Promoting Prosociality: Testing the Potential of Moral Elevation and Moral Outrage
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Abstract

This thesis examines the effects of two specific moral emotions - moral elevation (experienced when witnessing a moral virtue) and moral outrage (experienced when witnessing a moral transgression) – on prosociality. While ample research has examined emotions such as sympathy and guilt, much less is known about moral elevation and moral outrage. Yet, their separate strands of research suggest that both moral elevation and moral outrage are promising emotions for promoting prosocial responses. Chapters 1 and 2 are theoretical chapters. Chapter 1 reviews the literatures on prosociality, moral emotions, and the effects of moral emotions on prosociality. *Chapter 2* identifies and describes the key gaps in the moral elevation and moral outrage literatures. The key gaps in the literature and avenues for research include: (1) testing and comparing the specific and potentially distinctive prosocial outcomes of moral elevation and moral outrage, and (2) examining the specific component features of moral elevation and moral outrage, in particular focusing on the component features that have prosocial implications. Chapter 3 is a methodological chapter which reports three pilot studies testing the effects of emotion-inducing videos on feelings of moral elevation and feelings of moral outrage. The three pilot studies provide evidence for the effectiveness of the emotion-inducing stimuli used in this thesis.

Chapters 4 and 5 are empirical chapters which test the effects of moral elevation and moral outrage on prosocial outcomes, drawing on the appraisal tendency framework (Horberg et al., 2011). Specifically, to identify, for the first time, how moral elevation and moral outrage may affect the same or distinct prosocial intentions and behaviours, Chapters 4 and 5 report four studies testing the joint and independent effects of these two emotions on different types of prosocial outcomes. Comparing their effects in an experimental design enables a direct test of whether they increase helping behaviours generally (across moral domains), or whether their effects are more nuanced and depend on the salience of their associated

sociomoral concern (i.e., benevolence concerns for elevation and justice concerns for outrage). Specifically, Study 1 examines benevolence-relevant intentions in the form of self-reported prosocial benevolence intentions. Study 2 examines justice-relevant intentions in the form of prosocial political action intentions following an inequality. Study 3 examines benevolence-relevant behaviour in the form of charitable donations. Study 4 examines justice-relevant behaviour in the form of third-party bystander compensation and punishment following unfairness. Results provide support for the appraisal tendency framework. Specifically, moral elevation promoted prosocial intentions and behaviours when outcomes were relevant to benevolence concerns (Studies 1 and 3). In contrast, moral outrage promoted prosocial intentions and behaviours when outcomes were relevant to justice concerns (Studies 2 and 4).

Chapters 6 and 7 examine the component features, rather than the behavioural outcomes of moral elevation and moral outrage. Chapter 6 reports two studies that explore the relationships between moral elevation and moral outrage and the behavioural activation and inhibition systems. The primary aim was to uncover whether moral elevation can be conceptualised as an approach-oriented emotion. Past research has already demonstrated that moral outrage is an approach-oriented emotion (Harmon-Jones, 2007). However, evidence for whether moral elevation can be conceptualised as an approach-oriented emotion is mixed. Results of both studies provide clear support for the notion that elevation is also an approach-oriented emotion. Specifically, individual differences in moral elevation were related to individual differences in the behavioural activation but not inhibition system. Furthermore, an elevation-inducing video, as compared to a control video, increased an approach-oriented state, as well as prosocial motivation.

Chapter 7 is the final empirical chapter. Chapter 7 reports two studies that explore the effects of moral elevation and moral outrage on two specific component features –

stereotyping and self-focus. Study 7 demonstrates that sympathy (but not elevation or outrage) instigates undesirable paternalistic stereotypes. Study 8 shows that guilt (but not elevation or outrage) instigates relatively more self-focus than other-focus. These studies provide support for the distinctive roles of elevation and outrage as bases for more unqualified prosocial responses than are produced by sympathy or guilt.

Chapter 8 provides an integrative discussion of this thesis, highlighting the key findings, the theoretical and applied implications, the limitations, and the future directions of this research. The primary findings of this thesis are that moral elevation and moral outrage may be particularly effective strategies for mobilising people to want to help others.

However, their prosocial effects are distinctive and therefore the emotions should be used appropriately. This thesis informs and extends important theoretical frameworks including the appraisal tendency framework (Horberg et al., 2011) and the model of moral emotion prototypicality (Haidt, 2003), as well as the moral elevation and moral outrage literatures more specifically. The findings have direct implications for end-users including charitable organisations. Specifically, this thesis provides insights into the types of emotion-based interventions that may be effective for promoting prosocial action. Chapter 8 concludes with a discussion of important and exciting avenues for future research which include applying an intergroup framework to this research as well as testing the effects of moral elevation and moral outrage on prosociality among children and adolescents.

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Chapter 1

General Introduction

Within this general introduction the need for greater prosociality across societies is highlighted. Importantly, the review demonstrates the potential of emotions for promoting prosocial responses. While relatively under-researched, two specific moral emotions seem particularly promising for promoting a desire to help others. These two moral emotions are moral elevation (felt when witnessing a moral virtue) and moral outrage (felt when witnessing a moral transgression). This review describes their theoretical and empirical evidence to date.¹

Substantial inequalities and social injustices exist within as well as between countries and the rate of inequality is increasing rapidly (Oxfam, 2013; Stiglitz, 2012). Currently in the United States, the top one percent takes more than 20 percent of the nation's income and holds one-third of the country's wealth. The Walton family (owners of the Walmart fortune) has as much wealth as the bottom 30 to 40 percent of Americans combined (cf. Stiglitz, 2012). In the United Kingdom the number of people who have to use food banks to survive increased from 40,000 people in 2009-2010 to 290,000 people in 2010-2011 (BBC News, 2013). During the colonial period, the gap between the richest and the poorest countries

¹ Parts of this chapter form part of the following book chapter: Van de Vyver, J., & Abrams, D. (in press). Promoting prosocial behaviour: The potential of moral emotions. In E. Van Leeuwen & H. Zagefka (Eds.), *Intergroup Helping*. Springer.

widened from 3:1 to 35:1, partly because European powers extracted so much wealth from the Global South through resources and labour. Since then, that gap has grown to almost 80:1 (Hickel, 2013). An inescapable conclusion is that economic and political reform is essential to overcome such persistent inequalities. What is perhaps most surprising though, is that such inequality has been met with relative quiescence by the general public. Why does there seem to be such emotional indifference to the plight of others? Might social psychological processes play a part in motivating the public to support reforms that could promote greater equality? This chapter summarises current theory and research on the potential for moral emotions (specifically moral elevation and moral outrage) to increase people's willingness to help others (i.e., their prosocial behaviour).

This chapter will introduce some of the key topic areas of this thesis including the relevant theoretical frameworks and empirical evidence. It will begin with an overview of the literature on prosociality (including definitions, prevalence, and barriers). It will then highlight the potential of third-party individuals or groups to provide help. Following this an overview of emotions (including definitions and functions) and their potential for increasing prosociality will be reviewed. Once a comprehensive review of the prosociality and emotion literatures has been provided, the chapter will focus more specifically on the two emotions of relevance (i.e., moral elevation and moral outrage).

Prosocial Behaviour

Defining Prosociality

Batson (1998) defined prosocial motivation as the desire to expend effort to help others. Prosocial motivation can be conceptualised as both a dispositional trait as well as shorter-term state (Grant, 2008). The dispositional trait of prosociality is typically associated with individual differences in agreeableness (Graziano, Habashi, Sheese, & Tobin, 2007), empathy (Penner, Dovidio, Piliavin, & Schroeder, 2005), and other-orientation (Meglino &

Korsgaard, 2004). The shorter-term state involves a temporary increased motivation to protect or promote the welfare or needs of another person (Batson, 1998; Grant, 2007, 2008). State prosocial motivation can be instigated by many factors, some of which include, contact with the person in need (Batson, 1998, Grant, 2007), induction of a particular emotional state (Bartlett & DeSteno, 2006; Schnall, Roper, & Fessler, 2010), engagement in prosocial video games (Greitemeyer & Osswald, 2010), or meditation (Condon, Desbordes, Miller, & DeSteno, 2013; Fredrickson, Cohn, Coffey, Pek, & Finkel, 2008).

When prosocial motivation instigates action it is typically referred to as prosocial behaviour or social action (Penner et al., 2005; Snyder & Omoto, 2007). Instances of prosocial behaviour can include: cooperation, helping, kindness, generosity, and solidarity. Omoto, Snyder, and Hackett (2010) described prosocial behaviour (which they term social action) as follows:

Some social action is explicitly political, as when people get involved in the political process by voting, working on a campaign, or running for office. As well, people engage in lobbying and advocacy, work for the passage of legislation, and participate in activist social movements. Other forms of social action are not necessarily political. For example, people serve as volunteers and help other people who have difficulty caring for themselves; similarly, people join neighbourhood groups and organizations and participate in community service programs (p. 1703).

Thus, the term prosocial behaviour covers a wide range of behaviours. The crucial element is that it is instigated by a desire to help others.

Prosocial behaviours can encompass behaviours that are egoistically driven and behaviours that are altruistically driven. If the intent is to benefit the self primarily, then the motive can be termed egoistic (Graziano & Habashi, 2010). For example, someone may engage in volunteering activities purely to enhance one's curriculum vitae. In contrast, if the

intent is solely or primarily to benefit others without concern for oneself, the motive can be termed "altruistic" (Graziano & Habashi, 2010). For example, someone may engage in volunteering activities because they care about helping a certain person or group of people.

These motives can be difficult to disentangle; typically helping situations elicit more than one motive (Gaertner & Dovidio, 1977). Helping can serve both egoistic and altruistic motives by relieving the provider's distress as well as the victim's (Batson, 1991). The aim of this thesis is to understand strategies that encourage (state) prosocial behaviours that are *primarily* motivated by wanting to protect and promote the welfare of other people (Grant, 2007; 2008).

Moral behaviour is often confused with, or used interchangeably with the term prosocial behaviour. Nevertheless, they are underpinned by distinct motives. The motivation underpinning moral behaviour is adhering to one's moral principles and standards (Tangney, Stuewig, & Mashek, 2007). In contrast, the motivation underpinning prosocial behaviour is benefitting or increasing others' welfare (Penner et al., 2005). In practice, it can be difficult to disentangle these two motives and behaviours. For example, if a person feels sympathy and helps another person – they are probably not aware of whether they were thinking about the other's welfare or adhering to one's own moral standard underpins this emotion and behaviour. It is most likely a combination of both.

Prevalence of Prosocial Behaviour

An increasingly large body of research is providing evidence for the assertion that people have an intuitive and default tendency to help others (Keltner, Kogan, Piff, & Saturn, 2014). Among infants, research shows that from three months of age, they show a preference for geometric shapes depicted as helping another (Hamlin, Wynn, & Bloom, 2007, 2010; Hamlin, Wynn, Bloom, & Mahajan, 2011). Among children, research shows that from 14 months of age, they show helping and cooperative behaviours (Warneken & Tomasello,

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2006, 2007; Warneken, Chen, & Tomasello, 2006). Furthermore, research shows that young children experience sympathetic arousal equally when they help a person themselves as when they witness a person being helped by a third-party. Thus, they are motivated to see the person helped, rather than gain credit for the helping (Hepach, Vaish, & Tomasello, 2012). This evidence suggests that from a young age children are intrinsically motivated to help others.

Similar evidence for the intuitive nature of prosociality exists among adult populations. For example, Schulz, Fischbacher, Thöni, and Utikal (2014) tested people's intuitive prosociality by inducing either high or low cognitive load and measuring prosocial behaviour in a dictator game. The dictator game provided participants with a choice of how to distribute money (i.e., equally vs. unequally) between themselves and an unknown other person. To manipulate cognitive load participants were given one of two tasks to complete during the dictator game. In the high cognitive load condition, participants listened to letters over a headphone and were asked to press a key each time they heard a letter that was presented two letters earlier. In the low cognitive load condition, participants were asked to press a key each time they heard the letter "L". Results showed that participants under high cognitive load (i.e., decreased deliberation) were more prosocial than participants under low cognitive load (i.e., increased deliberation). Across 10 economic game studies, Rand, Greene, and Nowak (2012) also found evidence for the idea that prosociality is intuitive. Specifically, their results showed that participants who reached a decision more quickly were more cooperative. Moreover, when forced to make a decision quickly (vs. slowly) participants were more cooperative. Inducing participants to trust their intuitions (vs. inducing participants to reflect more) increased cooperation. In addition, recent research by Crockett and colleagues (2014) showed that people paid more money to reduce other people's pain than their own, and that people required more compensation to increase others' pain than

their own (Crockett, Kurth-Nelson, Siegel, Dayan, & Dolan, 2014). In sum, recent laboratory evidence suggests that helping and cooperation are intuitive.

In line with these findings (e.g., Crockett et al., 2014; Rand et al., 2012), nationally representative surveys have also shown high levels of prosociality (e.g., volunteering, charitable giving) across society. For example, a recent survey in England with 5105 respondents (Community Life Survey commissioned by the Cabinet Office, 2014) showed that 48% of people had participated in formal (i.e., via the workplace) and/or informal (i.e., outside of the workplace) volunteering at least once a month in the 12 months prior to interview. However, when only including informal volunteering (i.e., excluding workplace schemes), the figure dropped to 35% who had volunteered at least once a month in the 12 months prior to interview. Reports on charitable giving were high. Specifically, in the four weeks prior to interview, 75% of respondents had given money to charity. The average amount donated in the four weeks prior to interview was £21. Finally, the survey also examined people's civic participation such as engagement in democratic processes including contacting elected representatives or attending a demonstration. Results showed that 30% of respondents had engaged in some form of civic participation in the 12 months prior to interview.

Barriers to Prosocial Behaviour

Despite this intuitive motivation to help others, global levels of inequality and apathy persist. Indeed, while one in nine people on earth do not have enough food to lead a healthy active life (FAO, 2014), British households throw out 4.2 million tonnes of food and drink each year (the equivalent of six meals every week for the average UK household; WRAP, 2013). Moreover, in 2008, British households spent an average of £57.40 on recreation and culture (i.e., TVs, computers, newspapers, books, leisure activities and package holidays) each week (ONS, 2008), but only £2.48 on charitable giving (CGAP, 2011). These

discrepancies are in line with evidence that shows that people's intuitive prosocial motivations are often not enacted (cf. Aquino, Freeman, Reed II, Lim, and Felps, 2009). There are a multitude of factors (or barriers) that disable, discourage, or bias prosocial behaviours, each of which is outlined below.

First, situational factors can heavily influence people's likelihood to engage in prosocial behaviours. For example, research shows that the presence of competition, extrinsic rewards, and feeling hurried, all of which are very prevalent in Western societies, significantly reduce prosociality (e.g., Abrams, Van de Vyver, Pelletier, & Cameron, 2015; Darley & Batson, 1973; Warneken & Tomasello, 2014). Ample research has also shown that the number of people present in an emergency situation reduces people's prosocial intervention, due to the diffusion of responsibility (Darley & Latané, 1968; Latané & Darley, 1968, 1970). Thus, minor situational factors can have large effects on people's prosociality.

Second, research shows that demographics are related to people's likelihood of acting prosocially. For example, Piff and colleagues (2012) demonstrated that upper-class individuals donate less to charity, share less in economic games, and are less inclined to help people in need (Piff, Kraus, Cote, Cheng, & Keltner, 2010). Furthermore, women tend to donate more than men, married people tend to donate more than single people, people with children tend to give more than people without children, and older people tend to give more than younger people (Charities Aid Foundation, 2011; Charities Aid Foundation, 2012; Wiepking & Bekkers, 2012). Thus, while evidence suggests that people have an intuitive motivation to help others (Crockett et al., 2014; Rand et al., 2012), not everyone is equally likely to help others.

Third, personality research also shows that not all people are equally prosocial. For example, research has shown that highly agreeable individuals show high levels of prosociality across different tasks (Graziano et al., 2007), while individuals high in

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Machiavellianism are more likely to exploit others than to act prosocially (Gunnthorsdottir, McCabe, & Smith, 2002). Thus, again, while evidence suggests that people have an intuitive motivation to help others (Crockett et al., 2014; Rand et al., 2012), not everyone seems equally likely to help.

Fourth, in line with evidence on intergroup relations, perceived similarity, and stereotyping (see Cuddy, Fiske, & Glick, 2007; DeSteno, 2015), research shows that people are more willing to help some groups over others (cf. Abrams & Houston, 2006). For example, in a nationally representative British survey, people were more willing to donate money to causes helping disabled and elderly people than those supporting Black or Muslim people (Abrams & Houston, 2006). Moreover, the Charities Aid Foundation (2012) found that, while religious charities attract 17% of the overall amount donated, overseas (10%) and homelessness (2%) charities receive substantially less. Similar results can be found in the US, where religious charities also receive the majority of charitable contributions (National Philanthropic Trust, 2014). Statistics on volunteering also show that volunteering for religious activities is the most common kind (34.2%) (National Philanthropic Trust, 2014). Furthermore, evidence also shows that people are more likely to donate to organisations helping naturally caused rather than humanly caused disasters, as victims of naturally caused disasters are seen as less to blame for their plight (Zagefka, Noor, Brown, Randsley de Moura, & Hopthrow, 2011). Thus, while people are intuitively motivated to help others, substantial bias seems to exist in the determination of who is worthy of help.

Therefore, while most people seem instinctively inclined towards prosociality (Rand et al., 2012), many situational, individual difference, and relational barriers exist in society that prevent or bias engagement in prosocial action. It is essential to develop strategies that effectively mobilise people to want to help others. The current thesis examines the potential of emotions for encouraging people to help others.

The Relatively Advantaged and Prosocial Behaviour

To date, research on overcoming inequalities and injustices has largely focused on the disadvantaged and on when and how they can be mobilised to pursue social change efforts (Abrams & Grant, 2012; Van Zomeren, Spears, Fischer, & Leach, 2004). However, increasingly researchers are also examining whether and how relatively advantaged people become interested in pursuing social change to promote more equal and just societies (e.g., Iyer & Leach, 2010; Subašić, Reynolds, & Turner, 2008; Thomas, McGarty, & Mavor, 2009). Relatively advantaged people or groups are those "secure in their position, due to their greater size or control over resources" (Leach, Snider, & Iyer, 2002, p. 137). Some researchers have highlighted that help provided by advantaged people may not be as rare as previously thought, and that such helping is an essential part of daily life (Wright & Richard, 2010).

Support from advantaged people can help, or even be critical to, accomplishing social change (Iyer and Leach, 2010; Subašić et al., 2008). This is because (1) advantaged people often collectively hold substantial political, economic, and social power, which can help promote social change, and (2) involvement from a few members of advantaged groups can also further encourage wider participation in the movement (Goodman, 2001; see Iyer and Leach, 2010). As expressed by Subašić et al. (2008, p. 331), "when challenge to authority spreads beyond the minority to include those who are not directly (negatively) affected by the status quo, social change becomes possible". Therefore, "if acting collectively to challenge the status quo is fundamental to social change, it becomes crucial to understand the process by which the [advantaged] become not only sympathetic toward the [disadvantaged] and its cause but also willing to actively challenge the authority in solidarity with the [disadvantaged]" (Subašić et al., 2008, p. 331).

Nevertheless, it is important to note that when advantaged people perceive an inequality as illegitimate they must also perceive their own privilege as illegitimate; this can be difficult and unpleasant (Goodman, 2001; Iyer & Leach, 2010). Advantaged individuals or groups have to recognise their responsibility in creating and maintaining the unequal status quo. This may pose a threat to their own or their ingroup's image (Leach et al., 2002). Supporting social change efforts to overcome inequality entails working against one's own or one's ingroup's interest (Lipsitz, 1998). Therefore, while it is possible to mobilise advantaged groups to help disadvantaged groups (Wright & Richard, 2010), it can be a difficult and long process (Leach et al., 2002).

Furthermore, when advantaged people help disadvantaged people there can be a risk of maintaining and perpetuating inequalities and injustices between the two groups (Nadler and Halabi, 2006; van Leeuwen & Täuber, 2010). This is because such helping can often be strategic and aimed at maintaining status differences and therefore inequalities (van Leeuwen & Täuber, 2010). Indeed, Nadler and Halabi (2006) have argued and demonstrated that helping is often a reflection of power and status, and that providing help enables the helper to (re)affirm their higher status, and portray the recipient of help as dependent and low status. Therefore, help provided by advantaged groups may ensure persisting inequalities and/or injustices.

Third-Party Prosocial Behaviour

The majority of research that examines solidarity or helping between groups employs a unimodal (i.e., mobilising disadvantaged members to act) or bimodal (i.e., mobilising advantaged groups to help disadvantaged groups) approach (Glasford & Pratto, 2014). However, with an increase in global connectedness, the context of social change does not typically encompass just two groups (i.e., the advantaged and the disadvantaged). For example, the apartheid regime in South Africa included: the advantaged and the

disadvantaged, but also a third-party group (i.e., the international community). The current research focuses on when and why third-party individuals or groups (also referred to as bystanders in other parts of the literature; Abbott & Cameron, 2014) help others. Third parties are those who are not directly involved in or affected by the relevant situation or context (e.g., inequality, injustice; see also Saab, Tausch, Spears, & Cheung, 2015).

Help provided by third-party individuals or groups should encompass similar strengths as help provided by advantaged individuals or groups. Specifically, third-party individuals or groups may also (1) hold substantial economic, political, or social power, and (2) can also encourage wider participation in the movement. However, in contrast to advantaged individuals or groups, third-party individuals or groups may be more motivated to support disadvantaged people or groups as it should not threaten their own or their group's image or status. It is proposed that third-parties could significantly contribute to overcoming social inequalities and injustices, and it is therefore essential to understand how third-parties (or bystanders) can be mobilised to help others. This current thesis will examine emotional strategies for motivating third-parties to help others.

The Potential of Emotions

Emotions may provide a particularly effective tool for mobilising third-parties to help others (Thomas et al., 2009). The evidence for this assertion is set out below.

Defining Emotions

Although people understand what is meant by the word emotion, it is not an easy term to define. Giner-Sorolla (2012) made a useful attempt to define emotions, drawing on the characteristics (e.g., cognitive appraisals, physiological responses, and facial expressions) that accompany an emotional state, "Emotions arise from sensory and cognitive input, elaborated to a greater or lesser degree. From sources in the brain they activate peripheral nervous, endocrine, cardiovascular, and other physiological responses. At the same time they

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activate hard-to-control bodily expressions that can be read by other people, in our faces, voices, and posture. As with many other psychological states, humans reflect on emotions and give them names, so that emotions take on a semantic life. And humans cannot help but speak about and learn about emotions within the context of a culture, leading to cultural differences in emotion expression and knowledge" (Giner-Sorolla, 2012, p. 6).

Furthermore, when defining emotions it is important to compare the components of emotions to those of related concepts, such as moods and feelings. In terms of moods and emotions, researchers argue that they are distinctive as moods are less connected to a specific stimulus or event, are longer lasting, and more diffuse (Giner-Sorolla, 2012). In terms of feelings and emotions, they can be viewed as quite similar as both can be split along a core affect dimension (i.e., you can have a pleasant or an unpleasant feeling or emotion). Indeed, our internal biology is organised predominantly around the two dimensions of core affect (pleasantness vs. unpleasantness) and arousal (high vs. low arousal) (Russell, 2003). However, in terms of our expressive system and our language, there are a greater variety of emotions (vs. feelings) within each core affect dimension (e.g., anger, fear, and sadness vs. admiration, happiness, and moral elevation). Our expressive system can communicate around half a dozen emotions (Giner-Sorolla, 2012; Elfenbein & Ambady, 2002; Matsumoto, Keltner, Shiota, Frank, & O'Sullivan, 2008) and our language system can communicate a huge range of emotions, depending on the particular lexicon. For example, English contains around 2000 emotion words, Dutch around 1500, Taiwanese Chinese around 750, Malaysian around 230, and the language of the Chewong (a small aboriginal group in Malaysia, Howell 1981) only seven (Heelas, 1986; Russell, 1991; see Parkinson, Fischer, & Manstead, 2005). Therefore, emotion can be considered as a multi-layered concept, best explained by its characteristics (e.g., cognitive appraisals, physiological responses, and facial expressions) and cultural and linguistic influences (Giner-Sorolla, 2012).

Functions of Emotions

Theoretical frameworks have attempted to explain how emotions work and what they are for. Recently, the functional conflict theory (Giner-Sorolla, 2012) integrated the disparate literatures on the functions of emotion into one overarching theoretical framework. The functional conflict theory suggests that emotions can serve four functions (that, at times, may interfere with one another): (1) they are part of a system of motivated appraisals of the current environment, leading to appropriate action tendencies (the appraisal function); (2) they are an associative learning system, more simple and rigid than other types of learning, that forms emotionally based attitudes by associating pleasurable or painful emotions with an object (the associative learning function); (3) they are also a self-regulation system that responds to feedback about one's own actions (the self-regulation function); and (4) they are a social communication system that provides output and cues to others (the social communication function). As this thesis will focus on experimentally testing the potential for emotions to increase prosocial action tendencies, the first function (the appraisal function) is particularly relevant. Nevertheless, the other functions also seem important for understanding the link between emotions and prosociality. For example, it seems likely that people may react differently to emotional charity adverts if they know in advance (due to past experiences) that the adverts will make them feel distressed (i.e., the associative learning function). Moreover, recent research has shown that people use emotional expressions to determine genuine and moral character in others (i.e., the social communication function; Barasch, Levine, Berman, & Small, 2014). While important for developing a complete understanding of the relationship between emotions and prosociality, these latter research questions are beyond the scope of this thesis. The current thesis will examine the effects of moral emotions (derived from specific appraisals) on action tendencies (i.e., it will examine the appraisal function).

Appraisal Theory of Emotion

Appraisal theory in its most basic form, suggests that emotions depend on our cognitive appraisals of the environment (i.e., our interpretations of our surroundings; Arnold, 1960; Ellsworth, 1991; Lazarus, 1991; Roseman, 1984; Scherer, 2001; Smith and Lazarus, 1993; see also Giner-Sorolla, 2012; Parkinson et al., 2005). For example, appraisal theorists would argue that fear derives from an appraisal of danger, while anger derives from an appraisal of injustice. More specifically, when one person hears about a terrorist attack in the news they may think about the danger to themselves and thus react with fear and a desire to flee. In contrast, another person might think about the unfairness and injustice of the attack, and react with anger and a desire to retaliate (example from Giner-Sorolla, 2012). Thus, relevant appraisals lead to specific emotional reactions (which include specific bodily changes, expressions, and action tendencies; Parkinson et al., 2005).²

Appraisals provide a signal that current events require action, they make us want to do something, and they guide the form the action should take (Lazarus, 1991; Smith, 1989). For example, situations or objects appraised as good may encourage an approach motivation, whereas situations or objects appraised as bad may encourage an avoidance motivation (Arnold, 1960). Thus, a key element of appraisal theory is the emotional action tendencies (Frijda, 1986). An action tendency can be understood as: "readiness to engage in or disengage

² Critics of appraisal theory highlight that people are not always aware of the appraisal prior to the emotional experience. For example, people can feel angry without knowing why (Parkinson et al., 2005). In response to these criticisms appraisal theorists have argued that appraisals can be fast and unconscious (Lazarus, 1984), as well as slower and more conscious (Lazarus & Folkman, 1988). Unfortunately this is incredibly difficult to test empirically (Parkinson et al., 2005).

from interaction with some goal object in some particular fashion" (Frijda, Kuipers, & Ter Schure, 1989, p. 213). Action tendencies typically change the relation between the emotional person and their environment, and sometimes more specifically, change the relationship with other people in their social environment (Parkinson et al., 2005). For example, a self-blame appraisal may instigate feelings of guilt which can then encourage reparative actions. An other-blame appraisal may instigate feelings of moral outrage which can then encourage motivations to remove the harm from the environment (Lazarus, 1991). Thus, as part of their very nature, emotions guide behaviours; "the experience of emotion is thought to serve as an internal signalling device, providing information about events in the environment and guiding the individual's patterns of thought and action in appropriate fashion" (Goetz, Keltner, & Simon-Thomas, 2010, p. 361). Frijda (2010, p.571) argued that: "emotions are intimately related to action. They are among the main direct causes of action". Of interest to this thesis is how emotions can guide prosocial action in particular.

Prosocial Action

Increasingly researchers suggest that (certain) emotions can promote prosocial action. For example, Haidt's (2001) social intuitionist theory suggests that moral intuitions (which include moral emotions) produce moral judgments and behaviours. In a similar vein, Tangney and colleagues (2007) suggested that: "moral emotions provide the motivational force—the power and energy—to do good and to avoid doing bad". In support of these assertions, clinical research has shown that individuals with brain impairments in areas associated with emotional processing typically show less prosocial but more antisocial behaviours; they judge harmful acts as more permissible, they show less empathy and regret, they are less cooperative in economic decision making games, and they show increased abuse towards others (Damasio, 1994; Koenigs et al., 2007; Koenigs, Kruepke, & Newman, 2010). This has also been shown with psychopathic individuals who typically understand social norms and

laws, yet their impaired emotional ability hinders any motivation to act prosocially (Glenn, Raine, & Laufer, 2011). Thus, emotions seem to play a role in maintaining or increasing prosocial motivation and behaviour.

A sub-class of emotions, termed moral emotions, may be particularly important in encouraging prosocial behaviours (Haidt, 2001). Moral emotions are "those that are linked to the interests or welfare either of society as a whole or at least of persons other than the judge or agent" (Haidt, 2003, p. 276). Researchers suggest that moral emotions have evolved as commitment devices that encourage prosocial behaviour that may be costly in the short-term but beneficial in the long-term (e.g., cooperation; Haidt, 2003; Rand & Nowak, 2013; Teper, Zhong, & Inzlicht, 2015).

Traditionally moral emotion research has focused predominantly on three emotions: sympathy, guilt, and empathy. Nevertheless, since the 1980-1990's this research area has expanded to include a wider range of emotions such as disgust, anger, moral elevation, and shame (Haidt, 2003). Moral emotions now include: (a) other-condemning emotions, such as disgust, anger, and contempt, (b) self-conscious emotions, such as shame, embarrassment, and guilt, (c) other-suffering emotions, such as compassion, and (d) other-praising emotions, such as gratitude and moral elevation (Haidt, 2003; Rozin, Lowery, Imada, & Haidt, 1999).

Model of moral emotion prototypicality. Haidt's (2003) model of moral emotion prototypicality suggests that moral emotions (e.g., gratitude, shame, disgust, pride, moral outrage, moral elevation, guilt, and sympathy) vary in the extent to which they can be linked to the interests of society or of other people. The emotions that can be most directly linked to the interests of others are the most prototypical moral emotions, and thus most effective in inducing prosociality. Haidt's (2003) model draws on two component features (i.e., disinterested elicitors and prosocial action tendencies) to inform moral emotion's prototypicality. The two component features are each outlined below.

Disinterested elicitors. Emotions are "responses to perceived changes, threats, or opportunities in the world" (Haidt, 2003, p. 2). Usually these changes, threats, or opportunities affect the interests or needs of the self (Smith & Lazarus, 1993). However, humans can also react to social events that do not directly affect the self (Haidt, 2003). Some emotions occur more frequently when good or bad things happen to the self (e.g., happiness, fear). In contrast, other emotions occur more frequently when good or bad things happen to another person (e.g., moral elevation, sympathy, moral outrage). Haidt (2003) suggested that the frequency of which emotions occur due to disinterested elicitors (i.e., when there is no personal stake in the situation) informs the moral emotion prototypicality. He suggested that "the more an emotion tends to be triggered by such disinterested elicitors, the more it can be considered a prototypical moral emotion" (p. 3).

Prosocial action tendencies. Emotions typically motivate some sort of action as a response to the eliciting event (Frijda et al., 1989). While the action is often not taken, the person enters into a motivational and cognitive state in which there is an increased likelihood to engage in a goal-related action (e.g., helping, seeking revenge, etc.). Action tendencies can be ranked by the degree to which they benefit others, or else uphold or benefit the social order. For example, while happiness may increase people's positive responses to others, its action tendency is not to help others (i.e., it has a low prosocial action tendency). In contrast, the action tendency of compassion is quite clearly a motivation to help the person or group of people who are suffering (i.e., it has a high prosocial action tendency) (cf. Haidt, 2003).

Using these component features, Haidt (2003) described moral elevation, moral outrage, compassion, and guilt as the most prototypical moral emotions. These emotions are theorised to be the most intrinsically linked to the welfare of others, and thus most effective in encouraging prosociality.

Since the development of the model of moral emotion prototypicality, research has shown that a range of moral intuitions (or motives) exists (i.e., harm/care, fairness/reciprocity, ingroup/loyalty, authority/ respect, and purity/sanctity), and that the relevance of these intuitions varies by political orientation (moral foundation theory; Graham, Haidt, & Nosek, 2009; Haidt, 2007). Haidt's (2003) model of moral emotion prototypicality appears to focus on the harm/care (i.e., prosocial) motive alone. Indeed, prior to the development of moral foundation theory (Graham et al., 2009; Haidt & Graham, 2007) research viewed morality as concerning the protection of individuals. The most cited definition of morality was: "prescriptive judgments of justice, rights, and welfare pertaining to how people ought to relate to each other" (Turiel, 1983, p. 3). As the current research aims to understand the effects of emotions on prosociality, it will draw on Haidt's (2003) model, and therefore focus on the harm/care domain.

The current thesis will predominantly examine the prosocial effects of moral elevation and moral outrage, rather than those of sympathy and guilt. While evidence shows that moral elevation and moral outrage are promising emotions for increasing prosociality, much less is known about moral elevation and moral outrage than about sympathy and guilt. To demonstrate, several review articles have been published on sympathy (e.g., Batson & Shaw, 1991; Goetz et al., 2010) and on guilt (e.g., Baumeister, Stillwell, & Heatherton, 1994; Wohl, Branscombe, & Klar, 2006), yet no review articles have been published on moral elevation, and only one brief review article has been published focusing on moral outrage (van Doorn, Zeelenberg, & Breugelmans, 2014). Several published review articles have examined moral emotions generally, in which moral elevation and/or moral outrage are either mentioned or examined in relatively little detail (Tangney et al., 2007; Teper et al., 2015; Thomas et al., 2009). Nevertheless, more evidence is necessary to fully understand the effects of moral elevation and moral outrage, and therefore to inform their theoretical development and

applied use. The existing empirical evidence on moral elevation and moral outrage is reviewed below.

Moral Elevation and Moral Outrage

Moral Elevation

Moral elevation is a positive emotion experienced when witnessing another person perform a virtuous act, one that improves the welfare of others (Algoe & Haidt, 2009). In lay man's terms it can be described as a feeling of moral admiration. Haidt (2003) suggested that moral elevation consists of a feeling of warmth and expansion that is accompanied by admiration and affection for the person(s) who performed the exemplary behaviour. The action tendency of moral elevation is to emulate the moral exemplar (Haidt, 2003). That is, a desire to become a better person oneself and help others. Algoe and Haidt (2009) demonstrated that moral elevation is phenomenologically distinct from seemingly similar emotions such as gratitude and admiration. They found that moral elevation motivates prosocial and affiliative behaviours, gratitude motivates improved relationships with the benefactors, and admiration motivates self-improvement.

Although people may be familiar with the feeling of moral elevation experientially, people do not typically recognise it by its name (Landis et al., 2009). Thomas Jefferson was the first person to consider moral elevation as a term and said, "When any signal act of charity or of gratitude, for instance, is presented either to our sight or imagination, we are deeply impressed with its beauty and feel a strong desire in ourselves of doing a charitable and grateful act also" (Jefferson, 1771/1975, p. 349). A real surge of research into moral elevation began from around 2009 onwards (e.g., Algoe & Haidt, 2009; Aquino, McFerran, & Laven, 2011; Cox, 2010; Diessner, Iyer, Smith, & Haidt, 2013; Englander, Haidt, & Morris, 2012; Freeman, Aquino, & McFerran, 2009; Lai, Haidt, & Nosek, 2014; Piper,

Saslow, & Saturn, 2015; Schnall & Roper, 2012; Schnall et al., 2010; Silvers & Haidt, 2008; Thomson, Nakamura, Siegel, & Csikszentmihalyi, 2014; Vianello, Galliani, & Haidt, 2010).

Even though moral elevation is a relatively novel and under-researched emotion (just over a dozen articles have been published to date), the available evidence suggests that it may be particularly effective at inspiring people to help others (Schnall & Roper, 2012). For example, Silvers and Haidt (2008) showed that nursing mothers who were exposed to elevation-inducing videos were more likely to nurse and marginally more likely to hug their infants than mothers who watched comedy videos. Moreover, Freeman et al. (2009) conducted three studies, which demonstrated that moral elevation (induced by a video or written text) attenuated the detrimental effect of White student participants' social dominance orientation on donations to a Black-oriented charity (relative to a comparative control condition). Schnall and colleagues (2010) showed that elevation-inducing videos (in contrast to neutral or humorous videos) increased the likelihood of volunteering for a subsequent unpaid study and increased the likelihood of helping the experimenter with a tedious task. Oliver et al. (2015) showed that elevation-inducing videos (vs. humorous videos) increased feelings of overlap between the self and humanity, and this overlap was in turn associated with a greater sense of connectedness with people from other racial/ethnic groups.

Leadership research has also demonstrated the importance of moral elevation in inspiring prosocial behaviour among employees. For example, Vianello and colleagues (2010) showed that leader's ethical behaviour (i.e., interpersonal fairness and self-sacrifice) induced feelings of moral elevation among employees, which then mediated the effect of leader's behaviour on the prosocial behaviour of employees (i.e., organisational citizenship behaviour and affective organizational commitment). Moreover, Thomson and colleagues (2014) showed that when participants were exposed to elevation-inducing stories (vs. control

stories), they felt more positively toward mentoring and showed greater intentions to mentor someone with less experience.

In a naturalistic setting, 80 college students who participated in a week-long service trip to Nicaragua, were asked about (1) their volunteerism before the trip, (2) their moral elevation and planned volunteerism (general and trip-related) during the trip (3) their trip specific and general volunteerism after the trip, and (4) their trip specific and general volunteerism three months after the trip (Cox, 2010). Results showed that moral elevation was significantly related to planned (general and trip-related) volunteerism during the trip, trip-specific volunteerism one week after the trip, and trip-specific volunteerism three months after the trip. Moreover, the effect of moral elevation on volunteerism three months later was mediated by planned volunteerism during the trip. In other words, moral elevation, in a naturalistic setting, was significantly related to longer-term voluntary behaviours (Cox, 2010).

In order to understand how moral elevation motivates such prosociality, Schnall and Roper (2012) tested whether moral elevation increases prosocial outcomes through a threatened moral self-image or through a motivational state to act on one's moral values. The authors showed support for the latter. Specifically, participants who had taken part in a prosocial self-affirmation task before the moral elevation manipulation helped the experimenter significantly more with a boring task than participants who had not self-affirmed and participants in the control condition. Thus, participants who were reminded of their own moral values and were then induced with moral elevation were the most prosocial; moral elevation acted as a motivational stimulus.

Moreover, in order to examine the brain mechanisms underlying moral elevation, Englander et al. (2012) conducted an fMRI study with 10 healthy volunteers who watched nine video clips; three elevation-inducing video clips, three admiration-inducing video clips,

and three neutral video clips. Their results showed that the regions that were uniquely associated with the peak moments of moral elevation were those implicated in mentalising behaviour – the ability to make inferences about the beliefs and mind states of others.

Additionally, their results showed that the structures involved during moral elevation (precuneus, posterior and anterior cingulate) play a role in self-referential processes such as the construction of social narrative, integrating emotional experience, and action planning. The authors summarise that although moral elevation involves feelings of self-transcendence (i.e., a reduction in attention to the self), the experience of moral elevation is, at least somewhat, dependent upon an increase in self-referential processes (Englander et al., 2012).

Landis et al. (2009) employed a different approach to the hitherto mentioned studies and examined moral elevation as a personality construct. They showed that trait moral elevation was significantly related to extraversion, openness to experience, agreeableness, and self-reported prosocial behaviour. Moreover, moral elevation positively correlated with self-reported prosocial behaviour even when controlling for the Five-Factor model of personality. From the relationship between moral elevation and the Five-Factor model (Costa & McCrae, 1992), the authors suggest that people high in moral elevation are:

Warm, affectionate, friendly, genuinely like people, and tend to form close attachments to others. They tend to keep busy, have high energy levels, and tend to be socially ascendant. They are likely to experience such positive emotions as joy, happiness, love, and excitement, while being cheerful and optimistic. They are likely to have an appreciation for art and beauty, and are very receptive to their own inner feelings and emotions (often experiencing them more intensely than others).

