*	.05†
Norms (1)	3.42	0.87	-	.58***	.14***	.04
Frequency of donations (2)	3.41	0.93		-	.04	.08**
Household income (3)	3.16	1.23			-	13***
Religious identification (4)	-	-				-
<i>Note.</i> † $p < .1$, * $p < .05$, ** $p < .05$.01, *** p	< .001				

An Exploratory Factor Analysis (EFA) was conducted to assess if the items of the three main variables of interest in this study loaded on their respective factors. Regressing one construct from other constructs only makes sense if those constructs are clearly empirically and theoretically distinct; hence I wanted to demonstrate that this was the case for the constructs in question here. Since all the items presented a normal distribution, Maximum Likelihood (ML)

was used as the Extraction Method (Fabrigar, Wegener, MacCallum & Strahan, 1999). Taking into account the high correlations between the measures (see Table 1), Direct Oblimin rotation with delta 0 was set as an oblique rotation to state that the constructs were oblique, but not indistinguishable (Costello & Osborne, 2005; Harman, 1976).

The pattern matrix with the loadings is presented in Table 2, while the structure matrix with the correlations between the variables and the factors showed a similar configuration than the pattern matrix (for brevity's sake, the structure matrix is omitted, and is available upon request; Thompson, 2004). As can be seen in Table 2, four factors were extracted, even though theoretically only three factors were expected. The first factor corresponded to perceived norms, the second factor was consistent with the empathy scale, while the fourth factor matched past frequency of donations. Hence, the third factor was the extra factor obtained in the EFA.

Most of the items loaded on their respective factors, however there were exceptions. Items 1, 7 and 13 in Table 2 –corresponding to the items of empathy, perceived descriptive norms and past frequency of donations related to people begging on the street– had their highest loadings on the extra factor that was obtained in the EFA. The structure matrix showed that these items also had the highest correlations with the extra factor. Apart from these items, all of the other items behaved as expected. Although clearly responses to people begging in the street seem to somehow represent a special case, the existence of the fourth factor is of limited concern. The main goal of the EFA was to demonstrate distinctness of the concepts of empathy, norms, and donations. Since no inappropriate cross-loadings were observed (e.g., no empathy items loaded on the donations factor), it is fair to conclude that distinctness was demonstrated.

Table 2Study 1. EFA. Pattern Matrix.

	Pattern Matrix				
		Factor			
		1	2	3	4
1	Empathy - people begging on the street	03	27	.67	.02
2	Empathy - people that benefit from the spare				
	change donated	.06	59	.13	.05
3	Empathy - Teletón beneficiaries	.07	63	05	.11
4	Empathy - beneficiaries of disaster campaigns	.02	82	.01	.01
5	Empathy - national collection beneficiaries	01	93	.02	05
6	Empathy - beneficiaries of collection in the				
	workplace, etc.	.03	82	04	.03
7	Norms - donate to people begging on the street	.54	.06	.60	07
8	Norms - donate change to supermarkets, etc.	.65	05	.13	.02
9	Norms - donate to Teletón	.77	.01	07	.10
10	Norms - donate in disasters	.78	05	10	.08
11	Norms - donate in national collections	.81	06	.00	.00
12	Norms - donate in collections in their				
	workplace, etc.	.76	10	02	.01
13	Freq. of donation to people begging on the				
	street	01	.05	.44	.37
14	Freq. of donation of spare change to				
	supermarkets, etc.	.04	.00	.10	.48
15	Freq. of donation to Teletón	.10	.02	09	.64
16	Freq. of donation in disaster campaigns	04	04	04	.77
17	Freq. of donation in national collections	.01	08	.03	.67
18	Freq. of donation in collections in the				
	workplace, etc.	.06	08	.01	.54

To complement these results, a Confirmatory Factor Analysis (CFA) was conducted using Mplus 7.11 (Muthén & Muthén, 1998-2013). Because all the items showed a normal distribution, I used ML as the estimator of the CFAs. The

first model consisted of every item loading on its respective factor. According to Hu and Bentler's (1995) criteria of a Comparative fit index (CFI) larger than .90, a Root mean square error of approximation (RMSEA) less or equal than .06, and a Standardised root mean square residual (SRMR) less or equal than .08 as signs of an acceptable model, this first measurement model had a poor fit (χ^2 (132) = 2015.65, p < .001, CFI = .86, RMSEA = .11, SRMR = .06). The χ^2 value was also a sign of a poor fit considering that a χ^2/df ratio that is equal or less than 3 indicates an acceptable model fit when big samples are used (N > 200; Kline, 1998).

In a second measurement model the shared item variance between the indicators that shared the same type of donation context was considered. This way the potential method effect of having the same situation as the stimuli in different factors could be accounted for (Brown, 2003; Byrne, Shavelson & Muthén, 1989, Floyd & Widaman, 1995; Brown, 2015). To illustrate this, the errors of the items 1, 7 and 13 in Table 2 were correlated, because the three had content overlap, i.e. they all related to people begging on the street, even though they refer to different factors (i.e., empathy, perceived norms, and past frequency of donation, respectively). The same was done with items 2, 8 and 14, items 3, 9 and 15, and so on. This second measurement model had an acceptable fit (χ^2 (114) = 523.21, p < .001, CFI = .96, RMSEA = .05, SRMR = .03), even though the χ^2 was still higher than Kline's (1998) criteria. A difference χ^2 test (Bollen, 1989) suggested that this second measurement model with the correlated error terms fitted the data better than the first model (χ^2 (18) = 1377.19, p < .001).

Another alternative was to conduct a CFA without considering the problematic items in the measurement model (i.e. without items 1, 7 and 13 in Table 2). In this third model, there were no constraints added, hence the errors between the items were not correlated. The model's fit was approaching acceptability (χ^2 (87) = 1173.23, p < .001, CFI = .91, RMSEA = .10, SRMR = .04), but the RMSEA was higher than the standard suggested by Hu and Bentler (1995), and the χ^2/df ratio (Kline, 1998) was also high. Since this model was not nested, it could not be compared to the previous two models by a χ^2 difference

test, the Akaike Information Criterion (AIC), or the Bayesian Information Criterion (BIC).

In sum, the results of the EFA and the CFA suggested that the measurement model using the 6 items for each construct was not the best possible model, although overall it is fair to conclude that the three concepts –empathy, norms, and donations– were empirically distinct from each other. Therefore, to test the hypotheses, in addition to using the scales with 6 items each, I used the items related to the same context separately. For example, items 1, 7 and 13 in Table 2 (i.e. empathy, perceived norms, and donations relating to people begging on the street, respectively) were considered in one regression model, the same with items 2, 8 and 14 (i.e. empathy, norms, and donations relating to giving the spare change in supermarkets, respectively), and so on.

The Koenker test was used to evaluate if homoscedasticity could be assumed in every model. Even though Ordinary Least Squares (OLS) is robust against heteroscedasticity, the standard errors might be inaccurate, which affects the respective p-values. Hence, in order to get robust standard errors and get accurate levels of significance, HC3 -a heteroscedasticity consistent covariance estimator— was used as the covariance estimator whenever homoscedasticity could not be assumed. In a first step the SPSS RLM macro (Darlington & Hayes, 2017) was used to regress empathy and perceived norms on past frequency of donations. The SPSS PROCESS macro, model 1 (Hayes, 2013) was used in a second step to run the regression analyses with the interaction term, and in a third step the covariates household income and religious identification were added to the model. Because in this study there were 50 missing values in household income, the total sample for the third model was 1250 instead of 1300. There were no signs of multicollinearity in any of the regression models conducted in this study. A sensitivity power analysis considering the main hypotheses in this thesis showed a minimum detectable effect size of $f^2 = 0.01$. This analysis was conducted selecting a linear regression with 3 tested predictors, α significance criterion of .05, power of 80%, and sample size of 1300 (Faul, Erdfelder, Buchner, & Lan, 2009). Considering only

one tested predictor (i.e., only the interaction term) the minimum detectable effect size was $f^2 = 0.01$.

Analyses with variables as scales.

HC3 was used as the covariance estimator to obtain robust standard errors against heteroscedasticity in the three models. When using the 6-item scales as variables, perceived norms and empathy were both significant positive predictors of frequency of donation (see Table 3). This supports H1. This pattern of results did not change even when the interaction term and the covariates were added to the model.

Table 3Study 1. Regression analyses with 6-item scales.

	Frequency of donations			
	(1)	(2)	(3)	
	0.34***	0.32***	0.31***	
Empathy	(0.03)	(0.03)	(0.03)	
	[0.27, 0.40]	[0.25, 0.38]	[0.24, 0.37]	
	0.39***	0.39***	0.40***	
Norms	(0.04)	(0.04)	(0.04)	
	[0.32, 0.46]	[0.32, 0.46]	[0.33, 0.47]	
		-0.06**	-0.06**	
Empathy x Norms interaction		(0.02)	(0.02)	
		[-0.11, -0.02]	[-0.11, -0.02]	
			-0.02	
Household income			(0.02)	
			[-0.05, 0.01]	
D.11.1			0.16†	
Religious Id.			(0.08)	
(0 = no, 1 = yes)			[-0.01, 0.33]	
Moderation effect size (f^2)		0.01	0.01	

Note. † p < .1, ** p < .01, *** p < .001. b values correspond to unstandardised coefficients. Standard errors in parentheses. 95% CIs in brackets. No signs of multicollinearity. Step 1 R^2 = .39, F(2, 1297) = 373.99, p < .001. Step 2 R^2 = .40, F(3, 1296) = 251.14, p < .001. Step 3 R^2 = .40, F(5, 1244) = 143.45, p < .001.

As can be seen in Table 3, the interaction term added in the second step turned out to be significant, $\Delta R^2 = .005$, F(1, 1296) = 7.58, p = .006. According to the cut-off points of .02, .15, and .35 which correspond to small, medium and large effect sizes respectively (Aiken & West, 1991; Cohen, 2003), the interaction had a small effect size (f^2) . The interaction was significant even when the covariates were added in the next step, $\Delta R^2 = .005$, F(1, 1244) = 7.54, p = .006. In Figure 1 the interaction is illustrated. Empathy was a significant and positive predictor of frequency of donation in all three levels of perceived descriptive norms, however this association was stronger when perceived norms were low (-1 SD), b = 0.37, $SE_b = 0.04$, t(1296) = 9.82, p < .001, 95% CI [0.30, 0.45], compared to when they were high (+1 SD), b = 0.26, $SE_b = 0.04$, t(1296) = 6.42, p < .001, 95% CI [0.18, 0.34]. These results support H2, as empathy was a weaker predictor of frequency of donations when descriptive norms were high. This pattern of results was unaffected by the covariates added in the third step.

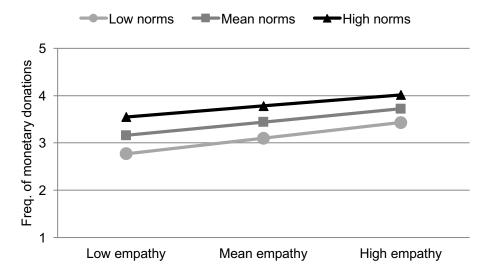


Figure 1
Study 1. Simple slopes. Empathy predicting frequency of monetary donations for 1 *SD* below the mean (low norms), the mean, and 1 *SD* above the mean (high norms) of descriptive norms.

In the third model, household income was not related to frequency of donations, whereas religious identification was only a marginally significant predictor (see Table 3). There was a tendency for participants who were identified with a religion or who were believers to donate more frequently than those who identified themselves with being agnostic or atheist.

In sum, and in support of both H1 and H2, the more participants felt empathy towards the recipients of help, and perceived that their family and friends donated, the more they reported having donated in the past. Empathy was a stronger predictor of past frequency of donation when participants perceived their family and friends to have donated less often compared to when they perceived their family and friends to have donated more frequently¹. Having analysed the results with regards to the composite measure, further analyses were conducted for each type of donation separately. These will be presented in the following.

Past frequency of donations to people begging on the street

Given that homoscedasticity could not be assumed, HC3 was used as the estimator in these three models. As can be seen in Table 4, both empathy and perceived norms were significant predictors of past frequency of donation in the context of giving monetary donations to people begging on the street. Therefore, H1 was supported.

In the second step, the interaction term between empathy and descriptive norms was also a significant predictor of past frequency of donation to people begging on the street, $\Delta R^2 = .01$, F(1, 1296) = 23.34, p < .001. This interaction had a small effect size (see Table 4). This pattern did not change when controlling for income and religious identification, $\Delta R^2 = .02$, F(1, 1244) = 24.28, p = .001.

Simple slopes analysis showed that empathy was a significant and positive predictor of frequency of donation to people begging on the street

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¹ Considering the results of the EFA, the same analyses was conducted but without the items related to donations to people begging on the street in the scales. The results showed that both empathy and norms were significant positive predictors of frequency of donation. The interaction term turned out to be marginally significant in the same direction as described above.

regardless of the level in perceived norms. However, empathy was less associated with frequency of donations when perceived norms were high (+1 SD), b = 0.19, $SE_b = 0.04$, t(1296) = 4.79, p < .001, 95% CI [0.11, 0.27] compared to when they were low (-1 SD), b = 0.41, $SE_b = 0.04$, t(1296) = 11.02, p < .001, 95% CI [0.33, 0.48], supporting H2. The interaction can be seen in Figure 2. The same results were obtained when the covariates were added in the third model. Among the covariates added in the third model, only religious identification was a significant predictor. Surprisingly, it was associated negatively with frequency of donation to people begging on the street.

Table 4
Study 1. Regression analyses with items about donations to people begging on the street

	Donations to people on the street			
	(1)	(2)	(3)	
	0.29***	0.30***	0.29***	
Empathy	(0.03)	(0.03)	(0.03)	
	[0.23, 0.35]	[0.24, 0.36]	[0.22, 0.35]	
	0.31***	0.29***	0.31***	
Norms	(0.04)	(0.04)	(0.04)	
	[0.24, 0.38]	[0.22, 0.36]	[0.24, 0.38]	
		-0.10***	-0.10***	
Empathy x Norms interaction		(0.02)	(0.02)	
		[-0.14, -0.06]	[-0.15, -0.06]	
			-0.02	
Household income			(0.02)	
			[-0.07, 0.02]	
Daligious Id			-0.31**	
Religious Id.			(0.11)	
(0 = no, 1 = yes)			[-0.52, -0.09]	
Moderation effect size (f^2)		0.02	0.02	

Note. ** p < .01, *** p < .001. b values correspond to unstandardised coefficients. Standard errors in parentheses. 95% CIs in brackets. No signs of multicollinearity. Step 1 $R^2 = .25$, F(2, 1297) = 192.20, p < .001. Step 2 $R^2 = .26$, F(3, 1296) = 161.87, p < .001. Step 3 $R^2 = .27$, F(5, 1244) = 107.12, p < .001.

To summarise, supporting both H1 and H2, participants reported having donated more often to people begging on the street when they felt more empathy towards the target of help, and when they perceived their family and friends to have donated more often in that same situation. Additionally, empathy was a weaker predictor of past frequency of donation to people begging on the street when participants perceived their family and friends to have donated often rather than less frequently.

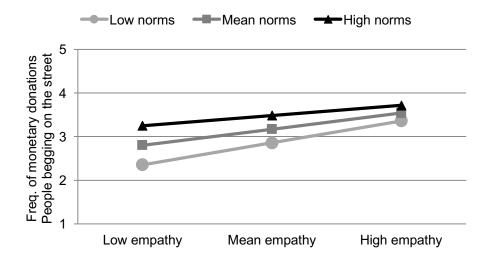


Figure 2
Study 1. Simple slopes. Empathy predicting frequency of monetary donations to people begging on the streets for 1 *SD* below the mean (low norms), the mean, and 1 *SD* above the mean (high norms) of descriptive norms.

Past frequency of donations of the spare change in supermarkets

Koenker tests allowed assuming homoscedasticity in the first and second model. OLS regression analyses were conducted. Once again, empathy and perceived norms were significant predictors of past frequency of spare change donations in supermarkets, which supports H1 (see Table 5).

Table 5Study 1. Regression analyses with items about donations of spare change in supermarkets

	Donations of spare change in supermarkets			
	(1)	(2)	(3)	
	0.14***	0.14***	0.13***	
Empathy	(0.03)	(0.03)	(0.03)	
	[0.08, 0.20]	[0.08, 0.20]	[0.06, 0.20]	
	0.44***	0.43***	0.42***	
Norms	(0.04)	(0.04)	(0.04)	
	[0.37, 0.51]	[0.36, 0.50]	[0.34, 0.50]	
		-0.07**	-0.07**	
Empathy x Norms interaction		(0.02)	(0.02)	
		[-0.12, -0.03]	[-0.12, -0.02]	
			-0.02	
Household income			(0.03)	
			[-0.07, 0.03]	
D 1' ' II			0.27†	
Religious Id.			(0.14)	
(0 = no, 1 = yes)			[-0.001, 0.55]	
Moderation effect size (f^2)		0.01	0.01	

Note. † p < .1, *** p < .01, *** p < .001. b values correspond to unstandardised coefficients. Standard errors in parentheses. 95% CIs in brackets. No signs of multicollinearity. Step 1 $R^2 = .19$, F(2, 1297) = 148.77, p < .001. Step 2 $R^2 = .19$, F(3, 1296) = 103.1, p < .001. Step 3 $R^2 = .19$, F(5, 1244) = 55.48, p < .001.

The interaction term between empathy and perceived norms was a significant predictor of frequency of donations of the spare change in supermarkets, $\Delta R^2 = .006$, F(1, 1296) = 9.76, p = .002, as seen in Table 5. The interaction effect size was small; nonetheless it remained unaffected by the later addition of the control variables to the model, $\Delta R^2 = .006$, F(1, 1244) = 8.40, p = .004. The association of empathy with frequency of spare change donations in supermarkets was significant at the low (-1 SD), b = 0.21, $SE_b = 0.04$, t(1296) = 5.61, p < .001, 95% CI [0.14, 0.29], and mean levels of perceived norms, b = 0.14, $SE_b = 0.03$, t(1296) = 4.48, p < .001, 95% CI [0.08, 0.20]. However, this

association was non-significant when perceived norms were high, b = 0.06, $SE_b = 0.04$, t(1296) = 1.44, p = .149, 95% CI [-0.02, 0.14]. Figure 3 depicts the interaction. These results support H2, since empathy was a predictor of frequency of spare change donations in supermarkets only when perceived norms were low. When perceived norms were high, empathy was not associated with past frequency of donations.

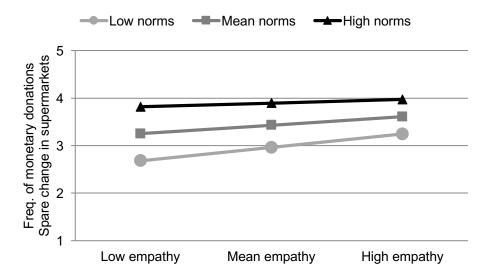


Figure 3 Study 1. Simple slopes. Empathy predicting frequency of monetary donations of the spare change in supermarkets for 1 SD below the mean (low norms), the mean, and 1 SD above the mean (high norms) of descriptive norms.

In the third model, Koenker test indicated that homoscedasticity could not be assumed, thus HC3 estimator was used. The previous results remained unchanged. From the control variables added in the model, only religious identification was a significant positive predictor of frequency of spare change donations in supermarkets (see Table 5). Participants who reported being believers also reported to have donated more often.

To sum up, in support of H1 and H2, participants donated their spare change more often in supermarkets when a) they empathised with the beneficiaries of their spare change donation, and b) they perceived their family and friends to have donated more often in this same context. Furthermore,

empathy was a weaker predictor of frequency of spare change donations in supermarkets when participants perceived that their family and friends had donated more frequently rather than less often in that same situation. In fact, when participants perceived that their family and friends had donated frequently, empathy was not associated with own frequency of donations.

Past frequency of donations in national collections

Homoscedasticity could be assumed in the three models based on the results of the Koenker test.

Table 6
Study 1. Regression analyses with items about donations in national collections

	Donations in national collections			
	(1)	(2)	(3)	
	0.30***	0.29***	0.28***	
Empathy	(0.03)	(0.03)	(0.04)	
	[0.24, 0.37]	[0.22, 0.36]	[0.21, 0.35]	
	0.39***	0.39***	0.40***	
Norms	(0.04)	(0.04)	(0.04)	
	[0.32, 0.46]	[0.32, 0.46]	[0.33, 0.47]	
		-0.05*	-0.05*	
Empathy x Norms interaction		(0.02)	(0.02)	
		[-0.10, -0.003]	[-0.10, -0.002]	
			-0.02	
Household income			(0.03)	
			[-0.07, 0.03]	
D-11-1 1.1			0.17	
Religious Id.			(0.11)	
(0 = no, 1 = yes)			[-0.05, 0.39]	
Moderation effect size (f^2)		0.003	0.003	

Note. * p < .05, *** p < .001. b values correspond to unstandardised coefficients. Standard errors in parentheses. 95% CIs in brackets. No signs of multicollinearity. Step 1 $R^2 = .24$, F(2, 1297) = 207.54, p < .001. Step 2 $R^2 = .24$, F(3, 1296) = 140.14, p < .001. Step 3 $R^2 = .25$, F(5, 1244) = 81.83, p < .001.

OLS regression analyses were conducted. Consistent with H1 and with the previous results, empathy and perceived descriptive norms were significant and positive predictors of frequency of donations in national collections (see Table 6). These results did not change in step 3.

As seen in Table 6, the empathy-perceived norms interaction was also a significant predictor of past frequency of donations in national collections, $\Delta R^2 = .003$, F(1, 1296) = 4.29, p = .039, having a small effect size. This interaction consisted of empathy being associated more weakly with past frequency of donations in national collections when perceived norms were high (+1 SD), b = 0.23, $SE_b = 0.05$, t(1296) = 5.01, p < .001, 95% CI [0.14, 0.33] compared to when norms were low, (-1 SD): b = 0.34, $SE_b = 0.04$, t(1296) = 8.86, p < .001, 95% CI [0.27, 0.42]. Thus, again H2 was confirmed by these results. Nevertheless, empathy was significant predictor of frequency of donations in national collections at all levels of perceived descriptive norms (see Figure 4). This pattern of results was upheld even when the covariates were added in the third model. The interaction term remained a significant predictor, $\Delta R^2 = .003$, F(1, 1244) = 4.12, p = .043. None of the control variables were significant predictors of frequency of donations in national collections (see Table 6).

In summary, and supporting H1 and H2, participants reported having donated more frequently in national collections in the past year when a) they empathised more with beneficiaries of the collection, and b) they perceived their family and friends to have donated more often in national collections. Additionally, the association between empathy and past frequency of donations in national collections was less pronounced when participants perceived their family and friends to have donated more frequently rather than less often.

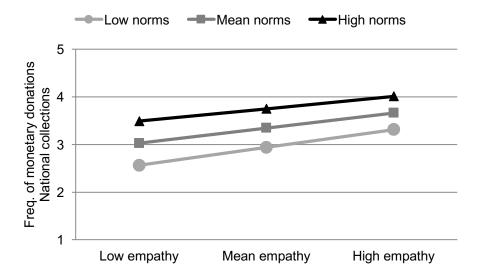


Figure 4
Study 1. Simple slopes. Empathy predicting frequency of monetary donations in national collections for 1 *SD* below the mean (low norms), the mean, and 1 *SD* above the mean (high norms) of descriptive norms.

Past frequency of donation in disaster campaigns.

Considering that homoscedasticity could not be assumed, HC3 estimator was used in the three models. As can be seen in Table 7, both empathy and perceived descriptive norms were significant positive predictors of frequency of donations in disaster campaigns, hence H1 was supported by this data. This pattern of results remained the same in the three models, regardless of the variables that were added later.

The interaction term added to the second model was marginally significant and had a small effect size on frequency of donations in disaster campaigns, $\Delta R^2 = .002$, F(1, 1296) = 2.88, p = .090 (see Table 7). This interaction is depicted in Figure 5. Simple slopes analysis revealed that, consistent with H2, the association between empathy and frequency of donations in disaster campaigns was less pronounced when perceived descriptive norms based on the behaviour of family and friends was high (+1 SD), b = 0.21, $SE_b = 0.06$, t(1296) = 3.73, p < .001, 95% CI [0.10, 0.32], compared to when they were low (-1 SD), b = 0.31, $SE_b = 0.04$, t(1296) = 6.89, p < .001, 95% CI [0.22, 0.39]. The interaction

was still a marginally significant predictor when the control variables were added in the third model, $\Delta R^2 = .002$, F(1, 1244) = 3.04, p = .081. None of the control variables added were significant predictors of frequency of donations in disaster campaigns (see Table 7).

Table 7
Study 1. Regression analyses with items about donations in disaster campaigns

	Donations in disaster campaigns			
	(1)	(2)	(3)	
	0.28***	0.26***	0.26***	
Empathy	(0.04)	(0.04)	(0.04)	
	[0.20, 0.36]	[0.18, 0.34]	[0.18, 0.34]	
	0.37***	0.37***	0.37***	
Norms	(0.04)	(0.04)	(0.04)	
	[0.29, 0.45]	[0.29, 0.45]	[0.29, 0.45]	
		-0.05†	-0.05†	
Empathy x Norms interaction		(0.03)	(0.03)	
		[-0.10, 0.01]	[-0.11, 0.01]	
			-0.03	
Household income			(0.03)	
			[-0.08, 0.02]	
- · · · · · · · · · · · · · · · · · · ·			0.15	
Religious Id.			(0.13)	
(0 = no, 1 = yes)			[-0.10, 0.40]	
Moderation effect size (f^2)		0.002	0.003	

Note. † p < .1, *** p < .001. b values correspond to unstandardised coefficients. Standard errors in parentheses. 95% CIs in brackets. No signs of multicollinearity. Step 1 $R^2 = .21$, F(2, 1297) = 170.65, p < .001. Step 2 $R^2 = .21$, F(3, 1296) = 116.12, p < .001. Step 3 $R^2 = .22$, F(5, 1244) = 67.95, p < .001.

In sum, and supporting H1 and H2, participants reported donating more often to disaster campaigns during the last year when they felt more empathy towards disaster victims, and when participants perceived their family and friends

to have donated frequently to disaster campaigns. Moreover, perceived norms moderated the association between empathy and frequency of donations to disaster campaigns. This moderation consisted of empathy being a weaker predictor of frequency of donations when participants perceived their close ones to have donated more frequently to disaster campaigns.

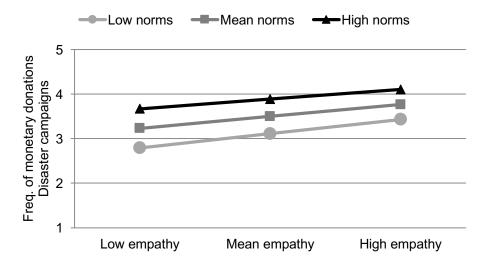


Figure 5 Study 1. Simple slopes. Empathy predicting frequency of monetary donations in disaster campaigns for 1 SD below the mean (low norms), the mean, and 1 SD above the mean (high norms) of descriptive norms.

Past frequency of donations to Teletón

A HC3 estimator was used in the three models, given that homoscedasticity could not be assumed. The results are displayed in Table 8. As was stated in H1, perceived descriptive norms based on the behaviour of family and friends were significant positive predictors of frequency of monetary donations to Teletón. These results remained unaffected by the variables added in the posterior models.

The interaction term added in the second model turned out to be non-significant, $\Delta R^2 = .0001$, F(1, 1296) = 0.19, p = .664. Hence in the Teletón

context there was no evidence supporting H2. In the third model (see Table 8), religious identification was the only control variable that had a significant association with past frequency of donations to Teletón. In this third step, the interaction remained non-significant, $\Delta R^2 = .0003$, F(1, 1244) = 0.46, p = .499.

Table 8Study 1. Regression analyses with items about donations to Teletón

	Donations to Teletón			
	(1)	(2)	(3)	
	0.29***	0.28***	0.25***	
Empathy	(0.04)	(0.05)	(0.05)	
	[0.20, 0.37]	[0.19, 0.37]	[0.16, 0.35]	
	0.48***	0.48***	0.49***	
Norms	(0.04)	(0.04)	(0.04)	
	[0.41, 0.56]	[0.40, 0.56]	[0.41, 0.57]	
		-0.01	-0.02	
Empathy x Norms interaction		(0.03)	(0.03)	
		[-0.07, 0.04]	[-0.08, 0.04]	
			-0.04	
Household income			(0.03)	
			[-0.09, 0.02]	
Daliaiana Id			0.54***	
Religious Id.			(0.15)	
(0 = no, 1 = yes)			[0.25, 0.83]	
Moderation effect size (f^2)		0.0001	0.0004	

Note. *** p < .001. b values correspond to unstandardised coefficients. Standard errors in parentheses. 95% CIs in brackets. No signs of multicollinearity. Step 1 $R^2 = .26$, F(2, 1297) = 237.66, p < .001. Step 2 $R^2 = .26$, F(3, 1296) = 157.24, p < .001. Step 3 $R^2 = .28$, F(5, 1244) = 96.98, p < .001.

To sum up, the more participants reported feeling empathy towards beneficiaries of Teletón, and the more often they perceived their family and friends to have donated to that charity, the more frequently participants reported to have donated to Teletón themselves during the past year. There was no moderating role of perceived norms on the association of empathy with donations in the Teletón context, yielding overall support for H1 but not H2.

