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The Cognitive Antecedents of Empathic Responding

Cuff, Ben

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The Cognitive Antecedents of Empathic Responding

By

Benjamin M. P. Cuff

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Glossary of Terms

Observer – The subject of the situation. The person feeling empathy for another.

Target – The object of the situation. The person in need whom the observer is feeling empathy for.

Agency – The extent to which the observer believes that (s)he is able to change the target's situation. How much (s)he feels able to provide help.

Blame – The extent to which the observer blames the target for his or her situation. How much (s)he believes that the target is responsible.

Empathic responding – Positive emotional responding towards another in need, including feelings of empathy and sympathy.

Empathy - An emotional response similar to the observer's perception and understanding of the target's emotions, with recognition that the source of the emotion is not the observer's own.

Morality – The extent to which the observer believes that what has happened to the target is morally wrong.

Perceived Need – The extent to which the observer believes that the target is in need. How much (s)he thinks the target needs help.

Perceived Power – The perceived power difference between the observer and target. How much the observer feels that (s)he is a more powerful person than the target.

Self-interest – The extent to which the observer believes that his/her own needs are more important than the target's (in the current situation).

Similarity – The extent to which the observer believes that the target is similar to himself/herself. This can be inferred on any number of factors (e.g., personality, appearance, cultural likeness, or social circumstances)

Sympathy – An observer's feelings of worry or concern for the target's welfare.

Valuing – The extent to which the observer values or likes the target.

Abstract

There are several shortcomings in the empathy literature that have led to an incomplete understanding of this important social emotion. Specifically, definitions of the term lack consistency, and the majority treatment of empathy as a trait capacity has overshadowed our understanding of empathy as a state variable, and of the relationships between context-dependent cognitions and empathic responding. The purpose of this thesis is to present research into the resolution of these issues. A new conceptualisation of empathy was first developed, based upon a consideration of the published literature. The cognitive antecedents of empathy (agency, blame, perceived power, cognitive empathy, similarity, valuing, perceived need, morality, self-interest, and mood) were then identified and reviewed. As no scale existed to target these variables, a new scale was developed (the Cognitive Antecedents of Empathic Responding Scale [CAERS]). In Study 1 the face validity of the CAERS was established, and the internal reliability of the scale was improved in Study 2. In Study 3, participants' (n = 177) cognitions towards a high school bullying victim were measured, finding that that some antecedents (i.e., perceived need, valuing, cognitive empathy, similarity, self-interest, and morality) were more influential on empathic responding than others. The results of Study 4 showed that participants' (n = 83) cognitions (especially morality, valuing, agency, and blame) towards an individual depicted in a charity advertisement influenced how much empathy they felt for that target and how likely they were to donate to that charity. In Study 5, a one-trial prisoner's dilemma (n = 100) was used to demonstrate that self-interest is also an important factor to consider. A new model of the antecedents of empathic responding was developed from these results, which will serve as a useful starting point for those wishing to enhance the way we encourage empathy in others, especially those working in forensic, healthcare, and charitable contexts.

Chapter 1: Introduction

1.1 Rationale

Empathy is an essential component of human interaction (Baron-Cohen and Wheelwright 2004, Van Boven et al. 2013), inseparable from social intelligence (Björkqvist, Österman, and Kaukiainen 2000), and has been deemed "the basic process in all social interaction" (Dymond 1949: 127). Many decades have been spent debating the definition of empathy (which shall be covered in Chapter 2) but, at a basic level, empathy concerns one's emotional response to an emotional stimulus. It allows us to understand and replicate the emotional states of others, promoting a particular course of action. Such emotions have evolutionary roots, with empathy aiding social species to care for offspring and other group members through the strengthening of social bonds, promoting group safety and nurturing (see Decety 2011).

Of particular importance is the fact that empathy is relevant to a wide range of social contexts. Empathy is said to promote altruistic behaviour (e.g., Batson 1991), and has been suggested to be crucial for the formation of therapeutic relationships (Reynolds and Scott 1999). Similarly, empathy is important for the delivery of effective healthcare by minimising patient distress (Olson 1995) and enabling hope and confidence in the patient (see von Dietze and Orbe 2000). On the other hand, a lack of empathy has commonly been associated with offending behaviour (Jolliffe and Farrington 2004, 2007), which remains a pervasive problem in most (if not all) societies and cultures. Empathy is clearly an important area of research and practice across many different fields of interest, in fact in almost any situation where human interaction occurs.

Nevertheless, despite a wide range of applications and extensive research, empathy remains a poorly understood concept. For example, it has been noted on multiple occasions

(to name a few: Coplan 2011, Batson et al. 2005, Decety and Jackson 2004, de Vignemont and Singer 2006, Eisenberg et al. 1991, Feshbach 1978) that despite the century long existence of the term, debate on how to define empathy is still commonplace in the literature. A further issue is that there has been a majority focus in the literature on empathy as a trait variable. Such a focus implies that an individual exhibits a specified capacity for empathy, and that this capacity remains stable across all situations encountered. Variations in empathy levels according to trait individual differences have been demonstrated in many studies (e.g., Baron-Cohen and Wheelwright 2004, Blair 2005), which perhaps explains the majority focus on trait capacities for empathy. However, other authors (see Chapter 3) have shown that empathy can vary according to context (i.e., as a state variable). Such state approaches have been eclipsed by the trait perspective in the research literature, which has resulted in a lack of understanding of how empathy functions across contexts. As a result, we lack suitable measurement tools that can identify contextually dependent empathy deficits (Pithers 1999).

Certain other issues with the measurement of empathy exist within the literature. In particular, empathy is often merged with related terms such as sympathy, defined as "feelings of sorrow or concern for another's welfare" (Eisenberg and Miller 1987: 92). Authors rarely make it clear whether their measures pertain to empathy or sympathy, and as such we do not have a clear understanding of either term. Therefore, efforts are needed to more clearly disentangle the antecedents and outcomes of empathy and sympathy, to improve our understanding, and to determine whether we should continue focussing on empathy in intervention/education (as this term has received the greatest interest thus far), or whether sympathy might be a more appropriate target.

Some (e.g., Barnett and Mann 2013a, Brown et al. 2013) have suggested that the variation of empathy/sympathy according to context may result from an individual's cognitions about the situation. Cognitions can cause blocks to 'normal' empathic responding,

or enhance empathic responding. For example, it has been demonstrated that attributions of blame can cause individuals to feel less empathy for another (e.g., Rudolph et al. 2004). Alternatively, other cognitive factors such as perceiving emotional need in another can cause increased feelings of empathy (e.g., Lishner, Batson, and Huss 2011). Consequently, it has been noted that researchers should investigate the various reasons why deficits arise, rather than empathy/sympathy itself (Barnett and Mann 2013a, Marshall, Hudson, Jones, and Fernandez 1995), and that potential blocks/enhancers of empathy should be investigated so that they can be targeted in assessment and intervention (Barnett and Mann 2013a). Although individual cognitive factors have been investigated (such as those mentioned above), these are rarely examined in combination and at the time the present project was started, no measurement scales existed to target them, and we had little knowledge regarding the relative importance of each cognitive antecedent. Addressing these issues will allow us to identify which of these cognitions have the greatest influence on empathy and sympathy (and therefore behavioural motivations), enabling for the identification of those cognitions that form the most pressing targets for education and intervention.

Further knowledge of the variation of empathy according to context specific cognitions would benefit researchers and practitioners in several different disciplines. For example, an understanding of how offenders are able to suppress empathy for their victims, whilst having 'normal' levels of empathy for others would prove useful for those aiming to address victim-specific empathy deficits in offending populations (e.g., Fernandez et al. 1999, Marshall et al. 1995). Understanding how empathy may underpin charitable donation behaviours (e.g., see Griffin et al. 1993, Kogut 2011) may also help to enhance charitable marketing campaigns, as determining how best to elicit empathy in potential donors can help maximise income generation for charitable organisations. Furthermore, the outcomes of this research can be applied by those who are interested in enhancing compassionate care

delivered by healthcare professionals (e.g., Hojat et al. 2002), particularly in light of the recent criticisms regarding a lack of compassion within some nurses in the UK (Care Quality Commission 2014, Francis 2013, The Patients' Association *n.d.*). Finally, a greater understanding of empathy may even benefit those in the marketing or business sectors, with empathy in salespersons being linked to greater customer satisfaction (Lee et al. 2011).

1.2 Aims

It is clear that efforts are needed to more fully understand this essential social ability through clearly examining what is meant by the term 'empathy', developing a scale to examine the cognitions that underlie empathic responding, and further investigating empathy as a state variable. Therefore, the aims of this project were: i) to define empathy using a rational argument and evidence-based approach; ii) to construct and validate a scale to measure key state-based cognitive antecedents; iii) to examine the relationship between these cognitions, empathic responding, and helping behaviours; and iv) to determine whether all cognitions are equally influential for empathic responding and helping behaviours, or whether some are more influential than others. It was envisaged that this research would stimulate much needed investigation in this area, thus providing a greater theoretical understanding of the empathic process that will lead to the development of more effective strategies for the promotion of empathy consistent behaviours.

1.3 Thesis Outline

Research will be presented in this thesis in three sections. The objective of the first section (Chapters 2-4) is to provide the theoretical grounding and rationale for the development of the Cognitive Antecedents of Empathic Responding Scale (CAERS). The first of the above aims is addressed in Chapter 2, where opposing viewpoints concerning the

conceptualisation of empathy are considered in light of the available evidence and rational arguments made within the literature. Through this approach a number of common themes when defining empathy were identified, and a new conceptualisation of the term was formulated. In Chapter 3, the literature regarding the cognitive antecedents of empathy is reviewed, which served as the theoretical grounding for the development of the CAERS. Then in Chapter 4, the framework used during the development of the scale is presented.

The focus of the second section (Chapters 5-7) is on data collection and analysis. In Chapter 5, the construction of the CAERS is presented, along with initial validity and reliability data. Findings are also presented regarding the influence of cognitions on empathy in a high school bullying context. In Chapter 6, state empathy in the context of charitable donation behaviours is examined, to demonstrate how this research might be applied to a specific area of interest, and to examine how cognitions influence empathy-related helping behaviours. Two limitations of this study provoked further examination. Firstly, because participants in this study were aware that they were not required to actually give any money to charity, this meant that there was no real element of perceived self-interest, one of the cognitive factors under investigation. Secondly, the target's emotional needs in Study 4 were not ambiguous enough, which resulted in ceiling effects for the perceived need subscale. As such, in Chapter 7, a study in which participants believed that they were exchanging raffle tickets with a person displaying more ambiguous emotional needs is presented, demonstrating that the introduction of these elements changes the helping model developed in Chapter 6.

The final section of this thesis (Chapters 8-10) draws together the developments made by this research towards our understanding of the empathic process, and the implications for those working with empathy within different fields of interest. In Chapter 8, the data from Chapters 5-7 is aggregated to develop a new model of the cognitive antecedents of empathic responding, and the implications for our understanding of the overall empathic process are

discussed. In Chapter 9 the implications of this research for those working in a number of different disciplines are outlined; specifically for those working in forensic, healthcare, and charitable contexts. Finally, overall conclusions are drawn in Chapter 10, where it is argued that further research in this area will enhance both research and practice in a number of important psychological disciplines.

Chapter 2: Empathy: A Review of the Concept

The aim of this chapter is to discuss the conceptualisation of empathy, by reviewing and critically appraising a range of definitions in the published literature. The purpose is to provide a comprehensive account of what is meant by empathy and to distinguish empathy from related terms such as sympathy. This review was accepted for publication by *Emotion Review* in June 2014 and is available online at the time of writing. This Chapter includes the pre-published version of the manuscript referenced below. The reference list for this manuscript has been embedded in to the overall reference list towards the end of this thesis.

Cuff, B. M. P, Brown, S. J., Taylor, L., and Howat, D. J. (2014) 'Empathy: A Review of the Concept'. *Emotion Review* [advance online publication]. available from <http://emr.sagepub.com/content/early/2014/12/01/1754073914558466>

2.1 Introduction

The term ‘empathy’ was coined over one hundred years ago by Titchener, an adaptation of the German word *Einfühlung* (Wispé 1986). According to Stotland and colleagues, discussions of empathy may even date back to “the beginnings of philosophical thought” (Stotland et al. 1978). Despite this extensive history, empathy is not a well defined notion. Instead, there are perhaps as many definitions as there are authors in the field (Decety and Jackson 2004, de Vignemont and Singer 2006).

Several problems result from this fact. Firstly, when interpreting research findings relating to ‘empathy’, one must first determine precisely what is being studied, and the degree of confusion with related concepts. This can make the interpretation of outcomes difficult, compromising the comparability of studies (Brown, Harkins, and Beech 2012, Gerdes, Segal, and Lietz 2010). Secondly, there appear to be differences in the way researchers and practitioners conceptualise empathy (Mann and Barnett 2013), leading to a mismatch between the way empathy is researched and dealt with in treatment and education programmes that aim to enhance empathy. Thirdly, therapeutic difficulties can arise when concepts are understood differently (Book 1988, Clark 2010), with some understandings of empathy having greater therapeutic effectiveness than others (see Clark 2010, Nightingale, Yarnold, and Greenberg 1991). These issues, and suggestions for their resolution, are discussed further towards the end of this paper.

While definition diversity should not necessarily be discouraged (e.g., Duan and Hill 1996), efforts should be made to draw together knowledge to improve our understanding and to reduce confusion in the field. Although “there is no way to ascertain which definition is correct” (Eisenberg et al. 1991: 64), it is possible to compare and contrast how empathy is conceptualised, and discuss any differences, examining competing viewpoints in light of the current knowledge-base. The purpose of this paper is to explore the range of current

conceptualisations of empathy and present a discussion outlining similarities that are supported in the literature, and to formulate a new conceptual summary of empathy that can be used by future researchers/practitioners.

2.2 Identifying Areas of Confusion

A snowballing procedure[1] was employed to identify definitions in the literature from key papers, and exploring avenues of interest from reference lists. These initial key papers were sourced mainly from *EBSCO* databases when searching for more general literature reviews on the topic (e.g., using search terms such as *empath* AND review).* Other papers were identified during the search for models of empathy to inform the discussions presented in Chapter 3 (using search terms such as *empath* AND model OR theory)*. Further papers were identified from initial searches of the literature from specific disciplines (e.g., including terms such as *offender*, healthcare, charit**). This process was not intended as an exhaustive review[2], but was designed to capture definitions across a range of different viewpoints. Only English language papers were examined, as there was no provision for translation of non-English language sources. No restrictions were placed in terms of the year of publication.

A total of forty-three distinct definitions/conceptual summaries were identified (see Table 2.1). A small number of these conceptualisations were not put forward by authors as formal 'definitions', but were summary statements of the wider theoretical discussions of empathy. These informal methods of defining empathy were nevertheless reviewed alongside the formal definitions as they have the same relevance in terms of interpreting and

[1]Snowballing was used in favour of more systematic approaches as definitions of empathy are not identified in any consistent manner, and are generally presented within the main body of more widely focussed manuscripts. The use of search terms was therefore not possible. A more general search for 'empathy' yielded too many results for a systematic search for definitions, as a detailed review of each manuscript would be required (making the task unmanageable). A snowball technique was therefore the most viable strategy.
[2]Due to this fact, Grey Literature was not included in this review. Although this method still allowed the current authors to identify a number of common debates in the published literature, it should be noted that different definitions may exist in these non-academic / unpublished sources.

understanding research findings. The present discussion is based upon shorthand definitions of empathy, rather than full models, for two reasons. Firstly, many models of empathy focus upon the wider empathic process (i.e., the process from perception to behaviour), which is beyond the scope of this paper. Secondly, this method allowed us to capture a wider range of ideas and theoretical positions, as the majority of definitions are presented in the literature without such models. The conceptualisations identified are numbered in Table 2.1; to avoid lengthy citations, in the following discussion these conceptualisations are referred to using superscript numbers relating to their position in Table 2.1.

By breaking each definition down into individual clauses and examining similarities and differences, eight themes crucial to our understanding of the concept were identified and are discussed below. It is possible that other authors may identify further debates, but these eight examples reflect the most commonly discussed issues in the literature.

2.3 Eight Example Themes Crucial to Our Understanding of Empathy

2.3.1 Distinguishing empathy from other concepts

Several notable attempts have been made to differentiate empathy from a range of associated concepts (see Batson 2011, Eisenberg et al. 1991, Scheler cited in Becker 1931). Others (e.g., Batson, Fultz, and Schoenrade 1987, Preston and de Waal 2002) denote empathy as an overarching category, containing all associated concepts such as emotional contagion, sympathy, and compassion. To explain why empathy is commonly merged with associated terms, Ickes (2003) utilised Scheler's (cited in Becker 1931) discussion on the related concepts of compathy (shared feelings due to shared circumstances), empathy (understanding another's emotions through perspective taking), mimpathy (imitating another's emotions, without experiencing them oneself), sympathy (intentionally reacting emotionally),

Table 2.1

List of identified empathy definitions

#	Author(s)	Definition
1	Albeiro et al. (2009: 393)	"The tendency to vicariously experience other individuals' emotional states...an emotional response that is focused more on another person's situation or emotion than on one's one...[which] can be either identical to or congruent with that of the other person involved."
2	Barker (2008: 141)	"The act of perceiving, understanding, experiencing, and responding to the emotional state and ideas of another person."
3	Barnett and Mann (2013: 230)	"A cognitive and emotional understanding of another's experience, resulting in an emotional response that is congruent with a view that others are worthy of compassion and respect and have intrinsic worth."
4	Baron-Cohen and Wheelwright (2004: 168)	"The drive or ability to attribute mental states to another person/animal, and entails an appropriate affective response in the observer to the other person's mental state."
5	Batson et al. (2005: 486)	"An other oriented emotional response elicited by and congruent with the perceived welfare of someone else."
6	Batson, Fultz, and Schoenrade (1987: 20)	"The other-focused, congruent emotion produced by witnessing another person's suffering involves such feelings as sympathy, compassion, softheartedness, and tenderness."
7	Clark (2010: 95)	"A way... to grasp the feelings and meanings of the client."
8	Cohen and Strayer (1996: 988)	"The ability to understand and share in another's emotional state or context.''
9	Colman (2009: 248)	"The capacity to understand and enter into another person's feelings and emotions or to experience something from the other person's point of view."
10	Coplan (2011: 40)	"A complex imaginative process through which an observer simulates another person's situated psychological states while maintaining clear self–other differentiation."

11	Davis (1983a: 114)	"A reaction to the observed experiences of another."
12	Davis (1996: 12)	"A set of constructs having to do with the responses of one individual to the experiences of another. These constructs specifically include the processes taking place within the observer and the affective and non-affective outcomes which result from those processes."
13	Decety and Lamm (2006: 1146)	"A sense of similarity between the feelings one experiences and those expressed by others."
14	Decety and Lamm (2006: 1146)	"The ability to experience and understand what others feel without confusion between oneself and others."
15	Decety and Michalska (2010: 886)	"The ability to appreciate the emotions of others with a minimal distinction between self and other."
16	Decety and Moriguchi (2007: 22)	"The capacity to share and understand emotional states of others in reference to oneself."
17	Dymond (1949: 127)	"The imaginative transposing of oneself into the thinking, feeling and acting of another and so structuring the world as he does."
18	Eisenberg, Fabes, and Spinrad (2006: 647)	"An affective response that stems from the comprehension of another's emotional state or condition, which is identical or very similar to the other's emotion, or what would be expected to feel."
19	Feshbach (1975: 26)	"A match between the affective responses of a perceiver and that of a stimulus person…. [definitions] must take into account both cognitive and affective factors."
20	Geer, Estupinan, and Manguno-Mire (2000: 101)	"The ability to perceive another person's point-of-view, experience the emotions of another and behave compassionately."
21	Goldman (1993: 351)	"A sort of "mimicking" of one person's affective state by that of another."
22	Hein and Singer (2008: 154)	"An affective state, caused by sharing of the emotions or sensory states of another person."
23	Hoffman (2000: 4)	"An affective response more appropriate to another's situation than one's own."

24	Hogan (1969: 308)	“The act of constructing for oneself another's mental state.”
25	Ickes (1997: 2)	“A complex form of psychological inference in which observation, memory, knowledge, and reasoning are combined to yield insights into the thoughts and feelings of others.”
26	Johnson, Cheek, and Smither (1983: 1299).	“The tendency to apprehend another person’s condition or state of mind.”
27	Lazarus (1994: 287)	“Sharing another’s feelings by placing oneself psychologically in that person’s circumstance.”
28	Oliveira-Silva and Gonçalves (2011: 201)	“The capacities to resonate with another person’s emotions, understand his/her thoughts and feelings, separate our own thoughts and emotions from those of the observed and responding with the appropriate prosocial and helpful behaviour.”
29	Pavey, Greitemeyer, and Sparks (2012: 681)	“The experience of sympathetic emotions and concern for another person in distress.”
30	Pease (1995: 202)	“The action of understanding, being aware of, being sensitive to, and vicariously experiencing the feelings, thoughts and experience of another of either the past or present without having the feelings, thoughts and experience fully communicated in an objectively explicit manner.”
31	Pelligra (2011: 170)	“The ability to anticipate and share others’ emotional states.”
32	Preston (2007: 428)	“A shared emotional experience occurring when one person (the subject) comes to feel a similar emotion to another (the object) as a result of perceiving the other’s state.”
33	Preston and de Waal (2002: 4)	“Subject’s state results from the attended perception of the object’s state’’
34	Rogers (1975: 2)	“To perceive the internal frame of reference of another with accuracy and with the emotional components and meanings which pertain thereto as if one were the person, but without ever losing the 'as if' condition.”
35	Singer and Lamm (2009: 82)	“An affective response to the directly perceived, imagined, or inferred feeling state of another being.”

36	Singer and Steinbeis (2009: 43)	"A distinction between oneself and others and an awareness that one is vicariously feeling with someone but that this is not one's own emotion."
37	Smith (1759 cited in Marshall et al. 1995: 100)	"An ability to understand another person's perspective plus a visceral or emotional reaction."
38	Stocks et al. (2011: 3)	"A category of emotional responses that are felt on behalf of others."
39	Stotland et al. (1978: 12)	"An observer reacting emotionally because he perceives that another is experiencing or about to experience an emotion."
40	Titchener (1909; Cited by Duan and Hill 1996: 261)	"A process of humanizing objects, of reading or feeling ourselves into them."
41	Van der Weele (2011: 586)	"A basically passive process of information gathering."
42	Wispé (1986: 318)	"The attempt by one self-aware self to comprehend unjudgmentally the positive and negative experiences of another self."
43	Zahavi (2008: 517)	"A basic, irreducible, form of intentionality that is directed towards the experiences of others."

transpathy (emotional contagion, where one is 'infected' by another's emotions), and unipathy (an intense form of transpathy). According to Ickes (2003), such terms differ across three dimensions: the degree of cognitive representations of the target's emotional state; the degree of emotion sharing; and the degree to which a self-other distinction is maintained. Ickes noted that empathy is located in the mid-range for all three of these dimensions, and that the meaning of this term "has an inherent ambiguity that invites the kind of definitional debates that have continued unresolved since the term *Einfühlung* was first introduced nearly a century ago" (p.64). Nevertheless, Ickes (and Scheler) claimed that although such terms are related, there is an argument for their separation.

Perhaps the most frequent discussion with regards to this theme is the difference between empathy and sympathy. Several definitions[3, 5, 6, 11, 12, 23, 29, 33, 35, 38, 39] appear to merge concepts of empathy and sympathy, or at least do not make this distinction clear, whilst others argue against merging sympathy and empathy (e.g., Eisenberg et al. 1991, Hein and Singer 2008, Scheler cited in Becker 1931). Eisenberg et al. (1991: 65) defined sympathy as "a vicarious emotional reaction based on the apprehension of another's emotional state or situation, which involves feelings of sorrow or concern for the other". The distinction between empathy and sympathy has been described as "feeling *as* and feeling *for* the other", respectively (Hein and Singer 2008: 157; emphasis in original). For example, when perceiving sadness in another, empathy will cause sadness in the observer (same emotion; feeling as), while sympathy will entail feelings of concern (different emotion; feeling for) (Singer and Lamm 2009). This is consistent with reported differences in the neurological processes underlying the two constructs (Decety and Michalska 2010). Due to these distinct emotional implications, it is the current authors' view that empathy and sympathy should be separated. The emotion of 'feeling for' another deserves a name and given its current

treatment in the literature by many authors, 'sympathy' lends itself as the most appropriate at this time.

Two other constructs commonly equated with empathy are compassion ("the feeling that arises in witnessing another's suffering and that motivates a subsequent desire to help"; Goetz, Keltner, and Simon-Thomas 2010: 351) and tenderness (an expansive, "warm-and-fuzzy" feeling often elicited by the delicate and defenceless; Lishner, Batson, and Huss 2011: 615). It is possible to differentiate tenderness, compassion, and sympathy. Tenderness has been linked to vulnerability in the target (i.e. a long-term need), whereas the motivation resulting from sympathy is targeted towards a current need (Lishner, Batson, and Huss 2011). While the distinction concerning compassion is less clear one suggestion is that compassion is a higher-order construct, consisting of feelings of sympathy and pity (Goetz, Keltner, and Simon-Thomas 2010). As such terms are more concerned with one's feelings towards the other's plight, rather than the sharing of emotions, they are more closely related to sympathy than empathy (Kalawski 2010, Lishner, Batson, and Huss 2011, Nakao and Itakura 2009).

2.3.2 Cognitive or affective?

Perhaps the most discussed aspect of empathy is whether it is a cognitive or affective concept. Cognitive empathy is the ability to understand another's feelings, related closely to theory of mind (Blair 2005). Affective empathy is concerned with the experience of emotion, elicited by an emotional stimulus. Some definitions are based upon only affective[1, 6, 13, 21, 22, 23, 36, 38], or cognitive[7, 15, 24, 25, 41, 42], components. However, many definitions[2, 3, 4, 5, 8, 9, 14, 16, 17, 18, 19, 20, 28, 30, 34, 35, 37] include both.

Research on personality and developmental disorders suggests that cognitive and affective empathy reflect two different constructs. For example, those with autistic spectrum disorder often appear to have cognitive empathy deficits, but average levels of affective empathy (Baron-Cohen and Wheelwright 2004). Psychopathic individuals show the opposite

pattern (Blair 2005). Numerous neurological studies have also demonstrated distinct brain regions associated with each construct (e.g., Shamay-Tsoory, Aharon-Peretz, and Perry 2009, Zaki et al. 2009). Nevertheless, due to extensive interaction, separation of the two concepts has been rejected (Baron-Cohen and Wheelwright 2004, Duan and Hill 1996, Singer 2006). For example, Lamm, Batson, and Decety (2007) suggested that while affective empathy is automatically elicited, manipulation of cognitive elements can modulate affective elements. Given the above discussion, an appropriate viewpoint might be that of Heberlein and Saxe (2005), in that whilst the affective and cognitive components can be separated, it is important to remember the interaction between the two processes. To give another perspective, Strayer (1987) suggested that the affective component is the content of empathy, whereas the cognitive component is the process via which this content is formed.

A further point to consider is whether empathy is necessarily restricted to an emotional context, or whether cognitive empathy can be considered 'empathy' alone. For example, cognitive-only empathy could help therapists understand clients' thoughts and meanings, and teachers to recognise a lack of understanding in pupils (see Rogers 1967, 1975). However, although inferring understanding and meaning in others uses very similar processes to cognitive empathy (e.g., perspective taking), the lack of interaction with any affective processes seems inconsistent with the widely accepted view of empathy as an emotional event (explicitly stated or implied by the majority of conceptualisations identified here). To avoid confusion, we recommend a different term for such scenarios, such as *Empathic Understanding* (Rogers 1967).