Moreover, they tend to be open-minded and entertain unconventional ideas. They view others as being honest and well-intentioned and worthy of being helped (easily being moved by the needs of others). They would rather forgive and forget than to

maintain interpersonal conflict. Finally, they feel well prepared to deal with life and tend to set high aspiration levels with a commitment and motivation to work hard in order to achieve their goals (Landis et al., 2009, p. 81)

Diessner and colleagues (2013) expanded on Landis et al.'s (2009) findings and showed that dispositional moral elevation (or as they term "engagement with moral beauty") predicted caring for others, being empathic of others, loving others, and valuing benevolence toward others.

Aquino et al. (2011) tested whether moral identity moderates the effects of state moral elevation on prosocial outcomes. Blasi (1984) described moral identity as an individual difference reflecting the degree to which being moral is a central or defining characteristic of a person's sense of obligation. Aquino et al. (2011) showed that participants who are high in moral identity (state and trait) were more likely to recall uncommon acts of kindness and were more likely to be affected by them. They noted that, "when moral identity is experienced as an important part of the self-concept, it can lead people to assign greater weight to morally virtuous acts" (p. 715).

In sum, although only around a dozen studies have examined the effects of moral elevation, the studies conducted so far have contributed significantly to what is known about moral elevation. Specifically, moral elevation appears to induce a range of prosocial behaviours including donations to charity and helping the experimenter (Freeman et al., 2009; Schnall et al., 2010). It has predictive power in naturalistic settings and has long-term effects on volunteering (Cox, 2010). It induces prosociality by encouraging people to follow their moral values (Schnall & Roper, 2012). It affects employee's prosocial behaviours in the organisational context (Vianello et al., 2010). Finally, it can also exist in the form of a stable individual difference variable, which similar to its state form, predicts prosocial outcomes (Diessner et al., 2013; Landis et al., 2009).

Moral Outrage

Van Doorn and colleagues' (2014) recent synthesis of research on the prosocial effects of anger (see also Haidt, 2003; Thomas et al., 2009) highlighted that while the vast majority of research conceptualises anger as an emotion with antagonistic outcomes, anger can also have prosocial outcomes. Specifically, in third-party contexts there is an alternative response to punishing perpetrators; people can also compensate and help victims.

Witnessing an injustice to another person can make people feel outraged. This feeling has been referred to as anger (Haidt, 2003), righteous anger (Leach, 2008), and moral outrage (Montada & Schneider, 1989; Rothschild, Landau, Molina, Branscombe, & Sullivan, 2013; Thomas et al., 2009). However, moral outrage should be differentiated conceptually from anger. Specifically, although both may be experienced similarly, *moral outrage* refers to anger that results from witnessing a person or group transgress a moral standard (usually of fairness or justice) that harms another person or group, but which does not affect the self (cf. Rothschild et al., 2013; Thomas et al., 2009). Fehr and Fischbacher (2004, p. 64) distinguished between the cheated partner (the second party) and the uninvolved observer (the third party). In this example, the former might experience anger, the latter moral outrage. Moral outrage is considered as a high arousal emotion and is defined as "anger provoked by the perception that a moral standard – usually a standard of fairness or justice – has been violated by a third party (government or authority) or system" (Thomas et al., 2009).

Many researchers have suggested that moral outrage induces a behavioural tendency to punish the perpetrator (cf. Pagano & Huo, 2007). Social dilemma research has indeed shown that witnessing unfairness between two unknown people can instigate altruistic punishment (Lotz, Okimoto, Schlosser, and Fetchenhauer; 2011; Nelissen & Zeelenberg, 2009). Altruistic punishment can be understood as costly punishment of perpetrators. Studies show that witnessing unfairness predicts altruistic punishment and that this effect is mediated

by feelings of moral outrage (Fehr & Gächter, 2002; Lotz et al., 2011; Nelissen & Zeelenberg, 2009).

However, recent research has shown that compensating the victim may be a more common response to witnessing injustice than punishing the perpetrator (Lotz et al., 2011). For example, in Lotz and colleagues' (2011) study, after witnessing an unequal monetary distribution between two ostensibly other participants, the (real) participants were given ten 0.50€ coins (5€ total). The participants were told that, if they wanted, they could reallocate their 5€ to (a) reduce the perpetrator's money, (b) increase the victim's money, or (c) some combination of the two. Reallocation was made in 0.50€ increments. Participants indicated their allocations by placing money into different envelopes for the perpetrator and for the victim, under the belief that the researcher would execute their interventions. Participants were told to keep any money they chose not to reallocate as participant payment. Results showed that participants actually compensated victims more than they punished offenders and that the majority of participants assigned both. Importantly, both compensation and punishment were predicted by perpetrator-oriented outrage. Thus, moral outrage increases both victim-focused compensation as well as perpetrator-focused punishment.

Research has also shown that moral outrage can ignite support for social justice.

Social justice efforts can include confronting or challenging people or institutions responsible for a particular transgression, seeking restitution for victims, and helping increase opportunities for affected persons (Iyer & Leach, 2010). For example, van Zomeren et al. (2004) found that feelings of moral outrage towards an authority for their unfair treatment of an outgroup predicted participants' willingness to participate in collective action efforts to challenge the authority (e.g., participate in a demonstration, sign a petition). Moreover, the effect of moral outrage on willingness to engage in collective action was equally strong when the unfair treatment affected the outgroup as when it affected the ingroup. Similarly, Iyer,

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Schmader, and Lickel (2007) found that British people's moral outrage at the American government for the occupation of Iraq predicted people's willingness to take concrete political actions (e.g., confronting those responsible for Iraq by signing a petition or attending a rally). Saab and colleagues (2015) showed that, among third-party groups, perceived injustice predicted collective action tendencies (i.e., protesting) and that this effect was mediated by feelings of moral outrage (and sympathy). van Zomeren and Lodewijkx (2005) showed that moral outrage (following a story about senseless violence) was significantly related to protest intentions (e.g., "would like to do something as a signal of protest against society") as well as helping intentions (e.g., "I would like to send a card to the relatives of the victim"). van Zomeren, Postmes, Spears, & Bettache (2011) showed that moral convictions (i.e., strong and absolute stances on moralised issues) against inequality predicted collective action tendencies through moral outrage (and efficacy).

Montada and Schneider's (1989) victim-focused research showed that feeling moral outrage, rather than feeling guilt or negative affect, following exposure to victims' stories of poverty (unemployment/national poverty/immigration) predicted a range of prosocial intentions including donating money, signing a petition addressed to political leaders or institutions, participating in a demonstration, and joining an activity group. Thomas and McGarty (2009) found that in opinion-based groups, inducing an outrage norm ("people feel genuine and passionate outrage that people in developing nations still, in the modern day, do not have access to safe water") increased commitment to positive social change (e.g. "'I intend to support the "Water for Life" movement by attending a rally which calls for change of government policy" or "I intend to support the "Water for Life" movement by attending a fundraising event"). Moreover, Wakslak and colleagues found that moral outrage mediated the relationship between system justification, which has been negatively implicated in helping behaviours, and intentions to help a disadvantaged group (Wakslak, Jost, Tyler, &

Chen, 2007). Lodewijkx, Kersten and van Zomeren (2008) showed that moral outrage against violence directly predicted intentions to participate in a silent march, but also indirectly predicted such intentions through re-establishing the belief in a just world, and through self-directed moral cleansing reactions. Research among children has also shown that moral outrage about a bullying scenario (i.e., an injustice) significantly predicted intentions to tell a teacher (Jones, Manstead, & Livingstone, 2009).

Particularly relevant in the current climate, Lindenmeier, Schleer, and Pricl (2012) found that moral outrage significantly predicted boycotting intentions following perceived unethical corporate conduct. Similarly, Grappi, Romani, and Bagozzi (2013) found that disgust and moral outrage predicted both negative word of mouth (e.g., "I intend to say negative things about this company") and a range of protest behaviours (e.g., boycotting the company, blog against the company, complain to the company) following corporate irresponsible behaviour. However, this effect was moderated by participant's other-regarding virtues.

Overall this overview of studies shows that moral outrage can encourage people to help others and to stand up against injustices that do not affect the self. It can do so in a range of ways such as, by punishing the harm-doer (e.g., Lotz et al., 2011; Nelissen & Zeelenberg, 2009), compensating the victim (e.g., Lotz et al., 2011), supporting social justice efforts (e.g., Iyer et al., 2007; van Zomeren et al., 2004), donating money (e.g., Montada & Schneider, 1989), volunteering (e.g., Montada & Schneider, 1989), and boycotting unethical corporate companies (e.g., Grappi et al., 2013; Lindenmeier et al., 2012).

Guilt and Sympathy

According to Haidt's (2003) model of moral emotion prototypicality, guilt and sympathy are also among the most prototypical emotions, and should therefore also be effective at increasing prosociality. Indeed, evidence for this assertion is abundant. In order to

test the prosocial implications of moral elevation and moral outrage, their effects are compared to those of guilt and sympathy in *Chapter 7*. For this reason brief overviews of guilt and sympathy are provided below. For detailed reviews on guilt and sympathy see Tangney et al. (2007), Wohl et al. (2006; collective guilt), and Goetz et al. (2010; compassion).

Guilt

Appraisal theorists suggest that guilt results from an appraisal that a person has done something wrong and is responsible for harm caused to another person (Zeelenberg & Breugelmans, 2008). The individual is then motivated to amend or rectify that harm (Baumeister, Stillwell, & Heatherton, 1994). Guilt is a self-focused emotion (Tangney et al., 2007). Guilt can function in a number of ways. In the immediate term it can motivate restitution toward the person harmed (Tangney et al., 2007). This can be done through confessions, apologies, and attempts to undo the harm caused (Caplovitz Barrett, 1995; Lewis, 1971; Lindsay-Hartz, 1984). Izard (1977, p.422) noted that "the experience of guilt binds the person to the source of guilt and does not subside without reconciliation that tends to restore social harmony".

Ample research has demonstrated the positive effects of guilt for interpersonal relationships and society (e.g., Baumeister et al., 1994; Ketelaar & Tung Au, 2003). For example, Ketelaar and Au (2003) found that autobiographical recall procedures inducing guilt increased prosociality in social dilemma games. Similarly, Nelissen, Dijker, and deVries (2007) showed that an induction of guilt increased prosocial behaviour, while an induction of fear did not. Amodio, Devine, and Harmon-Jones (2007) demonstrated that guilt (following a bogus feedback task regarding racial bias) promoted greater interest in prejudice reduction when an opportunity presented itself (e.g., choosing to read articles that focus on how to reduce prejudice). Moreover, De Hooge, Zeelenberg, and Breugelmans (2007) found that

guilt affected both prosociality in a social dilemma task as well as in an everyday cooperation measure. Finally, Doosje, Branscombe, Spears, and Manstead (1998) found that Dutch people's guilt about their country's colonisation of Indonesia predicted support for governmental compensation to Indonesia. Thus, guilt seems to motive prosocial intentions and behaviours.

Sympathy

Sympathy is an emotional response to witnessing another's suffering. It is an other-focused emotion (Batson, 1991). Sympathy is part of the compassion-related states which include: sympathy, pity, and empathic concern (Goetz et al., 2010). Each of these compassion-related states has been repeatedly and extensively linked to prosocial behaviour (Goetz et al., 2010). It involves a "heightened awareness of another's plight as something to be alleviated" (Wispé, 1986, p. 314). Pity differs slightly from sympathy and empathic concern as it also involves the additional appraisal of feeling concern for someone considered inferior to oneself (Fiske, Cuddy, Glick, & Xu, 2002). The key action tendency for these compassion-related states is the desire to help the disadvantaged and mitigate their suffering.

Empirical research has shown that compassion predicts prosocial behaviour in children as young as six years (Malti, Gummerum, Keller, & Buchmann, 2009). Self-reported individual differences in compassion have been positively associated with self-reported prosocial behaviour in Japan (Kitayama & Markus, 2000) and Brazil (Eisenberg, Zhou, & Koller, 2001). Empathic concern, one of the compassion-related states, is a powerful motive of volunteerism (Omoto, Malsch, & Barraza, 2009) and generally encourages altruistic behaviours towards those who suffer, even at a cost to oneself (Batson & Shaw, 1991).

Moreover, Pagano and Huo (2007) showed that Americans' feelings of sympathy about the Iraqi war increased support for four different policy responses: humanitarian action to help Iraqi people obtain food and shelter, reparative action to compensate the Iraqi people

for the harm they have suffered, preventative action to reduce future political abuses against Iraqi people, and retributive action to punish Saddam Hussein and his collaborators.

Sympathy was an especially important predictor of the humanitarian and reparative policies. Additionally, Iyer, Leach, and Crosby (2003) showed that European American people's sympathy about racial discrimination predicted their support for a policy that aimed to increase opportunities for those who had been disadvantaged by the inequality. Batson, Chang, Orr, and Rowland (2002) demonstrated that students, who were experimentally induced to feel more sympathy toward a heroin addict, were more willing to encourage their Student Union to allocate more of its budget to an agency that helps drug addicts, compared to participants in the control condition. Thus, sympathy seems to increase people's willingness to help others.

Summary and Conclusions

This chapter aimed to introduce some of the key topic areas of this thesis. It highlighted the need for greater prosociality across societies and the potential for third parties to provide such helping. This chapter introduced the idea that moral emotions may be effective tools for motivating prosocial behaviours. Detailed summaries of moral elevation and moral outrage attest to their prosocial potential in particular. Similarly, brief overviews of guilt and sympathy also suggest that these two emotions are effective at promoting prosocial behaviours. The next chapter will identify and describe important gaps in the literature, which will then be addressed in this thesis.

Chapter 2

Moral Elevation and Moral Outrage: Identifying the Key Gaps in the Literature

This theoretical chapter identifies and describes the key gaps in the moral elevation and moral outrage literatures. First, this chapter identifies and highlights the need for research to examine the specific prosocial outcomes of moral emotions. It draws on the appraisal tendency framework (Horberg et al., 2011) which suggests that distinct emotions have specific and distinctive effects on judgments and behaviours. Drawing on this theory it is suggested that the prosocial effects of moral elevation and moral outrage may be distinctive and nuanced. This needs to be empirically tested. Second, this theoretical chapter highlights the need to examine the specific component features of moral emotions.

Specifically, it proposes that research is necessary to examine the relationships between moral elevation and moral outrage, and stereotyping, self-focus, and approach-orientation in particular. This is because each of these component features has important prosocial implications.

In order to fully understand the prosocial effectiveness of moral elevation and moral outrage, it is essential to examine both their prosocial outcomes (e.g., intentional and behavioural outcomes) as well as their specific component features (e.g., self-focus, approach-orientation). This chapter will first outline what is unknown in terms of the prosocial outcomes of moral elevation and moral outrage. It will then outline what is unknown in terms of the component features of moral elevation and moral outrage (particularly focusing on component features with prosocial implications).

Specificity of Prosocial Outcomes: The Appraisal Tendency Framework

The existing evidence suggests that both moral elevation and moral outrage increase prosocial intentions and behaviours (see *Chapter 1*). Nevertheless, in order to maximise the prosocial effectiveness of moral elevation and moral outrage, it is important not just to know whether they influence prosocial behaviours but also which types of behaviours they influence and why. Indeed, research on the appraisal tendency framework (ATF) suggests that distinct emotions promote specific kinds of judgments and decisions as a function of their unique and distinctive cognitive appraisals (cf. Horberg et al., 2011; Lerner & Keltner, 2000).

The ATF draws on cognitive appraisal and functional (evolutionary) theories of emotion to understand how emotional experiences influence judgments and decisions (Lerner & Keltner, 2000). From cognitive appraisal theories of emotion, the ATF draws on the notion that a range of cognitive dimensions (rather than just valence) differentiates emotions from one another. From functional theories of emotion, the ATF draws on the notion that emotions trigger and coordinate effective responses (physiological, behavioural, experiential, and communicative), which enable a person to deal with situations, problems, or opportunities (Frijda, 1986; Oatley & Johnson-Laird, 1996). The ATF extends these theories and suggests that each emotion activates a cognitive predisposition to appraise situations in line with the central-appraisal dimensions that triggered the emotion – termed appraisal tendency. In other words, "appraisal tendencies are goal-directed processes through which emotions exert effects on judgments and choice until the emotion-eliciting problem is resolved" (Lerner & Keltner, 2000, p. 477).

Lerner and Keltner (2000) first developed the ATF as a response to the unique and heavy focus on emotion's valence; the majority of studies in the literature have compared the effects of positive versus negative moods on judgments and decisions (e.g., Bower, 1991;

Isen, Shalker, Clark, & Karp, 1978; Johnson & Tversky, 1983). In general these studies find that positive moods induce positive judgments and negative moods induce negative judgments. Researchers even suggested that "the only relevant aspect of emotion is their valence" (Elster, 1998, p.64, from Han, Lerner, & Keltner, 2007). However, according to ATF, emotions of the same valence (such as fear and anger) can exert opposing effects on judgments and decisions, while emotions of the opposite valence (such as anger and happiness) can exert similar effects (Lerner & Keltner, 2000; Lerner, Li, Valdesolo, & Kassam, 2015).

Studies over the past decade have provided some initial support for the ATF. For example, Lerner, Small, and Loewenstein (2004) compared the effects of disgust and sadness on routine economic transactions. While both emotions are negative, their cognitive appraisals are distinctive. Sadness revolves around an appraisal theme of loss, while disgust revolves around an appraisal theme of being too close to an indigestible object or idea (Lazarus, 1991). Thus, when feeling sad people are motivated to change their circumstance, and when feeling disgust people are motivated to expel objects and avoid taking in anything new. In their study they hypothesised and found that, disgust would reduce choice prices as buying represents a potential source of contamination, whereas sadness would increase choice prices as buying offers a route to change one's current circumstances. Furthermore they hypothesised and found that both disgust and sadness would reduce selling prices as, for disgusted people reducing selling prices would offer an opportunity to get rid of current objects, and for sad people it would offer an opportunity to change one's circumstance.

In another line of research, Iyer and colleagues (2007) showed that anger, guilt, and shame (all negative emotions) predicted distinct political action intentions in response to the American and British involvement in Iraq. Shame predicted intentions to support withdrawal from Iraq, anger predicted intentions to support confrontation of those responsible, to support

compensation to Iraq, and to support withdrawal from Iraq. Guilt did not predict any political action intentions. However, in a similar line of research, Pagano and Huo (2007) found that guilt predicted reparative actions.

Although the Iyer et al. and Pagano and Huo studies did not measure appraisals, the ATF would account for these distinct emotion-intention links as follows. The appraisal theme surrounding anger is that a person (or group) has transgressed some sort of societal standard (Frijda, 1986). Thus, anger should motivate action to undo the transgression or its effects. The appraisal theme surrounding guilt is that a person (or their ingroup) is responsible for specific negative actions (Lickel, Schmader, Curtis, Scarnier, & Ames, 2005). Thus, guilt should motivate action to undo the harm caused. The appraisal theme surrounding shame is similar to guilt but while guilt focuses on the behaviour ("I have done a bad thing"), shame focuses on the person's character ("I am a bad person") (Niedenthal, Tangney, & Gavanski, 1994). Thus, shame should motivate avoidant behaviours to hide one's character. The Iyer et al. and Pagano and Huo findings seem to be in line with the appraisal tendency framework. Nevertheless, as appraisals were not measured, it is unclear whether the appraisal tendency framework can account for the differences in the effects of these emotions.

The Appraisal Tendency Framework and Moral Judgments

The ATF has recently been extended to examine and understand the influence of distinct emotions on *moral* judgments. Horberg and colleagues' (2011) review highlights that certain emotions are instigated by appraisals linked to specific moral themes (e.g., Haidt & Graham, 2007; Rozin et al., 1999). For example, disgust, anger, and contempt derive from the distinct moral appraisal themes of purity, justice, and community roles respectively (Rozin et al., 1999). Horberg and colleagues (2011) suggest that each emotion's moral appraisal theme remains salient throughout the entire emotional state and colours subsequent moral judgments and behaviours by prioritising specific sociomoral concerns (or moral domains) that are

semantically related to the emotion's moral appraisal theme. For example, disgust should influence moral judgments when purity concerns are salient, anger should influence moral judgments when justice concerns are salient, and moral elevation should influence moral judgments when virtue or benevolence concerns are salient.

Importantly, Horberg and colleagues (2011) propose domain specificity. Domain specificity occurs when an emotion predominantly influences moral judgments about issues that express the associated sociomoral concern (vs. all sociomoral concerns). For example, disgust should primarily influence judgments relevant to purity concerns, while anger should primarily influence judgments relevant to justice concerns. There is some evidence for this notion. For example, people who are disgust-prone (vs. people who are not) show greater prejudice against homosexuals, but not towards African Americans (Tapias, Glaser, Keltner, Vasquez, & Wickens, 2007) and are especially likely to have conservative beliefs surrounding gay marriage and abortion, versus issues such as affirmative action (Inbar, Pizarro, & Bloom, 2009). Thus, research on disgust shows that its moral appraisal theme (purity) appears to guide its effects on moral judgments. Research has not yet examined whether the ATF can explain the effects of moral outrage and moral elevation. It is plausible that domain specificity only or predominantly appears for disgust. Furthermore, the majority of research has focused on moral judgments and attitudes but it is unclear whether the ATF can also account for behavioural effects.

It is worth noting that the ATF has been criticised by some researchers. Specifically, psychological constructionist accounts of emotion posit general morality-emotion correspondences, rather than specific morality-emotion correspondences (see Cameron, Lindquist, & Gray, 2015 for review). Constructionists suggest that emotions depend on domain-general processes and vary across situations and cultures. Constructionists do

acknowledge that emotion can be related to morality. However, they disagree with the notion that either morality or emotions can be divided into distinct types (Cameron et al., 2015).

The current thesis will examine whether the ATF does (or does not) account for the effects of moral elevation and moral outrage on prosocial intentions (*Chapter 3*) and prosocial behaviour (*Chapter 4*). Examining moral elevation and moral outrage will provide a particularly effective test of the ATF. This is because while moral elevation and moral outrage derive from differing (perhaps even opposing) appraisals (i.e., appraisal of a moral virtue vs. appraisal of a moral transgression), they have convergent effects on prosociality (see Haidt, 2003; *Chapter 1*). Therefore, comparing the effects of moral elevation and moral outrage provides a direct test of whether these emotions increase prosociality across the sociomoral domains of benevolence and justice (see Figure 2.1), or whether their effects of domain specific (see Figure 2.2) (cf. Horberg et al., 2011).

Some prior research is consistent with ATF and with the idea that moral outrage and moral elevation may have domain specific effects. Desteno, Petty, Rucker, Wegener, and Braverman (2004) showed that participants induced to feel interpersonal anger were more supportive of a tax increase when the appeal/message was framed in angering (mostly unfairness-relevant) terms. Participants induced to feel sadness were more supportive of a tax increase when the appeal/message was framed in saddening terms (mostly drawing on suffering, weakness, and need). Furthermore, Dasgupta, DeSteno, Williams, and Hunsinger (2009) showed that induced disgust increased bias against homosexuals but not Arabs, whereas the reverse was found for induced interpersonal anger. These studies did not measure moral appraisal themes but they do indicate that interpersonal anger (and perhaps by implication, moral outrage) may increase justice-relevant judgments.

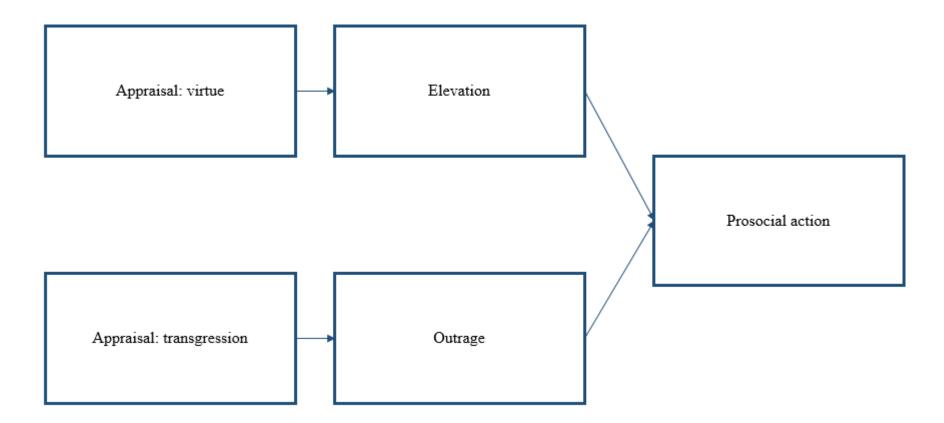


Figure 2.1. Depiction of the effects of moral elevation and moral outrage on prosociality when effects occur across sociomoral domains.

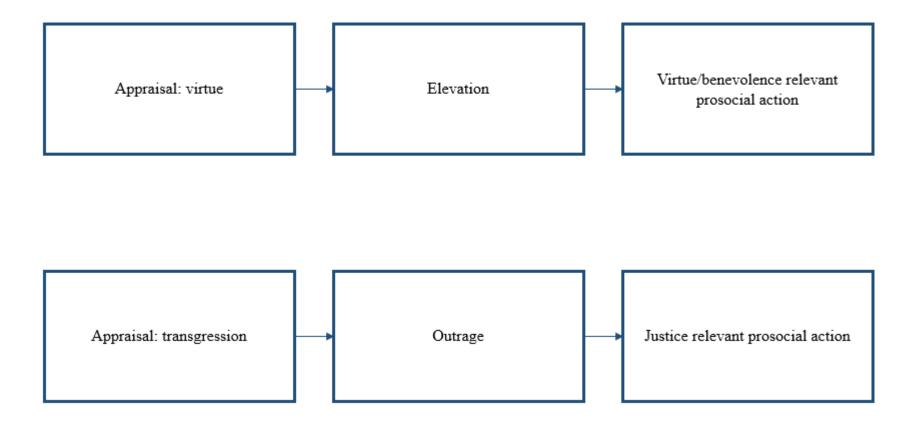


Figure 2.2. Depiction of the effects of moral elevation and moral outrage on prosociality when effects are domain specific.

Another series of studies (Siegel, Thomson, & Navarro, 2014) examined whether moral elevation and gratitude have distinct effects on prosociality. Participants induced to feel moral elevation gave more to moral charities than did those induced to feel gratitude. Those induced to feel gratitude gave more to amoral charities than those induced to feel moral elevation. The researchers suggested that these differences occurred because moral elevation should encourage emulation of the exemplar whereas gratitude should encourage reciprocity. These differential outcomes suggest that the effects of moral elevation on behaviours are not merely due to positive valence, but rather involve specific underlying appraisals. The DeSteno et al. (2004), Dasgupta et al. (2009), and Siegel et al. (2014) studies did not examine moral appraisal themes, or how moral appraisal themes relate to emotional states and subsequent judgments and behaviours. However, they are consistent with the idea that moral elevation and moral outrage should have domain specific effects on behaviour.

Chapters 3 and 4 will draw from the appraisal tendency framework to explicitly test whether moral elevation and moral outrage influence prosocial intentions and behaviours across the sociomoral domains of benevolence and justice, or whether their effects are domain specific (cf. Horberg et al., 2011).

Component Features with Prosocial Implications

Early theories of emotions have suggested that emotions can be distinguished according to their distinct component features (Frijda et al., 1989). These component features include (but are not limited to) the emotion's appraisals, action readiness (or approach orientation), action tendencies (Frijda, 1986; Frijda, 2009; Gable & Harmon-Jones, 2008), and attentional focus (Fredrickson, 2001). Importantly, some of these component features have direct implications for the prosocial potential of moral emotions.

As discussed in *Chapter 1*, Haidt's (2003) model for prototypical moral emotions suggests that two specific component features, *disinterested elicitors* and *action tendencies*,

are crucial for understanding the prosocial effectiveness of moral emotions. Disinterested elicitors refer to the emotions that can be triggered even when there is no personal stake. Prosocial action tendencies refer to the degree to which the action tendency following the triggering event benefits others, or upholds the social order. Emotions high in both disinterested elicitors and prosocial action tendencies are prototypical moral emotions. Using these component features, Haidt (2003) suggested that elevation, outrage, sympathy, and guilt can be most intrinsically linked to the welfare of others, and thus most effective at inducing prosociality. Drawing on separate strands of the literature (outlined below), the current thesis proposes three additional component features that have implications for prosociality. These component features are: motivational orientation (approach vs. avoidance), stereotyping (paternalistic vs. non-paternalistic), and focus (self vs. other). Understanding the effects of moral elevation and moral outrage on these specific component features will help inform their prosocial effectiveness.

Motivational Orientation

Researchers have suggested that two systems inform and guide much of our behaviour. The behavioural activation system (BAS; Gray, 1982) manages appetitive and approach motivations and behaviours. The behavioural inhibition system (BIS; Gray, 1982) manages aversive, avoidant, and withdrawal-oriented motivations and behaviours. As part of their nature, emotions instigate an *action readiness*, defined as an individual's readiness or unreadiness to engage with one's environment (also termed action potential or approach orientation). This action readiness can include moving toward, moving away, attending, rejecting, or moving against (Frijda et al., 1989). Some emotions are more likely to motivate behaviours that will move towards an object (e.g., approach, help, attack) while other emotions are more likely to motivate behaviours that will move away from an object (e.g., hide, avoid). The emotions that will be effective and useful in promoting prosociality will be

those that induce an approach orientation – a desire to move towards an object, such as helping victims or punishing perpetrators of a transgression or emulating a moral exemplar by actively helping others. This is because approach-oriented emotions will be most likely to encourage prosocial responses both in easy as well as in difficult situations (Algoe & Haidt, 2009).

Ample research shows that anger is an approach-oriented emotion (Carver & Harmon-Jones, 2009; Frijda et al., 1989). For example, in Roseman and colleagues' (1994) research, recalling experiences of anger induced blood rushing through the body, "that you'd explode", and heart pounding. Moreover, those who recalled feelings of anger also reported, "driven to do something" (Roseman et al., 1994). Similarly, Frijda et al. (1989) found that recalling anger was related to a motivation to move against something (e.g., "I boiled inside", "I wanted to go against an obstacle or difficulty, or to conquer it"). They also found that anger was related to a desire to attend ("I wanted to observe well, to understand, or to pay attention"). In addition, using a range of imaging technologies (e.g., EEG, PET, fMRI), studies have shown that anger is consistently related to left anterior dominance (Damasio et al., 2000; Harmon-Jones, 2007; Harmon-Jones & Allen, 1998; Harmon-Jones & Sigelman, 2001; Murphy, Nimmo-Smith, & Lawrence, 2003). Left anterior activity is widely understood as indicating an approach orientation, while right anterior activity indicates an avoidance orientation (Carver & Harmon-Jones, 2009). Given that the use of different terminology for anger versus moral outrage is due to conceptual rather than physiological differences (see *Chapter 1*), it is hypothesised that moral outrage also promotes an approach orientation.

Nevertheless, little or no research has examined the approach orientation of moral elevation. Some researchers have examined similar constructs to moral elevation, such as being inspired and being moved. Specifically, Thrash and Elliot (2004) who examined

inspiration suggest that inspiration can provide energy for immediate action. Similarly, Frijda et al. (1989) examined participant's recall of feeling "moved". Frijda and colleagues' empirical findings found that feeling moved was an approach-oriented emotion. It instigated a desire to approach ("I wanted to approach, to make contact") and a desire to attend.

Nevertheless, Thrash and Elliot (2004) and Frijda et al. (1989) did not specifically examine the motivational orientation of moral elevation.

Algoe and Haidt (2009) did examine, albeit indirectly, the approach orientation of moral elevation in particular. Using recall (Study 1) and diaries (Study 2) they coded for participants' self-reported motivations and actions when they felt either: moral elevation, admiration, gratitude, or joy. One of the codes was "energisation", which was described as: "when people indicated that they wanted to do things like jump up and down, or shout with excitement" (p. 111). Their results showed that while admiration and joy involved energisation, moral elevation did not. This led them to conclude that moral elevation is "a calmer emotion which seems to increase openness and warmth towards others; it may not lead to immediate altruistic action when such action is difficult" (p. 30). Moreover, they note that moral elevation is associated with a release in oxytocin, which has sedative and stress-reducing effects (Silvers & Haidt, 2008).

Algoe and Haidt's (2009) study used coding of participants' open-ended motivational statements as "energisation" to conceptualise elevation as an emotion that is low in approach-orientation. However, this code seems unlikely to cover all aspects of the behavioural activation (i.e., the approach) system. Given this limitation and the contrasting hypotheses based on inferences from related research, it seems that further research is necessary to more concretely test the relationship between moral elevation and the behavioural activation (approach) and inhibition (avoidance) systems. Moreover, in order to develop a better understanding of the prosocial implications of moral elevation it is essential to directly test its

relationship with the behavioural activation and inhibition systems. *Chapter 6* will address this gap in the literature.

Stereotyping

Paternalistic stereotyping occurs when groups are seen as high in warmth but low in competence. As paternalised groups (e.g., the elderly) are perceived as low status and dependent they tend to receive greater pity as well as helping (Fiske et al., 2002).

Nevertheless, such helping does not come without its limitations. Recent empirical evidence has shown that paternalised people or groups tend to receive dependency-oriented rather than autonomy-oriented helping (Nadler & Chernyak-Hai, 2014). In dependency-oriented helping, the helper provides the full solution to a problem. Although this fulfils immediate needs, this type of helping restricts the benefactor's self-sufficiency over time. In autonomy-oriented helping, the helper provides only a partial solution to the problem. This type of helping fulfils immediate needs and provides the skills for self-sufficiency over time (Halabi & Nadler, 2010). Thus, while paternalised people may receive more help (Fiske et al., 2002) this is likely to be dependency-oriented. Ultimately, such helping could be detrimental as it perpetuates dependence on high-status benefactors, rather than enabling recipients to become self-sufficient.

Research has highlighted that sympathy runs the risk of leading to paternalistic stereotyping as it maintains high levels of disparity between the ingroup (i.e., the advantaged) and the outgroup (i.e., the disadvantaged) (Nadler & Halabi, 2006; Thomas et al., 2009). Sympathy may therefore induce helping that is contingent on dependency, which reaffirms status differentiation between the beneficiary and the victim. It is proposed that such helping can be problematic and perhaps termed as qualified. To date, no research has examined whether moral elevation and moral outrage also produce paternalistic stereotypes of the target

group. Testing this will inform the prosocial implications of moral elevation and moral outrage. *Chapter 7* will address this gap in the literature.

Self-Focus

Emotions vary in the extent to which they instigate a self- or other-focus. Research shows that, as other-focused emotions draw attention to the needs of the disadvantaged, other-focused emotions motivate helping focused on the needs of others (altruistic motivation). In contrast, as self-focused emotions draw attention to one's own circumstance, self-focused emotions motivate helping that primarily alleviates one's own distress (egoistic motivation; Batson et al., 1988; Batson & Shaw, 1991).

Research has highlighted that due to its self-focused nature, guilt runs the risk of leading to normative and strategic responses primarily aimed at overcoming the self-focused negative state (Hopkins et al., 2007; van Leeuwen, 2007), which may then be associated with egoistic rather than altruistic action (Iyer, Leach, & Pedersen, 2004; McGarty et al., 2005). No research has examined whether moral elevation and moral outrage also produce a self-focus. Testing this will inform the prosocial implications of moral elevation and moral outrage. *Chapter 7* will address this gap in the literature.

Summary

Prosocial Outcomes

This theoretical chapter highlights the importance of investigating the specific prosocial outcomes of moral emotions. The appraisal tendency framework (Horberg et al., 2011) suggests that distinct moral emotions have nuanced and distinctive effects on judgments and behaviours. Drawing on the ATF, it is proposed that while moral elevation and moral outrage both promote prosocial intentions and behaviours (see *Chapter* 1), they may in fact stimulate distinctive types of prosocial outcomes. Employing the appraisal tendency framework to test the prosocial effects of moral elevation and moral outrage would

not only further inform theory but it would also inform important practical interventions (e.g., charitable campaigns) aimed at promoting prosocial action. *Chapters 4 and 5* will address this gap in the literature and employ the appraisal tendency theory to test and compare the prosocial outcomes (intentional and behavioural) of moral elevation and moral outrage.

Component Features

It is essential to consider and empirically test the component features of moral emotions. Haidt's (2003) model of moral emotion prototypicality highlights two useful component features for identifying prosocially effective emotions. In this thesis three additional component features are highlighted that could distinctively mark the prosocial quality of responses emanating from moral emotions. The effects of moral elevation or moral outrage on motivational orientation (approach vs. avoidance), stereotyping (paternalistic vs. non-paternalistic), and focus (self vs. other) are unknown. This will be the primary focus of *Chapters 6 and 7*.

Chapter 3

Pilot Testing

Chapter 3 reports the findings of the pilot tests conducted for this thesis. Pilot Study 1 tested the effects of an elevation-inducing, an outrage-inducing, and a control stimulus on emotion ratings. Pilot Study 2 tested the effect of an additional outrage-inducing stimulus on emotion ratings. Pilot Study 3 tested whether political orientation moderated the effects of the emotion-inducing stimuli on emotion ratings. The three pilot studies provide evidence for the effectiveness of the emotion-inducing stimuli used in this thesis.

The current thesis examines the potential of moral emotions for promoting prosocial responses. Prosocial responses occur when people (want to) expend effort to help others (Penner et al., 2005). Evidence shows that moral emotions can motivate a range of prosocial responses (for reviews see Haidt, 2003; Tangney et al., 2007; see also *Chapter 1*). Haidt's (2003) model of moral emotion prototypicality suggests that four moral emotions may be particularly effective for increasing prosociality. These four moral emotions are: sympathy, guilt, moral elevation and moral outrage. The current thesis will focus on the latter two emotions (see *Chapter 1*).

In order to test the effects of moral elevation and moral outrage on prosocial outcomes (*Chapters 4 and 5*) and component features (*Chapters 6 and 7*), it is essential to first pilot relevant emotion-inducing stimuli. The current chapter tests and reports the effectiveness of novel stimuli in inducing relevant emotions.

Moral Elevation

Moral elevation is a positive emotion felt when witnessing another person perform a virtuous act, one that improves the welfare of others (Algoe & Haidt, 2009). Moral elevation motivates people to emulate the exemplar and become a better person oneself (Algoe &

Haidt, 2009; Haidt, 2003). Recent evidence suggests that inducing participants to feel elevated motivates a range of prosocial behaviours including donating money to charity (Freeman et al., 2009), helping the experimenter (Schnall et al., 2010), and mentoring less experienced colleagues (Thomson et al., 2014).

In order to effectively induce moral elevation, a stimulus must demonstrate another person's act (or acts) of moral virtue. Acts of moral virtue typically consist of extreme acts of kindness and/or forgiveness (Jefferson, 1771/1975). Extreme acts of kindness and forgiveness are those that are extraordinary and challenging.

The majority of past research has induced moral elevation using short video clips (e.g., Algoe & Haidt, 2009; Freeman et al., 2009; Lai et al., 2014; Oliver et al., 2015; Schnall et al., 2010; Schnall & Roper, 2012; Silvers & Haidt, 2008). Other research has induced moral elevation using written stories (e.g., Aquino et al., 2011; Freeman et al., 2009; Thomson & Siegel, 2013; Thomson et al., 2014; Vianello et al., 2010) or recall (e.g., Algoe & Haidt, 2009; Aquino et al., 2011; Siegel et al., 2014; Thomson & Siegel, 2013). Some research has measured (rather than manipulated) moral elevation (e.g., Diessner et al., 2013; Diessner, Solom, Frost, Parsons, & Davidson, 2008; Landis et al., 2009; Vianello et al., 2010; see Table 3.1).

In order to induce feelings of moral elevation, Freeman and colleagues (2009) used a video clip about Amy Biehl; a white American activist in South Africa. Amy Biehl was murdered by Black youths while volunteering to help end apartheid. Rather than seeking vengeance, Amy's parents established and funded the Amy Biehl Foundation to continue Amy's work. The foundation funded 15 programs and helped thousands of people including two of the youths convicted of Amy's murder. This video clip shows both extreme acts of kindness as well as forgiveness. In their research, the video successfully induced feelings of moral elevation (Freeman et al., 2009). Many morally elevating stories such as this one exist.

Indeed, scholars have drawn on a range of elevation-inducing videos and stories to test the prosocial effects of moral elevation (see Algoe & Haidt, 2009; Aquino et al., 2011; Freeman et al., 2009; Oliver et al., 2015; Schnall et al., 2010).

Moral Outrage

Moral outrage is a negative emotion felt when witnessing another person transgress a moral standard (usually a moral standard of justice, fairness, or equality) that harms another person or group of people (Thomas et al., 2009). Moral outrage motivates people to reduce the harm done by compensating the victims and/or punishing the perpetrators (Lotz et al., 2011). Empirical evidence has shown that moral outrage about injustices or unfairness is related to compensation (Lotz et al., 2011), altruistic punishment (Lotz et al., 2011; Nelissen & Zeelenberg, 2009), social justice efforts (Iyer et al., 2007; van Zomeren et al., 2004), donations (Montada & Schneider, 1989), volunteering (Montada & Schneider, 1989), and boycotting intentions against unethical corporations (Grappi et al., 2013; Lindenmeier et al., 2012).