Past frequency of donations in local collections

Taking into account Koenker tests' results, homoscedasticity could not be assumed in the first two models, thus HC3 was used as the covariance estimator in the first two regression analyses. Consistent with the previous results and with what was stated in H1, empathy and perceived descriptive norms were positively associated with frequency of donations in local collections (i.e. collections organised in the workplace, study place, neighbourhood and among friends; see Table 9).

In the second model, there was no evidence of an interaction between empathy and perceived norms when predicting frequency of donations in local collections, $\Delta R^2 = .0001$, F(1, 1296) = 0.19, p = .664, as can be seen in Table 9. Therefore, the data did not support H2.

In the third model, homoscedasticity was assumed, thus the regression analysis was conducted with OLS. None of the control variables were associated with frequency of donations in local collections. There was no evidence of an interaction, $\Delta R^2 = .0000$, F(1, 1244) = 0.06, p = .812.

In sum, and supporting H1 but not H2, participants engaged more often in local collections when they felt more empathy towards the beneficiaries of these campaigns and when they reported having family and friends that had donated more frequently in this type of collections. Contrary to what was expected, perceived norms were not a moderator of the association between empathy and frequency of donations in local collections.

Table 9
Study 1. Regression analyses with items about donations in local collections

	Donati	Donations in local collections			
	(1)	(2)	(3)		
	0.34***	0.34***	0.33***		
Empathy	(0.04)	(0.04)	(0.04)		
	[0.27, 0.42]	[0.26, 0.42]	[0.26, 0.41]		
	0.36***	0.36***	0.36***		
Norms	(0.04)	(0.04)	(0.04)		
	[0.28, 0.44]	[0.28, 0.44]	[0.29, 0.43]		
		-0.002	-0.01		
Empathy x Norms interaction		(0.03)	(0.02)		
		[-0.05, 0.05]	[-0.05, 0.04]		
			0.02		
Household income			(0.03)		
			[-0.03, 0.08]		
D.1: 11			0.16		
Religious Id.			(0.11)		
(0 = no, 1 = yes)			[-0.07, 0.38]		
Moderation effect size (f^2)		0.0001	0.0		

Note. *** p < .001. b values correspond to unstandardised coefficients. Standard errors in parentheses. 95% CIs in brackets. No signs of multicollinearity. Step 1 $R^2 = .26$, F(2, 1297) = 203.26, p < .001. Step 2 $R^2 = .26$, F(3, 1296) = 136.03, p < .001. Step 3 $R^2 = .25$, F(5, 1244) = 84.11, p < .001.

Discussion

First of all, H1 was consistently supported by the results of this study. Perceived descriptive norms based on the perceived behaviour of family and friends was a significant predictor of self-reported frequency of donations over the past 12 months. Empathy was also positively associated with past frequency of donations. Therefore, participants were more likely to report having donated

frequently in a certain context when they felt more empathy towards the recipient of help, and when they perceived their close ones to have donated frequently in that same context.

The moderating role of perceived norms on the empathy-donations association was confirmed in almost every situation measured, with the exception of donations to Teletón and local collections. These results give partial support to H2. Where interactions did reach significance, as expected the association between empathy and past frequency of donations decreased when perceived descriptive norms were high.

As outlined before, it was expected that when social pressure was very salient, the association of social norms with behaviour would surpass the association of donations with other drivers, or restrict them (Mischel, 1977; Cooper & Withey, 2009). Moreover, for norms to have an effect on our behaviour we have to focus our attention on the group that endorses that norm. Empathy is an other-oriented emotional reaction (Batson, 1990; Batson, 1991), thus it requires our attention to be focussed on the feelings/emotions of the recipient of help (Batson, Early, & Salvarani, 1997; Batson et al., 2003). It was hypothesised that when group norms are high and therefore there is a great social pressure to adjust our behaviour to what the norms establish as desirable, our attentional resources are going to be directed towards the group that established that norm. This would leave less cognitive resources to focus on the recipient of help, and consequently empathy would be less likely to inform our behavioural choices. In other words, behaviour would be in line with the source of information more salient at the time.

In the context of donations to Teletón, which is maybe the most well-known and visible charity funding campaign in Chile, during the 27-hour television broadcast people are showered with cases of different Teletón beneficiaries, all of which are loaded with strong emotional content. Thus, in this context empathy levels may strongly affect people's decision to donate, regardless of social norms.

The same mechanism might explain the non-significant moderation in local collections. When there is a close relationship between the recipient of help

and the potential donor (e.g. a friend, an acquaintance, a colleague, etc.), empathy levels might become more salient, making it a strong predictor of helping. In these situations, what others do might not affect the strength of this association, as the personal relationship that exists between target of help and donor will be salient anyway, and thus it will shape decisions to donate. Moreover, it could be that a reciprocity norm might affect results in situations where the target of help is an acquaintance, since it is more likely that in the future the current target of help turns into a potential helper via role reversal. This could be a possible explanation for the non-significant interaction terms when predicting donations to Teletón and in locally organised collections.

In terms of strength, this study had a diverse sample. This supports generalisation of the results to all the population living in large cities in Chile. Nevertheless, as seen by the sensitivity power analysis, the minimum effect size detectable by this sample size was very small. Indeed, the large sample size allowed to detect the small moderation effect sizes. However, this interaction might not appear in a study with a smaller sample. Thus, considering the small effects sizes, the pattern of results found in this study should be considered as preliminary results that should be replicated in posterior studies.

There are a few limitations that must be noted. First, it is important to acknowledge that this study focussed on recalled past donations, and not all participants might be able to accurately recall their previous behaviour. On top of this, the measurement model in this study was not perfect, as indicated by the EFA and poor fit indexes in the first CFA. Also, even though the second measurement model had better fit indexes than the first one, to correlate error terms between items in different latent factors can be a controversial approach. Overall, these issues highlight the need to attempt to reproduce the present patterns of results but with a different dependent variable. Hence, I designed a new study to evaluate how empathy and perceived social descriptive norms can impact willingness to donate to a charity.

Chapter 3

Study 2. A replication in a cross-sectional study with undergraduate students

Results in Study 1 revealed that perceived descriptive norms were positively related to the participants' own donations in the past across a range of different recipient targets. This was also true for empathy. Hence, both situational empathy and social descriptive norms were positively associated with past frequency of donations, even when controlling for each other.

Results in Study 1 also supported the moderating role that perceived norms played in the association between empathy and donations. The association between empathy and donations was weaker when perceived norms were supportive of monetary donations, although this moderation failed to emerge for two types of donation which were investigated.

The exceptions in Study 1 in which there was no sign of the moderation were donations to Teletón and donations in collections organised in the workplace, study place, neighbourhood and among friends (i.e. local collections). It was hypothesised that this occurred because the empathy's salience was too high to be overridden by norms, and also because of possible anticipated reciprocity in the case of local collections.

In the current study, I tried to replicate the results of Study 1, in a context in which overly strong empathy is unlikely, and in which reciprocity expectations are unlikely to play a role. The chosen context was that of undergraduate participants donating to a charity organisation that helps homeless people.

A further novelty in Study 2 was that empathy was manipulated this time, to give a better handle on the causal direction of effects. One of the main limitations in Study 1 was that the measure of self-reported frequency of donations in the past was susceptible to inaccurate recall. Therefore, in Study 2 instead of asking about past donations, participants were asked about their present willingness to donate to a charity organisation.

The hypotheses in this study were the same as in Study 1:

H1: Perceived descriptive norms based on the behaviour of family and friends and situational empathy will predict willingness to donate, even when controlling for each other.

H2: There will be an interaction between situational empathy and perceived descriptive norms, in which situational empathy will be a weaker predictor of willingness to donate when descriptive norms are high.

Method

Participants

One hundred and forty-four participants were recruited to answer an online survey using Qualtrics. Considering practical limitations based in the cohort size of undergraduate student sample in Royal Holloway University of London (RHUL), all undergraduate psychology students in two consecutive cohorts were invited to participate, and all those who volunteered were included in the study. These participants were recruited via a research participation scheme in exchange for course credits. The participants' age ranged from 17 to 47 years old (123 women, 19 men, 2 missing; $M_{\rm age} = 19.08$, SD = 3.06; 94 British, 38 other nationalities, 12 missing).

Procedure

After reading a general description of the study and giving informed consent, participants were presented with a 10- to 15-minute survey. Participants were presented with a brief text that was designed to emphasise homelessness as an important issue in the UK and to introduce a charity that targets this problem (for the whole text see Appendix B). Even though the information about

homelessness shown in the text was based on real data (Department for Communities and Local Government, 2014; Greater London Authority, 2014; St Mungo's Broadway, 2014), I modified the objectives and work of the charity that was presented in the text (i.e., Shelter). After reading this text, participants were randomly allocated to one of three empathy conditions (high, low, and control empathy condition). After the empathy manipulation, participants completed the survey, and at the end they were debriefed.

Empathy manipulation

The empathy manipulation was based on Batson et al.'s work (1991). Participants were randomly allocated to one of three conditions: high empathy, low empathy or control condition. Participants in the high and low empathy conditions read that they were going to be presented with a small vignette with the experience of a current beneficiary of the charity introduced previously. Participants in the high empathy condition then received an instruction that asked them to focus on that person's emotions:

While you are reading this case, try to imagine how the protagonist feels about what has happened and how it has affected his life. Try to imagine what he has been through and how he feels as a result.

Participants in the low empathy condition received the instruction to remain objective while reading the vignette:

While you are reading this case, try to take an objective perspective toward what is described. Try not to get caught up in how the protagonist feels; just remain objective and detached.

The submit button in the page with the instruction was disabled for a few seconds to make sure that participants did not rush through the manipulation. Participants in both the high and low empathy conditions were presented with the same short vignette with the story of Daniel, a homeless person and current

beneficiary of the charity presented previously. The submit button was disabled for 30 seconds in that particular page to make sure participants read the vignette. Participants in the control empathy condition did not read this vignette.

Daniel is 36 years old and has been homeless for the last four years. He spends the nights on the streets or, if he is lucky, in emergency shelters. His troubles started when he was suddenly fired from his former job as a construction labourer. Although he tried to find a job, he was not lucky. "It's difficult to get a job when they see you as I was... dirty, untidy, tired, desperate. But how could I be presentable if I didn't have money because for starters I didn't have a job... It's a vicious cycle!"- Daniel says. For a while Daniel lived on what people gave him. There were some regulars that gave him some food every now and then. One day, one of them talked to Daniel about Shelter and contacted them on Daniel's behalf. He is now registered with them and is about to start on a programme, which will reintegrate him into the workplace. Daniel hopes that with the help of Shelter he will soon get back on his feet. "I hope Shelter can help me out of this vicious cycle... I just need somebody to back me up for a while".

All participants in the study then read that Daniel was one of many that Shelter wanted to help overcome homelessness. As an empathy manipulation check, all participants were asked to rate from 1 'not at all' to 7 'extremely' how (1) 'Sympathetic', (2) 'Compassionate', (3) 'Soft-hearted', (4) 'Warm', (5) 'Tender', and (6) 'Moved' they felt towards Daniel (α = .91). These items were taken from previous research on empathy (Batson et al., 1991; Batson, Early & Salvarani, 1997).

Measures

All measures in this study used a response scale that ranged from 1 'strongly disagree' to 7 'strongly agree', unless stated otherwise.

Empathy towards homeless people (α = .93) was adapted from the emotional response scale (Batson, Early, & Salvarani, 1997). Participants were

asked to report to what extent they felt a list of 6 emotions towards homeless people: (1) 'Sympathetic', (2) 'Compassionate', (3) 'Soft-hearted', (4) 'Warm', (5) 'Tender', and (6) 'Moved', just like in the empathy manipulation check. The response scale ranged from 1 'not at all' to 7 'extremely'.

Perceived descriptive norms based on the behaviour of family and friends $(\alpha = .83)$ was measured using 4 items: (1) 'My family often donates to charity organisations', (2) 'My family often donates to homeless people', (3) 'My friends often donate to charity organisations', and (4) 'My friends often donate to homeless people'².

Willingness to donate (α = .90) was adapted from Zagefka et al. (2011). It was measured using 5 items: (1) 'I would be willing to give donations to Shelter', (2) 'I think it is important to give donations', (3) 'I would be willing to give donations to homeless people', (4) 'I would really like to help homeless people', and (5) 'I would be willing to help homeless people'.

Results

A one-way analysis of variance (ANOVA) was conducted to test if the empathy manipulation worked as expected. There were no significant differences in empathy towards Daniel (empathy manipulation check) between empathy conditions (F(2, 141) = 0.83, p = .440, $\eta_p^2 = .01$, $\omega^2 = -.002$), in other words, the manipulation was not effective (see Figure 6). Therefore, all the subsequent analyses were conducted using empathy towards homeless people, and the empathy manipulation and the manipulation check (i.e., empathy towards Daniel) were not considered. This means that the dataset that contained an experimental manipulation was analysed as a correlational dataset, as if no manipulation had been included. Hence, this implies that results must be interpreted with due caution.

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² In an EFA the perceived descriptive norms items related to friends and family loaded on only one factor; thus, all the items were considered under one construct called perceived descriptive norms based on the behaviour of family and friends.

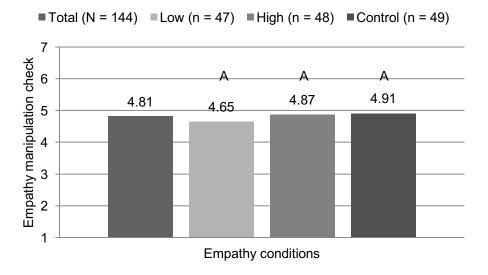


Figure 6
Study 2. Differences in empathy manipulation check by empathy conditions. Letters indicate difference between conditions. Conditions not sharing the same letter are significantly different from each other.

Descriptive statistics of the measures used in this study and their correlations are found in Table 10. Considering the recommended cut-off points skewness and for kurtosis by West et al. (1995), all measures presented a normal distribution. As expected, all the variables were positively correlated.

As a first step, an EFA was conducted to test if the items considered in this study loaded on different factors. For clarity, items included were the norms and donation items, as well as the items asking about empathy with homeless people in general (not the items asking about empathy with Daniel, which were used for the manipulation check). All of the items were normally distributed (West et al., 1995). Hence, the EFA was conducted with ML extraction (Fabrigar et al., 1999), and with Direct Oblimin with delta 0 to account for the correlations between the measures (Costello & Osborne, 2005; Harman, 1976).

Table 10Study 2. Descriptive statistics and correlations

	Mean	SD	(1)	(2)
Empathy towards homeless people	4.7	1.26	.40***	.69***
Norms (1)	3.81	1.46	-	.51***
Willingness to donate (2)	5.34	1.22		-
<i>Note.</i> *** <i>p</i> < .001				

The Pattern Matrix can be found in Table 11 and the Structure Matrix in Table 12. This time, both matrices are presented since both show different pattern of results.

Table 11Study 2. EFA. Pattern Matrix.

	Pattern Matrix					
			Factor			
		1	2	3		
1	Sympathetic towards homeless people	0.29	-0.08	0.54		
2	Compassionate towards homeless people	0.45	-0.03	0.44		
3	Soft-hearted towards homeless people	0.71	-0.09	0.24		
4	Warm towards homeless people	0.95	0.09	0.00		
5	Tender towards homeless people	0.92	0.17	-0.06		
6	Moved towards homeless people	0.47	0.05	0.35		
7	My family often donates to charity organisations.	0.02	0.66	-0.02		
8	My family often donates to homeless people.	0.20	0.73	-0.01		
9	My friends often donate to charity organisations.	-0.17	0.75	0.09		
10	My friends often donate to homeless people.	0.11	0.72	0.08		
11	I would be willing to give donations to Shelter.	-0.17	0.15	0.84		
12	I think it is important to give donations.	-0.01	0.01	0.68		
13	I would really like to help homeless people.	0.12	0.03	0.76		
14	I would be willing to help homeless people.	0.08	-0.01	0.80		
15	I would be willing to give donations to homeless people.	0.02	0.10	0.74		

As expected, three factors were extracted in the EFA. Almost all the items loaded on their respective factor. There was only one problematic item, which was item 1 in Table 11 (i.e. the empathy item which tapped into feeling sympathetic towards homeless people). Instead of loading on the factor for empathy, this item loaded on the third factor, which corresponded to willingness to donate. However, when looking at the structure matrix (Table 12), even though this item had a high correlation with the willingness to donate factor, it still had a high correlation with its correct target factor. Since these items have been used several times before to measure state emotional empathy (Batson, 1991; Batson, Early, & Salvarani, 1997; Batson, 1987; Batson et al., 1991), it was decided to keep item 1 as part of the empathy construct.

Table 12 Study 2. EFA. Structure Matrix.

tru	cture Matrix			
			Factor	
		1	2	3
1	Sympathetic towards homeless people	0.61	0.27	0.68
2	Compassionate towards homeless people	0.71	0.30	0.70
3	Soft-hearted towards homeless people	0.84	0.21	0.64
4	Warm towards homeless people	0.97	0.32	0.63
5	Tender towards homeless people	0.92	0.36	0.60
6	Moved towards homeless people	0.70	0.34	0.67
7	My family often donates to charity organisations.	0.17	0.65	0.33
8	My family often donates to homeless people.	0.37	0.77	0.49
9	My friends often donate to charity organisations.	0.07	0.75	0.36
10	My friends often donate to homeless people.	0.33	0.78	0.51
11	I would be willing to give donations to Shelter.	0.39	0.53	0.81
12	I think it is important to give donations.	0.41	0.35	0.67
13	I would really like to help homeless people.	0.59	0.44	0.85
14	I would be willing to help homeless people.	0.57	0.41	0.84
15	I would be willing to give donations to homeless people.	0.50	0.48	0.80

In Table 11, item 2 (i.e. empathy item about feeling compassionate towards homeless people) had a high cross loading too on its respective empathy factor and on the third factor. As can be seen in Table 12, this item had a high correlation with the empathy factor, but also with the willingness to donate factor. Still, I kept this item as part of the empathy construct, given it is a well-validated measure in research.

To test the hypotheses, I conducted regression analyses. A Koenker test indicated that homoscedasticity could not be assumed with this data, thus HC3 was used. The SPSS RLM macro (Darlington & Hayes, 2017) was used to test the regression model with empathy towards homeless people and perceived descriptive norms as independent variables (IVs). Then, model 1 of the SPSS PROCESS macro (Hayes, 2013) was used to add the interaction term to the regression. There were no signs of multicollinearity. A sensitivity power analysis with 3 tested predictors in a linear regression, $\alpha = .05$, power of 80% and sample size of 144 showed a minimum detectable effect size of $f^2 = 0.08$ (Faul et al., 2009). Considering only one tested predictors (i.e., the interaction) the minimum effect size that could be detected with this sample size was $f^2 = 0.06$.

Results of the regression analyses can be seen in Table 13. As expected according to H1 and consistently with the results of Study 1, perceived descriptive norms and empathy were positively associated with willingness to donate.

Consistent with the results of Study 1, the interaction term added in the second model was significant, $\Delta R^2 = .03$, F(1, 139) = 8.55, p = .004. This interaction had a relatively small effect size according to Cohen (2003).

Simple slopes analysis indicated that empathy was a significant predictor of willingness to donate at every level of perceived descriptive norms. Still, empathy had a weaker association with help when norms were high (+1 SD), b = 0.36, $SE_b = 0.07$, t(139) = 4.96, p < .001, 95% CI [0.21, 0.50], compared to when norms were low (-1 SD), b = 0.67, $SE_b = 0.09$, t(139) = 7.63, p < .001, 95% CI [0.50, 0.85]. The results support H2 and were consistent with the pattern of results in Study 1. This interaction is illustrated in Figure 7.

Table 13
Study 2. Regression analyses with empathy towards homeless people as IV.

	Willingness to donate		
	(1)	(2)	
Emmother torroads homoloss	0.55***	0.51***	
Empathy towards homeless	(0.07)	(0.06)	
people	[0.42, 0.69]	[0.40, 0.63]	
	0.24***	0.29***	
Norms	(0.06)	(0.06)	
	[0.12, 0.36]	[0.17, 0.40]	
		-0.11**	
Empathy x Norms interaction		(0.04)	
		[-0.18, -0.04]	
Moderation effect size (f^2)		0.07	

Note. ** p < .01, *** p < .001. b values correspond to unstandardised coefficients. Standard errors in parentheses. 95% CIs in brackets. Step 1 R^2 = .54, F(2, 140) = 78.22, p < .001. Step 2 $R^2 = .57$, F(3, 139) = 76.13, p < .001.

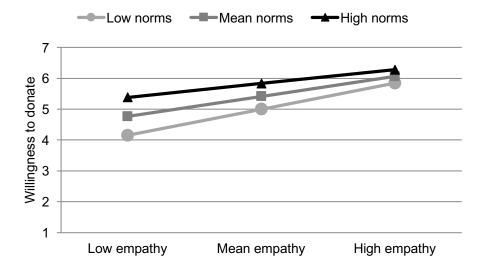


Figure 7 Study 2. Simple slopes. Empathy towards homeless people predicting willingness to donate for 1 SD below the mean (low), the mean, and 1 SD above the mean (high) of descriptive norms.

The same analysis was conducted with the empathy manipulation check scale (empathy towards Daniel) instead of the empathy towards homeless people measure, and the same pattern of results was obtained (Table 14). Given that the manipulation check measure provided an alternative option for testing the hypotheses, this supplementary analysis is presented for additional evidence. Empathy and perceived norms were both positively associated with willingness to donate. These results supported H1.

Table 14
Study 2. Regression analyses with empathy manipulation check as IV

	Willingness to donate		
	(1)	(2)	
	0.50***	0.47***	
Empathy (m. check)	(0.09)	(0.08)	
	[0.32, 0.68]	[0.31, 0.64]	
	0.31***	0.33***	
Norms	(0.06)	(0.06)	
	[0.18, 0.43]	[0.21, 0.46]	
		-0.11*	
Empathy x Norms interaction		(0.05)	
		[-0.20, -0.02]	
Moderation effect size (f^2)		0.05	

Note. * p < .05, *** p < .001. b values correspond to unstandardised coefficients. Standard errors in parentheses. 95% CIs in brackets. Step 1 $R^2 = .44$, F(2, 140) = 47.07, p < .001. Step 2 $R^2 = .46$, F(3, 139) = 41.31, p < .001.

In the second step, the interaction was a significant predictor of willingness to donate, $\Delta R^2 = .03$, F(1, 139) = 6.25, p = .014. Simple slopes analysis showed that the association between empathy and willingness to donate was significant in all levels of perceived norms. Nonetheless, empathy had a weaker link with willingness to donate when norms were high (+1 *SD*), b = 0.31, $SE_b = 0.08$, t(139) = 3.96, p < .001, 95% CI [0.16, 0.46], compared to when

norms were low (-1 SD), b = 0.64, $SE_b = 0.13$, t(139) = 5.03, p < .001, 95% CI [0.39, 0.89]. The interaction is depicted in Figure 8. Therefore, H2 was again supported by the data.

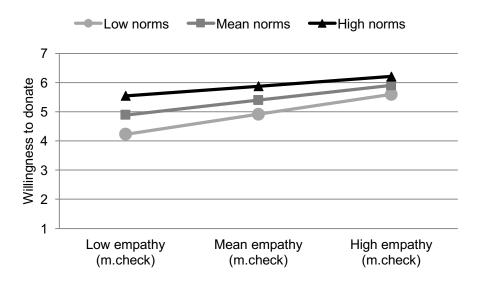


Figure 8
Study 2. Simple slopes. Empathy (m. check) predicting willingness to donate and help for 1 SD below the mean (low), the mean, and 1 SD above the mean (high) of descriptive norms.

Discussion

This study aimed to test if the results of Study 1 could be replicated. Indeed, participants' perceived norms based on the behaviour of their family and friends was positively related to their willingness to donate. Empathy predicted willingness to donate as well. Hence, H1 was again supported by the data in this study.

Willingness to donate was predicted not only by perceived descriptive norms and empathy but also by their interaction, as was the case in Study 1. When participants reported that their family and friends often donated to charities and to homeless people, empathy was less strongly associated with willingness to help than when participants perceived their families to have less supportive

norms towards donating. Moreover, considering the moderation effect sizes obtained in this study, and the minimum detectable effect size shown by the sensitivity power analysis, it can be concluded that the interactions reflect a true moderation effect. Thus, H2 was supported in this study.

Study 2 replicated the results found previously in Study 1 with a different sample and context. In the first study, the hypotheses were confirmed in a Chilean representative sample from the main cities in Chile, while in the second study the hypotheses were confirmed in a sample of undergraduate psychology students in a university in UK. Therefore, the importance of empathy along with perceived group norms in shaping monetary donations has been supported by two studies in very different settings.

An improvement in this study in comparison to Study 1 is that the dependent variable was improved. While in the previous study self-recalled frequency of donations in the past was the dependent variable, in Study 2 this was changed to a self-report measure of present willingness to donate. This measure is better than the previous one, because it is not based in recollections of past behaviour. And even though willingness to donate and help it is not a behavioural measure, according to previous research this type of self-report measures is a good proxy for actual donations (Zagefka et al., 2011).

However, it is important to remember that even though this study had originally an experimental design in which empathy was manipulated, the manipulation did not work as expected. This was evinced by the lack of effect on the empathy manipulation check. Hence the results in this study are based on correlational data, as was the case in Study 1. This is relevant when interpreting the results of the study, since associations between variables do not necessarily indicate causality.

A possible explanation for the lack of effect of empathy manipulation on the empathy manipulation check is the identifiable victim effect (Kogut & Ritov, 2005; Schelling, 1968; Small & Loewenstein, 2003). This effect consists in an increase in empathy and helping when a target of help is made recognisable. In this case, because Daniel was identified as the target of help for all participants, the identifiable victim effect could have played a role. Let us recall that all

participants, even those in the control norms condition that did not read the vignette, were told that Daniel was one of many that the charity wanted to help to overcome homelessness. However, these types of manipulation have been used before with positive results (Batson, & Ahmad, 2001; Batson et al., 1991; Batson et al., 2002; Batson et al., 1988; Batson, Early, & Salvarani, 1997; Batson, Sager, et al., 1997; Pavey et al.'s, 2012), so it would be surprising that the identifiable victim effect could cancel out the effect of the perspective-taking instruction manipulation. Another possible explanation for the lack of effect of the empathy manipulation is social desirability. Still, the same logic as before applies here, since the perspective-taking instruction manipulation has worked previously in spite of social desirability issues.

The current study focused on help towards homeless people, a highly stigmatised group that can trigger feelings of contempt (Fiske et al., 2002; Harris & Fiske, 2006). The logic behind choosing this target of help was that there could be a wide range of feelings (not necessarily positive ones) triggered by the target. Hence, there could be greater variability in participants' levels of empathy towards this particular target of help, as well as variability in attitudes and perceived donations towards this group. Research has shown that perspective taking and empathy can decrease prejudice (Dovidio et al., 2004; Pettigrew & Tropp, 2008; Todd, Bodenhausen, Richeson, & Galinsky, 2011), but it could be the case that in this study, empathy was resistant to manipulation because of the general strong prejudice participants had against homeless people. However, in general, all participants showed high levels of empathy towards Daniel and towards homeless people (higher than the midpoint of the scale). Therefore, this possibility can be ruled out.

Regarding the gender of the target of help, by design it was decided for it to be male, mainly because the majority of homeless people are male (Homeless Link, 2015; Homelessness Australia, 2016; The U.S. Department of Housing and Urban Development, 2016). This decision could have affected levels of empathy towards the target too, since female targets trigger more empathy than male targets (Olweus & Endresen, 1998; Stuijfzand et al., 2016). However, the guideline was to create a vignette as realistic as possible that could show the

experience of a person who was registered in a charity. Hence, a male target was selected.

In the following chapter, an experimental study is described in which norms and empathy were manipulated. Now, the empathy manipulation was based on Pavey et al.'s work (2012) in order to try to manipulate empathy effectively with another well-known perspective-taking instruction.

Chapter 4

Study 3. Replication of the moderation in an experimental study

In Studies 1 and 2, the association of perceived descriptive norms and situational empathy with donations was evidenced. Also, the moderation of perceived descriptive norms on the association between situational empathy on donations was supported in both studies. This interaction consisted of empathy being a weaker predictor of donations when norms were supportive of donations (i.e. high), compared to when norms were less supportive of helping (i.e. low). In both studies, descriptive norms were measured in relation to how often participants thought their family and friends donated.

These same results were found in different countries and with different types of samples, which highlights the consistency of the pattern of results. However, Studies 1 and 2 did not make headway with regards to getting a better handle on the causal direction of effects. Hence, in the current study I aimed to replicate the results using an experimental design.

In Study 3, participants were presented with a bogus charity organisation's campaign that targeted homelessness. Situational empathy and perceived descriptive norms were manipulated, and both were again considered jointly as possible predictors of willingness to donate to homeless people and willingness to donate to the NGO. Based on the rationale provided in the introduction chapter, the hypotheses were identical to the ones in Studies 1 and 2:

H1: Perceived social descriptive norms and situational empathy will be significant predictors of willingness to donate, even when controlling for each other.

H2: Perceived descriptive norms will moderate the effect of situational empathy on willingness to donate, such that empathy effects would be less pronounced when perceived descriptive norms are high, i.e. strongly supportive of donations.