Another debate relates to whether cognitive empathy and perspective taking (i.e., taking the perspective of the target, adopting their point of view) are the same construct. Several authors[9, 10, 17, 18, 27, 34, 37, 40] suggest they are. Nevertheless, there are notable counterarguments. For example, while perspective taking is important for theory of mind

processes (Gery et al. 2009), and is one method of achieving cognitive empathy, the two processes may not be one and the same. There are other ways of understanding another's feelings without taking their perspective, such as reading facial expression (Besel and Yuille 2010), accessing relevant memories of previous emotional situations (Eisenberg 1986), imagining events in another place or time (Stinson and Ickes 1992) and projection, where the observer assumes the target's emotional state to be the same as his/her own (Nickerson 1999, Nickerson, Butler, and Carlin 2011, Preston 2007).

2.3.3 Congruent or incongruent?

Some authors have explicitly argued that the empathic emotion of the observer needs to be congruent with that of the observed individual [1,6], with several implying this to be the case with a "sharing" of emotions[8, 16, 22, 27, 31, 32], or "experiencing" the other's emotions[2, 14, 20, 30] vicariously. For others, congruency may occur but is not necessary[13, 18, 32], and some authors suggest that the emotion is congruent with the observer's perception of need or entitlement in the other[3, 5, 23], thus congruent with the situation. Clearly there is a need to disambiguate this issue.

Some authors emphasise the importance of emotional congruency. For example, Rogers (1975: 4) conceptualised empathy as "entering the private perceptual world of the other and becoming thoroughly at home in it". Within a therapeutic relationship (which Rogers was primarily concerned with), one may be able to share and discuss emotions in depth. However, even the best therapist will be influenced by his/her own perspective, and the degree of congruency will depend upon this influence. Additionally, there are many examples outside of therapeutic relationships where empathy is felt without the opportunity for deep discussion of emotions (e.g., witnessing accidents), where the perspective and interpretation of the observer is the key source of information. Such perspectives and interpretations may or may not be accurate, and will be influenced by the observer's thoughts

(i.e., projection) and personality (Scheler 1954 cited in Stotland et al. 1978), and by priming effects (Hodges and Biswas-Diener 2007). Therefore, the degree of emotion matching will be dependent upon empathic accuracy: the ability to "accurately infer the specific content of another person's successive thoughts and feelings" (Ickes 2011: 57).

Also arguing for emotional congruency, Hein and Singer (2008) suggested that congruency is what separates empathy (congruent) from sympathy (incongruent). This is consistent with the idea that empathy is related to the other's feelings, while sympathy is a reflection of one's own (e.g., the feelings of concern that the observer holds for the target). However, this does not necessarily imply that the other's emotion is a perfect match to one's own. Levenson and Ruef (1992) argued that without accurate perception it will be difficult to respond compassionately. Presumably, however, an individual will respond based on his/her empathic experience, accurate or not. Naturally, cases of extreme incongruency, such as feeling anger as a result of mistaking sadness for anger in the target, will represent a failure of empathy.

According to de Vignemont and Singer (2006), neuroscientific evidence has yet to provide an answer to the debate on congruency, and testing for exact matching of emotion is nearly impossible (Preston 2007). Nevertheless, the degree of congruency is dependent upon factors such as personal experience, imagination, simulation (Coplan 2011) and the resources available for the verbal sharing of emotions. Accuracy is also dependent on how accurate the target is regarding his/her own emotions, which are often used as a measure of empathic accuracy (Batson 2011). If the target fails to accurately decipher his/her own emotional state then the task of being empathically accurate is made more difficult for the observer. Each of these factors suggests that true empathic congruency will be difficult to achieve. Whilst the empathic emotion may be similar to the target's, it is unlikely to ever be the same (Stotland et al. 1978).

2.3.4 Subject to other stimuli?

The previous discussion assumes that an emotional other is present for the observer to perceive. With a few exceptions[18, 30, 35], most authors make this assumption[2, 6, 13, 20, 22, 29, 32, 39]. However, some argue that direct perception may not be necessary. For example, Blair (2005) noted that empathy can either be in response to the emotions in another person or "other emotional stimuli" (p.699). Such stimuli may exist in three circumstances. First, it is possible to encounter another person who has just experienced an emotional event (e.g., an accident), but who is minimising emotional cues (verbal, facial, etc.). We argue that observers may infer emotionality through perspective taking, imagination, or the retrieval of relevant memories. Neuroscientific evidence supports this contention as 'intentional empathy' (asking people to empathise with others) activates empathy-associated brain areas in the absence of emotional cues (de Greck et al. 2012). Second, empathy for an absent target may be elicited by verbal statements from a third party (Blair 2005, Polaschek 2003), retrospectively (Barnett and Mann 2013a), and by inference from one's previous experience (Eisenberg et al. 1991). Third, empathy can also be evoked by stimuli about a fictional or imaginary person (Decety and Jackson 2004, Pelligra 2011, Singer and Lamm 2009). People respond emotionally to emotional scenes in books and animated films, where there are no living entities present experiencing an emotion, relying on imagination in such cases. We argue that there is little functional difference between empathy for a real, fictional, or absent person. The key element to consider in the presence of an emotionally-laden stimulus is that of perception and understanding in the observer, rather than actual emotionality in the target.

Additionally, a range of different emotions evoke empathy. 'Negative empathy' (e.g., pain / sadness) is often given prominence in the literature. For example, Batson, Fultz, and Schoenrade (1987: 20) suggested empathy is "produced by witnessing another person's suffering". However, Fan et al. (2011) identified a number emotions that can evoke empathy,

including anger, anxiety, disgust, fear, happiness, pain, and sadness. Moreover, individuals may not have the same empathic capacity for different emotions (Eisenberg 1986). For example, individuals may react strongly to 'positive empathy' (e.g., empathy for happiness), but dampen negative empathy to minimise personal distress.

2.3.5 Self-other distinction or merging?

It is also important to examine the internal self-oriented factors. Some conceptualisations[10, 14, 34, 36] maintain a clear self-other distinction: the observer is aware that his/her emotional experience comes from an external source (de Vignemont and Singer 2006). None of the conceptualisations identified here state that the observer does not have this awareness.

The main argument for a self-other distinction comes from the need to separate empathy from related concepts. In particular, this distinction is what separates empathy from emotional contagion (Decety and Lamm 2006, de Vignemont and Singer 2006, Gerdes, Segal, and Lietz 2010, Scheler cited in Ickes 2003). With empathy, the observer is aware that this feeling is a result of perceiving emotion in the other. With emotional contagion, the emotion is captured but the observer lacks this awareness and the observer believes this feeling to be his/her own

Neuroscientific evidence has demonstrated that observing another's pain activates the observer's brain areas responsible for pain (Singer and Lamm 2009), reflecting some self-other merging. Jackson et al. (2006) reported the results of an *f*MRI study that demonstrated others' experiences are processed the same as our own, but the degree of activation in relevant brain areas depends upon the degree of separation (i.e., greater activation when taking a 'self-perspective' compared to an 'other-perspective'). Therefore, due to these shared processing systems some merging is evident. This merging aids empathy by providing a bridge between the self and other (Decety and Sommerville 2003) and without some self-

other merging it would be difficult to understand the other's emotion (i.e., cognitive empathy).

2.3.6 Trait or state influences?

Over a quarter of the conceptualisations we identified[1, 4, 8, 9, 14, 15, 16, 20, 28, 31, 37] denoted empathy as an "ability" or "capacity", implying a stable trait concept. However, others suggest that empathic responses may be context specific (i.e., state influences), using words such as *situation*[1, 23], or *context*[8].The trait view implies that some individuals are more empathic than others, with this ability being stable across time. Anatomical differences (Banissy et al. 2012), as well as both genetic and developmental factors (Eisenberg and Morris 2001), account for some variability in empathic abilities. Further support emerges from studies into the deficits found in autistic and psychopathic individuals. Other effects of dispositional factors such as gender (e.g., Derntl et al. 2010) and education (Thomas, Fletcher, and Lange 1997) have been reported.

Thus, there is little doubt that empathic responding is subject to trait, individual difference factors. Nevertheless, considerable evidence supports the importance of situational, 'state' factors. For example, sex offenders do not have generalised empathy deficits, but are able to avoid empathy for certain individuals or groups of people (Fernandez et al. 1999). Similarly, violent men have decreased empathic accuracy towards their spouses, compared to female strangers (Clements et al. 2007). Moreover, a number of situational factors have been demonstrated to influence empathic responding, such as observer-target similarity (Eklund, Andersson-Stråberg, and Hansen 2009), how much the observer values the target (Batson et al. 2007), mood (Pithers 1999), blame (Rudolph et al. 2004), perceived power (Galinsky et al. 2006), perceived need (Lishner, Batson, and Huss 2011), and cognitive load (Rameson, Morelli, and Lieberman 2012). Thus, the evidence suggests that empathy is a result of the interaction between state and trait influences.

2.3.7 Has a behavioural outcome?

Another contention is whether empathy necessarily has a behavioural outcome. Although evidence suggests that empathy is often followed by a behavioural response (Eisenberg and Miller 1987), several authors have argued that empathy has no associated behavioural outcome in the immediate sense. A few definitions[2, 20, 28,] contain behavioural responses to empathy and several stage models of the empathic process contain some form of behavioural outcome (e.g., Betancourt 1990, Marshall et al. 1995). The singular concept of empathy, however, is typically located at an earlier stage, suggesting the separation of empathy from response behaviours. For example, Polaschek (2003) argued that empathy may be felt without an associated behavioural response in cases of competing interests or situational factors (e.g., when action would cause danger to the self). Others have argued that behaviour is evoked by empathy only when mediated through sympathy (e.g., de Vignemont and Singer 2006, Eisenberg et al. 1994), with the association between sympathy and helping being supported by experimental evidence (Lishner, Batson, and Huss 2011). Furthermore, helping behaviours can precede empathy, such as in cases of emergency (Pithers 1999).

The evidence therefore suggests that although empathy often leads to behavioural outcomes, this is not always the case, and such behavioural outcomes may be mediated through other factors. We suggest, therefore, that it is more appropriate to acknowledge this element as being a behavioural motivation (see Hills 2001), rather than having a direct behavioural component, due to those examples of non-action presented above.

A further point to note is that empathy is not necessarily accompanied by a prosocial or helpful behavioural response. While empathy is normally associated with prosocial behaviours (perhaps due to lay use of the term; Hodges and Biswas-Diener 2007), this is not always the case. For example, a good understanding of another's emotions can be used by

psychopaths to manipulate their victims (Hart, Cox, and Hare 1995), or used by businesspeople to undermine competitors (Hodges and Biswas-Diener 2007).

2.3.8 Automatic or controlled?

One final discussion point, although largely ignored in conceptualisations of empathy is whether empathy is automatically elicited or subject to control. Hodges and Wegner (1997: 312) argued that empathy, like other states of mind, "can be produced by variables beyond our control". Indeed, neuroscientific studies suggest that empathy is automatically activated upon perception of an emotional other (Singer et al. 2004). However, empathy is a state of mind that we can reflect upon, control, and modify (Hodges and Wegner 1997), using methods such as reframing (altering one's perspective or cognitions), suppression (not thinking about the situation), and exposure control (avoiding emotional situations); all of these require cognitive effort (Hodges and Biswas-Diener 2007). Thus, the evidence suggests the influence of both automatic and controlled processes on empathy.

2.4 Discussion

The conclusions from the above discussions can be summarised as follows: There are functional differences between empathy and related concepts; empathy includes both cognitive and affective elements; the emotions of the target and observer are similar but not identical; other stimuli, such as imagination, can evoke empathy; a self-other distinction is maintained in empathy, although a degree of merging is necessary; empathy is affected by both trait and state influences; behavioural outcomes are not part of empathy itself; and finally, empathy is automatically elicited but is also subject to top-down controlled processes. Based upon an examination of these conclusions, we define empathy as follows:

Empathy is an emotional response (affective), dependent upon the interaction between trait capacities and state influences. Empathic processes are automatically elicited but are also shaped by top-down control processes. The resulting emotion is similar to one's perception (directly experienced or imagined) and understanding (cognitive empathy) of the stimulus emotion, with recognition that the source of the emotion is not one's own.

Consistent with the arguments above, our definition acknowledges the importance of both cognitive and affective factors, whilst qualifying emotional congruency based upon the accuracy of perception and cognitive understanding. Imagined stimuli are also acknowledged, as are the influences of both state and trait factors, and both automatic and controlled processes. The self-other distinction is identified but avoidance of the word 'clear' leaves room for a degree of merging. Although it is to be noted that empathy may lead to behavioural outcomes, this definition of empathy purposefully avoids behavioural implications. Care has also been taken to avoid confusion with related concepts such as sympathy.

2.4.1 Implications

The purpose of this paper was to raise awareness of the above issues, in an effort to develop a more widely shared understanding of empathy. Variations in conceptualisations have led to several issues. For example, early measurement scales are often criticised for the use of purely affective (e.g., Mehrabian and Epstein 1972) or cognitive (e.g., Hogan 1969) conceptualisations and for measuring constructs other than empathy (Jolliffe and Farrington 2006). Using a single definition will enable researchers to develop measures that conform to a shared understanding, allowing easier comparison between scales and study outcomes (Brown et al. 2013). Similarly, a clearer (and agreed upon) conceptualisation of related terms may allow for a clear distinction between such concepts, again allowing us to more easily

interpret and compare research outcomes. Additionally, better understanding of the themes discussed here may promote research into situational factors that contribute to empathy, the range of stimuli that may elicit empathy, and the range of emotions that may elicit empathy (e.g., joy, pride).

Conceptualising empathy and related concepts with greater clarity can also benefit practitioners. For example, Mann and Barnett's (2013: 2) discussion suggests differences between practitioners' and researchers' conceptualisations of empathy, perhaps explaining the widespread implementation of empathy treatment programmes for offenders, despite a lack of research evidence for doing so. For example, it appears that intervention facilitators may perceive empathy to be an understanding of the impact of one's crimes on one's victim(s) (often specifically the ability to perspective take), rather than a sharing of emotion, as suggested by the various victim impact techniques employed within offender interventions (see Carich et al. 2003). Future research could examine the differences in how researchers and practitioners define empathy and related concepts, and examine what exactly practitioners wish to change/develop in offenders. For example, it might be that perspective taking is a greater treatment need than empathy. This would lead to greater consistency between research and practice, and therefore a greater empirical base for offender intervention.

A clear distinction between empathy and sympathy, potentially achieved by clarity in definitions, also has importance in clinical education and practice. For example, Clark (2010: 95) stated that there are "qualitative differences" between empathy and sympathy, with each of these factors having benefits under different contexts. Clark summarises his discussion by suggesting that "a counselor's awareness of the appropriate use of empathy and sympathy has potential to foster therapeutic gain" (p.100). Nightingale et al. (1991) provided medical physicians with a written vignette describing a patient who is upset, and asked them to

respond either in an empathic ("I understand how you feel") or a sympathetic ("I feel sorry for you") manner. Those taking the more sympathetic approach to practice made greater use of hospital resources than those with an empathic approach. A clear understanding of the functional differences between sympathy and empathy in medical contexts may therefore have implications in medical education, when trying to optimise physicians' approaches to practice.

2.4.2 Conclusion

A new conceptualisation of empathy has been constructed based on careful consideration of previous conceptualisations, empirical evidence, and arguments presented by various authors in the field. Few authors to date have approached this task in such a way. By constructing an understanding of empathy through more informed approaches, we can make some headway into reducing the confusion that has plagued empathy research for more than a century, and pave the way for greater consistency in clinical practice. If empathy is defined using a more consistent approach, both research and practice will be enhanced as practitioners and researchers will be working with shared understandings of these complex concepts. This will allow greater comparability between research findings, promote research in often overlooked areas, and enhance the theoretical grounding for clinical interventions and measurement.

Chapter 3: The Cognitive Antecedents of Empathy

3.1 Introduction

As well as suffering from conceptual ambiguity (discussed in the previous chapter), empathy also suffers from ambiguity at the wider empathic process level (i.e., the process from perception through to behaviour). Many different theorists have attempted to lay out this process in a range of theories and models that have a great deal of variation in focus and content. However, as in Chapter 2, it has been noted that the influence of contextual factors on empathy has lacked discussion in the literature (Brown et al. 2013, Eisenberg et al. 1991, Nezlek et al. 2001), with focus tending to be at a global, trait level (Geer, Estupinan, and Manguno-Mire 2000).

This restricted focus has limited our understanding of the state-based variations of empathy. For example, the numerous cognitive influences that underlie such variations are largely missing from conceptual understandings of empathy, and those models that do include such influences tend to limit focus to one or two factors (e.g., Betancourt 1990, Lishner, Batson, and Huss 2011; Marshall and Marshall 2011, Rudolph et al. 2004). Although numerous cognitive antecedents have been individually examined within the literature, there have been no papers that attempt to review this literature in order to draw together knowledge of these cognitive antecedents and their influences within the empathic process. It is this gap that will be addressed in the current chapter.

The importance of considering the cognitive antecedents of empathy lies in the fact that state cognitions, by definition, may be easier to change than trait capacities for empathy. Therefore, a greater examination of the changeable situation-specific cognitions, and their influences on empathy, may prove useful for those wishing to enhance empathy in a variety

of contexts. For example, treatment programmes for sex offenders commonly include an empathy component (e.g., McGrath et al. 2009). Empathy education also holds utility in improving practitioner-client therapeutic relationships (e.g., Hojat et al. 2002, Tavakol, Dennick, and Tavakol 2012). The enhancement of empathy may also be useful for those wishing to promote charitable donations (e.g., Eveland and Crutchfield 2007). The following review should therefore prove informative for relevant practitioners and researchers, as these cognitive antecedents of empathy represent some attractive targets for measurement and intervention.

Given the above discussion, the aims of this chapter are twofold: Firstly, to present the development of a new model of the entire empathic process from stimulus to behaviour, and secondly, to examine (and include in the model) the various state cognitive factors that have an impact on empathic responding. The novel value of the current chapter is that the literature regarding the influence of a variety of cognitions on empathic responding is summarised, enabling a greater understanding of how these cognitions contribute to empathy as a state variable[3]. In order to generate a more holistic understanding, including an understanding of how these cognitions contribute to behavioural motivations, the overall empathic process will be modelled and discussed. Upon consideration of existing models of empathy it seems apparent that there are four main sectors of the empathic process, consistent with that proposed by Proctor and Beail (2007). Firstly there is a perceptual component, which is followed in turn by cognitive interpretations, emotional outcomes, and behavioural motivations. This series of steps also holds parallels to Crick and Dodge's (1994) Social Information Processing Model, relating to children's aggressive behaviour. The stages of the proposed model (Figure 3.1) shall now be discussed in turn.

[3] It should be noted that although elements of this model may apply to 'positive empathy' (i.e., empathy for positive emotions such as joy), this model (and indeed the remainder of this thesis) is primarily concerned with 'negative empathy' (e.g., empathy for sadness or distress), as researchers are generally most interested in emotional responses to negative stimuli (i.e., those relating to helping responses).

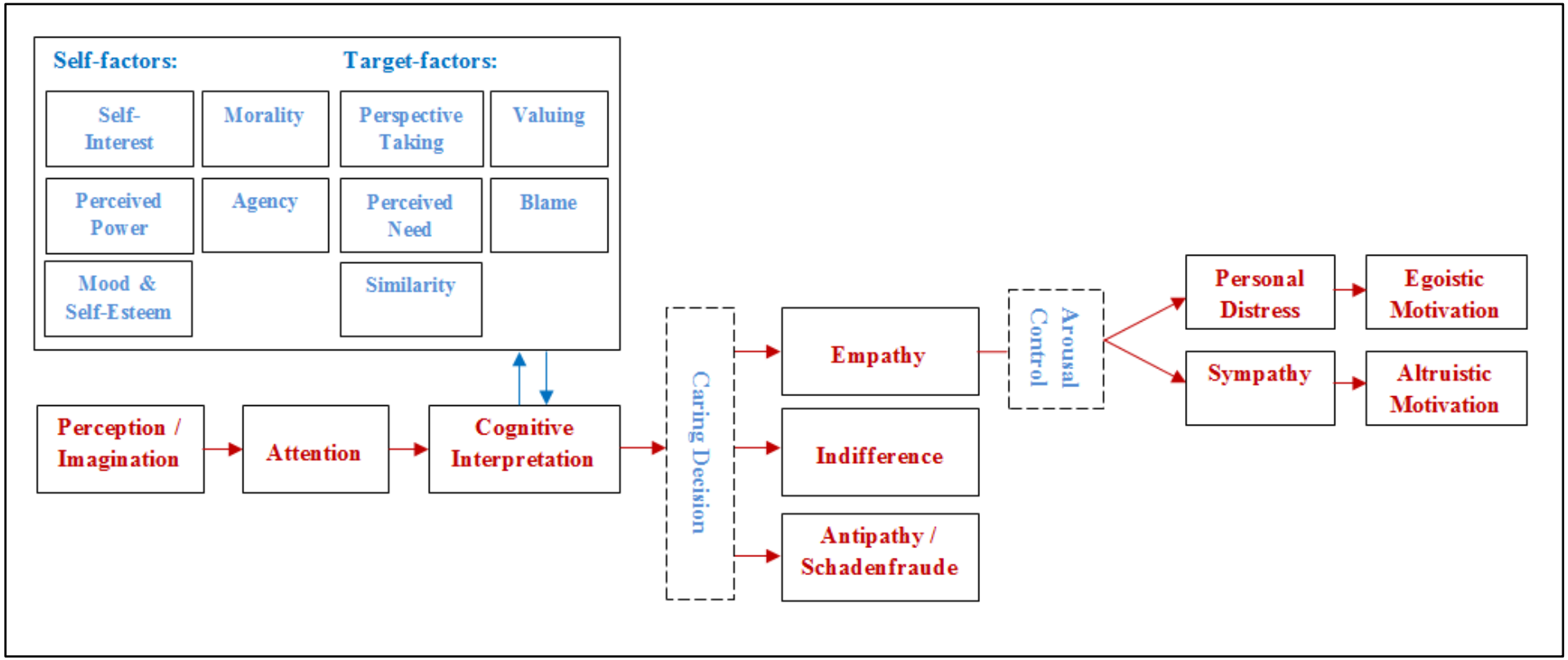

Figure 3.1. Proposed model of the empathic process (including the cognitive antecedents of empathy)

3.2 Perception, Attention, and Cognitive Interpretation

3.2.1 Perceiving, and attending to, an emotional stimulus

The unavoidable first requirement of the empathic process is the presence of an emotional stimulus to which one can attend. Many models of empathy ignore this fact, perhaps with good reason given that stimulus presence is undisputed. However, doing this sidesteps consideration of the different possible stimuli for empathic processing. Perhaps the least controversial would result from the direct perception of an emotional other. However, as discussed in Chapter 2, other possibilities have been proposed that should not be ignored (e.g., imagination, retrospective empathy, anticipatory empathy, or fictional stimuli).

Part of one's perception of events will include the recognition and understanding of emotional states in the target stimulus (including those alternative stimuli discussed above). Several authors have integrated emotion recognition into their models (e.g., Barnett and Mann 2013a, Marshall et al. 1995, Marshall and Marshall 2011) or have identified recognition as an appropriate early stage in the process (Coplan 2011, Gery et al. 2009, Ward, Polaschek and Beech 2006). The observer's empathic accuracy (the ability to "accurately infer the specific content of another person's successive thoughts and feelings"; Ickes 2011: 57) will determine the nature of perception, which will in part determine any resultant empathic emotions. For example, the results of a facial emotion recognition task conducted by Gery et al. (2009) suggested positive correlations between the accuracy of emotional recognition and levels of empathy in samples of offenders and non-offenders (although the causal direction of these results was not established). As above, this recognition process should not be limited to present stimuli. For example, it is important to recognise anticipatory empathy in perpetrators of harm because recognising distress in the target after the harm has been committed will have little impact on antisocial behaviours (Pithers 1999).

Upon perceiving an emotional stimulus one must pay attention in order to evoke any empathic response (Gu and Han 2007), thus forming the second stage of the proposed model. This remains applicable in the case of imagined stimuli as a lack of attention towards one's thoughts will mean that such stimuli will not be processed further. Reduced attention via distraction and/or increased cognitive load at this stage will likely limit any potential empathic responding (Decety and Lamm 2006). This has been demonstrated experimentally by Hein and Singer (2008) and Gu and Han (2007) who reported increased activation in the relevant brain areas of observers when they fully attended to another person in pain, compared to those carrying out a distracter task. In this sense, attention acts as a top-down moderator of the empathic process (Singer and Lamm 2009), influencing the degree of perception and processing of stimuli (Decety and Lamm 2006).

Several moderators of attention in relation to empathy have been identified. Firstly, supporters of the Perception-Action Mechanism (PAM) note the influence of stimulus salience (Hofelich and Preston 2012, Preston 2007), whereby more salient stimuli (i.e., those deemed more important to the observer) are more likely to warrant greater attention in the observer, although over-salient and over-distressing stimuli may cause decreased attention via intentional avoidance (Preston 2007). Thus, cognitive control can have an influence over the level of attention paid to a target and attention can be allocated based upon self-interest and the observer's immediate ability to help (Preston and de Waal 2002). The degree of cognitive capacity available may also have an effect. This is particularly applicable to situations where competing mental concerns, such as empathy for the target and personal safety of the observer, may be in effect. Such personal interests may be deemed more salient and so take priority in attention over empathic demands.

3.2.2 Cognitive interpretation

Once observers have perceived and attended to an emotional stimulus, they will attempt to make sense of the situation, forming the third stage of the proposed model. In addition to interpreting the target's emotional state, any thoughts and attitudes that the observer holds about the target and themselves will also shape the way they interpret the situation. Several authors have noted that empathy is largely based upon understanding (Decety and Jackson 2004, Preston and de Waal 2002, Zahavi 2008), and this is reflected in several theoretical models, to varying degrees (Betancourt 1990, Breithaupt 2012, Davis 1996, Goetz, Keltner, and Simon-Thomas 2010, Jacob 2011, Marshall & Marshall 2011, Preston 2007, Rudolph et al. 2004). The nature of this interpretation determines whether an empathic response is seen to be warranted, and if so, the level of responding. This would explain why our responses differ according to varying contexts. For example, upon hearing about the maiming of a notorious terrorist, empathy is unlikely to be the default response. Rather, factors such as low-valuing and blame take immediate precedence. On the other hand, should the same occur to a well-known celebrity, empathic responding is much more likely when that particular celebrity is highly valued by the observer.

This cognitive interpretation stage will be dependent upon information from perceptual and attentional processes. One could argue that this stage denotes the most important process as empathic responding, along with the resultant behavioural motivation, is determined by this cognitive stage (as discussed in Chapter 2; Strayer 1987) (the evidence behind this statement is discussed below). Several cognitive factors have been identified that moderate this cognitive stage, determining whether the situation is deserving of an empathic response, and to what degree. These may take the form of cognitions about the self or cognitions about the target and each shall now be discussed in turn, focussing on their associations with empathy.