In order to effectively induce moral outrage, a stimulus must demonstrate another person's act (or acts) of moral transgression. Acts of moral transgressions typically occur when a person violates standards of fairness, equality, and/or justice (Thomas et al., 2009). Thus, in order to effectively induce moral outrage, a stimulus must demonstrate an unfairness, inequality, or injustice that adversely affects another person or group of people.

The majority of past research has induced moral outrage using short stories or vignettes (e.g., Agerström & Björklund, 2009; Batson, Chao, & Givens, 2009; Glasford, 2013; Glasford & Pratto, 2014; Lindenmeier et al., 2012; Thomas & McGarty, 2009; van Zomeren et al., 2004). Some research has induced moral outrage using video clips (e.g., Glasford, 2013; Sullivan, Landau, & Kay, 2016). A large proportion of research has measured, rather than manipulated, moral outrage (e.g., Lodewijkx et al., 2008; Saab et al.,

2015; Pagano & Huo, 2007; Thomas et al., 2015; Wakslak et al., 2007). Finally, some research used a general vignette to set the context of the study (e.g., the war in Iraq) and then measured feelings of moral outrage (Fernando, Kashima, & Laham, 2014; Iyer et al., 2007; Rothschild et al., 2013; van Zomeren & Lodewijkx, 2005; van Zomeren et al., 2011; see Table 3.1).

In order to induce feelings of moral outrage, Sullivan and colleagues (2016) showed participants two video clips that formed part of the Kony 2012 campaign. The video clips demonstrate the war crimes perpetrated by Joseph Kony, which include the forced recruitment of child soldiers. One of the main people featured was a young Ugandan named Jacob Avaye whose brother was killed by Kony's militia group. The video clip shows violations of justice, fairness, and equality and successfully induced feelings of moral outrage. Similarly to stories of virtue, many stories of injustices or inequalities exist. Indeed, most research has used distinct outrage-inducing videos or stories; developed or retrieved for the particular study (e.g., Agerström & Björklund, 2009; Batson et al., 2009; Glasford, 2013; Glasford & Pratto, 2014; Lindenmeier et al., 2012; Sullivan et al., 2016; Thomas & McGarty, 2009; van Zomeren et al., 2004).

Table 3.1

Overview of Past Approaches and Manipulations used to Instigate Feelings of Moral Elevation and Moral Outrage

Approach used	Moral elevation	Moral outrage
Emotion-inducing videos	Algoe & Haidt, 2009; Freeman et al., 2009 Lai et al., 2014; Oliver et al., 2015 Schnall et al., 2010; Schnall & Roper, 2012 Silvers & Haidt, 2008	Glasford, 2013; Sullivan et al., 2016
Emotion-inducing stories / vignettes	Aquino et al., 201; Freeman et al., 2009 Thomson & Siegel, 2013; Thomson et al., 2014 Vianello et al., 2010	Agerström & Björklund, 2009 Batson, Chao, & Givens, 2009; Glasford, 2013 Glasford & Pratto, 2014 Lindenmeier et al., 2012 Thomas & McGarty, 2009 van Zomeren, Spears, Fischer, & Leach, 2004
Emotion-inducing recall tasks	Algoe & Haidt, 2009; Aquino et al., 2011 Siegel et al., 2014; Thomson & Siegel, 2013	
Authors measured rather than manipulated the emotion	Diessner et al., 2008, 2013; Landis et al., 2009 Vianello et al., 2010	Lodewijkx et al., 2008; Saab et al., 2015 Pagano & Huo, 2007; Thomas et al., 2015 Wakslak et al., 2007
Authors employed general vignette to set the context and then measured the emotion		Fernando, Kashima, & Laham, 2014 Iyer et al., 2007; Rothschild et al., 2013 van Zomeren & Lodewijkx, 2005 van Zomeren et al., 2011

The Current Research

The primary aim of this thesis is to test, compare, and understand the effects of moral elevation and moral outrage on prosociality. In order to achieve this aim it is essential to first evaluate whether elevation-inducing and outrage-inducing stimuli effectively induce feelings of moral elevation and moral outrage, respectively. This chapter reports three pilot studies which test the effects of elevation-inducing, outrage-inducing, and control stimuli on feelings of moral elevation and moral outrage.

Given the evidence demonstrating that outrage-inducing videos (vs. written stories) are most effective for increasing feelings of moral outrage (Glasford, 2013) and given that the majority of moral elevation research employed video clips (as opposed to other types of stimuli), the current chapter will pilot the effectiveness of elevation-inducing and outrage-inducing video clips (rather than written stories) on feelings of moral elevation and moral outrage, respectively.

Furthermore, in order to ensure equivalence across all videos (moral elevation, moral outrage, and control) in terms of length and style (e.g., interview vs. documentary vs. movie), novel (rather than existing) elevation-inducing and outrage-inducing stimuli are piloted.

Pilot Study 1 (N = 78) tests the effects of an elevation-inducing, an outrage-inducing, and a control stimulus on ratings of moral elevation and moral outrage. Pilot Study 2 (N = 61) tests the effect of an additional outrage-inducing video on ratings of moral outrage. Pilot Study 3 (N = 59) tests whether political orientation moderates the effects of the elevation-inducing and outrage-inducing videos on moral elevation and moral outrage ratings, respectively.

Pilot Study 1

Method

Participants and design. The initial sample consisted of ninety-nine participants (77.8% female) with a mean age of 20.90 years (SD = 4.64). Participants were randomly assigned to condition in a one factor between-participants design with three levels (Condition: Elevation vs. Outrage vs. Control). Participants were psychology students who took part for course credit.

Procedure. All participants provided informed consent. Participants then viewed the moral elevation, moral outrage, or control video. Participants then responded to the emotion measures. Participants received (on-line) debrief upon completion.

Participant restrictions. Data analyses were restricted to British participants for two reasons. First, moral elevation and moral outrage are both other-oriented emotions which are elicited by events not directly related to the self (Englander et al., 2012; Haidt, 2003; Lotz et al., 2011). Ample research shows that a person's group membership strongly influences their attitudes, feelings, and behaviours (Abrams & Hogg, 2010). As nationality of targets was relatively salient in the videos, we ensured that all targets were out-group members (Northern Ireland, the DRC and the U.S.). Second, well-established research shows important crosscultural differences in domains such as fairness and cooperation (cf. Henrich, Heine, & Norenzayan, 2010). Unfortunately, examining the cross-cultural differences in the effects of moral elevation and moral outrage on prosociality is beyond the scope of this thesis. To avoid any confounding effects of culture we restricted data analyses to British participants in Pilot Study 1 and in Studies 1, 3, 4, and 8 and to American participants in Pilot Studies 2 and 3 and in Studies 2, 5, 6, and 7. This restriction left a sample of 78 participants (74.4% female) in the current pilot study.

Experimental manipulations.

Moral elevation. This pilot study tested the effectiveness of a 2.14-minute documentary-style video clip that described the story of a man (Richard Moore) who was shot between the eyes by rubber bullet, which permanently blinded him at the age of 10. It shows how he was able to forgive the perpetrator, take a positive attitude to life, and spend his life helping others. Thus, this video demonstrates extreme acts of kindness and forgiveness (see *Appendix A*).

Moral outrage. An extract from a BBC documentary was piloted (2.42-minutes) in which a journalist reports how a (wealthy) financial speculator from the U.S. bought a three million dollar debt that Congo owed to former Yugoslavia for power lines. The financial speculators increased the debt to 100 million dollars, now demanding back that amount. The journalist also interviewed relevant Congo locals and international volunteers to show the extent of the cholera epidemic and the need for this money in Congo. Thus, this video clip shows violations of justice, fairness, and equality which adversely affected others (see *Appendix A*).

Control. Similarly to Schnall et al. (2010) we also employed a nature video for our control stimulus (2.42-minutes) – a National Geographic Channel documentary on *Wildebeest Migration* (see *Appendix A*).

Measures. Participants responded to all items on a 9-point scale from 1 (*not at all*) to 9 (*very much*). All items (described below) were presented on the same page and the presentation of all items was randomised.

Moral elevation. Moral elevation was assessed by asking participants to rate the extent to which they felt: inspired, awe, and admiration (Aquino et al., 2011; Freeman et al., 2009). The item "uplifted" was added as principal components analyses showed that it loaded well on the moral elevation factor. Specifically, a principal components analysis was

conducted on the four items (uplifted, awe, admiration, inspired) using a maximum likelihood extraction and direct oblimin rotation. Results showed that all items loaded onto one factor (Eigenvalue = 3.11; Percentage of variance explained = 77.67). Factor loadings were as follows: uplifted (.82), awe (.77), admiration (.91), and inspired (.84). Cronbach's alpha was .90. A mean score of the four items was computed to form the moral elevation measure (see *Appendix B*).

Moral outrage. Moral outrage was assessed by asking participants to rate the extent to which they felt: angry, infuriated, outraged, and contempt (Russell & Giner-Sorolla, 2011). Cronbach's alpha was .93. A mean score of the four items was computed to form the moral outrage measure (see *Appendix B*).

Results and Discussion

Analyses of variance were conducted to test the effects of Condition (Elevation vs. Outrage vs. Control) on feelings of moral elevation and moral outrage. Results revealed a significant effect of Condition on feelings of moral elevation $F(2, 75) = 32.65, p < .001, \eta^2 = .47$ and on feelings of moral outrage $F(2, 75) = 54.70, p < .001, \eta^2 = .59$.

Pairwise comparisons revealed that participants who viewed the elevation-inducing video scored higher on feelings of moral elevation (M = 6.75, SE = 0.36, p's < .001) than participants who viewed the outrage-inducing (M = 2.92, SE = 0.37) or control (M = 3.47, SE = 0.36) videos. Feelings of moral elevation did not differ between the moral outrage and control videos (p = .289).

Furthermore, pairwise comparisons showed that participants who viewed the outrage-inducing video scored higher on feelings of moral outrage (M = 5.90, SE = 0.31) than participants who viewed the elevation-inducing (M = 2.26, SE = 0.31) or control (M = 1.69, SE = 0.30) videos. Feelings of moral outrage did not differ between the moral elevation and control videos (p = .191).

Pilot Study 1 showed that the elevation-inducing and outrage-inducing videos were effective at increasing feelings of moral elevation and moral outrage, respectively. As expected, the control video did not promote feelings of moral elevation or moral outrage. The piloted emotion-inducing and control videos are deemed suitable for use in this thesis.

Pilot Study 2

Pilot Study 1 was conducted with a British sample. However, some of the studies in this thesis are conducted with American samples (Pilot Study 3 and Studies 2, 5, and 6). To ensure that moral outrage rather than guilt (due to nationality) is instigated, Pilot Study 2 tests the effectiveness of an outrage-inducing video to be used in the studies with American samples.

Method

Participants and design. Sixty-one (52.5% female) American participants with a mean age of 35.28 years (SD = 10.65) completed an on-line questionnaire. Participants were sampled from Amazon's Mechanical Turk; a site for web-based data collection that functions through a participant compensation system. Research suggests that MTurk offers a more diverse participant pool than other sampling methods, but retains a good to excellent quality of data which exceed the psychometric standards associated with published research (Buhrmester, Kawng, & Gosling, 2011). Participants were randomly assigned to condition in a one factor between-participants design with two levels (Condition: Outrage vs. Control).

Procedure. All participants provided informed consent. Participants viewed either the outrage-inducing or control video. They then responded to the emotion measures. Participants received an (on-line) debrief upon completion.

Experimental manipulations. The control video from Pilot Study 1 was employed (2.42-minutes in length). The new outrage-inducing video was a 2.58-minute documentary-style video, which demonstrated how a British multinational company dodged taxes in

Zambia, and how this negatively affected the people in Zambia (a small-business owner in Zambia pays more a year in tax than the multinational company). Thus, this video clip shows violations of justice, fairness, and equality which adversely affected others (see *Appendix A*).

Measures. The same moral outrage measure was used as in Pilot Study 1 (see *Appendix B*). Participants responded on a 7-point scale from 1 (*not at all*) to 7 (*very much*). All items were presented on the same page and the order of items was randomised.

Results and Discussion

Analyses of variance were conducted to test the effect of Condition (Outrage vs. control) on feelings of moral outrage. Results revealed a significant effect of Condition, F(1, 59) = 163.51, p < .001, $\eta^2 = .74$. Participants who viewed the outrage-inducing video scored higher on feelings of moral outrage (M = 5.02, SE = 0.18) than those who viewed the control video (M = 1.38, SE = 0.22).

Pilot Study 2 showed that the alternative outrage-inducing video (for use with American samples) also increased feelings of moral outrage (vs. the control condition). Thus, the outrage-inducing video is deemed suitable for use in this thesis.

Pilot Study 3

Pilot Studies 1 and 2 demonstrated the effects of elevation-inducing, outrage-inducing, and control videos on feelings of moral elevation and moral outrage. Pilot Study 3 extends these findings by testing whether these effects are moderated by political orientation.

According to moral foundation theory (Graham et al., 2009) liberals construct their moral system primarily upon two moral foundations – Harm/care (e.g., whether or not someone is harmed) and Fairness/reciprocity (e.g., whether or not people are treated differently than others). In contrast, conservatives construct moral systems more evenly upon five moral foundations – Harm/care, Fairness/reciprocity, Ingroup/loyalty (e.g., whether or not someone does something to betray his or her group), Authority/respect (e.g., whether or

not the people involved are of the same rank or status), and Purity/sanctity (e.g., whether or not someone does something disgusting). Moreover, liberals are more concerned with Harm/care and Fairness/reciprocity compared to conservatives and conservatives are more concerned with Ingroup/loyalty, Authority/respect, and Purity/sanctity compared to liberals.

The current chapter examines emotional reactions to moral (i.e., virtues) and immoral (i.e., transgressions) acts. Based on moral foundation theory, it seems plausible that political orientation may moderate the effects of witnessing moral and immoral acts on emotional responses. Specifically, it is hypothesised that political orientation and the emotion-inducing stimulus (Elevation vs. Outrage) interact to predict feelings of moral outrage. Specifically, as liberals prioritise Harm/care and Fairness/reciprocity foundations to a greater extent than conservatives, they should feel more moral outrage when witnessing immoral acts that show inequality, injustice, and unfairness. It is unclear whether morally virtuous acts (i.e., extreme acts of kindness and/or forgiveness) fall into the Harm/care domain or the Purity/sanctity domain. Being kind to others involves caring about other's feelings and needs (i.e., the Harm/care domain). Nevertheless, in one of Graham et al.'s studies, an item in the Purity/sanctity domain was: "Whether or not someone acted in a virtuous or uplifting way" (Graham et al., 2009, Study 2). However, items for the Purity/sanctity domain across the other studies largely addressed "disgusting" or "revolting" behaviours. It is plausible that morally virtuous acts span these two domains. As liberals prioritise Harm/care and conservatives prioritise Purity/sanctity, political orientation should not (or not strongly) affect the influence of witnessing moral acts on feelings of moral elevation.

Testing the moderating role of political orientation in this pilot study will uncover whether it should be employed as a factor or covariate in this thesis.

Method

Participants and design. Fifty-nine (27.1% female) American participants with a mean age of 31.56 years (SD = 9.78) completed an on-line questionnaire. Participants were sampled from Amazon's Mechanical Turk. Participants were randomly assigned to condition in a one factor between-participants design with two levels (Condition: Elevation vs. Outrage).

Procedure. All participants provided informed consent. Participants viewed either the elevation-inducing or outrage-inducing video. Participants then responded to the emotion and political orientation measures. Participants received (on-line) debrief upon completion.

Experimental manipulations. The elevation-inducing video from Pilot Study 1 was employed (2.14-minutes in length). As the sample was American, the outrage-inducing video from Pilot Study 2 was employed (2.58-minutes in length) (see *Appendix A*).

Measures. Participants responded to all measures on a 7-point scale from 1 (*not at all*) to 7 (*very much*). All elevation and outrage items were presented on the same page and the order of items was randomised. Political orientation was measured along with demographic variables at the end of the study.

Moral elevation and outrage. The same measures for moral elevation and moral outrage were used as in Pilot Studies 1 and 2 (see *Appendix B*).

Political orientation. Political orientation was measured by asking participants to rate their political beliefs from 1 (*strongly liberal*) to 7 (*strongly conservative*) (Graham et al., 2012).

Results and Discussion

Emotions. Analyses of variance were conducted to test the effects of Condition (Elevation vs. Outrage) on feelings of moral elevation and moral outrage. Results revealed a

significant effect of Condition on feelings of moral elevation F(1, 57) = 43.15, p < .001, $\eta^2 = .43$ and on feelings of moral outrage F(1, 57) = 50.16, p < .001, $\eta^2 = .47$.

Specifically, participants who viewed the elevation-inducing video scored higher on feelings of moral elevation (M = 5.24, SE = 0.26) than participants who viewed the outrage-inducing video (M = 2.88, SE = 0.24). Similarly, participants who viewed the outrage-inducing video scored higher on feelings of moral outrage (M = 4.92, SE = 0.27) than participants who viewed the elevation-inducing video (M = 2.10, SE = 0.29). These findings are in line with Pilot Studies 1 and 2.

Moderation analyses. Moderation analyses (Hayes' 2013 Process macro model 1 with 5000 bootstraps) were conducted to test whether political orientation moderated the effect of Condition (Elevation vs. Outrage) on feelings of moral elevation and on feelings of moral outrage. Results showed that Condition and political orientation did not interact to predict feelings of moral elevation (B = 0.12, SE = 0.22, t = 0.56, p = .576). Instead, in line with the ANOVA results, there was a main effect of Condition (B = -2.83, SE = 0.86, t = -3.28, p = .002). Similarly, results showed that Condition and political orientation did not interact to predict feelings of moral outrage (B = 0.09, SE = 0.24, t = 0.40, p = .694). Instead, in line with the ANOVA results, there was a main effect of Condition (B = 2.61, SE = 0.94, t = 2.79, p = .007).

Pilot Study 3 showed that political orientation did not moderate the effects of the outrage-inducing and elevation-inducing stimuli on ratings of moral outrage and moral elevation, respectively. While the moral outrage finding is contrary to the hypothesis, it can also be viewed as in line with moral foundation theory. Specifically, while liberals prioritise Harm/care more strongly than conservatives, conservatives prioritise the Harm/care foundation equally strongly as the four remaining moral foundations. Therefore, liberals and conservatives should both feel morally outraged when witnessing an

inequality/injustice/unfairness. Political orientation will therefore not be examined as a factor or covariate in this thesis.

A-Priori Power Analyses

A-priori power analyses were conducted to establish the sample sizes required for the studies reported in this thesis. Across Pilot Studies 1 to 3 the effect sizes for the effects of the emotion-inducing stimuli on reported emotions were very large ($\eta^2 > .43$). Power analyses showed that 20 to 25 participants per cell would be sufficient to detect medium to large effects.

Conclusion

This chapter presented the pilot studies conducted for this thesis. These were necessary to establish the effectiveness of emotion-inducing stimuli for inducing feelings of moral elevation and moral outrage. The emotion-inducing videos were deemed suitable as they effectively increased the relevant emotions. That is, the outrage-inducing stimuli increased feelings of moral outrage but not feelings of moral elevation and the elevation-inducing stimulus increased feelings of moral elevation but not feelings of moral outrage. Moreover, the elevation-inducing and outrage-inducing stimuli increased feelings of moral elevation and moral outrage (respectively) regardless of participants' political orientation. As expected, the control video did not promote feelings of moral elevation or moral outrage, and is therefore deemed suitable for use in this thesis. The studies in this thesis will employ these stimuli to test effects of moral elevation and moral outrage on a range of measures.

Chapter 4

Testing the Prosocial Effectiveness of the Prototypical Moral Emotions: Elevation Increases

Benevolence Intentions and Outrage Increases Justice Intentions

How can we overcome apathy and instigate a desire to help others? This chapter tests and compares the prosocial effects of two of the most prototypical emotions on a range of prosocial intentions. Although moral elevation and moral outrage derive from opposing appraisals, separate strands of research show that they both instigate a desire to help others. The current research tests the appraisal tendency framework to explore whether moral elevation and moral outrage increase prosociality across moral domains or whether their prosocial effects are domain specific. Results of Study 1 showed that moral elevation, but not moral outrage, (marginally) increased benevolent helping intentions (i.e., benevolence domain). Study 2 showed that moral outrage, but not moral elevation, increased prosocial political action intentions (i.e., justice domain). The findings show that although moral elevation and moral outrage both inspire a desire to help others, they affect distinct types of prosocial intentions, offering support for the appraisal tendency framework. Applied and theoretical implications are discussed. ³

³ Study 2 reported in this chapter forms part of the published manuscript, Van de Vyver, J., & Abrams, D. (2015) Testing the prosocial effectiveness of the prototypical moral emotions: Elevation increases benevolent behaviors and outrage increases justice behaviors. *Journal of Experimental Social Psychology*, 58, 23-33. doi:10.1016/j.jesp.2014.12.005

High levels of poverty and inequality persist, with 22 percent of the developing world's population still living in extreme poverty (The World Bank, 2012). Yet, many people remain as bystanders to these inequalities (Singer, 2009). This global wealth anomaly highlights the need for research to understand how we can mobilise people to take action to help others less fortunate than themselves. The current research contributes to this issue by testing the prosocial effects of two particularly powerful moral emotions – moral elevation and moral outrage (Haidt, 2003; see also *Chapter 1*). Once their effects are better understood they could inform real-world interventions aimed at fostering greater prosocial action.

Increasingly, research demonstrates that moral emotions can mobilise people to help others (i.e., prosociality; Tangney et al., 2007). Moral emotions are "those that are linked to the interests or welfare either of society as a whole or at least of persons other than the judge or agent" (Haidt, 2003, p. 276). For example, disgust, moral outrage, moral elevation, admiration, sympathy, and gratitude can all be considered as moral emotions (Haidt, 2003). The current chapter will test the prosocial effects of two moral emotions in particular – moral elevation and moral outrage.

Moral Elevation and Moral Outrage

Moral elevation is felt when witnessing another person perform a virtuous act that helps another person or benefits society (Algoe & Haidt, 2009). Moral elevation motivates people to emulate the exemplar, become a better person oneself, and help others (Algoe & Haidt, 2009; Haidt, 2003). Evidence from (the relatively few) studies on moral elevation suggests that it inspires helping. For example, participants in moral elevation conditions (vs. control conditions) are more likely to volunteer for a subsequent study and spend longer helping the experimenter with a tedious task (Schnall et al., 2010). Moral elevation attenuates the negative effect of social dominance orientation on donations (Freeman et al., 2009). Moral elevation is related to long-term volunteering in college students (Cox, 2010).

Individual differences in moral elevation predict caring, empathy, and love toward others, as well as valuing benevolence (Diessner et al., 2013). Thus, research shows clear evidence for the notion that moral elevation increases prosocial responses. Given this prosocial potential, moral elevation warrants further research in order to develop a more detailed theoretical understanding of its effects, and therefore its applied use.

Moral outrage is a negative emotion and is felt when witnessing another person transgress a moral standard (usually a moral standard of justice, fairness, or equality) that results in harm against another person or group of people (Thomas et al., 2009). Research shows that moral outrage increases a range of prosocial intentions and behaviours. For example, Montada and Schneider (1989) showed that, following exposure to stories of poverty, moral outrage rather than guilt or negative affect predicted prosocial intentions including donating money and participating in a demonstration. Thomas and McGarty (2009) found that in opinion-based groups, inducing a moral outrage norm increased commitment to the "water for life" campaign (e.g., attending a fundraiser). Wakslak and colleagues (2007) found that moral outrage mediated the relationship between system justification, which has been widely implicated in helping behaviours, and intentions to support community programs (e.g., donating money, volunteering) and support for the redistribution of resources. Thus, while it is a negative emotion, moral outrage has positive effects and encourages people to help others. Given this prosocial potential, moral outrage also warrants further research in order to develop a more detailed theoretical understanding of its effects, and therefore its applied use.

While research shows that moral elevation and moral outrage increase prosociality, less is known about the types of prosocial intentions and behaviours that these emotions induce. Specifically, it is unclear whether moral elevation and moral outrage motivate distinctive types of prosociality, or whether they motivate a general desire to be prosocial,

and therefore promote any type of prosocial intention and/or behaviour. For example, while moral elevation and moral outrage are highly distinctive emotions (i.e., their appraisals differ, they have a different valence), evidence shows that they have convergent effects on prosociality. An important question for research is whether elevation and outrage influence similar types of prosociality (consistent with their separate research strands in the literature) or whether their effects are more specific and distinctive (consistent with the appraisal tendency framework; Horberg et al., 2011). This can only be tested if the prosocial effects of moral elevation and moral outrage are compared in the same research framework. This will form the focus of the current chapter.

The Appraisal Tendency Framework

As discussed in more detail in *Chapter 2*, research on the appraisal tendency framework (ATF) suggests that distinct emotions promote specific kinds of judgments and decisions as a function of their unique and distinctive cognitive appraisals (cf. Horberg et al., 2011; Lerner & Keltner, 2000). In applying the appraisal tendency framework to moral emotions in particular Horberg and colleagues (2011) proposed that, during the emotional state, each emotion's moral appraisal theme remains salient and affects subsequent moral judgments, intentions, and behaviours by prioritising specific sociomoral concerns (or moral domains) that are semantically related to the emotion's moral appraisal theme. For example, disgust, anger, and contempt derive from the distinct moral appraisal themes of purity, justice, and community roles respectively (Rozin et al., 1999). Therefore, according to the ATF, disgust should influence moral judgments (or intentions) when purity concerns are salient, anger should influence moral judgments (or intentions) when justice concerns are salient, and contempt should influence moral judgments (or intentions) when community role concerns are salient. Moral elevation's moral appraisal theme is benevolence/virtue, therefore

moral elevation should influence moral judgments (or intentions) when benevolence/virtue concerns are salient (see Horberg et al., 2011).

Some empirical evidence exists to support the appraisal tendency framework. For example, research shows that anger, guilt, and shame predict distinct types of prosocial intentions (Iyer et al., 2007; Pagano & Huo, 2007). When assessing the relationship between these emotions and participants' responses to the invasion of Iraq, researchers found that anger predicted intentions to support confrontation of those responsible, compensation to Iraq, and withdrawal from Iraq. Shame predicted intentions to support withdrawal from Iraq (Iyer et al., 2007). Guilt predicted reparative actions (Pagano & Huo, 2007). Although these studies did not measure appraisals, their effects are in line with the appraisal tendency framework. The appraisal theme surrounding anger is that a person (or group) has transgressed some sort of societal standard (Frijda, 1986). Thus, anger should motivate action to undo the transgression or its effects. The appraisal theme surrounding guilt is that a person (or their ingroup) is responsible for specific negative actions (Lickel, Schmader, Curtis, Scarnier, & Ames, 2005). Thus, guilt should motivate action to undo the harm caused. The appraisal theme surrounding shame is similar to guilt however, while guilt focuses on the behaviour ("I have done a bad thing"), shame focuses on the person's character ("I am a bad person") (Niedenthal et al., 1994). Thus, shame should motivate avoidant behaviours to hide one's character. These studies provide some indirect support for the appraisal tendency framework (see *Chapter 2* for a more detailed review).

While research has shown that emotions (including moral elevation and moral outrage) have nuanced effects on moral outcomes (Dasgupta et al., 2009; DeSteno et al., 2004; Siegel et al., 2014; see Chapter 2), no research has directly examined the moral appraisal themes of moral elevation and moral outrage, or how moral appraisal themes relate to emotional states and subsequent judgments and behaviours. Thus, no research has directly

applied the ATF to test, compare, and understand the prosocial outcomes of moral elevation and moral outrage. The current chapter addresses this gap in the literature and tests whether the effects of moral elevation and moral outrage on prosocial intentions are domain specific, or whether moral elevation and moral outrage increase prosociality across moral domains.

The Current Research

Overview

Lerner and Keltner (2000, p. 478) suggest that research on the ATF "should compare emotions that are highly differentiated in their appraisal themes on judgments/choices that relate to that appraisal theme". Moral elevation and moral outrage differ substantially in terms of their core appraisals. From their definitions, we infer that moral outrage and moral elevation should be underpinned by *opposing* appraisals. Specifically, moral elevation derives from an appraisal of a moral virtue (i.e., upholding a moral standard). In contrast, moral outrage derives from an appraisal of a moral transgression (i.e., violating a moral standard). Moreover, while moral elevation and moral outrage derive from opposing appraisals, the empirical evidence to date documents convergent effects of both emotions on similar prosocial outcomes (e.g., charitable donations, volunteering). Thus, comparing moral elevation and moral outrage allows a direct test of whether the two emotions influence prosocial behaviours across the sociomoral domains of justice and benevolence, or whether their effects are domain specific (cf. Horberg et al., 2011).

To identify, for the first time, how moral elevation and moral outrage may act in concert to affect the same or distinct prosocial behaviours, the current chapter reports two studies testing the joint and independent effects of these two emotions on different types of prosocial intentions. Comparing their effects in an experimental design will enable us to understand whether they increase prosocial intentions generally (across moral domains), or whether their effects are more nuanced and depend on the salience of the relevant sociomoral

concern (domain specific). Specifically, Study 1 examines benevolence-relevant intentions in the form of benevolent helping intentions. Study 2 examines justice-relevant intentions in the form of prosocial political action intentions following an inequality.

Hypotheses

Based on the domain-specific predictions from ATF, we hypothesise that moral elevation and moral outrage have domain specific effects on prosocial intentions. Moral elevation should increase prosocial intentions most when the intention measure is relevant to benevolence concerns. Moral outrage should increase prosocial intentions most when the intention measure is relevant to justice concerns.

In Study 1 moral elevation, but not moral outrage, should increase prosociality (benevolent helping intentions) and this effect should be mediated by elevation appraisals and feelings of elevation. In Study 2, moral outrage, but not moral elevation, should increase prosociality (prosocial political action intentions) and this effect should be mediated by outrage appraisals and feelings of outrage.

Alternatively, a domain general hypothesis would hold that moral elevation and moral outrage should positively affect prosocial intentions across all sociomoral domains. Thus, the induction of either emotion should be sufficient to increase benevolent helping intentions (Study 1) and prosocial political action intentions (Study 2).

Dual Exposure

It is very common in everyday life to feel multiple emotions, whether at once or close together in time. Thus, extending the typical paradigms that have instigated a single emotional state to one in which we instigate two emotional states is an essential step for advancing our understanding of the processes, components, and outcomes of different emotional states.

In the current research we induce moral elevation, moral outrage, both moral elevation and moral outrage (dual exposure), or neither, and give participants an opportunity to act prosocially in one domain (in different studies, benevolence or justice). Dual exposure enables us to investigate the flexibility or rigidity of the appraisal—intention link. We are able to test the ATF further and explore what happens to the intentional outcome when two emotions with opposing appraisals are experienced concurrently. According to ATF, appraisals following dual exposure should make both justice and benevolence concerns salient. One possibility is that either concern is sufficient to increase prosocial intentions because people may respond flexibly, taking any domain-relevant opportunity that presents itself. Thus, following dual exposure, prosocial intentions would be high regardless of whether the opportunity is relevant to justice or benevolence concerns. Alternatively, the two appraisals might interfere with one another, attenuating the impact of either on subsequent prosocial intentions.

Study 1

Method

Participants and design. One hundred and three (86.4% female) British participants with a mean age of 20.13 years (SD = 4.79) completed an on-line questionnaire. Sample sizes were determined on the basis of providing sufficient power (.8) to detect a medium to large effect size. Participants were randomly assigned to condition in a 2 (Elevation: viewed vs. not viewed) X 2 (Outrage: viewed vs. not viewed) between-participants design. Data were collected using an on-line questionnaire (via a platform called Qualtrics). Participants were recruited via the psychology department's research participation scheme at the University of Kent and took part in exchange for course credit.

Procedure. All participants provided informed consent. Participants viewed either one or two videos (elevation, outrage, both elevation and outrage, or control). When

participants viewed both the elevation-inducing and outrage-inducing videos, the videos were viewed consecutively, and the order was counter-balanced. Order did not affect feelings of moral outrage, F(1, 23) = 0.90, p = .353, $\eta^2 = .04$, or feelings of moral elevation, F(1, 23) = 0.22, p = .642, $\eta^2 = .01$. Participants then responded to the emotion, appraisal, and prosocial measures. Participants received (written) debrief and course credit upon completion of the study.

Experimental manipulations. The elevation-inducing (2.14-minutes in length), outrage-inducing (2.42-minutes in length), and control (2.42-minutes in length) videos as described in Pilot Study 1 were employed (see *Chapter 3* and *Appendix A*).

Measures. Measures were presented to participants in the following order: first appraisals, then emotions, and then benevolent helping intentions (each on a separate page). Presentation of items within each of these three constructs was randomised.

Appraisals. Moral elevation arises from an appraisal of a moral virtue whereas moral outrage arises from an appraisal of a moral transgression (cf. Haidt, 2003). These appraisals will be referred to as elevation appraisals (i.e., upholding a moral standard) and outrage appraisals (i.e., transgressing a moral standard). A four-item scale was devised to measure elevation and outrage appraisals. Specifically, elevation appraisals were measured by asking participants to rate their agreement with the following two items: "To what extent is there behaviour in the video clip which is well above the normal standards of behaviour?" and "To what extent did any aspects of the video clip reflect the way people should behave, ideally?" A mean score of these two items was computed to form the elevation appraisal measure. Outrage appraisals were measured by asking participants to rate their agreement with the following two items: "To what extent is there behaviour in the video clip which is well below the normal standards of behaviour?" and "To what extent did any aspects of the video clip reflect the way people shouldn't behave?" A mean score of these two items was computed to

form the outrage appraisal measure. Cronbach alphas were .75 and .68 for the elevation and the outrage appraisal dimensions, respectively. Participants responded on a 5-point scale from 1 (*not at all*) to 5 (*very much*) (see *Appendix C*).

Moral elevation and moral outrage. The same moral elevation and moral outrage measures as described in Pilot Study 1 were employed (see *Chapter 3* and *Appendix B*). Participants responded to the items on a 7-point scale from 1 (*didn't feel it at all*) to 7 (*felt it very strongly*).

Benevolent helping intentions. Benevolence is defined as "inclination or tendency to help or do good to others; charity" (Collins English Dictionary Online, 2013). Benevolence-relevant prosocial intentions were measured using Pavey and colleagues' (2011) prosocial intentions scale (Pavey, Greitemeyer, & Sparks, 2011). This scale asks participants to rate the extent to which they would intend to: "give money to charity", "donate goods or clothes to a charity", "Go out of their way to help a friend", and "go out of their way to help a stranger in need" over the next 6 weeks. Participants responded on a 7-point scale from 1 (not at all) to 7 (very much). A mean score of these four items was computed to form the benevolent helping intentions measure (see Appendix D).

Results and Discussion

Table 4.1 shows intercorrelations among variables, as well as their means and standard deviations. Data were analysed using 2 (Elevation: viewed vs. not viewed) X 2 (Outrage: viewed vs. not viewed) ANOVAs.

Table 4.1
Study 1: Means, Standard Deviations, Confidence Intervals, and Correlations among Key Variables

Mean (SD)	95% CI	2	3	4	5
4.50 (1.52)	[4.21, 4.80]	.11	.55***	33**	.38***
3.35 (1.42)	[3.07, 3.63]		003	.41***	.14
3.31 (1.21)	[3.07, 3.55]			40	.20*
2.70 (1.16)	[2.47, 2.92]				28**
4.99 (0.98)	[4.80, 5.18]				
	4.50 (1.52) 3.35 (1.42) 3.31 (1.21) 2.70 (1.16)	4.50 (1.52) [4.21, 4.80] 3.35 (1.42) [3.07, 3.63] 3.31 (1.21) [3.07, 3.55] 2.70 (1.16) [2.47, 2.92]	4.50 (1.52) [4.21, 4.80] .11 3.35 (1.42) [3.07, 3.63] 3.31 (1.21) [3.07, 3.55] 2.70 (1.16) [2.47, 2.92]	4.50 (1.52) [4.21, 4.80] .11 .55*** 3.35 (1.42) [3.07, 3.63] 003 3.31 (1.21) [3.07, 3.55] 2.70 (1.16) [2.47, 2.92]	4.50 (1.52) [4.21, 4.80] .11 .55*** 33** 3.35 (1.42) [3.07, 3.63] 003 .41*** 3.31 (1.21) [3.07, 3.55] 40 2.70 (1.16) [2.47, 2.92]

Note. N = 103. CI = confidence interval. All measures were scored on a 7-point scale ($1 = not \ at \ all$, $7 = very \ strongly$) except for appraisals which were scored on a 5-point scale ($1 = not \ at \ all$, $5 = very \ much$).

^{*}p < .05. **p < .01. ***p < .001.

Appraisals and emotions. There was a significant main effect of Elevation.

Participants who viewed the elevation-inducing video scored higher on elevation appraisals, F(1, 98) = 87.78, p < .001, $\eta^2 = .47$ (M = 4.10, SE = 0.12) and on feelings of elevation, F(1, 98) = 46.23, p < .001, $\eta^2 = .32$ (M = 5.29, SE = 0.17) than participants who had not viewed this video ($M_{\text{appraisals}} = 2.45$, SE = 0.13; $M_{\text{elevation}} = 3.63$, SE = 0.18).

There was a significant main effect of Outrage. Participants who viewed the outrage-inducing video scored higher on outrage appraisals, F(1, 98) = 21.91, p < .001, $\eta^2 = .18$ (M = 3.19, SE = 0.14) and on feelings of outrage, F(1, 98) = 15.98, p < .001, $\eta^2 = .14$ (M = 3.88, SE = 0.19) than participants who had not viewed this video ($M_{appraisals} = 2.26$, SE = 0.14; $M_{outrage} = 2.85$, SE = 0.18).

There was also a significant main effect of Elevation on outrage appraisals, F(1, 98) = 14.24, p < .001, $\eta^2 = .13$, whereby outrage appraisals were lower when participants had (vs. had not) watched the elevation-inducing video. There was a significant main effect of Outrage on feelings of elevation, F(1, 98) = 9.17, p = .003, $\eta^2 = .09$, whereby feelings of elevation were lower when participants had (vs. had not) watched the outrage-inducing video. Finally, there was a significant Elevation X Outrage interaction on feelings of outrage, F(1, 98) = 6.35, p = .013, $\eta^2 = .06$. This interaction occurred because feelings of outrage reduced in the dual condition (M = 3.47, SE = 0.26) relative to the outrage-only condition (M = 4.29, SE = 0.27, p = .029). There were no other significant main or interaction effects (all p's > .330). See Table 4.2 for all cell-specific descriptives.

Benevolent helping intentions. There was only a marginal main effect of Elevation on benevolent helping intentions, F(1, 98) = 3.32, p = .071, $\eta^2 = .03$. Participants who had viewed the elevation-inducing video were marginally more willing to help others (M = 5.15, SE = 0.13) than those who had not viewed this video (M = 4.80, SE = 0.14). The main effect of Outrage, F(1, 98) = 2.22, p = .140, $\eta^2 = .02$ and the Elevation X Outrage interaction, F(1, 98) = 0.02

98) < 0.001, p = .998, η^2 < .001, were non-significant. See Table 4.2 for all cell-specific descriptives.

Table 4.2
Study 1: Means, Standard Errors, and Cell Sizes for each Condition

	Condition						
	Elevation video	Outrage video	Elevation and	Control video			
		outrage video (dual)					
Cell sizes	N = 28	<i>N</i> = 24	<i>N</i> = 26	N = 25			
1. Elevation	4.20 (0.17)	2.52 (0.18)	4.00 (0.18)	2.30 (0.18)			
appraisals							
2. Outrage	1.95 (0.19)	3.63 (0.20)	2.76 (0.20)	2.58 (0.20)			
appraisals							
3. Feelings of	5.74 (0.23)	3.34 (0.25)	4.83 (0.25)	3.91 (0.25)			
elevation							
4. Feelings of	3.09 (0.25)	4.29 (0.27)	3.47 (0.26)	2.61 (0.26)			
outrage							
5. Benevolence	5.29 (0.18)	4.66 (0.20)	5.01 (0.19)	4.94 (0.19)			
intentions							

Note. Table depicts means. Standard errors are provided in brackets. All measures were scored on a 7-point scale ($1 = not \ at \ all$, $7 = very \ strongly$) except for appraisals which were scored on a 5-point scale ($1 = not \ at \ all$, $5 = very \ much$).