Method

Participants

Two hundred and nine participants were recruited to answer an online survey about attitudes, feelings and attention using Qualtrics. These participants were recruited via Reddit -an online public social media website-, using the subreddit 'SampleSize', which is a community dedicated to posting and answering online surveys. Thus, this study targeted a pool of participants who were interested in participating in different studies. Recently, numerous researchers have used Reddit to advertise their studies and to recruit participants (e.g., Maxwell et al., 2017; Mills, Milyavskaya, Heath, & Derevensky, 2017; Parsons, Reichl, & Pedersen, 2017; Pham, Barbaro, Mogilski, Shackelford, & Zeigler-Hill, 2017). Studies have shown that Reddit is a website that provides high quality data, making it a reliable source to recruit participants (Casler, Bickel, & Hackett, 2013; Jamnik & Lane, 2017; Shatz, 2017). Participants were offered a raffle for three Amazon vouchers as an incentive. The participants' age ranged from 18 to 61 years old (113 women, 82 men, 14 other; $M_{\text{age}} = 24.69$, SD= 6.63; 87 American, 32 British, 14 German, 13 Swiss, 55 other nationalities, 8 missing).

Procedure

In this study, participants were presented with a 15- 20-minute survey in which situational empathy and perceived descriptive norms were manipulated. Participants were randomly allocated to one of three empathy conditions (high [n = 68], low [n = 72], or control empathy condition [n = 69]) as well as to one of three norms condition (high [n = 71], low [n = 69], or control norms condition [n = 69]). In the middle of the survey, after the empathy manipulation, participants

were told that the researchers wanted to make a short pause in this academic study to allegedly collect money for an international non-governmental organisation that helps homeless people around the world by working with local organisations. In this part of the study, the norms manipulation took place and the dependent variables were measured. After that, the study was picked up where it was left off, demographic variables were measured and participants were debriefed.

Empathy manipulation

The empathy manipulation was based on Pavey et al.'s work (2012). All participants were randomly assigned to one of three empathy conditions. They read different instructions, depending on the condition, before looking at a bogus charity poster (the poster was the same across conditions). In order to make sure that participants read the instructions, the submit button was disabled for 20 seconds. Those in the high empathy condition read the following instruction, which asked them to focus on the person's emotions portrayed in the poster:

We are interested in people's responses to emotional experiences, and to what extent people remember other people's feelings.

The following is a poster about a man experiencing homelessness. Research has shown that the best way to remember emotional experiences is to vividly imagine how the other person is feeling about what has happened and focus on the emotions they are experiencing. Therefore, while you see and read the poster, we would like you to try to imagine how the other person is feeling. Try not to concern yourself with attending to all the facts presented. Just imagine how this person feels and the different emotions he would be experiencing in this situation.

Please spend 1 minute reading and re-reading the text and examining the poster, and then click >>. You will then be asked to recall the emotional elements of the poster, and how you think the person was feeling.

After looking at the poster for at least 1 minute (the submit button was disabled for 60 seconds), participants in the high empathy condition were asked the following open question:

Please now write down the emotions you think the person in the poster was experiencing.

Participants in the low empathy condition were asked to focus on the details of the information given in the poster with the following instruction:

We are interested in people's memory of events, and how accurately people remember the details of other people's stories.

The following is a poster of a man experiencing homelessness. Research has shown that the best way to remember events is to remain as objective as possible. It helps if you distance yourself emotionally from the person in the poster, and try not to get caught up in imagining the other person's feelings. Therefore, while you read and watch the poster, we would like you to try to be as objective as possible. Try not to let yourself get caught up in imagining what the person has been through and how he feels as a result.

Please spend 1 minute reading and re-reading the text and examining the poster, and then click >>. You will then be asked to accurately recall some details of the poster.

After the poster, participants in the low empathy condition were asked the following open question:

Please now recall as much information about the person in the poster as you can (e.g., the person's age, name, gender, and any other details you can remember).

Finally, participants in the control empathy condition were presented with a much shorter instruction before being exposed to the poster:

The following is a poster of a man experiencing homelessness.

Please spend 1 minute reading and re-reading the text and examining the poster, and then click >>. You will then be asked some questions about the poster.

When participants in the control condition finished looking at the poster, they were asked to write down the topic of the poster, and anything they could recall about it.

All participants, regardless of the empathy condition, were presented with a bogus charity poster asking for donations to help end homelessness (see Figure 9). The story of Daniel was portrayed in the poster, supposedly a homeless person who was about to start a charity programme that would reintegrate him into the workplace.

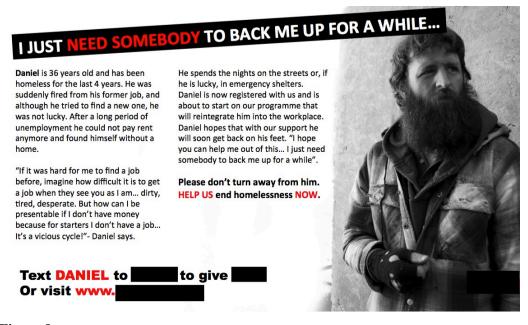


Figure 9Study 3. Bogus charity poster used in the empathy manipulation.

Norms manipulation

Because it is not possible to manipulate the previously used type of descriptive norms, i.e. because it is not plausible to give participants information about how much their family and friends have donated, in the current study I changed the group that establishes the norm. As a side effect, this meant that the reference group now corresponded to a more distal group than the one in the previous studies.

The norms manipulation was based on Goldstein et al.'s (2008) and Agerström et al.'s (2016) work. After telling participants about the researchers' intention to use this opportunity to collect money for an international NGO, participants in the high norms condition were told that '89.7% of participants in this study have already accepted to donate to this NGO that helps homeless people around the world.' Those in the low norms condition read almost the same statement, but it indicated that 19.7% of participants had decided to donate. The submit button was disabled for 5 seconds to ensure that participants read the message.

Along with the statement, participants saw a pie chart that visually represented the alleged proportion of participants that until then had decided to donate to the campaign. In order to make this information more realistic, the pie chart was presented in a gif image format after a loading spinner gif to give participants the feeling that the chart was being created with live data (see Figure 10). Participants in the control norms condition were not exposed to any information about the other participants' decisions.

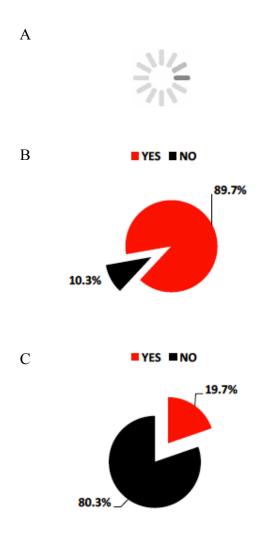


Figure 10
Study 3. Norms manipulation. A) Loading spinner gif. B) Pie chart for high norms condition. C) Pie chart for low norms condition.

Measures

All measures in this study used a response scale that ranged from 1 'not at all' to 7 'very much', with the exception of the empathy manipulation check.

Empathy manipulation check (α = .93) was measured at the end of the study. All participants were asked to rate from 1 'Not at all' to 7 'Extremely' how sympathetic, compassionate, soft-hearted, warm, tender and moved they felt towards Daniel. These items were adapted from previous research on empathy (Batson et al., 1991).

There were two different scales that tapped into the main dependent variable 'willingness to donate' adapted from Zagefka et al. (2011). The scales were willingness to donate to homeless people, and willingness to donate to the NGO.

Willingness to donate to homeless people (α = .89) was measured using 5 items: (1) 'I would be willing to give donations to homeless people', (2) 'I think it is important to give donations to homeless people', (3) 'I think it is the right thing to do to give donations to homeless people', (4) 'I think everyone should donate money to homeless people', and (5) 'I would give the maximum amount I could afford according to my means to homeless people'.

Willingness to donate to the NGO (α = .90) was measured using 5 items: (1) 'I would be willing to give donations to this international NGO', (2) 'I think it is important to give donations to this international NGO', (3) 'I think it is the right thing to do to give donations to this international NGO', (4) 'I think everyone should donate money to this international NGO', and (5) 'I would give the maximum amount I could afford according to my means to this international NGO'.

Results

In a two-way ANOVA with the empathy and norms manipulations as IVs (3 levels each), no differences were found in the empathy manipulation check between empathy conditions (F(2, 200) = 0.56, p = .574, $\eta p^2 = .01$; $\omega^2 = -.004$); hence, there was no evidence that the manipulation worked in the way it was intended (see Figure 11). Considering the cut-off points of .01, .06 and .14 for small, medium and large effects respectively (Kirk, 1996), there were small differences in the empathy manipulation check between norms conditions (F(2, 200) = 6.10, p = .003, $\eta p^2 = .06$, $\omega^2 = .05$). Participants in the high norms condition reported less empathy than those in the control (p = .033) and low norms condition (p = .003; see Figure 11). There was no interaction effect of the empathy and norms manipulations on the empathy manipulation check (F(4, 200) = 1.57, p = .185, $\eta p^2 = .03$, $\omega^2 = .01$).

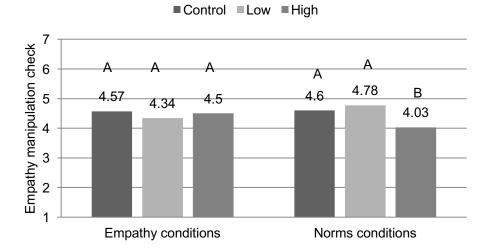


Figure 11
Study 3. Differences in the empathy manipulation check scale by empathy and norms conditions. Letters indicate difference between conditions. Conditions not sharing the same letter are significantly different from each other.

The descriptive statistics of the measures used in this study and their correlations are found in Table 15. All of the variables, regardless of the norms condition, were normally distributed (West et al., 1995). As expected and in line with H1, the empathy manipulation check was positively associated with willingness to donate to homeless people and to the NGO.

An EFA was conducted next with the items for the scales of empathy, willingness to donate to homeless people, and willingness to donate to the NGO. Because all the items were normally distributed, ML was used as the method of extraction (Fabrigar et al., 1999). Considering the intercorrelations between variables, I used Direct Oblimin rotation with a delta of 0 so the factors were considered oblique (Costello & Osborne, 2005; Harman, 1976). As expected, three factors were extracted, one for each construct. All the items loaded on their respective factors, without significant cross-loadings (the tables with the pattern and structure matrix are omitted for brevity's sake, and are available upon request).

Table 15Study 3. Descriptive statistics and correlations within the whole sample and by conditions.

Whole sample $(N = 209)$	Mean	SD	(1)	(2)
Empathy manipulation check	4.47	1.38	.59***	.45***
Willingness to donate to homeless people (1)	4.30	1.38	-	.60***
Willingness to donate to the NGO (2)	3.60	1.37		-
Low norms condition $(n = 69)$	Mean	SD	(1)	(2)
Empathy manipulation check	4.78	1.17	.66***	.54***
Willingness to donate to homeless people (1)	4.64	1.44	-	.59***
Willingness to donate to the NGO (2)	3.92	1.51		-
High norms condition $(n = 71)$	Mean	SD	(1)	(2)
Empathy manipulation check	4.03	1.54	.60***	.42***
Willingness to donate to homeless people (1)	3.92	1.29	-	.62***
Willingness to donate to the NGO (2)	3.20	1.16		-
Control norms condition $(n = 69)$	Mean	SD	(1)	(2)
Empathy manipulation check	4.60	1.28	.46***	.34**
Willingness to donate to homeless people (1)	4.36	1.32	-	.53***
Willingness to donate to the NGO (2)	3.71	1.35		-
<i>Note.</i> *** <i>p</i> < .001				

Because there was no evidence that the empathy manipulation worked, the empathy manipulation check was used in the following analyses instead of the empathy conditions. Regression analyses were conducted to test the hypotheses. In the first regression, only empathy and the norms manipulation were considered as IVs. Considering that the norms manipulation had three levels, indicator coding was used using the low norms condition as the reference group (Hayes & Montoya, 2017). In the second step, the interaction terms were added using model 1 of SPSS PROCESS macro (Hayes, 2013). Koenker tests

indicated that homoscedasticity could be assumed with both dependent variables, thus OLS was used as estimator. There were no signs of multicollinearity. A sensitivity power analysis with 5 tested predictors in a linear regression (the low norms condition is not considered since it is the reference group), sample size of 209, $\alpha = .05$, power of 80% showed a minimum detectable effect size of $f^2 = 0.06$ (Faul et al., 2009). Considering only two tested predictors related to the two interaction terms, the minimum effect size that could be detected with this sample size was $f^2 = 0.05$.

As can be seen in Table 16, empathy was the only consistent predictor of willingness to donate to homeless people and willingness to donate to the NGO. There was no effect of norms manipulation on willingness to donate to homeless people. Surprisingly enough, there was a marginally significant negative effect of norms on willingness to donate to the NGO when contrasting the low and high norms conditions. Thus, there was mixed support for H1, as empathy was the only significant predictor of disposition to donate, and norms slightly affected disposition to donate to the NGO in the opposite expected direction.

Moreover, as can be seen in Table 16, in both regression models the interaction term between empathy and norms was significant and its effect size was small, willingness to donate to homeless people $\Delta R^2 = .02$, F(2, 203) = 3.15, p = .045, willingness to donate to the NGO $\Delta R^2 = .02$, F(2, 203) = 3.18, p = .044 (Cohen, 1988, 2003; Aiken & West, 1991). The difference in empathy slopes were significant between the low and high norms condition for both DVs. This was also the case between the low and control norms condition when willingness to donate to homeless people was the DV, while this difference was marginally significant with willingness to donate to the NGO as the DV.

Table 16Study 3. Regression analyses with empathy manipulation check as IV.

	Willingness to donate to Willingness to			o donate to the
	homeles	ss people	N	GO
	(1)	(2)	(1)	(2)
	0.57***	0.82***	0.42***	0.69***
Empathy	(0.06)	(0.11)	(0.06)	(0.13)
	[0.46, 0.69]	[0.59, 1.04]	[0.30, 0.55]	[0.45, 0.94]
Low norms	Referen	ce group	Referen	ice group
	-0.29	-0.24	-0.40†	-0.36†
High norms	(0.19)	(0.19)	(0.21)	(0.21)
	[-0.67, 0.09]	[-0.62, 0.14]	[-0.82, 0.02]	[-0.78, 0.06]
	-0.17	-0.08	-0.13	-0.03
Control norms	(0.19)	(0.19)	(0.21)	(0.21)
	[-0.55, 0.20]	[-0.46, 0.30]	[-0.54, 0.28]	[-0.45, 0.38]
Empathy x Low-High		-0.32*		-0.38*
		(0.14)		(0.16)
norms		[-0.60, -0.04]		[-0.69, -0.07]
Emmethy v I ovy		-0.35*		-0.33†
Empathy x Low-		(0.15)		(0.17)
Control norms		[-0.65, -0.04]		[-0.67, 0.00]
Moderation effect size (f^2)		0.03		0.03

Note. † p < .1, * p < .05, *** p < .001. b values correspond to unstandardised coefficients. Standard errors in parentheses. 95% CIs in brackets. Willingness to donate to homeless people: Step 1 $R^2 = .35$, F(3, 205) = 37.49, p < .001. Step 2 $R^2 = .37$, F(5, 203) = 24.23, p < .001. Willingness to donate to the NGO: Step 1 $R^2 = .22$, F(3, 205) = 19.23, p < .001. Step 2 $R^2 = .24$, F(5, 203) = 13.05, p < .001.

To look closer at the interaction terms, simple slopes analyses were conducted. The analyses showed that empathy was a stronger predictor of willingness to donate to homeless people in the low norms condition (see empathy row in Table 16) compared to the high norms condition, b = 0.50, $SE_b = 0.09$, t(203) = 5.86, p < .001, 95% CI [0.33, 0.67], and to the control norms

condition, b = 0.47, $SE_b = 0.10$, t(203) = 4.52, p < .001, 95% CI [0.27, 0.68] (see Figure 12).

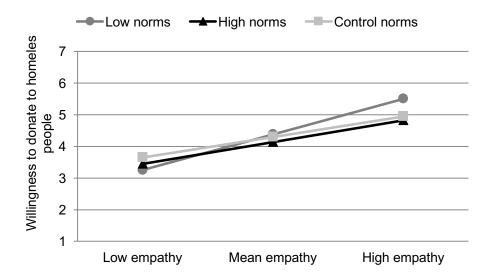


Figure 12
Study 3. Simple slopes. Empathy predicting willingness to donate to homeless people for low, high and control norms conditions.

In the low norms condition, empathy was a stronger predictor of willingness to donate to the NGO (see empathy row in Table 16) compared to the high norms condition, b = 0.31, $SE_b = 0.09$, t(203) = 3.36, p < .001, 95% CI [0.13, 0.50]. This association was marginally stronger in the low norms conditions compared to the control norms condition, b = 0.36, $SE_b = 0.11$, t(203) = 3.17, p = .002, 95% CI [0.14, 0.59] (see Figure 13). Hence, in this study H2 was supported by the data.

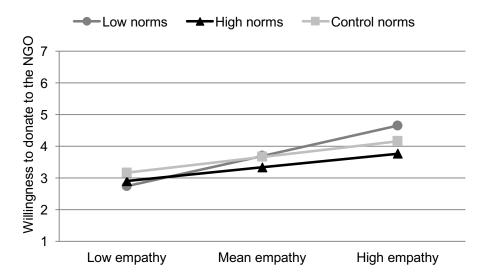


Figure 13Study 3. Simple slopes. Empathy predicting willingness to donate to the NGO for low, high, and control norms conditions.

Discussion

The current study attempted to manipulate both empathy and norms, with mixed results. As in Study 2, there was no evidence that the empathy manipulation was effective. When norms and empathy (manipulation check) were entered to the model as predictors of willingness to donate to homeless people and to the NGO, only empathy showed a significant association in the expected direction. The norms manipulation, which did not have a manipulation check, did not have the expected effects on the dependent variables. Moreover, norms had an unexpected marginally significant effect on one of the two DVs. Although norms interacted with empathy in the expected manner in their effect on donations, the main effect of norms was surprising in this study. This could of course mean that the manipulations were in need of improvement. However, given the fact that both types of manipulations have similar precedents in the literature (Agerström et al., 2016; Goldstein et al., 2008; Pavey et al., 2012), this would be surprising.

One feasible explanation for this negative effect of norms on willingness to donate to the NGO is that norms manipulation might have affected the

perceived need of help. Therefore, when participants read that 19.7% of respondents had decided to donate to the NGO, they might have thought that their help was needed urgently, considering the lack of help by others. In contrast, when participants read that 89.7% of participants had donated, they might have thought that their help was not much needed anymore.

Moreover, this effect of norms on disposition to donate could be related to the change of reference group. As was described before, because of the difficulty of manipulating descriptive norms derived from the behaviour of the participants' family and friends, in this study the reference group used was allegedly the group of previous respondents in the study. Thus, this reference group was more distal, and this could explain the lack of or negative impact on willingness to donate – depending on the DV used. Indeed, research has shown that only norms from relevant reference groups have a direct impact on behaviour (e.g. Terry & Hogg, 1996; Goldstein et al., 2008; Agerström et al., 2016). However, there have been previous studies that have used similar reference groups than the present one to manipulate descriptive norms, with good results (e.g. Shang & Croson, 2009; Croson & Shang, 2008).

Additionally, in the current study there was no perceived norms manipulation check, which is a measure that must be included in future studies to test if norms were indeed manipulated as was expected.

Regarding the lack of effect of the empathy manipulation on the empathy manipulation check measure, it is possible that the perspective-taking instructions for participants might not be ideal. Let us recall that the instructions told to participants in the high empathy condition included the sentence "Try not to concern yourself with attending to all the facts presented". The instructions for those in the low empathy condition included "Try not to let yourself get caught up in imagining what the person has been through and how they feel as a result". These instructions might cause the opposite effect. When people are told not to think of A, it is likely that they will think of A, even though they are told not to do so. Indeed, negative sentences are more difficult to process than affirmative ones (Kaup, Zwaan, & Lüdtke, 2007). This rationale could also be applied in the

case of Study 2, since the instructions for participants in the low empathy condition were similar to the ones in this study.

Again, this study focused on help towards homeless people, which is a highly stigmatised group that is often target of contemptuous prejudice (Fiske et al., 2002; Harris & Fiske, 2006). The idea that was discussed in Study 2, that is that empathy could not be manipulated because of the general strong prejudice people have towards this group, can be again ruled out because of the relatively high levels of empathy shown by participants. Given the difficulty in manipulating empathy, in future experimental studies empathy will be measured while norms will be manipulated.

In sum, H1 was only partially supported by the data in the current study, as there was a marginally negative effect of norms on willingness to donate to the NGO, and there was no effect of the norms manipulation on willingness to donate to homeless people. The manipulation check measure of situational empathy was positively associated to both willingness to donate variables.

Nonetheless, consistent with Studies 1 and 2, perceived descriptive norms acted as a moderator of the situational empathy-willingness to donate relationship. In this moderation, empathy was a weaker predictor of willingness to donate (to homeless people and to the NGO) when perceived descriptive norms were high, compared to when norms were low. Hence, H2 was supported by the current study's data. Still, these results must be taken cautiously. This study had enough power to detect a true moderation effect size comparable to the significant ones obtained in Study 2, as shown by the sensitivity power analysis. However, the significant moderation effect sizes obtained in this study were smaller than the minimum effect size that could be detected with a power of 80%. Hence, the significant results about the interaction should be considered with caution, since they might not reflect a true effect.

Another surprising finding was the effect of norms manipulation on the empathy manipulation check measure. Participants in the high norms condition showed lower levels of empathy than those in the low norms condition. It is unclear why this might have been the case, and future research could try to illuminate this issue further.

Chapter 5

Study 4. Testing the hypotheses across different recipients of help

Studies 1 to 3 provided evidence which, in general, supported the hypotheses in this thesis. Results in studies 1 and 2 showed that descriptive norms and situational empathy are associated with charitable donations, whereas results throughout Studies 1 to 3 suggest that descriptive norms moderate the empathy-donation link. This moderation consists of empathy being a weaker predictor of monetary donations when norms are more supportive of donations.

The study presented in this present chapter is a correlational study that aimed to replicate the results found previously, but in a different sample. Whereas Studies 1, 2, and 3 were conducted with a Chilean representative sample, an undergraduate student sample, and with Reddit users, respectively, in Study 4 I targeted a more diverse sample by using Crowdflower to advertise the study.

As in Studies 1 and 2, I used social norms based on perceived behaviour of family and friends to measure social descriptive norms, in order to replicate the results found in those studies in a more diverse sample. This was also decided based on what was discussed in Study 3, that is that the reference group used (i.e., previous respondents in the study) could have been too distal for norms to have an effect on willingness to donate. Furthermore, empathy was again measured and not manipulated, since empathy had proven too difficult to manipulate in Studies 2 and 3.

Hence, in the current study I considered empathy and social descriptive norms jointly as possible predictors of monetary donations to charities to evaluate

if they predicted donations after controlling for each other. Moreover, the empathy-norms interaction was tested as well.

In this study, a range of different targets of help were considered, and participants had to respond about one of those four possible targets. In order to choose the targets of help, a search for charities using the keywords 'charity', and 'NGO' was conducted. The first 100 organisations were then classified by their objective and/or target of help. According to this process, these four targets were obtained: disaster victims, homeless people, sick people, and the poor. Also, different types of donations according to various methods of elicitation were considered, such as donations over the phone, donations in response to letter appeals, and cash or direct debit donations in face-to-face fundraising, among others. Therefore, one participant was asked about a range of different types of donations to disaster victims, while another participant responded the same questions but regarding poor people. The purpose of this was to assess donations to different targets of help, as well as to consider the numerous potential ways in which participants might encounter donation requests. Hence, the targets of help and the types of donations were analysed separately, as well as combined (i.e., all the targets of help combined together, and the average of all the types of donation as one indicator).

This study was conducted in Crowdflower, which is a crowdsourcing web platform similar to MTurk. Surveys are advertised on channel partners as a job, so registered contributors can access the survey and complete it in order to receive a small payment. As a way of controlling the quality of data received, Crowdflower use test questions that can track the performance of contributors throughout the job. These test questions are questions with a known answer. If contributors do not answer test questions correctly they are removed from the job, and their answers are not recorded. According to their trajectory of performance based on all the jobs they have participated in, contributors are qualified from level 1 (less trusted contributors) to 3 (trusted contributors). However, because social psychology surveys are subjective, test questions cannot be used. Thus, a high level can be set as a requirement for contributors to gain access to these types of jobs in order to ensure quality of data.

The hypotheses were the same as in previous studies:

H1: Perceived descriptive norms based on the perceived behaviour of family and friends, and situational empathy, will be significant predictors of frequency of monetary donations, even when controlling for the respective other predictor.

H2: There will be an interaction between situational empathy and perceived descriptive norms, in which situational empathy will be a weaker predictor of frequency of monetary donations when social descriptive norms are high (i.e., when norms strongly support donations).

Method

Participants

Four hundred and forty-nine participants from 16 to 74 years old were recruited via Crowdflower to answer an online survey using Qualtrics (209 women, 240 men; $M_{\rm age} = 36.33$, SD = 10.92; 71 British, 17 Indian, 13 Serbian, 12 Bosnian Herzegovinian, 103 other nationalities, 233 missing). Studies have shown that these crowdsourcing websites (i.e., Crowdflower and MTurk) constitute a reliable source of demographically diverse participants (Buhrmester, Kwang, & Gosling, 2011; Casler et al., 2013; Horton, Rand, & Zeckhauser, 2011), and several researchers have started using Crowdflower as an alternative to MTurk (e.g., Guo & Main, 2017; Joiner et al., 2016; McKeogh, Dorahy, & Yogeeswaran, 2018). As a requirement to access the survey, participants needed to be level 3 contributors.

Procedure

After reading a general description of the study and giving their informed consent, participants were randomly presented with one of four possible survey versions. The target recipient group which participants were asked to think about differed between the survey versions (i.e., this was a between-participant factor). Some items explicitly mentioned the respective target recipient group. Targets were: disaster victims (n = 117), homeless people (n = 113), sick people (n = 118).

106), and the poor (n = 113). Included in the survey were also some generic items, and the four versions had the same questions for these indicators.

In order to ensure quality of data, an attention check was included in the survey just before the questions relevant to this thesis. Participants were instructed to indicate their level of agreement with two statements. However, those statements instructed participants to answer 1 to both of them (in a scale from 1 'Strongly disagree' to 7 'Strongly agree'). Just like in Oppenheimer, Meyvis and Davidenko's (2009) second study, participants were prevented from continuing the survey until they followed the instructions. That is, if participants answered incorrectly, they were presented with these same two statements all over again in a loop, until they answered 1 to both of them. Only then, participants were able to continue answering the survey. This attention check was added based on Oppenheimer et al.'s work (2009) in which they showed that there were no differences in responses between those participants that passed the Instructional Manipulation Check in their first try, and those who passed it in later stages. However, in Qualtrics there is no information regarding the number of times participants tried to submit their answers (i.e., number of times they failed the attention check and were presented with the same two statements in a loop). Hence, the attention check was added as a way of increasing participants attention to the survey, but the attention check could not be analysed. The average click count by participant in the attention check page was 2.95 clicks (a minimum of 2 clicks were needed to clear the attention check). However, this is not a good proxy variable for having passed or failed the attention check, since the click count considers all clicks done while the participant was in the attention check page (i.e., the click count does not necessarily reflect answers). After completing the 10-minute survey, participants were debriefed and given a code with which they could collect their payment on Crowdflower (USD \$0.20).

Measures

As explained previously, there were some measures related to different targets. Participants were asked about only one of the four possible targets,

depending on the version of the questionnaire they were randomly assigned to. The targets were: disaster victims, homeless people, sick people, and the poor.

Empathy ($\alpha_{total.sample} = .92$; $\alpha_{d.victims} = .91$; $\alpha_{homeless} = .93$; $\alpha_{sick} = .93$; $\alpha_{poor} = .92$) was measured with these 6 items that varied in group targets across surveys: 'How much empathy do you feel towards [target] ...' (1) '...when you are asked face to face by a charity worker to donate cash to them?', (2) '...when you are asked face to face by a charity worker to donate to them by electronic transfer (i.e. text messaging, direct debit, electronic transfer, etc.)?', (3) '...when you see a poster with an appeal to donate to them?', (4) '...when you are asked over the phone to donate to them?', (5) '...when you read a letter with an appeal to donate to them?', and (6) '...when you see a donation appeal on the internet to donate to them?' The response scale went from 1 'Not at all' to 7 'Very much', and the scale was created by averaging the items.

Perceived descriptive norms ($\alpha_{total.sample} = .91$; $\alpha_{d.victims} = .92$; $\alpha_{homeless} = .94$; $\alpha_{sick} = .90$; $\alpha_{poor} = .87$) were measured using 6 items: 'My family and friends often...' (1) '...donate cash to [target] when they are asked to face to face by a charity worker', (2) '...donate by electronic transfer (i.e. text messaging, direct debit, electronic transfer, etc.) to [target] when they are asked to face to face by a charity worker', (3) '...donate to [target] when responding to a poster with an appeal on it', (4) '...donate to [target] when responding to a charity worker's appeal over the phone', (5) '...donate to [target] when responding to a mailed appeal in a letter', and (6) '...donate to [target] when responding to a donation appeal on the internet (i.e. e-mail, webpages)?' Participants were asked to express their agreement with these statements using a scale from 1 'Strongly disagree' to 7 'Strongly agree'.