3.3 Cognitive Antecedents: Target-factors

3.3.1 Perspective taking

One factor that has received the most attention in the literature is perspective taking, defined as "the tendency to spontaneously adopt the psychological point of view of others" (Davis 1983a: 113-114), and its association with empathic responding has been empirically demonstrated on multiple occasions (e.g., Batson et al. 1995; Batson et al. 2007; Danzinger, Faillenot, and Peyron 2009). Taking the perspective of the target allows the observer insight into the target's emotions, granting the observer better knowledge into the likely behavioural and emotional responses of the target (Davis 1983a). The reader is referred to Epley et al. (2004), and Gerace et al. (2013) for more in depth discussions on the process by which individuals take the perspective of another.

The ability to take another's perspective, and the resulting influence on empathy, may vary according to current situational factors, potentiating the variation of empathy. For example, it has been demonstrated that induced cognitive load (e.g., via a distracter task involving number rehearsal) inhibits perspective taking ability (Davis et al. 1996), which requires cognitive effort (van der Heiden et al. 2013). The similarity between the observer and the target can also cause variation in perspective taking, as it is easier to imagine the perspectives of more similar targets (Chambers and Davis 2012). Other factors such as stress, anger, and intoxication have also been suggested to be potential mediators of perspective taking ability (Keenan and Ward 2000). The concern is that under contexts of decreased capacity or motivation to take another's perspective, effortful processing may be inhibited, resulting in less successful perspective taking (see Epley et al. 2014), potentially reducing affective responses. It should be noted that trait measures examining one's general tendency to take another's perspective will miss each of these variations (hence the need for the current research).

3.3.2 Valuing

Several authors have highlighted the influence of how much an observer values the target on the resulting empathic response. Batson et al. (2007), for example, reported higher empathy scores in participants in a 'high-valuing' condition as opposed to those in the 'low-valuing' condition (this was manipulated by presenting the target as either a likeable or antisocial person). Valuing can also promote greater empathic responding via its association with increased perspective taking towards a highly valued target (Batson et al. 2007, Batson et al. 1995).

The degree of valuing is likely to be attributable to the relationship with the target, as individuals tend to value those with whom they have closer relationships (Hills 2001). Additionally, as the degree to which we value someone tends to be more enduring than emotional responses (Batson et al. 1995), valuing is likely to continually promote empathy towards those we like. Conversely, it is unlikely that empathy will be evoked under the context of an indifferent or adversarial relationship (Hanson 2003), where valuing will be lower. Another's distress may even result in pleasure should one strongly devalue the target (van Dijk et al. 2006). According to Hanson (2003), this pleasure at another's suffering is not limited to deviant individuals as one might expect. For example, many feel glad when a 'bad guy' (someone is not valued highly) is killed in a film. All of these variations will likely be missed by current measures relying on a trait conceptualisation of empathy.

Encouragingly, individuals tend to value others highly by default, unless there is cause for devaluation (Batson et al. 2007). Such a cause may present itself during an offence situation, and may provide some explanation for victim-specific empathy deficits in offenders (see Marshall et al. 1995). Individuals may devalue others prior to causing harm, inhibiting empathy towards that other individual, and making the harmful act easier to commit. Dehumanised (equating to devalued) individuals are treated more harshly and with less

empathy (Bandura et al. 1996). This is attributed to the fact that devalued individuals are seen as "subhuman objects" (Bandura et al. 1996: 366), which is apparent in the dehumanisation of the enemy during wartime, where empathic behaviour is often necessarily dampened (Bandura 1999).

3.3.3 Similarity

Whilst researchers have reported positive correlations between the degree of perceived similarity and empathy (Eklund, Andersson-Stråberg, and Hansen 2009; Feshbach 1978; Stotland and Dunn 1963), other evidence suggests that this effect is mediated through factors such as perspective taking (Webster-Nelson and Baumgarte 2004), or valuing (Batson et al. 1995). Although more research is required to test the effects of similarity on empathy, any relationship may be explained by the greater presence of 'knowledge structures' relating to the target when the target is similar to oneself (Stinson and Ickes 1992). This allows one to infer the target's feelings with greater accuracy, which in turn may lead to the greater elicitation of empathy. This is consistent with the discussion presented by Cikara, Bruneau, and Saxe (2011), who reviewed the literature demonstrating greater elicitation of empathy when the target is part of one's social group, as compared to a member of an outgroup.

Several authors have noted that perspective taking ability is partly dependent upon the similarity between the observer and the target (e.g. Gerace et al. 2013, Komeda et al. 2009; Marshall et al. 1995, Rasoal, Eklund, and Hansen 2011), as greater knowledge of the target will make perspective taking easier, because the observer will have better knowledge of how the other is likely to react. For example, van Boven et al. (2004) reported that males were more likely to take the perspective of a man with testicular cancer than a woman experiencing a difficult childbirth, and vice-versa for female participants. This is a reciprocal effect, whereby perspective taking serves to increase the perceived self-other overlap of attributes (Davis et al. 1996), thus influencing the degree of perceived similarity. All of the

above suggests that empathy may be enhanced in situations where the observer perceives similarity with the target, and this similarity can be inferred on any number of factors (e.g., personality, appearance, cultural likeness, or social circumstances; Westbury and Neumann 2008). Interestingly, this effect occurs cross-species, with people feeling greater empathy for animals more similar to themselves, such as chimpanzees (Westbury and Neumann 2008).

3.3.4 Perceived need

It is widely accepted, when not discussing positive empathy (i.e., empathy for positive emotions such as joy), that the target must be in need, either mentally or physically, in order to evoke empathy in an observer (Batson et al. 2007). Indeed, in a study by Lishner, Batson, and Huss (2011), participants self-reported greater empathy for an adult in need compared to an adult with no current need. However, it is the *perception* of need that is important. The target may well, in fact, be in great need but if this is not perceived by the observer, or is ignored (via reduced attention), then an empathic response is unlikely to follow. The accuracy of this perception may in part be due to the level of attention paid to the target but also appears partly dependent upon the degree of valuing. For example, Batson et al. (2007) observed that by manipulating valuing to be greater, perceived need also increased, suggesting a causal positive relationship. This is consistent with an earlier proposal that perception of need involves consideration of the difference between the target's current state and the state that the observer desires for the target (Batson 1987). If one highly values another then this desire will be greater.

Target feedback is also an important consideration, but is often ignored in the literature. As highlighted by Vreeke and van der Mark (2003), empathy does not occur in isolation within the observer but is shaped via communication and the relationship with the target. The authors provide an example of a friend failing an exam. One's default response might be to express concern. However, should that friend express a lack of concern about the

result, the observer's perception of need will decrease. Thus the level of perceived need (and in turn, empathic responding) will be partly determined by this target feedback loop. Gerace et al. (2013) also noted that observers will discern the accuracy of their perspective taking via target feedback. Of course, this target feedback may not always be present, such as cases of imagination or anticipatory empathy, but may influence empathic responding where available.

3.3.5 Blame

In some situations, the target may be blamed for his/her own distress. In cases where the observer is responsible for causing distress, the target may be blamed for their circumstances in order for self-exoneration in the observer (Bandura et al. 1996). A third-party observer may even blame a distressed other to preserve the sense of a 'just world' (Lazarus 1994, Lerner 1980). These attributions of blame have a negative impact on empathic outcomes, as demonstrated in a meta-analysis by Rudolph et al. (2004), where it was found that the targets whom were attributed with greater controllability (and thus more blame) over their situations received less sympathy and more anger from observers. Targets seen as being less in control (and so less deserving of blame) were associated with greater sympathy and helping behaviours in the observer. As noted by Rudolph et al., such effects have been explained by appraisal theorists, denoting that attributions of blame can elicit anger in the observer, resulting in a lack of empathic responding (see Weiner 1995).

An interesting effect was reported by Batson et al. (1997) that serves as a moderator to the above relationship. They found that learning that the target was responsible for his/her plight inhibited empathy in the observer. However, if empathy was evoked before learning about responsibility, these empathic feelings were maintained in the observer. As Batson et al. (1997: 117) suggested, "once aroused, empathic feelings appear to have some inertia".

3.4 Cognitive Antecedents: Self-factors

Certain perceptions relating to the self may also cause a variation of empathy within individuals, although these factors have been given far less attention in the literature than those perceptions relating to the target.

3.4.1 Self-interest

According to Hills (2001: 55), self-interest is "a fundamental consideration that cannot be overlooked where empathy is concerned", yet this is very often the case, and is rarely included in models of empathy. Self-interest may preclude normal empathic responding that is in discord with current goals (Walker and Brown 2013), and this inhibition of empathy is perhaps achieved through limiting attention towards emotional cues (Hills 2001). This may be particularly relevant to empathy deficits in those who harm others. For example, Farrington (1986) placed a desire to fulfil self-interest as the first stage of the offending process. Where this self-interest promotes causing harm to another, then empathy may be inhibited.

Research into the relationship between self-interest and empathy is somewhat limited. Nevertheless, the available evidence would suggest an association. In a regression predicting a willingness to donate organs, Cohen and Hoffner (2013) reported that self-interested factors (self-benefit and self-risk) were significant predictors of donation intent but perceptions of benefits to the recipient were not. Specifically, perceptions of risk to oneself reduced the likelihood of donating, whilst perceptions of self-benefit (e.g., pride) increased this likelihood. Empathy was also a significant positive predictor of willingness to donate. Interestingly, these authors reported a positive correlation between perceptions of self-benefit and empathic concern. This means that when empathic responding is in line with self-interest, then empathy is elicited to a greater degree.

Van Ornum et al. (1981) compared students demonstrating a history of helping behaviours (volunteers) with those demonstrating a history of self-interest (members of a biology honour fraternity). The authors reported greater trait empathy in the former compared to the latter. Although it may be debatable whether a group of biologists is really representative of people with self-interested tendencies, the more altruistic group nevertheless displayed greater levels of empathy. However, the causal direction of this effect is unclear in these results.

Despite the potential inhibition of empathy by self-interest, it seems that in some instances where there are potential negative consequences to the observer, high empathy can override self-interested motivations. For example, Batson and Ahmad (2001) used instructions to manipulate empathy in their participants. They reported that high-empathy participants sacrificed their tokens to the other participants (as predicted by the association between empathy and helping behaviours) in a one-trial prisoners' dilemma (c.f. Batson and Moran 1999), whilst the majority of low-empathy participants held on to their tokens (as predicted by the discussion on self-interest above).

Given the above discussion, although it would appear that self-interest may cause some variation in empathic responding, more research is required to fully determine the relationship between self-interest and empathy, and at what threshold empathy is able to override these inhibitory effects.

3.4.2 Perceived power

Perceived power is important to acknowledge as feelings of power are associated with increased pursuance of self-interest (Keltner, Gruenfield, and Anderson 2003), whether this interest is prosocially or egocentrically oriented. Côté et al.'s (2011) discussion on this topic suggested that feelings of power inhibit empathy, creating an "emotional independence" (p.218) from the target, and amplifying individual tendencies. This is consistent with

Galinsky et al. (2006), who reported a negative correlation between power and both perspective taking and emotion recognition, both of which are important for empathy as discussed above. These findings suggest that behavioural responses in cases of high power will be guided by personal tendencies and motivations, rather than empathic emotions. In cases of low power, observers will be guided more by the emotion in the target (presumably in an empathic manner) and less by self-interest. Given that an observer's feelings of power will not remain stable across all targets and situations, empathy will vary according to context.

Power may also influence some of the other factors discussed here. For example, power can create a "psychological distance" (Galinsky et al. 2006: 1069) between the observer and the target, serving to reduce perceived similarity. High levels of narcissism (high perceived power) have also been associated with low levels of empathy (Delič et al. 2011, Jonason et al. 2013). This association may be due to the negative correlation between narcissism and perspective taking, attributed to a lack of motivation to perspective take rather than a deficit per se (Delič et al. 2011). For example, Scully (1988) reported that feelings of power in their sample of rapists resulted in a lack of attention towards their victims' emotions, therefore affecting empathy via both attention and emotion recognition processes.

Although the empirical evidence largely supports a negative relationship between power and empathy, perceived power may enhance empathic responding in certain situations. For example, Mast, Jonas, and Hall (2009: Study 4) reported that when leaders adopted an empathic leadership style, they were more sensitive to another's emotions than those who adopted an egoistic leadership style. As suggested by Mast and colleagues, more research is needed into the factors that moderate the relationship between power and empathic responding.

3.4.3 Agency

In a similar vein to victim blaming, the degree to which an individual feels responsible for his/her own actions may also account for some of the variance in empathic responding. The apparent lack of empathy in Milgram's (1963) classic study was attributed to obedience: The experimenter was in control and thus the participants lacked agency. Despite the effects of perceived *target* agency (i.e., blame) discussed above, little interest in self-perceived agency (i.e., the perceived degree of control) has been applied to empathy, and so such effects are currently unclear. However, there is evidence to suggest that individuals behave with greater cruelty when perceived agency is low (see Bandura et al. 1996), suggesting lower levels of empathy.

Tentative conclusions as to the relationship between empathy and agency may be also drawn from discussions of guilt and shame, which have received greater attention in the literature. Feelings of guilt are attributed with the recognition that one can change (i.e., high agency) (Hanson 2003), whereas shame is characterised by the individual perceiving themselves as "inherently bad" (Marshall and Marshall 2011) and unamenable to change (i.e., low agency). These feelings of shame (low agency) are often associated with lower levels of empathy via feelings of personal distress ("a self-focused, aversive emotional response to the vicarious experiencing of another's emotion"; Eisenberg, Fabes, and Spinrad 2006: 647) or by blocking recognition of harm (Marshall and Marshall 2011).

3.4.4 Morality

The notion of personal values or morals should also be considered as a potential influence. For example, a person who is strongly morally opposed to theft is highly unlikely to commit such an act, and such acts committed by others will be likely to evoke a greater emotional response in such an individual compared to those who do not have such strong

views. In support of the influence of morals on empathic responding, Schulz et al. (2013) reported that children's empathy was higher when the target had a morally good goal, compared to when the goal was morally bad. Eisenberg (2006) discussed several studies demonstrating an association between empathy/sympathy and moral reasoning, including the finding that morality also mediates the relationship between sympathy and prosocial behaviour.

Morality will be especially important when considering those who cause harm to others. Theories of moral standards denote that our morals guide, and deter, behaviour (Bandura et al. 1996). Under ideal circumstances an individual will recognise that his/her behaviour is in discord with societal and personal morals, evoking empathy, and leading to cessation of harm. However, cognitive reconstruction of morality can serve to disrupt this process. There are at least seven ways in which moral codes may be bypassed: euphemistic language, advantageous comparison, displacement of responsibility, diffusion of responsibility, disregarding consequences, dehumanisation, and attribution of blame (Bandura et al. 1996). Moral disengagement allows one to minimise the effects of anticipated guilt for their actions (Bandura et al. 2001). Several of these methods are likely to interact with the other factors discussed above (e.g., by minimising perceived need or agency) but those individuals with a greater tendency to utilise such reconstructive methods are the most able to overcome the behavioural restrictions imposed by empathy. Indeed, Lardén et al. (2006) reported a relationship between morality and empathy, mediated largely by distorted thinking styles.

3.4.5 Mood and self-esteem

Finally, the elicitation of empathy may also be dependent upon the current emotional stance of the observer, with mood being an important moderator of the first stage of Gallop, Lancee, and Garfinkel's (1990) empathic process model. Such effects have been

demonstrated empirically by Pithers (1999), who found greater levels of self-reported empathy in his sample of sex offenders when participants were experiencing a 'typical mood' (i.e., "the emotional outlook that was most common in his day-to-day life"; Pithers 1999: 273) compared to when experiencing a mood denoted as a precursor to their prior offences (i.e., "the predominant emotion that he had experienced prior to his past sexually abusive acts"; Pithers 1999: 273). As this demonstrates, mood also appears to cause some variation of empathy according to context.

Whilst anger has received a fair amount of attention as an outcome of empathy (e.g. Davis 1996), its effects as an antecedent have largely been ignored. However, one should not ignore the potential barriers to empathy that anger imposes. Anecdotal evidence would certainly suggest that individuals are able to suspend empathy during angry encounters, behaving in ways that they would not normally behave. It may well be that anger serves to inhibit empathy in as much as empathy inhibits anger, as it seems sensible to assume that an angry observer will interpret emotional cues in a different manner than one whom is not. However, this again requires further investigation.

Anxiety is another emotion that may serve to inhibit empathy. Similar to that of personal distress, anxiety may inhibit empathy by encouraging a greater focus on one's own emotions, rather than that of the target (Deardoff et al. 1977). Several authors have reported a negative correlation between anxiety and empathy (see Negd, Mallan, and Lipp 2011). Interestingly, however, this effect appears to be mitigated somewhat by perspective taking instructions (Negd, Mallan, and Lipp 2011), perhaps because these instructions refocus attention back to the target, rather than oneself.

Positive correlations have also been demonstrated between self-esteem and empathic responding (e.g., Davis 1983a, Marshall et al. 1997, Miller, Hedrick, and Orflosky 2006). In cases of low self-esteem, distorted thinking may occur to prevent further damage to self-

esteem (Marshall, Anderson, and Fernandez 1999) and these distortions promote the inhibition of empathy. Threats to one's self-evaluation can also promote pleasure derived from another's suffering (van Dijk et al. 2011), which promotes further causing of harm to the other; an opposite response to empathy. Those with low self-esteem are more sensitive to such threats (Marshall, Anderson, and Fernandez 1999), making antisocial responses more likely.

3.5 Empathic Outcomes and Behavioural Motivations

The discussion thus far has proposed that the empathic process begins with a stimulus, which is perceived and attended to. This information is then used to form an understanding of the emotional state of the target, as well as an interpretation of the situation in the observer (shaped by the various cognitive factors discussed above). Such processes allow an observer to grasp whether the current situation warrants empathy, and to what degree the observer is willing to help. The next stages of the proposed model concern the emotional and behavioural outcomes of these cognitive processes[4]. Similar to Hanson's (2003) model (who described sympathetic, unhelpful, and antisocial responses), the outcome of the antecedent stage can result in one of three emotional outcomes, largely dependent upon the nature of the cognitive interpretation.

Firstly, the observer may feel either that the situation does not require empathic responding (i.e., no perceived need) or that they simply do not care (e.g., low similarity; low valuing; uncaring emotional stance). Cases of indifference are commonplace. For example, many charities rely on peoples' empathy for donations but are often met with indifference.

[4] Whilst the importance of state factors in the current model is emphasised, the influence of trait capacities should not be ignored during this stage, such as trait emotional responsiveness (Eisenberg and Fabes 1992). Certain populations have of course been shown to have trait deficits in various aspects of the empathic process that limit emotional responding, such as psychopathic (Blair 2005) or autistic (Baron-Cohen and Wheelwright 2004) individuals.

Behavioural outcomes of indifference are largely characterised by a neutral, non-responsiveness, suggested by the positive correlation between empathy and helping behaviours, wherein a lack of empathy is associated with a lack of motivation towards a helping response (see Eisenberg and Miller 1987, for a review).

Secondly, one's interpretation of events may lead to a negative response to the distressed target. Batson et al. (2007) argued that empathy will only occur in the absence of antipathy, and this certainly seems to be the case in many instances. As noted previously, people often feel glad when a movie villain is killed (Hanson 2003), a clear example of cognitively induced antipathy. Antipathy is a likely outcome if a strong negative interpretation is applied to the current context (e.g., blame; strong devaluing; discord with self-interest). Angered individuals (i.e., negative mood) may also feel little empathy towards their targets as a result of temporary antipathy, with caring and regret returning once this temporary block has been removed (Polaschek 2003).

Another possible negative outcome, with subtle differences to antipathy, is that of *schadenfreude*; "pleasure derived from another's misfortune" (van Dijk, Goslinga, and Ouwerkerk 2008: 632). Schadenfreude differs from antipathy by eliciting malicious pleasure from another's suffering rather than mere gladness. Consistent with the above discussion, Schulz et al. (2013) suggested five potential elicitors of schadenfraude that include: blame, low valuing, low self-esteem, a breach of moral codes, and envy, which may link in with self-interest or create a power imbalance between target and observer. The behavioural outcomes of these negative states will be unlikely to motivate any form of helping behaviour and may even promote causing continued suffering to target. For example, Schulz et al. (2013) reported an inhibitory effect of schadenfreude on helping behaviour. This is likely to occur despite emotional pleas for empathy. For example, the perception of distress would not inhibit an attacker's behaviour who wants his victim to suffer (Hanson 2003).

The third potential response is a positive one, whereby the observer perceives a need, and cares about the plight of the target (e.g., high valuing), with empathy as the result. In Chapter 2, empathy was defined as "an emotional response … similar to one's perception (directly experienced or imagined) and understanding (cognitive empathy) of the stimulus emotion". This definition distinguishes empathy from indifference or antipathy / schadenfraude as in those cases the emotion experienced is not similar to the perceived emotion in the other (e.g., sadness/distress).

Assuming then from the previous stage that empathy is the result, there are two possible secondary emotions, denoted by several models (e.g., Batson, Fultz, and Schoenrade 1987, Eisenberg, Fabes, and Spinrad 2006, Goetz, Keltner, and Simon-Thomas 2010) containing elements of personal distress ("a self-focused, aversive emotional response to the vicarious experiencing of another's emotion"; Eisenberg, Fabes, and Spinrad 2006: 647) and sympathy ("an emotional response stemming from another's emotional state or condition that is not identical to the other's emotion, but consists of feelings of sorrow or concern for another's welfare"; Eisenberg and Miller 1987: 91-92). These outcomes are also acknowledged in the current model, to highlight the fact that empathy (and therefore empathy consistent cognition) does not necessarily lead to altruistic behaviours (as noted in Chapter 2). Such behaviours are based upon these secondary emotions, which are themselves determined by the level of arousal and degree of control (as suggested by Barnett and Mann 2013a, Decety and Jackson 2004, Goetz, Keltner, and Simon-Thomas 2010).

The findings of Eisenberg et al.'s (1994) questionnaire study suggest that less emotional, better emotionally regulated individuals are more prone towards sympathy than personal distress. Therefore, under times of low or high-but-managed arousal the most likely result (in the absence of indifference or antipathy) is the experience of sympathy. However, under "empathic overarousal" (Eisenberg and Morris 2001: 97), an individual can become

focussed on his/her own emotion and experience personal distress. These two experiences can have very different behavioural implications. Sympathy is said to have an altruistic motivation, encouraging prosocial behaviours (i.e., "actions intended to benefit one or more people other than oneself"; Batson and Powell 2003: 463), whilst personal distress has an egoistic motivation, encouraging the amelioration of one's own distress (Batson, Fultz, and Schoenrade 1987). The latter, personally distressed, individual will take the easiest route to remove this distress, whether this be through helping or avoidance (Batson 1991).

Several implications may come about as a result of experiencing personal distress instead of sympathy. Cognitive deconstruction, along with the concomitant self-focus, is more likely in those prone to personal distress (Barnett and Mann 2013b). In addition, personal distress may cause an individual to blame the target for this distress (Covell and Scalora 2002). The results of Curwen's (2003) study suggested an association between feelings of personal distress and the presence of distorted thinking styles, with the latter being used to ameliorate the effects of the former. Such proposals would suggest an interaction with cognitive processes. Although presently untested, this suggests a constant updating of the empathic process, with emotional outcomes feeding back to earlier cognitive processes.

Consideration of this stage holds additional implications for offenders, which are often discussed in relation to empathy deficits. For example, Gery et al. (2009) reported that their sample of sex offenders had a greater tendency towards personal distress than non-offender controls (although the authors did call into question the measure used in this case). This may in part be due to the experience of shame in the offenders as shame can lead to over-arousal and personal distress (Marshall and Marshall 2011), as well as affecting emotion recognition and victim blaming as discussed above. According to the Pathways Model (Ward 2003), distressed offenders may use sex as a soothing device to ameliorate their distress, thus promoting further offending (and adding an element of self-interest). Carlo et al. (2012) also

suggested that problem-focussed coping is more likely to lead to sympathetic behaviour, whereas emotion-focused coping will not. Sex offenders appear to be more prone to the latter (Serran et al. 2007), and are therefore more likely to experience personal distress in the face of a distressed victim. All of these findings suggest the importance of improving emotional regulation and encouraging sympathy in order to promote altruistic motivations.

It should be noted at this stage that actual behavioural responses are impossible to predict, but should at least be guided by such motivating factors. These behavioural motivations mark the final stage of the empathic process, and thus the model is complete.

3.6 Implications

This new model of empathy has been based upon careful consideration of existing knowledge concerning the various cognitive factors that influence empathic responding, as well as that concerning the main process chain. One of the benefits of pooling such information together is that new targets for measurement and enhancement can be identified; many of which have received scant interest to date. In particular, one can conclude from the above discussions that there are numerous cognitive antecedents of empathy that may underlie the variation of empathy according to context. Specifically, empathy is likely to be evoked to a greater degree when the observer takes the perspective of the target, values the target, perceives the target to be in need, perceives the target to be similar to themselves, perceives greater self-agency, and perceives a greater breach of moral codes. Empathy is likely to be evoked to a lesser degree when the observer blames the target, attributes greater priority to self-interest, and perceives power over the target (depending on the nature of self-interest and power). Mood may either enhance or inhibit empathy, depending upon the exact nature of one's mood.

Given that there are many factors in the empathic process, other than empathy itself, it is concerning that the majority of current measures largely focus upon 'end product' emotions such as empathy or sympathy. Before these affective components are ever evoked, an observer may fail to attend to the stimulus; fail to recognise emotionality accurately; or simply fail to care. Given that these factors likely precede empathic emotions, measuring empathy or sympathy will offer little explanation for these events. However, cognitive factors such as those discussed above are all likely to be implicative, with extensive interaction between such factors also likely. Whilst more modern scales do contain a cognitive element, such as the Basic Empathy Scale (Jolliffe and Farrington 2006) and The Empathy Quotient (Baron-Cohen and Wheelwright 2004), these tend to examine the broad ability of individuals to understand emotions in others, rather than any of the specific potential deficits identified here. More specific measurement of these earlier processes may allow us to identify failings of empathy at an earlier stage, and allow us a greater understanding into the specific processes through which empathy is evoked.

As discussed previously, state factors have often been ignored in the measurement of empathy and the common focus upon trait levels of empathic responding has restricted our understanding of empathy deficits in individuals. In particular, although each of these cognitions has been associated with empathy in the past, they are typically dealt with in an isolated manner, and so we are not aware of which cognitions are the most important for empathic responding (and therefore empathy-related helping behaviours), neither are we aware of whether any mediation effects exist between them. A measure that examines the combined influence of these cognitions will allow for greater depth in our understanding of the concept, providing greater insight into processes influencing empathy as a state-variable.

A consideration of the cognitions discussed here might also be used to further our understanding of the behavioural outcomes of the empathic process, and can be used to

complement existing theory in behavioural motivation. For example, these cognitions can be used to complement Kitcher's (2010) five dimensions of altruistic responding. According to the above discussions, the *intensity* of altruistic responses may be determined by perceived need and agency. The *range* of people treated altruistically may be determined by the degree of valuing, and the degree of similarity. The *scope* of contexts in which altruistic responses occur may be determined by mood, and whether the target is blamed for their own misfortune. The *discernment* of the consequences of one's behaviour for the target may be impaired should one focus upon self-interest. Finally, *empathic ability* may be determined by perceived need and cognitive empathy. As these examples demonstrate, a greater consideration of situation-specific cognitive antecedents can be used to gain a more detailed understanding of behavioural motivations resulting from the empathic process, providing a more in depth understanding of the cognitive processes underlying behavioural responses.