Mediation analyses. Sequential mediation analyses (using Hayes' 2013 Process macro model 6) were conducted to test whether elevation appraisals and then feelings of elevation sequentially mediated the marginally significant effect of the elevation-inducing video on benevolent helping intentions. Due to the 2 X 2 design and as we were only interested in the mediating role of the elevation main effect, the outrage-inducing video was entered as a covariate. Results showed that elevation appraisals and then feelings of elevation significantly and sequentially mediated the marginal effect of the elevation-inducing video on benevolent helping intentions, B = 0.15, SE = 0.07, 95CI 0.05/0.36 (indirect effect). The marginal total effect of the elevation-inducing video on benevolence intentions (B = 0.35, SE = 0.19, t = 1.83, p = .070) was reduced to non-significance in the direct model (B = -0.07, SE = 0.26, t = -0.28, t = 0.778) (see Figure 4.1 for path coefficients).

To summarise, Study 1 offers partial support for the appraisal tendency framework (Horberg et al., 2011). Moral elevation, but not moral outrage, marginally increased benevolent helping intentions and this effect was sequentially mediated by elevation appraisals and feelings of elevation.

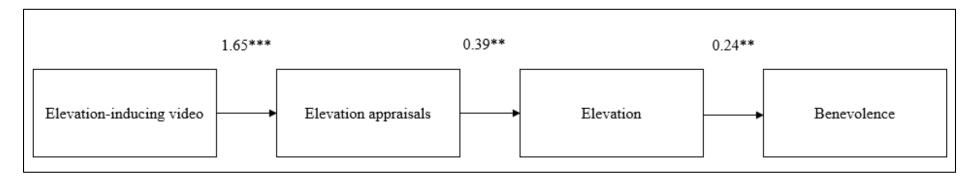


Figure 4.1. Study 1: Unstandardised B coefficients for sequential mediation analyses using Process macro (Hayes, 2013).

Note. **p < .01. ***p < .001.

Study 2

Method

Participants and design. One hundred and sixty-four (51.8% female) American participants with a mean age of 35.75 years (SD = 12.46) completed an on-line questionnaire (via a platform called Qualtrics). Sample sizes were determined on the basis of providing sufficient power (.8) to detect a medium to large effect size. Participants were sampled from Amazon's Mechanical Turk; a site for web-based data collection that functions through a participant compensation system. Participants were randomly assigned to condition in a 2 (Elevation: viewed vs. not viewed) X 2 (Outrage: viewed vs. not viewed) between-participants design. Two participants had seen the video before so were excluded from the analyses (leaving a sample of 162).

Procedure. All participants provided informed consent. Participants viewed either one or two videos (elevation, outrage, both elevation and outrage, or control). Participants then responded to the appraisal, emotion, and prosocial measures. Participants received (written) debrief and compensation upon completion of the study.

Experimental manipulations. The elevation (2.14-minutes in length) and control (2.42-minutes in length) videos as described in Pilot Study 1 were employed (see *Chapter 3* and *Appendix A*). As the sample was American (rather than British), the outrage-inducing (2.58-minutes in length) video as described in Pilot Study 2 was employed (see *Chapter 3* and *Appendix A*).

Measures. Participants responded to the measures in the following order: first appraisals, then emotions, and then prosocial political action intentions (each on a separate page). Presentation of items within each of these three constructs was randomised. Appraisals were measured using the same items as described in Study 1. Moral elevation and moral outrage were measured using the same items as described in Pilot Study 1 (see *Chapter 3* and

Appendix B and C). Participants responded to the appraisals on a 5-point scale from 1 (not at all) to 5 (very much), and to the emotions on a 7-point scale from 1 (didn't feel it at all) to 7 (felt it very strongly).

Prosocial political action intentions. This measure was adapted from Iyer et al. (2007). It is considered a justice-relevant measure as it assesses responses to inequality. Participants were told, "Recent data from Oxfam shows that 72 million children worldwide are out of school and that 771 million adults worldwide are illiterate. Some Americans are taking action to express their opinions about what should be done to improve access to education worldwide". Participants were told about three groups who support distinct strategies: (1) support ("one group has been formed to call for the U.S. to provide more support and help to improve access to education (e.g., by funding the development of school buildings, books, teacher's wages, and children's uniforms)", (2) challenge ("other Americans have formed a group to identify those responsible for the lack of access to education worldwide and to directly challenge them to fix the problems they have created"), and (3) avoidance ("other Americans have formed a group to advocate for the U.S. to not get involved in this issue of access to education worldwide"). Participants were asked how willing they would be to get involved with each group in eight different ways: "join the group's e-mail list", "volunteer with this group", "sign a petition", "attend a rally", "recruit others to become involved with this group", "vote for a candidate who agrees with this group", "wear a badge supporting this group", and "go to a meeting of local representatives of this group" (see also Iyer et al., 2007). Cronbach's alphas were .92 for the support and challenge items, and .97 for the avoidance items. Participants responded on a 5-point scale from 1 (not at all willing) to 5 (very willing). Participants responded to this measure in the following order: the support group first, then the challenge group, and then the avoidance

group (each on a separate page). Presentation of items within each of the groups (e.g., sign a petition) was randomised (see *Appendix E*).

Behavioural engagement with prosocial group. In order to measure behavioural engagement participants were asked: "If you would like more information about one or more of the groups please indicate the group you would like information about". Participants could then tick one or more of the three groups (see *Appendix E*).

Results and Discussion

Table 4.3 shows the correlations among variables, as well as their means and standard deviations. Data were analysed using 2 (Elevation: viewed vs. not viewed) X 2 (Outrage: viewed vs. not viewed) ANOVAs.

Emotions and appraisals. There was a significant main effect of Elevation. Participants who had viewed the elevation-inducing video scored significantly higher on elevation appraisals, F(1, 158) = 115.35, p < .001, $\eta^2 = .42$ (M = 4.27, SE = 0.10) and on feelings of elevation, F(1, 158) = 61.30, p < .001, $\eta^2 = .28$ (M = 5.23, SE = 0.17), than those who had not viewed the elevation-inducing video ($M_{appraisals} = 2.79$, SE = 0.10; $M_{elevation} = 3.38$, SE = 0.16).

There was also a significant main effect of Outrage. Participants who had viewed the outrage-inducing video scored significantly higher on outrage appraisals, F(1, 158) = 126.03, p < .001, $\eta^2 = .44$ (M = 3.93, SE = 0.11), and on feelings of outrage, F(1, 158) = 167.06, p < .001, $\eta^2 = .51$ (M = 5.08, SE = 0.16) than those who had not viewed the outrage-inducing video ($M_{appraisals} = 2.13$, SE = 0.12; $M_{outrage} = 2.01$, SE = 0.17).

There was also a significant main effect of Outrage on elevation appraisals, F(1, 158) = 7.27, p = .008, $\eta^2 = .04$, whereby elevation appraisals were lower when participants had (vs. had not) watched the outrage-inducing video. There was a significant main effect of Outrage on feelings of elevation, F(1, 158) = 19.19, p < .001, $\eta^2 = .11$, whereby feelings of elevation

were lower when participants had (vs. had not) watched the outrage-inducing video. There were no other significant main or interaction effects (all p's > .180). See Table 4.4 for all cell-specific descriptives.

Table 4.3

Study 2: Means, Standard Deviations, Confidence Intervals, and Correlations among Key Variables

Mean (SD)	95% CI	2	3	4	5	6	7
4.45 (1.69)	[4.19, 4.71]	09	.67***	26**	.20**	.15	01
3.63 (2.14)	[3.30, 3.96]		01	.68***	.40***	.42***	.08
3.49 (1.15)	[3.31, 3.67]			06	.05	.10	.07
3.08 (1.35)	[2.87, 3.29]				.05	.10	.07
3.27 (0.08)	[3.11, 3.44]					.72***	06
3.20 (0.08)	[3.04, 3.36]						.11
1.75 (0.08)	[1.60, 1.91]						
	4.45 (1.69) 3.63 (2.14) 3.49 (1.15) 3.08 (1.35) 3.27 (0.08) 3.20 (0.08)	4.45 (1.69) [4.19, 4.71] 3.63 (2.14) [3.30, 3.96] 3.49 (1.15) [3.31, 3.67] 3.08 (1.35) [2.87, 3.29] 3.27 (0.08) [3.11, 3.44] 3.20 (0.08) [3.04, 3.36]	4.45 (1.69) [4.19, 4.71] 09 3.63 (2.14) [3.30, 3.96] 3.49 (1.15) [3.31, 3.67] 3.08 (1.35) [2.87, 3.29] 3.27 (0.08) [3.11, 3.44] 3.20 (0.08) [3.04, 3.36]	4.45 (1.69) [4.19, 4.71] 09 .67*** 3.63 (2.14) [3.30, 3.96] 01 3.49 (1.15) [3.31, 3.67] 3.08 (1.35) [2.87, 3.29] 3.27 (0.08) [3.11, 3.44] 3.20 (0.08) [3.04, 3.36]	4.45 (1.69) [4.19, 4.71] 09 .67*** 26** 3.63 (2.14) [3.30, 3.96] 01 .68*** 3.49 (1.15) [3.31, 3.67] 06 3.08 (1.35) [2.87, 3.29] 3.27 (0.08) [3.11, 3.44] 3.20 (0.08) [3.04, 3.36]	4.45 (1.69) [4.19, 4.71] 09 .67*** 26** .20** 3.63 (2.14) [3.30, 3.96] 01 .68*** .40*** 3.49 (1.15) [3.31, 3.67] 06 .05 3.08 (1.35) [2.87, 3.29] .05 3.27 (0.08) [3.11, 3.44] 3.20 (0.08) [3.04, 3.36]	4.45 (1.69) [4.19, 4.71] 09 .67*** 26** .20** .15 3.63 (2.14) [3.30, 3.96] 01 .68*** .40*** .42*** 3.49 (1.15) [3.31, 3.67] 06 .05 .10 3.08 (1.35) [2.87, 3.29] .05 .10 3.27 (0.08) [3.11, 3.44] .72*** 3.20 (0.08) [3.04, 3.36]

Note. N = 162. CI = confidence interval. The emotions were scored on a 7-point scale ($1 = not \ at \ all$, $7 = very \ much$). The appraisals and political action intentions were scored on a 5-point scale ($1 = not \ at \ all$, $5 = very \ much$).

^aT-tests showed that the correlations between outrage and support (t (161) = -5.44, p < .001) and outrage and challenge (t (161) = -5.52, p < .001) were significantly different to the correlations between elevation and support and elevation and challenge, respectively.

p < .01. *p < .001.

Table 4.4

Study 2: Means, Standard Errors, and Cell Sizes for each Condition

	Condition					
	Elevation video	Outrage video	Elevation and outrage videos (dual)	Control video		
Cell sizes	N = 39	N = 47	N = 39	N = 39		
1. Elevation appraisals	4.48 (0.14)	2.77 (0.13)	4.07 (0.14)	2.79 (0.14)		
2.Outrage appraisals	1.95 (0.16)	3.96 (0.15)	3.91 (0.16)	2.31 (0.16)		
3.Feelings of elevation	5.65 (0.24)	2.77 (0.22)	4.81 (0.24)	4.01 (0.24)		
4.Feelings of outrage	2.15 (0.24)	5.15 (0.22)	5.03 (0.24)	1.90 (0.24)		
5.Support intentions	3.11 (0.17)	3.55 (0.15)	3.39 (0.17)	3.07 (0.17)		
6.Challenge intentions	3.04 (0.16)	3.55 (0.15)	3.24 (0.16)	2.90 (0.16)		
7.Avoidance intentions	1.56 (0.16)	1.77 (0.15)	1.85 (0.16)	1.83 (0.16)		

Note. Table depicts means. Standard errors are provided in brackets. The emotions were scored on a 7-point scale ($1 = not \ at \ all$, $7 = very \ strongly$). The appraisals and political action intentions were scored on a 5-point scale ($1 = not \ at \ all$, $5 = very \ much$).

Prosocial political action intentions. There was a main effect of Outrage on support intentions, F(1, 158) = 4.25, p = .041, $\eta^2 = .03$ and on challenge intentions, F(1, 158) = 7.46, p = .007, $\eta^2 = .05$. Participants who had viewed the outrage-inducing video were significantly more likely to support a group that advocated victim-focused support (M = 3.44, SE = 0.12), and significantly more likely to support a group that advocated perpetrator-focused challenge (M = 3.40, SE = 0.11), than participants who had not viewed the outrage-inducing video ($M_{\text{support}} = 3.09$, SE = 0.12; $M_{\text{challenge}} = 2.97$, SE = 0.12). There was no effect of Elevation on support, F(1, 158) = 0.27, p = .869, $\eta^2 < .001$ or challenge intentions, F(1, 158) = 0.21, p = .651, $\eta^2 = .001$. There were also no significant interaction effects on support, F(1, 158) = 0.15, P = .703, P = .001 or challenge intentions, P = .170, P = .170

Behavioural engagement. Hierarchical loglinear analyses showed a marginally significant interaction between the outrage-inducing video and behavioural engagement with the challenge group, $\chi^2(1) = 3.15$, p = .076, whereby of the 62 participants who had requested further information, 38 had viewed the outrage-inducing video (61.29%) (see Figure 4.2). There were no other two or three-way interactions between the emotion-inducing videos and behavioural engagement (p's > .205).

Mediation analyses. Sequential mediation analyses (Hayes' 2013 Process macro model 6 was employed) were conducted to test whether outrage appraisals and then feelings of moral outrage sequentially mediated the effect of the outrage-inducing video on support intentions, challenge intentions, and behavioural engagement with the challenge group. Due to the 2 X 2 design and as we were only interested in the mediating role of the outrage main effect, the elevation-inducing video was entered as a covariate for all three mediation analyses. Results showed that outrage appraisals and then feelings of outrage significantly

and sequentially mediated the effect of the outrage-inducing video on support intentions, B = 0.37, SE = 0.10, 95CI 0.22/0.61 (indirect effect), on challenge intentions, B = 0.34, SE = 0.09, 95CI 0.20/0.56 (indirect effect), and on behavioural engagement with the challenge group, B = 0.61, SE = 0.21, 95CI 0.30/1.14 (indirect effect) (see Figure 4.3 for path coefficients).

The significant total effect of the outrage-inducing video on support intentions (B = 0.35, SE = 0.17, t = 2.09, p = .039) was reduced to non-significance in the direct model (B = -0.25, SE = 0.23, t = -1.09, p = .277). Similarly, the significant total effect of the outrage-inducing video on challenge intentions (B = 0.44, SE = 0.16, t = 2.79, p = .006) was reduced to non-significance in the direct model (B = -0.11, SE = 0.22, t = -.53, p = .598). The marginal effect of the outrage-inducing video on behavioural engagement with the challenge group (B = 0.58, SE = 0.33, Z = 1.76, p = .079) was reduced to non-significance in the direct model (B = -0.42, SE = 0.56, Z = -0.75, p = .455).

To summarise, Study 2 offers support for the appraisal tendency framework (Horberg et al., 2011). Moral outrage, but not moral elevation, increased justice-relevant prosocial intentions and behavioural engagement, and these effects were sequentially mediated by outrage appraisals and feelings of outrage.

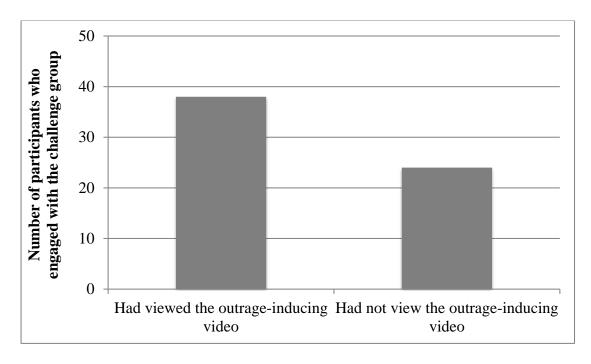


Figure 4.2. Study 2: Hierarchical loglinear analyses testing the interaction between the outrage-inducing video and behavioural engagement with the challenge group.

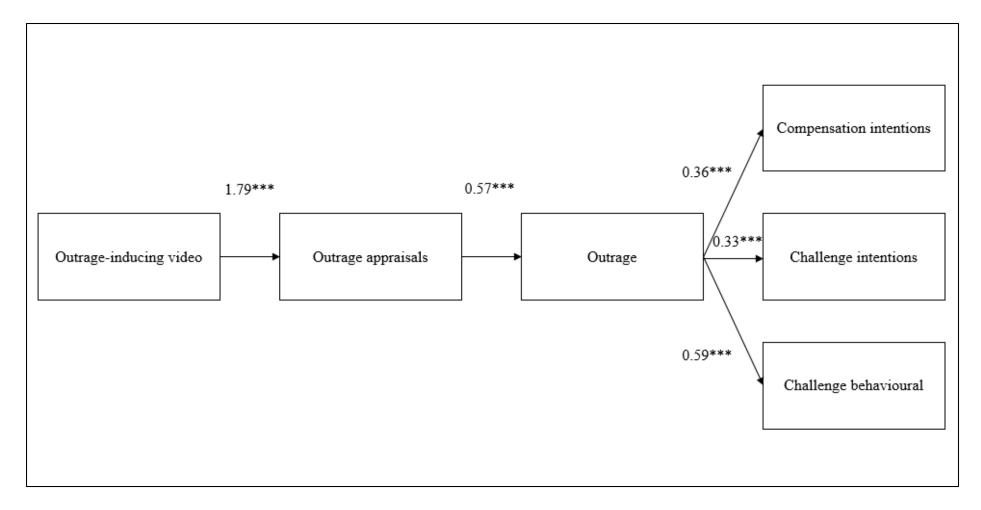


Figure 4.3. Study 2: Unstandardised B coefficients for sequential mediation analysis using Process macro (Hayes, 2013). Note. ***p < .001.

General Discussion

Two studies provided partial support for the domain-specificity predictions of the appraisal tendency framework (Horberg et al., 2011; Lerner & Keltner, 2000). Specifically, results showed that although moral elevation and moral outrage both instigated prosocial responses, the two emotions derived from distinctive appraisals and had distinctive effects on prosocial intentions.

Prior research indicates that the ATF can help to account for the influence of emotions (particularly disgust) on moral judgments (e.g., Tapias et al., 2007). The present research extends this substantially by selectively comparing the prosocial effects of two emotions (moral elevation and moral outrage) that are highly distinctive in terms of their appraisals but similar in terms of their action tendencies. Direct comparison of the effects of moral elevation and moral outrage enabled us to test whether they influence intentions across moral domains (e.g., justice, benevolence), or whether their effects are specific to a single moral domain.

Domain specificity suggests that moral elevation should predominantly increase benevolence-relevant intentions (Study 1) and that moral outrage should predominantly increase justice-relevant intentions (Study 2). Consistent with the ATF, Study 1 showed that in the benevolence domain, only moral elevation (marginally) increased prosocial intentions. Furthermore, this effect was sequentially mediated by elevation appraisals (i.e., upholding a moral standard) and then by feelings of moral elevation. Study 2 provided further support for the ATF by showing, in a justice-relevant domain, that only moral outrage increased prosocial political action intentions and behavioural engagement. These effects were sequentially mediated by outrage appraisals (transgressing a moral standard) and then by feelings of moral outrage. Thus, across two studies we showed that the effects of inducing moral elevation and moral outrage on prosociality are domain specific, and correspond to their appraisal themes.

The results from dual exposure provided further insight into ways that these contrasting appraisals may combine. In Studies 1 and 2, dual exposure did not inhibit the prosocial effects of the alternative emotion. This suggests flexibility in the appraisal-intention link, whereby both sociomoral concerns (benevolence and justice) can remain salient during the emotional states and can respond to whichever prosocial opportunity presents itself.

Theoretical and Applied Implications

Past research testing the ATF has focused on understanding the effects of discrete emotions on distinctive action tendencies (e.g., to harm others or to help others; Iyer et al., 2007; Lerner et al., 2004; Pagano & Huo, 2007). However, a dearth of research has tested whether effects of moral emotion are moral domain specific (e.g., benevolence, justice, or purity; Tapias et al., 2007). The present research substantially extends the ATF literature by testing whether moral elevation and moral outrage have domain specific effects on prosocial intentions. These two emotions offer a particularly effective test of the ATF because despite both having positive connotations for prosociality they imply distinct domain specific effects (benevolence vs. justice, respectively). The current studies showed that moral elevation and moral outrage increased domain-specific prosocial intentions associated with their distinct moral appraisal themes, thus providing support for the ATF.

As well as providing insights into how emotions affect individual-level prosocial intentions, the current research raises interesting new questions about how distinct emotions may impact upon interpersonal-level and society-level processes. Researchers have highlighted the importance of considering the social context of emotions (Parkinson et al., 2005; Parkinson & Manstead, 2015; Van Kleef, De Dreu, & Manstead, 2010). Specifically, when researching emotions it is important to also consider the *social* appraisals of emotions. Social appraisals imply that people take other people's emotions into account when appraising what is happening (Parkinson & Manstead, 2015). Therefore, it would be

interesting to explore whether the relationship between instances of moral virtues and feelings of elevation and the relationship between elevation and prosociality vary depending on other's reactions in the same context. Similarly, it would also be interesting to explore whether the relationship between instances of injustices and feelings of outrage and the relationship between outrage and prosociality vary depending on others' reactions in the same context. Some evidence already exists showing that anger is more likely to influence willingness to engage in social action when this emotional reaction is shared by other group members (Livingstone, Spears, Manstead, Bruder, & Shepherd, 2011). Future research should further explore the role that the social context can play in predicting people's emotional and behavioural responses to moral virtues and moral transgressions.

Emotions may also impact on society-level processes such as moralisation.

Moralisation is the process by which moral judgments become embedded into societal value systems, often through emotions. Research on moralisation shows some support for society-level domain specificity in the influence of emotions such as disgust on attitudes towards societal issues such as homosexuality (cf. Horberg et al., 2011). Therefore, it would be interesting to explore whether other emotions, in particular under-researched emotions such as moral elevation, can also instigate the moralisation of societal phenomena. For example, it is plausible that, across a community, the presence of selfless acts may generate shared feelings of moral elevation that create new moral standards of benevolence (rather than of justice). Similarly, it is plausible that, across a community, exposure to stories of injustices or inequalities may generate shared feelings of moral outrage that create new moral standards of justice (rather than benevolence).

The current studies offer important insights for campaigns that aim to increase prosocial action. Firstly, the current research provides further empirical support for the effectiveness of moral elevation and moral outrage at increasing prosocial action. Charitable

campaigns typically draw on sympathy and guilt to instigate prosociality, however sympathy runs the risk of instigating paternalistic helping (Nadler & Halabi, 2006; Thomas et al., 2009) while guilt runs the risk of instigating self-focused helping (Iyer et al., 2004; see also *Chapter* 2). Thus, moral elevation and moral outrage appear as powerful alternatives for motivating prosociality.

Secondly, the current research provides initial evidence for the notion that moral elevation and moral outrage promote distinct types of prosociality. Moral elevation may be more effective at increasing prosociality if benevolence concerns are salient, while moral outrage may be more effective at increasing prosociality if justice concerns are salient.

Nevertheless, given that intentions (rather than behaviours) were measured, and given that the effect in Study 1 was marginal, further research is necessary. In particular, it is necessary for future research to test the effects of moral elevation and moral outrage on prosocial behaviours (rather than intentions).

Limitations and Caveats

Across Studies 1 and 2 ratings of moral elevation and moral outrage were either not particularly high or differed by only 2-points from the control video. Research shows that nature (the control stimulus) can inspire feelings of awe (Keltner & Haidt, 2003). However, it is unlikely that the video instigated any feelings of moral elevation. It is also highly doubtful that the control stimulus instigated feelings of moral outrage. Thus, it is likely that participants in the control condition felt as though they should report some sort of emotional response, rather than actually feeling any emotion. It is plausible that with even stronger elevating and outrageous stimuli, prosocial effects may be more pronounced. Nevertheless, the significant differences between the emotion-inducing videos and the control video on respective emotion ratings, and the consistency of the overall empirical findings with the

theoretical predictions provide confidence in our stimuli. Future research should examine effects of a greater range of elevation-inducing and outrage-inducing stimuli.

ANOVA results across the two studies were in line with the theoretical predictions, but some of the correlational data merit further comment. Whereas both types of appraisal directly correlated with prosociality in Study 1 neither type of appraisal correlated directly with prosociality in Study 2. It is plausible that participants who dispositionally evaluate behaviour with reference to moral standards (regardless of the particular situation) may also be more benevolent, but it is unclear why they might not also engage in justice-related actions. Future research should therefore investigate whether particular individual differences can explain these relationships.

In Study 2 feelings of moral elevation correlated significantly with willingness to engage with the support group (justice-relevant). Although this was not hypothesised, it does not contradict the primary hypothesis that the predominant influence over justice-relevant intention should be outrage. Specifically, in line with the domain-specificity hypothesis the relationship between moral outrage and justice-relevant outcomes (r = .40) was substantially larger than the relationship between moral elevation and justice-relevant outcomes (r = .20, t = .5.44, p < .001).

In Study 1, while the effect of Elevation on prosocial benevolent intentions was in line with a-priori predictions, the effect was only marginally significant. Further research is necessary to test whether this effect of moral elevation on benevolent helping indeed exists and therefore whether it is replicable using other measures.

Furthermore, the current research measured prosociality using intentional rather than behavioural measures. Study 2 did attempt to improve on such intentional measures by assessing behavioural engagement. However, research is necessary to test whether the domain-specific effects replicate when using behavioural measures.

Conclusion

The present chapter has examined, for the first time, whether and how moral elevation and moral outrage can produce prosocial responses via different appraisals. Understanding how these appraisals and moral emotions influence prosociality is essential for deciding whether and how to use them in important practical interventions such as charity campaigns, educational efforts, or social policy strategies. The evidence shows, for the first time, that moral elevation and moral outrage have distinctive prosocial effects, and suggests interesting new possibilities both for interventions and for future theory and research.

Chapter 5

A Behavioural Approach to Testing the Prosocial Effects of Elevation and Outrage: Elevation

Increases Benevolent Behaviours and Outrage Increases Justice Behaviours

This chapter extends the findings from Chapter 4 by testing and comparing the effects of moral elevation and moral outrage on prosocial behaviours (rather than intentions). This is essential in order to inform theory development as well as applied interventions. More specifically, the current chapter draws on the appraisal tendency framework to examine whether moral elevation and moral outrage increase prosocial behaviours across moral domains, or whether their behavioural effects are domain specific. It is hypothesised that, in line with the findings from Chapter 4 and with the appraisal tendency framework, moral elevation will increase benevolent-relevant prosocial behaviour, while moral outrage will increase justice-relevant prosocial behaviour. Results of Study 3 showed that moral elevation, but not moral outrage, increased donations to charity (i.e., benevolence domain). Study 4 showed that moral outrage, but not moral elevation, increased compensation in a third-party bystander game (i.e., justice domain). This research provides further support for the findings from Chapter 4 and suggests that moral elevation and moral outrage affect distinct types of prosocial behaviours. Applied and theoretical implications are discussed.⁴

⁴ Studies 3 and 4 reported in this chapter form part of the published manuscript, Van de Vyver, J., & Abrams, D. (2015) Testing the prosocial effectiveness of the prototypical moral emotions: Elevation increases benevolent behaviors and outrage increases justice behaviors. *Journal of Experimental Social Psychology*, *58*, 23-33. doi:10.1016/j.jesp.2014.12.005

Large inequalities and injustices occur and persist across societies every day. Indeed, in the US, the top 1% takes more than 20% of the nation's income (cf. Stiglitz, 2012).

Nevertheless, many people remain apathetic to the needs of others. Researchers have a unique ability to empirically test strategies that can effectively mobilise people to be more helpful and supportive of others. The current chapter aims to contribute to the existing literatures surrounding prosociality (see Haidt, 2003; Penner et al., 2005; Tangney et al., 2007) by testing the effects of two particularly promising emotions on prosocial behaviours. In particular, this chapter draws from social psychological theories (e.g., appraisal tendency theory; Horberg et al., 2011) to explore whether emotions increase prosocial behaviours, and the types of prosocial behaviours that they promote.

Prosocial motivation can be understood as the desire to expend effort to help others (Penner et al., 2005). Prosocial behaviour (or action) occurs when this motivation is enacted. Research shows that moral emotions increase action, and particularly prosocial action (Tangney et al., 2007). Indeed, "moral emotions provide the motivational force – the power and energy – to do good and to avoid doing bad" (Tangney et al., 2007). Moral emotions have been defined as "those that are linked to the interests or welfare either of society as a whole or at least of persons other than the judge or agent" (Haidt, 2003, p. 276). Examples of moral emotions include: disgust, sympathy, moral elevation, moral outrage, and admiration (Haidt, 2003). The current chapter examines the effects of moral elevation and moral outrage on prosocial behaviours (see *Chapter 1*).

Moral Elevation and Moral Outrage

Moral elevation is a positive emotion felt when witnessing another person perform a virtuous act, one that improves the welfare of others (Algoe & Haidt, 2009). Moral elevation motivates people to emulate the exemplar and become a better person oneself (Haidt, 2003). Recent studies have shown that moral elevation increases people's helping behaviours. For

example, Silvers and Haidt (2008) showed that nursing mothers who were induced to feel elevation (vs. a control condition) were more likely to nurse and marginally more likely to hug their infants. Moreover, Schnall and colleagues (2010) showed that participants induced to feel moral elevation (vs. control conditions) were more likely to volunteer for a subsequent study as well as help the experimenter with a tedious task. In a field context, Cox (2010) showed that moral elevation predicted volunteering three months later. Therefore, empirical research suggests that moral elevation can mobilise people to help others.

Moral outrage is a negative emotion felt when witnessing another person transgress a moral standard (usually a standard of justice, fairness, or equality) that harms another person or group (Thomas et al., 2009). Moral outrage motivates people to undo the harm caused by helping the victim and/or punishing the perpetrator (Lotz et al., 2011). Studies show that moral outrage increases helping intentions. For example, Thomas and McGarty (2009) found that in opinion-based groups, inducing an outrage norm ("people feel genuine and passionate outrage that people in developing countries still, in the modern day, do not have access to safe water") increased commitment to positive social change (e.g., "I intend to support the Water for Life movement by attending a rally which calls for change of government policy" or "I intend to support the Water for Life movement by attending a fundraising event"). Lodewijkx and colleagues (2008) showed that feelings of moral outrage against violence directly predicted intentions to participate in a silent march. Saab and colleagues (2015) demonstrated that perceived injustice predicted collective action tendencies (i.e., protesting) and that this effect was mediated by feelings of moral outrage (and sympathy). Therefore, empirical research suggests that outrage can mobilise people to want to help others.

The Appraisal Tendency Framework

As discussed in *Chapters 2 and 4*, research on the appraisal tendency framework

(ATF) suggests that distinct emotions promote specific kinds of judgments and decisions as a

function of their unique and distinctive cognitive appraisals (cf. Horberg et al., 2011; Lerner & Keltner, 2000). In applying the appraisal tendency framework to moral emotions in particular Horberg and colleagues (2011) proposed that, during the emotional state, each emotion's moral appraisal theme remains salient and affects subsequent moral judgments, intentions, and behaviours by prioritising specific sociomoral concerns (or moral domains) that are semantically related to the emotion's moral appraisal theme. For example, moral outrage should influence moral judgments (or behaviours) when justice concerns are salient and moral elevation should influence moral judgments (or behaviours) when benevolence/virtue concerns are salient (see Horberg et al., 2011).

In line with the ATF (Horberg et al., 2011) research has shown that emotions (including moral elevation and moral outrage) have nuanced effects on moral outcomes (Dasgupta et al., 2009; DeSteno et al., 2004; Siegel et al., 2014). However, until this thesis, no research had directly examined the moral appraisal themes of moral elevation and moral outrage, or how moral appraisal themes relate to emotional states and subsequent judgments and behaviours. Thus, no research had directly applied the ATF to understand the prosocial effects moral elevation and moral outrage.

In order to advance theoretical developments of moral elevation and moral outrage (Haidt, 2003) and of the appraisal tendency framework (Horberg et al., 2011), *Chapter 4* tested whether effects of moral elevation and moral outrage were domain specific, or whether these two emotions promoted prosocial intentions across moral domains. Two studies were reported in *Chapter 4*, which showed that, in line with the appraisal tendency framework (see Horberg et al., 2011; for a detailed description see *Chapter 2*), moral elevation and moral outrage have domain specific effects on prosocial intentions. Specifically, Study 1 showed that moral elevation (marginally) promoted benevolence-relevant intentions. Moreover, the elevation-inducing stimulus promoted benevolence-relevant intentions through elevation

appraisals and feelings of elevation. Study 2 showed that moral outrage promoted justice-relevant intentions. The outrage-inducing stimulus promoted justice relevant intentions through outrage appraisals and feelings of moral outrage. Therefore, moral elevation and moral outrage seemed to have distinctive effects on prosocial intentions that were driven by their distinctive moral appraisal themes.

Prosocial Intentions versus Prosocial Behaviours

Nevertheless, an important limitation of *Chapter 4* was that prosociality was measured using self-report intentions rather than actual behaviours. The current chapter overcomes this limitation by testing the effects of moral elevation and of moral outrage on prosocial behaviours. A substantial body of research has tested the effects of emotions on moral judgments and intentions (see Teper et al., 2015). However, there is a significant lack of behavioural research across areas of social psychology, particularly in moral psychology (see Baumeister, Vohs, & Funder, 2007; Teper et al., 2015). Given the dissociation between attitudes and behaviours (Blasi, 1980), it is essential to understand how emotions affect behaviour (Teper et al., 2015).

Indeed, Piaget (1932/1997) noted that "the relations between thought and action are very far from being as simple as commonly supposed" (p. 176). Festinger's (1957) cognitive dissonance theory similarly showed that people often engage in behaviour that is inconsistent with their attitudes (see also Ajzen & Fishbein, 1977). Teper et al. (2015) suggested that given the normative nature of morality, the discrepancy between attitudes and behaviours might be more evident in the moral domain than in other domains. As people usually prefer to see themselves and be seen by others as moral and as moral behaviours are often costly, people often support moral values but fail to act morally (Batson, Thompson, Seuferling, Whitney, & Strongman, 1999). This notion was supported in Blasi's (1980) review article, which showed that only half of the studies investigated reported a positive relationship

between self-reported morality and moral behaviour (honesty); the other half found no significant relationship.

A similar discrepancy occurs between moral intentions and moral behaviours (Teper et al., 2015). For example, across various moral dilemmas (e.g., cheating, charitable donations, cooperative behaviours), people's behavioural forecasts do not predict their actual behaviour (Epley & Dunning, 2000; Teper, Inzlicht, & Page-Gould, 2011). In other words, attitudes and intentions do not consistently predict actual behaviours. Given this dissociation between intentions and behaviours, it is essential to replicate the findings of *Chapter 4* using behavioural measures. This will enable a stronger test of the appraisal tendency framework.

The Current Research

Chapter 4 showed that moral elevation (but not moral outrage) marginally increased benevolent-relevant prosocial intentions and that moral outrage (but not moral elevation) increased justice-relevant prosocial intentions. The current chapter extends Chapter 4 by testing whether these findings can be replicated when employing behavioural measures. To identify, for the first time, how moral elevation and moral outrage may act in concert to affect distinct prosocial behaviours, the current research reports two studies testing the joint and independent effects of these two emotions on different types of prosocial behaviours. Study 3 examines benevolence-relevant behaviour in the form of charitable donations. Study 4 examines justice-relevant behaviour in the form of third-party bystander compensation and punishment following unfairness.

Hypotheses

Based on the domain-specific predictions from ATF (see Horberg et al., 2011; Chapters 2 and 4), we hypothesise that moral elevation and moral outrage have domain specific effects on prosocial behaviours. Moral elevation should increase prosocial behaviour most when the behavioural measure is relevant to benevolence concerns. Moral outrage should increase prosocial behaviour most when the behavioural measure is relevant to justice concerns.

In Study 3 moral elevation, but not moral outrage, should increase prosociality (donations) and this effect should be mediated by elevation appraisals and feelings of elevation. In Study 4, moral outrage, but not moral elevation, should increase prosociality (third-party bystander compensation and punishment) and this effect should be mediated by outrage appraisals and feelings of outrage.

Dual Exposure

The findings from *Chapter 4* suggest that dual exposure (i.e., the induction of both elevation and outrage) does not inhibit the prosocial effects of the alternative emotion.

Specifically, there seems to be a certain flexibility in the appraisal-intention link, whereby both sociomoral concerns (benevolence and justice) can remain salient during the emotional states and participants can respond to whichever prosocial opportunity presents itself. In line with these findings it is hypothesised that following dual exposure, prosocial behaviour will be high regardless of whether the opportunity is relevant to justice or benevolence concerns.

Study 3

Method

Participants and design. Ninety-two (70.7% female) British participants with a mean age of 23.05 years (SD = 7.83) completed an on-line questionnaire⁵. Sample sizes were determined on the basis of providing sufficient power (.8) to detect a medium to large effect size. Participants were randomly assigned to condition in a 2 (Elevation: viewed vs. not viewed) X 2 (Outrage: viewed vs. not viewed) between-participants design. Data were collected using an on-line questionnaire (via a platform called Qualtrics). Participants were recruited via (1) a formal university-led strategy, 50.5% (i.e., the department's research credits scheme); or (2) an informal social network strategy, 49.5% (e.g., Facebook).

Procedure. All participants provided informed consent. Participants viewed either one or two videos (elevation, outrage, both elevation and outrage, or control). When participants viewed both the elevation and outrage inducing videos (i.e., dual exposure condition), the videos were viewed straight after one another, and the order was randomised. Participants then responded to the emotion, appraisal, and prosocial measures. Participants received (written) debrief (and compensation if applicable) upon completion of the study. Prize draw allocation was organised upon completion of data collection (i.e., once all participants had taken part).

⁵ A portion of the data from Study 3 was included in the author's Master's dissertation. Further data collection and reanalysis has subsequently been conducted.

Experimental manipulations. The elevation (2.14-minutes in length), outrage (2.42-minutes in length), and control (2.42-minutes in length) videos as described in Pilot Study 1 were employed (see *Chapter 3* and *Appendix A*).

Measures. Participants responded to the measures in the following order: first appraisals, then emotions, and then charitable donations (each on separate pages). Presentation of items within each of these three constructs was randomised. Appraisals were measured using the same items as described in Study 1 (see *Chapter 4* and *Appendix C*). Feelings of moral elevation and moral outrage were measured using the same items as described in Pilot Study 1 (see *Chapter 3* and *Appendix B*). Participants responded to the appraisals on a 5-point scale from 1 (*not at all*) to 5 (*very much*), and to the emotions on a 9-point scale from 1 (*didn't feel it at all*) to 9 (*felt it very strongly*).

Charitable donations. Benevolence-relevant prosocial behaviour was measured according to the amount of prize draw money participants donated to charity (cf. Aquino et al., 2011; Freeman et al., 2009; McFarland, Webb, & Brown, 2012). All participants were entered in to a £60 (\$96) prize draw. Participants could donate none, some, or the entire amount to their chosen charity (they were given a selection of 10 charities to choose from; see *Appendix F*).

Results and Discussion

All analyses controlled for recruitment strategy (formal university-led strategy vs. informal social networking strategy).

Descriptives. Table 5.1 shows intercorrelations among variables, as well as their means and standard deviations. Data were analysed using 2 (Elevation: viewed vs. not viewed) X 2 (Outrage: viewed vs. not viewed) ANOVAs.

Appraisals and emotions. There was a significant main effect of Elevation.

Participants who viewed the elevation-inducing video scored higher on elevation appraisals,

 $F(1, 87) = 41.80, p < .001, \eta^2 = .33 \ (M = 3.55, SE = 0.12)$ and on feelings of elevation, $F(1, 87) = 29.23, p < .001, \eta^2 = .25 \ (M = 5.02, SE = 0.28)$ than participants who had not viewed this video $(M_{\text{appraisals}} = 2.30, SE = 0.15; M_{\text{elevation}} = 2.66, SE = 0.34)$.

There was a significant main effect of Outrage. Participants who viewed the outrage-inducing video scored higher on outrage appraisals, F(1, 87) = 31.96, p < .001, $\eta^2 = .27$ (M = 3.54, SE = 0.15) and on feelings of outrage, F(1, 87) = 31.01, p < .001, $\eta^2 = .26$ (M = 4.00, SE = 0.26) than participants who had not viewed this video ($M_{appraisals} = 2.24$, SE = 0.17; $M_{outrage} = 1.85$, SE = 0.29).

There were significant Elevation X Outrage interactions on elevation appraisals, F(1, 87) = 24.73, p < .001, $\eta^2 = .22$ and on outrage appraisals, F(1, 87) = 4.04, p = .048, $\eta^2 = .04$. Specifically, elevation appraisals reduced in the dual condition (M = 3.10, SE = 0.16) relative to the elevation-only condition (M = 4.01, SE = 0.19, p < .001). In contrast, outrage appraisals did not differ between the dual exposure condition (M = 3.49, SE = 0.19) and the outrage-only condition (M = 3.58, SE = 0.24, p = .779). See Table 5.2 for all cell-specific descriptives.