Frequency of donations in the past ($\alpha_{total.sample} = .93$; $\alpha_{d.victims} = .91$; $\alpha_{homeless} = .94$; $\alpha_{sick} = .87$; $\alpha_{poor} = .95$) was measured using 6 items: 'Over the last 12 months, how many times have you...' (1) '...donated cash to [target] when a charity worker has asked you to do it face to face?', (2) '...donated to [target] by electronic transfer (i.e. text messaging, direct debit, electronic transfer, etc.) when a charity worker has asked you to do it face to face?', (3) '...donated to [target] responding to a poster with an appeal on it?', (4) '...donated to [target] when a

charity worker has asked you to do it over the phone?', (5) '...donated to [target] when responding to a mailed appeal in a letter?', and (6) '...donated to [target] when responding to a donation appeal on the internet (i.e. e-mail, webpages)?' The response scale ranged from 0 '0 times per year' to 12 '12 or more times per year', and the scale was created using the mean of the 6 items.

Some other variables were measured which are not relevant for the current hypotheses (see Appendix C). Other variables measured in this study that were considered relevant to explaining frequency of donation were measured and added as control variables. For instance, there is evidence that people with less financial resources donate less amounts of money and less often than those with higher income (Bryant et al., 2003; Independent Sector, 2002; Wiepking & Bekkers, 2012; Wunderink, 2002). Also, opportunity to donate was considered, since people who are exposed to solicitation are more likely to donate than those who are not (Bryant et al., 2003; Wiepking, 2010). Finally, research has shown that religious identification is associated with monetary donations (Bekkers & Wiepking, 2011; Bryant et al., 2003; Choi & Chou, 2010). Thus, perceived discretionary income, opportunity to donate and religious identification were assessed and considered as control variables.

Perceived discretionary income was assessed with one item: 'I feel that I have a lot of money to spend each month on what I want.' Participants were asked to indicate their agreement to this assessment using the response scale 1 'Strongly disagree' to 7 'Strongly agree'.

Opportunity to donate ($\alpha_{total.sample} = .88$; $\alpha_{d.victims} = .84$; $\alpha_{homeless} = .91$; $\alpha_{sick} = .88$; $\alpha_{poor} = .88$) was assessed by 6 items in which participants were asked how often they were exposed to different types of donation requests, considering the last 12 months: (1) 'How many times have you been asked face to face by a charity worker to donate cash to [target]?', (2) 'How many times have you been asked face to face by a charity worker to donate by electronic transfer (i.e. text messaging, direct debit, electronic transfer, etc.) to [target]?', (3) 'How many times have you been asked over the phone to donate to [target]?', (4) 'How many times have you been asked in a letter by post to donate to [target]?', and (6) 'How

many times have you seen donation appeals on the internet (i.e. e-mail, webpages) to donate to [target]?' The response scale ranged from 0 '0 times per year' to 12 '12 or more times per year', and the scale was created using the mean of the 6 items.

Religious identification was assessed by one dichotomous item: 'Do you identify with any religion?' in which participants answered 0 'No' or 1 'Yes'.

Results

Descriptive statistics and correlations for the whole sample and for each target group separately are presented in Table 17 and Table 18 respectively. According to West et al.'s criteria (1995), almost all of the scales were normally distributed, with the exception of the frequency of donations scale in the whole sample, and in the subsamples that responded vis-a-vis disaster victims and sick people as targets. The scale was positively skewed for these three groups and was also leptokurtic in the subsample with disaster victims as targets. Therefore, when using the whole sample to conduct regression analyses, and when using the disaster victims and sick people subsamples, natural log transformation of the frequency of donations scale was used in order normalise the data. After the log transformation, these variables showed a normal distribution, according to West et al.'s cut-off points.

Table 17Study 4. Descriptive statistics and correlations for the whole sample

Total sample ($N = 449$)	Mean	SD	(1)	(2)	(3)	(4)	(5)
Empathy	3.53	1.52	.57***	.34***	.11*	.23***	.14**
Norms (1)	2.75	1.42	-	.56***	.30***	.39***	.23***
Freq. of donations (2)	1.51	2.35		-	.40***	.50***	.22***
Discretionary income (3)	2.94	1.66			-	.17***	.15**
Opportunity to donate (4)	2.97	2.98				-	.14**
Religious Id. (5)	-	-					-
<i>Note.</i> * <i>p</i> < .05, ** <i>p</i> < .01, ***	* p < .001						

Table 18
Study 4. Descriptive statistics and correlations by subsamples

Disaster victims ($n = 117$)	Mean	SD	(1)	(2)	(3)	(4)	(5)
Empathy	3.59	1.44	.50***	.27**	.06	.04	.1
Norms (1)	2.82	1.48	-	.50***	.28**	.20*	.16†
Freq. of donations (2)	1.17	1.91		-	.39***	.32***	.14
Discretionary income (3)	2.60	1.54			-	.12	.11
Opportunity to donate (4)	2.75	2.68				-	06
Religious Id. (5)	-	-					-
Homeless people $(n = 113)$	Mean	SD	(1)	(2)	(3)	(4)	(5)
Empathy	3.53	1.56	.63***	.40***	.35***	.33***	.15
Norms (1)	2.74	1.50	-	.59***	.31**	.51***	.20*
Freq. of donations (2)	1.74	2.72		-	.38***	.67***	.09
Discretionary income (3)	3.28	1.70			-	.33***	.004
Opportunity to donate (4)	2.43	2.86				-	.25**
Religious Id. (5)	-	-					-
Sick people ($n = 106$)	Mean	SD	(1)	(2)	(3)	(4)	(5)
Empathy	3.60	1.59	.54***	.30**	06	.26**	.20*
Norms (1)	2.79	1.40	-	.60***	.26**	.43***	.33***
Freq. of donations (2)	1.38	2.03		-	.33**	.49***	.38***
Discretionary income (3)	2.92	1.67			-	.08	.13
Opportunity to donate (4)	3.39	3.17				-	.22*
Religious Id. (5)	-	-					-
Poor people $(n = 113)$	Mean	SD	(1)	(2)	(3)	(4)	(5)
Empathy	3.41	1.52	.64***	.40***	.09	.29**	.09
Norms (1)	2.64	1.30	-	.62***	.39***	.45***	.24*
Freq. of donations (2)	1.76	2.62		-	.48***	.51***	.36***
Discretionary income (3)	2.99	1.69			-	.18†	.38***
Opportunity to donate (4)	3.35	3.13				-	.15
Religious Id. (5)	-	-					-
Note. $\dagger p < .1, *p < .05, **p < .05, *p < .05, $.01, *** p	<.001					

As expected, all the variables were positively associated to frequency of donations (see Table 17 and Table 18). With the whole sample and across each subsample, participants donated more frequently when they reported a) feeling more empathy towards the target, b) having family and friends that often donated to the target, c) feeling that they had enough money each month, d) and when they were exposed more often to requests to donate to the target. Participants who felt identified with a religion also donated more often to sick people, the poor, and within the whole sample.

As a first step, an EFA was conducted of the three main scales of interest –empathy, descriptive norms, and frequency of donations– using the whole sample, to test if they measured different constructs. Considering the non-normal distribution of four items of frequency of donations that were positively skewed (items related to poster, phone, letter, and internet appeals), I used principal axis factoring (PAF) as the method of extraction (Fabrigar et al., 1999). Because of the significant correlations between these variables, which can be seen in Table 17, I used oblique (Direct Oblimin) rotation with a delta of 0 (Harman, 1976).

As displayed in Table 19, all items loaded on their respective factor as expected, however it should be noticed that the analysis extracted a fourth factor too. Although none of the items had its highest loading on the fourth factor, the first empathy item (i.e. item 1 in Table 19) had a high cross-loading of .56 on that factor. Following the rule of thumb proposed by Tabachnick and Fidell (2001) of a minimum item loading of .32 on a factor, it can be seen in Table 19 that three items loaded higher than this on the fourth factor (i.e. items 1, 2, and 7). However, considering the loadings these items had on their respective factors, the difference between the expected loadings and the cross-loadings is still substantial. Moreover, there were no cross-loadings among the first three factors extracted, which are the crucial factors which correspond to the theoretical constructs. The EFAs structure matrix showed exactly the same pattern of results than the pattern matrix. All the items had a higher correlation with the expected factor than with the other extracted factors.

Table 19 Study 4. EFA. Pattern Matrix.

	Pattern Matrix						
			Fa	ctor			
		1	2	3	4		
1	Empathy - cash face to face	.02	.63	002	.56		
2	Empathy - electronic transfer face to face	.03	.69	.05	.35		
3	Empathy - poster appeal	.04	.84	03	12		
4	Empathy - phone appeal	.07	.71	.11	.18		
5	Empathy - letter appeal	.04	.86	.05	09		
6	Empathy - internet appeal	.04	.86	03	15		
7	Norms - cash face to face	.59	02	03	.45		
8	Norms - electronic transfer face to face	.65	.02	.12	.17		
9	Norms - poster appeal	.87	.04	.01	11		
10	Norms - phone appeal	.72	0	.15	.14		
11	Norms - letter appeal	.83	.03	.03	11		
12	Norms - internet appeal	.83	.1	01	15		
13	Frequency of donations - cash face to face	03	.01	.65	.31		
14	Frequency of donations - electronic transfer face to face	.06	.01	.75	.05		
15	Frequency of donations - poster appeal	.04	05	.89	07		
16	Frequency of donations - phone appeal	.004	02	.92	.02		
17	Frequency of donations - letter appeal	.02	.01	.87	12		
18	Frequency of donations - internet appeal	.03	.10	.82	16		

To confirm the goodness of the measurement model used in the analyses, a CFA was conducted in Mplus 7.11 (Muthén & Muthén, 1998-2013). This software gives the possibility to choose from different estimators. Robust Maximum Likelihood (MLR) was used as the estimator of the CFA, because it does not assume normal distribution, which was the case of items 15, 16, 17 and 18 in Table 19. In the first model, the items were constrained to load on their respective factors. This model had a poor fit ($\chi^2(132) = 774.94$, p < .001, CFI = .84, RMSEA = .10, SRMR = .06). Additionally, considering that χ^2 usually is

significant with big samples (i.e. larger than 200 observations), and that a χ^2/df ratio equal or less than 3 suggests an adequate model fit with big samples (Kline, 1998), the obtained χ^2 also indicated a poor fit.

To take into account the possible shared item variance between the indicators on the different scales, the correlated errors between the items that shared the same type of donation appeal across scales were added to a second CFA model (as in Study 1). For example, the errors for all items which were related to letter appeals were allowed to correlate, the errors for all items which were about donating cash in response to face-to-face requests were allowed to correlate, etc. Correlated error terms might emerge due to a potential method effect. Thinking about the same stimulus whilst answering different questions (related to empathy, donations, etc.) might potentially give rise to such a method effect (Brown, 2003; Byrne et al., 1989, Floyd & Widaman, 1995; Brown, 2015). This second model had an acceptable fit $(\chi^2(114) = 312.75, p < .001, CFI = .95,$ RMSEA = .06, SRMR = .04). To test if indeed this measurement model with correlated error terms was better than the first model, I computed a difference test using loglikelihood ($\chi^2(18) = 378.98$, p < .001), which indicated that the second model with the correlated error terms fit the data better than the first measurement model.

Analyses across samples

Analyses across the entire sample.

After running Koenker tests, it became clear that homoscedasticity could not be assumed when regressing frequency of donations on descriptive norms and empathy as scales, regardless of the (sub)sample used. Therefore, to test the hypotheses and conduct the regression analysis with empathy and social norms as independent variables, I used the SPSS RLM macro (Darlington & Hayes, 2017) that allows selecting HC3 as the covariance estimator. As a second step, the interaction term was added to the analyses using the SPSS PROCESS macro

(Hayes, 2013), and as a final step perceived discretionary income, opportunity to donate, and religious identification were added as covariates. This was done to examine if empathy, descriptive norms and their interaction still showed a strong predictive association with frequency of monetary donations when controlling for more potential predictors. While using PROCESS macro, the HC3 estimator was selected, thus the results obtained were robust against heteroscedasticity. These analyses were conducted using the whole sample as well as the four different subsamples related to the different targets of help. A sensitivity power analysis considering a regression analysis with 3 predictors, α of .05, power of 80% and a sample of 449 showed a minimum detectable effect size of $f^2 = 0.02$ (Faul et al., 2009). Considering only the interaction as predictor the minimum detectable effect size was $f^2 = 0.02$.

The results of the regression analyses with the whole sample can be found in Table 20. As was previously explained, in order to normalise the data, I used a natural log transformation on frequency of monetary donations.

In the first regression which summarised across the different targets, descriptive social norms was the only significant predictor of frequency of monetary donations, even though empathy and social norms were both related to frequency of donations (as was seen in Table 17). That is, participants who had family and friends who often donated money reported donating more often as well. However, the empathy felt towards the recipient of help was not associated with frequency of donations when controlling for social descriptive norms. Therefore, H1 was partially supported by this result, as perceived descriptive norms, but not situational empathy, was a significant and positive predictor of frequency of donations.

Table 20 Study 4. Regression analyses with the whole sample (N = 449)

	Fre	Frequency of donations				
	(1)	(2)	(3)			
	0.02	0.01	0.02			
Empathy	(0.02)	(0.02)	(0.02)			
	[-0.02, 0.06]	[-0.03, 0.06]	[-0.02, 0.05]			
	0.29***	0.30***	0.20***			
Norms	(0.03)	(0.03)	(0.03)			
	[0.24, 0.34]	[0.24, 0.35]	[0.15, 0.25]			
		-0.01	-0.02†			
Empathy x Norms interaction		(0.02)	(0.01)			
		[-0.04, 0.02]	[-0.04, 0.001]			
			0.08***			
Discretionary Income			(0.01)			
			[0.05, 0.011]			
			0.08***			
Opportunity to Donate			(0.01)			
			[0.06, 0.10]			
Daliaiana Id			0.11*			
Religious Id.			(0.05)			
(0 = no, 1 = yes)			[0.01, 0.021]			
Moderation effect size (f^2)		0.002	0.01			

Note. † p < .1, * p < .05, *** p < .001. b values correspond to unstandardised coefficients. Standard errors in parentheses. 95% CIs in brackets. The natural log transformation of frequency of donation was used as the DV. No signs of multicollinearity. Step 1 $R^2 = .37$, F(2, 446) = 91.80, p < .001. Step 2 $R^2 = .37$, F(3, 445) = 86.27, p < .001. Step 3 $R^2 = .52$, F(6, 442) = 88.10, p < .001.

The empathy and descriptive norms interaction added in the second step turned out to be non-significant, $\Delta R^2 = .001$, F(1, 445) = 0.45, p = .501. However, in the third step, when the covariates perceived discretionary income, opportunity to donate, and religious identification were added to the regression, the interaction became marginally significant, $\Delta R^2 = .004$, F(1, 442) = 3.48, p = .063.

The moderation effect size (f^2) was small (Cohen, 1988, 2003; Aiken & West, 1991). The moderated relationship between empathy and frequency of donations by descriptive social norms is depicted in Figure 14. Simple slopes analysis showed that empathy was a significant predictor of frequency of monetary donations only when descriptive norms were low (-1 SD), b = 0.04, $SE_b = 0.02$, t(442) = 2.31, p = 0.02, 95% CI [0.01, 0.08]. Empathy had a non-significant association with frequency of monetary donations at the mean level of norms, b = 0.02, $SE_b = 0.02$, t(442) = 0.85, p = .396, 95% CI [-0.02, 0.05], as well as when norms were high (+1 SD), b = -0.01, $SE_b = 0.03$, t(442) = -0.38, p = .705, 95% CI [-0.07, 0.05]).

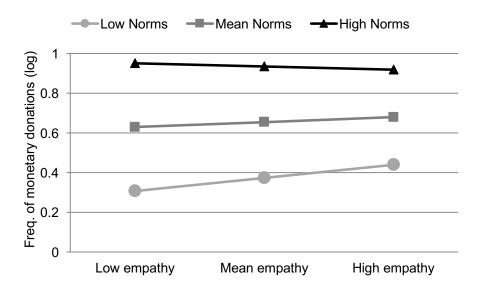


Figure 14
Study 4. Simple slopes. Empathy predicting frequency of monetary donations for 1 SD below the mean of descriptive norms (low norms), the mean of descriptive norms, and 1 SD above the mean of descriptive norms (high norms).

These results partially support H2, as the interaction between situational empathy and perceived descriptive norms was not significant in the second step of the regression, and was only marginally significant when controlling for the covariates. Still, the empathy effect on frequency of donations was null when

social descriptive norms were high as hypothesised. All of the three control variables, as well as descriptive norms, were significant and positive predictors of frequency of monetary donations.

Therefore, in general terms the more participants reported that their family and friends engaged in charitable giving the more frequently they reported to have donated in the past year. I conducted the same analyses using each of the four subsamples.

Analyses within the subsample with disaster victims as target.

As outlined before, a natural log transformation of frequency of monetary donations to disaster victims was used as the DV, considering the non-normal distribution of the original scale. A sensitivity power analysis for the subsample of participants that answered the survey in relation to helping disaster victims with a regression analysis, 3 predictors, α of .05, power of 80% and sample of 117 showed a minimum detectable effect size of $f^2 = 0.10$ (Faul et al., 2009). With only the interaction as a predictor, the minimum detectable effect size was $f^2 = 0.07$. Within this subsample, only descriptive norms was a significant predictor of frequency of monetary donations (see Table 21), even though empathy was also positively correlated with frequency of monetary donations (see Table 18), thus partially supporting H1.

There was no evidence for a moderating role of social descriptive norms on the empathy association with donations to disaster victims, $\Delta R^2 = .01$, F(1, 113) = 0.47, p = .496; hence H2 was not supported by this data. The interaction remained non-significant when the control variables were added, $\Delta R^2 = .01$, F(1, 110) = 1.87, p = .174. Among the control variables, perceived discretionary income and opportunity to donate were significant predictors of frequency of donations. Being identified with a religion was not a significant predictor. Importantly, descriptive norms continued to be a significant and positive predictor of frequency of monetary donations to disaster victims even when the association of the covariates with donations were partialled out.

Hence, the more participants reported that their family and friends donated to disaster victims, the more frequently participants reported having made charitable donations to help disaster victims during the past year.

Table 21Study 4. Regression analyses. Subsample with disaster victims as targets of help (n = 117)

	Frequency of donations				
	(1)	(2)	(3)		
	-0.01	-0.003	0.02		
Empathy	(0.04)	(0.05)	(0.04)		
	[-0.09, 0.08]	[-0.09, 0.09]	[-0.06, 0.09]		
	0.24***	0.25***	0.18***		
Norms	(0.04)	(0.04)	(0.04)		
	[0.15, 0.32]	[0.16, 0.33]	[0.10, 0.26]		
		-0.02	-0.03		
Empathy x Norms interaction		(0.03)	(0.02)		
		[-0.08, 0.04]	[-0.07, 0.01]		
-			0.10**		
Discretionary Income			(0.03)		
			[0.03, 0.17]		
			0.07**		
Opportunity to Donate			(0.02)		
			[0.02, 0.12]		
D-1:-: 14			0.04		
Religious Id.			(0.10)		
(0 = no, 1 = yes)			[-0.15, 0.23]		
Moderation effect size (f^2)		0.01	0.03		

Note. ** p < .01, *** p < .001. b values correspond to unstandardised coefficients. Standard errors in parentheses. 95% CIs in brackets. The natural log transformation of frequency of donation was used as the DV. No signs of multicollinearity. Step 1 $R^2 = .31$, F(2, 114) = 15.58, p < .001. Step 2 $R^2 = .31$, F(3, 113) = 13.52, p < .001. Step 3 $R^2 = .47$, F(6, 110) = 14.34, p < .001.

Analyses within the subsample with homeless people as target.

A sensitivity power analysis considering a regression analysis of 3 predictors, power of 80%, α of .05, and sample of 113 (i.e., the subsample of participants who answered the survey with homeless people as the recipients of help) showed a minimum detectable effect size of $f^2 = 0.10$ (Faul et al., 2009). With only the interaction as a predictor, the minimum detectable effect size was $f^2 = 0.07$.

The same pattern of results was obtained in the regression analyses with the subsample of participants who answered the survey with homeless people as the recipients of help. Although empathy and social descriptive norms were positively correlated with frequency of monetary donations (see Table 18), when both were entered in the same regression model only perceived descriptive norms emerged as a significant predictor (Table 22), which only partially supports H1. The association between perceived norms and frequency of monetary donations to help homeless people was upheld even when the control variables were added to the model.

In the second model, the empathy-norms interaction that was added to the regression was non-significant, $\Delta R^2 = .004$, F(1, 109) = 0.29, p = .592, therefore H2 was not supported by the results obtained with this subsample. Of the covariates added in the third step, only opportunity to donate was a significant predictor, while perceived discretionary income was marginally significant. The interaction remained non-significant, $\Delta R^2 = .0004$, F(1, 106) = 0.06, p = .809.

Thus, the more participants reported having family and friends that donated to homeless people, the more likely it was for the participants to report having donated more often to help homeless people in the past year.

Table 22 Study 4. Regression analyses. Subsample with homeless people as targets of help (n = 113)

	Frequency of donations				
	(1)	(2)	(3)		
	0.09	0.12	0.02		
Empathy	(0.15)	(0.19)	(0.15)		
	[-0.20, 0.38]	[-0.25, 0.49]	[-0.27, 0.32]		
	1.01***	0.95***	0.58*		
Norms	(0.21)	(0.22)	(0.23)		
	[0.60, 1.42]	[0.53, 1.38]	[0.12, 1.403]		
Empathy x Norms interaction		0.07	-0.02		
		(0.14)	(0.10)		
		[-0.20, 0.34]	[-0.22, 0.18]		
			0.18†		
Discretionary Income			(0.11)		
			[-0.03, 0.39]		
			0.48***		
Opportunity to Donate			(0.12)		
			[0.25, 0.71]		
D-1:-: 14			-0.58		
Religious Id.			(0.45)		
$(0 = no' \ 1 = yes)$			[-1.48, 0.31]		
Moderation effect size (f^2)		0.01	0.001		

Note. * p < .05, *** p < .001. b values correspond to unstandardised coefficients. Standard errors in parentheses. 95% CIs in brackets. No signs of multicollinearity. Step 1 $R^2 = .35$, F(2, 110) = 16.46, p < .001. Step 2 $R^2 = .35$, F(3, 109) = 15.47, p < .001. Step 3 $R^2 = .56$, F(6, 106) = 15.63, p < .001.

Analyses within the subsample with sick people as target.

Because of the non-normal distribution of the frequency of monetary donations to help sick people, a natural log transformation of the measure was used instead. A sensitivity analysis for the subsample of participants who answered the survey with sick people as targets of help showed a minimum detectable effect size of $f^2 = 0.11$ (Faul et al., 2009). This was done considering a regression analysis with 3 predictors, power of 80%, α of .05, and sample of 106. With only one predictor (i.e., the interaction), the minimum detectable effect size was $f^2 = 0.08$. As before, even though empathy towards sick people and perceived descriptive norms were correlated with frequency of monetary donations (see Table 18), only descriptive norms was a significant predictor of how often participants reported having donated to help sick people during the past year, giving partial support to H1 (see Table 23). The association of descriptive norms with past frequency of donations persisted even when the control variables were added.

Just as with the disaster victims and homeless people subsamples, H2 was not supported by the data, as the interaction between situational empathy and perceived norms added in the second model was non-significant, $\Delta R^2 = .004$, F(1, 102) = 1.06, p = .306. In the third model, two of the control variables turned out to be significant predictors: opportunity to donate to sick people and religious identification. The interaction remained non-significant, $\Delta R^2 = .01$, F(1, 99) = 1.57, p = .213.

Hence, the more participants reported having family and friends who donated to help sick people, the more often participants reported having donated money during the past year to help sick people.

Table 23 Study 4. Regression analyses. Subsample with sick people as targets of help (n = 106)

	Frequency of donations				
	0.001	-0.01	-0.01		
Empathy	(0.03)	(0.04)	(0.03)		
	[-0.05, 0.06]	[-0.08, 0.06]	[-0.07, 0.06]		
	0.30***	0.32***	0.23***		
Norms	(0.04)	(0.05)	(0.05)		
	[0.22, 0.39]	[0.23, 0.41]	[0.13, 0.32]		
		-0.02	-0.02		
Empathy x Norms interaction		(0.02)	(0.02)		
		[-0.05, 0.02]	[-0.05, 0.01]		
			0.04		
Discretionary Income			(0.03)		
			[-0.01, 0.09]		
			0.05*		
Opportunity to Donate			(0.02)		
			[0.01, 0.09]		
Daliaiana Id			0.22*		
Religious Id.			(0.09)		
(0 = no 1 = yes)			[0.04, 0.41]		
Moderation effect size (f^2)		0.01	0.01		

Note. * p < .05, *** p < .001. b values correspond to unstandardised coefficients. Standard errors in parentheses. 95% CIs in brackets. The natural log transformation of frequency of donation was used as the DV. No signs of multicollinearity. Step 1 $R^2 = .45$, F(2, 103) = 34.99, p < .001. Step 2 $R^2 = .45$, F(3, 102) = 29.39, p < .001. Step 3 $R^2 = .54$, F(6, 99) = 19.50, p < .001.

Analyses within the subsample with poor people as target.

As was the case with the subsample of participants who answered the survey with homeless people as targets of help (the same subsample size), the minimum effect size that could be detected within the subsample who answered about helping poor people was $f^2 = 0.10$ with three predictors, and $f^2 = 0.07$ when only the interaction was tested as predictor. (Faul et al., 2009). The pattern of

results obtained within the subsample of participants who answered about helping poor people was similar to the results described for the other subsamples. Just like with the previous targets, there was evidence which partially supported H1, but not H2. Although the correlations between empathy, descriptive norms, and frequency of monetary donations to poor people were all significant (see Table 18), only descriptive norms turned out to be a significant predictor in step 1 (see Table 24).

Table 24 Study 4. Regression analyses. Subsample with poor people as targets of help (n = 113)

	Fr	equency of donation	ons
	(1)	(2)	(3)
	0.01	0.05	0.18
Empathy	(0.19)	(0.22)	(0.18)
	[-0.36, 0.38]	[-0.38, 0.48]	[-0.18, 0.54]
	1.24***	1.10***	0.53*
Norms	(0.26)	(0.24)	(0.22)
	[0.73, 1.75]	[0.62, 1.58]	[0.10, 0.97]
Empathy x Norms interaction		0.16	0.12
		(0.14)	(0.12)
		[-0.12, 0.44]	[-0.12, 0.36]
			0.36**
Discretionary Income			(0.11)
			[0.14, 0.58]
			0.23***
Opportunity to Donate			(0.06)
			[0.10, 0.35]
D-1:-: 14			0.78†
Religious Id.			(0.42)
(0 = no 1 = yes)			[-0.06, 1.62]
Moderation effect size (f^2)		0.02	0.02

Note. † p < .1, * p < .05, ** p < .01, *** p < .001. b values correspond to unstandardised coefficients. Standard errors in parentheses. 95% CIs in brackets. No signs of multicollinearity. Step 1 $R^2 = .38$, F(2, 110) = 17.55, p < .001. Step 2 $R^2 = .40$, F(3, 109) = 17.09, p < .001. Step 3 $R^2 = .54$, F(6, 106) = 15.11, p < .001.

The empathy-descriptive norms interaction was non-significant in the second regression, $\Delta R^2 = .01$, F(1, 109) = 1.24, p = .267, and again only descriptive norms emerged as a predictor of frequency of monetary donations to poor people. This pattern of results remained the same way when controlling for perceived discretionary income, opportunity to donate, and religious identification in the third model. The three covariates were significant predictors of frequency of donations to poor people. The interaction remained non-significant, $\Delta R^2 = .01$, F(1, 106) = 1.03, p = .314.

Therefore, the more participants reported having family and friends who donated to help poor people, the more frequently participants reported having donated money to help the poor during the last year.

Analyses by type of donation

Regression analyses were conducted not only focussing on responses to different targets (i.e., disaster victims, homeless people, sick people, and the poor), but also focussing on the six different modes of approach (being asked for cash face-to-face, being asked face-to-face to make an electronic transfer, poster appeals, phone solicitations, letter appeals, and appeals on the internet such as webpages). Hence, the constructs in the following analyses were measured by single items, but the analyses included all four groups of participants who had been asked about different targets (recall that the different targets were a between-participants factor). Regression analyses were conducted predicting the frequency of donations from empathy and norms, summarising across the whole sample. A natural log transformation of the frequency of donations items was used when they were related to poster, phone, letter, and internet appeals, because they were positively skewed. Because the whole sample was used again, the sensitivity power analysis showed a minimum detectable effect size of f^2 = 0.02 considering a regression analysis with 3 predictors, and $f^2 = 0.02$ considering only the interaction as the tested predictor (Faul et al., 2009).

Cash face-to-face.

Correlations between frequency of donations, empathy and descriptive norms when donating cash face to face can be found in Table 25.

Table 25Study 4. Correlations between items related to the same donation appeal.