More effective measurement of these cognitions (resulting from a more detailed understanding of their relationships with empathy and prosocial behaviours) will prove useful for those wishing to enhance empathy in others, and will allow treatment or education programmes to individually tailor their approaches towards specific deficits in the individual. This might apply in particular to those working in forensic, healthcare, and charity contexts. These areas are more fully discussed in Chapter 9, but are discussed in brief below.

A consideration of the above cognitions can be used in the development of more effective promotional strategies for charitable organisations. For example, notions of blame should be avoided as Eveland and Crutchfield (2007) reported lower empathy (lessening the likelihood to donate) when sufferers of AIDS had contracted the disease through intravenous drug use. Conversely, higher agency and greater perceptions of need appear to encourage donation behaviours (Bekkers & Wiepking, 2011a Basil et al., 2008; Cheung & Chan, 2000). However, although these cognitions have been dealt with in isolation, a combined

examination of the full range of cognitive antecedents would allow for the identification of those aspects of cognition that represent the most efficacious targets for income generation, and would allow researchers to provide more specific guidance for charity advertisers wishing to evoke empathy in their audience, ultimately increasing income generation for those who need it most.

Tailoring interventions to individual criminogenic needs is important when treating offenders according to the Risk-Needs-Responsivity approach to intervention (Andrews, Bonta, and Hoge 1990); an effective approach in lessening recidivism (see Andrews and Bonta 2010). In addition, many offenders do not display generalised deficits according to trait measures of empathy, but rather show victim-specific state deficits (Marshall et al. 1995). A fuller examination of how an offender perceives their victims may allow us to more fully understand any cognitive processes that underlie these specific characteristics. A combined approach is essential to determine which variables influence empathic responding and offending behaviour to the greatest degree, and which changes in cognition are able to bring about the greatest treatment change. Although measures of victim-specific deficits currently exist within the literature (e.g., see Polaschek 2003: 176), these tend not to tease apart the different components of empathy but rather provide a general score in the context of specific situations.

Hojat et al. (2002: 1567) also noted that "it is important to investigate the underlying reasons for variations in empathy among health care professionals". They stated that such knowledge will aid in the education of healthcare professionals, with the aim of promoting and maintaining an empathic approach to patient care. Current trait measures offer little explanation for the specific reasons behind empathic variation beyond simple individual differences. An examination of the various factors listed here may indicate which of the cognitions that influence empathy may be most prone to change, leading to empathic decline;

in turn providing specific targets for education and training. According to appraisal theorists, changing cognitive interpretations through intervention will ultimately change emotional responses (Scherer, Schorr, and Johnstone 2001), leading to a greater likelihood of the elicitation of empathy. One could argue that this may be achieved via the consideration of those cognitive antecedents discussed here.

3.5 Conclusion

A new model of empathic responding has been developed, which addresses those concerns highlighted at the beginning of this chapter by examining the entire empathic process as well as paying close attention to influential contextual factors; elements so often missed in models of empathy. By examining the passage of information from perception to behaviour, this model allows for a more holistic understanding of the empathic process, allowing for the identification of potential failings in individuals where such failings are commonplace. The various cognitive aspects presented here offer some attractive targets for future measurement scales, which may allow us to gain a deeper understanding of how empathy varies according to the target and situation. This knowledge may in turn aid settings where the aim is to enhance empathy, such as the promotion of charitable giving, the treatment of offenders, and the education of healthcare professionals. By drawing knowledge together in this way, a clear need to further examine the cognitive antecedents of empathy has arisen. This review forms the basis for the following research into empathy as a state variable, allowing for the development of a measurement scale, and allowing us to gain a deeper understanding of the way empathy varies according to the target and situation.

Chapter 4: Methodology

4.1 The Need for a Measure of The Cognitive Antecedents of Empathic Responding

Several conclusions can be drawn from the previous two chapters that highlight the need for further investigation into the cognitive antecedents of empathy. It was argued in Chapter 2 that more research was needed into the situational variation of empathy, due to the overall focus on trait capacities. This idea was furthered in Chapter 3, where a number of context-dependent cognitive antecedents of empathy were identified, and it was argued that a measure allowing for the combined examination of these antecedents would allow one to determine which antecedents have the greatest influence on the elicitation of state empathy (thus being the most important targets for intervention). This would be of benefit for researchers working in a number of different psychological disciplines (in particular those working in charity, forensic, and healthcare contexts). Such a measure therefore needs to be identified or, if one cannot be found, developed so that research can be continued in this area.

A psychometric scale would be the most appropriate way to measure these cognitions. As discussed by DeVellis (2012), variables can often be measured more directly by observing behavioural reactions to external stimuli, and such methods can indeed produce more reliable and valid results as they are less susceptible to biases such as social desirability. However, whilst this may have been possible for measuring empathy (e.g., via helping responses), determining participants' cognitions via behavioural observations would be very difficult to do in any reliable and valid way. For example, there is no direct behavioural expression of perceived agency. One can only measure the behavioural outcomes that are motivated by such cognitions. DeVellis noted the following: "in instances when we cannot rely on behaviour as an indication of a phenomenon, it may be more useful to assess the construct by

means of a carefully constructed and validated scale" (DeVellis 2012: 11). Psychometric methods are therefore more suitable than behavioural methods for use in the studies reported here. Similarly, although other methods such as the Implicit Association Task (Greenwald, McGhee, and Schwartz 1998) could have been used to measure some of the cognitions identified in Chapter 3, such methods would typically only allow for the examination of one or two cognitions at a time. Psychometric methods were again preferable as they allow for an easier examination of multiple variables in combination, allowing for multiple comparisons to be made. Although psychometric measures are associated with their own limitations (e.g., social desirability), statistical controls can be used to mitigate such effects (discussed in Section 4.3).

Another conclusion drawn in Chapter 2 was that the research literature relating to empathy often lacks distinction with sympathy: a related but nevertheless distinct concept. It is important that researchers aim to develop a clearer understanding of the functional differences between empathy and sympathy. Measures and methodologies should therefore make this distinction where possible. This would allow us to both identify any differences in the antecedents of empathy and sympathy and to identify any differences in the behavioural outcomes of these important social emotions. For consistency, the terms 'empathy' and 'sympathy' will henceforth be used to refer to these specific emotional responses. In instances where it is more appropriate to be non-specific (i.e., when referring to both, or referring to positive emotional responding more generally), or when specific statements cannot be made (i.e., when unsure where differences between empathy and sympathy lie), the term 'empathic responding' shall henceforth be used.

The aim of the current chapter is to address the above needs. A review of existing measures shall be presented in Section 4.2, with the aim of identifying any measures that both target the range of cognitive antecedents identified in Chapter 3 and make a clear distinction

between empathy and sympathy. The outcome of this review was that no such measures existed at the time this search was conducted. As such, a framework for the development of a new measure that meets these aims is presented in Section 4.3. This framework was followed during the development of the Cognitive Antecedents of Empathic Responding Scale (CAERS), named to reflect its focus on the range of cognitions discussed in Chapter 3, and its measurement of both empathy and sympathy.

4.2 A Review of Existing Measures

A measure is needed to further investigate the cognitive antecedents of empathic responding. As previously discussed, questionnaire based psychometric methods are most appropriate for this task. However, this does not mean that one should saturate the literature with redundant measures when existing measures may be employed to serve the intended task. As noted by Clark and Watson (1995: 311 cited in Barry et al. 2011), "If reasonably good measures of the target construct already exist, why create another?" Before developing any new scale, it is therefore important to review the literature in order to identify existing measures that may be fit for purpose (Barry et al. 2011, DeVellis 2012).

In order to determine whether any scales examining the cognitive antecedents of empathy already existed, a number of online databases were searched (*Academic Search Complete, AMED, MEDLINE, and PsycINFO*). Articles were included if they described a measure of empathy including either the antecedents of empathy, or cognitions or cognitive abilities that influence empathic responding. Scales that are used to examine the broad ability of individuals to understand another's emotions (i.e., trait cognitive empathy) in others were excluded to restrict the findings to those measures that are used to examine cognitions specific to a given target or situation. Only articles appearing in academic (peer review) journals or books were included. Only English language papers were examined, as there was

no provision for the translation of non-English language sources. The results of the searches described below can be found in Table 4.1.

The search terms *empath* AND cogniti* AND antecedent* yielded 44 results, within which only one relevant measure (i.e., matching the above inclusion/exclusion criteria) was identified. It was then decided to search for measures that either examined the antecedents of empathy or the influence of cognitions (which might not necessarily be labelled as 'antecedents'). Starting with antecedents, the search terms *empath* AND antecedent AND scale* yielded 19 results, within which 3 relevant measures were identified. The terms *empath* AND antecedent AND measur** yielded 35 results, within which 2 relevant measures were identified. The search was then expanded to include scales that are used to examine the relationship between cognitions and empathy. The search terms *empath* AND cogniti* AND scale* yielded 586 results, within which 6 relevant measures were identified. The search terms *empath* AND cogniti* AND measur** yielded 1,162 results, within which 9 relevant measures were identified (not already identified by the above terms).

Due to the common merging of empathy and sympathy in the literature (discussed in Chapter 2), a search was also carried out to identify any scales examining the cognitive antecedents of sympathy. The same search terms (substituting *empath** for *sympath*)* and exclusion and inclusion criteria were used as above. This search yielded 794 results, of which most were concerned with the sympathetic nervous system, rather than emotional sympathy. Only 5 relevant scales were identified (when using the terms *sympath* AND cogniti* AND measur**).

Table 4.1
List of identified measures targeting the antecedents of empathic responding

Search Terms	Citation	Description
empath AND cogniti* AND antecedent*	Leerkes and Crockenberg (2006)	Measured the antecedents of mothers' empathy for their children. Focussed on antecedents such as pre-natal coping styles.
empath AND antecedent AND scale*	Adams et al. (1982)	Examined the impact of early perceptions of parents (e.g., parent support / affection during childhood) on empathy during adolescence.
	Barnett et al. (1980)	Developed a questionnaire to examine trait antecedents of empathy, focussing upon the impact of parenting (e.g., time spent with parents as a child) on capacities for empathy.
	Hojat et al. (2001)	Presented The Jefferson Scale of Physician Empathy, measuring empathy within healthcare professionals. This scale targets healthcare-specific cognitions such as the importance of empathic practices.
empath AND antecedent AND measur**	Heinke and Louis (2009)	Measured the influence of different cultural backgrounds (e.g., individualistic or collectivistic values) on empathic responding.
	van der Mark, van Ijzendoorn, and Bakermans-Kranenburg (2002)	Measured the impact of parenting on empathic concern.
empath AND cogniti* AND scale*	Grynberg, Heeren, and Luminet (2012)	Developed the Vicarious Distress Questionnaire. This scale measures the antecedents to personal distress, which included the antecedent of agency.
	Hayashino, Wurtele, and Klebe (1995)	Examined the influence of cognitive distortions on empathy in child molesters.
	Murphy, Mercer, and Duncan (2013)	Developed the CARE measure, which is used to examine the performance of therapists during sessions with their clients. Factors include positivity, listening skills,

		and planning skills.
	Nagano (2000)	Developed a scale that is used to examine four 'attitudes' that foster cognitive empathy in a therapeutic context. These attitudes include the levels to which counsellors understand and accept what the client is saying, encourage the client to freely express views, and how well the counsellor can recognise his or her own understanding of the client's needs.
	Tangney et al. (2012)	Reported correlations between the Criminogenic Cognitions Scale and a measure of empathy. These cognitions are specific to attitudes towards offending and authority.
	Waldron et al. (2006)	Examined three measures of cognitive distortions specific to child molesters (e.g., the belief of children as sexual beings), and their relationships with empathy.
empath AND cogniti* AND measur**	Barriga, Sullivan-Cosetti, and Gibbs (2009)	Measured 'moral maturity' in relation to empathy. Although related to the morality domain identified in Chapter 3, this measure is not used to measure morality in any specific context.
	Bethall, Lin, and McFatter (2013)	Examined the impact of internal working models of the self (e.g., whether oneself is worthy of affection) and others (e.g., whether others are trustworthy) on empathic responding.
	Gentile et al. (2014)	Measured cognitive distortions regarding aggression (e.g., hostile attribution bias, aggressive fantasising) and empathy in the context of video game violence.
	Gunther et al. (2007)	Examined the relationship between leadership styles and empathic responding in nurses.
	Marshall, Hamilton, and Fernandez (2001)	Measured the impact of cognitive distortions on empathy in a sample of child molesters.
	Mast, Jonas, and Hall (2009)	Measured the impact of feelings of power on interpersonal sensitivity (correctly

		assessing other people).
	Nezlek et al. (2001)	Measured the variation of empathy according to current mood states.
	Sanford (1998)	Measured the effect of relationship-based cognitions (e.g., memory accessibility for relationship troubles) on empathy within relationships.
	Watson, Hood, and Morris (1985)	Measured the relationship between religiosity and empathic responding.
sympath AND cogniti* AND measur**	Dickert, Sagara, and Slovic (2011)	Measured participants' sympathy under varying levels of cognitive load in the context of charitable donations.
	Eisenberg et al. (2007)	Examined the variation of empathy according to effortful control and impulsivity.
	Eisenberg et al. (2014)	Examined the relationship between prosocial moral reasoning and trait sympathy.
	Gruen and Mendelsohn (1986)	Examined the interaction between personality and situation type (e.g., different types of conflict) on sympathetic elicitation.
	Rise et al. (2014)	Examined the differences in sympathetic responding when participants were faced with addicts of different substances.

4.2.1 Conclusions

One can conclude from the above review that whilst there are a number of existing scales that have been developed to examine either cognitions, antecedents, or both, in the context of empathy, none directly address those concerns raised in Section 4.1 (i.e., an examination of the state based variations of empathy and sympathy according to a range of situation specific cognitions). Some scales target historical antecedents such as the effects of parenting (e.g., Adams et al. 1982, Barnett et al. 1980, van der mark, van Ijzendoorn, and Bakermans-Kranenburg 2002), which offer limited scope for intervention for those already in adulthood. Other scales examine antecedents or cognitions within very specific contexts such as healthcare (e.g., Hojat et al. 2001) or offending (e.g., Tangney et al. 2012), and so are limited in terms of examining empathy across contexts. Others examine cognitions that are not specific to a given situation or target, such as personal leadership styles or coping strategies (e.g., Gunther et al. 2007, Leerkes and Crockenberg 2006). Such scales are limited in their abilities to examine the changeable nature of empathy according to context. No scale was identified that had been developed to assess a range of cognitions, and most are restricted to one or two variables only. Additionally, no scale was identified that measures both empathy and sympathy in combination. Given these issues, a new scale was needed to measure a range of cognitions towards a particular target, not limited to a particular area of interest.

4.3 Scale Construction

The specific details of how the 'Cognitive Antecedents of Empathic Responding Scale' (CAERS) was developed shall be outlined in Chapter 5. However, the rationale behind the decisions made during the scale's construction shall be outlined here, based upon discussions of scale development found in the literature. This section shall largely follow the suggestions of DeVellis (2012), who developed a clear, comprehensive, and logical

framework outlining the required steps to take when developing a new scale. These steps, and how they relate to the construction of the CAERS, shall be discussed in turn below, and suggestions from other authors in the field will be used to compliment these discussions where applicable.

Step 1 (according to DeVellis 2012) is to determine what exactly one intends to measure. In order to do this, one must first determine the precise purpose of the scale (Barry et al. 2011), and develop a strong theoretical grounding for the scale (Barry et al. 2011, Lord and Novick 2008). Chapter 2 was partly used to serve this purpose, in that the need for greater research into the state variation of empathy was identified. The decision to include a sympathy subscale was also based upon Section 2.3.1, where the confusion surrounding the distinction between empathy and sympathy was identified. Chapter 3 was also used to develop the rationale for the scale, in which the literature regarding the cognitive antecedents of empathy was reviewed, and the need for further research was evidenced. This chapter therefore provided the justification for which variables the CAERS would measure, and the theoretical understanding of the expected relationships between these subscales.

Step 2 is to generate an item pool. Similar to Step 1 above, it was important to clearly define each of the subscales examined before generating items (Loewenthal 2001), so that each item reflected its intended latent variable (DeVellis 2012). Several authors in the field (e.g., Barry et al. 2011, DeVellis 2012, Loewenthal 2001) have suggested that it is sensible to generate a large number of initial items, so that the scale can be condensed at a later stage. The suggestions of Loewenthal (2001) were followed, who provided the more specific recommendation of starting with an initial pool of 10-30 items per subscale, before condensing subscales into 3-15 items each. Although there may have been the temptation to develop overly short subscales to minimise participant boredom, such a decision may have been problematic for calculating scale reliability (e.g., Eisinga, Te Grotenhuis, and Pelzer

2012), and might not have allowed the scale to adequately capture the intended construct (Barry et al. 2011). Multiple item subscales are also preferable over single item measures as they result in greater predictive validity (Diamantopoulos et al. 2012) and can have greater reliability (Loo 2012) than their single-item equivalents. The use of multiple item subscales also grants greater precision, as greater mental effort may be required to form conclusions about less concrete ideas such as the cognitions targeted by the CAERS (DeVellis 2012). A compromise between scale integrity (improved reliability & validity) and brevity (improved response rates) was therefore sought during scale development. As noted by DeVellis (2012), a strong scale that is completed by fewer participants (due to increased length) is preferable to a weaker (shorter) scale completed by more participants.

At this stage, it was also important to avoid the generation of lengthy items, as this might have reduced clarity (DeVellis 2012). Item clarity is important so that the CAERS can be completed by individuals with a wide range of intelligence and reading abilities. Researchers have suggested that it is also sensible to generate some reverse scored items to avoid acquiescence effects (i.e., to discourage participants from agreeing thoughtlessly with all statement) (see Anastasi and Urbina 1997). Each of these suggestions was followed in the development of the CAERS, as described in Chapter 5.

Step 3 is to decide upon a format for the scale. As variability represents a desirable quality for any scale (DeVellis 2012), likert type scales (i.e., multiple response options) seemed more appropriate than simple yes/no response types in the current context (consistent with the suggestions of Comrey 1988). However, as DeVellis (2012) noted, too many response options (e.g., a scale of 1-100) makes responding more difficult as it is harder to meaningfully discriminate between response options (DeVellis 2012), potentially leading to increased participant fatigue. Fatigue may have been a particular issue with the CAERS, given the large number of variables included (necessarily increasing scale length). It was

therefore important to create a balance of variability and ease of completion. As such, it was decided to develop five-point likert-type scales to create this balance.

Step 4 is to have the item pool reviewed by others knowledgeable in the area. DeVellis (2012) suggested asking these judges to rate how much each item is relevant to its intended subscale. This is to avoid confusion between subscales, and items that are attributed to the wrong subscales should be discarded (Loewenthal 2001). DeVellis (and Barry et al. 2011) also noted that judges might be asked to rate items' clarity, again to avoid any confusion in future participants. Each of these steps were followed in Study 1 of the current research (described in Chapter 5). Performing these checks ensured that all items were face-valid: i.e., items should appear to measure what they are intended to measure (Kline 2000). As well as avoiding confusion between subscales, assessing face validity allows one to see whether items are understood by participants as intended. Nevertheless, one should avoid producing a scale that is overly face-valid, which may lead to participants responding in a socially desirable manner (Kline 2000). As such, social desirability was measured in each of the studies reported within this thesis.

Step 5 is to include validation items. As noted by DeVellis (2012), one should not rely on face-validity alone, and more rigorous methods of establishing validity are also required. As just mentioned, it is important to avoid the effects of social desirability so that participants' responses accurately reflect reality. Social desirability, defined as the "tendency to respond to self-report items in a manner that makes the respondent look good rather than to respond in an accurate and truthful manner" (Holtgraves 2004: 161), can range from "outright lying to putting one's best foot forward" (Andrews and Meyer 2003: 484). Social desirability was assessed during the development of the CAERS to ensure construct validity, as this is an issue associated with self-report measures in general (Holtgraves 2004). Although some empathy measures (e.g., the Basic Empathy Scale; Jolliffe and Farrington 2006) appear to be

free from social desirability (determined by non statistically significant correlations), others have been associated with this bias such as the E-Scale (see Kampfe et al. 2013) and the IRI (see Curwen 2003). These effects may be present to a greater degree in sensitive contexts (e.g., empathy in offenders) where participants are motivated to present themselves in a favourable light (Kämpfe et al. 2013). As noted by Fazio and Olsen (2003), the effects of social desirability will be dependent upon motivation and opportunity. When motivation (sensitive topic) and opportunity (self-report measure) is present, then socially-desirable responding may occur.

Indirect measures, such as the Implicit Association Task (Greenwald, McGhee, and Schwartz 1998) may be less susceptible to the effects of social desirability (Kampfe et al. 2013), as would other non-self-report methods of empathy such as facial or physiological indexes (see Eisenberg and Fabes 1990). However, these methods would be inappropriate to measure cognitions (as discussed previously). As such, the effects of social desirability in the CAERS were addressed through careful scale construction, resulting in weak correlations between CAERS subscales and a social desirability measure in Chapter 5. In addition, any relationships that do exist can be mitigated through the use of statistical controls (Paulhus 1981). Following these suggestions, the construction of scale items that have strong social implications were avoided (i.e., items were developed with neutral social connotations; Anastasi and Urbina 1997), and a measure of social desirability was included so that such effects could be statistically controlled for where they arose.

It is also important to ensure that scales hold good construct validity (i.e., how well the test performs according to theoretical predictions). Construct validity was assessed for the CAERS by generating hypotheses based on theoretical accounts of empathy, and putting these hypotheses to the test (c.f. Kline 2000). A scale can be said to hold good construct validity when factors that are expected to correlate do correlate (convergent validity) and

factors that are not expected to correlate do not correlate (divergent validity) (Campbell and Fiske 1959). Such predictions were derived from the discussions presented in Chapter 3, which allowed for the testing of convergent validity in the studies reported in the chapters to follow. Divergent validity was less easy to assess, given that the literature generally fails to identify which cognitive antecedents of empathy do not correlate.

It was also important that the CAERS demonstrated good content validity: "whether the test adequately covers the dimension to be measured" (Domino and Domino 2006: 53). According to Messick (1989), scale items should hold both content representativeness (how well items cover the range of domains to be measured) and content relevance (how relevant items are to each domain). Each of these were ensured by properly defining each subscale, and generating items with these definitions in mind to ensure item relevancy. Representativeness was addressed by measuring the full range of cognitions identified in Chapter 3.

Criterion-related validity (how well the test measures the intended variables) was also important to consider. This is made up of both concurrent (correlations with similar tests) and predictive (the ability of the scale to predict behaviour) validity. In assessing concurrent validity, the most appropriate measure was deemed to be the Interpersonal Reactivity Index (Davis 1980): a well validated and frequently used measure of trait empathy. As state variation in empathy is at least partially dependent on trait capacities, results were expected to show correlations between the CAERS and the IRI. Nevertheless, as the two scales are measuring different aspects of empathy, very strong correlations were not expected. Kline (2000) suggested being 'content' with moderate correlations (i.e., r = .4 - .5) in such cases, making use of other methods of validation to further attest to the validity of the scale.

Scales should also hold good predictive validity, which is the ability of the scale to predict future behaviour (Loewenthal 2001). This is mainly assessed in Chapters 6 and 7,

where the CAERS is used to predict donation behaviours. According to the empathy-altruism hypothesis (Batson 1991), the emotion subscales of the CAERS (i.e., empathy and/or sympathy) were expected to predict the intention to respond in a prosocial manner.

Step 6 is to test the scale on a pilot sample. The purpose of this is to identify any errors in the scale, to identify any problematic items, and to preliminarily assess relationships between subscales (Domino and Domino 2006). DeVellis (2012) noted the importance of piloting the scale on a sample representative of its intended purpose. Although it is hoped that the CAERS will be used in a variety of contexts (e.g., offenders and healthcare professionals, and others), the most common testing population for studies on empathy is undergraduate students (especially in theoretical investigations as discussed here). This therefore formed the target population during scale validation. Further validation will of course be required should the CAERS be adapted for use in more specialised contexts (e.g., in the healthcare or forensic fields).

Step 7 is to evaluate the scale. Several suggestions were offered by DeVellis (2012) for this stage. Firstly, items should be re-examined for appropriateness. Reverse scored items should be checked to make sure they are performing as intended, or whether they are inadvertently measuring a different construct (for example, sadness might be intended as a reverse scored item for happiness, but might actually be measuring a different construct; DeVellis 2012). Items also need to be checked for the range of scores that they produce in order to avoid ceiling or floor effects caused by the strength of wording. Cronbach's alpha should be calculated for each subscale at this point to ensure good internal consistency. A factor analysis should also be performed to confirm the intended structure of the scale. Each of these suggestions were followed in Studies 1-3 (see Chapter 5).

Step 8 is to optimise the scale. One of the primary concerns is to optimise the length of the scale. As noted above, shorter scales are easier for the participants; longer scales tend

to be more reliable. It was therefore important to achieve the appropriate balance between the two. DeVellis (2012) recommends reducing the scale length by removing 'bad items' according to inter-item correlations and the resulting effects on subscale alphas. This step was performed in Study 2 (Chapter 3).

High internal reliability is vital for high validity (Kline 2000), and so it is important to assess this during scale development. Nunnally (1978) stated that alphas should be above .7 for any scale. In order to ensure that this target was met, the 5 suggestions provided by Lowenthal (2001) for improving the reliability of subscales were followed: (1) Do nothing if alphas are acceptable; (2) Investigate item-scale correlations and remove items that lead to the greatest gains in alpha; (3) Calculate split-half reliabilities for small subscales (not relevant in the current context); (4) Conduct factor analyses and remove weak loading items; and, (5) Should all else fail, rewrite items and begin the process again.

Although assessing test-retest reliability is recommended by several authors (e.g., Anastasi and Urbina 1997, DeVellis 2012, Domino and Domino 2006, Kline 2000, Loewenthal 2001), this may be less applicable to the CAERS. Kelly and McGrath (1988) suggested that there are four causes of poor test-retest reliability: change over time, natural oscillations according to time, variation in measurement methods, and unreliable measurement tools. Given that the CAERS is a measure of state variations within empathy, one would expect to observe changes and oscillations over time in the various cognitions according to the target and situation. Even when the target and situation remains constant across two time periods, current mood may change sufficiently to cause oscillations. One would therefore expect to observe lower test-retest reliability for this scale than would otherwise occur. Although not examined here, it may be useful for future research to confirm the existence of these natural oscillations, or whether cognitions remain more stable than has been assumed.

4.4 Other Methodological Considerations

After each of the above steps was completed, and the CAERS had been appropriately validated, it was decided to test the scale in more specific contexts to examine the effects of cognitions on empathic responding. It was important to consider sampling procedures during each of these studies, and in order to recruit a suitable number of participants, convenience / snowballing procedures were utilised. Although non-random methods such as these may be more prone to sampling bias, Loewenthal (2001) noted that such a bias is less influential when one is interested in relative effects (e.g., whether high valuing is associated with high empathy) than when one is interested in absolute effects (e.g., the amount of empathy felt for a particular target). Should one wish to standardise the CAERS in the future (i.e., to generate scale norms), more rigorous methods such as random sampling would become a necessity (see Kline 2000). Nevertheless, although convenience / snowballing procedures are acceptable in the current context, confounding variables (e.g., education and religiosity in Study 6) were still considered and controlled for, in accordance with the suggestions made by Loewenthal.