Table 5.1
Study 3: Means, Standard Deviations, Confidence Intervals, and Correlations among Key Variables

Variable	Mean (SD)	95% CI	2	3	4	5
1.Elevation	3.98 (2.37)	[3.49, 4.47]	07	.56***	14	.32**
2.Outrage	3.11 (2.08)	[2.68, 3.54]		.07	.56***	.13
3.Elevation appraisals	3.02 (1.16)	[2.78, 3.26]			.09	.33**
4.Outrage appraisals	2.99 (1.25)	[2.74, 3.25]				.23*
5.Donations	29.71 (23.89)	[24.76, 34.65]				

Note. N = 91. CI = confidence interval. Elevation and outrage were scored on a 9-point scale (1 = didn't feel it at all, 9 = felt it very strongly). Cognitive appraisals were scored on a 5-point scale (1 = not at all, 5 = very much). Prosocial behaviour was measured according to the amount

of money (from £0-60) donated to charity. A t-test showed that the correlation between elevation and donations versus the correlation between

outrage and donations did not differ significantly, t (89) = -1.64, p = .104.

*
$$p < .05$$
. ** $p < .01$. *** $p < .001$.

Table 5.2

Study 3: Means, Standard Errors, and Cell Sizes for each Condition

	Condition					
	Elevation video	Outrage video	Elevation and outrage videos (dual)	Control video		
Cell sizes	N = 23	N = 20	N = 32	<i>N</i> = 17		
1.Elevation appraisals	4.02 (0.19)	2.85 (0.20)	3.06 (0.16)	1.79 (0.22)		
2.Outrage appraisals	2.65 (0.22)	3.55 (0.24)	3.52 (0.19)	1.82 (0.26)		
3.Feelings of elevation	5.80 (0.42)	2.25 (0.45)	4.20 (0.36)	3.12 (0.49)		
4.Feelings of outrage	2.36 (0.38)	3.95 (0.40)	4.06 (0.32)	1.34 (0.44)		
5.Prosocial behaviour	35.70 (4.87)	29.90 (5.22)	32.28 (4.13)	16.53 (5.66)		

Note. Table depicts means. Standard errors are provided in brackets. Elevation and outrage were scored on a 9-point scale (1 = didn't feel it at all, 9 = felt it very strongly). Cognitive appraisals were scored on a 5-point scale (1 = not at all, 5 = very much). Prosocial behaviour was measured according to the amount of money (from £0-60) donated to charity.

Charitable donations. There was only a main effect of Elevation, F(1, 87) = 4.58, p = .035, $\eta 2 = .05$. Participants who had viewed the elevation-inducing video donated significantly more (M = £34.00, SE = 3.21) than those who had not viewed this video (M = £23.20, SE = 3.89). The main effect of Outrage, F(1, 87) = 0.98, p = .325, $\eta 2 = .01$ and the Elevation X Outrage interaction, F(1, 87) = 2.71, p = .103, $\eta 2 = .03$ were non-significant. See Table 5.2 for all cell-specific descriptives.

Mediation analyses. Sequential mediation analyses (using Hayes' 2013 Process macro model 6) were conducted to test whether elevation appraisals and feelings of elevation sequentially mediated the effect of the elevation-inducing video on donations. Due to the 2 X 2 design and as we were only interested in the mediating role of the elevation main effect, the outrage-inducing video was entered as a covariate. Results showed that elevation appraisals and then feelings of elevation significantly and sequentially mediated the effect of the elevation-inducing video on donations, B = 2.48, SE = 1.48, 95CI 0.32/6.37 (indirect effect). The significant total effect of the elevation-inducing video on donations (B = 9.95, SE = 5.07, t = 1.96, p = .053) was reduced to non-significance in the direct model (B = -0.93, SE = 5.82, t = -0.16, p = .874) (see Figure 5.1 for path coefficients).

To summarise, Study 3 offers support for the appraisal tendency framework (Horberg et al., 2011). Moral elevation, but not moral outrage, increased donations to charity (i.e., benevolence relevant prosocial behaviour) and this effect was sequentially mediated by elevation appraisals and feelings of elevation.

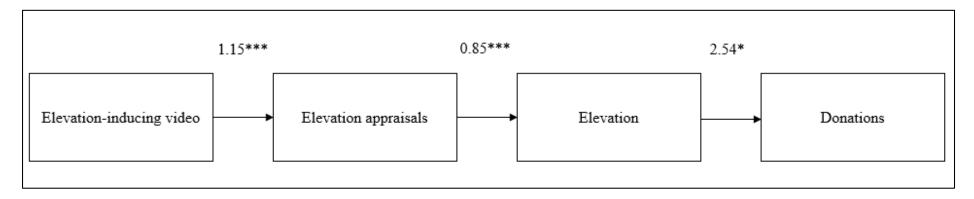


Figure 5.1. Study 3: Unstandardised B coefficients for sequential mediation analyses using Process macro (Hayes, 2013).

Note. *p = .05. **p < .01. ***p < .001.

Study 4

Study 4 examines whether the effects of moral elevation and moral outrage extend to affect justice-relevant prosocial behaviours. Specifically, Study 4 explores participants' compensation and punishment following unfair distributions in a third-party bystander game.

Method

Participants and design. Seventy-eight (91% female) British participants with a mean age of 19.92 years (SD = 5.55) completed an on-line questionnaire. Sample sizes were determined on the basis of providing sufficient power (.8) to detect a medium to large effect size. Participants were randomly assigned to condition in a 2 (elevation video: viewed vs. not viewed) X 2 (outrage video: viewed vs. not viewed) between-participants design. Data were collected in the laboratory. Participants were undergraduate students recruited via the psychology department's research participation scheme at the University of Kent. Participants took part in exchange for course credit. Two participants had seen the video before so were excluded from the analyses (leaving a sample of 76 participants).

Procedure. Participants were invited to sign-up to a three-person laboratory study. All participants provided informed consent. Participants first watched either one or two videos (elevation, outrage, both elevation and outrage, or control). When participants viewed both the elevation-inducing and outrage-inducing videos (i.e., dual exposure condition), the videos were viewed straight after one another, and the order was randomised. Participants then responded to the appraisal and emotion measures. Then they took part in the third-party experimental game. Participants received a written as well as verbal debrief at the end of the study. Participants also received course credit upon completion of the study.

Third-party experimental game. We employed a modified experimental game to measure third-party bystander compensation and punishment in response to unfairness (Fetchenhauer & Huang, 2004; Lotz et al., 2011). Participants took part in this study at the

same time as two other participants. Participants were told the following: "You are going to participate in an interaction between three parties. All participants will be randomly assigned to either one of three possible roles, Player A, B, or C. In the course of this interaction, you and the other players can earn points. Each point is equivalent to £0.10. When the experimenter has collected all of the data, ten percent of participants will be randomly selected by a lottery and will receive their amount of money based on the decisions made in their interaction. This means that your decisions in this interaction may determine how much you receive if you win the study lottery. Before we start, the computer will now randomly assign each participant to the role of either Player A, B, or C". All participants were in fact assigned the role of Player C. Participants were then told: "In this social interaction, Player A has 100 points, Player B has no points, and Player C has 50 points. In Phase 1, Player A may allocate a voluntary number of points to Player B. It is up to Player A to decide how many points he or she will allocate to Player B. Player B has no say in how much he or she receives. Player A may decide not to allocate any points at all to Player B, or to allocate half of the points to Player B. All possible distributions that Player A could make are shown below". Participants were then shown all the possible distributions in a table (see *Appendix* G). Participants were finally told that Player C (i.e., the participant) then has the option to compensate Player B (any amount from 0-16 points) or punish Player A (any amount from 0-16). Participants' decisions were made more efficient: every reduction point assigned to Player A reduced Player C's number of points by 1, but reduced Player A's number of points by 3. Every compensation point assigned to Player B reduced Player C's total number of points by 1, but increased Player B's total number of points by 3 (e.g., Fehr & Fischbacher, 2004; Lotz et al., 2011). To ensure clarity and understanding examples were provided in table formats (see *Appendix G*).

To avoid confounding effects of anger about the unequal distribution we asked participants to make their choices while Player A made theirs. Thus, participants (Player C) indicated their compensation and reduction points for each possible distribution that Player A could make. Participants were told that their decisions would be binding. Furthermore, each point in the game was equivalent to £0.10. Participants were told that 10% of participants would be selected by a lottery and would receive their amount of money based on the decisions made in their interaction. This prize draw approach was employed due to budgetary reasons. However, Fehr and Schmidt's (1999) meta-analysis shows that participant's behaviour in experimental games does not change dependent on whether the money distribution is individual or by prize draw allocation. For the transcript of the instructions to participants see *Appendix G*.

A mean score was calculated separately for (1) compensation and for (2) punishment. Specifically, the compensation score was computed by creating a mean score of all of participant's compensation choices (0-16 compensation points) following the five possible unequal distributions (i.e., when Player A assigned zero, 10, 20, 30, and 40 points to Player B). Similarly, the punishment score was computed by created a mean score of all of participant's punishment choices (0-16 punishment points) following the five possible unequal distributions (i.e., when Player A assigned zero, 10, 20, 30, and 40 points to Player B).

Experimental manipulations. The same elevation-inducing (2.14-minutes), outrage-inducing (2.42-minutes), and control (2.42-minutes) videos as described in Pilot Study 1 (see *Chapter 3* and *Appendix A*) were employed.

Measures. Participants responded to the measures in the following order: first appraisals, then emotions, and then the behavioural measure (each on separate pages). Presentation of items within the appraisal and emotion constructs were randomised.

Appraisals were measured using the same items as described in Study 1 (see *Chapter 4* and *Appendix C*). Feeling of moral elevation and moral outrage were measured using the same items as described in Pilot Study 1 (see *Chapter 3* and *Appendix B*). Participants responded to the appraisals on a 5-point scale from 1 (*not at all*) to 5 (*very much*), and to the emotions on a 7-point scale from 1 (*didn't feel it at all*) to 7 (*felt it very strongly*).

Results and Discussion

Table 5.3 shows the correlations among variables, as well as their means and standard deviations. Data were analysed using 2 (Elevation: viewed vs. not viewed) X 2 (Outrage: viewed vs. not viewed) ANOVAs.

Emotions and appraisals. There was a significant main effect of Elevation. Participants who had watched the elevation-inducing video scored higher on elevation appraisals, F(1, 74) = 135.03, p < .001, $\eta^2 = .65$ (M = 4.54, SE = 0.11) and on feelings of elevation, F(1, 74) = 61.81, p < .001, $\eta^2 = .46$ (M = 5.65, SE = 0.16), than those who had not watched the elevation-inducing video ($M_{appraisals} = 2.63$, SE = 0.12; $M_{elevation} = 3.87$, SE = 0.16).

There was a significant main effect of Outrage. Participants who had watched the outrage-inducing video scored higher on outrage appraisals, F(1, 74) = 50.33, p < .001, $\eta^2 = .41$ (M = 3.85, SE = 0.17), and feelings of outrage, F(1, 74) = 85.58, p < .001, $\eta^2 = .54$ (M = 4.90, SE = 0.19) than those who had not watched the outrage-inducing video ($M_{appraisals} = 2.13$, SE = 0.17; $M_{outrage} = 2.42$, SE = 0.19).

Additionally, there was a significant main effect of Outrage on feelings of elevation, F(1, 74) = 10.05, p = .002, $\eta^2 = .12$, whereby feelings of elevation were significantly lower when participants had watched the outrage-inducing video. Furthermore, there was a significant Elevation X Outrage interaction effect on feelings of elevation, F(1, 74) = 7.08, p = .010, $\eta^2 = .09$. Pairwise comparisons showed that feelings of elevation were significantly

higher in the dual exposure (M = 5.59, SE = 0.22) and elevation-only conditions (M = 5.70, SE = 0.22) than in the control condition (M = 4.53, SE = 0.24; p < .001). Moreover, feelings of elevation were significantly higher in the control condition than in the outrage condition (M = 3.21, SE = 0.23; p < .001). See Table 5.4 for all cell-specific descriptives.

Compensation and punishment. There was a significant Elevation X Outrage interaction on compensation, F(1, 74) = 5.65, p = .020, $\eta^2 = .07$. There were no other significant effects (p's > .105). Pairwise comparisons showed that participants in the outrage-only condition compensated significantly more (M = 5.70, SE = 0.67) than those in the control condition (M = 3.02, SE = 0.69, p = .007) and than those in the dual exposure condition (M = 3.62, SE = 0.66, p = .031). The elevation-only condition did not increase (or decrease) compensation relative to any other condition (M = 4.11, SE = 0.64, p's > .250) (see Figure 5.2). See Table 5.4 for all cell-specific descriptives.

Despite consistent main effects of the manipulations resulting in high correlations between emotions and their respective appraisals, the different patterns of interaction effects on elevation and on behaviour meant that appraisals and emotions did not correlate with the behavioural outcome. This meant that we could not test for mediation.

To summarise, effects of the elevation-inducing and outrage-inducing videos in Study 4 offer further partial support for the appraisal tendency framework (Horberg et al., 2011). The outrage-inducing video, but not the elevation-inducing video, increased outrage appraisals, feelings of outrage, and justice-relevant behaviour.

Table 5.3

Study 4: Means, Standard Deviations, Confidence Intervals, and Correlations among Key

Variables

Variable	Mean (SD)	95% CI	2	3	4	5	6
1.Elevation	4.45 (1.69)	[4.19, 4.71]	23*	.56***	33**	10	01
2.Outrage	3.63 (2.14)	[3.30, 3.96]		09	.64***	.14	.06
3. Elevation appraisals	3.49 (1.15)	[3.31, 3.67]			19†	07	01
4. Outrage appraisals	3.08 (1.35)	[2.87, 3.29]				.02	.13
5. Compensation	3.27 (0.08)	[3.11, 3.44]					.13
6. Punishment	3.20 (0.08)	[3.04, 3.36]					

Note. N = 76. CI = confidence interval. The emotions were scored on a 7-point scale (1= didn't feel it at all, 7 = felt it very strongly). The appraisals were scored on a 5-point scale (1= not at all, 5 = very much). Compensation and punishment range from zero to 16. †p < .10. *p < .05. **p < .01. ***p < .001.

Table 5.4
Study 4: Means, Standard Errors, and Cell Sizes for each Condition

	Condition				
	Elevation	Outrage video	Elevation and	Control video	
	video		outrage		
			videos (dual)		
Cell sizes	N = 21	<i>N</i> = 19	N = 20	N = 18	
1.Elevation appraisals	4.55 (0.16)	2.42 (0.17)	4.53 (0.16)	2.83 (0.17)	
2.Outrage appraisals	1.83 (0.23)	3.90 (0.25)	3.80 (0.24)	2.42 (0.25)	
3.Feelings of elevation	5.70 (0.22)	3.21 (0.23)	5.59 (0.22)	4.53 (0.24)	
4.Feelings of outrage	2.32 (0.26)	4.92 (0.27)	4.88 (0.26)	2.51 (0.28)	
5.Compensation	4.11 (0.64)	5.70 (0.67)	3.62 (0.66)	3.02 (0.69)	
6.Punishment	4.89 (0.84)	6.67 (0.88)	6.06 (0.86)	5.72 (0.91)	
7.Total allocation	4.50 (0.56)	6.18 (0.58)	4.84 (0.57)	4.37 (0.60)	
(compensation &					
punishment)					

Note. Table depicts means. Standard errors are provided in brackets. Elevation and outrage were scored on a 7-point scale (1 = didn't feel it at all, 7 = felt it very strongly). Cognitive appraisals were scored on a 5-point scale (1 = not at all, 5 = very much). Compensation, punishment, and total allocation (a mean score of compensation and punishment combined) range from zero to 16 points.

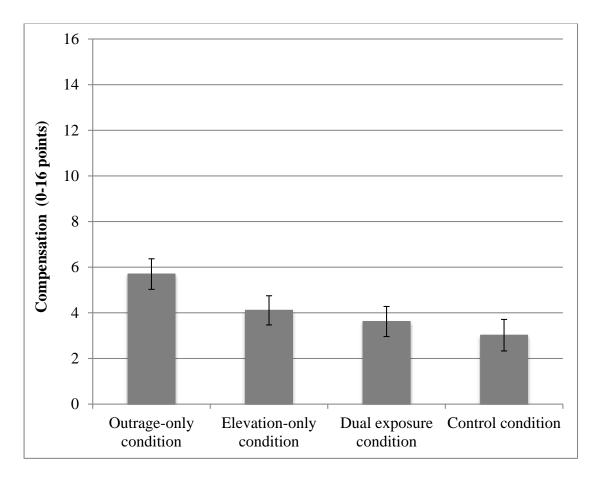


Figure 5.2. Study 4: Compensation points given to Player B as a function of condition.

Note. Error bars depict standard errors.

General Discussion

The current chapter reports two studies that examined whether the domain specific effects of moral elevation and moral outrage on prosocial intentions extend to prosocial behaviour. The two studies provided further support for the domain-specificity predictions of the appraisal tendency framework (Horberg et al., 2011; Lerner & Keltner, 2000). Specifically, in line with the studies reported in *Chapter 4*, results showed that although moral elevation and moral outrage both instigated prosocial responses, the two emotions derived from distinctive appraisals and had distinctive effects on prosocial behaviours.

According to the appraisal tendency framework emotions have domain specific effects on moral judgments and behaviours (Horberg et al., 2011). Domain specificity would

occur if moral elevation predominantly increased benevolence-relevant behaviours (Study 3) and if moral outrage predominantly increased justice-relevant behaviours (Study 4).

Consistent with the appraisal tendency framework and the domain specificity hypothesis, Study 3 showed that in the benevolence domain, only moral elevation increased charitable donations. Furthermore, this effect was sequentially mediated by elevation appraisals (i.e., upholding a moral standard) and then by feelings of elevation. Study 4 showed, in a justice-relevant domain, that only moral outrage affected prosocial behaviour in a third-party bystander game. In line with previous findings that moral outrage leads to a preference for compensation over punishment, moral outrage affected compensation but not punishment in Study 4 (cf. Lotz et al., 2011). Thus, in line with Study 6 reported in *Chapter 4*, results showed that the effects of moral elevation and moral outrage on prosociality are domain specific, and correspond to their specific appraisal themes.

The results from dual exposure provided further insight into ways that these contrasting appraisals may combine. In Study 3 dual exposure did not inhibit the prosocial effects of the alternative emotion. This is in line with findings reported in *Chapter 4* and suggests flexibility in the appraisal-behaviour link. However, in Study 4, dual exposure appeared to inhibit the effect of outrage on compensation. Specifically, compensation was reduced following dual exposure relative to outrage-only exposure. This may be because the experimental procedure involved a delay between the emotion induction phase and the behavioural measurement phase (participants were required to "wait" for each other as all "players" had to start the game at the same time). This finding raises the interesting possibility that the sociomoral concerns of a non-domain relevant emotion may interfere with a domain-relevant emotion after a period of time. We have shown this can arise when the domain is justice-related, and future research will be needed to explore whether similar effects occur when the domain is benevolence related.

Theoretical and Applied Implications

Prior research indicates that the appraisal tendency framework can help to account for the influence of emotions on moral outcomes (e.g., Tapias et al., 2007). The present research substantially informs and extends this literature by selectively comparing the behavioural effects of two emotions that are highly distinctive (even opposing) in terms of their appraisals but comparable in terms of their action tendencies. This direct comparison enabled a clear test of whether moral emotions promote prosocial behaviours across moral domains, or whether their effects are domain specific.

As highlighted in *Chapter 2*, previous ATF research has predominantly examined the effects of discrete emotions on distinctive action tendencies (e.g., to harm others or to help others; Iyer et al., 2007; Lerner et al., 2004; Pagano & Huo, 2007). Yet, very little research explored whether effects of moral emotions are domain specific (e.g., benevolence, justice, or purity; Tapias et al., 2007). Together, *Chapters 4 and 5* provide strong evidence for the notion that moral emotions have domain specific effects on prosociality (including both intentions and behaviours).

The findings of Studies 3 and 4 contribute to the moral psychology literature by measuring behavioural rather than attitudinal or judgmental outcomes (see Teper et al., 2015). Indeed, there is a significant lack of behavioural research within the moral psychology field. The current studies demonstrate the feasibility of behavioural measurement in empirical studies. Furthermore, the behavioural findings of Studies 3 and 4 are in line with the findings of Studies 1 and 2 that measured prosocial intentions. As prosocial intentions and behaviours were not measured within the same studies, it is not possible to know whether intentions were predictive of behaviours. Nevertheless, the convergent findings for prosocial intentions (*Chapter 4*) and prosocial behaviours (*Chapter 5*) suggest that prosocial intentions were not

dissociated from prosocial behaviours. Instead, the effects of moral elevation and moral outrage on prosocial intentions were replicated when measuring prosocial behaviours.

The ATF offers a theoretically sound as well as tangible and practical framework for practitioners to understand the effects of emotions on prosocial behaviours and utilise them accordingly (Horberg et al., 2011). In applying the ATF to moral elevation and moral outrage, the current research showed how each emotion should be used appropriately to increase distinctive prosocial behaviours. Put differently, different behavioural goals required different emotional states. Specifically, the present studies showed that moral elevation strongly motivates benevolent behaviours. Thus, when raising money or attracting volunteers, charities should show uncommon acts of kindness in their campaign content. This should instigate feelings of moral elevation, make salient the sociomoral concern of benevolence, and thus encourage the uptake of benevolent behaviours. Moreover, moral outrage strongly motivates justice behaviours. Thus, when attempting to increase third-party action or intervention in response to injustices or unfairnesses (e.g., through collective protest or petition signing) charities should show moral transgressions in their campaign content. This should instigate feelings of moral outrage, make salient the sociomoral concern of justice, and thus encourage the uptake of justice behaviours.

Limitations and Caveats

Similarly to Studies 1 and 2 (see *Chapter 4*), across Studies 3 and 4 ratings of moral elevation and moral outrage were either not particularly high or differed by only 2-points from the control video. As discussed in *Chapter 4*, it seems highly doubtful that the control stimulus instigated feelings of moral elevation or moral outrage. Instead, it seems likely that participants in the control condition felt as though they should report some sort of emotional response, rather than actually feeling any emotion. The significant differences between the emotion-inducing videos and the control video on respective emotion ratings (across Studies

1 to 4), and the consistency of the overall empirical findings with the theoretical predictions provide confidence in our stimuli.

In *Chapter 4*, results showed that both types of appraisals correlated directly with prosociality in Study 1 (i.e., benevolence intentions), but neither type of appraisals correlated with prosociality in Study 2 (i.e., justice intentions). It was suggested that participants who dispositionally evaluate behaviour with reference to moral standards (regardless of the particular situation) may also be more benevolent, but that it is unclear why they might not also engage in justice-related actions. The results of Studies 3 and 4 echoed the above findings. Specifically, in Study 3 both types of appraisals correlated with prosociality (i.e., benevolence-relevant behaviour), in contrast in Study 4 neither type of appraisals correlated with prosociality (i.e., justice-relevant behaviour). As suggested in *Chapter 4*, future research should therefore investigate whether particular individual differences can explain these relationships.

In Study 4 compensation did not differ significantly between the elevation-inducing and outrage-inducing video. Nevertheless, while the outrage-inducing video increased compensation significantly relative to the control, the elevation-inducing video did not.

Therefore, Study 4 provides support for the notion that the predominant influence over justice-relevant intention should be outrage.

Furthermore, the current research focused on applying the ATF to moral elevation and moral outrage to understand their effects on prosocial intentions and behaviours. However, future research should also examine how dispositional traits (such as empathy, perspective taking, or belief in a just world) are implicated in the link between moral emotions and domain specific prosocial behaviours. It is plausible that such dispositional traits may moderate the effects of moral emotions on prosocial behaviours.

Conclusion

The present research extended the findings from *Chapter 4* to examine whether and how moral elevation and moral outrage influence prosocial behaviours. In line with the findings from *Chapter 3* and with the appraisal tendency framework, results showed that moral elevation and moral outrage have distinctive effects on prosocial behaviour. The findings inform theoretical development of moral emotion theory and highlight important implications for applied interventions.

Chapter 6

Is Moral Elevation an Approach-Oriented Emotion?

Two studies were designed to test the contention that moral elevation should be conceptualised as an approach-oriented emotion. The studies examined the relationship between moral elevation and the behavioural activation and inhibition systems. Study 5 (N = 80) showed that individual differences in moral elevation were associated with individual differences in behavioural activation but not inhibition. Study 6 (N = 78) showed that an elevation-inducing video promoted equally high levels of approach orientation as an outrage-inducing video and significantly higher levels of approach orientation than a control video. Furthermore, the elevation-inducing stimulus (vs. the control condition) significantly promoted prosocial motivation and this effect was sequentially mediated by feelings of moral elevation followed by an approach-oriented state. Overall the results show unambiguous support for the proposal that moral elevation is an approach-oriented emotion. Applied and theoretical implications are discussed.

Researchers have suggested that two systems inform and guide much of our behaviour. The behavioural activation system (BAS; Gray, 1982) manages appetitive and approach motivations and behaviours. The behavioural inhibition system (BIS; Gray, 1982)

⁶ Studies 5 and 6 reported in this chapter form part of the following manuscript: Van de Vyver, J., & Abrams, D. (in press). Is moral elevation an approach-oriented emotion? *The Journal of Positive Psychology*.

Researchers have typically associated the BAS with positive affect and the BIS with negative affect (Gray, 1982, 1994). Indeed, Carver and White (1994) found that individual differences

in BAS were positively associated with individual differences in positive affect, while individual differences in BIS were positively associated with individual differences in negative affect.

manages aversive, avoidant, and withdrawal-oriented motivations and behaviours.

More recent evidence shows that negative emotions can also be associated with the BAS. For example, ample research has now shown that anger (or outrage; see *Chapters 1 and 2*) is high in approach orientation (Carver & Harmon-Jones, 2009; Harmon-Jones, 2007). Therefore, although general negative and positive affect may have quite specific and consistent relationships with the motivational system, individual emotional states (e.g., anger, inspiration, disgust) may have different and more unique relationships with behavioural activation and inhibition systems.

The current research tests whether moral elevation, a relatively under-researched emotion to date, is associated with the BIS or the BAS. More specifically, we test evidence for the contention that elevation should be conceptualised as a high approach emotion.

Researchers have recently begun to explore the nature of moral elevation, in particular focusing on its behavioural outcomes. Moral elevation is a positive emotion experienced when witnessing a virtuous act, one that improves the welfare of others (Algoe & Haidt, 2009). Moral elevation consists of a feeling of warmth and expansion that is accompanied by admiration and affection for the person(s) who performed the exemplary behaviour. The action tendency of moral elevation is to emulate the moral exemplar, and to become a better person oneself (Haidt, 2003).

Empirical studies have consistently shown that moral elevation promotes prosocial behaviours (e.g., Cox, 2010; Schnall et al., 2010). Prosocial behaviours are those that benefit

others (Penner et al., 2005). For example, moral elevation promotes volunteering, helping the experimenter, and organisational citizenship (Cox, 2010; Schnall et al., 2010; Vianello et al., 2010).

Based on this evidence that moral elevation is a positive emotion which produces prosocial behavioural responses, we contend that moral elevation should be moderately or strongly associated with the BAS, and therefore motivate an approach-orientation.

A contrasting hypothesis seems plausible on the basis of the one study that has, somewhat indirectly, explored the behavioural activation and inhibition systems of moral elevation. The authors of this study suggested that elevation is "a calmer emotion which seems to increase openness and warmth towards others; it may not lead to immediate altruistic action when such action is difficult" (Algoe & Haidt, 2009, p. 30). In their study, Algoe and Haidt (2009) coded participant's open-ended and self-reported motivations and actions following feelings of elevation, admiration, gratitude, or joy. One of their codes was "energisation", which was described as: "when people indicated that they wanted to do things like jump up and down, or shout with excitement" (p. 111). Analyses revealed that admiration and joy involved energisation but elevation did not. Moreover, Algoe and Haidt (2009) noted that elevation is associated with a release in oxytocin, which has sedative and stress-reducing effects (Silvers & Haidt, 2008). These findings seem to indicate that elevation may not be strongly associated with the BAS, and may therefore not be considered as an emotion that is high in approach.

The Current Research

Algoe and Haidt's (2009) study used coding of participants' open-ended motivational statements as "energisation" to conceptualise elevation as an emotion that is low in approach-orientation. However, this code seems unlikely to cover all aspects of this motivational system. Given this limitation and the contrasting hypotheses based on inferences from prior

research, it seems that further research is necessary to more concretely test the relationship between elevation and the behavioural activation and inhibition systems.

Study 5 (*N* = 80) examines the relationship between individual differences in moral elevation and individual differences in the BIS and the BAS, using well-established measures of these constructs. In order to effectively differentiate these relationships, Study 5 also measures general positive and negative affect, as well as individual differences in outrage and shame, the former consistently conceptualised as an approach-oriented emotion and the latter as an avoidance-oriented emotion. Given the well-established relationships between general negative and positive affect and the BIS and the BAS (Carver & White, 1994), their effects will be accounted for in regression analyses. Comparing effects of elevation to those of shame (an avoidance-oriented emotion) and outrage (an approach-oriented emotion) will help inform the relationships between elevation and the BIS and the BAS. For example, if effects of elevation mirror those of shame, then elevation may be an avoidance-oriented emotion. In contrast, if effects of elevation mirror those of outrage, then elevation may be an approach-oriented emotion. If elevation relates to the BAS but more weakly than outrage does, then it may not be a strong approach-oriented emotion. If elevation relates to the BAS more strongly than outrage does, then it may be a particularly strong approach-oriented emotion.

Study 6 (N = 78) directly manipulates moral emotions in order to test whether an elevation-inducing stimulus (as compared to an outrage -inducing and a control stimulus) increases approach or avoidance orientations, as well as prosocial motivation more specifically.

Study 5

Method

Participants. Eighty American participants (64.2% female) with a mean age of 37.79 (SD = 14.26) completed an on-line questionnaire (via the Qualtrics software platform).

Sample sizes were determined on the basis of providing sufficient power (.8) to detect a medium to large effect size. Participants were sampled from Amazon's Mechanical Turk; a site for web-based data collection that functions through a participant compensation system.

Procedure. Participants were given access to a secure web link which sent them to an on-line questionnaire. Informed consent and demographic information were obtained.

Participants then responded to the emotion and motivational orientation measures.

Specifically, participants completed dispositional measures of elevation, outrage, shame, approach and avoidance, and measures of current affect. Participants received (on-line) written debrief and compensation upon completion.

Dispositional measures. Participants first responded to the emotion constructs. Each of these was shown on a separate page. Order of presentation of the three emotion constructs was randomised and so was the order of the items within each construct. Participants then completed the approach/avoidance measure. Presentation of items was again randomised. Finally, participants completed the general positive and negative affect measure. Presentation of items was randomised.

Moral elevation. Moral elevation was measured using a six-item scale taken from Diessner and colleagues (2008) (e.g., "When perceiving an act of moral beauty I feel changes in my body, such as a lump in my throat, an expansion in my chest, faster heart beat, or other bodily responses"; "I notice moral beauty in human beings"; "When perceiving an act of moral beauty I find that I desire to become a better person"). Moral beauty was defined to participants as: "The statements below refer to experiences in which you perceive or hear about some person demonstrating an impressive act of charity or loyalty or kindness or compassion or forgiveness or sacrifice for others or sincere service to others. We refer to these as acts of moral beauty." Participants responded from 1 (strongly disagree) to 5

(*strongly agree*). A mean score of the six items was computed to form the moral elevation measure (see *Appendix H* for all of the items). Cronbach's alpha was .90.

Moral outrage. Moral outrage was measured using an 11-item scale taken from Vitaglione and Barnett (2003) (e.g., "I feel outraged by injustices done to others"; "It bothers me when I see that others are not fairly treated"; "I get angry when a friend of mine is hurt by someone else"). Participants responded from 1 (strongly disagree) to 5 (strongly agree). A mean score of the 11 items was computed to form the moral outrage measure (see Appendix H for all of the items). Cronbach's alpha was .91.

Shame. Shame was measured using a four-item sub-scale taken from Cohen, Wolf, Panter, and Insko (2011) (e.g., "You make a mistake at work and find out a coworker is blamed for the error. Later, your coworker confronts you about your mistake. What is the likelihood that you would feel like a coward?"; "You successfully exaggerate your damages in a lawsuit. Months later, your lies are discovered and you are charged with perjury. What is the likelihood that you would think you are a despicable human being?") Participants responded from 1 (*very unlikely*) to 7 (*very likely*). A mean score of the four items was computed to form the shame measure (see *Appendix H* for all of the items). Cronbach's alpha was .76.

Approach and avoidance. Approach and avoidance orientations were measured using Carver and White's (1994) BIS/BAS questionnaire. The BIS (avoidance) scale contains seven items (e.g., "I worry about making mistakes"; "Criticism or scolding hurts me quite a bit"). A mean score of the seven items was computed to form the BIS measure (see Appendix I for all of the items). Cronbach's alpha for the BIS scale was .86. The BAS (approach) scale consists of three subscales: (1) drive ("I go out of my way to get things I want"; "When I want something I usually go all-out to get it"), which contains items that pertain "to the persistent pursuit of desired goals"; (2) fun seeking ("I crave excitement and new sensations"; "I'm

always willing to try something new if I think it will be fun"), which has items "reflecting both a desire for new rewards and a willingness to approach a potentially rewarding event on the spur of the moment"; and (3) reward responsiveness ("It would excite me to win a contest"; "When I'm doing well at something I love to keep at it"), which contains items that "focus on positive responses to the occurrence or anticipation of reward" (p. 322).

Cronbach's alphas for the three subscales were .86, 76, and 76, respectively. Mean scores were calculated for each of the three sub-scales (see *Appendix I* for all of the items).

Participants responded to all BIS and BAS items from 1 (*very false for me*) to 4 (*very true for me*).

General positive and negative affect. General positive and negative affect was measured using the 20-item positive and negative affect schedule (PANAS, Watson, Clark, & Tellegen, 1988). Participants were asked to rate the extent to which they felt 20 different states (e.g., interested, alert, jittery). Participants responded from 1 (very slightly or not at all) to 5 (extremely). Two mean scores were calculated – one for positive affect and one for negative affect. Cronbach's alphas were .93 and .95 for positive and negative affect, respectively.

Results

Descriptives. Intercorrelations among variables, as well as their means and standard deviations, are presented in Table 6.1.

Correlational analyses showed that moral elevation correlated positively and significantly with BAS-reward (r = .43, p < .001). Quite similarly, outrage correlated positively and significantly with BAS-reward (r = .37, p = .001) and with BIS (r = .29, p = .009). Shame correlated negatively with BAS-drive (r = -.24, p = .030) and positively with BIS (r = .45, p < .001). There were no other significant relationships between each of the emotions and BIS or BAS. However, when adjusting for Type I error and performing a

Bonferonni correction (0.05 α / 6 pairwise comparisons = .008), the relationships between outrage and BIS (r = .29, p = .009) and shame and BAS-drive (r = -.24, p = .030) disappeared.

Table 6.1
Study 5: Means, Standard Deviations, Confidence Intervals, and Correlations among Key Variables

Variable	Mean (SD)	95% CI	2	3	4	5	6	7
1.Elevation	3.85 (0.82)	[3.66, 4.03]	.62***	.32**	.08	.19	.43***	.22
2. Outrage	3.94 (0.64)	[3.79, 4.08]		.39***	09	.19	.37**	.29**
3.Shame	5.87 (1.13)	[5.62, 6.12]			24*	14	.07	.45***
4.Approach-drive	2.55 (0.70)	[2.40, 2.71]				.57***	.54***	19
5.Approach-fun	2.62 (0.65)	[2.47, 2.76]					.48***	05
6.Approach-reward	3.26 (0.49)	[3.15, 3.37]						.13
7.Avoidance	2.98 (0.68)	[2.83, 3.13]						
6.Approach-reward7.Avoidance	` ,							

Note. N = 80. CI = confidence interval. Elevation and outrage were scored on a 7-point scale (1 = didn't feel it at all, 7 = felt it very strongly).

Shame was scored on a 7-point scale (1 = *very unlikely*, 7 = *very likely*). Approach and avoidance were scored on a 4-point scale (1 = *very false for me*, 4 = *very true for me*).

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

Regression analyses. Regression analyses were conducted to further examine the relationships between the emotions and the approach and avoidance orientations.

Specifically, four sets of regression analyses were conducted to test the predictive effects of each of the emotions on (1) BIS, (2) BAS-drive, (3) BAS-fun, and (4) BAS-reward, while controlling for each other and for general positive and negative affect.

BIS. The first regression model was significant, F(5, 74) = 13.48, p < .001, $R^2 = .48$. Shame significantly predicted BIS ($\beta = .33$, p = .001), while elevation ($\beta = .11$, p = .332) and outrage ($\beta = .18$, p = .116) did not.

BAS-drive. The second regression model was significant, F (5, 74) = 3.12, p = .013, R^2 = .17. Shame significantly (and negatively) predicted BAS-drive (β = -.26, p = .030), while elevation (β = .18, p = .202) and outrage (β = -.13, p = .365) did not.

BAS-fun. The third regression model was not significant, F(5, 74) = 1.96, p = .095, $R^2 = .12$. However, effects mirrored those of BAS-drive, whereby only shame significantly (and negatively) predicted BAS-fun ($\beta = -.27$, p = .027).

BAS-reward. The final regression model was significant, F (5, 74) = 5.24, p < .001, R^2 = .26. Elevation significant predicted BAS-reward (β = .28, p = .040), while shame (β = .11, p = .335) and outrage (β = .22, p = .108) did not.

Discussion

The findings regarding moral elevation are in line with the hypothesis that it is an approach-oriented emotion. Individual differences in moral elevation were significantly related to individual differences in BAS. Specifically, the higher participants scored on moral elevation, the higher they scored on BAS-reward. Moreover, after accounting for the other emotions as well as general positive and negative affect, moral elevation did not relate to BIS.

Findings for shame are in line with previous research. Individual differences in shame were related to individual differences in BIS (positively) and BAS (negatively). The findings for outrage are less clear because the bivariate correlational relationship with BAS-reward became non-significant once other emotions and general positive negative and positive affect were accounted for. These findings are not in line with previous research, which demonstrate that outrage is high in approach orientation (Carver & Harmon-Jones, 2009; Harmon-Jones, 2007). The current study did differ from previous research in two ways. First, it measured outrage at injustices against others rather than injustices against the self. Second, while previous research has compared outrage to positive emotions, this research is the first to compare it to moral elevation. Study 6 will test whether these findings relating to outrage are replicated when using an experimental rather than correlational design.

The current findings are consistent with the hypothesis that elevation is an approachoriented emotion. Indeed, it was the only emotion that positively related to BAS (BASreward specifically) in the regression analyses. Shame also related with BAS (BAS-drive and
BAS-fun), but these relationships were negative. However, given the correlational design of
the study, it is not possible to establish causal relationships. Therefore, Study 6 employs an
experimental design to test the effect of an elevation-inducing stimulus on approach and
avoidance orientation, as well as on prosocial motivation more specifically.

Study 6

Study 6 examines the effects of an elevation-inducing stimulus, as compared to a control stimulus, on approach and avoidance orientations, and on prosocial motivation. As the effects for outrage in Study 5 were inconsistent with the existing literature (Carver & Harmon-Jones, 2009; Harmon-Jones, 2007), an outrage-inducing condition is included in Study 6 in order to clarify the inconsistencies of Study 5. Furthermore, as Study 5 established

that elevation is not an avoidance-oriented emotion, Study 6 does not include shame as a comparison emotion.

Given the results of Study 5, it is hypothesised that the elevation-inducing video will lead to higher levels of approach-orientation than the control video. In contrast, levels of avoidance should be low across conditions. Furthermore, it is hypothesised that the elevation-inducing video will lead to higher levels of prosocial motivation than the control video. Finally, the effect of the elevation-inducing video on prosocial motivation should be sequentially mediated by feelings of elevation (rather than outrage) and then by the approach-oriented state.

Despite the uncertain conclusions regarding dispositional outrage in Study 5 the literature clearly suggests that induced outrage should lead to higher levels of approach orientation (Carver & Harmon-Jones, 2009; Harmon-Jones, 2007) and prosocial motivation (Thomas et al., 2009) than the control condition. Furthermore, the effect of the outrage inducing video on prosocial motivation should be sequentially mediated by feelings of outrage (rather than elevation) and then by the approach-oriented state.