		(1)	(2)
	Freq. of donation	.390***	.473***
Cash face to face	Empathy (1)	-	.554***
	Norms (2)		-
Electronic transfer face to	Freq. of donation	.338***	.554***
face	Empathy (1)	-	.514***
race	Norms (2)		-
Poster appeal	Freq. of donation	.182***	.463***
	Empathy (1)	-	.467***
	Norms (2)		-
	Freq. of donation	.378***	.561***
Phone appeal	Empathy (1)	-	.543***
	Norms (2)		-
	Freq. of donation	.324***	.470***
Letter appeal	Empathy (1)	-	.500***
	Norms (2)		-
	Freq. of donation	.325***	.487***
Internet appeal	Empathy (1)	-	.504***
	Norms (2)		-
<i>Vote.</i> *** <i>p</i> < .001			

These variables were all positively correlated. In the regression analyses (see Table 26), both empathy and descriptive norms were positive predictors of frequency of donations, which supports H1. However, there was no interaction between empathy and descriptive norms; therefore, there was no evidence supporting H2 (step 2 $\Delta R^2 = .01$, F(1, 445) = 2.43, p = .120; step 3 $\Delta R^2 = .003$, F(1, 442) = 1.92, p = .167).

In the third regression model, which included the three additional predictors (i.e. perceived discretionary income, opportunity to donate cash when asked face-to-face, and religious identification), situational empathy and perceived descriptive norms remained significant predictors of frequency of donations (see Table 26).

Table 26Study 4. Regression analyses of cash donations in face-to-face appeals

		Cash face-to-face	2
	(1)	(2)	(3)
	0.31***	0.32***	0.33***
Empathy	(0.08)	(0.08)	(0.07)
	[0.15, 0.46]	[0.16, 0.48]	[0.19, 0.47]
	0.60***	0.57***	0.28***
Norms	(0.08)	(0.08)	(0.08)
	[0.44, 0.76]	[0.42, 0.72]	[0.12, 0.43]
		0.06	0.05
Empathy x Norms interaction		(0.04)	(0.03)
		[-0.02, 0.14]	[-0.02, 0.11]
			0.24**
Discretionary Income			(0.07)
			[0.09, 0.38]
			0.35***
Opportunity to Donate			(0.04)
			[0.27, 0.43]
Paligious Id			0.53*
Religious Id.			(0.24)
(0 = no, 1 = yes)			[0.06, 1.00]
Moderation effect size (f^2)		0.01	0.01

Note. * p < .05, ** p < .01, *** p < .001. b values correspond to unstandardised coefficients. Standard errors in parentheses. 95% CIs in brackets. No signs of multicollinearity. Step 1 $R^2 = .25$, F(2, 446) = 63.05, p < .001. Step 2 $R^2 = .25$, F(3, 445) = 45.03, p < .001. Step 3 $R^2 = .45$, F(6, 442) = 48.96, p < .001.

Electronic transfer face to face.

As can be seen in Table 25, all the variables related to donations via electronic transfer when approached by a charity worker face-to-face were positively correlated. In the first regression model, descriptive norms were a significant predictor of monetary donations, while empathy was only marginally significant (see Table 27), which still is consistent with H1.

Table 27Study 4. Regression analyses of electronic transfer donations in face-to-face appeals

	E.	Transfer face-to-fac	e
	(1)	(2)	(3)
	0.12†	0.12†	0.10
Empathy	(0.07)	(0.07)	(0.06)
	[-0.01, 0.24]	[-0.01, 0.26]	[-0.03, 0.23]
	0.84***	0.80***	0.58***
Norms	(0.09)	(0.09)	(0.09)
	[0.68, 1.01]	[0.63, 0.98]	[0.39, 0.76]
		0.06	0.02
Empathy x Norms interaction		(0.04)	(0.04)
		[-0.03, 0.14]	[-0.05, 0.10]
			0.35***
Discretionary Income			(0.07)
			[0.21, 0.50]
			0.22***
Opportunity to Donate			(0.04)
			[0.14, 0.30]
Daligious Id			0.17
Religious Id.			(0.23)
(0 = no, 1 = yes)			[-0.28, 0.62]
Moderation effect size (f^2)		0.01	0.001

Note. † p < .1, *** p < .001. b values correspond to unstandardised coefficients. Standard errors in parentheses. 95% CIs in brackets. No signs of multicollinearity. Step 1 $R^2 = .31$, F(2, 446) = 62.81, p < .001. Step 2 $R^2 = .31$, F(3, 445) = 47.03, p < .001. Step 3 $R^2 = .42$, F(6, 442) = 38.02, p < .001.

The interaction term added in the second step was non-significant (step 2 $\Delta R^2 = .004$, F(1, 445) = 1.62, p = .204; step 3 $\Delta R^2 = .001$, F(1, 442) = 0.30, p = .583); therefore, H2 was not supported. When the control variables were added in the third step, only perceived norms remained a predictor of frequency of donations.

Poster appeals.

In the first model (see Table 28), while perceived descriptive norms was a significant predictor of past frequency of donations, empathy had only a marginally significant negative association, even though empathy and descriptive norms were positively correlated with frequency of donations (see Table 25). Thus, there was only partial support for H1.

In the second model, the interaction between situational empathy and perceived descriptive norms was non-significant, $\Delta R^2 = .001$, F(1, 445) = 0.24, p = .623; hence there was no evidence that supported H2. However, the negative association of empathy with frequency of donations became non-significant, while perceived descriptive norms kept their significant association with the DV. When the covariates were added, descriptive norms retained its positive association with frequency of donations, while empathy became marginally significant again. In this third model, the interaction remained non-significant, $\Delta R^2 = .003$, F(1, 442) = 1.44, p = .231.

Table 28
Study 4. Regression analyses of donations in response to poster appeals

		Poster appeal	
	(1)	(2)	(3)
	-0.03†	-0.03	-0.04†
Empathy	(0.02)	(0.02)	(0.02)
	[-0.07, 0.005]	[-0.08, 0.01]	[-0.07, 0.004]
	0.26***	0.26***	0.20***
Norms	(0.02)	(0.02)	(0.02)
	[0.21, 0.30]	[0.21, 0.31]	[0.16, 0.25]
		-0.01	-0.01
Empathy x Norms interaction		(0.01)	(0.01)
		[-0.03, 0.02]	[-0.04, 0.01]
			0.09***
Discretionary Income			(0.02)
			[0.05, 0.12]
			0.05***
Opportunity to Donate			(0.01)
			[0.03, 0.06]
Paligious Id			0.05
Religious Id.			(0.06)
(0 = no, 1 = yes)			[-0.08, 0.17]
Moderation effect size (f^2)		0.001	0.004

Note. † p < .1, *** p < .001. b values correspond to unstandardised coefficients. Standard errors in parentheses. 95% CIs in brackets. The natural log transformation of frequency of donation was used as the DV. No signs of multicollinearity. Step 1 $R^2 = .27$, F(2, 446) = 66.59, p < .001. Step 2 $R^2 = .27$, F(3, 445) = 46.65, p < .001. Step 3 $R^2 = .36$, F(6, 442) = 36.40, p < .001.

Phone appeals.

Descriptive norms were a significant predictor of frequency of donations in response to phone appeals (see Table 29). Empathy was only a marginally

significant predictor of frequency of monetary donations, in spite of their significant correlation in Table 25. Still, these results are consistent with H1.

Table 29Study 4. Regression analyses of donations in response to phone appeals

	Phone appeals		
	(1)	(2)	(3)
	0.04†	0.04†	0.03†
Empathy	(0.02)	(0.02)	(0.02)
	[-0.003, 0.08]	[-0.003, 0.08]	[-0.01, 0.07]
	0.24***	0.24***	0.17***
Norms	(0.03)	(0.03)	(0.03)
	[0.19, 0.30]	[0.18, 0.30]	[0.12, 0.22]
		0.01	-0.01
Empathy x Norms interaction		(0.02)	(0.01)
		[-0.02, 0.04]	[-0.04, 0.01]
			0.09***
Discretionary Income			(0.02)
			[0.06, 0.12]
			0.08***
Opportunity to Donate			(0.01)
			[0.06, 0.11]
Daliaiana Id			0.12*
Religious Id.			(0.06)
(0 = no, 1 = yes)			[0.01, 0.23]
Moderation effect size (f^2)		0.001	0.01

Note. † p < .1, * p < .05, *** p < .001. b values correspond to unstandardised coefficients. Standard errors in parentheses. 95% CIs in brackets. The natural log transformation of frequency of donation was used as the DV. No signs of multicollinearity. Step 1 $R^2 = .34$, F(2, 446) = 62.24, p < .001. Step 2 $R^2 = .34$, F(3, 445) = 48.52, p < .001. Step 3 $R^2 = .50$, F(6, 442) = 67.66, p < .001.

The same pattern of results was observed when the interaction term, and later on the control variables, were added. No evidence was found of an empathynorms interaction (step 2 $\Delta R^2 = .001$, F(1, 445) = 0.14, p = .708; step 3 $\Delta R^2 = .003$, F(1, 442) = 1.60, p = .206), which is inconsistent with H2.

Letter appeals.

The results of the regression analyses can be found in Table 30.

Table 30Study 4. Regression analyses of donations in response to letter appeals

	Letter appeals		
	(1)	(2)	(3)
Empathy	0.04†	0.04†	0.04*
	(0.02)	(0.02)	(0.02)
	[-0.002, 0.07]	[-0.002, 0.08]	[0.002, 0.08]
Norms	0.21***	0.20***	0.14***
	(0.02)	(0.02)	(0.02)
	[0.16, 0.26]	[0.16, 0.25]	[0.10, 0.19]
Empathy x Norms interaction		0.01	-0.003
		(0.01)	(0.01)
		[-0.02, 0.03]	[-0.03, 0.02]
Discretionary Income			0.12***
			(0.02)
			[0.09, 0.16]
Opportunity to Donate			0.04***
			(0.01)
			[0.03, 0.06]
Religious Id.			0.14*
Religious Id. $(0 = \text{no, } 1 = \text{yes})$			(0.06)
(0 - 110, 1 - yes)			[0.02, 0.27]
Moderation effect size (f^2)		0.002	0.0003

Note. † p < .1, * p < .05, *** p < .001. b values correspond to unstandardised coefficients. Standard errors in parentheses. 95% CIs in brackets. The natural log transformation of frequency of donation was used as the DV. No signs of multicollinearity. Step 1 $R^2 = .28$, F(2, 446) = 60.17, p < .001. Step 2 $R^2 = .28$, F(3, 445) = 53.03, p < .001. Step 3 $R^2 = .40$, F(6, 442) = 41.82, p < .001.

Perceived descriptive norms was a significant predictor of donations in response to letter appeals, while empathy was a marginally significant predictor (see Table 30), despite both having significant correlations with frequency of donations (see Table 25). This result is still consistent with H1. The interaction again was non-significant (step 2 ΔR^2 = .001, F(1, 445) = 0.44, p = .508; step 3 ΔR^2 = .0002, F(1, 442) = 0.10, p = .756). Thus, H2 was not supported. When the control variables were added, norms remained a predictor of donations, while empathy became a significant predictor.

Internet appeals.

Both descriptive norms and empathy were good predictors of monetary donations in response to internet appeals (see Table 31), as was stated in H1. This result did not change when the interaction term was added to the model, although the interaction itself was non-significant (step 2 ΔR^2 = .002, F(1, 445) = 0.82, p = .367; step 3 ΔR^2 = .001, F(1, 442) = 0.92, p = .338). Thus, H2 was not supported by these results.

In the third regression model, empathy's association with frequency of donation became marginally significant, while social descriptive norms remained a significant predictor.

Discussion

In sum, there were mixed results with regards to H1. When using the scales across the entire sample and separately for the four different targets (subsamples), and when focusing on different approach types (face-to-face, internet appeals, etc.), there was evidence that consistently supported the prediction that perceived norms are a significant predictor of donations.

However, the pattern of results when using the scales across the entire sample and separately for the four different subsamples did not corroborate the association of situational empathy with donations. Empathy was consistently found to be a non-significant predictor. Moreover, when looking at different

approach types separately, the link between empathy and frequency of donations was not as consistent as the one found between norms and donations. In general, there was a tendency for empathy to be a significant and positive predictor of frequency of donations, with the exception of poster appeals, where strangely enough there was a marginal negative association.

Table 31Study 4. Regression analyses of donations in response to internet appeals

		Internet appeals	
	(1)	(2)	(3)
Empathy	0.05*	0.05*	0.04†
	(0.02)	(0.02)	(0.02)
	[0.01, 0.09]	[0.004, 0.09]	[-0.001, 0.08]
Norms	0.22***	0.23***	0.19***
	(0.02)	(0.03)	(0.03)
	[0.17, 0.27]	[0.18, 0.28]	[0.14, 0.24]
Empathy x Norms interaction		-0.01	-0.01
		(0.01)	(0.01)
		[-0.03, 0.01]	[-0.03, 0.01]
Discretionary Income			0.08***
			(0.02)
			[0.05, 0.12]
Opportunity to Donate			0.03***
			(0.01)
			[0.01, 0.04]
Religious Id. $(0 = no, 1 = yes)$			0.07
			(0.07)
			[-0.06, 0.20]
Moderation effect size (f^2)		0.002	0.002

Note. † p < .1, * p < .05, *** p < .001. b values correspond to unstandardised coefficients. Standard errors in parentheses. 95% CIs in brackets. The natural log transformation of frequency of donation was used as the DV. No signs of multicollinearity. Step 1 $R^2 = .29$, F(2, 446) = 85.02, p < .001. Step 2 $R^2 = .29$, F(3, 445) = 69.59, p < .001. Step 3 $R^2 = .35$, F(6, 442) = 46.49, p < .001.

There was weak evidence of a moderating role of perceived norms (H2) only when considering the scales within the whole sample and while controlling for perceived discretionary income, opportunity to donate, and religious identification. This interaction consisted of empathy being a significant (and positive) predictor only when descriptive norms were low, which is consistent with H2. However, this interaction was marginally significant, had a small effect size, and was only found when using the whole sample. Even though, the study by design had enough power to detect moderation effect sizes as the ones obtained in Studies 1 and 3 when using the whole sample, considering the sensitivity power analysis, this moderation might not reflect a true effect. It is possible that because of power issues (i.e. low number of participants) this moderation was not found when using the subsamples. Additionally, there was no evidence of a moderating role of norms when looking at different approach types. Thus, overall there was no strong evidence to support H2.

To sum up, the results of the current study gave mixed support to the hypotheses of this thesis. On one hand, the association between norms and donations was confirmed. On the other hand, the evidence for an association between empathy and donations was weak, and there was no strong evidence supporting the moderating role of norms. There was just one result that showed a weak tendency towards a moderation by descriptive norms of the empathydonation relationship in the hypothesised direction, but this was not consistently supported by other results throughout the study.

There are a few limitations to this study. First of all, Study 4 had a cross-sectional correlational design, and therefore causal relations could not be tested. Secondly, just as in Study 1, this study asked for self-reported frequency of donations during the past year. The aforementioned issues about accuracy of recall and response biases apply. Because in this study I used Crowdflower as a way of recruiting participants, the pool of potential contributors that had access to the survey consisted of people that do different tasks in exchange for a small amount of money. Even though in Crowdflower I set a high level for contributors to access the survey (i.e., only contributors with a track of high overall accuracy

in their performance in past tasks were able to answer), there might have been participants that answered the survey without paying too much attention to the questions asked, and aimed to finishing the survey as fast as they could to receive the advertised incentive. This could be a potential problem for the quality of the data collected. Nonetheless, the attention check included might have helped to ensure participants' diligence (Oppenheimer et al., 2009), and many scholars have argued that crowdsourcing platforms allow for the collection of high-quality data (Buhrmester et al., 2011; Casler et al., 2013; Horton et al., 2011).

Despite these slight reservations about the use of electronic platforms, because of the strong evidence for their merits (Buhrmester et al., 2011; Casler et al., 2013; Goodman, Cryder, & Cheema, 2013; Horton et al., 2011), further attempts were made to use this convenient means of data collection. Again, as a way of ensuring high quality data, an attention check was added. In the next chapter (Study 5), I present an experimental study in which I used Crowdflower to recruit participants with the objective of again testing the hypotheses of this thesis.

Chapter 6

Study 5. Experiment in Crowdflower

The study presented in this chapter was conducted with the objective of testing the hypotheses of this thesis with an experimental design in the hope of replicating the results found in Studies 1 to 3. Thus, in order to do this, in Study 5 empathy was measured, and social descriptive norms was manipulated. So, in contrast to Study 2 (which had an experimental design, but was analysed as a correlational study) and Study 3 (which also had an experimental design, unlike Study 4 which was purely correlational), in the current study I only manipulated social descriptive norms while I measured empathy. Recall that in Study 2 empathy was manipulated, whereas in Study 3 both empathy and descriptive norms were manipulated. This approach was chosen because in Studies 2 and 3 empathy had proven to be resistant to manipulation; it was hence reasoned that possibly this variable is quite difficult to influence via experimental manipulation, and that it might be better to work with existing 'natural' levels of empathy in the participants. Given that Study 3 had not yielded any evidence on the basis of which to question the effectiveness of the norms manipulation (there was no manipulation check), this variable was once again manipulated. However, in this study a norms manipulation check was added.

As was described previously, in Study 3 I conducted an online experiment study advertised on the Subreddit Samplesize community; thus, participants were taken from a pool of people who use Reddit and who are interested in participating in different studies. Study 5 was an online experiment advertised on Crowdflower, to gain access to a more diverse sample than in Study 3.

The hypotheses were the same as previously:

H1: The descriptive norms condition and situational empathy will be significant predictors of disposition to donate, even when controlling for each other.

H2: The descriptive norms condition will moderate the relationship between empathy and disposition to donate. The interaction will consist of a weaker relationship between empathy and disposition to donate in the high norms condition (i.e. when allegedly a high percentage of participants had donated to the cause) compared to the low norms condition (i.e. when a low percentage of participants donated to the cause).

Method

Participants

One hundred and three participants between 19 to 68 years old were recruited via Crowdflower to answer an online study using Qualtrics. The requirements to participate was for participants to live in the UK. In order to do this, participants were screened using the IP address from which participants accessed the Crowdflower job. Moreover, a question at the beginning of the survey that asked participants their country of residence acted as a second filter. Also, participants were required to be level 3 contributors (i.e., to be trusted contributors; 56 women, 46 men, 1 agender; $M_{age} = 37.62$, SD = 11.41; 86 British, 17 other nationalities).

Procedure

Participants were informed that the study consisted in a short survey about fundraising. After giving their informed consent, participants read that Students' Unions from several universities in the UK were going to fundraise money to support local and national charities in the UK that help homeless people. Participants also read that this project was in its preliminary stage, and that this is why we wanted to assess the viability of the chosen fundraising approach by asking participants if they would be willing to donate in the campaign (for the

whole vignette, see Appendix D). This text was shown to the participants in order to inform them that no real donation would be requested, while at the same time motivating them to give their honest answers (since their input would have an effect on the alleged future campaign). Considering that in Crowdflower contributors receive small sums of money for completing jobs (in this case, answering the survey) and that this could be an important source of income (Brawley & Pury, 2016; Gleibs, 2016), it was deemed that an actual charitable campaign that asks for their donation could prove to be unexpected and threatening.

After reading this text, participants answered a few demographic questions and were presented with an attention check (as in Study 4; Oppenheimer et al., 2009). Then, participants were randomly allocated to one of three descriptive norms conditions based on Goldstein et al. (2008). The manipulation was similar as in Study 3 of this thesis. Participants in the high norms condition were informed that until then, allegedly 89.7% of the respondents to the survey had decided to support the fundraising effort. In addition to this, participants saw a pie chart in which the percentage of respondents that had allegedly supported the fundraising was depicted. Participants in the low norms condition read that allegedly 10.3% of respondents had supported the fundraising effort until then, and saw the corresponding chart depicting this percentage (see Appendix E). It was decided to use a lower percentage in the low norms condition than the one used in Study 3 in the same condition (i.e., 19.7%), in order to use the same proportions in the high (89.7%) donated and 10.3% did not donate) and low norms conditions (10.3% donated and 89.7% did not donate). As in Study 3, the chart was shown as a gif image in which participants first saw a loading spinner gif and then the pie chart. This was done in order to give participants the impression that the chart was based on live data. As in Study 3, the submit button was disabled for 5 seconds in order to make sure that participants did not rush through the manipulation. Participants in the control condition did not see any information about the alleged behaviour of other respondents, therefore in this condition social norms were not made salient. After the manipulation, participants were asked about their disposition to donate.

When participants had finished answering the 5-minute survey, they were debriefed and given a code to collect their incentive on Crowdflower (USD \$0.10).

Measures

Empathy (α = .92) was measured with the following items adapted from previous research on empathy (Batson, Early, & Salvarani, 1997): 'How much do you experience each of these emotions towards homeless people?' (1) 'Sympathetic', (2) 'Compassionate', (3) 'Soft-hearted', (4) 'Warm', (5) 'Tender', and (6) 'Moved'. The response scale ranged from 1 'Not at all' to 7 'Extremely'.

Disposition to donate to charities (α = .93) was measured using 5 items adapted from Zagefka et al. (2011): (1) 'I would be willing to give donations to charities that help homeless people in the UK', (2) 'I think it is important to give donations to charities that help homeless people in the UK', (3) 'I think it is the right thing to do to give donations to charities that help homeless people in the UK', (4) 'I think everyone should donate money to charities that help homeless people in the UK', and (5) 'I would give the maximum amount I could afford according to my means to charities that help homeless people in the UK'. The response scale ranged from 1 'Not at all' to 7 'Very much'.³

Norms manipulation check (r = .65) was measured at the end of the survey using the following 2 items: (1) 'I believe many respondents have decided to support this fundraising', and (2) 'I believe the Students' Union initiative of fundraising money to help homeless people will be successful.' Participants were asked to indicate their agreement using a scale from 1 'Not at all' to 7 'Very

-

There was another construct in this study, *Disposition to donate to homeless people*, that was measured with the following 5 items: (1) 'I would be willing to give donations to homeless people.', (2) 'I think it is important to give donations to homeless people.', (3) 'I think it is the right thing to do to give donations to homeless people.', (4) 'I think everyone should donate money to homeless people.', and (5) 'I would give the maximum amount I could afford according to my means to homeless people.'. However, in an EFA these items loaded on the same factor as the Disposition to donate to charities items. Because the pattern of results presented in the chapter did not differ when using the 10 items together, for the purpose of clarity and to avoid redundancy, only the original five items of Disposition to donate to charities were used.

much'. It is difficult to design a manipulation check for the norms manipulation, which is why in Study 3 no such check had been included. It could be argued that the present check is more akin to an attention check than a manipulation check. Nonetheless, in the present study it was decided that it might be helpful having at least some handle on whether the manipulation worked, because otherwise potential null effects of the manipulation on the DV (as obtained in Study 3) are very difficult to interpret.

Again, some control variables were included. As outlined for previous studies, we anticipated that especially discretionary income and religious identification might be important (Bekkers & Wiepking, 2011; Bryant et al., 2003; Choi & Chou, 2010; Independent Sector, 2002; Wiepking & Bekkers, 2012; Wunderink, 2002).

Perceived discretionary income was measured with the following statement: 'I feel that I have a lot of money to spend each month on what I want.' to which participants had to indicate their level of agreement from 1 'Strongly disagree' to 7 'Strongly agree'.

Religious identification was assessed using the following item: 'Do you identify with any religion?' Participants could answer to this question with 0 'No' or 1 'Yes'.

Results

The variables' means, standard deviations, and correlations within the whole sample and by conditions are presented in Table 32. All of the scales were normally distributed. Within the whole sample and by conditions, participants were more willing to donate when they reported a) feeling more empathy towards homeless people, and b) believing that many respondents were supportive of the fundraising (i.e. norms manipulation check).

Table 32
Study 5. Descriptive statistics and correlations within the whole sample and by conditions.

Whole sample $(N = 103)$	Mean	SD	(1)	(2)	(3)	(4)
Empathy	4.02	1.29	.61***	.39***	12	.19†
Willingness to donate (1)	4.13	1.60	-	.63***	08	.14
Norms manipulation check (2)	4.70	1.47		-	07	.16
Discretionary income (3)	3.05	1.65			-	09
Religious identification (4)	-	-				-
Low norms condition $(n = 34)$	Mean	SD	(1)	(2)	(3)	(4)
Empathy	3.92	1.22	.58***	.33†	13	.37*
Willingness to donate (1)	4.06	1.31	-	.58***	25	.13
Norms manipulation check (2)	4.09	1.20		-	15	13
Discretionary income (3)	3.21	1.59			-	.09
Religious identification (4)	-	-				-
High norms condition $(n = 35)$	Mean	SD	(1)	(2)	(3)	(4)
Empathy	3.94	1.43	.67***	.43*	06	.03
Willingness to donate (1)	3.99	1.87	-	.64***	01	.13
Norms manipulation check (2)	5.36	1.27		-	05	.15
Discretionary income (3)	3.09	1.63			-	23
Religious identification (4)	-	-				-
Control norms condition $(n = 34)$	Mean	SD	(1)	(2)	(3)	(4)
Empathy	4.20	1.24	.56**	.49**	17	.21
Willingness to donate (1)	4.33	1.60	-	.82***	02	.14
Norms manipulation check (2)	4.65	1.67		-	02	.17
Discretionary income (3)	2.85	1.74			-	01
Religious identification (4)	-	-				-
Note. † < .1, * p < .05, ** p < .01, *	** p < .0	001				

As a first step, I checked if the descriptive norms manipulation worked. In order to do this, I conducted a one-way MANOVA with norms condition as an

independent factor (with three levels) and the norms manipulation check and empathy as DVs. There were differences by condition (F(4, 200) = 4.35, p = .002, $\eta_p^2 = .08$). As expected, there was a significant medium effect of the norms condition on perceived descriptive norms (F(2, 100) = 7.21, p = .001, $\eta_p^2 = .13$, $\omega^2 = .11$), and no differences in empathy (F(2, 100) = 0.50, p = .609, $\eta_p^2 = .01$, $\omega^2 = -.01$) (Kirk, 1996). Bonferroni post-hoc tests revealed that participants in the high norms condition perceived higher descriptive norms than participants in the low norms condition (p = .001), whereas the control condition was no different from the other two conditions (see Figure 15). Hence, the norms manipulation achieved the expected results. Therefore, the norms manipulation and not the manipulation check was used to test the hypotheses.

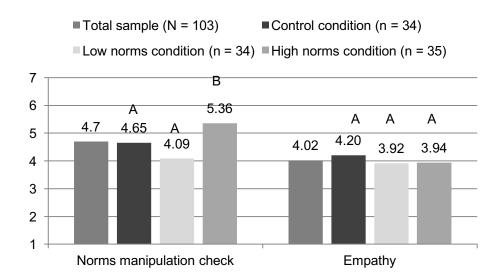


Figure 15
Study 5. Differences in norms manipulation check and empathy by norms conditions.
Letters indicate difference between conditions. Conditions not sharing the same letter are significantly different from each other.

Secondly, I conducted an EFA of the two main scales of interest – empathy, and disposition to donate— with ML, since the data were normally distributed (Fabrigar et al., 1999), and Direct Oblimin rotation with a delta of 0 in order for the constructs to be considered oblique, since both constructs were correlated as can be seen in Table 32 (Costello & Osborne, 2005; Harman, 1976). As expected, two factors were extracted, all the items loaded on their respective factors, and there were no significant cross-loadings. Because the factor structure was really clear-cut, the table with factor loadings is not presented; however, this will be available upon request.

To test the hypotheses, regression analyses were conducted using OLS, since Koenker tests confirmed that homoscedasticity could be assumed. In a first regression, empathy and the norms manipulation were considered as predictors. Indicator coding was used to consider the three levels of the norms manipulation, using the low norms condition as the reference group (Hayes & Montoya, 2017). In a second step the interaction term was added using model 1 of SPSS PROCESS macro (Hayes, 2013). In a final step, I added perceived discretionary income and religious identification as covariates. There were no signs of multicollinearity. A sensitivity power analysis considering a linear regression with 5 tested predictors, α of .05, power of 80% and sample size of 103 showed a minimum detectable effect size of $f^2 = 0.13$ (Faul et al., 2009). This analysis took into account one predictor for empathy, two predictors representing the high and control norms conditions (low condition was the reference group), and two predictors for the interaction terms (empathy x low-high norms interaction, and empathy x low-control norms interaction). With only the two interaction terms as tested predictors, the minimum effect size that could be detected with this sample size was $f^2 = 0.10$.

The results of the regression analyses are in Table 33. Across the three regressions, only empathy was a significant predictor, whereas norms condition did not have an effect on disposition to donate. Empathy was positively associated with disposition to donate. Therefore, H1 was only partially supported by the results.