In the study described in Chapter 6, online data collection methods were used, which are associated with several advantages and disadvantages, as discussed by Kline (2000). Some of the advantages of computer-based methods include being able to minimise variance due to testing conditions. This means that the way the questionnaire is presented to each participant is nearly identical, which is less true for face-to-face studies (e.g., variation caused by the researcher). However, there may still be some variance in the conditions around the participant (as in any study). The other biggest advantage of computer based testing is that scale administration is eased greatly, and human error during data entry is eliminated. Computer testing may also be easier for those with eyesight or motor problems (allowing

participants to zoom in and use larger keyboards), who may otherwise find paper based testing difficult (Kline 2000).

Despite the above, Kline (2000) noted some disadvantages associated with computer based data collection that researchers need to remain cautious of. Firstly, some persons (e.g., some older individuals or those with intellectual difficulties) may find it difficult to use computers, possibly limiting responses from such populations. This was a difficult issue to address, although one could perhaps argue that the same issue applies to paper based testing (i.e., some individuals will find them difficult to understand), and so this is perhaps not as specific to computer based testing as Kline suggests. Secondly, online testing eliminates rapport between the researcher and participant. This presents an ethical dilemma in that participants are less able to ask the researcher questions before or during the study. This was addressed in Study 6 by providing email addresses so that contact can be established should the participant require this. Kline also noted that a lack of face to face interaction also prevents the researcher from making any incidental observations (e.g., any aspects of the questionnaire that can be improved). Although such observations were not possible in the study presented in Chapter 6, these observations were however granted during the face-to-face testing methods used in other chapters (i.e., Chapters 5 and 7).

Controlling for socially desirable responding has been discussed, but there are other forms of reactivity that should also be accounted for. For example, demand characteristics (i.e., participants attempting to respond in a manner consistent with the perceived aims of the study) are an issue that applies to many psychological studies. To avoid these effects, the intended relationships between cognitions and empathic responding were not disclosed to participants, but rather participants were informed about the general nature of the study. Demand characteristics were less of an issue in Study 5, due to the use of deception (participants were originally not informed that the focus of the study was on empathy).

The fact that psychology students at the university are obligated to participate in research studies may cause frustration in some individuals, thus they may have adopted a negative-participant role (see Weber and Cook 1972), also known as the 'screw-you effect' (Masling 1966). In an effort to lessen the effects of such behaviours, the importance of each of these studies was emphasised to participants via information sheets (to encourage honest responding) and answer sheets were carefully checked for obvious occurrences of improper responding (e.g., giving the same answer for every question).

The observer-expectancy effect (i.e., when the researcher influences participants' responses) was also taken into account when developing questionnaires and participant information sheets through the use of emotionally neutral terms. As all information was given to participants via written materials in Studies 1-4, it is unlikely that the researcher would have influenced participants beyond the information given in the questionnaire packs. The observer-expectancy effect may have been more of an issue in Study 5, which involved one-to-one participant interaction, but verbal instruction was limited only to when participants were unable to understand the written instructions they were given.

4.5 Conclusion

In conclusion, the search for measures of the cognitive antecedents of empathy failed to identify any existing scales that are suitable to address those concerns raised in Chapter 3. The development of a new scale was therefore needed to serve the aims of the current research (as described in Chapter 1). The above steps, based on the suggestions provided by DeVellis' (2012), form a useful framework for the development of any scale, and have provided a number of recommendations. In the following chapter this framework is applied to the development of the CAERS, including the assessment of the internal reliability of each subscale and the various checks of validity described above.

Chapter 5: The Cognitive Antecedents of Empathic Responding Scale

5.1 Introduction

Psychologists have attempted to measure empathy at least as far back as the 1920s (Chlopan et al. 1985) and a number of psychometric tools have been developed during this time. However, as discussed in the previous chapters, despite the range of scales available there are certain important aspects of empathy that are not typically examined in the measurement literature (i.e., the context specific antecedents). A new measure was therefore needed to further our understanding of these concepts.

One of the main issues addressed here is that the vast majority of scales are measures of general tendency, i.e., *typical* levels of empathic responding. It is of course important to examine trait levels of empathy/sympathy, but such measures are limited in their abilities to inform us of context specific effects. As noted by Davis and Franzoi (1991: 74), "possessing a capacity does not ensure that this capacity will be used". For example, it has often been noted that sex offenders, whilst possessing the capacity to feel empathy, typically lack empathy for their specific victims (Fernandez et al. 1999, Marshall et al. 1995). As such, trait measures are ill-equipped to examine such specific effects, and a state measure will allow us greater insight into the variation of empathy/sympathy according to context.

Furthermore, there are a wide range of cognitive factors that may determine such variations in empathic responding. For example, one tends to feel less empathy when one fails to perceive that the target is in need (Lishner, Batson, and Huss 2011), or when the target is blamed for his or her current situation (Rudolph et al. 2004). Undoubtedly, such cognitions will vary according to context and the persons involved. Although the influence of each of these factors on empathic responding has been individually demonstrated in the

literature (see Chapter 3), no measurement scale existed at the start of the current project to examine these antecedents in combination. As such, researchers have not been able to compare the influences of these variables. Such a scale may prove useful in developing our understanding of empathy and sympathy, and may allow for the identification of the most influential antecedents of empathic responding.

Sympathy ("feelings of sorrow or concern for another's welfare"; Eisenberg and Miller 1987: 92) has received far less research interest than empathy in terms of its measurement and antecedents. However, it is important to consider sympathy when one is interested in the effects of empathy on helping behaviours (which is usually the case), as several authors have suggested that sympathy mediates the empathy-helping relationship (e.g., Batson, Fultz, and Schoenrade 1987, de Vignemont and Singer 2006, Eisenberg, Fabes, and Spinrad 2006, Goetz, Keltner, and Simon-Thomas 2010). Despite this suggestion, limited efforts have been made to examine these two constructs in combination. The longstanding confusion surrounding the definition of empathy and sympathy has also led to a blurring of these concepts (see Chapter 2), which has made it difficult to discern the unique antecedents and outcomes of empathy and sympathy. Given these issues, it was felt necessary to include both empathy and sympathy in the development of the new scale.

The aim of this chapter is to present the Cognitive Antecedents of Empathic Responding Scale (CAERS). As discussed above, the purpose of developing this scale was to address the limitations associated with the assessment of empathy and sympathy[5]. Specifically, the aim was to measure the range of context-specific cognitive antecedents of both state empathy and state sympathy. In the remainder of this chapter the construction of this scale will be discussed, initial validity and reliability data will be outlined, and the

[5] This scale focuses upon 'negative empathy' (i.e., empathy for negative emotions such as sadness or distress). However, it should be noted that empathy can also apply to positive emotions (e.g., joy), which would not be a suitable context for the current measure.

influence of cognitions on empathic responding in a high school bullying context will be examined.

5.2 Construction of the CAERS

In Chapter 3, ten cognitive antecedents of empathy were identified that are likely to influence degrees of empathic responding: perspective taking (can the observer adopt the target's perspective?), perceived need (does the target need help?), similarity (is the target similar to the observer?), valuing (does the observer respect/value the target?), blame (does the observer blame the target?), self-interest (do the observer's needs take priority over the target's needs?), perceived power (is the observer more powerful than the target?), morality (has a breach of the observer's moral codes occurred?), agency (does the observer feel able to help?), and mood and self-esteem. Although subscales of the CAERS are largely based upon these factors, a 'Cognitive Empathy' subscale was substituted for the perspective taking component denoted by the earlier model (i.e., Figure 3.1). Although perspective taking no doubt forms an important part of cognitive empathy, the conclusions drawn in Chapters 2 and 3 suggested avoiding restricting measurement of one's ability to understand another's emotions to one's ability to take another's perspective. Rather, it was preferable to include the additional methods of understanding another's emotions, such as by reading facial expressions (Besel and Yuille 2010), accessing relevant memories (Eisenberg 1986), imagination (Stinson and Ickes 1992), projection (Nickerson 1999), and/or when emotions are understood via conditioning (Blair 2005).

As such, the CAERS consists of nine cognition subscales (cognitive empathy, perceived need, similarity, valuing, blame, self-interest, agency, morality, and perceived power), a self-esteem subscale, an empathy subscale, and a sympathy subscale. Six mood subscales (happy, sad, anxious, relaxed, angry, and tired) were also included. The mood

states were based upon those identified in Chapter 3 (i.e., anger and anxiety) along with others that have not received research interest in a the context of empathy but may nevertheless have an influence on empathic responding (happiness, sadness, relaxedness and tiredness).

Ten items were generated by the researcher for each subscale (five each for empathy and sympathy[6]), with the focus being on maintaining face validity and ease of comprehension. These items were largely based upon synonyms and antonyms of the target cognitions. Care was also taken to avoid confusion between concepts. For example, power items were kept free of notions of agency, whereby an item such as "I have control over the situation" may contain elements of both. Object ambiguity was also kept to a minimum. For example, in the morality subscale statements such as "I was offended by what happened" were avoided as this could be interpreted in two ways: being offended by perpetrator's or the victim's actions. As the CAERS is primarily concerned with the measurement of context dependent factors, items were generated to make the respondent record his or her responses in relation to a specific target, such as "he/she needs help" (Item 1), rather than towards a general target (e.g., "I can recognise when others need help"). This allowed the scale to measure thoughts for specific individuals, in specific situations. This initial item pool can be found in Appendix A.1.

Each item was measured via a five point likert-type scale ranging from 'strongly disagree' to 'strongly agree'. In the case of mood and self-esteem, participants were simply asked to rate their current state via five point likert-type scales ranging from 'not at all' to 'very' for each mood state, and 'very low' to 'very high' for self-esteem. In the questionnaire, the mood and self-esteem scales were presented first, followed by a randomised list of the

[6] These subscales were originally combined to form an overall "empathic responding" subscale (thus consistent with the other 10-item subscales), but it was later deemed sensible to separate empathy and sympathy to investigate the differences between these terms.

remaining one hundred items. Roughly half (45%) of these remaining items were reverse scored to minimise acquiescence effects.

Three studies were conducted to assess the reliability and validity of the CAERS, as well as to provide initial data for the effects of the cognitive antecedents on empathy and sympathy. Study 1 was primarily concerned with face validity (step 4 of Chapter 4); Study 2 determined internal reliability and social desirability correlates (steps 6, 7, and 8 of Chapter 4); and in Study 3 internal reliabilities were re-assessed following scale reduction, construct and concurrent validity checks were performed, and the relationships between cognitions and empathic responding were analysed (steps 5, 6, 7, and 8 of Chapter 4). Ethical approval was granted by the university's ethics committee for each study (Appendix B.1), and all participants were fully informed about the nature of the study and their rights to withdraw. All studies reported within this thesis conform with the British Psychological Society 'Code of Human Research Ethics' (BPS 2010).

5.3 Study 1: Face Validity

5.3.1 Participants

Five PhD students were recruited from the psychology department at Coventry University on an opportunistic and word of mouth basis. PhD students were recruited due to their ease of access (which was important due to time constraints in validating the scale) and because of the fact that they were demographically similar to the groups that would be completing the initial validation studies. All participants were female, with an age range of 23-28 years (M = 25, SD = 2.17). All described their ethnicity as white British.

5.3.2 Procedure

The purpose of this study was to assess the face validity and comprehension of items. Participants were first informed about the nature of the study (Appendix C.1) and provided consent (Appendix D). They were then provided with a randomised list of the one hundred scale items and a brief description of each subscale. Participants were asked to assign each item to a subscale, and highlight anything they did not understand. This allowed for the identification of any confusion between subscales and issues with comprehension. After submitting their responses, participants were thanked and debriefed (Appendix E.1).

5.3.3 Results and Discussion

No issues regarding comprehension arose. Overall, participants exhibited a mean correct assignment rate of 88.8%, indicating good face validity. Two items were assigned in error by two participants to the empathy subscale (‘Valuing 1’: “I care about her”; ‘Cognitive Empathy 3’: “I can imagine what she was thinking”). These items were removed from the scale. Three items were assigned in error by two participants to the cognitive empathy subscale. One item was removed (‘Blame 5’: “She had no control over these events” [reverse item]). The other two were retained (‘Perceived Need 4’: “She is upset”; ‘Perceived Need 5’: “She is happy” [reverse item]) because of the strong theoretical links between perceived need and cognitive empathy (i.e., one must be able to understand the other’s emotions via cognitive empathy in order to perceive emotional needs).

As noted earlier, efforts were taken to avoid confusion between agency (the degree to which the observer feels they are able to help) and perceived power (the power imbalance between observer and target). However, one item designed to measure agency (‘Agency 4’: “The decisions I make will have an impact”) was applied erroneously to perceived power by

two participants. In order to reduce overlap between these subscales this item was deleted from subsequent iterations of the CAERS.

5.4 Study 2: Reliability and Social Desirability

5.4.1 Participants

Sixty-one participants were recruited during the lectures of two different masters level psychology courses. As in Study 1, the scale was validated using student samples mainly due to their ease of access. Additionally, although students may differ from other populations in terms of their *absolute* levels of empathy (e.g., see Lennon and Eisenberg 1987), there is no reason at the current time to assume that students would differ from other populations in terms of the relationships between cognition and emotion. Accordingly, there is no reason at the current time to assume that the use of student samples render the validation of the measure flawed[7]. This sample comprised of 6 males (9.8%) and 55 females (90.2%), with 75.4% being of white British ethnic origin. A further 16.4% were of "other-white" origins, and the remaining 8% were of Africa, Asian, and Caribbean ethnic origins. Ages ranged between 22 and 57 years (M= 31, SD = 6.74).

5.4.2 Materials

The Marlow-Crowne social desirability scale (short form). Due to time constraints the 'M-C Form C' developed by Reynolds (1982) was employed as a measure of social desirability. This measure is a short form version of the 33 item Marlowe-Crowne social desirability scale (Crowne and Marlowe 1960), consisting of 13 true / false items. Higher scores indicate higher levels of socially desirable responding. This scale has good internal reliability (r_{kr20} = .76; Reynolds 1982) and strong correlations have been reported between

[7] However, as discussed in Chapter 4, further validation would be needed before using the CAERS in more specialised samples such as offender populations.

the M-C Form C and the original Marlowe-Crowne scale by both Reynolds (r = .93) and Fischer and Fick (1993) (r = .97).

Video clip. In order to elicit empathy in the participants an audio-visual stimulus (one minute in length) was utilised. It was decided that a video more appropriately reflects a real life face-to-face situation than would alternative methods such as written vignettes. This video was sourced online from a popular video sharing site (available at http://www.tubechop.com/watch/1122369) and depicted a female high-school student describing her experiences of bullying. The subject describes how she entered into a relationship with the male partner of another girl, and became subject to bullying from her peers as a result of this relationship. This stimulus was selected carefully to address the majority of CAERS subscales. For example, blame is introduced through the notions of infidelity between the girl (the target) and the bully's partner. This video was also appropriate as each of the other variables being measured were suitably ambiguous in relation to the girl's situation (i.e., ceiling or floor effects were not anticipated); thus it was expected to glean suitably distributed results for statistical analyses.

5.4.3 Procedure

After being informed about the nature of the study (Appendix C.2) and providing consent (Appendix D), participants were asked to complete the first page of the CAERS, which consisted of demographic information questions and the mood and self-esteem scales, prior to viewing the video stimulus. Mood information was collected prior to the video as the effects of mood as an antecedent were of interest rather than the mood elicited by the stimulus, which would be closely related to empathy itself. Prior to being shown the video, participants were instructed to imagine that they are attending school with the girl depicted in the video and that the girl had approached them for help. They were also instructed to imagine that by helping the girl they would likely fall victim to the bullies themselves. The

purpose of this was to introduce an element of self-interest; one subscale that would otherwise be difficult to address with this procedure. The video was then presented to the whole group. Following the video, participants completed the rest of the questionnaire followed by the social desirability scale, and were finally debriefed (Appendix E.1).

5.4.4 Results and discussion

One of the main purposes of Study 2 was to improve the internal reliability of subscales, to minimise social desirability correlates, and to reduce the number of items in order to ease scale administration. Initial checks indicated that all subscales exhibited good internal reliability and non-statistically significant correlations with the social desirability measure (Table 5.1). Two individual items, Self-interest 5' ("It is important that I meet my own needs here"; r = -.27, p = .04) and 'Empathy 3' ("She didn't make me feel anything"; r = .27, p = .04), exhibited correlations with social desirability and were removed from future iterations of the scale. As there were no further issues with reliability or social desirability, the decision was made to remove two additional items from each subscale, in order to reduce the overall length of the scale. Further reductions (i.e., more than two items) would have reduced the internal reliability of the majority of subscales. Items were chosen on the basis of making the greatest improvements to internal reliability. As can be seen in Table 5.1, improvements were achieved for each subscale following item reduction, with the exception of those two scales that were reduced due to social desirability effects (i.e., self-interest and empathy), and valuing. Nevertheless, Cronbach's alpha scores still remained high for these scales post reduction. Correlations with the social desirability measure remained non-significant for each subscale following item reduction, with the correlation coefficient being further reduced in several cases (Table 5.1).

Table 5.1
Reliability and Validity Checks

Subscale	Cronbach's α		Correlation with SDS (*r*) [a]	
	Before Item Reduction	After Item Reduction	Before Item Reduction	After Item Reduction
Self-Interest	.79	.77	-.18	-.14
Agency	.81	.82	.18	.22
Morality	.86	.87	-.10	.15
Perceived Power	.72	.76	.03	.08
Cognitive Empathy	.75	.77	-.08	-.00
Perceived Need	.74	.76	-.04	.02
Similarity	.87	.88	-.13	.09
Valuing	.87	.85	.15	.09
Blame	.88	.89	.14	.14
Empathy	.77	.72	.15	.10
Sympathy	.80	.81	.11	.15

Note: "SDS" = social desirability scale.
[a]All correlation coefficients were non-significant ($p > .05$).

5.5 Study 3: Relationships Between Cognitions and Empathic Responding

5.5.1 Hypotheses

One of the main purposes of Study 3 was to investigate the relationship between the CAERS cognitions and empathic responding. Based on the research evidence and arguments presented in Chapter 3, several relationships were expected to arise in the current study. It was hypothesised that empathy would positively correlate with morality, agency, cognitive empathy, valuing, perceived need, and similarity. Additionally it was expected that empathy would negatively correlate with self-interest, perceived power, and blame. Although largely exploratory at this stage, it was expected that there would be positive correlations between empathy and happiness, relaxedness and self-esteem, with negative correlations between empathy and sadness, anxiousness, and tiredness. Examinations of the influence of cognitions

on sympathy are lacking in the literature. However, due to the high expected correlation between empathy and sympathy, similar relationships to the above were expected.

5.5.2 Participants

A total of 177 criminology and psychology undergraduate students took part in the study during normal university lectures. Of these, 146 (82.4%) were female, and 31 (17.6%) were male. 50.8% identified as being of white British ethnicity. The next largest ethnic group was "other-white" (12.5%), followed by Indian (9%) and "black-African" (7.9%). The remainder consisted of a variety of Asian and mixed ethnic backgrounds. Due to small cell sizes the effects of gender and ethnicity were not considered further. Participants were aged between 18 and 44 years (M = 21, SD = 3.70).

5.5.3 Method and Materials

The same method and materials (using the revised version of CAERS) as Study 2 were used in Study 3. The only exception being that the participants were asked to complete an additional validity check measure:

The Interpersonal Reactivity Index (IRI). The IRI (Davis 1980) was employed as a concurrent validity check. The IRI is a popular measure of trait empathy, including four subscales of fantasy (the ability to identify with fictional characters), perspective taking (the ability to adopt the point of view of another), personal distress (feelings of anxiety when in the presence of a distressed other) and empathic concern (the tendency to feel concern for another). Subscales of the IRI exhibit moderate-to-good internal reliability (α = .70 - .78) (Davis 1980). Although the IRI is a measure of trait differences, correlations were expected with the CAERS as state empathic responses will be at least partly dependent upon trait tendencies.

5.5.4 Results

A confirmatory factor analysis was conducted (using AMOS software for SPSS) based on a maximum likelihood procedure to confirm that the items accurately reflected the intended latent structure. Standardised loading estimates can be found in Table 5.2. The initial 80-item model achieved poor model fit according to the non-normed fit index (NNFI = .75) and the comparative fit index (CFI = .76). As such, model trimming was employed to improve model fit. Four items were removed from each subscale and the analyses were repeated (Table 5.2). The revised 44-item model (resulting in the revised scale found in Appendix A.2) achieved better model fit. Bentler and Bonett (1980) recommended a minimum value of .90 for the NNFI and CFI, and Ullman (2001) recommended a maximum value of 2.00 for the chi-square/degrees of freedom ratio. The revised model achieved these recommendations (TLI = .91; CFI = .92; $\chi^2/df = 1.57$). An RMSEA value of .05 also indicated good model fit according to MacCallum, Browne, and Sugawara (1996). All subscales continued to hold moderate-to-good internal reliabilities post reduction (Table 5.2).

Subscale means for cognitive empathy, sympathy, and similarity subscale scores were significantly skewed; violating the assumptions for the Pearson's correlations conducted below. Log10 transforms corrected this issue for cognitive empathy and sympathy, and a square-root transform corrected the issue for similarity. Five subscales now exhibited significant correlations with social desirability (Table 5.3). These results suggest that those who wished to portray themselves in a more socially desirable manner indicated that they valued the target more, were less concerned with self-interest, understood the target's emotions more, and experienced greater empathy and sympathy for the target. Given these significant results, it was necessary to control for socially desirable responding in the following analyses. Statistical controls were used in favour of removing participants with

Table 5.2
Confirmatory Factor Analysis: Item Loadings and Internal Reliabilities

		Initial Scale		Refined Scale	
Construct	Item	β	Cronbach's α	β	Cronbach's α
Empathy	E1	.46	.79	.46	.79
	E2	.76		.76	
	E4	.83		.83	
	E5	.78		.79	
Sympathy	S2	.87	.85	.79	.85
	S3	.79		.69	
	S4	.69		.73	
	S5	.77		.80	
Valuing	VA2	.69	.77	.73	.82
	VA4	.67		.68	
	VA5	.72		.79	
	VA7	.68		.74	
	VA3	.31			
	VA8	.19			
	VA9	.58			
	VA10	.56			
Perceived Need	PN2	.64	.71	.62	.69
	PN3	.70		.68	
	PN4	.53		.51	
	PN10	.58		.60	
	PN1	.45			
	PN5	.50			
	PN7	.21			
	PN8	.43			
Blame	BL4	.73	.88	.72	.87
	BL6	.88		.91	
	BL8	.80		.79	
	BL9	.75		.75	
	BL1	.59			
	BL2	.64			
	BL3	.64			
	BL7	.51			
Self-Interest	SI2	.75	.81	.80	.82
	SI3	.82		.74	
	SI7	.62		.56	
	SI8	.71		.66	
	SI1	.50			
	SI4	.50			

	SI9	.53			
	SI10	.32			
Perceived Power	PP5	.72	.82	.70	.85
	PP7	.71		.71	
	PP8	.77		.76	
	PP10	.86		.91	
	PP1	.36			
	PP3	.46			
	PP4	.61			
	PP6	.39			
Morality	MO3	.60	.80	.59	.76
	MO7	.68		.66	
	MO9	.66		.69	
	MO10	.77		.78	
	MO2	.47			
	MO4	.54			
	MO6	.54			
	MO8	.51			
Agency	AG5	.82	.88	.85	.87
	AG7	.80		.82	
	AG9	.78		.72	
	AG10	.77		.78	
	AG2	.55			
	AG3	.64			
	AG6	.55			
	AG8	.66			
Cognitive Empathy	CE1	.61	.81	.64	.79
	CE2	.64		.66	
	CE4	.61		.61	
	CE5	.75		.81	
	CE7	.64			
	CE8	.40			
	CE9	.66			
	CE10	.47			
Similarity	SM5	.86	.90	.87	.92
	SM6	.89		.92	
	SM7	.91		.89	
	SM10	.79		.76	
	SM1	.74			
	SM3	.53			
	SM4	.62			
	SM8	.59			

high social desirability score, to avoid reductions in power (as removing participants would reduce the sample size).

Table 5.3
Reliability and validity checks

Subscale	Mean (SD)	Correlation with SDS (*r*)	Correlation with IRI Subscales[c] (*r*)			
			F	EC	PT	PD
Self-Interest	2.42 (0.76)	-.21**	-.18*	-.38***	-.28***	-.12
Agency	3.10 (0.86)	.04	.13	.23**	.18*	-.15*
Morality	4.10 (0.56)	.11	.19*	.34***	.25***	.08
Perceived Power	4.01 (0.63)	-.07	-.12	-.09	-.09	-.26**
Cog. Empathy[a]	0.31 (0.27)	.16*	.24**	.29***	.20**	.07
Perceived Need	4.46 (0.43)	.08	.15	.36***	.17*	.08
Similarity[b]	1.33 (0.27)	-.06	.15	.11	.07	.09
Valuing	3.13 (0.66)	.21**	.14	.40***	.36***	.13
Blame	2.25 (0.80)	-.07	-.13	-.21**	-.20**	-.09
Empathy	3.39 (0.78)	.17*	.29***	.54***	.40***	.15
Sympathy[a]	0.36 (0.14)	.16*	.20**	.54***	.36***	.09

Notes: "SDS" = social desirability scale; "F"=fantasy; "EC" = empathic concern"; "PT"=perspective taking; "PD" = personal distress.
[a] Log10 transformed. Untransformed mean for cognitive empathy was 3.82 (*SD* = 0.62), and for sympathy was 3.97 (*SD* = 0.63).
[b] Square-root transformed. Untransformed mean was 1.85 (*SD* = 0.76).
[c] Controlling for social desirability scores.
*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

Correlations with IRI subscales (Table 5.3) supported the concurrent validity of the CAERS. All but two of the CAERS subscales significantly correlated with the empathic concern subscale of the IRI. Such correlations were expected, given that state variables will

be partly influenced by the trait capacities for empathy measured by the IRI. Of particular importance is the correlation between the empathy and sympathy measures and the empathic concern measure of the IRI. A significant correlation was also found between the measure of cognitive empathy (which includes an element of perspective taking) and the perspective taking subscale of the IRI.

A good range of mean empathy (range = 1.25-5.00, *M* = 3.39, *SD* = 0.78) and sympathy (range = 1.50-5.00, *M* = 3.97, *SD* = 0.63) scores were evoked, indicating that the video was successful in eliciting empathy and sympathy. Correlation coefficients offered support for the hypotheses denoted in Section 5.5.1, with all subscales significantly correlating with both empathy and sympathy, with the exception of the non-significant correlation between sympathy and perceived power (Table 5.4). All of these correlations were in the hypothesised (i.e., see Section 5.5.1) direction, based upon the discussions presented in Chapter 3. Specifically, higher agency, cognitive empathy, perceived need, similarity, valuing, and greater breach of morals were associated with higher levels of both empathy and sympathy. Conversely, lower perceived power (non-significant for sympathy), self-interest, and blame were associated with higher levels of both empathy and sympathy.

One of the advantages of measuring all cognitions in combination is that one can examine which of them have the strongest predictive power for empathy and sympathy (representing the novel value of the current research). As such, two multiple regressions were calculated. All nine cognitions were entered on the first block for both regressions and the residuals were normally distributed (with the aforementioned data transformations).