Method

Participants and design. Seventy-eight American participants (52.60% female) with a mean age of 34.83 (SD = 11.02) completed an on-line questionnaire (via Qualtrics). Sample sizes were determined on the basis of providing sufficient power (.8) to detect a medium to large effect size. Participants were sampled from Amazon's Mechanical Turk; a site for webbased data collection that functions through a participant compensation system. Participants were randomly assigned to Condition in a one factor between-participants design with three levels (Condition: elevation vs. outrage vs. control). Data were collected using an on-line questionnaire.

Procedure. Participants were given access to a secure web link which sent them to an on-line questionnaire. Informed consent and demographic information were obtained, after which participants were randomly assigned to watch one of three videos (elevation, outrage, and control). Participants then responded to the emotion and motivational orientation measures. Participants received (on-line) written debrief and compensation upon completion.

Experimental manipulations. The elevation (2.14-minutes) and control (2.42-minutes) videos as described in Pilot Study 1 were employed (see *Chapter 3*). As the sample was American (rather than British), the outrage-inducing (2.58-minutes) video as described in Pilot Study 2 was employed (see *Chapter 3* and *Appendix A*).

Measures. Measures were presented to participants in the following order: first emotions, then action readiness, and then prosocial motivation (each on a separate page). Presentation of items within each of these three constructs was randomised. All items were measured on a 7-point scale (1 = didn't feel it at all, 7 = felt it very strongly).

Emotion. Moral elevation and moral outrage were measured using the same items as described in Pilot Study 1 (see *Chapter 3* and *Appendix B*).

Action readiness. Items were drawn from Frijda and colleagues' (1989) list of action readiness items. We used the items that directly measured approach versus avoidance orientation. Approach orientation was measured using the following two items: "I want to approach, to make contact" and "I wanted to be or stay close, to be receptive to someone" (r = .79, p < .001). A mean score of these two items formed the approach measure. Avoidance orientation was measured using the following two items: "I wanted to have nothing to do with something or someone, to be bothered by it as little as possible, to stay away" and "I wanted to sink into the ground, to disappear from the Earth, not to be noticed by anyone" (r = .61, p < .001). A mean score of these two items formed the avoidance measure

Prosocial motivation. Participants were asked to rate the extent to which they felt each of the following things while watching the video: "want to help others", "feel like doing good for others", "do not want to help others", and "do not care about assisting others". A mean score of these four items formed the prosocial motivation measure. Cronbach's alpha was .77.

Results

Descriptives. Intercorrelations among variables, as well as their means and standard deviations, are presented in Table 6.2.

Table 6.2
Study 6: Means, Standard Deviations, Confidence Intervals, and Correlations among Key Variables

Variable	Mean (SD)	95% CI	2	3	4	5
1.Elevation	4.13 (1.55)	[3.78, 4.48]	18	.41***	.01	.36**
2.Outrage	2.97 (1.98)	[2.53, 3.42]		.42***	.36**	.24*
3.Approach	3.83 (1.78)	[3.43, 4.24]			.21†	.62***
4.Avoidance	1.93 (1.20)	[1.66, 2.20]				15
5. Prosocial motivation	5.70 (1.22)	[5.43, 5.98]				

Note. N = 78. CI = confidence interval. All measures were scored on a 7-point scale (1 = didn't feel it at all, 7 = felt it very strongly).

Table 6.3
Study 6: Means, Standard Errors, and Cell Sizes for each Condition

	Condition				
	Elevation-only video	Outrage-only video	Control video		
Cell sizes	N = 26	N = 28	N = 24		
1.Feelings of elevation	5.45 (0.24)	3.38 (0.23)	3.56 (0.25)		
2.Feelings of outrage	2.02 (0.26)	4.96 (0.25)	1.69 (0.27)		
3.Approach	4.35 (0.32)	4.39 (0.30)	2.63 (0.33)		
4.Avoidance	1.77 (0.23)	2.29 (0.22)	1.69 (0.24)		
5.Prosocial motivation	6.07 (0.23)	5.94 (0.22)	5.03 (0.23)		

Note. Table depicts means. Standard errors are provided in brackets. All measures were scored on a 7-point scale (1 = didn't feel it at all; 7 = felt it very strongly).

Emotions. Mixed model analyses of variance testing the interaction effect of Condition (elevation vs. outrage vs. control) x Emotion self-reports (elevation vs. outrage) revealed a significant interaction, F(2, 75) = 61.48, p < .001, $\eta^2 = .62$. Pairwise comparisons showed that feelings of elevation were higher following the elevation-inducing (M = 5.45, SE = 0.24) than following the outrage-inducing (M = 3.38, SE = 0.23) and control (M = 3.56, SE = 0.25) videos (ps < .001, respectively), F(2, 75) = 22.35, p < .001, $\eta^2 = 37$. Feelings of outrage were higher following the outrage-inducing (M = 4.96, SE = 0.25) than following the elevation-inducing (M = 2.02, SE = 0.26) and control (M = 1.69, SE = 0.27) videos (ps < .001, respectively), F(2, 75) = 50.77, p < .001, $\eta^2 = .58$. See Table 6.3 for all cell-specific descriptives.

Motivational orientation. A mixed model analysis of variance with motivational orientation (approach vs. avoidance) as a two-level within participants variable and Condition (elevation vs. outrage vs. control) as a three-level between participants variable revealed a significant main effect of motivational orientation, F(1, 75) = 81.29, p < .001, $\eta^2 = .52$ and a significant main effect of Condition, F(2, 75) = 8.34, p = .001, $\eta^2 = .18$. The main effects were qualified by a significant interaction effect, F(2, 75) = 5.27, p = .007, $\eta^2 = .12$.

Pairwise comparisons showed that approach orientation was significantly higher following the elevation-inducing (M = 4.35, SE = 0.32) and outrage-inducing videos (M = 4.39, SE = 0.30) than following the control video (M = 2.63, SE = 0.33, p's < .001), F (2, 75) = 9.78, P < .001, P = .21. There was no significant difference between the elevation-inducing and outrage-inducing videos (P = .915). Avoidance orientation did not differ by condition (P = .177, P = 0.23; P = 0.23; P = 0.22; P = 0.22; P = 0.24; all P = 0.25.

Moreover, pairwise comparisons showed that approach was significantly higher than avoidance following the elevation-inducing ($F(1, 75) = 51.45, p < .001, \eta^2 = .41$), outrage-

inducing (F(1,75) = 37.05, p < .001, $\eta^2 = .33$), and control (F(1,75) = 6.29, p = .014, $\eta^2 = .08$) videos. Nevertheless, the effect sizes for the differences between approach and avoidance orientations were much larger following the elevation-inducing and outrage-inducing videos than following the control video (see Figure 6.1). See Table 6.3 for all cell-specific descriptives.

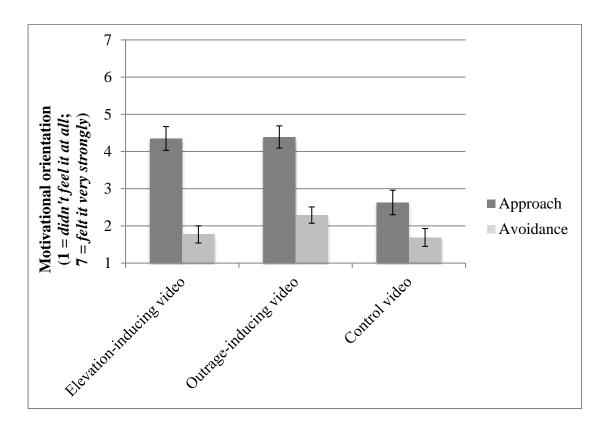


Figure 6.1. Study 6: Motivational orientation as a function of condition.

Note. Error bars depict standard errors.

Prosocial motivation. Analyses of variance were conducted to test the effect of Condition (elevation vs. outrage vs. control) on prosocial motivation. Results revealed a significant effect of Condition, F(2, 75) = 6.03, p = .004, $\eta^2 = .14$. Pairwise comparisons revealed that prosocial motivation was significantly higher following the elevation-inducing (M = 6.07, SE = 0.23) and outrage-inducing (M = 5.94, SE = 0.22) videos than following the

control (M = 5.03, SE = 0.23, p's < .007) video. There was no significant difference in prosocial motivation between the elevation-inducing and outrage-inducing videos (p = .679). See Table 6.3 for all cell-specific descriptives.

Mediation analyses. Sequential mediation analyses (using Hayes' 2013, Process macro model 6) were conducted to test (1) whether feelings of elevation and then approach orientation mediated the effect of the elevation-inducing video on prosocial motivation and (2) whether feelings of outrage and then approach orientation mediated the effect of the outrage-inducing video on prosocial motivation. Condition (elevation vs. outrage vs. control) was dummy coded to produce an elevation condition variable and an outrage condition variable. The control condition acted as the reference category. In order to test the independent mediating roles of the two emotions, feelings of moral outrage were entered as a covariate in the first analysis, and feelings of moral elevation were entered as a covariate in the second analysis.

Results showed that feelings of elevation and then approach orientation significantly and sequentially mediated the effect of the elevation-inducing video on prosocial motivation, B = 0.34, SE = 0.14, 95CI 0.13/0.71 (indirect effect). The significant total effect of the elevation-inducing video on prosocial motivation (B = 0.98, SE = 0.32, t = 3.05, p = .003) was reduced to non-significance in the direct model (B = 0.23, SE = 0.33, t = 0.69, p = .491) (see Figure 6.2).

Similarly, results showed that feelings of outrage and then approach orientation significantly and sequentially mediated the effect of the outrage-inducing video on prosocial motivation, B = 0.47, SE = 0.24, 95CI 0.15/1.09 (indirect effect). The significant total effect of the outrage-inducing video on prosocial motivation (B = 0.96, SE = 0.30, t = 3.16, p = .002) was reduced to non-significance in the direct model (B = 0.35, SE = 0.40, t = 0.89, p = .378) (see Figure 6.2).

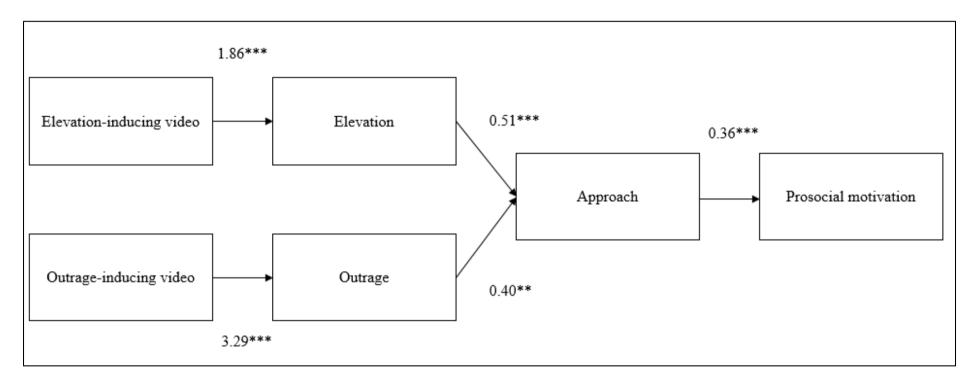


Figure 6.2. Study 6. Unstandardised B coefficients for sequential mediation analyses using Process Macro (Hayes, 2013).

^{**}*p* < .01. ****p* < .001.

Discussion

Results were in line with hypotheses. Specifically, the elevation-inducing and outrage-inducing videos led to higher levels of approach orientation than the control video. Moreover, the elevation-inducing and outrage-inducing videos led to higher levels of prosocial motivation than the control video. Effects of the emotion-inducing videos on prosocial motivation were mediated by their respective emotions and then by the approach-oriented state. Therefore, both elevation and outrage induce an approach (rather than avoidance) orientation which in turn leads to a greater willingness to help others.

Thus, in line with Study 5, the results of Study 6 provide further evidence for the hypothesis that elevation is an approach-oriented emotion. Furthermore, the results for outrage are in line with existing literature (Carver & Harmon-Jones, 2009; Harmon-Jones, 2007) conceptualising outrage as an emotion high in approach-orientation.

General Discussion

The current research is the first to directly test the relationship between moral elevation and the behavioural activation and inhibition systems. More specifically, it aimed to explore whether elevation can be conceptualised as an approach-oriented emotion. Study 5 showed that individual differences in elevation (when accounting for general positive and negative affect, and two comparison emotions) were positively associated with individual differences in the behavioural activation system (the BAS-reward sub-scale specifically) but not in the behavioural inhibition system. This provided evidence for the notion that dispositional elevation is an approach-oriented, rather than avoidance-oriented, emotion. Study 6 showed that an elevation-inducing video, as compared to a control video, significantly promoted an approach-oriented state as well as prosocial motivation. Moreover, the effect of the elevation-inducing video on prosocial motivation was significantly and sequentially mediated by feelings of moral elevation and then by the approach-oriented state.

This study showed that situational increases in moral elevation instigate an approach orientation. Taken together the two studies provide clear evidence for the notion that elevation, whether measured dispositionally or as a situational response, is an approach-oriented emotion.

The current findings contribute to the rapidly expanding moral elevation literature. First, the findings somewhat contradict those of Algoe and Haidt (2009). Indeed, elevation does not appear to be a calmer and sedative emotion and instead strongly promotes a desire to do something, to approach, to act, and more specifically, a desire to actively help others. It seems likely that the spontaneously self-described responses coded by Algoe and Haidt may not have captured the full scope of the approach responses that follow from moral elevation. Second, the current findings complement the existing research that has shown the potential of moral elevation for promoting a range of prosocial behaviours (Cox, 2010; Schnall et al., 2010), both in the lab and in the field. Specifically, given the approach-oriented nature of elevation, it should effectively promote prosocial behaviour both when the behaviour is easy as well as when the behaviour is difficult. In sum, the findings of the current research provide yet further evidence for the positive and prosocial potential of moral elevation.

Limitations and Caveats

The current research employed outrage (Studies 1 and 2) and shame (Study 1) as comparison emotions. These two emotions were employed given their well-established link to approach (Carver & Harmon-Jones, 2009; Harmon-Jones, 2007) and avoidant (Cohen et al., 2011) states respectively. Future research is now needed to compare the behavioural activation and inhibition systems of elevation to those of other positive emotions that have less obvious action implications (e.g., compassion).

The findings of the current research suggest that elevation is a strongly approachoriented emotion, and therefore should motivate behavioural responses both when they are easy and when they are difficult (see Algoe & Haidt, 2009). However, the current research did not measure easy versus difficult prosocial responses and it would be interesting and important to develop valid and reliable measures of easy versus difficult prosocial responses to better understand the behavioural limits of different emotions (including elevation).

Conclusion

The current research provides clear and direct support for the notion that moral elevation is associated with the behavioural activation rather than inhibition system, and more specifically, that it strongly motivates an approach-oriented rather than avoidance-oriented state. These findings disambiguate contradictions in prior evidence, showing that both dispositional and situational elevation are associated with increased approach. Encouragingly, and in line with past research (Cox, 2010; Schnall et al., 2010), these findings suggest that elevation should be a particularly effective emotion for motivating people to pro-actively help and benefit others.

Chapter 7

Qualified Prosociality? Comparing Implications of Sympathy and Guilt with Elevation and
Outrage

The current chapter examines the distinctiveness of moral elevation and moral outrage versus sympathy or guilt as bases for prosociality. Previous research has demonstrated that specific component features – disinterested elicitors and action tendencies – are involved in the linkage between moral emotions and the concern for others (Haidt, 2003). In this chapter I examine two additional component features (stereotyping and self-vs. other-focus) that could link elevation and outrage to qualitatively different forms of prosociality compared with sympathy or guilt. Study 7 (N = 105) demonstrates that sympathy (but not elevation or outrage) instigates undesirable paternalistic stereotypes. Study 8 (N = 121) shows that guilt (compared with either elevation or outrage) instigates relatively more self-focus than other-focus. These studies provide further support for the distinctive roles of elevation and outrage as bases of more unqualified prosocial responses than are produced by sympathy or guilt. Theoretical and applied implications are discussed.

Vast inequalities and social injustices continue to exist across societies. Yet many people remain as passive bystanders. It is essential for research to understand when and why people can be mobilised to help and support others. Previous research has shown that guilt, sympathy, elevation and outrage can promote prosocial responses (Haidt, 2003). However, it has not considered whether the prosocial motivations emanating from elevation and outrage differ from the motivations emanating from guilt and sympathy. The present research examines the underlying component features of prosocial responses to these four moral emotions.

Moral emotions may provide a particularly effective strategy for motivating prosocial motivation – wanting to protect or promote the welfare of others (Haidt, 2003; Tangney et al., 2007). Moral emotions are "those that are linked to the interests or welfare either of society as a whole or at least of persons other than the judge or agent" (Haidt, 2003, p. 276).

Haidt's (2003) model of moral emotion prototypicality suggests that moral emotions vary in the extent to which they can be linked to the interests of others. Researchers have analysed various component features of emotions, including the emotion's eliciting event, facial expression, physiological change, appraisal, and action tendency (Frijda, 1986; Scherer, 1984). Haidt (2003) suggests that two of these component features are particularly useful for identifying prototypical moral emotions. First, *disinterested elicitors* refer to the emotions that can be triggered even when there is no personal stake (e.g., you can feel angry about an injustice that affects someone else). Second, *prosocial action tendencies* refer to the degree to which the action tendency following the triggering event benefits others (e.g., the action tendency of compassion is to help the victim). Emotions high in both disinterested elicitors and prosocial action tendencies are prototypical moral emotions. Given these component features, Haidt (2003) suggested that elevation, outrage, sympathy, and guilt are the most prototypical moral emotions. In other words, these emotions are the most intrinsically linked to the welfare of others.

The four emotions have been defined as follows. Elevation is an emotional response to witnessing a moral virtue (Algoe & Haidt, 2009). Outrage is an emotional response to witnessing a person or group transgress a moral standard that harms another person or group (Thomas et al., 2009). Guilt is an emotional response felt when the self has transgressed a moral standard that harms another person or group (Zeelenberg & Breugelmans, 2008). Sympathy is an emotional response to witnessing another's suffering (Lazarus, 1991). Existing empirical evidence shows that elevation, outrage, sympathy and guilt can all

promote prosocial intentions and behaviours (e.g., Cox, 2010; De Hooge et al., 2007; Freeman et al., 2009; Iyer et al., 2007; Landis et al., 2009; Montada & Schneider, 1989; Nelissen et al., 2007; Pagano & Huo, 2007; Schnall et al., 2010; Vianello et al., 2010; Waklsak et al., 2007). However, elevation and outrage have been under-researched relative to sympathy and guilt and a question for the present research is whether they motivate qualitatively different forms of prosocial motivation.

Haidt's (2003) model of moral emotion prototypicality highlights two useful component features for identifying *moral* emotions. The current research proposes two additional component features that inform the extent to which emotions inspire an interest in the welfare of others. Drawing on separate lines of empirical evidence (outlined below), it is proposed that stereotyping and self- versus other-focus are potentially important component features that could distinctively mark the prosocial quality of responses emanating from sympathy and guilt respectively. Specifically, because sympathy involves implicit derogation of a target group and because guilt involves increased self-concern, they do not place primary value on the other person or group and therefore we consider that they are both qualified forms of prosocial motivation. The current research compares the effects of elevation and outrage to those of sympathy and guilt on stereotyping and self-focus respectively. This will uncover whether, like sympathy and guilt, elevation and outrage are also qualified prosocial emotions.

Stereotyping

Paternalistic stereotyping occurs when groups are seen as high in warmth but low in competence. As paternalised groups (e.g., the elderly) are perceived as low status and dependent they are recipients of greater pity and helping (Fiske et al., 2002).

Importantly, recent evidence shows that the type of help provided to paternalised people tends to be dependency-oriented rather than autonomy-oriented (Nadler & Chernyak-

Hai, 2014). In dependency-oriented helping, the helper provides the full solution to a problem. Although this fulfils immediate needs, this type of helping restricts the benefactor's self-sufficiency over time. In autonomy-oriented helping, the helper provides only a partial solution to the problem. This type of helping fulfils immediate needs and provides the skills for self-sufficiency over time (Halabi & Nadler, 2010). Thus, while paternalised people may receive more help (Fiske et al., 2002) this is likely to be dependency-oriented. Ultimately, such helping could be detrimental as it perpetuates dependence on high-status benefactors, rather than enabling recipients to become self-sufficient.

Research has highlighted that sympathy runs the risk of leading to paternalistic stereotyping as it maintains high levels of disparity between the ingroup (i.e., the advantaged) and the outgroup (i.e., the disadvantaged) (Nadler & Halabi, 2006; Thomas et al., 2009). Sympathy may therefore induce helping that is contingent on dependency, which reaffirms status differentiation between the beneficiary and the victim. To date, no research has examined whether elevation and outrage also produce paternalistic stereotypes of the target group. This will be tested in Study 7.

Self-Focus

Emotions vary in the extent to which they instigate a self- or other-focus. Research shows that, as other-focused emotions draw attention to the needs of the disadvantaged, other-focused emotions motivate helping focused on the needs of others (altruistic motivation). In contrast, as self-focused emotions draw attention to one's own circumstance, self-focused emotions motivate helping that primarily alleviates one's own distress (egoistic motivation; Batson et al., 1988; Batson & Shaw, 1991).

Research has highlighted that due to its self-focused nature, guilt runs the risk of leading to normative and strategic responses primarily aimed at overcoming the self-focused negative state (Hopkins et al., 2007; van Leeuwen, 2007), which may then be associated with

egoistic rather than altruistic action (Iyer et al., 2004; McGarty et al., 2005). No research has examined whether elevation and outrage also produce a self-focus. This will be tested in Study 8.

The Current Research

The primary aim of the current chapter is to test the prosocial implications of elevation and outrage compared with either sympathy (Study 7) or guilt (Study 8).

Specifically, Study 7 compares the effects of elevation and outrage to those of sympathy on stereotyping of the target group. Study 8 compares the effects of elevation and outrage to those of guilt and a control condition on self- versus other-focus.

Study 7

To our knowledge no research has examined how elevation and outrage influence stereotyping. Research has suggested that sympathy may be associated with paternalistic stereotypes (cf. Thomas et al., 2009). Thus, sympathy induction is employed as the comparison condition in this study.

The following hypotheses are based on the appraisal tendency framework (Horberg et al., 2011). The appraisal tendency framework (ATF) highlights the role of cognitive appraisals in triggering the emotional state itself (which is well established in emotion theories, Frijda, 1986), and in determining the outcomes of the emotional state. This framework suggests that appraisals remain salient throughout the emotional state and colour subsequent judgments (or motivations and behaviours) by prioritising specific concerns (termed sociomoral concerns) that are semantically related to the emotion's appraisal.

Given that sympathy derives from an appraisal that a target is needy, it is hypothesised that, relative to other conditions, sympathy will reduce perceptions of competence. In contrast, given that elevation derives from an appraisal of a morally impressive behaviour, thus from high (moral) competence, it is hypothesised that, relative to

other conditions, elevation will increase perceptions of competence. The potential relationship between outrage and competence stereotypes is less clear. This is because outrage derives from an appraisal that someone has transgressed a moral standard which has affected another person or group. Whether the affected target is then seen as competent or incompetent is not immediately clear. Thus, it is plausible that outrage will lead to neither high nor low perceptions of competence. Perceptions of warmth should be high following all three emotion-inducing manipulations as there is no theoretical reason for the target to be disliked. Furthermore, we hypothesise that sympathy will induce higher levels of paternalism (warmth-competence difference score) than elevation and outrage.

Method

Participants and design. One hundred and five American participants (59 male, 45 female) with a mean age of 33.68 years (SD = 11.74) completed an on-line questionnaire. Sample sizes were determined on the basis of providing sufficient power (.8) to detect a medium to large effect size. Participants were sampled from Amazon's Mechanical Turk; a site for web-based data collection that functions through a participant compensation system. Participants were randomly assigned to condition in a one factor between participants design with three levels (Condition: elevation vs. outrage vs. sympathy).

Procedure. Participants were given access to a secure web link which sent them to an on-line questionnaire. Informed consent and demographic information were obtained, after which participants were randomly assigned to read one of three emotion-inducing stories (elevation, outrage, and control). Participants then responded to the emotion and stereotyping measures. Participants received (on-line) written debrief and compensation upon completion.

Experimental manipulations.

Elevation. The elevation-inducing story was a written transcript from the elevation-inducing video described in Pilot Study 1 (see *Chapter 3* and *Appendix A*). A written story (or

transcript) was used instead of the original video stimulus so that some of the information could be amended. Specifically, the protagonist's nationality was amended to Zambian. This was necessary in order to maintain consistency of the target outgroup across conditions so that it would be possible to compare outgroup stereotypes between conditions. The extract was 334 words in length (see *Appendix A* for the full transcript used).

Outrage. The outrage-inducing story was a written transcript from the outrage-inducing video described in Pilot Study 2 (see *Chapter 3* and *Appendix A*). The raw transcript was used. The extract was 445 words in length (see *Appendix A* for the full transcript used).

Sympathy. The sympathy-inducing story was novel. The extract was taken from the Children International website. It describes the state of poverty and hunger in Zambia, highlighting problems such as AIDS/HIV and lack of parents in the homes. The extract was 410 words in length (see *Appendix A* for the full transcript used).

Measures. Measures were presented to participants in the following order: first emotions and then stereotypes (each on a separate page). Presentation of items within each of these two constructs was randomised. All items were measured on a 7-point scale (I = didn't feel it at all, T = felt it very strongly) unless indicated otherwise.

Elevation and outrage. To measure feelings of moral elevation and moral outrage, the same items were employed as in Pilot Study 1 (see *Chapter 3* and *Appendix B*).

Sympathy. Participants were asked to rate the extent to which they felt: compassionate, moved, softhearted, sympathetic, tender, and warm (Stocks, Lishner, Waits, & Downum, 2011). A mean score of these six items formed the sympathy measure. Cronbach's alpha was .78.

Stereotypes. To measure perceived competence, participants were asked: "To what extent do you view people from Zambia as [competent, confident, capable, efficient, intelligent, and skilful]" (Fiske et al., 2002). A mean score of these six items formed the

competence measure. Cronbach's alpha was .94. To measure perceived friendliness, participants were asked: "To what extent do you view people from Zambia as [friendly, well-intentioned, trustworthy, warm, good-natured, and sincere]" (Fiske et al., 2002). A mean score of these six items formed the friendliness measure. Cronbach's alpha was .96. Participants responded from 1 (*not at all*) to 5 (*extremely*).

Results

Descriptives. Intercorrelations among variables, as well as their means and standard deviations, are presented in Table 7.1.

Emotions. Mixed model analyses of variance showed a significant interaction effect of Condition (elevation vs. outrage vs. sympathy) x Emotion self-reports (elevation, vs. outrage vs. sympathy), F(4, 204) = 42.99, p < .001, $\eta^2 = .46$. Pairwise comparisons showed that feelings of elevation were higher following the elevation-inducing (M = 5.66, SE = .23, p < .001) than following the outrage-inducing (M = 2.79, SE = 0.23) and sympathy-inducing (M = 3.00, SE = 0.22) stories. Feelings of outrage were higher following the outrage-inducing (M = 4.74, SE = 0.29, p < .02) than following the elevation-inducing (M = 2.87, SE = 0.28) and sympathy-inducing (M = 3.76, SE = 0.28) stories. Feelings of sympathy were marginally higher following the sympathy-inducing (M = 5.24, SE = 0.20, p = .069) than following the outrage-inducing story (M = 4.71, SE = 0.21), but did not differ following the elevation-inducing story (M = 4.95, SE = 0.20, p = .308). See Table 7.2 for all cell-specific descriptives.

Stereotypes. Analyses of variance were conducted to test the effect of Condition (elevation vs. outrage vs. sympathy) on stereotypes of competence and warmth. Results revealed a significant effect of Condition on competence, F(2, 102) = 5.77, p = .004, $\eta^2 = .10$ but not on warmth, F(2, 102) = 0.49, p = .494, $\eta^2 = .01$.

Pairwise comparisons revealed that following the elevation-inducing story perceptions of competence were rated as significantly higher (M = 3.48, SE = .16) than following the

sympathy-inducing story (M = 2.73, SE = .16, p = .001) and marginally higher than following the outrage-inducing story (M = 3.10, SE = .16, p = .092). Perceptions of competence following the outrage-inducing story were higher albeit not significantly than following the sympathy-inducing story (p = .100). See Table 7.2 for all cell-specific descriptives.

Paternalism. Paternalism is reflected by the combination of high warmth and low competence scores. Thus, to test paternalism, we computed a warmth-competence difference score, where high difference scores reflect higher paternalism. Analyses of variance were conducted to test the effect of Condition (elevation vs. outrage vs. sympathy) on paternalism. Results revealed a significant effect of Condition, F(2, 102) = 3.81, p = .025, $\eta^2 = .07$. Pairwise comparisons showed that paternalism was higher following the sympathy-inducing story (M = 0.67, SE = .14) than following the elevation-inducing (M = 0.14, SE = .14, p = .009) and outrage-inducing (M = 0.28, SE = .15, p = .055) stories. There was no difference between the elevation-inducing and outrage-inducing stories (p = .489). See Table 7.2 for all cell-specific descriptives.

Regression. Regression analyses were conducted to test the independent predictive effects of elevation, outrage, and sympathy on paternalism. The overall model was significant $(R^2 = .17, F(3, 101) = 6.77, p < .001)$. Sympathy positively predicted $(\beta = .40, p < .0001)$ and elevation negatively predicted $(\beta = -.32, p = .002)$ paternalism. Outrage $(\beta = -.03, p = .727)$ did not predict paternalism.

Table 7.1

Study 7: Means, Standard Deviations, Confidence Intervals, and Correlations among Key Variables

Mean (SD)	95% CI	2	3	4	5	6
3.82 (1.87)	[3.46, 4.18]	12	.34***	.34***	.20*	18†
3.78 (1.82)	[3.43, 4.14]		.30**	07	.05	.13
4.97 (1.21)	[4.74, 5.21]			.12	.39***	.29**
3.10 (0.98)	[2.91, 3.29]				.59***	49***
3.47 (0.94)	[3.28, 3.65]					.42***
).37 (0.87)	[0.20, 0.53]					
33	.82 (1.87) .78 (1.82) .97 (1.21) .10 (0.98) .47 (0.94)	.82 (1.87) [3.46, 4.18] .78 (1.82) [3.43, 4.14] .97 (1.21) [4.74, 5.21] .10 (0.98) [2.91, 3.29] .47 (0.94) [3.28, 3.65]	.82 (1.87) [3.46, 4.18]12 .78 (1.82) [3.43, 4.14] .97 (1.21) [4.74, 5.21] .10 (0.98) [2.91, 3.29] .47 (0.94) [3.28, 3.65]	.82 (1.87) [3.46, 4.18]12 .34*** .78 (1.82) [3.43, 4.14] .30** .97 (1.21) [4.74, 5.21] .10 (0.98) [2.91, 3.29] .47 (0.94) [3.28, 3.65]	.82 (1.87) [3.46, 4.18]12 .34*** .34*** .78 (1.82) [3.43, 4.14] .30**07 .97 (1.21) [4.74, 5.21] .12 .10 (0.98) [2.91, 3.29] .47 (0.94) [3.28, 3.65]	.82 (1.87) [3.46, 4.18]12 .34*** .34*** .20* .78 (1.82) [3.43, 4.14] .30**07 .05 .97 (1.21) [4.74, 5.21] .12 .39*** .10 (0.98) [2.91, 3.29] .59*** .47 (0.94) [3.28, 3.65]

Note. N = 105. CI = confidence intervals. Emotions were scored on a 7-point scale (1 = didn't feel it at all, 7 = felt it very strongly). Competence and warmth were scored on a 5-point scale from 1 (not at all) to 5 (extremely). Paternalism was computed by subtracting the competence from the warmth ratings.

Table 7.2

Study 7: Means, Standard Errors, and Cell Sizes for each Condition

	Condition				
	Elevation video	Outrage video	Elevation and outrage		
			videos (dual)		
Cell sizes	N = 35	N = 34	N = 36		
1.Elevation	5.66 (0.23)	2.79 (0.23)	3.00 (0.22)		
2.Outrage	2.87 (0.28)	4.74 (0.29)	3.76 (0.28)		
3.Sympathy	4.95 (0.20)	4.71 (0.21)	5.24 (0.20)		
4.Competence	3.48 (0.16)	3.10 (0.16)	2.73 (0.16)		
5.Warmth	3.62 (0.16)	3.38 (0.16)	3.40 (0.16)		
6.Paternalism	0.14 (0.14)	0.28 (0.15)	0.67 (0.14)		

Note. Table depicts means. Standard errors are provided in brackets. Emotions were scored on a 7-point scale (1 = didn't feel it at all; 7 = felt it very strongly). Competence and warmth were scored on a 5-points scale (1 = not at all; 5 = very much). Paternalism was computed by subtracting the competence from the warmth ratings.

Mediation analyses. Two sets of mediation analyses (using Hayes' 2013 Process macro model 4) were conducted (1) to test whether feelings of elevation, sympathy, and/or outrage mediated the effects of the elevation-inducing story on paternalism, and (2) to test whether feelings of elevation, sympathy, and/or outrage mediated the effects of the outrage-inducing story on paternalism. Across both analyses the sympathy-inducing story acted as the reference category.

Elevation-inducing story. Results showed that feelings of elevation significantly mediated the effect of the elevation-inducing story on paternalism, B = -0.46, SE = 0.18, 95CI -0.84/-0.15 (indirect effect). Feelings of outrage, B = -0.01, SE = 0.05, 95CI -0.12/0.07 and feelings of sympathy, B = -0.08, SE = 0.08, 95CI -0.26/0.08 (indirect effects) did not mediate the effect of the elevation-inducing story on paternalism. The significant total effect of the elevation-inducing story on paternalism (B = -0.53, SE = 0.20, t = -2.66, p = .009, 95CI -0.93/-0.14) was reduced to non-significance in the direct model (B = 0.01, SE = 0.27, t = 0.05, p = .947, 95CI -0.53/0.56) (see Figure 7.1).

Outrage-inducing story. Results showed that feelings of sympathy significantly mediated the effect of the outrage-inducing story on paternalism, B = -0.14, SE = 0.08, 95CI - 0.33/-0.01 (indirect effect). Feelings of elevation, B = 0.04, SE = 0.06, 95CI -0.07/0.18 and feelings of outrage, B = 0.01, SE = 0.05, 95CI -0.08/0.12 (indirect effects) did not mediate the effect of the outrage-inducing story on paternalism. The marginally significant total effect of the outrage-inducing story on paternalism (B = -0.39, SE = 0.20, t = -1.94, p = .055, 95CI - 0.79/0.01) was reduced to non-significance in the direct model (B = -0.30, SE = 0.21, t = -1.46, p = .148, 95CI -0.71/0.11) (see Figure 7.1).

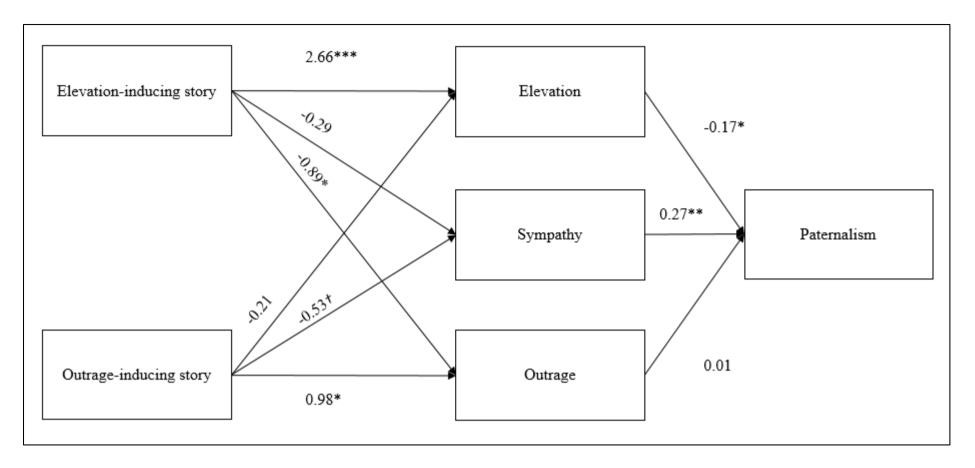


Figure 7.1. Study 7: Unstandardised B coefficients for mediation analyses using Process macro (Hayes, 2013, model 4).

Note. This figure depicts two models that were run separately. One model tested whether the effect of the elevation-inducing story on paternalism was mediated by the three emotions. The other model tested whether the effect of the outrage-inducing story on paternalism was mediated by the three emotions. †p < .10. *p < .05. **p < .01. **p < .001

Discussion

Overall, the results demonstrate that while sympathy increases paternalistic stereotyping, elevation and outrage do not. Specifically, relative to the sympathy manipulation, the elevation manipulation increased perceptions of competence. Outrage did not lead to high or low perceptions of competence relative to the elevation or sympathy conditions. Furthermore, while sympathy induced paternalism (high warmth combined with low competence), elevation and outrage did not. Elevation even induced stereotypes of high warmth and high competence – normally reserved for ingroups and close allies (cf. Fiske et al., 2002).

One limitation of this study was that sympathy ratings were relatively high across conditions. However, regression analyses replicated the key findings that elevation negatively predicted paternalism, sympathy positively predicted paternalism, and that outrage did not predict paternalism. Further, mediation analyses demonstrated that the effect of the elevation manipulation on paternalism was mediated by feelings of elevation and not by feelings of sympathy.

Study 8

In line with the ATF (Horberg et al., 2011), research has established that guilt is a self-focused emotion (Iyer, Leach, & Crosby, 2003). However, no research has experimentally tested the focus (self vs. other) of elevation and/or outrage, and consequently no research has distinguished the focus associated with guilt versus these two emotions. As elevation and outrage are experienced following other-relevant cues, their appraisals can be considered as other-focused. Drawing on the ATF (Horberg et al., 2011), it follows that their subsequent cognitions and motivations should also be distinctively other-focused. Therefore, it is hypothesised that guilt should induce a significantly higher focus on the self as compared to elevation and outrage.

Method

Participants and design. Participants were 167 British students. The current study included an attention check item. This was a novel addition in this study and was included to ensure that participants were reading all of the questions. When excluding participants who failed the attention check (27.5%), the sample consisted of 121 participants.

Of the 121 participants, 89 were female and 32 were male and the mean age was 21.35 years (SD = 5.88). Participants were University students from across different academic disciplines. Participants were incentivised for taking part through course credit or prize draw entry. Sample sizes were determined on the basis of providing sufficient power (.8) to detect a medium to large effect size.

Because focus may vary dispositionally and by population (cf. Scheier, Fenigstein, & Buss, 1974), we included a control condition to evaluate whether guilt, elevation or outrage increased or decreased self-focus relative to the sample baseline. Therefore the design was a one factor between participants design with four levels (Condition: elevation vs. outrage vs. guilt vs. control).

Procedure. Participants were given access to a secure web link which sent them to an on-line questionnaire. Informed consent and demographic information were obtained, after which participants watched one of the four videos (elevation, outrage, guilt, or control). Participants then completed the emotion and focus measures. Participants received (on-line) written debrief upon completion.

Experimental manipulations. The elevation-inducing (2.14-minutes), outrage-inducing (2.42-minutes), and control (2.42-minutes) videos described in Pilot Study 1 (see *Chapter 3* and *Appendix A*) were employed.

Guilt. The guilt-inducing video was a 2.41-minute extract from a Consumer

International report which demonstrated the impact of electronic waste (e-waste) produced by

European consumers (8.8 million tons per year) on the lives of people in developing countries (6.6 million tons of European e-waste is dumped in developing countries every year). It also discussed the hazardous effects of e-waste on the health of people living in the communities where e-waste is dumped as well as its effects on the environment (see *Appendix A*).

Measures. Measures were presented to participants in the following order: first focus, then emotions, and then perceived responsibility (each on a separate page). Presentation of items within each of these two constructs was randomised. All items were measured on a 7-point scale (1 = didn't feel it at all, 7 = felt it very strongly) unless indicated otherwise.

Elevation and outrage. Feelings of moral elevation and moral outrage were measured using the items described in Pilot Study 1 (see *Chapter 3* and *Appendix B*).

Guilt. Participants were asked to rate the extent to which they felt: guilty, ashamed, blameworthy, dissatisfied with myself, disgusted at myself, angry at myself, and embarrassed (Watson & Clark, 1999). A mean score of these seven items formed the guilt measure. Cronbach's alpha was .94.

Perceived responsibility manipulation check. Guilt and outrage are both evoked by the perception that someone has transgressed a moral standard. In the present scenario guilt should reflect a sense of responsibility for a transgression whereas outrage should not because it is another group that has transgressed. In order to assess responsibility, participants in the outrage and guilt conditions were asked: "How responsible do you feel Europe is for having allowed the situation that was described in the video clip?" and "How much do you feel it is Europe's responsibility to do something to improve the situation that was described in the video clip?" These two items correlated strongly (r = .64, p < .001). A mean score of these two items was computed to form the perceived responsibility manipulation check.