Table 33Study 5. Regression analyses with norms manipulation as IV

	Disposi	tion to donate to	charities
	(1)	(2)	(3)
	0.76***	0.62**	0.61**
Empathy	(0.10)	(0.18)	(0.19)
	[0.56, 0.95]	[0.26, 0.99]	[0.23, 0.98]
Low norms condition		Reference group	
	-0.08	-0.06	-0.1
High norms condition	(0.31)	(0.31)	(0.32)
	[-0.70, 0.53]	[-0.68, 0.56]	[-0.74, 0.55]
	0.06	0.07	0.03
Control norms condition	(0.31)	(0.32)	(0.33)
	[-0.57, 0.68]	[-0.55, 0.70]	[-0.64, 0.69]
		0.25	0.26
Empathy x Low-High norms condition		(0.24)	(0.24)
		[-0.23, 0.73]	[-0.22, 0.75]
		0.11	0.11
Empathy x Low-Control norms		(0.26)	(0.26)
condition		[-0.41, 0.62]	[-0.41, 0.63]
			-0.01
Discretionary Income			(0.08)
			[-0.16, 0.15]
Daligious Id			0.13
Religious Id.			(0.28)
(0 = no, 1 = yes)			[-0.44, 0.69]
Moderation effect size (f^2)		0.01	0.01

Note. ** p < .01, *** p < .001. b values correspond to unstandardised coefficients. Standard errors in parentheses. 95% CIs in brackets. No signs of multicollinearity. Step 1 $R^2 = .38$, F(3, 99) = 20.00, p < .001. Step 2 $R^2 = .38$, F(5, 97) = 12.12, p < .001. Step 3 $R^2 = .39$, F(7, 95) = 8.52, p < .001.

There was no significant interaction between empathy and the norms condition, $\Delta R^2 = .01$, F(2, 97) = 0.56, p = .571, thus again there was no evidence that supported H2. When the control variables perceived discretionary income

and religious identification were added in the third model, none was a significant predictor of disposition to donate. The interaction term remained non-significant, $\Delta R^2 = .01$, F(2, 95) = 0.61, p = .547.

As an additional analysis, the same regression model was conducted but with the norms manipulation check measure as a predictor of disposition to donate instead of the experimental norms condition (see Table 34).

Table 34
Study 5. Regression analyses with the norms manipulation check measure as IV

	Dispo	sition to donate to cha	arities
	(1)	(2)	(3)
	0.54***	0.54***	0.54***
Empathy	(0.09)	(0.09)	(0.09)
	[0.36, 0.72]	[0.36, 0.72]	[0.36, 0.72]
	0.50***	0.51***	0.51***
Norms manipulation check	(0.08)	(0.08)	(0.08)
	[0.34, 0.66]	[0.36, 0.67]	[0.36, 0.67]
		0.08	0.08
Empathy x Norms interaction		(0.05)	(0.05)
		[-0.02, 0.18]	[-0.02, 0.18]
			0.003
Discretionary Income			(0.07)
			[-0.13, 0.13]
D-1:-: 14			-0.02
Religious Id.			(0.22)
(0 = no, 1 = yes)			[-0.46, 0.43]
Moderation effect size (f^2)		0.03	0.03

Note. ** p < .01, *** p < .001. b values correspond to unstandardised coefficients. Standard errors in parentheses. 95% CIs in brackets. No signs of multicollinearity. Step 1 $R^2 = .56$, F(2, 100) = 62.52, p < .001. Step 2 $R^2 = .57$, F(3, 99) = 43.34, p < .001. Step 3 $R^2 = .57$, F(5, 97) = 25.48, p < .001.

A sensitivity analysis showed a minimum detectable effect size of f^2 = 0.11 (Faul et al., 2009). The criteria was a regression analysis with 3 predictors, power of 80%, α of .05, and sample of 103. With only one predictor (i.e., the interaction), the minimum detectable effect size was f^2 = 0.08. In these analyses,

empathy and norms were significant predictors of disposition to donate to charities, even when controlling for income and religious identification, supporting H1 (see Table 34). Nonetheless, there was no interaction between empathy and the norms manipulation check measure, thus there was no moderation (step $2 \Delta R^2 = .01$, F(1, 99) = 2.74, p = .101; step $3 \Delta R^2 = .01$, F(1, 97) = 2.67, p = .105). Hence, the data did not support H2. Neither income nor religious identification were related to disposition to donate to charities.

Discussion

In Study 5, there was no replication of the results obtained in the previous studies. According to the results of the current experiment, when using the norms manipulation in the model only empathy was a significant predictor of disposition to donate, while there was no evidence of norms being a significant antecedent. However, when the norms manipulation check measure was used instead of the norms conditions, empathy as well as norms were predictors of disposition to donate. Thus, H1 was just partially supported by the results in Study 5. There was no evidence that supported an interaction between empathy and descriptive norms on disposition to donate, even when the norms manipulation check measure was used. Hence, there was no supporting evidence in this study of H2.

One of the possible explanations for the lack of consistency with the results of the previous studies concerns the experimental manipulation used in Study 5. Recalling the way in which descriptive norms were manipulated, participants were told that a specified low or high percentage of other respondents to the survey had decided to support the fundraising. Even though the manipulation seemed to work as expected according to the manipulation check, it is possible that participants did not consider the group of reference presented in the manipulation (i.e. other respondents of the survey) as a relevant group for them. As outlined above, the manipulation check was more an attention check which tapped into whether participants processed the information which was presented, but the manipulation check cannot directly speak to whether the manipulation was really effective in affecting a relevant group norm (i.e., that

people important to the self, endorse and engage in a certain behaviour). Hence, participants might not have felt compelled to follow the norms provided. After all, only norms of relevant reference groups have a direct effect on behaviour (Terry & Hogg, 1996; Goldstein et al., 2008; Agerström et al., 2016; Hysenbelli et al., 2013). Studies 1, 2 and 4 referred to norms arising from behaviour observed in family and friends, and in all three studies using this type of norms there was an association between social norms and donations. In contrast, in Studies 3 and 5, norms referred to the behaviour of other participants in the study, and in both studies, there was no main effect of norms manipulation on behaviour.

It could also be the case that the norms manipulation was not in line with the alleged frame of the study that was being conducted. Participants were told that this was a viability study (i.e., they were not going to be asked for a real donation), but in the norms manipulation they were told that a certain proportion of participants had decided to support the fundraising effort. It is likely that this did not make sense to participants. Nonetheless, in the vignette participants were told that we wanted to assess how many people were willing to donate —via a one-off or regular donation— in the future campaign (see Appendix D). In light of this sentence, the norms manipulation could have been understood perfectly well. That is, participants supporting the fundraising effort were participants that were willing to donate in the future campaign by any of those two means. Hence, assuming that participants read the vignette at the beginning of the study, this misunderstanding can be discarded as an explanation for this lack of effect.

Another issue to be discussed as a possible explanation for the inconsistency of results is the use of attention checks. As Oppenheimer et al. (2009) stated, attention checks in general can increase statistical power and reliability of the data collected, and can make participants read instructions more diligently when attention checks are used as in Studies 4 and 5 (i.e., with a loop forcing participants to try again when they fail). Therefore, attention checks can become a useful tool to ensure good quality data when using crowdsourcing websites. However, there is also evidence that attentions checks can increase systematic thinking (Hauser & Schwarz, 2015), and consequently reduce chances

that participants answer spontaneously to questions. Studies have also shown that attention checks can increase socially desirable responding (Clifford & Jerit, 2015). Therefore, this might not be the best way of ensuring quality of data in online surveys posted in crowdsourcing websites. Indeed, participants recruited via crowdsourcing have a better pass ratio in this type of attention checks than college students (Hauser & Schwarz, 2016), and evidence shows that sampling high-reputation workers can produce high quality data by itself (Peer, Vosgerau, & Acquisti, 2014). Therefore, attention checks will not be used in the following studies.

Moreover, an important limitation of this study was that it was underpowered considering the moderation effect sizes found in the previous studies. Still though, it could have detected a medium effect size. The lack of power is a relevant issue to consider in the following studies.

Chapter 7

Study 6. Experiment with a more relevant reference group

In the current study, an experimental design was used, with the aim of using a reference group more proximal and relevant to participants, in order to make sure that norms would be relevant and influential. With a university undergraduate student sample, I manipulated norms using as the reference group the previous respondents from the same university. There is evidence suggesting that identification with one's university is quite high in most students (Breytenbach, Renard, & Snelgar, 2013; Chawla & Srivastava, 2016; Myers, Davis, Schreuder, & Seibold, 2016), and this group therefore seemed a convenient and relevant reference group for the purpose of this study. This reference group can be assumed to be more relevant than references to the previous respondents of a short online survey, as used in Studies 3 and 5.

Undergraduate students were presented with a scenario similar to the one used in Study 5. They were told that Student Unions from various universities in the UK were organising a fundraising campaign to help end homelessness. For this purpose, the viability of the campaign was being assessed by asking students if they were willing to donate in that campaign. In this study, empathy was measured and norms was manipulated in the same way as in Studies 3 and 5, but with respondents at Royal Holloway as the reference group in the norms manipulation.

The hypotheses, as in the previous studies, can be summarised as the following:

H1: Perceived descriptive norms as well as empathy will be a significant predictor of disposition to donate to the campaign and to homeless people, even when controlling for each other.

H2: The descriptive norms condition will moderate the relationship between empathy and disposition to donate. The interaction will consist of a weaker relationship between empathy and disposition to donate in the high norms condition (i.e. when allegedly a high percentage of respondents from the same university) compared to the low norms condition (i.e. when a low percentage of respondents from the same university donated to the cause).

Method

Participants

One hundred forty-one undergraduate psychology students at Royal Holloway University of London were recruited to answer an online survey about fundraising using Qualtrics. These participants were recruited via a research participation scheme in exchange for course credits. The participants' age ranged from 17 to 47 years old (126 women, 15 men; $M_{\rm age} = 19$, SD = 3.25; 106 British, 35 others).

Procedure

Participants were presented with a 5- 10-minute survey in which empathy towards homeless people was measured and perceived descriptive norms were manipulated. After giving their consent to collaborate in the study, participants read the following text:

Royal Holloway Student Union along with Student Unions from several universities across the UK is planning to fundraise money during 2017 to support charities in the UK that help homeless people.

An essential part of this initiative is to consider the real needs of homeless people from different regions of the UK, so that the funds can really help people in need. This is why the different Student Unions will

work with local and national charities to channel the help towards homeless people in the most helpful way.

This project is still in a preliminary stage. That's why we are evaluating the viability of different means of collecting monetary donations from the different university and neighbouring communities.

Before starting the official fundraising campaign (scheduled for April 2017), we are assessing how many people and neighbours in the surrounding areas of the different universities participating in this campaign would be willing to make a one-off or regular donation (via direct debit) to local and national charities, and the amount they would be willing to donate to help end homelessness in the UK. We are also interested in your attitudes towards homeless people.

This will give us valuable information about the feasibility of the different campaigns we are organising and the impact of this project in the different areas in the UK

This text was shown to participants to inform them that even though no real donations were going to be asked at the time, the fundraising campaign was going to be held in the future; thus, their honest input was needed. After reading this, empathy towards homeless people was assessed, and then participants were randomly allocated to one of two norms conditions (low and high norms condition) in which descriptive norms were manipulated. After the manipulation, the dependent variables (disposition to donate to the campaign and to homeless people) and demographics were measured and participants were debriefed.

Norms manipulation

The norms manipulation was based on Goldstein et al.'s (2008) work, as in the previous studies presented in this thesis. Participants were randomly allocated to the low or the high norms condition. Depending on the condition, participants were told that allegedly a certain proportion of respondents at Royal Holloway had already decided to support the fundraising drive. Those in the low norms condition read the following statement: 'Until now, 10.3% of the

respondents at Royal Holloway have decided to support this fundraising effort!' Meanwhile those in the high norms condition read: 'Until now, 89.7% of the respondents at Royal Holloway have decided to support this fundraising effort!' Below the statement, participants were shown a pie chart that visually represented the alleged proportion of respondents that had decided to donate to the campaign. This chart was shown in a gif image format in which first participants saw a loading spinner gif and then the pie chart. As in previous studies, this was done to make this information more credible. The submit button was disabled for 5 seconds in order to ensure that participants saw the information shown in the chart.

Measures

All measures used in this study had a response scale that ranged from 1 'Not at all' to 7 'Very much', unless it is stated otherwise.

Empathy towards homeless people (α = .88) was measured right after telling participants that the survey had the objective to evaluate the feasibility of the Student Union's fundraising campaign. The measure was adapted from previous research on empathy (Batson et al., 1991). All participants were asked how much they experienced each of the emotions listed towards homeless people. The emotions listed were: 'sympathetic', 'compassionate', 'soft-hearted', 'warm', 'tender' and 'moved'. The response scale ranged from 1 'Not at all' to 7 'Extremely'.

Norms manipulation check (r = .58) was assessed using two items: (1) 'I believe many respondents have decided to support this fundraising', and (2) 'I believe the Students' Union initiative of fundraising money to help homeless people will be successful'.

Disposition to donate was measured with two scales tapping into disposition to donate to the campaign and disposition to donate to homeless people, both adapted from Zagefka et al. (2011).

Disposition to donate to the campaign ($\alpha = .89$) was measured using 4 items: (1) 'I would be willing to give donations to this fundraising campaign', (2) 'I think it is important to give donations to this fundraising campaign', (3) 'I

think it is the right thing to do to give donations to this fundraising campaign', and (4) 'I think everyone should donate money to this fundraising campaign'.

Disposition to donate to homeless people (α = .88) was measured using 4 items: (1) 'I would be willing to give donations to homeless people', (2) 'I think it is important to give donations to homeless people', (3) 'I think it is the right thing to do to give donations to homeless people', and (4) 'I think everyone should donate money to homeless people'.

A measure tapping into perceived need of help was added, since a feasible explanation in Study 3 for the marginally negative effect of norms on willingness to donate was that it could have impacted perceived need. Also, like in previous studies, religious identification and discretionary income were added, since previous research has shown that they can be associated to donations (Bekkers & Wiepking, 2011; Bryant et al., 2003; Choi & Chou, 2010 Independent Sector, 2002; Wiepking & Bekkers, 2012; Wunderink, 2002).

Perceived need of help (r = .50) was measured to confirm that the manipulation only impacted perceived norms and not the extent to which participants' help was needed. It was measured using two items: (1) 'I believe that my donation is needed in this fundraising', and (2) 'I believe that homelessness is an important problem in the UK'.

Perceived discretionary income was measured with the following statement: 'I feel that I have a lot of money to spend each month on what I want.'. Participants had to indicate their level of agreement from 1 'Strongly disagree' to 7 'Strongly agree'.

Religious identification was measured by asking participants: 'Do you identify with any religion?' Participants could answer 0 'No' or 1 'Yes'.

Results

In Table 35 the descriptive statistics and the correlations of the measures of this study are shown for the whole sample and by norms condition.

Table 35
Study 6. Descriptive statistics and correlations within the whole sample and by conditions

Whole sample	3.5	~~	(4)	(2)	(2)	(4)	(=)	(6)
(N = 141)	Mean	SD	(1)	(2)	(3)	(4)	(5)	(6)
Empathy	4.32	1.19	.21*	.39***	.46***	.42***	.03	09
Norms m. check (1)	4.97	1.12	-	.45***	.38***	.44***	.17*	07
Disposition to donate to the campaign (2)	4.72	1.35		-	.69***	.58***	.24**	.05
Disposition to donate to homeless people (3)	4.81	1.29			-	.58***	.20*	.15†
Perception of need (4)	5.16	1.20				-	.21*	04
Discretionary income (5)	2.67	1.51					-	.15†
Religious identification (6)	-	-						-
Low norms condition	Mean	SD	(1)	(2)	(2)	(4)	(5)	(6)
(n=71)	Mean	SD	(1)	(2)	(3)	(4)	(5)	(6)
Empathy	4.37	1.21	.25*	.34**	.41***	.41***	.01	10
Norms m. check (1)	4.63	1.14	-	.56***	.46***	.51***	.21†	04
Disposition to donate to the campaign (2)	4.75	1.34		-	.75***	.54***	.22†	.06
Disposition to donate to homeless people (3)	4.85	1.36			-	.67***	.16	.10
Perception of need (4)	5.18	1.13				-	.22†	09
Discretionary income (5)	2.49	1.33					-	.10
Religious identification (6)	-	-						-
High norms condition $(n = 70)$	Mean	SD	(1)	(2)	(3)	(4)	(5)	(6)
Empathy	4.27	1.17	.23†	.44***	.51***	.44***	.06	08
Norms m. check (1)	5.31	1.00	-	.39**	.34**	.43***	.08	07
Disposition to donate to the campaign (2)	4.70	1.37		-	.62***	.61***	.27*	.03
Disposition to donate to homeless people (3)	4.77	1.23			-	.49***	.24*	.22†
Perception of need (4)	5.14	1.28				-	.20†	.01
Discretionary income (5)	2.86	1.67					-	.21†
Religious identification (6)	-	-						-
Note. † $p < .1, *p < .05, **p < .05$	< .01, **	*p < 1	.001			-		

The measures presented a normal distribution according to the criteria by West et al. (1995). Within the whole sample and in both experimental conditions, empathy and the norms manipulation check were positively correlated with disposition to donate to the campaign and disposition to donate to homeless people. Perception of need also correlated positively with the DVs, within the whole sample and in both experimental conditions.

I conducted a MANOVA to test if there were differences by condition in the norms manipulation check, as well as on empathy and perceived need, to evaluate that indeed the manipulation did not impact on constructs other than norms. There was a significant multivariate effect of the norms condition, (F(3, 137) = 6.35, p < .001, $\eta p^2 = .12$). Univariate tests showed that there was a significant medium effect of the norms condition on the norms manipulation check (F(1, 139) = 13.96, p < .001, $\eta p^2 = .09$, $\omega^2 = .08$), but not on empathy (F(1, 139) = .05, p = .816, $\eta p^2 = .000$, $\omega^2 = -.01$) nor on need (F(1, 139) = .26, p = .614, $\eta p^2 = .002$, $\omega^2 = -.01$; Kirk, 1996). Results are displayed in Figure 16.

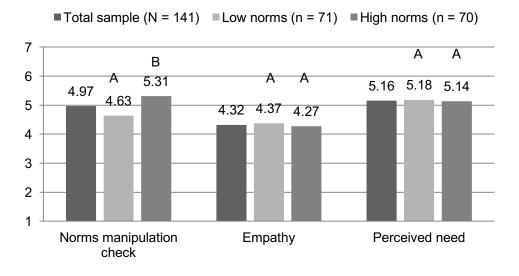


Figure 16
Study 6. Differences in manipulation check, empathy and perceived need of help by norms conditions. Letters indicate difference between conditions. Conditions not sharing the same letter are significantly different from each other.

From these results, two things can be concluded. First, the norms manipulation seemed to be effective. Second, the norms manipulation did not affect participants' perceived need of help, thus this confirms that the experimental effect was accurate in targeting norms and not perceived need of help. Hence, to test the hypotheses, the norms manipulation and not the norms manipulation check measure was considered.

I conducted an EFA considering the items of the main variables used, that is, empathy and disposition to donate to the campaign and to homeless people. I used ML as the method of extraction since all the items were normally distributed (Fabrigar et al. 1999). Also, I used Direct Oblimin rotation with a delta of 0, since the variables were correlated, as seen in Table 35 (Costello & Osborne, 2005; Harman, 1976). The results of the EFA confirmed the measurement model, since the expected three factors, i.e. empathy, disposition to donate to the campaign, and disposition to donate to homeless people, were extracted. All items loaded on their respective factor and there were no significant cross-loadings. The pattern and structure matrix is available upon request, but will be omitted here for brevity's sake.

Regression analyses were conducted to test the hypotheses with empathy towards homeless people, and the norms experimental condition (0 = low norms condition, 1 = high norms condition) as IVs. Then, the interaction term was added in the model, and in a final step, the covariates were added. Koenker tests were conducted before every regression analysis to assess if homoscedasticity could be assumed in each model, in which case OLS was used as the estimator. If homoscedasticity could not be assumed, then HC3 was used instead, since it is a robust estimator against heteroscedasticity. The SPSS RLM macro (Darlington & Hayes, 2017) was used to test the first regression model with empathy towards homeless people and the norms experimental condition as IVs. The SPSS PROCESS macro (model 1; Hayes, 2013) was used for the model with the interaction term. There were no signs of multicollinearity. A sensitivity power analysis with 3 tested predictors in a linear regression, $\alpha = .05$, power of 80% and sample size of 141 showed a minimum effect size of $f^2 = 0.08$ that could be detected (Faul et al., 2009). The same criteria but with only one predictor to be

tested (i.e., the interaction term) showed that the minimum effect size that could be detected was $f^2 = 0.06$.

The regression analyses are shown in Table 36 and Table 37.

Table 36
Study 6. Regression analyses with norms manipulation as IV and disposition to donate to the campaign as DV

	Disposition to donate to the campaign			
	(1)	(2)	(3)	
	0.44***	0.44***	0.22*	
Empathy	(0.09)	(0.09)	(0.09)	
	[0.27, 0.62]	[0.27, 0.62]	[0.05, 0.39]	
NI	-0.001	-0.001	-0.03	
Norms condition $(0 = low, 1 = high)$	(0.21)	(0.21)	(0.19)	
(0 – 10w, 1 – 111gti)	[-0.42, 0.42]	[-0.42, 0.42]	[-0.40, 0.34]	
		0.14	0.08	
Empathy x Norms interaction		(0.18)	(0.15)	
		[-0.22, 0.49]	[-0.23, 0.38]	
			0.53***	
Perceived need			(0.09)	
			[0.36, 0.70]	
			0.12†	
Discretionary income			(0.06)	
			[-0.01, 0.24]	
Religious Id.			0.17	
(0 = no, 1 = yes)			(0.19)	
(0-110, 1-yes)			[-0.21, 0.55]	
Moderation effect size (f^2)		0.004	0.002	

Note. † p < .1, * p < .05, *** p < .001. b values correspond to unstandardised coefficients. Standard errors in parentheses. 95% CIs in brackets. Step 1 $R^2 = .15$, F(2, 138) = 12.32, p < .001. Step 2 $R^2 = .16$, F(3, 137) = 8.38, p < .001. Step 3 $R^2 = .39$, F(6, 134) = 13.98, p < .001.

Empathy was the only consistent predictor of disposition to donate to the campaign and disposition to donate to homeless people, even when the covariates

were added to the model (see Table 36). Norms manipulation had no effect on the dependent variables. Therefore, H1 was only partially supported by the data.

Table 37Study 6. Regression analyses with norms manipulation as IV and disposition to donate to homeless people as DV

	Disposition to donate to homeless people			
	(1)	(2)	(3)	
	0.50***	0.50***	0.31**	
Empathy	(0.10)	(0.10)	(0.10)	
	[0.30, 0.69]	[0.29, 0.70]	[0.11, 0.51]	
Na 141	-0.03	-0.03	-0.01	
Norms condition	(0.20)	(0.20)	(0.17)	
(0 = low, 1 = high)	[-0.42, 0.36]	[-0.42, 0.37]	[-0.35, 0.32]	
Empathy x Norms interaction		0.07	0.01	
		(0.21)	(0.19)	
		[-0.34, 0.48]	[-0.36, 0.39]	
			0.48***	
Perceived need			(0.08)	
			[0.32, 0.65]	
			0.06	
Discretionary income			(0.07)	
			[-0.08, 0.19]	
Religious Id.			0.49**	
•			(0.18)	
(0 = no, 1 = yes)			[0.14, 0.84]	
Moderation effect size (f^2)		0.001	0.000	

Note. ** p < .01, *** p < .001. b values correspond to unstandardised coefficients. Standard errors in parentheses. 95% CIs in brackets. Step 1 $R^2 = .21$, F(2, 138) = 12.40, p < .001. Step 2 $R^2 = .21$, F(3, 137) = 7.95, p < .001. Step 3 $R^2 = .43$, F(6, 134) = 17.39, p < .001.

There was no evidence of an interaction between empathy and norms (disposition to donate to the campaign, step 2 ΔR^2 = .004, F(1, 137) = 0.58, p = .449; step 3 ΔR^2 = .001, F(1, 134) = 0.24, p = .627; disposition to donate to

homeless people, step 2 ΔR^2 = .001, F(1, 137) = 0.11, p = .744; step 3 ΔR^2 = .000, F(1, 134) = 0.01, p = .938).

As an alternative to the previous analyses, the same regression analyses were conducted but with the norms manipulation check instead of the norms experimental conditions (see Table 38 and Table 39).

Table 38
Study 6. Regression analyses with norms manipulation check measure as IV and disposition to donate to the campaign as DV

	Disposition	on to donate to th	e campaign
	(1)	(2)	(3)
	0.35***	0.34***	0.20*
Empathy	(0.08)	(0.08)	(0.08)
	[0.18, 0.51]	[0.17, 0.50]	[0.04, 0.36]
	0.47***	0.47***	0.29**
Norms (m. check)	(0.09)	(0.09)	(0.09)
	[0.29, 0.64]	[0.30, 0.65]	[0.11, 0.46]
		-0.06	-0.05
Empathy x Norms interaction		(0.07)	(0.07)
		[-0.20, 0.08]	[-0.18, 0.08]
			0.43***
Perceived need			(0.09)
			[0.25, 0.60]
			0.1
Discretionary income			(0.06)
			[-0.03, 0.22]
Daligious Id			0.22
Religious Id.			(0.18)
(0 = no, 1 = yes)			[-0.14, 0.58]
Moderation effect size (f^2)		0.01	0.004

Note. * p < .05, ** p < .01, *** p < .001. b values correspond to unstandardised coefficients. Standard errors in parentheses. 95% CIs in brackets. Step 1 $R^2 = .29$, F(2, 138) = 28.80, p < .001. Step 2 $R^2 = .30$, F(3, 137) = 19.43, p < .001. Step 3 $R^2 = .43$, F(6, 134) = 16.87, p < .001.

Table 39
Study 6. Regression analyses with norms manipulation check measure as IV and disposition to donate to homeless people as DV

	Disposition	on to donate to hom	eless people
	(1)	(2)	(3)
	0.43***	0.41***	0.29***
Empathy	(0.08)	(0.08)	(0.08)
	[0.27, 0.59]	[0.25, 0.57]	[0.13, 0.44]
	0.34***	0.35***	0.19*
Norms (m. check)	(0.09)	(0.08)	(0.08)
	[0.17, 0.51]	[0.18, 0.51]	[0.02, 0.35]
		-0.09	-0.07
Empathy x Norms interaction		(0.07)	(0.06)
		[-0.22, 0.05]	[-0.19, 0.05]
			0.41***
Perceived need			(0.08)
			[0.25, 0.58]
			0.04
Discretionary income			(0.06)
			[-0.07, 0.15]
Daliaiana Id			0.51**
Religious Id.			(0.17)
(0 = no, 1 = yes)			[0.18, 0.85]
Moderation effect size (f^2)		0.01	0.01

Note. * p < .05, ** p < .01, *** p < .001. b values correspond to unstandardised coefficients. Standard errors in parentheses. 95% CIs in brackets. Step 1 $R^2 = .29$, F(2, 138) = 28.48, p < .001. Step 2 $R^2 = .30$, F(3, 137) = 19.66, p < .001. Step 3 $R^2 = .46$, F(6, 134) = 18.69, p < .001.

In contrast with the previous results, now empathy as well as norms were positive predictors of disposition to donate to the campaign and to homeless people, even when the covariates were added to the model. However, there was no evidence of an interaction between empathy and norms (disposition to donate to the campaign, step 2 $\Delta R^2 = .004$, F(1, 137) = 0.79, p = .377; step 3 $\Delta R^2 = .002$,

F(1, 134) = 0.53, p = .466; disposition to donate to homeless people, step $2 \Delta R^2 = .01, F(1, 137) = 1.73, p = .191$; step $3 \Delta R^2 = .01, F(1, 134) = 1.47, p = .227$). Thus, H1 was supported by the data, but there was no support for H2.

Discussion

In the current study, empathy was measured while descriptive norms were manipulated. In contrast to Studies 3 and 5, in the current study the reference group used to establish the descriptive norm can be assumed to have been more relevant to participants. Moreover, no attentional checks were added in this study based on concerns about the negative impact that these could have on participants and on quality of data (Clifford & Jerit, 2017; Hauser & Schwarz, 2015; Oppenheimer et al., 2009).

Results showed that empathy was a significant predictor of disposition to donate to the campaign and to homeless people, however, there was no norms treatment effect, nor was there an interaction effect. Hence, H1 was only partially supported by the data, while H2 was not supported. However, when the same analysis was conducted with the norms manipulation check instead of the norms experimental conditions, both empathy and norms were significant predictors of donations. Considering the power of the study, moderation effect sizes such as the ones found in Study 2 could have been detected. Still, the interaction was non-significant.

As indicated previously, in this study it was assumed that participants would regard the group composed of respondents from their same university as a relevant reference group, or at least more relevant than the group composed of previous respondents to the study used in Studies 3 and 5. However, the fact that there was no main effect of the manipulation on disposition to donate (just like in Study 5) suggests that the norms manipulation might have not been strong enough, even though it did have an effect on the manipulation check in the direction expected. The lack of an interaction between empathy and norms might also suggest the lack of strength in the manipulation.

Importantly, this study was underpowered. The effect sizes found in the previous studies were relatively small, requiring a large sample to detect them.

However, practical constraints made it difficult to access a larger undergraduate student sample for this study, given the cohort size which Royal Holloway usually takes in.

One issue that can be rescued from this experiment is that the norms manipulation impacted on perceived norms (i.e. norms manipulation check) and not on perceived need of help. If one recalls that in Study 3 a concern had been that the norms manipulation might have affected perceived need of help, this result is good news.

Chapter 8

Study 7. Crowdflower experiment with a larger sample.

As outlined above, a possible explanation for the lack of evidence of an interaction in some of the previous studies might be their relatively small sample sizes and low power available for the detection of small effect sizes. Considering a larger sample than the ones used for the previous studies was hence of focal interest for the current study.