Durbin-Watson statistics were acceptable[8] when both empathy and sympathy were entered as the dependent variable (*d* = 1.8 for both regressions). VIF values for both tests

[8] Field (2013) recommended that values should be close to 2, and range between 1 and 3.

ranged between 1.00-1.86, indicating acceptable multicolinearity[9]. After controlling for social desirable responding, predictor variables explained a significant amount of the variance in both empathy ($F(9, 166) = 25.55$, $p < .001$, $R^2 = .59$, $R^2_{Adjusted} = .57$) and sympathy ($F(9, 166) = 23.34$, $p < .001$, $R^2 = .57$, $R^2_{Adjusted} = .54$). As can be seen in Table 5.4, there were differences in the predictors of empathy and sympathy. Perceived need, valuing, and cognitive empathy were significant predictors of both empathy and sympathy. Similarity was a predictor of empathy only, and morality and self-interest were predictors of sympathy only.

There were many significant inter-correlations between the cognition subscales (Table 5.5), with only eight not being statistically significant: perceived power with perceived need, blame, agency, morality, and cognitive empathy; and similarity with perceived need, self-interest, and morality.

The correlations between the various mood states and empathy/sympathy were also examined (Table 5.4). Seven participants were removed from this analysis due to missing data. All six mood states (happy, sad, anxious, relaxed, angry, and tired) and self-esteem were not statistically significantly correlated ($p > .05$) with empathy or sympathy. Thus, the hypotheses that these mood states would correlate with empathy were not supported by the current findings. Several statistically significant correlations between these mood states and the other subscales were however observed (Table 5.5). The results suggest that greater sadness and anxiety were associated with a greater perception of similarity. Greater anger was associated with greater focus on self-interest. Finally, higher self-esteem was associated with greater perceptions of power and breaches of morality, while being associated with lesser perceptions of similarity.

[9] Maximum values of 10 have been recommended (e.g., Hair et al. 1995, Neter, Wasserman, and Kutner 1989).

Table 5.4
Relationships with Empathy and Sympathy: Correlations and Linear Regressions

	Empathy		Sympathy[a]	
Cognitions	*r*	β (*t*)	*r*	β (*t*)
Perceived Need	.43***	.24 (3.75***)	.48***	.16 (2.42*)
Blame	-.35***	.06 (0.98)	-.37***	.08 (1.18)
Self-Interest	-.33***	-.01 (0.16)	-.44***	-.16 (-2.63**)
Perceived Power	-.20**	-.05 (0.79)	-.10	.03 (0.55)
Valuing	.66***	.48 (7.73***)	.58***	.35 (5.44***)
Morality	.37***	.08 (1.14)	.48***	.20 (2.94**)
Agency	.36***	.06 (1.10)	.35***	.04 (0.68)
Cog. Empathy[a]	.43***	.12 (2.04*)	.51***	.21 (3.38**)
Similarity[b]	.36***	.20 (3.48**)	.23**	.11 (1.80)
Mood States[c]				
Happy	.06	-	.03	-
Sad	.03	-	-.01	-
Anxious	-.11	-	-.08	-
Relaxed	-.02	-	-.02	-
Angry	-.02	-	-.02	-
Tired	-.02	-	-.02	-
Self-Esteem	.07	-	.07	-

Note. Social desirability was statistically controlled for in all analyses
[a] Log10 transformed
[b] Square-root transformed
[c] $n = 170$
*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

Table 5.5
Subscale correlation matrix (controlling for social desirability scores)

	PN	Blame	SI	PP	Valuing	Morality	Agency	CE	Similar.
PN	-	-.27***	-.31***	.13	.27***	.52***	.14*	.36***	-.06
Blame	-	-	.29***	.08	-.41***	-.52***	-.36***	-.40***	-.19**
SI	-	-	-	.29***	-.35***	-.17*	-.34***	-.28***	-.10
PP	-	-	-	-	-.27**	.10	-.11	-.11	-.34***
Valuing	-	-	-	-	-	.33***	.35***	.29***	.26**
Morality	-	-	-	-	-	-	.18*	.37***	-.01
Agency	-	-	-	-	-	-	-	.29***	.29***
CE	-	-	-	-	-	-	-	-	.25**
Similarity	-	-	-	-	-	-	-	-	-
Mood States[a]									
Happy	.10	.01	-.06	.02	.04	.04	-.03	-.07	-.04
Sad	-.10	-.04	-.04	-.06	.07	.01	.11	.01	.16*
Anxious	-.14	.12	.11	-.10	-.03	-.07	.00	-.02	.16*
Relaxed	.07	-.02	-.08	.11	.02	.04	.12	-.03	-.12
Angry	-.14	.09	.24**	.15	-.06	-.03	-.09	-.03	-.04
Tired	-.05	.11	-.05	-.02	-.01	-.09	-.09	.07	-.08
Self-Esteem	.14	.00	.05	.27***	-.10	.15*	.01	.09	-.20**

Notes: "PN" = Perceived Need"; "SI" = self-interest; "PP" = perceived power; "CE" = Cognitive Empathy.
[a]$n = 170$
*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

5.6 General Discussion

A new measurement scale (the CAERS) was developed to examine the influence of a number of situation specific variables on empathic responding. This scale is unique in the fact that it measures a range of antecedents in combination, and that the factors it measures will vary according to the target and the situation. This has advantages over other scales that only measure one's trait capacity for empathy/sympathy. In Study 1 it was demonstrated that the CAERS has good face validity. As a result of Study 2 the scale was condensed to improve the internal reliability of the subscales. Study 3 demonstrated concurrent validity with the IRI, as empathy and sympathy (CAERS) correlated significantly with the empathic concern subscale of the IRI, and the CAERS cognitive empathy subscale correlated significantly with the perspective taking subscale of the IRI. The results of Study 3 also offered partial support for the hypotheses in Section 5.5.1. Specifically, the expected relationships between the nine cognitions and empathic responding were supported, but the relationships between mood and empathic responding were not.

In addition to developing the CAERS, a core purpose of this study was to examine the role various cognitions play in the empathic process. The findings of Study 3 suggest that the amount of empathy one feels towards a target is significantly predicted by the amount one values the target, perceives need in the target, understands the target's emotions, and believes that the target is similar oneself. Although the other variables (i.e., blame, self-interest, perceived power, morality, and agency) did not significantly contribute to the regression model, correlations were observed that are consistent with past research. Specifically, the results demonstrated a positive relationship between empathy and valuing (Batson et al. 2007), cognitive empathy (Batson et al. 1995, Batson et al. 2007), perceived need (Hein and Singer 2008, Lishner, Batson, and Huss 2011), morality (Schulz et al. 2013), similarity (Feshbach 1978, Stotland and Dunn 1963), and agency (Bandura et al. 1996). Negative

correlations were found between empathy and self-interest (Cohen and Hoffner 2013, van Ornum et al. 1981), perceived power (Galinsky et al. 2006), and blame (Rudolph et al. 2004).

The fact that these variables individually correlated with empathy, but were not significant when entered into the regression alongside the other variables, emphasises the need to examine these in combination. The CAERS is the first scale that allows one to do this. The current results suggest that not all antecedents are equally influential, and further research is needed to determine where any mediation effects may be present. For example, blame is often denoted to inhibit empathic responding (see Rudolph et al. 2004), but it did not significantly contribute to the regression model here, despite the statistically significant correlation. It may be that the influence of blame is mediated through another variable such as valuing or similarity, as we may dehumanise, or distance ourselves from, those who are blamed for their own misfortune (Lazarus 1994). Mediation analyses such as these are discussed in Chapter 8.

A similar picture was found with regards to sympathy. Although the results suggested that the majority of antecedents significantly correlated with sympathy (with the exception of mood and perceived power), only five of these variables significantly predicted sympathy in the regression analysis. Namely, self-interest appears to inhibit sympathy felt for the target, with the opposite being true for perceived need, valuing, morality, and cognitive empathy. It is also interesting to note that perceived power correlated with empathy, but not sympathy. It may be that any emotional independence caused by feelings of power (Côté et al. 2011) extends only to the sharing of emotions (i.e., empathy) and has no influence on feelings of concern (i.e., sympathy), which perhaps requires further research.

This study has demonstrated that differences between the antecedents of empathy and sympathy exist, further representing the novel value of this research. Not only does this finding justify the inclusion of both an empathy and sympathy subscale into the CAERS, but

it has implications for our understanding of these concepts. The results reported here suggest that empathy (i.e., the sharing of emotions) is elicited to a greater degree when one perceives the target to be in greater need, values the target more, understands the target's emotions and feels more similar to the target. However, sympathy (i.e., feelings of concern) is elicited to a greater degree when one values the target more, perceives the other to be in greater need, understands the target's emotions more, perceives a greater breach of moral codes, and when self-interest is perceived to be less important than the needs of the target. These findings not only suggest differences in the way that empathy and sympathy manifest, but may also have implications should these differences carry over to motivations for helping behaviours. These differences are rarely discussed in the literature, and suggest a greater need for research into the differences between these related concepts.

The findings relating to mood and self-esteem did not support initial predictions. Research into the influence of several of these mood states on empathic outcomes is lacking, and so perhaps the results reported here may cause us to rule out such influences. However, the results regarding anxiety are inconsistent with the results reported by Negd, Mallan, and Lipp (2011), which suggested that low anxiety participants felt significantly more empathy for the target than high anxiety participants. The results of Negd, Mallan, and Lipp's study were based upon a manipulation whereby genuine anxiety was elicited via the threat of an electric shock. Therefore, and this is perhaps true for all of the above mood variables, it may be that the CAERS was unsatisfactory in capturing the true mood of the participants. Perhaps something more sophisticated than a self-report scale is needed to properly assess the influence of pre-existing mood on empathy. Alternative methods may be required to untangle the nature of these relationships, although such investigations fall outside the scope of the current research.

5.6.1 Limitations

There are certain limitations to the current research that should be considered. Firstly, it must be noted that while this scale has been deemed to measure the cognitive *antecedents* of empathy and sympathy, the results presented here do not attest to the causal direction of these effects. Nevertheless, the results of several other studies do appear consistent with the understanding of these cognitions as being antecedents. Manipulation studies (where cognitions have been manipulated by the researcher) are able to attest to the causal effects on empathy/sympathy, and these have been demonstrated for similarity (Komeda et al. 2013), perspective taking (cognitive empathy; Batson and Ahmad 2001), perceived need (Lishner, Batson, and Huss 2011), valuing (Batson et al. 2007), blame (reviewed by Rudolph et al. 2004), perceived power (Mast, Jones, and Hall 2009) and morality (Schulz et al. 2013). One can say with some confidence, therefore, that cognitions do precede emotional outcomes, and therefore supports the notion that these cognitions may represent important targets for the enhancement of empathic responding. Nevertheless, it is of course also possible that emotional outcomes can alter cognitions as part of a feedback loop. Further testing is required to assess this notion.

Secondly, although no issues with comprehension arose from Study 1, and no further issues were brought to the researcher's attention during the course of Studies 2 and 3, it must be acknowledged that all participants here were university educated, and were in the majority young, female, and of a white British ethnic background. Further validation would be required before applying the CAERS to samples that do not match such characteristics.

Thirdly, four subscales exhibited significant correlations with the social desirability measure. Specifically, these results suggest that those who aimed to respond in a socially desirable manner indicated that they valued the target more, felt more empathy and sympathy for her, and cared less about their own self-interests. Although it would be preferable not to

see such relationships, they are in the expected direction should participants be trying to portray themselves as more caring and selfless individuals. Encouragingly, the correlation coefficients were rather small. Nevertheless, the effects of social desirability should be considered when using this scale, and will be controlled for in the following studies. Further testing is required to assess the effects of social desirability on this scale in more sensitive contexts, where such effects may be more implicative (Curwen 2003, Fazio and Olsen 2003, Hanson and Scott 1995).

5.7 Conclusions

The CAERS was developed to examine the relationships between a range of cognitions and empathic responding (meeting the second aim of this thesis). This scale demonstrates good internal reliability, and its validity is confirmed in the consistency between the current findings and past research. Using this scale, it has been demonstrated that nine situation specific variables have an impact on empathy/sympathy (relevant to the third aim of this thesis), and that differences exist between the antecedents of empathy and sympathy (despite the common merging of these terms; see Chapter 2). As each of the cognitions will vary according to the target and situation, this contributes to our understanding of empathy and sympathy as state variables. Importantly, as these cognitions have previously been dealt with in isolation, these results suggest that some cognitive antecedents have greater influences on empathic responding than others (relevant to the fourth aim of this thesis).

It is important to continue with this combined approach to gain a greater understanding of the empathic process, by identifying which of these variables have direct effects on empathy/sympathy, and where any mediation effects lie. As researchers are ultimately interested in the relationship between empathic responding and prosocial

behaviour, it is important to examine how the influence of these cognitions carries over to the latter stages of the empathic process (i.e., leading to behavioural motivations). In the next chapter, these themes will be explored, to gain a fuller understanding of how these cognitions contribute to the entire empathic process, and to demonstrate how the CAERS can be applied to foster greater understanding within a specific area of psychological interest (i.e., the antecedents of charitable donation decisions).

Chapter 6: Cognitions, Empathy, and Charitable Donations

6.1 Introduction

Charitable organisations rely on donations from members of the general public, with 43-65% of their incomes being generated from individuals (National Council for Voluntary Organisations [NCVO] 2014a). Nevertheless, in a typical month, only 55% of people donate to charities, a proportion that has remained fairly stable since 2006 (NCVO 2014b). The average donation amount in a typical month has also remained stable between 2004 and 2014 at £10 (GBP) (NCVO 2014b), despite the monetary worth of this amount decreasing due to rising inflation. Charitable need is not restricted to monetary donations. For example, data from the U.S. suggests that despite 40% of individuals needing blood donations in their lifetime, only 5% actually donate their blood (Bloodcenters.org 2007 cited in Fisher, Vandenbosch, and Antia 2008). There is a clear benefit for charitable organisations in increasing the number of people who donate, as well as the representative value of each donation. To this aim, charitable organisations spend large amounts of money on marketing materials each year (roughly $7.6 billion per year in the U.S., according to Watson 2006). The purpose of this chapter is to present novel research using the CAERS to examine how the efficacy of such materials may be improved, and to demonstrate how an understanding of the cognitive antecedents of empathic responding may be used to foster such improvements.

A common method of promoting charitable giving (defined as "the donation of money to an organization that benefits one beyond one's own family", Bekkers and Wiepking 2011a: 3) has been via the elicitation of empathy, often achieved through the use of promotional campaigns such as television advertisements. Several empirical studies have reported associations between empathy and a higher likelihood to donate (e.g., Basil,

Ridgway, and Basil 2008, Davis 1983a, Griffin et al. 1993; Mattila and Hanks 2012, Shelton and Rogers 1981, Verhaert and van den Poel 2011), and this relationship is consistent with the idea that feelings of empathy promote altruistic helping behaviours (Batson 1991).

A related, although less researched factor to empathy, is that of sympathy ("feelings of sorrow or concern for another's welfare"; Eisenberg and Miller 1987: 92), which has also been associated with helping behaviours (e.g., Batson 1991). However, as discussed in Chapter 2, conceptual understandings of empathy and sympathy have frequently become blurred in the research literature, and it is often unclear which of these concepts are being investigated, and where any unique influences lie. This lack of clarity also applies to the charitable donation literature. In addition, it is not clear where any unique influences of sympathy and empathy lie, which is important given that the results of Study 3 (see Chapter 5) demonstrated functional differences between these variables. As such, it is necessary to investigate whether evoked shared emotions (empathy) or feelings of concern (sympathy) are most important in the context of charitable donations.

It is relatively well accepted that empathy, and perhaps sympathy, promotes helping behaviours; including the donation of money or other goods to charity. However, it is less clear which specific aspects of charity fundraising campaigns are best able to evoke empathy/sympathy in their target audiences, and therefore improving the efficacy of these campaigns is made difficult. Although researchers (e.g., Griffin et al. 1993, Mattila and Hanks 2012) have suggested that charity advertisers should aim to elicit a degree of empathic responding in their audiences, little specific guidance is given for how best to achieve this. The results of Study 3 suggest that a number of cognitions about oneself and others may be suitable for this purpose, as results showed several significant relationships between these cognitions and empathic responding. Several of these cognitions have been examined under the context of charitable donations. For example, it has been reported that people are less

likely to donate when they blame the potential recipient for his/her circumstances (Griffin et al. 1993, Kogut 2011). Higher agency (when the potential donator feels that he/she has the resources available to help) also appears to encourage donations (Basil, Ridgway, and Basil 2008, Cheung and Chan 2000), and when perceptions of need are higher, the likelihood of donation also increases (see Bekkers and Wiepking 2011a).

Although some knowledge is available regarding these cognitions in relation to charitable donations, there are no published papers that examine all in combination. Accordingly, we lack an understanding as to which variables are the most important targets for charitable promotions. Using a combined approach (as utilised in Study 3; Chapter 5) will allow one to determine which variables have the greatest effect on a likelihood to donate (thus being the most efficacious target for fundraisers), and will allow one to model the process leading up to charitable donation decisions. These two issues form the main aims of the current research. Based on the above discussion (and the discussions presented in chapters 3 and 5), it is expected that some (e.g., blame, agency, and perceived need; according to the above citations), but not all, cognitions will influence the likelihood to donate, mediated at least partially by feelings of empathy and/or sympathy.

6.2 Study 4: A Study of Charitable Donation Behaviours

6.2.1 Design

This study was designed to investigate the antecedents of charitable donation behaviours. To meet the above aims, participants were asked to view and respond to a real-world charity advertisement. A correlational design was employed using the nine CAERS cognitions, the empathy and sympathy subscales of the CAERS, and a measure of donation likelihood. Social desirability and trait empathy were also measured to control for these influences. This design meets the aims of the current study as the combined approach allows

for the identification of the variables that influence charitable donation decisions to the greatest degree, therefore allowing for the development of a new model charitable donation decisions.

Data was collected online, as this provided an easier method of targeting a larger sample from a wide range of demographic backgrounds (i.e., members of the general public) that would have been otherwise more difficult to achieve via paper-based methods. Ethical approval for this study was granted by the university ethics committee (Appendix B.2), and the study conformed with the British Psychological Society's 'Ethics Guidelines for Internet-Mediated Research' (BPS 2013).

6.2.2 Participants

Eighty-three members of the general public were recruited via social networking websites and internet message boards. Members of the general public were targeted as this more accurately reflects the target audience for charities than would a sample restricted to students (i.e., charities typically target a range of demographic backgrounds). Twenty-five participants were male (30%) and 58 were female (70%), with an age range of 18-72 (M = 36.1, SD = 13.5). Most (83%) participants described themselves as white-British, 6% as 'other-white', and 11% as white-Irish, or Indian, or mixed ethnic backgrounds. A wide range of education backgrounds were captured, including 'no formal education' (2.4%), GCSE level (13.3%), A-level (9.6%), undergraduate degree level (34.9 %) and postgraduate degree level (39.8%).

6.2.3 Materials

Participants were presented with the same questionnaires as in the studies described in Chapter 5. The revised version of the CAERS was used as a measure of cognition and state empathic responding. The IRI (Davis 1980; described in Chapter 5) was included to determine whether trait (IRI) or state (CAERS) empathy has the greatest influence on

donation behaviours. The 'M-C Form C' (Reynolds 1982; described in Chapter 5) was employed as a short form measure of the Marlowe-Crowne Social Desirability Scale (Crowne and Marlowe 1960). The measure of social desirability was needed to control for positive presentation biases, as participants may have been motivated to present themselves as caring, helpful individuals. A video clip was also used as an example charity promotional material.

Video Clip. A television advertisement for a UK based charity was sourced from a popular video sharing website (available from www.youtube.com/watch?v=CK7svcKCAcQ). This video (60-seconds in length) depicts a war veteran suffering from post-traumatic stress disorder, clearly struggling to maintain a stable home life. At the end of the video, viewers are asked by the narrator to donate money in order to help war veterans suffering from post-war stress. As with the video described in Chapter 5, this video was chosen because each of the variables being measured were seen to be suitably ambiguous in relation to the man's situation; thus it was expected to glean suitably distributed results for statistical analyses, and lessen the likelihood of floor and ceiling effects.

Online Survey. The above materials were presented to participants via an online survey hosted on the 'Bristol Online Survey' website. Participants were able to respond via personal computers or tablets and submitted their responses by clicking checkboxes.

6.2.4 Procedure

The study was advertised on social networking sites and other internet message boards (i.e., forums for people interested in participating in research studies), with the aim of capturing a range of demographic backgrounds. Upon deciding that they wished to participate, participants followed a link to the online survey, and were displayed an information sheet (Appendix C.3) stating that the purpose of the study was to investigate how people's thoughts and attitudes influence how much empathy they feel, and in turn, how likely they were to

donate to charity. Participants were then required to give consent by checking a number of tick-boxes (following the format of Appendix D).

Demographic information was collected first, including a number of control variables (level of education, marital status, number of children, religiosity, level of income, donation frequency, and donation recency) identified as being possible confounds by Bekkers and Wiepking (2011b, 2012). However, preliminary analyses indicated that none of these factors seemed to significantly influence the donation likelihood variable ($p > .05$), and so were not considered further. Participants were asked next to complete the IRI to determine trait levels of empathic responding, followed by the social desirability measure to determine susceptibility to socially desirable responding.

Participants were then asked to watch the video, and immediately after were asked how likely they would choose to donate on a six point likert-type scale ranging from 'very unlikely' to 'very likely' (following a similar approach to Basil, Ridgway, and Basil 2008, Griffin et al. 1993 Mattila and Hanks 2012). A neutral option was deliberately omitted from this scale to force participants into a response as this is more reflective of real life where individuals will decide whether or not they will donate. A dichotomous (i.e., yes/no) response format was avoided as it was decided that a likert-type scale would more precisely assess how likely participants believed they would donate to the charity (gaining more insight into the strength of their decision). It should be noted that participants were fully aware that they would not actually be required to donate any money at this stage. Following these questions, participants were asked to complete the CAERS. At the end of the study they were thanked and debriefed as to the full nature and aims of the study (Appendix E.2).

6.2.5 Results

As can be seen in Table 6.1, all CAERS and IRI subscales achieved strong internal reliability (α = .80-.90). Perceived Need scores were strongly negatively skewed (implying

ceiling effects) and so a Log10 transform was applied to this variable. Several subscales significantly correlated with the social desirability measure (Table 6.1). It was therefore necessary to control for socially desirable responding in the subsequent regressions. As described in Chapter 5, statistical controls were used in favour of removing high-scoring participants to avoid the reductions in power associated with smaller sample sizes.

Table 6.1
Subscale averages, ranges, internal reliabilities, and social desirability correlates

Subscale	*M (SD)*	Range	Cronbach's α	Correlation with SDS (*r*)
Donation Likelihood	3.49 (1.35)	1.0-6.0	-	.22*
CAERS Subscales				
Self-Interest	2.47 (0.57)	1.1-3.9	.80	-.16
Agency	2.51 (0.68)	1.0-4.1	.88	.11
Morality	3.61 (0.68)	1.5-5.0	.84	.11
Perceived Power	3.58 (0.58)	2.5-5.0	.81	.13
Cognitive E.	4.14 (0.56)	2.6-5.0	.86	.34**
Perceived Need[a]	0.32 (0.12)	0.0-0.5	.82	.14
Similarity	2.22 (0.61)	1.0-3.5	.87	-.03
Valuing	3.87 (0.54)	2.4-5.0	.83	.17
Blame	2.21 (0.79)	1.0-4.8	.90	-.36**
Empathy	3.74 (0.82)	1.5-5.0	.88	.15
Sympathy	3.98 (0.63)	2.0-5.0	.82	.28*
IRI Subscales				
Fantasy	3.36 (0.79)	1.1-5.0	.82	-.06
Empathic Concern	3.86 (0.69)	1.3-4.9	.82	.37**
Perspective Taking	3.70 (0.68)	1.6-4.9	.84	.49**
Personal Distress	2.50 (0.76)	1.1-4.9	.87	-.26*

Note. "SDS" = Social desirability scale.
[a] Log10 transformed. Untransformed mean was 4.50 (*SD* = 0.46).
*$p < .05$; **$p < .01$

The antecedents of empathy and sympathy. Analyses were first conducted to determine whether the CAERS cognitions, along with trait empathic capacities, had an influence on empathic responding. Two linear regressions were performed, entering empathy

and then sympathy as the dependent variables. Durbin-Watson statistics were acceptable for the empathy (d = 1.9) and sympathy (d = 2.1) regressions. VIF values for both tests ranged between 1.00-2.80; indicating acceptable multicolinearity. Variables were entered in three blocks. Social desirability scores were entered into the first block to control for this bias. The IRI subscales were entered into the second block. CAERS subscales were entered into the third block to examine the influence of these state cognitions above and beyond trait capacities for empathy/sympathy. The results of these regressions can be found in Table 6.2.

Table 6.2
Empathy and Sympathy regression

	Empathy				Sympathy			
	β	*t*	ΔR2	F_{change}	*β*	*t*	ΔR2	F_{change}
Block 1			.02	1.85			.08	6.68*
SDS	.15	1.36			.28	2.58*		
Block 2			.41	13.94***			.27	8.08***
Fantasy	.10	1.04			.00	0.04		
Emp. Concern	.49	4.12***			.43	3.39***		
Persp. Taking	.23	1.76			.19	1.39		
Pers. Distress	.00	0.02			-.02	-0.23		
Block 3			.30	8.30***			.30	6.57***
Self-Interest	.01	0.14			-.02	-0.18		
Agency	.18	2.46*			.07	0.90		
Morality	.28	3.34**			.12	1.21		
Perceived Power	-.03	0.37			-.05	-0.62		
Cognitive E.	.04	0.40			.18	1.53		
Perceived Need[a]	.11	1.16			.15	1.45		
Similarity	.03	0.46			-.12	-1.45		
Valuing	.38	3.59***			.39	3.26***		
Blame	.06	0.63			.00	0.03		

Note. "SDS" = Social desirability scale.
[a] Log10 transformed
*p < .05; **p < .01; ***p < .001

In the empathy regression, only blocks 2 and 3 significantly contributed to the model (overall adjusted R^2 = .67), indicating no significant influence of social desirability. Of the IRI subscales, only Empathic Concern (EC) made a significant contribution to the model, indicating that participants with the greatest trait EC felt more empathy towards the target in

the current context. Three CAERS subscales significantly contributed to the model, indicating that context specific cognitions explained a significant proportion of empathic variance after controlling for trait capacities. Specifically, the results suggest that empathy was felt to a greater degree when participants perceived a greater breach of moral codes, perceived a greater ability to change the target's circumstances (agency), and valued the target to a greater degree.

With respect to sympathy, all 3 blocks made a significant contribution to the model (overall adjusted R^2 = .58). Firstly, the results suggested that the more participants wished to portray themselves in a favourable light, the more they indicated that they felt sympathy for the target. Similar to the empathy regression, trait EC significantly predicted feelings of sympathy in this context. In Block 3, only valuing made a significant contribution to the model, suggesting that the more a participant valued the target, the more sympathy that participant felt.

The antecedents of charitable donation decisions. Next, analyses were conducted to determine whether cognitions and emotions were able to predict the likelihood of donating to this charity (Table 6.3). Variables were entered in 4 blocks, with each block making a significant contribution to the model ($p < .05$; overall adjusted R^2 = .40). Durbin-Watson (d = 1.9) and collinearity statistics (VIF = 1.00-3.52) were in agreement with test assumptions. Social desirability was significant in Block 1, affirming the need to control for this influence. The IRI variables were entered into Block 2. Both EC and personal distress (PD) significantly contributed to the model, suggesting that those with higher trait EC, and lower susceptibility to becoming distressed, were more likely to donate. In Block 3, only empathy significantly predicted donation likelihood, indicating that the more empathy participants felt for this target, the more likely they were to donate. The cognitions were entered into Block 4 in order to identify any direct influences on donation behaviours that were not otherwise explained by

a mediation through emotional responses (i.e., empathy). Such direct effects were implied for two cognitions. As blame increased donation likelihood decreased. The positive influence of agency on donation likelihood was marginally outside the threshold for significance (p = .07). Given the uncertainty of this result (and the number of variables included in the regression), agency was retained in the path analysis to follow.