Focus. Wegner and Giuliano's (1980, 1983) 20-item "linguistic implications form" was employed. This measure asks participants to complete 20 sentences by selecting one of

several correct pronouns (e.g., my, your, ours) for each sentence. Self-focus was scored by summing up the number of sentences completed with a first-person singular pronoun (e.g., I, me, or my; Wegner & Giuliano, 1980, 1983).

Results

All analyses controlled for academic discipline as well as incentive strategy.

Descriptives. Intercorrelations among variables, as well as their means and standard deviations, are presented in Table 7.3.

Perceived responsibility. Analyses of variance revealed a significant effect of Condition (outrage vs. guilt) on responsibility, F(1, 48) = 16.64, p < .001, $\eta 2 = .26$. As expected, perceived responsibility was higher following the guilt-inducing video (M = 5.31, SE = .25) than following the outrage-inducing video (M = 3.84, SE = .24).

Emotions. Mixed model analyses of variance revealed a significant interaction of Condition (elevation vs. outrage vs. guilt vs. control) x Emotion ratings (elevation, vs. outrage vs. guilt), F(2, 106) = 32.62, p < .001, $\eta = .48$. Pairwise comparisons showed that feelings of elevation were higher following the elevation-inducing (M = 5.23, SE = .25, p < .001) than following the outrage-inducing (M = 3.25, SE = 0.24), guilt-inducing (M = 2.30, SE = 0.26), and control (M = 3.77, SE = 0.24) videos. Feelings of outrage were higher following the outrage-inducing (M = 4.37, SE = 0.21, P < .001) than following the elevation-inducing (M = 2.78, SE = 0.23) and control (M = 2.16, SE = 0.22) videos, but did not differ from the outrage scores following the guilt-inducing video (M = 4.32, SE = 0.23, P = .863). Feelings of guilt were higher following the guilt-inducing (M = 3.05, SE = 0.25, P < .04) than following the elevation-inducing (M = 2.28, SE = 0.24), outrage-inducing story (M = 2.13, SE = 0.23), and control (M = 1.51, SE = 0.23) videos. See Table 7.4 for all cell-specific descriptives.

Table 7.3

Study 8: Means, Standard Deviations, Confidence Intervals, and Correlations among Key Variables

Variable	Mean (SD)	95% CI	2	3	4
1.Elevation	3.63 (1.67)	[3.33, 3.93]	15	.19*	07
2.Outrage	3.41 (1.51)	[3.14, 3.68]		.50***	.15†
3.Guilt	2.23 (1.34)	[1.99, 2.47]			.17 <i>†</i>
4. Self-focus	8.33 (3.22)	[7.75, 8.91]			

Note. N = 121. CI = confidence interval. Emotions are scored on a 7-point scale (1 = didn't feel it at all, 7 = felt it very strongly). Self-focus ranges from 0 (low self-focus) to 20 (high self-focus).

Table 7.4

Study 8: Means, Standard Errors, and Cell Sizes for each Condition

	Condition			
	Elevation-only	Outrage-only	Guilt-inducing	Control video
	video	video	video	
Cell sizes	N = 29	N = 32	N = 29	N = 31
1.Feelings of elevation	5.23 (0.25)	3.25 (0.24)	2.30 (0.26)	3.77 (0.24)
2.Feelings of outrage	2.78 (0.23)	4.37 (0.21)	4.32 (0.23)	2.16 (0.22)
4.Feelings of guilt	2.28 (0.24)	2.13 (0.23)	3.05 (0.25)	1.51 (0.23)
5.Self-focus	7.98 (0.59)	7.90 (0.56)	9.88 (0.61)	7.64 (0.57)

Note. Table depicts means. Standard errors are provided in brackets. Emotions were scored on a 7-point scale (1 = *didn't feel it at all*, 7 = *felt it very strongly*). Self-focus ranged from 0 (low self-focus) to 20 (high self-focus)

Self-Focus. Analyses of variance testing effects of Condition on self-focus showed a significant effect, F(3, 106) = 2.86, p = .041, $\eta^2 = .08$. Pairwise comparisons revealed that self-focus was significantly higher following the guilt-inducing (M = 9.88, SE = 0.61) than following the elevation-inducing (M = 7.98, SE = 0.59, p = .030), outrage-inducing (M = 7.90, SE = 0.56, p = .019), and control (M = 7.64, SE = 0.57, p = .010) videos. There were no other significant differences (p's > .680). See Table 7.4 for all cell-specific descriptives.

Furthermore, one sample t-tests showed that self-focus scores fell significantly below the mid-point following the elevation-inducing (t [28] = -3.15, p = .004), outrage-inducing (t [31] = -5.01, p < .001), and control (t [30] = -4.91, p < .001) videos, but not following the guilt-inducing video (t [28] = -0.63, p = .536).

As the emotions did not correlate significantly with self-focus (see Table 7.3), no mediation analyses were performed. The lack of correlations is likely due to the fact that self-focus and emotions are very distinct types of measures (i.e., implicit vs. explicit).

Discussion

Results are in line with the hypotheses. The results showed that guilt instigates significantly greater self-focus than elevation and outrage. Specifically, the guilt-inducing video led to significantly higher levels of self-focus than the control, elevation, and outrage videos. Moreover, the elevation-inducing and outrage-inducing videos did not instigate more or less self-focus than the control video. Given that the mean scores for focus were significantly below the midpoint of the scale in all of the non-guilt conditions (p < .01), it seems likely that the default situation is to focus on others and that this is altered or disrupted by guilt but not by elevation or outrage.

One limitation of this study is that self-reported outrage and guilt were at similar levels within the outrage condition. This could be because the two emotions share some general negative affect. However, feelings of outrage were significantly lower than feelings

of guilt within the guilt condition. Moreover, perceptions of responsibility (a necessity for feeling guilty) were low in the outrage condition and high in the guilt condition. Therefore, the emotion-inducing videos do appear to have been effective in instigating distinctive emotional responses.

General Discussion

A substantial amount of research has compared the component features of a range of emotions (e.g., Frijda et al., 1989; Roseman et al., 1994). The primary aim of the current research was to test the extent to which elevation and outrage can be considered as distinctively prosocial emotions relative to sympathy or guilt, both of which are *qualified* by undesirable features. We tested this proposition by drawing on two component features (stereotypes and self- vs. other-focus) that could motivate prosociality. The results showed that drawing on these two novel component features can help to effectively differentiate between distinct moral emotions.

Study 7 showed that sympathy, relative to elevation and outrage, instigates paternalistic stereotypes. Thus, sympathy should be more likely to induce helping that is contingent on dependency, which reaffirms status differentiation from the victim (cf. Fiske et al., 2002; Nadler & Chernyak-Hai, 2014). Given these findings, elevation and outrage may be more likely than sympathy to promote autonomous helping.

Study 8 showed that guilt, but not elevation or outrage, instigates self-focus. Thus, guilt should be more likely to induce egoistic helping, which tends to relieve one's own distress rather than meet the needs of the victim. Given these findings, elevation and outrage may be more likely than guilt to promote altruistic helping.

Overall these two studies suggest that elevation and outrage can be considered as less qualified prosocial emotions than either sympathy or guilt.

The current chapter provides further empirical support for the appraisal tendency framework (Horberg et al., 2011). Specifically, results of both studies showed that these discrete moral emotions have distinctive effects on component features. Furthermore, these effects can be theoretically predicted by the emotion's differing appraisals.

Applied Implications

Study 7 showed that elevation and outrage (unlike sympathy) do not instigate paternalistic stereotypes. This is a particularly relevant insight for the applied field. Indeed, charitable campaigns often paternalise beneficiaries and depict them as helpless victims (Balaji, 2011; Manzo, 2006). Organisations such as VSO have critiqued such campaigns for focusing on the short-term benefits (i.e., donations) over the long-term consequences, including ignorant perceptions of poverty, negative stereotypes, and creating "an implicit sense of superiority and inferiority" (VSO, 2002). Other negative long-term consequences include compassion fatigue and a reduced investment in African businesses due to perceptions of incompetence (cf. Manzo, 2006). It is essential to understand which intervention strategies (e.g., emotions) can render short-term gains (i.e., increasing helping) without also incurring negative consequences (i.e., negative stereotypes). Past research shows that elevation and outrage increase prosocial action (e.g., Freeman et al., 2009; Montada & Schneider, 1989). The current research extends these findings by demonstrating that, unlike sympathy, elevation and outrage do not induce paternalistic stereotyping.

Overall, charity campaigns should endeavour to employ strategies that are effective at increasing genuine helping. The findings of the current research suggest that elevation and outrage should be more likely to promote autonomous and altruistic forms of helping compared to sympathy and guilt respectively. Developing and extending our understanding of moral emotions will maximise their effective use in applied settings. Future research should

consider the qualified nature of prosociality and continue to explore the component features that may facilitate or inhibit particular types of prosocial responses.

Limitations and Caveats

In the current chapter prosocial responses were not directly measured. There were two reasons for this. First, measuring component features rather than prosocial responses helps to minimise confounding effects (e.g., socially desirable responding). Second, the relevant links between the component features and prosocial responses have already been well-established in the literature (e.g., Batson & Shaw, 1991; Nadler & Chernyak-Hai, 2014). Therefore, the priority of the current research was to establish the novel links between elevation, outrage, sympathy, and guilt on the one hand, with the relevant component features on the other. However, as neither study included a direct measure of prosociality, it remains unclear whether the differences between guilt and sympathy on the one hand, and elevation and outrage on the other, would indirectly lead to differential propensities to engage in prosociality. We suggest that this is an important next step for this line of research.

In Study 8 a high rate of participants failed the attention check. As no attention checks were included in Study 7 it seems plausible that a proportion of participants in this study also did not read the questions properly and that the data therefore include some error variance. Nevertheless, it seems likely that the attention check issue was specific to the sample in study 8. Specifically, the sample in Study 8 comprised of students, whereas the sample in Study 7 comprised of MTurk users. Research shows that MTurk users are more attentive to instructions than student samples (Hauser & Schwartz, 2015).

Study 8 employed an established scale to measure feelings of guilt. Nevertheless, it could be argued that some of the items in the scale (e.g., dissatisfied with myself, ashamed) measured feelings of shame rather than guilt. While factor analyses did show that all items

loaded strongly onto one factor (all loadings > .77), future research should employ a different measure of guilt that directly distinguishes between guilt and shame.

Study 7 did not include a control condition. Therefore, it is not possible to determine whether warmth ratings were higher (or lower) in the emotion-inducing conditions than following a neutral condition. While the current study showed important differences between the emotions on competence ratings, future research should also examine, more closely, whether differences occur on warmth ratings.

Conclusion

The present research has examined, for the first time, whether elevation and outrage induce paternalistic stereotypes and self-focus. Understanding how these moral emotions influence these particular component features is essential for deciding whether and how to use them in important practical interventions such as charity campaigns, educational efforts, or social policy strategies. The evidence shows that, unlike sympathy and guilt, elevation and outrage do not induce paternalistic stereotypes or self-focus. These new findings suggest that elevation and outrage may be less qualified prosocial emotions than either sympathy or guilt.

Chapter 8

General Discussion, Conclusions and Future Research Directions

Theoretical Background and Aims

As highlighted throughout this thesis high levels of poverty and inequality persist, both nationally and internationally. Engaging the general public to genuinely care about the concerns and wellbeing of others is necessary to bring about pressure and support for proequality social change. Although people are intuitively motivated to help others (Crockett et al., 2014; Rand et al., 2012), this motivation is often not enacted (see *Chapter 1*). Academic researchers, in particular psychologists, have a unique ability to empirically test, and therefore to uncover, effective strategies for mobilising people to actively and appropriately help others. The aim of the present research was to examine the prosocial effectiveness of two promising, yet under-researched moral emotions - moral elevation and moral outrage.

Prosocial Outcomes

Despite deriving from opposing appraisals (i.e., upholding a moral standard vs. transgressing a moral standard), and despite their opposite valences (i.e., positive vs. negative), moral elevation and moral outrage appear to have convergent effects on prosocial outcomes. For example, elevation and outrage both promote donations and volunteering (Cox, 2010; Freeman et al., 2009; Montada & Schneider, 1989; Thomas & McGarty, 2009; see also *Chapter 1*). This thesis drew on important theoretical frameworks to suggest, and demonstrate, that the prosocial outcomes of moral elevation and moral outrage may in fact be more nuanced and distinctive. As no research has examined (or compared) the prosocial effects of moral elevation and moral outrage within the same research framework, it remained unknown whether they promote similar or distinctive prosocial outcomes.

The current thesis addressed this gap in the literature by drawing on the appraisal tendency framework (Horberg et al., 2011; Lerner & Keltner, 2000) to test and compare the

prosocial effects of moral elevation and moral outrage within the same research framework. According to the appraisal tendency framework (Horberg et al., 2011; Lerner & Keltner, 2000) and the domain specificity hypothesis (Horberg et al., 2011), moral elevation should primarily influence prosocial intentions and behaviours relevant to benevolence concerns, while moral outrage should primarily influence prosocial intentions and behaviours relevant to justice concerns. Therefore, moral elevation and moral outrage should not have similar effects on prosocial responses, and their effects should instead be distinctive and nuanced. Testing this hypothesis represented the main empirical aim of *Chapters 4 and 5*.

Component Features

Haidt's (2003) model of moral emotion prototypicality suggests that two specific component features (i.e., disinterested elicitors and action tendencies) are crucial for understanding the prosocial effectiveness of moral emotions. Drawing on three further component features, this thesis suggested that motivational orientation (approach vs. avoidance), stereotyping (paternalistic vs. non-paternalistic), and focus (self vs. other) can also inform moral emotion's prosocial effectiveness. While research has examined the prosocial component features of emotions such as sympathy and guilt, little research had explored the prosocial component features of moral elevation and moral outrage. This line of research is essential in order to inform whether elevation and outrage are indeed effective for promoting unqualified prosociality. Overcoming this gap in the literature represented the main empirical aim of *Chapters 6 and 7*.

The overarching aim of this thesis was to develop a more in-depth understanding of the prosocial effects of moral elevation and moral outrage. *Chapter 4* explored whether moral elevation and moral outrage have distinctive or comparative effects on prosocial intentions. *Chapter 5* extended these findings further and explored the effects of moral elevation and moral outrage on prosocial behaviours. *Chapters 6 and 7* uncovered the prosocial

implications of moral elevation and moral outrage by examining their component features. Specifically, *Chapter 6* examined whether moral elevation can be considered as an approach-oriented emotion. *Chapter 7* examined whether moral elevation and moral outrage promote paternalistic stereotyping of the target group and self-focus.

Summary of Findings

The appraisal tendency framework (Horberg et al., 2011; Lerner & Keltner, 2000) and the domain specificity hypothesis (Horberg et al., 2011) suggest that during an emotional state, each emotion's moral appraisal theme remains salient and affects subsequent moral judgments, intentions, and behaviours by prioritising specific sociomoral concerns (or moral domains) that are semantically related to the emotion's moral appraisal theme. To identify, for the first time, how moral elevation and moral outrage may act in concert to affect the same or distinct prosocial intentions, *Chapter 4* reported two studies testing the joint and independent effects of these two emotions on different types of prosocial intentions.

Comparing their effects in an experimental design enabled a test of whether they increase helping behaviours generally (across moral domains), or whether their effects are more nuanced and whether they are dependent on the salience of the relevant sociomoral concern (domain specific). Specifically, Study 1 examined benevolence-relevant intentions in the form of benevolent helping intentions. Study 2 examined justice-relevant intentions in the form of prosocial political action intentions following an inequality.

In line with the domain-specific predictions from ATF, it was predicted that moral elevation and moral outrage should have domain specific effects on prosocial intentions. Moral elevation should increase prosocial intentions most when the intention measure is relevant to benevolence concerns. Moral outrage should increase prosocial intentions most when the intention measure is relevant to justice concerns. More specifically, in Study 1 moral elevation, but not moral outrage, should increase prosociality (benevolent helping

intentions) and this effect should be mediated by elevation appraisals and feelings of elevation. In Study 2, moral outrage, but not moral elevation, should increase prosociality (prosocial political action intentions) and this effect should be mediated by outrage appraisals and feelings of outrage. In support of the ATF, results of Study 1 showed that moral elevation, but not moral outrage, marginally increased benevolent helping intentions and this effect was sequentially mediated by elevation appraisals and feelings of elevation. In further support of the ATF, results of Study 2 showed that moral outrage, but not moral elevation, increased justice-relevant prosocial intentions and behavioural engagement, and these effects were sequentially mediated by outrage appraisals and feelings of outrage.

An important limitation of *Chapter 4* was that prosociality was measured using self-reported intentions rather than actual behaviours. *Chapter 5* aimed to overcome this limitation by testing the effects of moral elevation and of moral outrage on prosocial *behaviours*. A substantial body of research has tested the effects of emotions on moral judgments and intentions (see Teper et al., 2015). However, there is a significant lack of behavioural research across areas of social psychology, but particularly in moral psychology (Baumeister et al., 2007; Teper et al., 2015). Given the dissociation between attitudes and behaviours (Blasi, 1980), it is essential to understand how emotions may also affect behaviour (Teper et al., 2015). Measuring behavioural (rather than intentional) outcomes in *Chapter 5* enabled a stronger test of the prosocial effects of moral elevation and moral outrage and a stronger test of the appraisal tendency framework.

Chapter 5 reported two studies testing the joint and independent effects of moral elevation and moral outrage on different types of prosocial behaviours. Study 3 examined benevolence-relevant behaviour in the form of charitable donations. Study 4 examined justice-relevant behaviour in the form of third-party bystander compensation and punishment following unfairness. Based on the domain-specific predictions from ATF (see Horberg et al.,

2011) and on the findings reported in *Chapter 4*, it was predicted that moral elevation and moral outrage should have domain specific effects on prosocial behaviours. Moral elevation should increase prosocial behaviour most when the behavioural measure is relevant to benevolence concerns. Moral outrage should increase prosocial behaviour most when the behavioural measure is relevant to justice concerns. More specifically, in Study 3 moral elevation, but not moral outrage, should increase prosociality (donations) and this effect should be mediated by elevation appraisals and feelings of elevation. In Study 4, moral outrage, but not moral elevation, should increase prosociality (third-party bystander compensation and punishment) and this effect should be mediated by outrage appraisals and feelings of outrage. In support of the ATF, results of Study 3 showed that moral elevation, but not moral outrage, increased donations to charity (i.e., benevolence relevant prosocial behaviour) and that this effect was sequentially mediated by elevation appraisals and feelings of elevation. In further support of the ATF, results of Study 4 showed that the outrage-inducing video, but not the elevation-inducing video, increased outrage appraisals, feelings of outrage, and justice-relevant behaviour.

Chapters 6 and 7 explored the prosocial implications of moral elevation and moral outrage by examining three of their component features (i.e., motivational orientation, stereotyping, and self-focus).

Study 5 explored the relationship between individual differences in moral elevation and individual differences in the behavioural inhibition and activation systems. Results revealed that moral elevation was positively related to behavioural activation rather than inhibition. Study 6 tested the effect of an elevation-inducing video on approach and avoidance states as well as on prosocial motivation (compared to a control condition). Results revealed that the elevation-inducing video led to significantly higher levels of approach orientation as well as prosocial motivation than the control video. Moreover, the effect of the

elevation-inducing video on prosocial motivation was sequentially mediated by feelings of elevation and then by the approach-oriented state. The existing literature has already demonstrated that outrage is an approach-oriented emotion. While results in Study 5 suggested that individual differences in outrage were not associated with individual differences in the behavioural activation system, the results of Study 6 showed that an outrage-inducing video significantly increased approach-orientation relative to a control video. Therefore, results of Studies 5 and 6 showed that moral elevation (and moral outrage) can be considered as approach-oriented emotions.

Study 7 compared the effects of moral elevation and moral outrage to those of sympathy on stereotyping of the target group. In line with the appraisal tendency framework (Horberg et al., 2011), it was predicted that sympathy should instigate low perceptions of competence of the target group, moral elevation should instigate high perceptions of competence of the target group, and moral outrage should instigate neither high nor low perceptions of competence of the target group. It was further predicted that perceptions of warmth of the target group should be relatively high across the emotion-inducing conditions. Finally, it was predicted that sympathy should induce higher levels of paternalism (warmth-competence difference score) than moral elevation and moral outrage.

Overall, the results of Study 7 were in line with the predictions. Perceptions of competence were higher following the elevation-inducing condition than following the sympathy-inducing condition. Perceptions of competence were neither high nor low following the outrage-inducing condition (scores did not differ significantly from the other emotion-inducing conditions). Furthermore, as expected, while sympathy promoted paternalistic stereotypes of the target group, moral elevation and moral outrage did not. Finally, in line with hypotheses, warmth scores did not differ between emotion-inducing conditions.

Finally, Study 8 compared the effects of moral elevation and moral outrage to those of guilt and a control condition on self-focus. In line with the appraisal tendency framework (Horberg et al., 2011), it was predicted that moral elevation and moral outrage should induce less self-focus than guilt. Results supported the predictions. Specifically, while guilt promoted a self-focus, moral elevation and moral outrage did not.

Taken together, the results reported in this thesis suggest that moral elevation and moral outrage are effective emotions for promoting prosociality. Specifically, moral elevation and moral outrage both promoted prosocial intentions and behaviours, but in line with the ATF their prosocial effects were distinctive. Furthermore, moral elevation and moral outrage promoted an approach-orientation, non-paternalistic stereotypes, and an other-focus, and can therefore be considered as unqualified prosocial emotions (see Table 8.1 for a summary of all studies).

Table 8.1

Summary of	Studies			
Study	Participants	Independent variables	Dependent variables	Main findings
Chapter 4				
Study 1	103 Brit u/grads	1. Elevation- inducing video: viewed vs. not viewed 2. Outrage-inducing video: viewed vs. not viewed	DV: Prosocial benevolence intentions MV: Appraisals and emotions	Benevolence intentions were marginally higher when pts had viewed (vs. had not viewed) the elevation-inducing video. This effect was sequentially mediated by elevation appraisals and feelings of elevation.
Study 2	163 Amer adults	1. Elevation- inducing video: viewed vs. not viewed 2. Outrage-inducing video: viewed vs. not viewed	DV: Prosocial political action intentions MV: Appraisals and emotions	Prosocial political action intentions were significantly higher when pts had viewed (vs. had not viewed) the outrage-inducing video. This effect was sequentially mediated by outrage appraisals and feelings of outrage.
Chapter 5				
Study 3	92 Brit adults + u/grads	1. Elevation- inducing video: viewed vs. not viewed 2. Outrage-inducing video: viewed vs. not viewed	DV: Donations MV: Appraisals and emotions	Donations were significantly higher when pts had viewed (vs. had not viewed) the elevation-inducing video. This effect was sequentially mediated by elevation appraisals and feelings of elevation.
Study 4	78 Brit u/grads	1. Elevation-inducing video: viewed vs. not viewed 2. Outrage-inducing video: viewed vs. not viewed	DV: Compensation and punishment when witnessing an unfairness MV: Appraisals and emotions	Compensation after witnessing an unfairness was significantly higher following the outrage-only video than following dual exposure or the control video.

Chapter 6						
Study 5	80 Amer adults	Correlational design	Vars: individual differences in elevation, shame, outrage, behavioural inhibition, and behavioural approach and general positive affect and negative affect.	Individual differences in elevation were related to individual differences in behavioural activation (pos). Individual differences in shame were related to individual differences in behavioural inhibition (pos) and behavioural activation system (neg). Individual differences in outrage were not related to individual differences in behavioural inhibition or activation.		
Study 6	78 Amer adults	Condition: elevation vs. outrage vs. control videos	DV: Approach orientation, avoidance orientation, and prosocial motivation MV: Emotions	Approach orientation and prosocial motivation were significantly higher following the elevation and outrage-inducing videos than following the control video. Effects of the emotion-inducing videos on prosocial motivation were sequentially mediated by their respective emotions and then by the approach-oriented state.		
Chapter 7						
Study 7	105 Amer adults	Condition: elevation vs. outrage vs. sympathy stories	DV: Stereotypes of competence and warmth MV: Emotions	Paternalistic stereotyping was significantly higher following the sympathy-inducing story than following the elevation and outrage-inducing stories. The effect of the elevation-inducing story on (lower) paternalistic stereotyping was mediated by feelings of elevation.		
Study 8	121 Brit u/grads	Condition: elevation vs. outrage vs. guilt vs. control videos	DV: Focus	Self-focus was significantly higher following the guilt-inducing video than following the elevation-inducing, outrage-inducing, and control videos.		

Note. Amer = American. Brit = British. U/grad = undergraduate. DV = dependent variable. MV = mediating variable. Pos = positively. Neg = negatively.

Limitations

The current thesis provides novel insights into the prosocial potential of moral elevation and moral outrage. Nevertheless, there are some limitations and caveats that must be identified and discussed. Below I outline eight limitations of this research.

One limitation of this thesis is that the sample sizes for many of the studies could be considered as somewhat small (especially Study 4 which had a sample size of 20 per cell). Nevertheless, very large effect sizes were found for the effects of the emotion-inducing stimuli on the relevant emotions across the pilot studies, and a-priori power analyses showed that 20 to 25 participants per cell should provide sufficient power (.8) to detect a medium to large effect size (see *Chapter 3*). Moreover, a meta-analysis of the effects of the elevation-inducing video (vs. the control video) on elevation ratings across the relevant studies in this thesis (Pilot Study 1 and Studies 1, 2, 3, 4, 6, and 8) showed persistently strong effects, meta-analytic Z (weighted by sample size = 373) = 11.35, p < .001, SMD = 1.35 [1.12, 1.58]. Indeed an SMD above 0.8 is typically considered as a large effect size (Cohen, 1988). Similarly, a meta-analysis of the effects of the outrage-inducing video (vs. the control video) on outrage ratings across the relevant studies in the thesis (Pilot Study 1 and Studies 1, 2, 3, 4, 6, and 8) also showed persistently strong effects, meta-analytic Z (weighted by sample size = 376) = 10.77, p < .001, SMD = 1.92 [1.57, 2.27].

All studies (but one) employed emotion-inducing videos to manipulate feelings of moral elevation and moral outrage. While most elevation research has employed videos to instigate feelings of moral elevation (e.g., Algoe & Haidt, 2009; Freeman et al., 2009; Lai et al., 2014; Oliver et al., 2015; Schnall et al., 2010; Schnall & Roper, 2012; Silvers & Haidt, 2008), and while the emotion-inducing videos employed in the current thesis were thoroughly piloted prior to the empirical research (see *Chapter 3*), it is plausible that confounds existed. Specifically, even though the videos were matched in terms of length and style (e.g.,

interview vs. documentary vs. movie), other variables such as sound and visual features may have differed between the elevation-inducing and outrage-inducing stimuli. The results of the pilot research, the theoretical basis of the research findings, and the replicability of the research findings across studies provide confidence in the effectiveness of the emotion-inducing videos employed in this thesis. However, to overcome this limitation future research could also employ a single stimulus to instigate feelings of moral elevation versus feelings of moral outrage by instructing participants beforehand to focus either on the elevating or the outrageous material. Nevertheless, this strategy may also be associated with methodological issues (e.g., participants may be more likely to feel both emotions across conditions).

Alternatively, while potentially less emotional, written stories (rather than video clips) may be more suitable in order to minimise confounds across conditions

It is important to discuss the limitations of the video clips used in this thesis in a bit more depth. Most importantly, the targets in the video clips varied in terms of whether they were one individual person (e.g., the moral elevator) or whether they were a larger body or group of people (e.g., a multi-national company; people in Congo). Future research should ensure that this component of the video clips remains consistent across targets and across conditions. In order to facilitate such consistency future research could employ the same context for all emotion-inducing stimuli and manipulate only the behaviour of the targets. For example, future research could draw on the refugee crisis and demonstrate either morally elevating behaviour by a third-party (trying to help refugees) or morally outrageous behaviour by a third-party (trying to traffic refugees).

Emotions were measured using explicit self-report emotion scales drawn from previous research (Aquino et al., 2011; Freeman et al., 2009; Russell & Giner-Sorolla, 2011). Research on emotions often uses pictures of emotional faces to complement the self-report scales (e.g., Russell & Giner-Sorolla, 2011). However, no research has developed emotional

faces to depict feelings of moral elevation. Therefore, emotional faces were not used in the current thesis. This could be an aim for future research. Furthermore, implicit measures of emotional arousal (e.g., via Biopac or Face reader) may also be informative for measuring emotional responses following elevation-inducing and outrage-inducing stimuli. This could also be an interesting step for future research. In particular, it could help further inform the effectiveness of the emotion-inducing stimuli.

In the current research, benevolence relevant outcomes and justice relevant prosocial outcomes were measured in different studies. Specifically, Studies 1 and 3 measured benevolence relevant prosocial outcomes and Studies 2 and 4 measured justice relevant prosocial outcomes. Results were in line with theoretical frameworks and relevant predictions. However, measuring benevolence relevant and justice relevant prosocial outcomes within the same study may provide additional insights. Future research could measure benevolence relevant and justice relevant outcomes within the same study and then employ a mixed model design to directly compare the effects of elevation-inducing and outrage-inducing stimuli on these two outcomes.

The current thesis did not measure how long the prosocial effects of moral elevation and moral outrage last. The studies reported in this thesis usually only lasted 10-20 minutes from start to finish. The immediate priority and therefore focus of the current research was to understand the effects of moral elevation and moral outrage on prosociality. Nevertheless, future research should explore whether the effects of these emotions last or whether they are relatively short-lived. If effects are short-lived then reminders or novel prompts may be required to facilitate longer-term effects.

The studies reported in *Chapter 7* tested two specific component features of moral elevation and moral outrage – stereotyping and self-focus. In these studies prosocial responses were not directly measured as the relevant links between the component features

and prosocial responses were already well-established in the literature (e.g., Batson & Shaw, 1991; Nadler & Chernyak-Hai, 2014). Therefore, the priority was to establish the links between moral elevation and moral outrage on the one hand, and the relevant component features on the other. Nevertheless, an avenue for future research could be to measure the effects of moral elevation and moral outrage on autonomous and altruistic types of helping directly.

Study 8 showed that 27.5% of the sample failed the attention check (see *Chapter 7*). This raises the question of whether a proportion of participants in the other studies (1-7) also did not read the questions properly and whether the data of these studies also include some error variance. As highlighted in *Chapter 7*, research shows that MTurk users are more attentive to instructions than student samples (Hauser & Schwartz, 2015). Participants were sampled from MTurk in Studies 2, 5, 6, and 7. Moreover, Study 4 was lab-based (rather than on-line), so attention should have been maximised in this setting. This leaves Studies 1 and 3 that were conducted online with student samples, and therefore the data of these two studies may contain some error variance. A strength of these two studies is that the results of Study 1 were replicated using a different outcome measure in Study 3. Moreover, findings were in line with theoretically-grounded a-priori predictions. Nevertheless, future research should include attention checks as a standard methodological procedure.

The current thesis explored third-party individuals' desire to help others. Third parties are those who are not directly involved in or affected by the relevant situation or context (e.g., inequality, injustice; see also Saab et al., 2015). The primary aim of this thesis was to understand whether and how moral elevation and moral outrage can mobilise third-party individuals to want to help others. For this reason, participants were shown videos that depicted other people who they did not know and had no relationship with. Unfortunately, manipulating ingroup identity and therefore examining intergroup helping behaviours was

beyond the scope of this thesis. Nevertheless, given the importance of intergroup dynamics for predicting people's prosocial (as well as discriminative) behaviours towards others (see Sturmer & Snyder, 2010), this should be a fundamental next step for this line of research.

All studies reported in this thesis were either lab-based or on-line studies.

Nevertheless, to effectively advance the evidence on these emotions it is essential to also conduct field studies. Indeed, in order to effectively and reliably inform charitable and other applied campaigns, the effects of moral elevation and moral outrage on prosociality must first be replicated in field studies. This is an important avenue for future research.

Summary of Theoretical Implications

Empirical evidence has shown that moral elevation and moral outrage are effective emotions for promoting prosociality (e.g., Haidt, 2003; Schnall et al., 2010; Thomas et al., 2009). However, given that these two emotions have received substantially less theoretical and empirical attention compared to other emotions (e.g., sympathy and guilt; see *Chapter 1*) their effects were less well understood. The current thesis drew on and extended well-established theoretical frameworks (e.g., the appraisal tendency framework; Horberg et al., 2011; Lerner & Keltner, 2000) to better understand the effects of moral elevation and moral outrage on prosociality. Below I outline how the findings of this thesis inform the appraisal tendency framework, the model of moral emotion prototypicality, and the moral elevation and moral outrage literatures more specifically.

Chapter 2 provided an overview of the appraisal tendency framework (Horberg et al., 2011; Lerner & Keltner, 2000), which suggests that moral elevation and moral outrage should have distinctive effects on prosociality. Nevertheless, while this theory is well-established in terms of judgmental research and non-moral emotions, it has only recently been applied to the study of moral emotions and prosocial outcomes in particular (see Horberg et al., 2011). Moreover, the ATF has been criticised by psychological constructionist accounts of emotions

and morality which posit domain general, rather than domain specific, morality-emotion correspondences (Cameron et al., 2015). Therefore, it remained unclear whether or not the ATF could effectively account for the effects of moral elevation and moral outrage on prosocial intentions and behaviours. As discussed in *Chapter 4*, comparing the effects of moral elevation and moral outrage provides a particularly effective test of the appraisal tendency framework. Specifically, Lerner and Keltner (2000, p. 478) suggested that research on the ATF "should compare emotions that are highly differentiated in their appraisal themes on judgments/choices that relate to that appraisal theme". Moral elevation and moral outrage derive from opposing core appraisals. Moreover, while moral elevation and moral outrage derive from opposing appraisals, the empirical evidence to date documents convergent effects of both emotions on prosocial outcomes (e.g., charitable donations, volunteering). Thus, comparing moral elevation and moral outrage allows a direct test of whether the two emotions influence prosocial behaviours across the sociomoral domains of justice and benevolence, or whether their effects are domain specific (cf. Horberg et al., 2011). Chapters 4 and 5 provided unique support for the contention that the appraisal tendency framework can explain the effects of moral elevation and moral outrage on prosocial intentions as well as behaviours. Moreover, Chapters 4 and 5 extended the separate strands of research on moral elevation on the one hand, and moral outrage on the other by demonstrating that these emotions do not simply promote general prosociality, but that instead, their prosocial effects are determined by their initial appraisal theme (i.e., benevolence vs. justice; see also Horberg et al., 2011).

Chapter 2 highlighted that while emotions such as sympathy and guilt have been considered as prosocial emotions, they also suffer from some important prosocial short-comings. It was suggested that as the body of research on these two emotions has expanded, so have the "ifs" and "buts" of when they do and do not evoke prosociality and what types of

prosociality they induce. *Chapters 6 and 7* drew on three component features (motivational orientation, stereotyping, and self-focus) to test whether moral elevation and moral outrage also suffer from such limitations. The findings of these chapters inform moral emotion research, and in particular the model of moral emotion prototypicality (Haidt, 2003).

The model of moral emotion prototypicality (Haidt, 2003) draws on two component features (disinterested elicitors and prosocial action tendencies) to suggest that moral elevation, moral outrage, sympathy, and guilt are the most prototypical moral emotions as they can be most directly linked to the needs of others. Chapter 2 informed and extended this model by suggesting that three further component features can inform the extent to which these emotions can be linked to the needs of others. Results of *Chapter 6* showed that both state elevation and state outrage are approach-oriented and should therefore promote prosociality both in easy as well as difficult situations (Algoe & Haidt, 2009). Results of Chapter 7 suggested that moral elevation and moral outrage may be more prosocially effective emotions than sympathy and guilt. Specifically, sympathy (but not elevation or outrage) increased undesirable paternalistic stereotypes of the target group. Moreover, guilt (but not elevation or outrage) increased a focus on the self. Therefore, the model of moral emotion prototypicality (Haidt, 2003) could be extended to include these three additional component features. Furthermore, drawing on these additional component features, moral elevation and moral outrage appear to be more prosocially effective emotions than sympathy and guilt.

Summary of Practical Implications

As highlighted throughout this thesis, large inequalities and injustices persist across the world. Charitable (and other) organisations aim to overcome such inequalities and injustices through countless projects and campaigns. These campaigns may include providing direct support to people in need, raising awareness about a particular issue among the general

public, or engaging the general public to stand up for their (or other's) rights. For such organisations to be successful in their work, it is usually essential to gain support and help from the general public. Nevertheless, while people are intuitively motivated to help others (Crockett et al., 2014; Schulz et al., 2014, see *Chapter 1*), there are many everyday factors that inhibit prosocial action from occurring. The current thesis provides direct insights for charitable (and other) organisations by exploring and testing effective strategies for engaging the general public to genuinely care about the concerns and wellbeing of others. This research has a number of direct implications for the applied field, each outlined below.

First and foremost this thesis tested the potential of two relatively under-researched moral emotions (i.e., moral elevation and moral outrage) for promoting prosocial intentions and behaviours. In line with their separate strands of research (e.g., Algoe & Haidt, 2009; Montada & Schneider, 1989; Schnall et al., 2010; Thomas et al., 2009), the current findings showed that moral elevation and moral outrage are effective emotions for increasing prosocial intentions as well as behaviours. Therefore, charitable (as well as other) campaigns can draw on these emotions for mobilising people to want to help others.

Substantial amounts of money are invested in charitable campaigns each year. Therefore, to spend money appropriately charitable (and other) organisations (more specifically - their marketing teams) require academic knowledge about what strategies may be most effective for mobilising prosocial action. The current thesis demonstrates that moral elevation and moral outrage affect distinct types of prosocial outcomes, and should therefore be used appropriately. While moral elevation effectively promotes benevolent behaviours, outrage effectively promotes justice behaviours. This is an essential insight for charitable (and other) organisations. Consider a scenario in which a marketing team discovers research that demonstrates that moral elevation effectively promotes prosocial behaviours (e.g., Schnall et al., 2010). The marketing team may then want to develop a campaign using this

emotion. The current thesis shows that this campaign will be effective if the goal is to promote a benevolence-relevant behaviour, not a justice-relevant behaviour. In other words, this thesis provides directly applied insights into how and when marketing campaigns should employ emotions to mobilise prosocial action.

The current thesis also demonstrates the ease by which campaigns can promote prosocial outcomes. Specifically, in this thesis, short two-minute video clips were employed to induce feelings of moral elevation and/or moral outrage. These short video clips effectively and significantly increased prosocial intentions as well as behaviours. This suggests that campaigns can use short video clips as effective tools for promoting these emotions, and thereby promote prosociality. Charities could either use videos that already exist or they could develop such videos for their specific purposes. For example, at the end of Russel Howards' Good News show each week he shows a morally-elevating video. Charities could endeavour to air their advertisement just after such a TV-show (thereby employing already existing videos). Alternatively, charities could incorporate either morally elevating or morally outrageous material in their advertising videos or copy. Indeed, most charity advertisements (especially those aimed at raising money) tend to focus on inducing sympathy and/or guilt (i.e., showing people, usually children, who are starving and in need). The current thesis shows that elevation and outrage are also effective at promoting prosociality, and that they might promote less qualified responses than sympathy and guilt. For example, in their advert, a charity could focus on showing the exceptionally good work that they are doing. A next step would be for researchers to work directly with the fundraising and campaign teams within charities to help develop and test their advertising materials.

Charitable campaigns often attempt to "pull on the heartstrings". They do this by employing emotions such as sympathy and guilt to encourage people to help others (Breeze & Dean, 2012). Nevertheless, while these emotions may be effective for promoting prosocial

action (see Goetz et al., 2010; Tangney et al., 2007), they also have a multitude of "negative side effects". For example, due to its self-focus, guilt may lead to strategic actions that primarily aim at overcoming its self-focused negative states (Hopkins et al., 2007; van Leeuwen, 2007), which may then be associated with tokenistic top-down forms of behaviour rather than victim-oriented actions (Iyer et al., 2004; McGarty et al., 2005). Moreover, sympathy may lead only to paternalistic forms of helping because it maintains high levels of disparity between the ingroup (i.e., the advantaged) and the outgroup (i.e., the disadvantaged) (Nadler & Halabi, 2006; Thomas et al., 2009). In other words, sympathy implies that the disadvantaged are dependent on the goodwill provided by the advantaged. The current thesis demonstrates, drawing on three component features (focus, stereotyping, and motivational orientation), that moral elevation and moral outrage do not suffer from such "negative side effects". Therefore, given that moral elevation and moral outrage effectively promote prosocial action (like sympathy and guilt), but do not suffer from such negative side effects (unlike sympathy and guilt), moral elevation and moral outrage may be particularly useful emotions for promoting prosocial action in the applied field. They enable charities to accomplish short-term goals such as raising money, but avoid long-term negative repercussions such as negative stereotyping of disadvantaged groups.