This present study had an experimental design very similar to Study 5, but without considering a control norms group (by reducing the number of experimental cells, it was hoped to increase the *N* per cell). Thus, empathy was measured while perceived descriptive norms were manipulated. Also, as in Study 6, a perceived needs measure was added, to again test whether the norms manipulation would have an impact on it. Finally, the charity and the target of help were different from before. Instead of using a charity and a campaign to raise funds to help homeless people, this study used an animal welfare charity. Homeless people are members of a highly stigmatised group and might be targets of contemptuous prejudice (Fiske et al., 2002; Harris & Fiske, 2006). In this study animals were chosen as targets, since they can trigger feelings of warmth and high levels of help (Sevillano & Fiske, 2016). Moreover, the generalisability of the associations can be assessed with a target that has not been used in the preceding studies.

Just like in the previous studies, it was expected that:

H1: Perceived descriptive norms and situational empathy will be a significant predictor of disposition to donate to the animal welfare charity, even when controlling for each other.

H2: There will be an interaction between situational empathy and social descriptive norms, in which empathy will be a weaker predictor of disposition to donate to the animal welfare when social descriptive norms are high.

Method

Participants

Four hundred seven participants were recruited via Crowdflower to answer an online survey in Qualtrics about fundraising. An a priori power analysis was conducted for one tested predictor in a linear regression of three predictors, α of .05, power of .80, and small effect size ($f^2 = 0.02$) (Faul et al., 2009; Faul, Erdfelder, Lang, & Buchner, 2007). Based on these assumptions, the desired sample size was 395. As requirements, all participants had to speak and understand English and they had to be trusted contributors (i.e., level 3 contributors). The participants' age ranged from 18 to 78 years old (180 women, 225 men, 2 other; $M_{\rm age} = 37.71$, SD = 11.82; 92 Americans, 79 Italians, 45 British, 33 Polish, 24 Greeks, 24 Venezuelan, 20 Germans, 10 Dutch, 10 Swedish, 70 other nationalities).

Procedure

In the survey description in Crowdflower, contributors read that all of those who answered the survey carefully would receive a bonus payment, as a way of ensuring a high-quality data. After participants gave their informed consent, they proceeded to answer a 5- 10-minute survey in which empathy towards animals was measured and perceived descriptive norms were manipulated. They first saw a screenshot taken from the Blue Cross charity's website (www.bluecross.org.uk; Figure 17). In the screenshot, Blue Cross's vision and work was explained in general terms. The submit button was disabled for 15 seconds to ensure that participants read the text in the screenshot. After reading this, empathy towards animals in need was measured. Then, participants were randomly allocated to one of two norms conditions (low and high norms

condition). After the manipulation of descriptive norms, there was a manipulation check. Finally, the dependent and demographic variables were measured. At the end of the survey participants were debriefed and given a code to automatically claim their payment (USD \$0.07). After that, I allocated the same amount to participants via Crowdflower as a bonus (USD \$0.14 in total).

Blue Cross for pets

Sick, injured and homeless pets have relied on us since 1897. Abandoned or unwanted, ill or injured, pets turn to us for help every year. Our doors are always open to them, and with your support, they always will be.

Each year, thousands of cats, dogs, small pets and horses turn to our animal hospitals, clinics and rehoming services for treatment and to find them the happy homes they deserve.

Our **vision** is that every pet will enjoy a healthy life in a happy home and we won't rest until we achieve it. But we really need your help.

We care for more than 40,000 pets every year but we know it's not enough – there are many, many more out there who still desperately need us and we must be there for them. By 2020 we want to be helping 70,000 animals a year, and your support will help to make sure this happens.

Figure 17

Screenshot of the animal welfare charity and its fundraising effort.

Norms manipulation

The norms manipulation followed those previously used (Goldstein et al., 2008; Studies 3, 5, and 6). After showing participants the screenshot about the animal welfare charity and its fundraising effort and measuring empathy, participants were randomly allocated to the low or the high norms condition. As in Study 5, depending on the condition, participants were told that allegedly a certain proportion of respondents to the study had decided to support the fundraising effort. Those in the low norms condition read the following statement: 'Until now, 10.3% of the respondents have said they would support this fundraising effort!' Meanwhile, those in the high norms condition read:

'Until now, 89.7% of the respondents have said they would support this fundraising effort!' Below the statement, there was a pie chart illustrating the proportions. Just as in Studies 3, 5, and 6, participants first saw a loading spinner gif and then the pie chart. The submit button was disabled for 5 seconds to ensure that participants did not rush through the manipulation.

Measures

Measures used in this study had a response scale that ranged from 1 'Not at all' to 7 'Very much', unless it is stated otherwise.

Empathy towards animals in need (α = .91) was measured right after participants read about the Blue Cross charity in the screenshot that was shown to them (Figure 17). This measure was adapted from previous research on empathy (Batson et al., 1991). All participants were asked how much they experienced each of the emotions listed towards abandoned, unwanted, ill, or injured animals. The emotions were: 'sympathetic', 'compassionate', 'soft-hearted', 'warm', 'tender' and 'moved'. The response scale ranged from 1 'Not at all' to 7 'Extremely'.

Norms manipulation check (r = .75) was assessed using two items: (1) 'I believe many respondents have decided to support this fundraising campaign.' (2) 'I believe the Blue Cross for pets initiative of fundraising money will be successful.'

Disposition to donate to the campaign (α = .94) was adapted from Zagefka et al. (2011), and was measured using 5 items: (1) 'I would be willing to give donations to this fundraising campaign.' (2) 'I think it is important to give donations to this fundraising campaign.' (3) 'I think it is the right thing to do to give donations to this fundraising campaign.' (4) 'I think everyone should donate money to this fundraising campaign.' (5) 'I would give the maximum amount I could afford according to my means to this fundraising campaign.'

As in Study 6, a measure that tapped into perceived need of help was assessed. Also, as in previous studies, income and religious identification were considered, since studies have shown that they can be positively associated to

donations (Bekkers & Wiepking, 2011; Bryant et al., 2003; Choi & Jing-Ann Chou, 2010; Independent Sector, 2002; Wiepking & Bekkers, 2012; Wunderink, 2002).

Perceived need of help (r = .64) was measured with the following two items: (1) 'I believe that my donation is needed in this campaign.' (2) 'I believe that animal welfare is a relevant issue.'

Perceived discretionary income was measured with the following statement: 'I feel that I have a lot of money to spend each month on what I want.'. The response scale ranged from 1 'Strongly disagree' to 7 'Strongly agree'.

Religious identification was assessed using the following question: 'Do you identify with any religion?' Participants could answer with 0 'No' or 1 'Yes'.

Results

The descriptive statistics and correlations of the measures in this study are shown in Table 40 within the whole sample and by norms conditions. All measures had a normal distribution according to West et al.'s criteria (1995). All the measures were positively correlated in the whole sample and within each condition.

Considering that all the items of empathy and disposition to donate to the campaign were normally distributed, I conducted an EFA with ML extraction (Fabrigar et al., 1999). Based on the correlation between variables (Table 40), I conducted the EFA with Direct Oblimin rotation with a delta of 0 (Costello & Osborne, 2005; Harman, 1976). As expected, two factors were extracted and the items loaded on their respective factor without significant cross-loadings – the pattern and structure matrices are available upon request.

Table 40Study 7. Descriptive statistics and correlations within the whole sample and by conditions.

(N=407)	Mean	SD	(1)	(2)	(3)	(4)	(5)
Empathy	5.12	1.27	.24***	.57***	.61***	06	.02
Norms m. check (1)	5.02	1.52	-	.47***	.43***	.07	.10†
Willingness to donate (2)	4.67	1.51		-	.79***	.09†	.14**
Perceived need (3)	5.22	1.42			-	.06	.06
Discretionary income (4)	2.81	1.62				-	.08
Religious identification (5)	-	-					-
Low norms condition							
(n = 203)	Mean	SD	(1)	(2)	(3)	(4)	(5)
Empathy	5.15	1.27	.20**	.56***	.57***	10	.03
Norms m. check (1)	4.29	1.56	-	.48***	.40***	.11	.16*
Willingness to donate (2)	4.60	1.52		-	.78***	.16*	.14*
Perceived need (3)	5.19	1.39			-	.08	.06
Discretionary income (4)	2.67	1.51				-	.22*
Religious identification (5)	-	-					-
High norms condition							
(n = 204)	Mean	SD	(1)	(2)	(3)	(4)	(5)
Empathy	5.08	1.27	.43***	.59***	.65***	02	.02
Norms m. check (1)	5.75	1.07	-	.59***	.60***	05	.02
Willingness to donate (2)	4.73	1.50		-	.81***	.03	.14†
Perceived need (3)	5.26	1.45			-	.03	.06
Discretionary income (4)	2.95	1.71				-	04
Religious identification (5)	-	-					-

In order to test if the norms manipulation worked, I conducted a MANOVA with the norms manipulation check, empathy towards animals in need, and perceived need of help as dependent variables. There was a significant multivariate effect of the norms condition ($F(3, 403) = 50.22, p < .001, \eta_p^2 = .27$) on the DVs. There was a significant univariate effect of the norms condition on

the norms manipulation check measure (Welch's F(1, 358.368) = 121.22, p < .001, $\eta_p^2 = .23$, $\omega^2 = .23$) in the expected direction. Hence the norms manipulation seemed to be effective. There was no differences in empathy (F(1, 405) = .38, p = .538, $\eta_p^2 = .001$, $\omega^2 = -.002$), nor in perceived need (F(1, 405) = .23, p = .630, $\eta_p^2 = .001$, $\omega^2 = -.002$). Therefore, participants felt similar levels of empathy towards animals in need in both norms conditions, and the norms manipulation did not affect the levels of perceived need of help reported by participants. Means are shown in Figure 18.

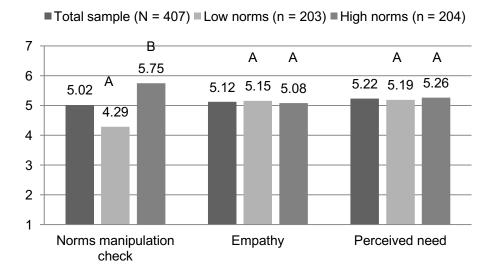


Figure 18
Study 7. Differences in norms manipulation check, empathy and perceived need by norms conditions. Letters indicate difference between conditions. Conditions not sharing the same letter are significantly different from each other.

As in the previous studies, regression analyses were conducted to test the hypotheses. The norms experimental condition was coded as 0 'low norms condition', and 1 'high norms condition'. First, only empathy and norms condition were added to the model as predictors of disposition to donate to the campaign. In a second step, the interaction term was added to the model as a third predictor, using model 1 of SPSS PROCESS macro (Hayes, 2013). In the final step, the covariates were added to the model. Koenker tests showed that homoscedasticity could be assumed in all the models tested. There were no signs

of multicollinearity. A sensitivity power analysis was conducted with 3 tested predictors in a linear regression, α of .05, power of 80% and sample size of 407. This analysis showed a minimum effect size of $f^2 = 0.03$ that could be detected (Faul et al., 2009). The same criteria, now with only one predictor tested showed that the minimum effect size that could be detected was $f^2 = 0.02$.

Table 41Study 7. Regression analyses with norms manipulation as IV

	Disposition to donate to the campaign				
	(1)	(2)	(3)		
	0.68***	0.68***	0.18***		
Empathy	(0.05)	(0.05)	(0.05)		
	[0.59, 0.78]	[0.59, 0.78]	[0.09, 0.26]		
Norms condition	0.18	0.18	0.07		
	(0.12)	(0.12)	(0.09)		
(0 = low, 1 = high)	[-0.06, 0.42]	[-0.06, 0.42]	[-0.10, 0.25]		
		0.04	-0.06		
Empathy x Norms interaction		(0.10)	(0.07)		
		[-0.16, 0.23]	[-0.20, 0.08]		
			0.74***		
Perceived need			(0.04)		
			[0.66, 0.82]		
			0.05†		
Discretionary income			(0.03)		
			[-0.01, 0.10]		
D 1			0.28**		
Religious Id.			(0.09)		
(0 = no, 1 = yes)			[0.10, 0.45]		
Moderation effect size (f^2)		0.0003	0.002		

Note. † p < .1, *** p < .01, **** p < .001. b values correspond to unstandardised coefficients. Standard errors in parentheses. 95% CIs in brackets. No signs of multicollinearity. Step 1 $R^2 = .33$, F(2, 404) = 100.09, p < .001. Step 2 $R^2 = .33$, F(3, 403) = 66.62, p < .001. Step 3 $R^2 = .65$, F(6, 400) = 125.56, p < .001.

Empathy –not norms manipulation– was the only predictor of disposition to donate to the campaign (see Table 41); hence, H1 was only partially supported by the data. Moreover, there was no interaction between empathy and the norms condition; this does not support H2 (step $2 \Delta R^2 = .0002$, F(1, 403) = 0.13, p = .717; step $3 \Delta R^2 = .001$, F(1, 400) = 0.72, p = .397).

Table 42
Study 7. Regression analyses with norms manipulation check measure as IV

	Disposition to donate to the campaign				
	(1)	(2)	(3)		
	0.58***	0.57***	0.17***		
Empathy	(0.05)	(0.05)	(0.04)		
	[0.49, 0.67]	[0.48, 0.66]	[0.09, 0.26]		
	0.35***	0.35***	0.16***		
Norms m. check	(0.04)	(0.04)	(0.03)		
	[0.28, 0.43]	[0.28, 0.43]	[0.09, 0.22]		
		-0.02	-0.03		
Empathy x Norms interaction		(0.02)	(0.02)		
		[-0.07, 0.03]	[-0.06, 0.01]		
			0.67***		
Perceived need			(0.04)		
			[0.59, 0.75]		
			0.05†		
Discretionary income			(0.03)		
			[-0.01, 0.10]		
D.1::: 14			0.25**		
Religious Id.			(0.09)		
(0 = no, 1 = yes)			[0.08, 0.42]		
Moderation effect size (f^2)		0.002	0.005		

Note. † p < .1, *** p < .01, *** p < .001. b values correspond to unstandardised coefficients. Standard errors in parentheses. 95% CIs in brackets. No signs of multicollinearity. Step 1 $R^2 = .45$, F(2, 404) = 162.52, p < .001. Step 2 $R^2 = .45$, F(3, 403) = 108.51, p < .001. Step 3 $R^2 = .67$, F(6, 400) = 137.67, p < .001.

In a parallel analysis, a regression analysis was conducted with the norms manipulation check instead of the experimental conditions (see Table 42). Now both empathy and norms were predictors of disposition to donate, even when adding the covariates, supporting H1. However, no evidence was found of an interaction between empathy and norms (step 2 $\Delta R^2 = .001$, F(1, 403) = 0.72, p = .396; step 3 $\Delta R^2 = .002$, F(1, 400) = 1.89, p = .170). Therefore, there was no support for H2.

Discussion

The current study showed a similar pattern of results to that obtained in Studies 5 and 6. There was no effect of the experimental norms condition on disposition to donate, and only empathy showed to be a significant predictor. This study had enough power to detect moderation effect sizes similar to the significant ones found in Studies 1, 2 and 3. However, there was no interaction between empathy and norms condition. Only when using the norms manipulation check instead of the norms manipulation as a predictor in the model did norms become related to disposition to donate. Empathy remained a significant predictor in this analysis. Hence, H1 was only partially supported by the data, and there was no support for H2.

The pattern of results was the same as in Studies 5 and 6, even when in the current study the number of participants was considerably higher than before (N in experimental conditions Study 5 = 103, Study 6 = 141, Study 7 = 407). As in Studies 5 and 6, the norms manipulation seemed to work effectively, as far as the manipulation check allows us to conclude, and the norms manipulation did not seem to affect perceived need.

Chapter 9

General discussion

Overview of studies in this thesis

This thesis is just a first step in an effort to consider helping behaviours as resultant from a complex decision induced by not only interpersonal but also social influences. However, research on helping has been largely developed in an interpersonal context without much consideration of group variables (van Leeuwen, & Zagefka, 2017). The strong effect of empathy on prosocial behaviour has amply and convincingly been demonstrated (e.g. Batson, et al., 1997; Wunderink, 2002; Coke et al., 1978; Pavey et al., 2012). However, social descriptive norms, when they are made salient, can influence a wide range of behaviours, including helping behaviours (e.g. Croson, et al., 2009; van Leeuwen, & Jongh, 2015; Croson & Shang, 2008; Reyniers, & Bhalla, 2013; Agerström, et al., 2016). In this thesis, I try to combine both types of research, in order to make better sense of how helping decisions are made in a social context, with group and interpersonal forces combining to form an intricate dynamic.

Apart from considering both empathy and social descriptive norms as powerful drivers of monetary donations, I also expected that there would be an interaction between them. This empathy-norms interplay was expected based on two rationales: a) The strong situation hypothesis (Cooper & Withey, 2009; Mischel, 1977), and b) Our limited attentional resources (e.g. Biesanz, et al., 2001; Chajut & Algom, 2003; Stothart et al., 2015) and the Focus Theory (Cialdini et al., 1991).

The strong situation hypothesis refers to the claim that personality would influence behaviour more strongly in weaker situations than in stronger contexts (Cooper & Withey, 2009; Mischel, 1977). The strength of the situation conveys the uniformity of expectancies of the behaviour to be performed. Hence, a strong

situation is one in which everyone knows how to behave, while a weak situation is one in which there is a huge range of possible behaviours that could emerge. In the former case, personality traits are less likely to guide conduct, because there are situational cues that point clearly towards the expected behaviour, resulting in a restricted scope of potentially acceptable demeanours. Weak situations are more ambiguous; there are fewer clear guidelines to follow, and therefore there will be a wider range of possible behaviours which might emerge, and personality will be more likely to inform behaviour. In this thesis, a strong situation would correspond to one in which there is a salient and strong norm that clearly shows the expected behaviour, i.e. give monetary donations, whereas a weak situation would correspond to one in which norms are low. In the former situation, empathy will be less strongly associated with donations than in the latter (weak) situation.

Secondly, definitions of empathy and social norms also suggest that the two variables might interact. Empathy is an other-oriented emotional reaction (Batson, 1990), hence it requires attention to be focussed on the target of help. However, social norms focus attention on the group that establishes that norm. Because of our limited attentional resources (e.g. Chajut & Algom, 2003; Stothart et al., 2015; Biesanz, et al., 2001), when norms are strong and salient, attention will be focussed on the group, and there will be fewer attentional resources left to focus on the target of help. Therefore, it will be less likely that empathy will impact on behaviour. If norms are weak, there will be more attentional resources which can be focussed on the target of help; hence, empathy is likely to affect behaviour more strongly. This is supported by the rationale behind Focus Theory (Cialdini et al., 1991), since behaviour will be more consistent with the source of motivation or information salient at the time.

In total, seven studies ($N_{\text{Total}} = 2753$) were conducted to test these hypotheses. The overview of these studies is in Table 43.

Table 43

Overview of studies in this thesis

Study	Design	Sample	Total N	n by	norms co	ndition	Assoc. with/Effects on donations. (+) = positive, (-) = negative, or No relation					
				Low	High	Control	Empathy	Norms	Interaction			
Study 1	Cross-sec.	Chile's main cities	1300	-	-	-	(+)	(+)	(-) ^a			
Study 2	Cross-sec. b	Undergrad. students	144	-	-	-	(+)	(+)	(-) ^a			
Study 3	Exp.	Reddit sample	209	69	71	69	(+) ^c	(-) ^d	(-) ^a			
Study 4	Cross-sec.	Crowdflower	449	-	-	-	(+)	(+)	No ^e			
Study 5	Exp.	Crowdflower (UK)	103	34	35	34	(+)	Manip.: No M.check: (+)	No			
Study 6	Exp.	Undergrad. students	141	71	70	-	(+)	Manip.: No M.check: (+)	No			
Study 7	Exp.	Crowdflower	407	203	204	-	(+)	Manip.: No M.check: (+)	No			

^a Negative interaction refers to empathy being a weaker predictor when norms are high, compared to when norms are low.

^b Study 2 was initially experimental; since the empathy manipulation was ineffective, results shown here correspond to the analyses with empathy measures as IVs.

^c In Study 3 empathy was manipulated ineffectively; hence, results shown here correspond to the analysis with the empathy manipulation check measure.

^d This was a marginal effect on one of the 2 DVs tapping into donations. There was no norms manipulation effect on the other DV.

^e There was a negative marginal association using the scale of donation (not the items separated) only within the whole sample (not with the subsamples by targets of help).

Among these seven studies, three were correlational studies (Studies 1, 2 and 4), and the remaining four had an experimental design (Studies 3, 5, 6 and 7). However, one of the cross-sectional studies, i.e. Study 2, was originally designed as an experiment, but because of the failed manipulation it was analysed in correlational terms. There were mixed results across the 7 studies.

In Study 1, a correlational study conducted in Chile, empathy as well as perceived norms predicted donations, supporting H1. In general, there was support for H2, since empathy was less strongly associated with past frequency of donations when perceived norms were high compared to when they were low. The interaction effect size was small; thus, the achieved power was high.

Study 2 initially had an experimental design in which empathy was manipulated. However, because the manipulation did not work as expected, the analysis was carried out in correlational terms, focussing on the manipulation check. Results showed support for H1 and H2, when using either empathy towards homeless people or the empathy manipulation check as predictors. The interaction effect size was again small and the achieved power was relatively high. Hence, Study 2 replicated Study 1 results in a different context, with undergraduate students in the UK.

Study 3 was advertised on the Reddit website. This study had an experimental design in which I manipulated both empathy and descriptive norms. However, as in Study 2, the empathy manipulation did not work, hence the empathy manipulation check was used as a measure of empathy. Results partially supported H1, since empathy was the only predictor of willingness to donate. The norms manipulation had a negative marginal effect on one of the two measures of helping. Results supported H2, with a small interaction effect size. Importantly, upon reflection there was a potential confound in Study 3, since there were significant differences in the empathy manipulation check between the norms conditions. The empathy manipulation check was located at the end of the study; hence allowing the norms manipulation to have an impact on this measure. This highlighted the importance of measuring empathy before the norms manipulation, and, in the case of experimental studies, of using the manipulation check right after the corresponding manipulation.

Study 4 had a diverse sample of users of the Crowdflower platform. Donations to four possible targets were assessed: disaster victims, homeless, sick, and poor people. The measures used referred to donations in response to six different elicitation methods, such as receiving a letter with a donation appeal or face-to-face fundraising of cash donations. The data partially supported H1. Within the whole sample and across the four subsamples with different target groups, norms but not empathy were associated with donations. However, when the types of donations were considered separately, both empathy and norms were significant predictors of frequency of donations. Results for H2 were weak, since there was a marginally significant interaction in the expected direction and with a small effect size only when using the whole sample and when including control variables.

Study 5 was an experiment study advertised on Crowdflower. Empathy was measured and then norms were manipulated; a norms manipulation check was also included. Results only partially supported H1, since only empathy was associated with disposition to donate, while the norms manipulation had no effect. Data did not support H2. An alternative analysis which used the norms manipulation check rather than the norms manipulation supported H1. Both empathy and norms were associated with disposition to donate. Again, there was no support for H2.

In Study 6, Royal Holloway undergraduate students participated, and this category was used as the norms relevant reference group. Results partially supported H1, since only empathy was associated with disposition to donate, and the norms manipulation had no effect. Again, H2 was not supported. As an alternative analysis, the norms manipulation check was used instead of the norms manipulation. H1 was supported by these results, but H2 was not.

Finally, Study 7 looked at donations to an animal welfare cause. Participants were Crowdflower users. Results were the same as the ones obtained in the previous experiments. The norms manipulation had no effect on donations, while empathy was a significant predictor. There was no interaction. And when norms manipulation check measure was used instead of norms conditions,

empathy and norms were significant predictors, supporting H1, but there was still no support for H2.

Even though there were mixed results in this thesis and there was no consistent support for either of the hypotheses, the following key findings can be rescued. H1 stated that empathy as well as social descriptive norms would be significant predictors of monetary donations. Regarding H1, empathy seemed to be a more consistent predictor than descriptive norms, especially when considering the results of the experimental studies (see Table 43). Across studies, empathy was almost always positively associated with helping (see Table 44). Taking into account the 30 linear regressions that were conducted throughout this thesis, in 23 of them the results obtained pointed towards a significant positive association between empathy and monetary donations (see Table 45). Also, in general terms, perceived descriptive norms was a positive predictor of helping, however, the latter seemed to be more consistent in the correlational studies than in the experiments (see Table 43 and Table 44). 24 of a total of 30 linear regressions supported this association (see Table 45).

H2 stated that social descriptive norms would have a moderating role on the empathy and monetary donations association, and that empathy would be less associated with monetary donations when social descriptive norms are high. There was general support for H2 in the correlational studies. However, of the four experimental studies conducted in this thesis, only one supported this moderation (i.e., Study 3; see Table 43). The remaining experimental studies did not show any sign of an interaction between empathy and perceived descriptive norms. In fact, only 10 of the 30 linear regressions conducted throughout this thesis showed this expected significant negative interaction between norms and empathy (see Table 44 and Table 45). Still though, if an interaction is expected between empathy and social descriptive norms, it would be more likely for it to follow the direction hypothesised in H2. This based on the fact that the majority of the linear regressions conducted in this thesis showed a negative interaction, however not always a significant one (23 versus 7, as seen in the sixth and seventh columns in Table 45).

Table 44Overview of results in this thesis

	Study 1					Study 2		Study 3		Study 4									Study 5		Study 6			Study 7						
IVs	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Empathy	(+) ***	(+) ***	(+) ***	(+) ***	(+) ***	(+) ***	(+) ***	(+) ***	(+) ***	(+) ***	(+) ***	(+) n.s	(+) n.s.	(+) n.s.	(-) n.s.	(+) n.s.	(+) ***	(+) n.s.	(-) †	(+) †	(+) *	(+) †	(+) **	(+) ***	(+) *	(+) **	(+) *	(+) ***	(+) ***	(+) ***
Norms	(+) ***	(+) ***	(+) ***	(+) ***	(+) ***	(+) ***	(+) ***	(+) ***		(-) n.s.	(-) †	(+) ***	(+)	(+) *	(+) ***	(+) *	(+) ***	(+) ***	(+) ***	(+) ***	(+) ***	(+) ***	(-) n.s.	(+) ***	(-) n.s.	(-) n.s.	(+) **	(+) *	(+) n.s.	(+) ***
Interaction	(-) **	(-) ***	(-) **	(-) *	(-) †	(-) n.s.	(-) n.s.	(-) **	(-) *	(-)	(-) *	(-)	(-) n.s.	(-) n.s.	(-) n.s.	(+) n.s.	(+) n.s.	(+) n.s.	(-) n.s.	(-) n.s.	(-) n.s.	(-) n.s.	(+)	(+) n.s.	(+)	(+)	(-) n.s.	(-)	(-)	(-) n.s.
Income	(-) n.s.	(-) n.s.	(-) n.s.	(-) n.s.	(-)	(-)	(+)					(+) ***	(+)	(+)	(+) n.s.	(+)	(+) **	(+)	(+) ***	(+)	(+)	(+) ***	(-) n.s.	(+) n.s.	(+)	(+)	(+) n.s.	(+)	l	(+)
Rel. id.	(+)	(-) **	(+)	(+)	(+)	(+)	(+)					(+) *	(+) n.s.	(-) n.s.	(+)	(+) †	(+) *	(+) n.s.	(+) n.s.	(+) *	(+) *	(+) n.s.	(+) n.s.	(-) n.s.	(+) n.s.	(+) **	(+) n.s.	(+)	(+) **	(+) **
Opp.	'		,		0000							(+) ***	(+) **	(+) ***	(+) *	(+) ***					3000-									
P. need																									I ` ′	(+) ***	(+) ***	(+) ***	(+) ***	(+) ***

Note. n.s. non-significant, † p < .1, ** p < .01, *** p < .001.

Table 45Overview of results in this thesis. Summary.

(-)	(-)	(+)	(+)	Total	Total	Total
p < .1	n.s.	n.s.	p < .1	(-)	(+)	measured
1	1	5	23	2	28	30
1	4	1	24	5	25	30
10	13	7	0	23	7	30
0	7	6	13	7	19	26
1	2	10	13	3	23	26
0	0	0	11	0	11	11
0	0	0	6	0	6	6
	p < .1 1 10 0 1 0	p < .1 n.s. 1 1 1 4 10 13 0 7 1 2 0 0	p < .1 n.s. n.s. 1 1 5 1 4 1 10 13 7 0 7 6 1 2 10 0 0 0	p < .1 n.s. n.s. p < .1 1 1 5 23 1 4 1 24 10 13 7 0 0 7 6 13 1 2 10 13 0 0 0 11	p < .1 n.s. n.s. p < .1 (-) 1 1 5 23 2 1 4 1 24 5 10 13 7 0 23 0 7 6 13 7 1 2 10 13 3 0 0 0 11 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

Note. 31 linear regressions conducted in total in this thesis. Study 1: 7 linear regressions; Study 2: 3 linear regressions; Study 3: 2 linear regressions; Study 4: 11 linear regressions; Study 5: 2 linear regressions; Study 6: 4 linear regressions; Study 7: 2 linear regressions.