Table 6.3
Donation likelihood regression

	Donation Likelihood				
	β	95% CI	t	ΔR2	F_{change}
Block 1				.05	4.05*
SDS	.22	.00 < .43	2.01*		
Block 2				.21	5.51**
Fantasy	-.06	-.28 < .16	-1.56		
Empathic Concern	.35	.08 < .62	2.57*		
Perspective Taking	.13	-.16 < .43	0.91		
Personal Distress	-.24	-.45 < -.02	-2.20*		
Block 3				.08	4.60*
Empathy	.39	.07 < .70	2.45*		
Sympathy	-.01	-.30 < .28	-0.09		
Block 4				.17	2.49*
Self-Interest	-.09	-.30 < .12	-0.86		
Agency	.19	-.02 < .40	1.84†		
Morality	-.09	-.34 < .16	-0.74		
Perceived Power	.09	-.11 < .28	0.85		
Cognitive E.	-.12	-.41 < .16	-0.87		
Perceived Need[a]	.06	-.19 < .31	0.48		
Similarity	.16	-.04 < .36	1.60		
Valuing	-.02	-.34 < .30	-0.09		
Blame	-.37	-.60 < -.13	-3.06**		

Note. "SDS" = Social desirability scale.
[a] Log10 transformed
*p<.05; **p<.01; †p = .07

Path analysis of the charitable donation model. Based on these findings, a provisional model of the process leading to donation decisions was developed. Variables that did not contribute to either regression model (i.e., in Tables 6.2 and 6.3) were excluded to encourage good model fit. In order to test this model, a path analysis was conducted using a maximum-likelihood procedure. Variables were ordered in three stages based upon theoretical assumptions. Stage 1 was the IRI and CAERS subscales (i.e., the antecedents of empathy). Stage 2 was empathy. Stage 3 was donation likelihood (i.e., the final donation decision). All possible paths were examined (excluding backwards paths between stages). This initial model showed poor model fit according to the Root Mean Square Error of Approximation (RMSEA) index (= 0.33), and so path trimming was employed, removing all non-significant ($p > .05$) paths from the model. Analyses were re-run using this new model, which showed better fit. Values above .95 for the Non-Normed Fit Index (.99), the Goodness of Fit Index (.97), and the Comparative Fit Index (.99), suggested a very good model fit (Hu and Bentler 1999, Schumaker and Lomax 1996). Similarly, an RMSEA value of .04 indicated good model fit according to MacCallum, Browne, and Sugawara (1996) and Hu and Bentler (1999).

The final model, including the standardised regression coefficients can be found in Figure 6.1. All paths shown are significant to $p < .05$ or less, and the results suggested that 44% of the variance in donation likelihood can be explained by the variables within the model. As can be seen in Figure 6.1, blame and trait personal distress appeared to have direct influences on a likelihood to donate; the influence of agency was partially mediated through feelings of empathy; and the influences of valuing, morality, and trait empathic concern, appeared to be fully mediated through feelings of empathy.

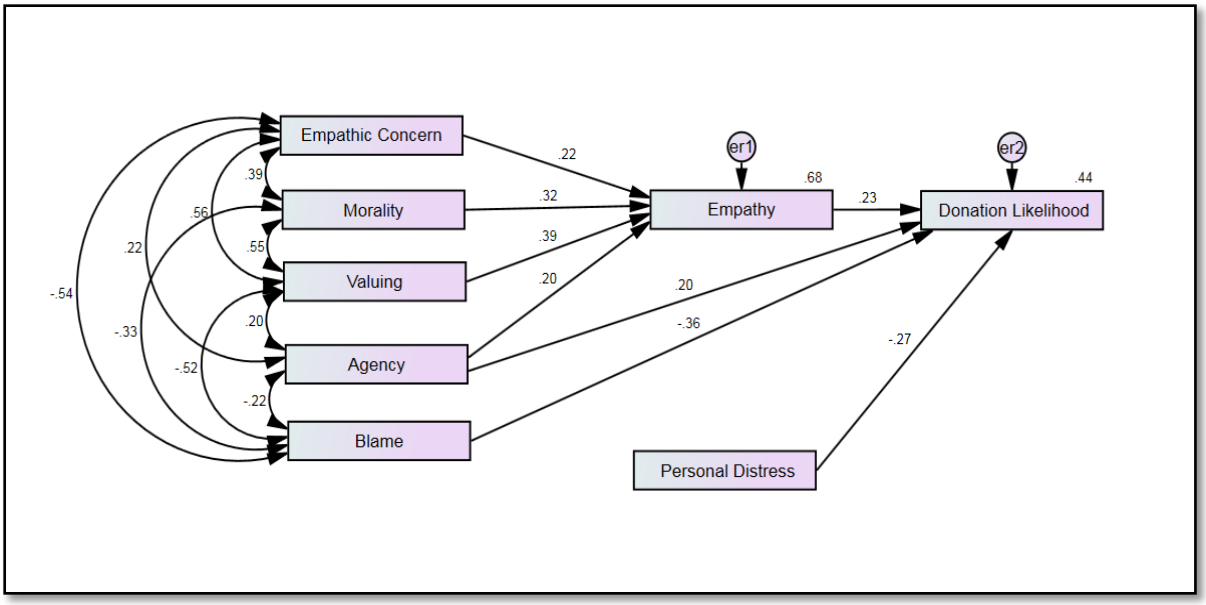

Figure 6.1. Trimmed model of the influences on donation likelihood. Values indicate standardised regression coefficients. All paths were significant (p<.05).

6.3 Discussion

The results presented here offer novel findings regarding the cognitive and affective antecedents of charitable donation behaviours, and demonstrate how the current research can be used to improve our understanding of the empathic process in a specific field of interest. The results of the path analysis suggested that individuals may be more likely to donate when they experience greater levels of empathy and agency, with empathy being enhanced via morality, valuing, agency, and trait empathic concern. Conversely, individuals may be less likely to donate when they blame the target and have higher levels of trait personal distress. These results demonstrate that perceptions of individuals depicted in charity advertisements have a significant influence on the likelihood to donate to that charity (either directly or indirectly through empathy). These findings are therefore consistent with discussions presented in earlier chapters regarding the importance of considering state factors in addition to trait capacities for empathy. The regressions and path analyses have allowed for the

identification of those cognitions that have the greatest effects on donation behaviours, which has obvious implications for those involved with income generation and the development of promotional materials for charitable organisations. Accordingly, the following suggestions can be made.

First and foremost, charities should avoid eliciting any notions of target blame, as this appeared to have the largest direct (negative) effect on a likelihood to donate. This is consistent with previous research demonstrating a negative relationship between blaming and donation behaviours (e.g., Griffin et al. 1993, Eveland and Crutchfield 2007). Certain appeals may be particularly susceptible to blaming, such as those targeting the homeless, alcoholics, or people with AIDS (Griffin et al. 1993). For example, based on their findings, Eveland and Crutchfield (2007) advised AIDS charities to be mindful of notions of promiscuity and drug use, as these factors might engender feelings of blame in potential donators (which may lead to feelings of anger rather than empathy; Rudolph et al. 2004). Eveland and Crutchfield's findings differ somewhat from the current results in that they found an impact of blame on empathy, but are nevertheless in agreement with the conclusion that blame is damaging to income generation.

The results presented here also suggest a direct negative influence of trait personal distress on likelihood to donate, indicating that those more prone to becoming distressed during emotional encounters were less likely to donate. Further research is required to fully explain this relationship as actual levels of distress experienced during the study were not measured here. Nevertheless, the current findings are consistent with the empathy literature, in that feelings of personal distress are more likely to motivate egocentric (e.g., escape) behaviours, rather than altruistic (i.e., helping) behaviours (Batson, Fultz, and Schoenrade 1987). For example, Cameron and Payne (2011) provided evidence to suggest that people can engage in emotional 'down-regulation' to avoid the experience of distress when faced with

overwhelming appeals. As such, charities should avoid overly emotional appeals that might cause distress. Future research is needed to determine the threshold at which avoidance may occur.

The elicitation of empathy also seems to have a direct influence on donation behaviours; a finding commonly reported in the literature (e.g., Basil, Ridgway, and Basil 2008, Davis 1983b, Einholf, Philbrick, and Slay 2013, Mattila et al. 2012, Verheart and van den Pool 2011), and consistent with the empathy-altruism literature (e.g., Batson 1991). The current results are inconsistent, however, with the suggestion that the effects of empathy on helping behaviours are mediated through feelings of sympathy (See Chapter 3; e.g., de Vignemont and Singer 2006, Eisenberg et al. 1994, Lishner, Batson, and Huss 2011); instead suggesting that it is important to evoke emotions similar to that perceived in the target (e.g., sadness, resulting in empathy) rather than feelings of concern (sympathy). Unsurprisingly, state empathy was partially determined by trait empathic concern, suggesting that those with a greater tendency towards empathy were more likely to feel empathy for this target.

The model presented in Figure 6.1 can be used to determine how best to evoke empathy in target audiences (representing an important novel contribution of this research): by appealing to an individual's sense of valuing, morality, and agency. The strongest influence on empathy was that of valuing. The more that the participants liked / cared about the target, the more empathy was elicited; a finding consistent with previous research (e.g., Batson et al. 2007). This suggests the need to present targets as being likable individuals, worthy of another's donation. For example, one way in which advertisers can achieve this is via the 'identifiable victim effect'. When charities utilise a 'poster child', they are able to generate greater incomes than when focussing on the suffering of whole populations (e.g., Kogut 2011, Slovic 2007, Small, Loewenstein, and Slovic 2007, Västfjäll et al. 2014). As discussed by Small, Loewenstein, and Slovic (2007: 144), people tend to value lives based on

proportions rather than absolute numbers of lives, so that "ten deaths out of many million is merely a drop in the bucket". By focussing on the suffering of one individual, every person in that reference group (i.e., 100% of a group of one) is suffering. The increase in valuing achieved by this 'individual' focus results in the greater elicitation of empathy, and consequently a greater likelihood of donation (Small, Loewenstein, and Slovic 2007).

A significant positive relationship between morality and empathy was also found, indicating the more a participant believed that what had happened to the target was morally wrong, the more empathy the participant felt for the target. Although there have been several studies examining the influence of a moral obligation to donate (i.e., trait morality) on charitable donation behaviours (see Bekkers and Wiepking 2011a), no studies appear to have examined the impact of context specific breaches of personal morals on a likelihood to donate to a specific charity. Further research is therefore needed to confirm these findings. Charity advertisers may seek to promote ideas of moral injustice during the development of promotional materials. However, as Batson, Ahmad, and Tsang (2002) noted, such moral codes may be easily sidestepped by viewers when it suits them best.

The final influential factor to discuss is that of agency. The current results suggest that the more one feels able to make a difference with donations, the more likely one is to donate (see Bekkers and Wiepking 2011a). It may be that an ability to help others serves to elicit feelings of anticipatory guilt should one not choose to donate, and by donating one is able to avoid such guilt (Basil, Ridgway and Basil 2008). This effect is partially mediated through empathy, whereby greater agency appears to elicit greater feelings of empathy. The current results suggest that charity advertisers should make potential donors aware of how a donation (of a manageable amount) will make a difference to the target. Many charities already take this approach (e.g., "for less than a cup of coffee per day you can help save a needy child"; Basil, Ridgway, and Basil 2008: 8). This also means that donors should be satisfied that their

donations are being suitably received by the target. As Bekkers and Wiepking (2011a) cautioned, charities should avoid 'flashy' fundraising methods that may give observers the impression that their money is not being spent wisely. For example, Bekkers and Crutzen (2007) demonstrated a reduction in monetary donations when using such methods.

6.3.1 Limitations

As is the case with most research in this area, the use of post-hoc self-report methods may have affected the external validity of the current study. In a real world donation decision it is unlikely that individuals will stop and reflect upon their specific thoughts towards the individuals depicted in a charity advert; at least not to the same degree as was expected here. Rather, such decisions may be largely based upon gut feelings or instincts (e.g., Small, Loewenstein, and Slovic 2007). Although participants' donation decisions were likely unaffected by thorough introspection (as this decision was made before completing the CAERS), their reporting of emotions and cognitions may have been affected, as thinking about one's own emotions may be sufficient to change them (see Lieberman 2007). Furthermore, it is possible that whether participants decided to donate or not may have influenced the cognitions that they subsequently reported. Further research is required to determine the extent of any differences between automatic and deliberative emotions/cognitions, and what implications these might have for charitable donation behaviours.

Another limitation of the current study relates to the interpretation of the results for perceived need and self-interest. Firstly, the video employed here seemed to have elicited a ceiling effect with regards to perceived need, implying that the emotional needs of the man in the video were obvious to the participants (i.e., the video was too effective in eliciting perceptions on need). Although the data transformation granted more appropriately distributed data, this may nevertheless limit the interpretability of this data. With regards to

self-interest, participants in the current study were aware of the fact that they would not actually be donating money to this charity, and so the potential loss of self-interest (i.e., giving away money) was only imagined. This might mean that participants did not make the same cost-benefit analyses as if money were to actually change hands. Given these limitations, further research is required to determine whether the relationships reported here can be replicated when the target's needs are more ambiguous and when participants are faced with the actual 'loss' of money. These limitations form the rationale for the following study (see Chapter 7).

It is also possible that a lack of power in the current study may have resulted in type II errors for some of the variables investigated here. Due to time constraints and a lack of participant interest, the obtained sample size (n = 83) was less than that suggested by a-priori sample size calculations (n = 114; based upon $\alpha = .05$; power = .80; $f^2 = .15$[10]). Although still useful in determining the largest influences on empathic responding / donation decisions, the existence of type II errors (i.e., false-negative results) might affect our interpretation of those antecedents not exhibiting statistically significant influences. This shall therefore also be examined in the following chapter (i.e., Study 5).

Finally, although efforts were made to capture a range of demographic backgrounds, it should be noted that this sample were largely white British and educated to degree level. Further research would be needed to confirm whether the relationships outlined in the donation decision model (i.e., Figure 6.1) remain the same in other populations.

6.4 Conclusions

This chapter has demonstrated how the cognitive antecedents of empathy can be used in an applied field to enhance empathic responding towards a target in need. The results of Study 4

[10] Deemed a medium effect size by Cohen (1988).

have allowed for more specific suggestions to be made to charity advertisers wishing to elicit empathy in their audiences. Based on these results, it can be concluded that in order to maximise an individual's likelihood to donate to a particular organisation, charity advertisers should present the target of their appeal as being blameless, while also evoking a degree of emotionality through appealing to a donator's senses of agency, morality, and valuing. This is the first study to examine a large range of cognitive antecedents in such a way, and this has allowed for the identification of the most influential cognitive antecedents, and a model of the donation decision process has been developed. Continued investigation into how individuals arrive at such decisions will allow us to effectuate continued improvements to charity marketing strategies, allowing for the maximisation of income generation for those who need it most.

Chapter 7: The Trade-Off Between Self-Interest and Perceived Need in Helping Situations

7.1 Introduction

It was interesting to note in the previous chapter that neither perceived need nor self-interest contributed to the helping decision model. This finding is inconsistent with popular understanding, and therefore warrants further investigation. For example, Hills (2001: 55) has deemed self-interest to be "a fundamental consideration that cannot be overlooked where empathy is concerned", and the role of perceived need has been deemed "obvious and uncontroversial" by Batson et al. (2007). As empathy researchers are ultimately interested in behavioural implications of empathic processes (at least in most cases), it is important to further investigate these issues so that we can gain a better understanding of how these variables (i.e., self-interest, perceived need, and empathic responding) interact within the empathic process as a whole, leading to the development of prosocial motivations.

There are three possibilities that may explain the findings reported in Study 4 (Chapter 6). Firstly, it is possible that perceived need and self-interest may indeed have no relationship with helping behaviours. Secondly, it may be that Study 4 lacked the power to detect a statistically significant influence of perceived need and self-interest on the helping decision. An examination of the effect size estimates (Table 6.3) suggested this to be unlikely, given that the confidence intervals (95% CI for β) comfortably surrounded the null effect (i.e., 0) for both self-interest (-.30 < .12) and perceived need (-.19 < .31), but is nevertheless a possibility given the wide estimates. Given the small overlap with zero, these confidence intervals also indicate a possible type II error with regards to the relationship between perceived need and empathy (-.07 < .28), and so an indirect influence on helping

may have been missed. This was less likely for self-interest (-.14 < .16), which more comfortably surrounded the null effect. A third possibility (discussed in Section 6.3.1) is that certain aspects of Study 4 limited the impact of self-interest and perceived need on decision making, as participants were fully aware that they would not actually be required to give any money away, and ceiling effects were observed for perceived need, possibly due to the stimulus employed. Because of these issues, the same cost-benefits analyses (i.e., the weighing up of own-versus-other needs) that would have occurred within a real-world behavioural response might not have occurred. A study where participants are faced with more ambiguous needs, and a more genuine element of self-interest, may yield different results. This hypothesis forms the rationale for the study outlined in the current chapter. Before presenting Study 5, the relationship between self-interest, perceived need, and empathic responding shall be discussed in more detail, to further support the claim that relationships are expected between these variables.

7.1.1 Self-interest, perceived need, and empathic responding

Gerbasi and Prentice (2013: 496) defined self-interest as "the pursuit of gains in socially valued domains, including material goods, social status, recognition, academic or occupational achievement, and happiness", and stated that "other motives (e.g., altruism, conformity) are taken seriously if, and only if, they account for additional variance in behaviour above and beyond self-interest." (p.495). It is therefore important to fully determine the effects of self-interest on empathic responding and prosocial behaviours. As noted in Chapter 3, altruistic responding can be disrupted when such a response would go against self-interest (Walker and Brown 2013), and an over-focus on self-interest (rather than another person's needs) can promote aggressive behaviour, where such behaviours are instrumental to achieving one's goals (Arsenio and Lemerise 2001, Ward and Durrant 2013). Relevant to Study 4, Cameron and Payne's (2011) results suggested that as the financial and

emotional costs of charitable donations increase, the more people are motivated to avoid empathic responding.

The relationship between self-interest, empathy, and helping behaviours has been demonstrated in the research literature, which is why the non-significant influence of self-interest in Study 4 was an unexpected result. For example, Wang et al. (2014) found that self-interest was the primary concern in a competition task, and took priority over consideration of the outcomes for another person. Van Ornum et al. (1981) reported that those with a history of helping others scored higher on an empathy questionnaire than those with a history of self-interest. Additionally, Cohen and Hoffner (2013) reported results suggesting the importance of self-interest. Specifically, perceived self-risks (e.g., body disfigurement) and self-benefits (e.g., pride) significantly predicted the intention to sign an organ donor card, while benefits to the recipient (e.g., increasing chance of survival) did not predict a likelihood to donate.

A prominent view among psychologists, therefore, is that individuals are likely to act with self-interest in mind (Gerbasi and Prentice 2013, van Lange et al. 2006). However, there are situations where individuals can reject this self-interest to act in an altruistic manner. For example, Batson and Ahmad (2001) reported that participants were willing to sacrifice their own raffle tickets to cheer up another person in need, when they felt empathy for that person. As Batson and Ahmad noted, this behaviour makes no sense from a rational choice theory point of view (i.e., meeting one's own financial needs), but is better explained by the consideration of other individuals' needs as in the empathy-altruism hypothesis (Batson 1991). One may also argue that this might be explained by the negative state relief model (attending to another's needs to remove one's own personal distress; e.g., Cialdini et al. 1987). Several studies have demonstrated that as perceived need increases, so does empathic

responding (e.g., Avenanti et al. 2006, Lishner, Batson, and Huss 2011, Saarela et al. 2007); which in turn can promote altruistic behaviours (e.g., Batson et al. 2007).

The above suggests then that when an individual encounters a situation where another person is in need of help, that individual is faced with a dilemma: to prioritise one's own needs and act selfishly, or to prioritise the other person's needs and act selflessly. In his motivational model of empathy, Zaki (2014) implied that the resolution of this dilemma can either push individuals towards an empathic response (attending to perceived need) or towards an indifferent emotional response (attending to self-interest). However, research is lacking into how these variables interact to promote or inhibit empathic responding and/or helping behaviours. In fact, only two studies appear to attempt this, and these have conflicting findings: Cohen and Hoffner (2013) reported that self-interest, but not other-interest (loosely equating to perceived need), predicted helping decisions, while Gerbasi and Prentice (2013) reported that both variables predicted helping behaviours.

Certain limitations to the above studies (i.e., Cohen and Hoffner 2013, Gerbasi and Prentice 2013) also warrant further investigation. Firstly, limited attention was paid to the interaction between self-interest and perceived need, and the effect of this interaction on empathic responding and helping behaviours. Secondly, the scale developed by Gerbasi and Prentice (2013) was a trait measure, examining individual tendencies to pursue self or other-interests. As is the running theme in this thesis, researchers should also focus on understanding how these factors interact within a specific situation. Thirdly, empathic responding was either not measured (Gerbasi and Prentice 2013) or measured only as a trait variable (Cohen and Hoffner 2013); again offering little insight into the impact on empathic responding within a given situation. Given these issues, and the limitations of Study 4, variables deemed 'fundamental' and 'obvious' certainly deserve more thorough investigation.

7.2 Study 5: One-Trial Prisoner's Dilemma

7.2.1 Aims

The factors contributing to empathy-related helping decisions need to be more fully investigated. The aims of this study were therefore as follows: i) to present a more focussed (and therefore more powerful) study to examine the possibility of false negative results reported in Study 4; ii) to examine whether the introduction of ambiguous needs and a genuine element of self-interest changes the nature of the helping decision model (i.e., Figure 6.1); and iii) to further investigate the interaction between cognitions (especially perceived need and self-interest), empathic responding, and the generation of helping decisions. This study addressed the limitations of prior research (discussed on the previous page) by more fully examining how self-interest and perceived need interact within a specific empathic helping situation (i.e., as state, not trait, variables), and by examining how cognition and empathic responding contribute to the generation of helping decisions.

7.2.2 Design

In order to meet the above aims, the one-trial prisoner's dilemma method adapted by Batson and Ahmad (2001) was employed. In this procedure, participants believed that they were competing for raffle tickets with another (actually fictional) participant, thus introducing a more genuine element of self-interest. This method was appropriate as the deception allowed the researcher to more tightly control the events experienced by the participant (i.e., each participant was faced with the exact same information and same decisions), while allowing for the measurement of cognition / empathy towards a specific target. This procedure also uses a written communication as a stimulus for empathy, presumably being a less powerful stimulus than the video used in Study 4 (lessening the likelihood of the ceiling effects that occurred in Study 4). Competing for raffle tickets allows for the introduction of a

genuine element of self-interest when there is no funding available for the use of actual money (as was the case here).

An independent measures design was employed, wherein participants were randomly assigned to either a low self-interest or high self-interest condition, by offering tickets to a prize draw of different amounts (£5 or £50 respectively; although for fairness, all participants were ultimately entered into a raffle for £55, following the debrief). This manipulation, as well as the measures used (described below), reflects the only difference from the methodology employed by Batson and Ahmad (2001), and served to introduce a real element of self-interest (addressing the main limitation of Study 4). There were 14 dependent variables in the current study: Nine cognitive antecedents of empathy; four trait empathy subscales; and a social desirability scale. Ethical approval for this study was granted by the university ethics committee, and the study conformed with the British Psychological Society 'Code of Human Research Ethics' (BPS 2010).

7.2.3 Participants

One hundred and eleven undergraduate students were recruited via the university research scheme in exchange for 'research credits' (psychology students at the university are required to accumulate a number of credits per year, earned by participating in research studies). However, 11 of these were excluded after they expressed beliefs that the fictional participant did not exist (participants were asked if they had any suspicions about the nature of the study before being debriefed). Students were recruited in this study as they were more readily available to the researcher than members of the general public. To avoid a small sample size (a limitation of Study 4), it was deemed sensible to recruit a student sample in this instance. Only female students were recruited so that the CAERS and the written communication (supposedly from the fictional participant) could be made specific to a female target, as participants may have become suspicious if these materials seemed too tailored to

the fabricated situation. Ages ranged between 18-34 years (M = 20, SD = 2.33). Participants' ethnicities were as follows: 22% white British, 19% white non-British, 20% Indian, and 19% black. The remaining 20% were of other Asian and mixed ethnic backgrounds.

7.2.4 Materials

The same measures were used as described previously (see Chapter 5 for descriptions of these scales). Specifically, the CAERS was used to measure state cognitions and empathic responding; the IRI was used as a measure of trait empathic capacities; and the M-C Form C was used as a social desirability measure.

Sender's Note [Appendix F]. A written communication, developed by Batson and Ahmad (2001), was used as the emotional stimulus in the current study in order to evoke empathy / sympathy in the participants. Appropriately, this note is a less powerful stimulus than the video used in Study 4, thus being less prone to perceived need ceiling effects. The note was hand written by a female colleague to give the impression that it had been written by a fictional female student that the participants had been paired up with in the study (henceforth referred to as the 'partner'). It described how the partner had recently experienced an upsetting break-up with her boyfriend, and that she has been feeling down. This note has been shown to evoke empathy and perceived need in those who read it (Batson and Ahmad 2001), and was adapted for the current study to make it more suitable for a British population (e.g., American colloquialisms were changed to British).

Initial Self-Interest (ISI). A three-item scale was developed to measure how important the £5 / £50 prize was to the participants. It was assumed that participants would believe that £50 was more important to them than £5. This scale exhibited good internal reliability (α = .81). The three items were "this amount of money is important to me", "I really want to win this prize", and "I don't care about this amount of money" (reverse scored).

7.2.5 Procedure

The procedure used was largely based upon the methodology developed by Batson and Ahmad (2001), and a summary can be found in Figure 7.1 at the end of this section. The study was advertised on the university's research participation website, where students were able to express an interest to participate, and sign up to a timeslot for the study. Upon entering the room, participants were informed (via an information sheet; Appendix C.4) that the purpose of the study was to investigate the effects of four factors (the balance of initial resources; whether participants could choose to donate or not; whether the exchange was simultaneous or one after another; and whether participants met their partner face-to-face) on reactions to the exchange of goods. They were also told that they had been paired up with another anonymous participant (actually fictitious), with their partner being met in another room. This deception was required so that participants did not know the true nature of the study. Participants were also informed that they would be competing with their partner for tickets to either a £5 or £50 prize (each participant was randomly allocated to a condition, and was unaware of the other condition). After reading the information sheet, participants gave consent (Appendix D), provided demographic information, and completed the ISI, IRI, and social desirability measure.

Once the above questionnaires had been completed, participants were given instructions for the one-trial prisoner's dilemma procedure adapted by Batson and Ahmad (2001). This instruction sheet can be found in Appendix G. Participants were told that in this condition they would not meet their partner face-to-face but would receive written communication from them (i.e., the sender's note). Participants were told that they were in the 'receiver' condition, and so would not be required to write a note themselves. Participants were given three blue cards indicating a number of tickets that they would receive towards a prize draw ('+5'; '+5'; & '-5'). They were told that their partner had the same number of

tickets (red cards), and that they would be required to exchange one token with their partner, with their partner making the first move. Participants were given a tabulated form of the possible outcomes for both themselves and their partner (Table 7.1).