The applied impact of this research outlined above largely focuses on the third sector as the primary beneficiary of these insights. However, the research reported in this thesis is also relevant to other applied sectors and institutions. For example, policy makers within the public sector are increasingly drawing on behavioural insights (drawn from psychology and economics) to enhance the effectiveness of their policy initiatives (Dolan et al., 2012). Indeed, policy makers are eager to employ low-cost and effective strategies for changing people's behaviours. Central government departments such as the Department for Communities and Local Government (DCLG) and the Cabinet Office (CO) commission

projects aimed at promoting prosocial action and community engagement (e.g., as part of DCLG's community integration policy; as part of CO's social action policy). Therefore, knowledge about the most effective approaches (e.g., emotions) for promoting prosocial action is particularly important and relevant. Other public sector organisations such as the HM Prison Service and the NHS often rely on volunteers to support their work. Therefore, understanding effective strategies for encouraging people to become volunteers is also directly relevant to such organisations.

Finally, educational and school programs often aim to engage children in prosocial behaviours. Such programs can be commissioned or organised by central government departments (e.g., Department of Education, Cabinet Office), by charitable organisations (e.g., Anne Frank Trust, People United, Bullying UK), or directly by schools. It seems likely that moral emotions may also be effective for promoting prosocial action among children and adolescents. For example, moral elevation may encourage children or adolescents to volunteer or engage in extra-curricular activities that benefit the community. Moral outrage may be more appropriate to use among adolescents rather than children, but may promote prosocial bystander intervention when witnessing an incident of bullying (Jones et al., 2009). Nevertheless, no research has tested whether manipulating feelings of moral elevation or moral outrage affect prosocial outcomes among children and/or adolescents. This is an important gap in the literature that should be addressed by future research.

Future Research

The current research has inspired and paved the way for exciting directions for future research. Below I outline six important directions for future research.

Intergroup Emotion and Prosociality

Research suggests that it is essential to distinguish intergroup prosociality from interpersonal prosociality (Sturmer & Snyder, 2010). This stems from the long-standing

literature on intergroup bias. Intergroup bias can be understood as the "systematic tendency to evaluate one's own membership group (the ingroup) or its members more favourably than a non-membership group (the outgroup) or its members" (Hewstone, Rubin, & Willis, 2002, p. 576). Intergroup bias can be manifested as (a) favouring the ingroup and/or (b) derogating the outgroup. Hewstone et al. (2002) suggest that ingroup bias in prosociality is a form of ingroup favouritism. Specifically, when individuals categorise themselves as belonging to an ingroup, they will extend trust, positive regard, cooperation, empathy, and prosociality to ingroup, but not outgroup, members. Thus, this body of research suggests that the ways in which people behave towards others who are categorised as either ingroup or outgroup members will not parallel the ways in which people behave towards other individuals in interpersonal contexts.

Interpersonal versus intergroup distinctions in behaviour are typically made on the basis of the salient (intergroup) identity. That is, interpersonal behaviour occurs when someone is focused on their relationship with another person (relational self), while intergroup behaviour occurs when a person is focused on their relationship with their group (collective self) (Brewer & Gardner, 1996). Helping is considered as intergroup when someone who identifies oneself with one group, helps a person who is perceived to belong to an outgroup (Levine, Cassidy, Brazier, & Reicher, 2002; Reicher, Cassidy, Wolpert, Hopkins, & Levine, 2006). Thus, it is essential to explicitly consider the intergroup-level processes underlying prosocial responses.

Similarly, intergroup emotion theory (IET; Smith, 1993) highlights the role that salient social identities play in predicting emotional arousal. Specifically, IET suggests that intergroup emotions (e.g., anger) arise from intergroup appraisals (e.g., illegitimacy), and in turn predict intergroup action tendencies (e.g., social action against an outgroup). In other words, emotional processes and responses vary depending on the social identity that is salient

in a given context. Thus, it is also essential to consider the intergroup-level processes underlying emotional responses.

The current thesis did not include an intergroup factor in the study designs. In other words, it did not examine the influence of salient social identities on people's subsequent emotions and behaviours. This is a natural and essential next step for this research.

Employing an explicit intergroup-level approach will enable the development of a more advanced understanding of the effects of moral elevation and moral outrage on ingroup, outgroup, and third-party prosocial responses.

Furthermore, future research should investigate the connections between social appraisal and group-level emotions (Parkinson & Manstead, 2015). Social appraisal implies that people take other people's emotions into account when appraising what is happening. Therefore, future studies should explore the effects of elevation and outrage on intergroup and third-party helping during social interactions. This is important as the reactions of peers in a given context are likely to affect people's own appraisals and therefore also to affect their emotional and behavioural responses in that context. Indeed, Livingstone et al. (2011) showed that anger is more likely to influence willingness to engage in social action when this emotional reaction is shared by other group members. Given that much of our time is spent in social contexts (e.g., at work, at school), it is essential to understand how such social contexts influence emotional processes.

Field Research

In order for this research to effectively inform third sector and public sector projects (e.g., charity campaigns, policy campaigns), the effects must first be replicated in a field study. The studies reported throughout this thesis clearly demonstrated that moral elevation and moral outrage effectively promote (distinct) prosocial outcomes. Nevertheless, all studies were laboratory or online studies. An essential step for future research is to collaborate with

external organisations to conduct large-scale field studies testing the effects of these emotions on prosocial behaviours.

Individual Difference Variables

The current research focused on understanding the effects of situational factors (e.g., emotions) on prosocial outcomes. However, it is highly likely that individual difference variables may moderate the effects of (1) the emotion-inducing stimuli on the relevant emotional states, and/or (2) the emotions on prosociality. Future research should explore whether individual difference variables such as values, belief in a just world, empathy, and perspective taking moderate such effects. It seems likely that greater valuing of universalism may lead to higher feelings of moral outrage when witnessing injustices. Similarly, greater valuing of benevolence may lead to higher feelings of moral elevation when witnessing moral virtues. Belief in a just world (BJW) may reduce feelings of moral outrage and subsequent desires to help others. Alternatively, witnessing an injustice may challenge the worldviews of people high in BJW, and they may therefore feel more outraged and may be more likely to help others. Future research is necessary to integrate situational and individual difference variables to develop a better understanding of prosocial behaviours.

Cognate Measures

There seems to be substantial scope to collaborate with cognitive psychologists to further develop and extend this line of research. For example, using eye tracking technology it would be possible to explore whether participants are focused on the perpetrator or the victim when watching outrage-inducing stimuli. This would inform research demonstrating the prosocial (rather than antagonistic) outcomes of moral outrage (see *Chapter 5*; Lotz et al., 2011). Furthermore, employing physiological measures (e.g., EEG, heart rate, skin conductance response) to assess the intensity of relevant emotional states may enable exploration of whether and how intensity affects prosocial responses.

Developmental Research

The current thesis aimed to understand the effects of moral emotions on prosociality among adults. This was an essential step in order to develop an initial understanding of the effects of moral elevation and moral outrage. Future research should draw on these findings to explore when and how these moral emotions may promote prosociality during childhood and adolescence. Understanding the developmental trajectory of when children and adolescents can understand and feel emotions like moral elevation and moral outrage, and when and how these emotions influence behaviours will inform relevant theory as well as applied initiatives.

Appraisal Tendency Framework

The findings of this thesis demonstrate clear support for the appraisal tendency framework (Horberg et al., 2011). However, the thesis focused on two specific moral emotions – moral elevation and moral outrage. Research is necessary to test whether a wider range of moral emotions (e.g., admiration, shame) also have such domain specific effects. This would provide greater empirical evidence and insights for the appraisal tendency framework.

Conclusion

The aim of this thesis was to examine the prosocial effectiveness of two promising, yet under-researched moral emotions - moral elevation and moral outrage. The findings of this thesis significantly advance the existing insights into these two emotions. The results showed that moral elevation and moral outrage have distinctive effects on prosociality. Moral elevation promotes prosocial outcomes when outcomes are relevant to benevolence concerns. In contrast, moral outrage promotes prosocial outcomes when outcomes are relevant to justice concerns. Therefore, they should be used appropriately in charitable and other applied campaigns. The results further showed that moral elevation and moral outrage are associated

with prosocial component features. Specifically, they promote an approach orientation, non-paternalistic stereotyping, and an other-focus. Therefore, moral elevation and moral outrage may be particularly effective at promoting unqualified prosociality. The findings reported in the current thesis are particularly informative for applied campaigns aimed at encouraging more helpful and cooperative societies.

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Appendix A

Experimental Manipulations

Table A1 Moral Elevation

Original Transcript I grew up in Derry in the early 70s it was a fairly violent place, bombs went off, the smell of sinus gas in the air. 1972 when I was on my way home from school I was running up through the football field and as I ran past a British soldier fired a rubber bullet and the rubber bullet struck me here between the eyes, I lost my sight, so I have been blind now since 1972. I just knew that I wanted to spend most of my life working to help others in other parts of the world. I just had a natural affiliation towards children who were vulnerable. In 1996 Richard set up Children in Crossfire. My dream is to work with groups that help children out of poverty. The sort of work we've been doing is providing access to clean water, proper food, medicine, education. What I began to realise is that there are children in other parts of the world who may have had their eyesight but didn't have the opportunities that I have. What is important is we focus on what we can do not what we can't do. And I think that's been the story of my life in a way. "Richard for me is like the blind leading the sighted. He really began this whole peace process on the day he was shot. Whatever happened to him and whatever happened on that day there was never any hatred or animosity" (Des Dohorty, Childhood friend). Anger is like a rotten apple, it eats you from the inside out. I didn't have all of that anger, so what happened? I was able to get on with my life in a very positive way. Children in Crossfire now works in 14 of the world's poorest countries. Forgiveness is a tremendous gift. It's a fantastic place to be. When I forgive the soldier that blinded me then I am much happier inside. You look at Children in Crossfire you can see how forgiveness changed my future.

Adapted transcript used in Study 7

"The Blind Leading the Sighted", Narrated by Daniel Muchanga

I grew up in Zambia in the early 70s it was a fairly violent place, bombs went off, the smell of sinus gas in the air. 1972 when I was on my way home from school I was running up through the football field and as I ran past a soldier fired a rubber bullet and the rubber bullet struck me here between the eyes, I lost my sight, so I have been blind now since 1972. I just knew that I wanted to spend most of my life working to help others out of poverty. In 1996 Daniel set up a charity called Zambia Support Group. My dream is to work with groups that help children out of poverty. The sort of work we've been doing is providing access to clean water, proper food, medicine, education. What I began to realise is that there are children all over the world who may have had their eyesight but didn't have the opportunities that I have. What is important is we focus on what we can do not what we can't do. And I think that's been the story of my life in a way. "Daniel for me is like the blind leading the sighted. He really began this whole peace process on the day he was shot. Whatever happened to him and whatever happened on that day there was never any hatred or animosity" (Childhood friend). Anger is like a rotten apple, it eats you from the inside out. I didn't have all of that anger, so what happened? I was able to get on with my life in a very positive way. Zambia Support Group now works in 14 of the poorest towns in Zambia. Forgiveness is a tremendous gift. It's a fantastic place to be. When I forgive the soldier that blinded me then I am much happier inside. You look at Zambia Support Group you can see how forgiveness changed my future.

Video link

http://www.youtube.com/watch?v=SQjfzSeMSJA

Moral Outrage 1

Transcript

Greg Palast, investigative journalist reports on BBC newsnight:

We're heading out of the capital Kinshasa, the cholera epidemic is sweeping the country. I'm driving to an encampment where the victims are cared for in quarantine. It's still a struggle for the people here, the nation just now recovering from years of civil war. They've already treated 8000 cholera patients including 11-year old Edomo Ensako. "He had cholera but now he's better" (Edomo's father). It's simple, what's needed here is clean water; the question is why don't they have it? Here's what's happened. A financial speculator known as a vulture has blocked Congo from receiving 100 million dollars owed to the African nation, he says that that money is owed to him. In this village the British government and UNICEF dug a well at the cost of less than \$2000 they were able to provide clean water, cholera free water for 400 people. That still leaves 15 million Congolese without clean water. The vulture paid just \$3 million dollars for Congo's debt but he wants \$100 million of Congo's money returned. I Asked the director of the UNICEF project what 100 million could do here: "200 thousand children would have their life saved" - so 100 million dollars, 200 thousand children saved. So how did a New York vulture end up claiming 100 million dollars on a 3 million dollar debt from one of the world's poorest countries? The story began 30 years ago when Yugoslavia built power lines for the Congo; they hadn't finished paying for the lines, when both Yugoslavia and the Congo slipped into civil war. 100 thousand died as Yugoslavia split up into 7 separate countries and millions died in Congo. Somehow in all this mayhem, vulture speculators obtained the right to collect that power line debt owed by the Congo. The vulture paid 3 million dollars but wanted back more than 30 times that amount.

Video

http://www.youtube.com/watch?v=1QFwwx-F9-g&feature=youtu.be

link

Moral Outrage 2

Transcript

"Something rotten in the sweetest town of Zambia" narrated by Kryticious Nshindano, ActionAid Zambia

Sweet town of Mazabuka situated in the southern part of Zambia.

The levels of poverty in Zambia have been high for the last 10 years or so. Mazabuka has one of the highest poverty levels in the country; about 68% of the people there live in poverty. Zambia sugar is a major and key industry in Mazabuka. If you look at the millions of dollars that Zambian sugar, ABF the parent company, are dodging in terms of taxes and what that could do for a town like Mazabuka, it's quite a lot "Today the largest part of Associated British Foods (ABF) product is generated by sugar" (-- Associated British Foods plc promotional video). Caroline sells Zambia sugar products. She paid more tax in Zambia than the giant multinational from 2008-2010. "Our profits are not enough to supply us with good food at home. The most challenging meal is usually supper so we usually eat porridge" Caroline Muchanga, Market stall owner

Associated British Foods has made profits of \$123 million in Zambia since 2007 but admits to paying "virtually no corporate tax" in the country. You won't believe the kind of amount that is lost through tax havens and even through incentives by Zambia sugar. They use legal loopholes to shift an estimated \$13.8 million a year out of Zambia, into tax havens. Zambia loses enough to put an extra 48,000 children in school a year.

They're able to move around their profits through these tax havens which rob the country of the much needed taxes, revenue for public service provision. "If companies paid tax the government would be collecting enough revenue and grants to hospital and schools would increase" Mr Sunatama, Headmaster of Nakambala School, on the edge of the Zambia Sugar estate. "Sometimes when we come from home we usually come with clean uniforms. But when we get to school, we feel bad because we get dirty. We need to at least have a floor in our school". Irene Hangoma, student at Nakambala School, on the edge of the Zambia Sugar estate. "If that tax was being paid maybe those moneys would be used by many hospitals to buy more drugs, to access the hard to reach places" Sister Florence Mweemba, Head of the clinic at Nakambala Health Centre, Mazabuka "We receive up to 15 children per week. After weighing we identify many children as malnourished. About 2 children die per month due to malnutrition. Tax is important because the government gives it back to us at the end of the day" Dailess Mwiinga, Nutritionist at Nakambala Health Centre, Mazabuka.

Video

http://www.youtube.com/watch?v=1p cKBwUhwA

link

Control

Transcript

Each year the Serengeti planes in Tanzania play host to one of the greatest animal migrations on earth. Some 2 million animals begin a round trip that will take them almost 2000 miles. Fossil evidence suggests that modern wildebeests grazed these planes more than a million years ago. At the beginning of each year wildebeests congregate at the fringes of the Serengeti, all giving birth in the same month. Rapidly their numbers swell. The calves can run as fast as their mothers within 2 days of being born. No one knows what triggers the migration. There is no discernable signal, it just takes one or two to sniff the air and decide the time is right to leave.

The migrating animal's journey is a long and arduous one. Even without the attention of predators around 200 thousand of the weakest wildebeest zebras will die of starvation, disease or overexertion during the trek. Everyday fresh carcasses are left behind. The migrating animals rest at the swirling streams and regroup.

A single cat finds it tricky taking down a full grown wildebeest, but if it can separate a wildebeest calf off from its mother then it has a chance of a meal.

In Kenya's Maasai Mara the migrating herds arrive. Rains have created a huge area of well watered grazing. Here the wildebeest will stay until the smell of November's short rains tell them it's time to regroup and head southwards, back towards the Serengeti.

Video link http://www.youtube.com/watch?v=HYM6LqDJLiM

intp://www.youtube.com/watch?v=H1MoEqD3Ei

Sympathy

Transcript

"Zambia: A Country in Crisis" narrated by Scott Cotter

As morning dawns in the rambling squatter community of Kanyama, sunlight warms the thickening haze of early-morning pollution and lung-burning dust already filling the air. By mid-morning, heat rises in visible waves from the tattered tin roofs covering the tiny, weatherworn brick houses crowding the densely-populated community. Children, hungry and lacking classrooms to fill, gather in barren common areas to play and seek shelter from the stifling heat under anything that casts a shadow. This is where 150,000 of Zambia's poorest residents live, people for whom the collapsed copper market, a soaring unemployment rate and worsening AIDS crisis have been particularly devastating. Most families here live in small, crumbling brick homes that are no more than eight or 10 feet across and a few feet in the other direction. Some have concrete floors; sadly, others have dirt. What they share are yawning gaps in the roofs and walls that choking dust and heavy rains easily breach. Absent from most homes are any furnishings or personal belongings, with the exception of a blanket or two for sleeping. Also markedly absent are parents. While UNICEF reports that 16 percent of the population of Zambia is infected with HIV/AIDS, the number seems ambiguous when it's nearly impossible to find a family untouched by the disease in Kanyama. Thousands of children have been orphaned, many left to fend for themselves. And grandparents, after suffering the loss of their own children to the disease, are left with the seemingly insurmountable task of raising handfuls of grandchildren on incomes that amount to pennies a day. Street vending is about the only means of survival for many. Unskilled, uneducated and overburdened, they muster the energy to sell everything from vegetables and cooking oil to fire-roasted peanuts, french fries and chicken intestines. If they're industrious - and blessed with a good deal of luck - they can afford to feed their grandchildren at least one meal a day, which typically consists of nshima, a local dish made of corn, water and cooking oil. Others, less fortunate and often too old or feeble to make the daily trek to buy supplies from markets miles away, can only afford to feed their grandchildren a few meals each week, further compromising their immune systems and making them more susceptible to rampant diseases. This is especially true during the rains when malaria, tuberculosis and cholera outbreaks spread like flash fire in the confined, destabilized community.

Video link

Not applicable - no video used

Guilt

Transcript

A vast dangerous and hidden trade in old televisions, computers, and other electrical equipment is flowing from rich Western nations to developing nations in Asia and Africa. Electronic waste, or "ewaste" as it's often known, is fast becoming one of the biggest global threats to human health and the environment. As more and more electronic junk is burnt, broken up, or stripped for valuable second hand parts a cocktail of dangerous toxic chemicals and heavy metals is being released. Workers in the crude recycling facilities are exposed to harmful persistent chemicals which then find their way into the atmosphere and water supplies. "Ghana is increasingly becoming a dumping ground for E-waste, mainly from Europe and the United States of America. Here we're talking of several tonnes of obsolete, discarded computers. The problem is that we don't have the mechanisms or the systems in place in this country to recycle this waste. Some come in under the guise of donation, but when you examine the items they don't work. So one would wonder why someone would want to donate items that don't work. If it's not dumping then it's just a way to get rid of these computers. When you go to the site where these items are dumped you'll see a lot of old computers dumped in these rivers. The lead, the mercury, and all the other toxins bio-accumulate. That is to say, they stay in the food chain. People, who break up these copper-wired tubes, tell you that they have nausea, they have headaches, they have respiratory problems as a result of breaking these wires. They inhale a lot of fumes, the residents in the neighbourhood inhale a lot of fumes, from the burning processes. Sometimes we even find children breaking these copper-wired tubes apart just to get the wires and other metals to sell" Mike Anane, President of the League of Environmental Journalists in Ghana.

Video

http://www.youtube.com/watch?v=Wc4T4KbVl3g

link

Appendix B

Emotion Scales

Table B1 Moral Emotions

While you were watching this video clip please indicate how much you felt each of the following things from 1 (*didn't feel it at all*) to 9 (*felt it very strongly*)

Didn't feel it at all	2	3	4	5	6	7	8	Felt it very strongly
1								9

- 1. Inspired
- 2. Awe
- 3. Admiration
- 4. Uplifted
- 5. Angry
- 6. Infuriated
- 7. Outraged
- 8. Contempt
- 9. Sympathetic
- 10. Softhearted
- 11. Tender
- 12. Warm
- 13. Compassionate
- 14. Pity
- 15. Guilt
- 16. Ashamed
- 17. Blameworthy
- 18. Dissatisfied with myself
- 19. Disgusted at myself
- 20. Angry at myself
- 21. Embarrassed

Note. Items 1 to 4 measured moral elevation. Items 5 to 8 measured moral outrage.

Items 9 to 14 measured sympathy. Items 15 to 21 measured guilt.

Appendix C Cognitive Appraisal Scale

Table C1 Cognitive Appraisals

The video clip demonstrates a wide variety of aspects of life					
	Not at				Very
	all				much
	1	2	3	4	5

- 1. To what extent is there behaviour in the video clip which is well above the normal standards of behaviour?
- 2. To what extent did any aspects of the video clip reflect the way people should behave, ideally?
- 3. To what extent is there behaviour in the video clip which is well below the normal standards of behaviour?
- 4. To what extent did any aspects of the video clip reflect the way people shouldn't behave?

Note. Items 1 and 2 measured elevation appraisals. Items 3 and 4 measured outrage appraisals.

Appendix D

Benevolent Helping Intentions Scale (Study 1)

Table D1 Benevolent Helping Intentions

Please rate the extent to which you intend to do each of the following things over the next 6 weeks:

Not at						Very
all						much
1	2	3	4	.5	6	7

- 1. Give money to charity
- 2. Donate goods or clothes to a charity
- 3. Go our of your way to help a friend
- 4. Go out of your way to help a stranger in need

Appendix E

Prosocial Political Action Scales (Study 2)

Table E1

Prosocial Action Intentions and Behavioural Engagement

72 million children are out of school. 771 adults worldwide are illiterate (Oxfam). Some Americans are taking action to express their opinions about what should be done to improve access to education worldwide.

1. One group has been formed to call for the U.S. to provide more support and help to improve access to education (e.g., by funding the development of school buildings, books, teacher's wages, and children's uniforms). Using the scale below, indicate how willing you would be to engage in various activities to support this group and its strategy:

Not at				Very much
all				
1	2	3	4	5

- 1. Volunteer with this group
- 2. Vote for a candidate who agrees with this group
- 3. Sign a petition
- 4. Wear a badge supporting this group
- 5. Attend a rally
- 6. Join the group's e-mail list
- 7. Recruit others to become involved with this group
- 8. Go to a meeting of local representatives of this group
- 2. Other Americans have formed a group to identify those responsible for the lack of access to education worldwide and to directly challenge them to fix the problems they have created. Using the scale below, indicate how willing you would be to engage in various activities to support this group and its strategy:

Not at				Very much
all				
1	2	3	4	5

- 1. Volunteer with this group
- 2. Vote for a candidate who agrees with this group

- 3. Sign a petition
- 4. Wear a badge supporting this group
- 5. Attend a rally
- 6. Join the group's e-mail list
- 7. Recruit others to become involved with this group
- 8. Go to a meeting of local representatives of this group
- 3. Other Americans have formed a group to advocate for the U.S. to not get involved in this issue of access to education worldwide. Using the scale below, indicate how willing you would be to engage in various activities to support this group and its strategy:

Not at				Very much
all				
1	2	3	4	5

- 1. Volunteer with this group
- 2. Vote for a candidate who agrees with this group
- 3. Sign a petition
- 4. Wear a badge supporting this group
- 5. Attend a rally
- 6. Join the group's e-mail list
- 7. Recruit others to become involved with this group
- 8. Go to a meeting of local representatives of this group

If you would like more information about one or more of the groups please indicate the group you would like details from below:

- 1. The group that advocates more support and help to improve access to education worldwide
- 2. The group that advocates to identify those responsible and directly challenge them to improve access to education worldwide
- 3. The group that advocates to not get involved

Note. Group 1 was the "support group". Group 2 was the "challenge group". Group 3 was the "avoidance group". The final section of the table shows the behavioural engagement measure.

Appendix F

Charitable Donations Measure (Study 3)

Table F1

Charitable Donations Measure

Prize Draw

- "Everyone that takes part in this research will be entered in a prize draw of £60. The following questions will ask you if you would like to give any of the amount to charity.
- Please note that if you win, the researcher will distribute the money according to your answers below.
- Please note that this is entirely <u>confidential</u> and is your own choice.
- On the following page you will be able to choose up to two charities to donate to amongst the following options: NSPCC, Handicap International, Human Rights Watch, Foundations for Peace, Save the Children, Nonviolent Peace Force, Amnesty International, WWF, Greenpeace, and WheelPower."
- 1. How much of the £60 would you like to donate to charity?
- 2. Please choose up to two charities to donate your chosen amount of money to.

If you choose one charity then all of the money you want to donate will go to that charity. If you choose two charities then the money you want to donate will be evenly distributed between the 2 charities.

NSPCC (The National Society for the Prevention of Cruelty to Children).

<u>Short Description</u>: The NSPCC is a British charity which aims to end cruelty to children in the UK.

Handicap International

<u>Short Description</u>: Handicap International is a charity which aims to help people with disabilities around the world.

Human Rights Watch

Short Description: Human Rights Watch is a nonprofit, nongovernmental human rights organisation which aims to lobby for and promote human rights and justice around the world.

Foundation for Peace

Short Description: The Foundation for Peace is a charity which aims to support those affected by local and global









conflict.

WWF

Short Description: WWF is a charity which aims to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

Save the Children

<u>Short Description</u>: Save the Children is a charity which aims to help children inflicted by poverty and violence around the world.

Nonviolent Peace Force

Short Description: The Nonviolent Peace Force is a charity which aims to promote, develop and implement unarmed civilian peacekeeping as a tool for reducing violence and protecting civilians in situations of violent conflict.

Amnesty International

<u>Short Description</u>: Amnesty International is charity which aims protect people wherever justice, fairness, freedom and truth are denied.

WheelPower (Sport for All)

<u>Short Description</u>: WheelPower (Sport for All) aims to promote equality of opportunity in sport for all people with physical disabilities.

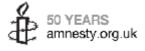
Greenpeace

Short Description: Greenpeace is a charity which aims to defend the natural world and promote peace by investigating, exposing and confronting environmental abuse, and championing environmentally responsible solutions.













Note. Order of charity presentation was randomised. The short descriptions are based on the charity's websites. Participants would only be shown this section if they opted to donate money to charity in the previous section.

Appendix G

Third-Party Experimental Game Transcript (Study 4)

Dear participant,

The next part of this study is on social interactions. Please read the following instructions carefully. In case of questions or uncertainties, please ask the experimenter.

[NEW PAGE]

You are going to participate in an interaction between three parties. All participants will be randomly assigned to either one of three possible roles, Player A, B, or C. In the course of this interaction, you and the other players can earn points. Each point is equivalent to £0.10. When the experimenter has collected all of the data, ten percent of participants will be randomly selected by a lottery and will receive their amount of money based on the decisions made in their interaction.

This means that your decisions in this interaction may determine how much you receive if you win the experiment lottery.

Before we start, the computer will now randomly assign each participant to the role of either Player A, B, or C.

[TIME LAG] [NEW PAGE]

You are assigned to the role of **Player C**.

Everyone will remain completely anonymous during and after the experiment. So, you will never know which other participants were the Players A and B in this interaction, nor will they know that you were the Player C with whom they had interacted.

If you press "Continue" you will receive information about the two phases of the social interaction. Players A and B will receive the same information.

[NEW PAGE]

Phase 1: Player A's Decision

In this social interaction, Player A has 100 points, Player B has no points, and Player C has 50 points.

In Phase 1, Player A may allocate a voluntary number of points to Player B.

It is up to Player A to decide how many points he or she will allocate to Player B.

Player B has no say in how much he or she receives.

Player A may decide not to allocate any points at all to Player B, or to allocate half of the points to Player B. All possible distributions that Player A could make are shown below.

The	The Points					
Player						
Player	100 points	90	80	70	60	50 points
A	(Player A keeps	points	points	points	points	(Player A allocates
	all of the points)					half of the points to
						Player B)
Player	0 points	10	20	30	40	50 points
В		points	points	points	points	

[NEW PAGE]

Phase 2: Player C's Decision

Based on the distribution that Player A makes, Player C can choose to assign reduction points to Player A and/or compensation points to Player B.

Every reduction point that Player C assigns to Player A reduces the total number of points from Player C by 1, but reduces the total number of points from Player A by 3.

Every compensation point that Player C assigns to Player B reduces the total number of points from Player C by 1, but increases the total number of points from Player B by 3.

Player C is free to assign any number of reduction points to Player A and/or compensation points to Player B, anything from zero to all 50 points that were initially assigned.

However, Player C cannot use more than 50 points in total. Some EXAMPLES are given below.

So, if for example Player A made the following distribution:

Player A = 70 points

Player B = 30 points

Player C could choose to:

	Points	OR	Points
Punish Player A with:	4		10
Compensate Player B with	2		12

This would leave Players A, B, and C with this many points:

Player A's point (70 points)	70 - 4(3) = 58	70 - 10(3) = 40
Player B's points (30 points)	30 + 2(3) = 36	30 + 12(3) = 66
Player C's points (50 points)	50 - 6 = 44	50 - 22 = 28

Please press "Continue" to start with the interaction.

[NEW PAGE]

While Player A makes his or her choice, we want you to choose how many reduction and/or compensation points you would assign for each of the possible six distributions that Player A could make.

Player A can make any of the following six distributions:

	Points						
Player A gets:	100	90	80	70	60	50	
Player B gets:	0	10	20	30	40	50	

Please decide how many compensation and/or reduction points you would assign for each of these six distributions in case Player A makes such an offer.

Your decision will be binding. In other words, your decisions will be compared with the actual decision that Player A makes. Your decisions together with Player A's decision will determine how much each player in this interaction receives if they win the experiment lottery.

Player A	100	90	80	70	60	50
Player B	0	10	20	30	40	50

Punishment to

Player A:

Compensation

to Player B:

Remember:

- For every 1 reduction point you give, 3 points will be deducted from Player A.
- For every 1 compensation point you give, 3 points will be compensated to Player B.
- You can give any amount of points but the total must not exceed 50 points.

Appendix H

Dispositional Emotion Scales (Study 5)

Table H1

Dispositional Elevation

The statements below refer to experiences in which you perceive or hear about some person demonstrating an impressive act of charity or loyalty or kindness or compassion or forgiveness or sacrifice for others or sincere service to others. We refer to these as acts of moral beauty.

Please rate your agreement/disagreement with the statements below:

Strongly				Strongly
disagree				agree
1	2	3	4	5

- 1. I notice moral beauty in human beings
- 2. When perceiving an act of moral beauty I feel changes in my body, such as a lump in my throat, an expansion in my chest, faster heart beat, or other bodily responses
- 3. When perceiving an act of moral beauty I feel emotional, it "moves me," such as feeling a sense of awe, or wonder or excitement or admiration or upliftment
- 4. When perceiving an act of moral beauty I feel something like a spiritual experience, perhaps a sense of oneness, or being united with the universe, or a love of the entire world
- 5. When perceiving an act of moral beauty I find that I desire to become a better person
- 6. When perceiving an act of moral beauty I find that I desire to do good deeds and increase my service to others

Table H2
Dispositional Outrage

Please rate your agreement/disagreeme	ent with the statements below:	
	Strongly	Strongly
	disagree	agree
	1 2 3 4	5

- 1. I feel angry when I see others being unfairly treated
- 2. It bothers me when I see that others are not fairly treated
- 3. I feel outraged by injustices done to others
- 4. I am concerned by unfairness done to others
- 5. If I see that someone is feeling mad because he or she was mistreated, then I feel mad too
- 6. When I see someone feeling sad because he or she was hurt by another person, I feel angry
- 7. I feel angry for other people when they have been victimized by others
- 8. I feel angry for a person when his or her feelings have been hurt by someone else
- 9. I get angry when a friend of mine is hurt by someone else
- 10. When someone I know gets angry at someone else, I feel angry at that person too
- 11. When I see others being taken advantage of, I don't feel mad for them

Note. Item 11 was reverse scored.

Table H3
Dispositional Shame

Below you will read about situations that people are likely to encounter in day-to-day life, followed by common reactions to those situations. As you read each scenario, try to imagine yourself in that situation. Then indicate the likelihood that you would react in the way described.

Very						Very
unlikely						likely
1	2	3	4	5	6	7

- 1. You rip an article out of a journal in the library and take it with you. Your teacher discovers what you did and tells the librarian and your entire class. What is the likelihood that this would make you would feel like a bad person?
- 2. You give a bad presentation at work. Afterwards your boss tells your coworkers it was your fault that your company lost the contract. What is the likelihood that you would feel incompetent?
- 3. You successfully exaggerate your damages in a lawsuit. Months later, your lies are discovered and you are charged with perjury. What is the likelihood that you would think you are a despicable human being?
- 4. You make a mistake at work and find out a coworker is blamed for the error. Later, your coworker confronts you about your mistake. What is the likelihood that you would feel like a coward?

Appendix I

Approach and Avoidance - BIS/BAS Scale (Study 5)

Each item of this questionnaire is a statement that a person may either agree with or disagree with. For each item, indicate how much you agree or disagree with what the item says. Please respond to all the items; do not leave any blank. Choose only one response to each statement. Please be as accurate and honest as you can be. Respond to each item as if it were the only item. That is, don't worry about being "consistent" in your responses. Choose from the following four response options:

- 1 = very true for me
- 2 =somewhat true for me
- 3 = somewhat false for me
- 4 = very false for me
- 1. A person's family is the most important thing in life.
- 2. Even if something bad is about to happen to me, I rarely experience fear or nervousness.
- 3. I go out of my way to get things I want.
- 4. When I'm doing well at something I love to keep at it.
- 5. I'm always willing to try something new if I think it will be fun.
- 6. How I dress is important to me.
- 7. When I get something I want, I feel excited and energized.
- 8. Criticism or scolding hurts me quite a bit.
- 9. When I want something I usually go all-out to get it.
- 10. I will often do things for no other reason than that they might be fun.
- 11. It's hard for me to find the time to do things such as get a haircut.
- 12. If I see a chance to get something I want I move on it right away.
- 13. I feel pretty worried or upset when I think or know somebody is angry at me.
- 14. When I see an opportunity for something I like I get excited right away.
- 15. I often act on the spur of the moment.
- 16. If I think something unpleasant is going to happen I usually get pretty "worked up."
- 17. I often wonder why people act the way they do.
- 18. When good things happen to me, it affects me strongly.
- 19. I feel worried when I think I have done poorly at something important.
- 20. I crave excitement and new sensations.

- 21. When I go after something I use a "no holds barred" approach.
- 22. I have very few fears compared to my friends.
- 23. It would excite me to win a contest.
- 24. I worry about making mistakes.

Note. Items other than 2 and 22 were reverse-scored. Items 3, 9, 12, and 21 measured BAS Drive. Items 5, 10, 15, and 20 measured BAS Fun Seeking. Items 4, 7, 14, 18, and 23 measured BAS Reward Responsiveness. Items 2, 8, 13, 16, 19, 22, and 24 measured BIS. Items 1, 6, 11, and 17 were fillers.

Appendix J

General Positive and Negative Affect Scale (PANAS) (Study 5)

Table J1

General Positive and Negative Affect

Indicate to what extent you feel this way right now, that is, at the present moment:

Very slightly or not at all Extremely

1 2 3 4 5

- 1. Interested
- 2. Distressed
- 3. Excited
- 4. Upset
- 5. Strong
- 6. Guilty
- 7. Scared
- 8. Hostile
- 9. Enthusiastic
- 10. Proud
- 11. Irritable
- 12. Alert
- 13. Ashamed
- 14. Inspired
- 15. Nervous
- 16. Determined
- 17. Attentive
- 18. Jittery
- 19. Active
- 20. Afraid

Note. Items 1, 3, 5, 9, 10, 12, 14, 16, 17 and 19 measured positive affect. Items 2, 4, 6, 7, 8, 11, 13, 15, 18, and 20 measured negative affect.

Appendix K

Action Readiness Scale (Study 6)

Table K1 Action Readiness

While you were watching this video clip please indicate how much you felt each of the following things from 1 (not at all) to 7 (very strongly so)

Not						Very
at all						strongly so
1	2	3	4	5	6	7

- 1. I wanted to approach, to make contact
- 2. I wanted to be or stay close, to be receptive to someone
- 3. I wanted to have nothing to do with something or someone, to be bothered by it as little as possible, to stay away
- 4. I wanted to sink into the ground, to disappear from the Earth, not to be noticed by anyone

Note. Items 1 and 2 measured approach orientation. Items 3 and 4 measured avoidance orientation.

Appendix L

Prosocial Motivation Scale (Study 6)

Table L1 Prosocial Motivation

While you were watching this video clip please indicate how much you felt each of the following things from 1 (not at all) to 7 (very strongly so)

Not at all						Very strongly
						SO
1	2	3	4	5	6	7

- 1. Want to help others
- 2. Feel like doing good for others
- 3. Do not want to help others
- 4. Do not care about assisting others

Note. Items 3 and 4 were reverse scored.

Appendix M

Stereotypes of Competence and Warmth Scale (Study 7)

Table N1
Stereotypes of Competence and Warmth

To what extent do you view people from Zambia as:

Not at all

Very strongly so

1 2 3 4 5

- 1. Competent
- 2. Confident
- 3. Capable
- 4. Efficient
- 5. Intelligent
- 6. Skilful
- 7. Friendly
- 8. Well-intentioned
- 9. Trustworthy
- 10. Warm
- 11. Good-natured
- 12. Sincere

Note. Items 1 to 6 measured perceived competence. Items 7 to 12 measured perceived warmth.

Appendix N Perceived Responsibility Manipulation Check (Study 8)

Table N1
Perceived Responsibility

	Not at						Very
	all						much
	1	2	3	4	5	6	7
1. How responsible do you feel Europe is for having							
allowed the situation that was described in the video							
clip?							
2. How much do you feel it is Europe's							
responsibility to do something to improve the							
situation that was described in the video clip?							

Appendix Q

Focus Measure (Study 8)

It has often been found that what people say contains a certain amount of redundancy. For example, you might hear only a part of a conversation going on across the room at a party, but still be able to fill in the blanks because much of the information in the conversation is repetitious. To research this phenomenon, we are collecting some judgments of standard passages--brief phrases, sentences, and the like--to find out how redundant they are. This exercise is concerned with the use of pronouns.

Your task is to look at each of the following passages and try to fill in the blank in each one. In each blank there are several possible pronouns that may make sense in the sentence. Please <u>choose the word</u> that makes the most sense to you.

Even if you have to guess on some or many of the passages, go ahead and make your best guess for each one. Please try to fill in the <u>most likely</u> word.

- 1. All of (our, my, his) answers matched the ones in the back of the book.
- 2. At first it didn't seem to make any difference, but by later that night the noise from the party was entirely too loud to allow (*her*, *me*, *us*) to sleep.
- 3. The salesman tried to persuade (me, her, us) to buy a set of encyclopedias.
- 4. The noise got to (us, them, me) before long.
- 5. (Our, His, My) idea of fun is sitting at home and listening to music.
- 6. The sun went in just when (we, she, I) decided to go outside.
- 7. Please don't do this to (her, us, me); it is just not fair.
- 8. It was (her, our, my) understanding that the deadline for the paper had been delayed one week.
- 9. Except for (me, us, her), everyone failed the test.
- 10. As a result of (*our*, *my*, *his*) suggestions, a minor revision in the policy has occurred.
- 11. (*He, We, I*) spent so much time on the initial planning that it seemed impossible to finish before the deadline.
- 12. It rained so hard that all of (our, my, her) clothes got soaked.
- 13. For the past two or three months, (*I, we, they*) have had reports of squabbling and dissatisfaction among the workers in the office.

- 14. According to (*our*, *my*, *her*) notes, only five of the original seven laws are still in existence.
- 15. Someone stopped (them, me, us) to get directions to the stadium.
- 16. (We, He, I) waited by the phone for the doctor to return the call.
- 17. The cashier charged (her, us, me) too little for the groceries.
- 18. The mosquitoes didn't even bother (him, us, me).
- 19. Dinner was waiting on the table when (he, I, we) came back from the store.
- 20. It isn't easy to get lost in this town, but somehow (*I, we, they*) managed it.