Discussion, strengths, limitations and future directions

We might say that Focus Theory (Cialdini et al., 1991) was not supported by the results in most of the experimental studies that showed lack of effect of norms manipulation on helping. It might be that empathy is such a strong antecedent of helping that its salience surpassed the norms manipulations salience. Consequently, participants acted in disregard of the normative message presented to them. Indeed, results in Study 5 support this interpretation, since there was no difference in the norms manipulation effect on disposition to donate between participants in both experimental conditions (high and low norms) and those in the control condition (with no normative message). Moreover, empathy was the only significant predictor of disposition to donate in the three conditions. However, it should be noticed again that in the cross-sectional studies as well as in the experiments that had a measure of norms manipulation check, perceived norms did inform donations as expected. In addition, it can be argued that by

measuring a construct, this construct is made salient. Therefore, Focus Theory was partly supported by the results in this thesis, since, even though the experimental manipulation of norms did not inform behaviour, perceived norms – when measured— did. In contrast, the empathy-altruism hypothesis (Batson et al., 1988; Batson et al., 1991) was consistently supported by the results in this thesis. Importantly, the association of situational empathy and descriptive norms with monetary donations were obtained in conjunction, controlling for each other, which to my knowledge has not been done previously.

An important strength of this thesis is the diversity of the participant samples I used in the different studies. Participants from Chile with diverse social backgrounds, undergraduate university students in the UK, and Crowdflower contributors and Reddit users mainly from Europe and the U.S. took part in my studies. Diverse participant samples are helpful for testing the generalisability of results across different cultures. The importance of replicating results, especially in different contexts, has been highlighted by the rise of the current replication crisis in social sciences (Bardi & Zentner, 2017; Koole & Lakens, 2012; Maxwell et al., 2015). This especially motivated me to replicate the results found in the first studies in different contexts.

Indeed, the motivation to reproduce the results obtained in the first studies made it possible to find results in the latter studies that did not fully support the hypotheses presented in this thesis. This constitutes another strength of this work, since attempts to replicate results represent a way of tackling the replication crisis by considering the possibility that significant results might be false positives (Forstmeier, Wagenmakers, & Parker, 2017). The mixed results obtained in this thesis underline the relevance of replication.

Another strength of this thesis is that its focus is in line with a general effort of studying helping behaviours within a social context, going beyond the focus on interpersonal helping, and considering group variables as relevant influences (van Leeuwen, & Zagefka, 2017). In particular, empathy and social norms as antecedents of charitable donations have been studied for a long time in isolation. In this thesis, I attempted to bridge the gap between these two lines of

research, and aimed to consider individual and group variables jointly when explaining behaviour (Tajfel & Turner, 1986; Brewer, 1991).

An important limitation of the current work is that there were mixed results in this thesis. Overall, empathy was a more consistent predictor of helping than descriptive norms, while descriptive norms seemed to be more associated with helping in the correlational studies than in the experiments. Indeed, in almost all the experimental studies conducted in this thesis, there was no norms manipulation effect on helping, even though the manipulations seemed to work as expected, as far as is possible to tell based on the norms manipulation check results. One possible explanation for this discrepancy between the correlational and experimental results is the difference in the dependent variables used in the two types of studies. Indeed, there is a difference between asking participants about their past frequency of donation, and asking about their actual disposition to donate. However, Study 2, which ended as a correlational study because of the failure in the empathy manipulation, contradicts this possible explanation. In Study 2, disposition to donate was a dependent variable, and still descriptive norms were associated with helping.

An alternative explanation for the fact that descriptive norms tended to be related to helping in the correlational studies but not in the experimental ones concerns the measure of descriptive norms which was used. In the correlational studies, participants were asked about what their family and friends did regarding donations. In the experimental studies, descriptive norms were established not by family and friends, but by other respondents of the study. It could be, as was discussed before, that the relevance of the reference group could be the source of the discrepancy. This could point to an important issue about the constructs used throughout this thesis. Descriptive norms which arise from the behaviour of family and friends might be tapping into something required during socialisation. This norm is not establishing a new guideline of behaviour, but it is already a habit, a learned attitude or an internalised norm. However, in the experiments the descriptive norm was giving information that was completely new to participants. Hence the descriptive norms construct used in the correlational studies is different from the one used in the experiments. In other words, the impact of

norms arising from the behaviour of family and friends will be much stronger than the descriptive norm arising from manipulations in this thesis's experimental studies, since the former have more time to shape the participants' personal attitudes and behaviour (i.e. by the internalisation of norms). Indeed, Ottoni-Wilhelm and Bekkers (2010) and Bekkers and Ottoni-Wilhelm's (2016) concept of the principle of care could be more closely related to descriptive norms arising from family and friends.

Moreover, the strength of identification could also be behind the lack of effect of norms manipulation on helping. Self-Categorisation Theory posits that norms are internalised when we identify with a group (Turner, et al., 1987), and that we express our social identity by following those norms (Jetten et al., 1996; Marques et al., 1998). Therefore, strength of identification could have moderated the effect of norms manipulation on willingness to donate. Specifically, high identifiers with the group of 'other participants of the study' could have acted in a more norm-consistent way in comparison to those who did not identify as much with the reference group. In general, research on the effect of social norms on helping has not considered the strength of identification as a variable that need to be accounted for (e.g., studies by Croson and Shang that were described in the Introduction). Still, there are a group of studies that might be considering strength of identification by using different reference groups to establish the norm. For instance, Agerström et al. (2016) had two conditions with different reference groups establishing the same descriptive norm. One referred to students from the same university, and the other made reference to students in universities in the same country (i.e., local and global norms respectively). However, we would only be assuming that this difference points towards strength of identification. In future studies, strength of identification should be measured in order to evaluate whether it plays a role in the effect of norms manipulation on helping. This also is related to a limitation in the manipulation check used in this thesis. The manipulation check reflected whether participants processed the information given to them in the chart, but it did not reflect how important for them was the reference group used.

Finally, another possible explanation for the lack of effect of the norms manipulation on helping is the one given by Schultz et al. (2007). As previously explained in the Introduction, descriptive norms can have a boomerang effect, since people above and below a norm will feel attracted to that standard. Therefore, if in general participants thought that most of other participants in the study did not donate, even those exposed to the low normative message would feel inclined to donate, because they would still perceive that normative message as a high normative message. In this situation, injunctive norms can help to make norms manipulation more powerful by transmitting the idea of what is the desired behaviour, as was shown by Schultz et al. (2007). Hence, in future studies injunctive norms can be used in conjunction and aligned with descriptive norms in order to boost the power of the manipulation of norms.

Another issue which merits reflection is the definition of empathy. For the purpose of this thesis, I defined empathy as an other-oriented emotional reaction congruent with the emotion that that other feels. I do not make the distinction between empathy and sympathy that Baldner and McGinley (2014) and other researchers highlight. For instance, Baldner and McGinley argue that sympathy only refers to situations where someone is in need, while empathy could arise in positive circumstances of joy as well. Given that the situations studied in this thesis only comprise settings of need and not situations of joy, I did not consider it necessary to separate out the components of sympathy and empathy in this work. Instead I followed the steps of Batson et al. (1987), Hoffarth and Hodson, (2014), Lee, Winterich, and Ross, (2014), Ma-Kellams and Blascovich, (2013), Oceja et al. (2010), among other researchers, and treated them as synonyms. Nonetheless, there are certainly alternative ways of defining empathy to the one chosen here, and my choices might have directly affected the methods and, therefore, results of this thesis.

For instance, situational empathy was considered in this thesis as a main antecedent of charitable giving, leaving aside trait empathy as a possible predictor. As was explained in the Introduction, this was done based on the assumption that situational empathy would inform behaviour better than trait empathy, since the usual targets of help in charitable campaigns can trigger very

different emotional reactions, such as warmth and disgust (Fiske et al., 2002; Sevillano & Fiske, 2016). Thus, a general trait of empathy might not be as consistent with those emotional reactions as situational empathy. Moreover, this thesis is based mainly on Batson's extensive line of research that shows the strong link between situational empathy and helping behaviours (e.g., Batson, 1987, 1990). Still, the consideration of situational instead of trait empathy might explain the mixed results in the interaction obtained across studies. The strong situation hypothesis (Cooper & Withey, 2009; Mischel, 1977) considers the moderation of the strength of the situation on personality's effect on behaviour. According to the logic behind this hypothesis, trait empathy might be more susceptible to be moderated by norms than situational empathy, since the former is a more general disposition, while the last one is more dependent of the situation. In short, it might be the case that the expected interaction with norms is more consistent with trait empathy than with situational empathy.

Regarding Studies 2 and 3, in which empathy was manipulated but to no avail, this might have to do with the quality of the data in the studies which used internet platforms —it is hard to know whether participants really paid due attention. Considering the nature of the empathy manipulations used in this thesis, it requires participants to follow the instructions and to have all their attentional resources focussed on the task. Future research could revert to labbased approaches, which would allow more control over the experimental environment.

However, it is surprising that the empathy manipulations were ineffective in this thesis, especially since perspective-taking instructions are a very well-known and researched way of manipulating empathy effectively (Batson, & Ahmad, 2001; Batson et al., 1991; Batson et al., 2002; Batson et al., 1988; Batson, Early, & Salvarani, 1997; Batson, Sager, et al., 1997; Pavey et al.'s, 2012). This difficulty in manipulating empathy could be explained by the identifiable victim effect (Kogut & Ritov, 2005; Schelling, 1968; Small & Loewenstein, 2003), since perspective-taking instructions require identifying a target to empathise with (or not). Indeed, when looking at the empathy manipulation check measures there were no differences in empathy conditions in

both studies, not even with the control conditions. Let us recall that in Study 2, even though participants in the control condition did not read the vignette, they were told that Daniel was one of many that the charity wanted to help overcome homelessness. This goes in line with evidence that shows that merely determining a target of help without giving other information about the target can increase empathy (Small & Loewenstein, 2003). Still, it would be expected that the use of different perspective-taking instructions would have an effect on empathy above and beyond the identifiable victim effect common to all participants. Another possibility is that this manipulation is susceptible to social desirability bias. Yet, these types of instructions have been extensively used to manipulate empathy in research with good results, even though researchers have not accounted for the identifiable victim effect and social desirability bias.

An alternative explanation for the lack of effect of the empathy manipulation could be that the instructions given to participants were worded in a negative way. For instance, in Study 3, participants in the high empathy condition were told not to pay attention to the facts, while participants in the low condition were told not to think about how the target of help feels. Hence, participants were told not to do what participants in the other experimental condition should have been doing. These negative instructions are more difficult to process than affirmative instructions, and they might have inadvertently produced the opposed expected effect, since they take longer to process and they are related to higher error rates (Kaup, Zwaan, & Lüdtke, 2007). In Study 3, the problematic instruction was only one part of the whole perspective-taking instruction; thus, a way of handling this problem would be to use that same manipulation deleting that particular sentence.

Finally, another possible reason behind the ineffective empathy manipulation is the use of homeless people as the target group in Studies 2 and 3 in which empathy was manipulated. This is a highly stigmatised group that triggers high levels of prejudice (Fiske et al., 2002; Harris & Fiske, 2006). Hence, empathy towards homeless people might not be susceptible to manipulation. However, in one hand, research has also shown that perspective-taking and empathy can decrease prejudice (Dovidio et al., 2004; Pettigrew &

Tropp, 2008; Todd et al., 2011), and on the other hand, participants reported relatively high levels of empathy towards homeless people in Studies 2 and 3. Thus, this alternative explanation is not fully supported by previous research and data in this thesis.

There are limitations and strengths in the dependent variables used throughout this thesis. Research has shown that past frequency of donation is a significant predictor of intentions to donate (Lee, Piliavin, & Call, 1999), and intentions to donate, in turn, predict actual donations (Zagefka et al., 2011). However, it cannot be assumed that all participants recall accurately their past behaviour, nor that responses of willingness to donate are not affected by social desirability. As a way of avoiding this last issue, in Study 3 participants were told that a real charitable campaign was being conducted during the study, and that they were going to be redirected after the survey to the charity website so they could make their donation. This was done in order to make their answers more realistic and closely related to an actual donation. Still though, the use of actual behavioural measures would be the best way of dealing with these difficulties in future studies. Although, it is expected that the pattern of results found in this thesis would not change much considering previous research (Lee et al., 1999; Zagefka et al., 2011).

Based on what was previously stated, as a follow-up of this thesis, different targets of help and charities could be considered. Even though in Studies 4 and 7 I explored a range of different targets of help (i.e. disaster victims, homeless, sick people, poor people, and animals in need), there is room for expansion. Empathy levels as well as perceived norms will surely differ between different targets. Therefore, in light of the replicability crisis, future work could test the generalisability of the processes to other contexts.

Furthermore, there is a wide range of charities that, even though they focus on the same target of help, they have completely different objectives. For instance, charity organisation A can seek to help homeless people by giving them skills so they can implement the solution to their problems (e.g., by offering training workshops), while charity organisation B can aim to meet their basic needs (e.g., give them food or shelter). In terms of Nadler's (2002) autonomy-

oriented and dependency-oriented help distinction, organisation A offers autonomy-oriented help, since homeless people are conceived as people able to help themselves with the charity's support. In contrast, organisation B offers dependency-oriented help, since homeless people are seen as less capable and as more dependent on the charity's help. These differences in the charity's objective might also impact on the association of empathy and social norms with helping. For instance, studies have shown that people with high levels of trait empathy prefer to give autonomy-oriented help; thus, in the example they would rather donate to charity A than to charity B (Maki, Vitriol, Dwyer, Kim & Snyder, 2017). Hence, it is likely that charities' way of helping will have an impact on the effect of well-known drivers of donation, even though the ultimate target of help, i.e., homeless people, is the same one.

Although research has shown that empathy and social norms are associated to helping in general, it cannot be assumed that the results obtained in this thesis about monetary donations will apply to another type of helping behaviours, such as volunteerism. Indeed, if there are differences in results within monetary donations across different types of donation appeals (as seen in Studies 1 and 4), it is likely that there will be differences across different types of helping behaviours too. Actually, volunteerism requires spending more time face-to-face with the targets of help. Based on this, it can be expected that empathy will play a major role in predicting this type of help. Furthermore, volunteerism is associated to autonomy-oriented help, which in turn is associated with trait empathy (Maki et al., 2017). This supports the expectation that empathy can be especially relevant in predicting volunteerism. However, monetary donations are usually not as visible as being a volunteer. It is more likely that people share with others that they are volunteers in a charity in comparison to have made a donation to a campaign. Since volunteerism is a more noticeable activity, it would make the norm more salient. Hence, perceived descriptive norms might also inform decisions to volunteer. In sum, it would be interesting to look into the impact of empathy and social norms on intentions to volunteer and into other types of helping as well (e.g., material donations).

As explained in the Introduction, one of the logical bases behind the expectation of finding a norms-empathy interaction was the limited attentional resources humans have (Biesanz et al., 2001; Chajut & Algom, 2003; Stothart et al., 2015), the fact that social norms and empathy require our focus on different cues (i.e. the group establishing the norm and the target of help respectively), and that the most prominent source of motivation would inform behaviour. Thus, when norms are perceived as salient, empathy will inform behavioural choices in a lesser degree. To continue looking into this topic in future studies, other variables can be added to the design that can 'compete' in informing behavioural choices. For instance, participants could receive information about the efficacy of the charity organisation before deciding to donate or not. Will empathy or social norms decrease their association with helping when other relevant information is given to participants? This could have practical implications for charity organisations, since it is useful information to have in mind for their donation campaigns.

Practical implications

In practical terms, even though the effect sizes found in the studies were small, the sheer number of people who donate to charities mean that many small contributions by individuals can add up to huge overall revenue for charities. This makes the findings of this thesis especially relevant – if certain variables make it just slightly more likely that people will donate, the exposure of huge numbers of people to a potential intervention based on this insight could mean that slight individual behavioural changes might add up to large amounts of money.

It is common for charities nowadays to aim to trigger empathy in their campaigns. This strategy is supported by data in this thesis, since empathy was a consistent predictor of monetary donations. Also, charities use their donors' networks to raise funds. For instance, people can do their own fundraising for a charity by participating in events and asking for sponsors (e.g., using JustGiving.com or organising bake sales in their community). In addition,

making supporters more visible (e.g. with a pin or t-shirts) can also prove to be an effective way of making the norm salient. The results in this thesis also supported the effectiveness of this type of campaigns, since people will be more willing to donate if they perceive that their network donates too. What is certain is that it is not one or the other, but both strategies are efficient in raising funds. Moreover, charities might focus their efforts on strengthening empathy-eliciting campaigns particularly in areas where donations are traditionally low, i.e. where social norms can be assumed to be low. Results regarding the interaction between norms and empathy obtained in this thesis suggest this could prove to be a cost-effective strategy.

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Appendix A: Study 1 additional measures in Foco Ciudadano survey

The survey and items were in Spanish. The items were translated to English to be included here.

- 1. Political system justification
 - a. In general, the Chilean political system operates as it should.
 - b. The Chilean political system needs to be radically restructured.
 - c. Most policies in Chile serve the greater good

2. Political cynicism

- a. Most politicians get into politics only to benefit personally.
- b. Politicians dedicate themselves to favour special interests.
- c. In electoral campaigns, most politicians promise more than they can deliver.
- d. Politicians lie to get what they want.

3. Political efficacy

- a. How much influence do you think someone like you has on government decisions?
- b. How much influence do you think someone like you has on municipality decisions?
- c. Suppose that the Congress is debating about a law that you believe is unfair. Do you think you could do something to express your opinion?

4. Just world beliefs

- a. I think the world is basically a fair place.
- b. I have confidence that justice always prevails over injustice.
- c. I think that generally good things happen to good people in life.

5. Political isolation

- a. When there are elections, I feel none of the options identifies me.
- b. I feel that no politician represents my position.

6. Importance of political topics

a. Topics that are discussed in national politics are important to me.

7. Perceived corruption

a. How widespread do you think bribe taking and corruption is in Chile?

8. Voting frequency

- a. How many times have you voted for the following elections? In presidential elections
- b. In senators and deputies' elections
- c. In mayor's elections

9. Frequency of collective action

- a. In the last year, how many times have you participated in... Activities or meetings of political parties?
- b. Political or social demonstrations?
- c. Activities or meetings of labour organisations such as unions, cooperatives, welfare committees or other?
- d. Activities or meetings of students' organisations?
- e. Activities or meetings of indigenous, pro diversity, environmentalist or neighbourhood organisations?
- f. Have you signed letters supporting a social or political cause (paper or internet)?
- g. Have you contacted a member of Parliament (via websites, personal visits, emails or by other means)?
- h. Have you written or participated in political actions via social network (via facebook, twitter, or other)?
- i. Have you tried to convince a family member, friend or acquaintance to vote for a candidate or party?

10. Feelings about Chilean politics

- a. Anger
- b. Disappointment
- c. Enthusiasm
- d. Happiness
- e. Trust
- f. Serenity
- g. Contempt
- h. Pride

- i. Boredom
- i. Shame

11. Mean amount of monthly donation

a. How much do you donate on average in a common month?

12. Frequency of material donation

- a. How frequently have you donated the following?... Groceries, food
- b. Clothes, shoes, blankets
- c. Books, toys, school supplies
- d. Medicine
- e. Cleaning products or personal hygiene items
- f. Furniture
- g. Construction materials
- h. Diapers or items for children

13. Frequency of time donation

- a. How frequently have you done the following? I have participated in activities for the benefit of others (such as bingos, funfairs, show for profit or solidarity campaigns).
- b. I have visited people that are hospitalised in homes or care institutions (e.g., sick people, elderly, people with disabilities, kids in orphanages)
- c. I have cooked or served food to people in need (e.g., breakfasts, lunch, coffee)
- d. I have given lodging or a space in my home to homeless people
- e. I have taught in free workshops
- f. I have worked pro-bono
- g. I have participated in the construction or repaired homes of people with limited resources
- h. I have given emotional support to people who have lived difficult situations
- i. I have helped fundraising or attracting new volunteers for helping organisations

14. Autonomy/Dependency-oriented help

- a. Help to people in need should consist in... Giving them a complete solution to get them out of that situation
- b. Offer them tools they can use to help themselves

15. Prosocial values

- a. How important are the following values for you?... Help others
- b. Share what you have with others

16. Social responsibility for poverty

- a. In a way, I feel responsible for the bad quality of life poor people have
- b. I consider poor people's problems as part of my problems too

17. Empathy towards the poor

- a. When I think about how much the poor suffer I feel great concern for them
- b. When I think about the problems the poor people have, I feel very bad for them

18. Perceived impact of help

- a. Any contribution or action you do is important to overcome poverty
- b. Every contribution you do makes the difference to overcome poverty

19. Universal values

- a. How similar is this person to you? For this person, it is important that the weak and vulnerable in society be protected
- b. For this person, it is important that every person in the world have equal opportunities in life
- c. For this person, it is important to care for nature
- d. For this person, it is important to take part in activities to defend nature
- e. For this person, it is important to be tolerant towards all kinds of people and groups
- f. For this person, it is important to accept people even when he/she disagrees with them
- g. For this person, it is important that people he/she knows have full confidence in him/her

- h. For this person, it is important that all his/her friends and family can rely on him/her completely
- i. For this person, it is important to take care of people he/she is close to
- j. For this person, it is important to help the people dear to him/her

20. Trust in institutions

- a. How much do you trust in... The National Congress
- b. The Court of Justice
- c The Government

21. Chilean identification

- a. I feel proud of being Chilean
- b. I am committed to other Chileans

22. Religious identification

- a. How much do you identify with that religion?
- b. How committed do you feel with that religion?

23. Trait empathy

- a. I often have tender, concerned feelings for people less fortunate than me.
- b. Sometimes I do not feel sorry for other people when they have problems
- c. When I see someone being taken advantage of, I feel protective towards him/her
- d. Other people's misfortunes do not usually disturb me a great deal.
- e. I am often quite touched by things that I see happen.
- f. I would describe myself as a pretty soft-hearted person.

24. Social dominance orientation

- a. Some groups of people must be kept in their place.
- b. It's probably a good thing that certain groups are at the top and other groups are at the bottom.
- c. An ideal society requires some groups to be on top and others to be on the bottom.
- d. Some groups of people are simply inferior to other groups.
- e. Groups at the bottom are just as deserving as groups at the top.

- f. No one group should dominate in society.
- g. Groups at the bottom should not have to stay in their place.
- h. Group dominance is a poor principle.
- i. We should not push for group equality.
- j. We shouldn't try to guarantee that every group has the same quality of life.
- k. It is unjust to try to make groups equal.
- 1. Group equality should not be our primary goal.
- m. We should work to give all groups an equal chance to succeed.
- n. We should do what we can to equalize conditions for different groups.
- o. No matter how much effort it takes, we ought to strive to ensure that all groups have the same chance in life.
- p. Group equality should be our ideal.

25. Authoritarianism

- a. What our country really needs instead of more concern for civil rights is a good stiff dose of law and order
- b. What our country needs is a strong, determined leader who take us back to our true path
- c. No crime justifies the application of the death penalty
- d. It is important to defend by all possible means the rights of people with extreme postures or behaviours
- e. Obedience and respect for authority are the most important values children should learn
- f. The real keys to having a good life are obedience and discipline
- g. The days when women are submissive belong in the past. A "woman's place" should be wherever she wants to be
- h. It is good that today young people have greater freedom to set their own rules and protest against things they do not like
- i. Leaving traditions will have terrible consequences in the future
- j. Instead of constantly questioning the foundations of our society, in the long run it is better for someone to respect the rules.

- k. People should pay less attention to the Bible and traditional religions and instead develop their own personal standards of what is right and wrong
- 1. Stable homosexual couples should be treated the way married couples are treated

Appendix B: Study 2 text

Homelessness is a huge problem in England – affecting people of every age, ethnic and religion background in every part in the country. Some statistics that illustrate the problem are these:

- In Autumn 2013, the number of people sleeping rough in England in any one night was estimated to be 2,414.
- In Autumn 2013, the estimation of people sleeping rough in London in any one night was 543, accounting for 22% of the total England figure.
- 6,508 people were seen sleeping rough between April 1 2013 and March 31 2014 in London.
- During the period July September 2014, 2,704 individuals were found sleeping on London's streets.

Shelter is a charity that works with homeless people in England to give them back their independence and get them back on their feet. Shelter provides temporary residence for those that can no longer afford to pay rent themselves. This could apply to an individual or a family and, no matter what their situation is, the needy are always welcome at the shelters. They can come and stay for a short period of time while Shelter helps them with aspects of their life to get them back on track to living independently. Unemployment, underemployment, and low wages relative to rent are frequent causes of homelessness. The job training and placement programmes offered by Shelter are effective at ensuring that those in need have the tools to achieve long-term stability and success.

Since 2012, Shelter has reached 2,319 homeless people in England. From those, 89.4% have already left the shelters to start living independently, while 4.1% have gone back to living on the streets. Furthermore, Shelter has established collaborative links with large employers around the country, to offer job opportunities to beneficiaries of the programme. These achievements would be impossible if it was not for the support of thousands of volunteers and the money donations Shelter receives every year.

Appendix C: Study 4 additional measures in survey

1. Just world belief

- a. I feel that the world treats me fairly.
- b. I feel that I get what I deserve.
- c. I feel that my efforts are noticed and rewarded.
- d. I feel that the world treats people fairly.
- e. I feel that people get what they deserve.
- f. I feel that a person's efforts are noticed and rewarded.

2. Social dominance orientation (Opposition to equality)

- a. We should do what we can to equalize conditions for different groups.
- b. No one group should dominate in society.
- c. Increased social equality would be a bad thing.
- d. Treating different groups more equally would create more problems than it would solve.

3. Trait empathy

- a. I often have tender, concerned feelings for people less fortunate than me
- b. I would describe myself as a pretty soft-hearted person.
- c. Other people's misfortunes do not usually disturb me a great deal.
- d. I am often quite touched by things that I see happen.
- e. I believe that there are two sides to every question and try to look at them both.
- f. I sometimes find it difficult to see things from the "other guy's" point of view.
- g. I try to look at everybody's side of a disagreement before I make a decision.
- h. When I'm upset at someone, I usually try to "put myself in his shoes" for a while.

4. Conformity (PVO-RR)

a. It is important to me to be free to choose by myself what I do.

- b. It is important to me that people do whatever I say they should.
- c. It is important to me that all my friends and family can rely on me completely.
- d. It is important to me never to violate rules or regulations.
- e. It is important to me to follow rules even when no-one is watching.
- f. It is important to me to obey all the laws.
- g. It is important to me to avoid upsetting other people.
- h. It is important to me never to annoy anyone.
- i. It is important to me never to make other people angry.

5. Amount donated

- a. How much cash have you donated to target group when a charity worker has asked you to do it face to face?
- b. How much money have you donated by electronic transfer (i.e. text messaging, direct debit, electronic transfer, etc.) to target group when a charity worker has asked you to do it face to face?
- c. How much money have you donated to target group responding to a poster with an appeal on it?
- d. How much money have you donated to target group when a charity worker has asked you to do it over the phone?
- e. How much money have you donated to target group when responding to a mailed appeal in a letter?
- f. How much money have you donated to target group when responding to a donation appeal on the internet (i.e. e-mail, webpages)?

6. Perceived impact of donation

- a. I believe that money I donate to target group has a fair chance of making a real difference.
- b. I believe that money I donate to target group has a fair chance of improving things.
- c. I believe the money I donate to target group is likely to be well-spent.

7. Amount donated compared to others' donation

a. I tend to think that my own help will be insignificant in comparison to what others have donated or will give.

b. I tend to think that my help will be unnecessary, considering how many people will donate.

8. Attributions and emotional reactions

- a. 58. How responsible are these people for their problems?
- b. 59. How much control do these people have to prevent their condition?
- c. 60. How much control do these people have over coping with their problems?
- d. 61. How much do you blame these people for their problems?
- e. 62. How much anger do you feel towards these people?
- f. 63. How much pity do you feel for these people?

9. Family and friends injunctive norms

- a. ...donate cash to target group when you are asked to face to face by a charity worker
- b. ...donate by electronic transfer (i.e. text messaging, direct debit, electronic transfer, etc.) to target group when you are asked to face to face by a charity worker
- c. ...donate to target group when responding to a poster with an appeal on it
- d. ...donate to target group when you are asked to over the phone
- e. ...donate to target group when responding to a mailed appeal in a letter
- f. ...donate to target group when responding to a donation appeal on the internet (i.e. e-mail, webpages)?

Appendix D: Study 5 vignette

Students' Unions from several universities across the UK are planning to fundraise money during the last months of 2016 to support charities in the UK that help homeless people.

An essential part of this initiative is to consider the real needs of homeless people from different regions of the UK, so that the funds can really help people in need. This is why the different Students' Unions will work with local and national charities to channel the help towards homeless people in the most helpful way.

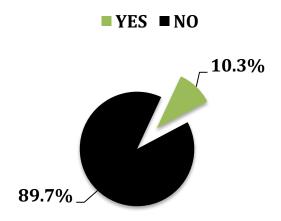
This project is still in its preliminary stage. That is why we are evaluating the viability of different means of collecting monetary donations from people in the UK.

Before starting the official fundraising campaign (scheduled for October 2016), we would like to assess how many people would be willing to make a one-off or regular donation to local and national charities. We also want to assess the amount people would be willing to donate. This will give us valuable information about the feasibility of the different campaigns we are organising.

Appendix E: Study 5 social descriptive norms manipulation

Low norms condition

Until now, 10.3% of the respondents have decided to support this fundraising effort!



High norms condition

Until now, 89.7% of the respondents have decided to support this fundraising effort!