Table 7.1
Outcome possibilities for participants and their imaginary partner

Participant		Partner	
Final Tokens held	Tickets for prize draw	Final Tokens held	Tickets for prize draw
+5 +5 +5	25 Tickets	+5 +5 +5	25 Tickets
+5 +5 -5	5 Tickets	+5 +5 -5	5 Tickets
+5 -5 +5	15 Tickets	+5 -5 +5	15 Tickets
+5 -5 -5	0 Tickets	+5 -5 -5	0 Tickets

Notes: A red+5 / blue+5 combination yields 20 instead of 10 tickets. This procedure was developed by Batson and Ahmad (2001) to match the standard prisoner's dilemma payoffs. If one person ended with a negative value, that person received 0 tickets for the prize.

While participants were reading the instruction sheet, they were left alone for approximately three minutes. This was to allow them enough time to read the instructions, and to give them the impression that the researcher was talking to the other participant in another room. Once the researcher returned, participants were given more time to finish reading the instruction sheet if required. Questions were answered when necessary, but verbal instructions were kept to a minimum to avoid biasing participants' decisions.

Once the instructions had been read and understood, participants were asked to read the sender's note. A message at the top of the page explained that the partner wrote this note before learning about the nature of the study. This was so the participant did not believe that the partner was simply attempting to influence her decision with a negative story. Once participants had read the note they were asked to look at the token they had been given, which was always a red '-5' card, and were asked to put one of their own blue cards in the envelope (the researcher looked away while participants were making their choice. This was to reduce social desirability and demand effects). Participants could either choose to give away a '-5' card, which would mean that both parties ended with 5 tickets, or they could choose to give away a '+5' card, which would mean that the participant ended with 0 tickets and their partner ended with 25. In essence, giving a '-5' card is more indicative of a response consistent with self-interest (the participant retains the maximum amount of tickets possible), while giving away a '+5' card is more indicative of a helpful response that is inconsistent with self-interest (the participant sacrifices all their tokens to maximise the chances of the partner). Like Batson and Ahmad (2001), it was assumed that participants would think that the '+5' card would be perceived as a positive outcome by the partner, while the '-5' card would not.

After making their choice, participants were asked to complete the CAERS. So that the generally negative-focussed content of the CAERS (e.g., "she is upset") did not raise suspicions, participants were verbally informed that their partner had told the researcher that she had written about a negative event. Once participants had completed the CAERS, they were asked whether they had any suspicions about the nature of the study. This was to assess whether they had any doubts about the existence of the fictional participant (11 did express such doubts and were excluded from the following analyses). Finally, participants were fully debriefed about the true nature of the study (Appendix E.3), and were informed that they

would receive one ticket to a £55 prize draw, irrespective of the choice made. Once the study was complete, one participant was drawn at random to receive the prize. For clarity, a process tree of the overall procedure can be found in Figure 7.1.

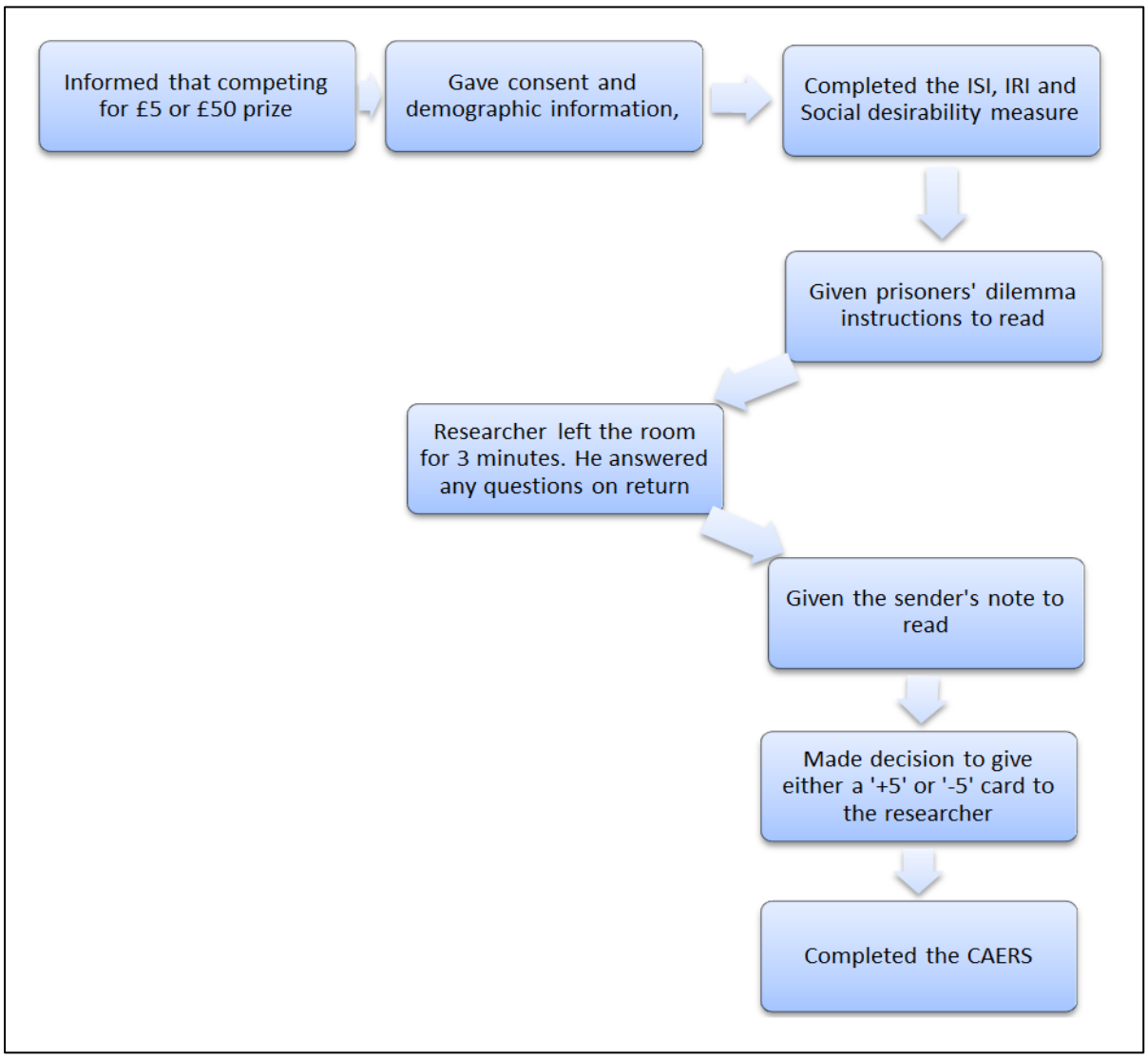

Figure 7.1. Process tree of the procedure (from the participants' point of view).

7.2.6 Results

The perceived need subscale was normally distributed, with an appropriate midpoint (M = 3.50, SD = 0.36), thus avoiding the ceiling effects observed in Study 4. All other variables were normally distributed, and achieved good internal reliability (Table 7.2). The

social desirability measure did not significantly correlate with any other variable used within the following analyses (Table 7.2), disaffirming the need to control for self-presentation biases in this instance. Similarly, initial analyses indicated that IRI variables had no relationship with the helping decision variable ($p > .05$). To avoid complicating the regression models, and to increase statistical power (thus addressing the first aim of this study), these variables were excluded from the following analyses.

Table 7.2
Subscale averages, ranges, internal reliabilities, and social desirability correlates

Subscale	*M (SD)*	Range	Cronbach's α	Correlation with SDS (r)[a]
Initial self-interest	3.57 (0.91)	1.0-5.00	.81	-.16
CAERS Subscales				
Self-Interest	2.58 (0.82)	1.00-4.75	.88	-.10
Agency	1.93 (0.74)	1.00-4.00	.75	.19
Morality	3.20 (0.72)	1.50-5.00	.72	-.14
Perceived Power	3.75 (0.67)	1.50-5.00	.85	-.04
Cognitive E.	4.04 (0.58)	2.00-5.00	.81	.05
Perceived Need	3.50 (0.36)	2.00-4.00	.70	-.01
Similarity	2.61 (1.00)	1.00-5.00	.94	-.03
Valuing	3.52 (0.62)	1.50-5.00	.81	.07
Blame	1.79 (0.58)	1.00-3.00	.83	.14
Empathy	3.51 (0.79)	1.75-5.00	.81	.15
Sympathy	3.76 (0.63)	1.75-5.00	.80	.14

Note. "SDS" = Social desirability scale.
[a] $p > .05$ for all correlation coefficients

An independent samples *t*-test was conducted to determine whether there was a difference between groups in their initial self-interest (ISI) scores. A significant difference was not found ($t(98) = -1.92$, $p > .05$), indicating that participants in the £50 condition ($M = 3.93$, $SD = 0.76$) felt that the value of the prize they were offered was no more important to them than did those in the £5 group ($M = 3.64$; $SD = 0.75$). It was therefore inappropriate to use the value of the prize as an indication of initial self-interest. However, the ISI scores achieved a good range across the whole sample (1.75-5.00), had an appropriate mid-point (*M*

= 3.79, *SD* = 0.91), and were normally distributed. It was therefore decided that the use of this measure represented a more appropriate indication of initial self-interest than did the group to which participants were assigned. As such, although an independent measures design was originally intended, a correlational design was employed for the following analyses, using the ISI scale scores instead of dichotomous group membership.

The primary interest of this study was how perceived need, self-interest, and empathic responding contributed to participants' helping decisions (i.e., whether they decided to give a '+5' or a '-5' card to their partner). A binary logistic regression with participants' decisions as the dependent variable was conducted (Table 7.3). Variables were entered in three blocks: ISI in the first block; empathy and sympathy in the second block; and perceived need and self-interest in the third block. Variables were normally distributed and exhibited no issues with multicollinearity (according to VIF values). Hosmer-Lemeshow tests indicated good model fit ($p > .05$).

Only blocks 1 and 3 significantly contributed to the model ($p < .05$). In brief, ISI significantly predicted the likelihood of making a helping decision, suggesting that the more participants valued the prize offered to them, the less likely they were to give a '+5' card. However, additional analyses determined that this relationship disappeared when controlling for state self-interest ($\chi^2 = 2.96$, $p > .05$), suggesting a mediation effect. Empathy and sympathy did not contribute to the model, indicating that emotional responses did not directly influence participants' decision making (as they did in Study 4). In Block 3, only self-interest significantly contributed to the model, suggesting that participants were less likely to give a '+5' card when the salience of self-interest was high.

Table 7.3
Binary Logistic Regression

	Helping Likelihood				
	β	*SE* β	Wald's χ^2 (*df* = 1)	e^{β} (odds ratio)	95% CI
Block 1					
Initial self-interest	-.53	.25	4.54*	0.59	0.36-0.96
Block 2					
Empathy	.53	.41	1.64	1.70	0.76-3.81
Sympathy	-.39	.41	0.58	0.68	0.25-1.85
Block 3					
Self-Interest	-.96	.38	6.56**	0.38	0.18-0.80
Perceived Need	-.38	.84	0.21	0.68	0.13-3.52

Note. Dependent variable = helping decision (coded as follows: '-5' = 1; '+5' = 2)
*p < .05; **p < .01

Although not the primary aim of the current study, another regression was conducted to see whether any of the other CAERS variables accounted for participants' decision making (Table 7.4). Interestingly, none of these variables made significant contributions to the model, again indicating that the only factor that directly influenced decision making was self-interest. Although self-interest appeared to have the only direct influence on the decision to help, it was possible that the effects of other variables were mediated through self-interest. To test this assumption, a linear regression was conducted with self-interest as the dependent variable (Table 7.5). Initial self-interest was controlled for, as this might have affected responding during the trial. These results suggested that empathy, agency, and blame had a significant relationship with self-interest, indicating that when the participants blamed the target, self-interest was more salient. Conversely, when participants felt more empathy and more able to help the target, self-interest was less salient.

Table 7.4

The influence of CAERS variables on helping decisions

	β	*SE* β	Wald's χ^2 (*df* = 1)	e^{β} (odds ratio)	95% CI
Block 1					
Initial self-interest	-.53	.25	4.54*	0.59	0.36-0.96
Block 2					
Self-Interest	-1.06	.395	7.19**	0.35	0.16-0.75
Perceived Need	-0.49	.804	0.37	0.61	0.13-2.97
Blame	0.06	.476	0.02	1.06	0.42-2.70
Perceived Power	0.45	.396	0.01	1.05	0.48-2.27
Valuing	-0.38	.541	0.48	0.69	0.24-1.98
Agency	0.35	.346	1.01	1.42	0.72-2.79
Cognitive Empathy	-0.11	.471	0.05	0.90	0.36-2.27
Similarity	0.25	.278	0.83	1.29	0.75-2.22
Morality	-0.17	.352	0.24	0.84	0.42-1.68

Note. Dependent variable = helping decision (coded as follows: '-5' = 1; '+5' = 2)

*p < .05; **p < .01

Table 7.5

Linear regression with self-interest as the dependent variable

	Self-Interest			
	β	*t*	ΔR2	F_{change}
Block 1			.04	4.30*
Initial self-interest	.21	2.07*		
Block 2			.20	12.30***
Empathy	-.33	2.61**		
Sympathy	-.20	1.24		
Block 3			.18	3.37**
Agency	-.34	3.42**		
Morality	.15	1.38		
Perceived Power	.17	1.48		
Cognitive E.	-.18	1.30		
Perceived Need	-.37	1.90		
Similarity	.16	2.08*		
Valuing	-.01	0.06		
Blame	.29	2.20*		

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

A particular interest of this study was the interaction between perceived need and self-interest within the empathic process (i.e., the balancing of self and other needs). The lack of a significant correlation between ISI and perceived need (r = .13, p > .05) suggested that perceived need judgements during the trial were not influenced by the prize offered to participants. Analyses were also conducted to determine whether information about another person's needs changed the salience of self-interest during the trial. Although perceived need held a significant relationship with self-interest when entered into a regression equation alone (β = -.33, p < .01; controlling for ISI), as was the case in Gerbasi and Prentice's (2013) study, this relationship disappeared when entered into the regression model alongside the other variables (β = -.19, p > .05), suggesting that the influence of perceived need was distributed amongst its covariates.

For the sake of comparison between the studies reported in Chapters 5, 6, and 7, additional analyses were conducted to further examine the antecedents of empathy and sympathy (Table 7.6). Self-interest, morality, similarity, perceived need, and valuing accounted for some of the variance in empathy. Perceived need, similarity, self-interest and valuing accounted for some of the variance in sympathy.

A path analysis was conducted to summarise all of the above results (Figure 7.2). Bayesian estimation was used to account for the dichotomous outcome variable (i.e., the helping decision) and a posterior p-value of .41 indicated acceptable model fit[11]. All paths shown are significant to p < .05 or better. In summary, self-interest had a direct influence on the helping decision, which in turn was influenced by empathy, agency, and blame. Empathy had four antecedents itself: similarity, morality, perceived need, and valuing.

[11] van de Schoot et al. (2014) recommended that values should be close to .50.

Table 7.6

Linear Regression: The cognitive antecedents of empathy and sympathy

	Empathy		Sympathy	
Subscale	β^a	*t*	β^b	*t*
Self-Interest	-.21	-2.46*	-.17	-1.94*
Agency	.01	0.10	-.13	-1.50
Morality	.19	2.35*	.15	1.81
Perceived Power	-.09	-1.14	-.03	-0.38
Cognitive E.	.10	1.24	-.03	-0.35
Perceived Need	.18	2.09*	.27	3.00**
Similarity	.23	2.87**	.18	2.09*
Valuing	.23	2.28*	.34	3.34**
Blame	.02	0.19	.03	0.36

[a] $\Delta R^2 = .55$; $F_{change} = 11.98$***

[b] $\Delta R^2 = .51$; $F_{change} = 10.56$***

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

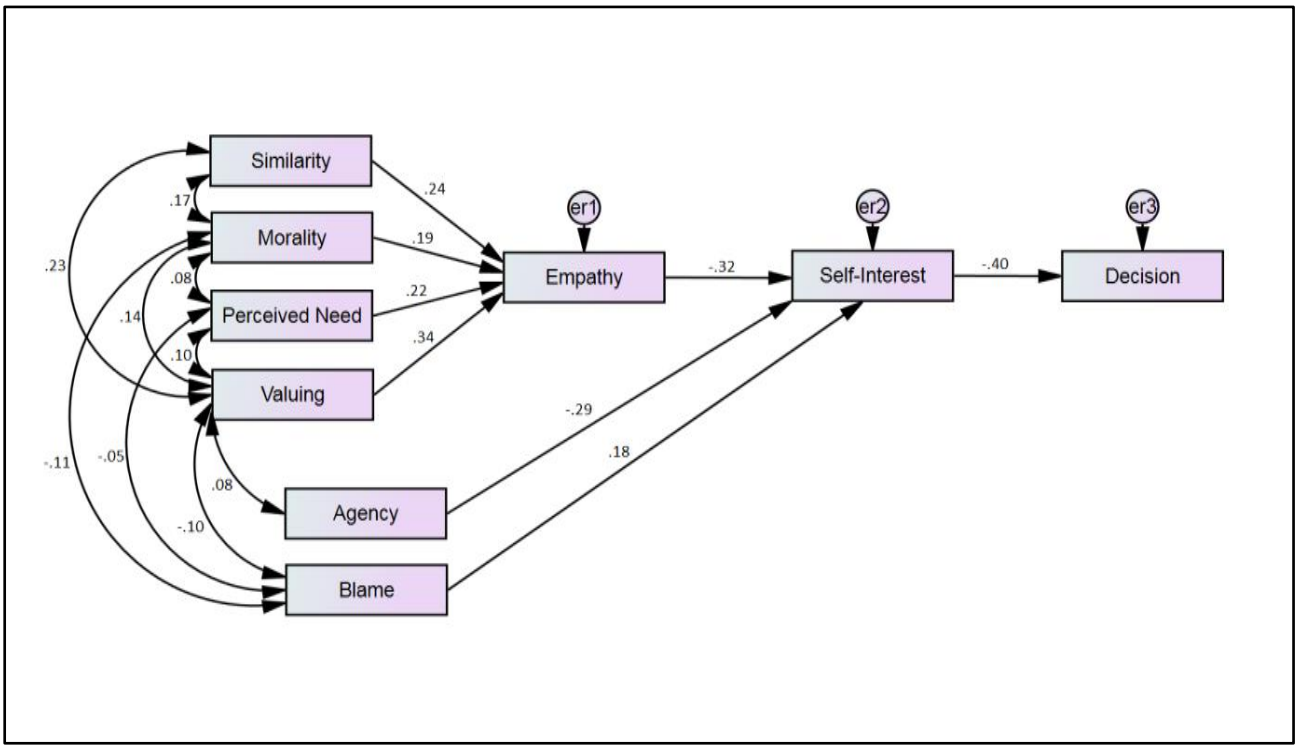

Figure 7.2. Summary of the direct and indirect influences on decision making

7.3 Discussion

The results of the current study add to our understanding of the overall empathic process; in particular with regards to the relationship between perceived need, self-interest, empathic responding, and helping behaviours. Each of the aims described in Section 7.2.1 have been addressed. Firstly, the relationship between self-interest / perceived need and helping has been examined with greater power. Secondly, the introduction of a genuine element of self-interest appeared to change the nature of the helping decision model, suggesting that self-interest represents an important additional step to the helping model presented in Chapter 6. Thirdly, the results of this study have granted novel information regarding the interaction between cognitions, empathic responding, and helping decisions, allowing for further development of the empathic process model (Figure 3.1).

Perhaps the most important finding of the current study is the fact that the addition of a genuine element of self-interest, which was not present in Study 4, appeared to change the decision making process. In particular, participants appeared to give greater consideration to self-interest in their decision making, and as a result, self-interest was the only variable that had a direct influence on decision making in the current study, with all other influences being mediated through this variable. Not only does this change our understanding of the empathic process, but it also suggests that researchers need to ensure that a genuine element of self-interest is addressed in methodologies similar to that described in Chapter 6, to ensure that external validity is retained.

The fact that self-interest was the primary feature of decision making supports previous suggestions that altruistic responding can be disrupted when such a response would go against self-interest (Walker and Brown 2013). The overall importance of self-interest means that these results are in agreement with past research (e.g., Cohen and Hoffner 2013, Gerbasi and Prentice 2013, Wang et al. 2014), and supports the rational choice theory (e.g.,

Cornish and Clarke 1986), as when participants desired the prize more, they were more likely to optimise their own chances of winning it. In addition to replicating past findings, the novel value of the current research also lies in the fact that it provides a more detailed analysis of the interactions between self-interest, perceived need, and empathic responding; and adds additional knowledge regarding the influence of other empathy-related cognitions on the salience of self-interest.

The current results suggest that the greatest negative influence on the salience of self-interest (and therefore indirectly promoting altruistic behaviours) was feelings of empathy towards the fictional partner. This is consistent with the commonly cited association between empathy and altruistic responding (e.g., Batson 1991), and is consistent with the suggestion that feelings of empathy can overcome self-interested desires (Batson and Ahmad 2001). Similar to the results of Study 4 (Chapter 6), a number of cognitive antecedents promoted the elicitation of empathy during the study. Specifically, empathy was elicited to a greater degree when participants reported greater perceptions of need (c.f. Lishner, Batson, and Huss 2011), similarity (c.f. Komeda et al. 2013), breaches of morality (c.f. Schulz et al. 2013), and when they valued the target more (c.f. Batson et al. 2007). The fact that similarity and perceived need contributed to the model in Figure 7.2, but not in Figure 6.1, suggests that Study 4 may indeed have lacked the power to determine these relationships, thus meeting the first aim of the current study.

In addition to those influences mediated through feelings of empathy, the current results also provide some novel findings with regards to the influence of two other cognitions on perceptions of self-interest. Firstly, higher agency (feeling able to help the target) reduced the salience of self-interest (thus increasing the likelihood of helping). This is consistent with Berman and Small (2012) who suggested that when we believe that prosocial acts would not help resolve the other's problem, we no longer anticipate feelings of guilt from a selfish

action (because the other is not negatively affected by our decision). Secondly, blaming the target for her circumstances increased the salience of self-interest (thus decreasing the likelihood of helping), perhaps because the target was not seen to deserve one's help (see Goetz, Keltner, and Simon-Thomas 2010), thus removing the sanctions imposed by anticipated guilt (see Pelligra 2011). It is encouraging to note that the relationship between agency / blame and the helping decision reflects the results reported in Study 4. However, these were direct relationships in Study 4, while being mediated through self-interest in the current study. This again is likely explained by the introduction of a genuine element of self-interest, and further implies that researchers should employ caution during the design of future studies to ensure that perceptions of self-interest are genuine.

It was interesting to observe that there was no direct interaction between self-interest and perceived need, as one would expect a certain amount of balancing one's own needs against the needs of the other (i.e., cost-benefit analyses). Although this is in contrast with the results reported by Cohen and Hoffner (2013), this difference in findings is likely due to the fact that these authors did not measure empathic responding during their study. The current results suggest that individuals primarily balanced consideration of self-needs against the degree of emotional responding. This could be explained by one of two theories (see Cropanzano, Goldman, and Folger 2005 for a brief review). Firstly, according to the empathy-altruism hypothesis (Batson 1991), empathetic participants may have been motivated to sacrifice their own needs to alleviate the suffering of their partner. Secondly, according to the negative state relief model (see Cialdini et al. 1987), empathetic participants may have been motivated to alleviate their own distress by helping the other to resolve their current predicament. Further research is needed to determine the most likely explanation, but either theory nevertheless suggests that the best way to overcome self-interest based behaviour is via the elicitation of empathy, making use of the various cognitive antecedents

measured by the CAERS (i.e., similarity, morality, perceived need, and valuing, as well as agency and blame).

7.3.1 Limitations and suggestions for further research

Certain limitations of the current study suggest the need for further research in this area. Firstly, as with Batson and Ahmad's (2001) research, this study was developed under the assumption that participants would believe that giving their raffle tickets to the other person would cheer them up (i.e., addressing their partner's emotional needs). To do this, participants would be giving away their chances to the raffle (i.e., sacrificing their own financial needs), and thus there was a mismatch between the needs of the self and other (i.e., financial vs. emotional). It is possible that participants based their decisions on how much they believed the other person needed money, rather than an emotional boost, which the perceived need subscale was unable to measure. Individuals may behave differently when in the context of congruent needs (e.g., the sender's note might have suggested concerns about money), and so future research is needed to confirm the above model (Figure 7.2) in such contexts. For example, it might be that when a helping response more appropriately matches the target's particular needs, perceived need exhibits a more direct influence on the helping decision process.

Secondly, the current study adopted a rather limited view of self-interest, and a broader examination may help to determine the reasons why individuals chose (or chose not) to help their fictional partner. For example, the separate domains of approach motivating self-interest (e.g., pride at helping another) and avoidance motivating self-interest (e.g., avoiding the loss of money) were not measured here (see Cohen and Hoffner 2013). The self-interest subscale of the CAERS focuses primarily on avoidance motivation, but research including both domains of self-interest may lead to a more comprehensive understanding of the helping decision process. This would also allow us to gain a greater understanding of how theories of

altruistic behaviour relate to the model presented in Figure 7.2. For example, a greater influence of approach motivating self-interest might suggest support for the negative state relief model (e.g., by helping the other in order to relieve one's own distress [Cialdini et al. 1987], or to minimise feelings of guilt [Pelligra 2011]), whereas a greater influence of avoidance motivating self-interest might suggest support for the rational choice theory (retaining material goods for oneself).

Thirdly, future research might examine the extent to which people offer help to others. As noted by Zaki (2014), even when one decides to help another, individuals may choose the helping response least costly to themselves, thus still being swayed by self-interest. It would be interesting to replicate the current study but give participants the option of giving away only some of their raffle tickets. This might allow one to observe whether those who decide to help, give away less of their tickets as self-interest increases in salience, allowing for a more thorough investigation of the interaction between these factors.

Fourthly, as with almost any procedure that involves deception, it is possible that some participants failed to declare their suspicions about the nature of the study when asked by the researcher (i.e., some participants included in the analyses may not have believed in the existence of their research partner). This risk is perhaps further increased by the sampling of psychology students, who often gain familiarity with deceptive procedures. Although various steps were taken to discourage suspicions (i.e., the researcher left the room to 'talk to the partner'; the note had been hand-written by a female colleague; various instructions were given to avoid the materials seeming too tailored to the fabricated situation), this is nevertheless a possibility and so the current results should be interpreted with some caution.

Finally, as with Studies 1-4, further work would be needed to confirm these results with more diverse samples, as the current findings are drawn only from university educated females, who were in the majority young and of white British descent. Future research is

needed to confirm whether the model presented in Figure 7.2 remains applicable in other samples that do not match these characteristics.

7.4 Conclusion

In conclusion, the results of this study have allowed for the enhancement of the model developed in Chapter 6, by demonstrating how the introduction of a genuine element of self-interest changes the decision making process. In particular, it appears that self-interest represents an important additional step to the model presented in Chapter 6. This has allowed for the development of a more ecologically valid model of the decision making process, and has further added to our understanding of how the cognitive antecedents of empathic responding contribute to the empathic process as a whole.

Chapter 8: Modelling the Cognitive Antecedents of Empathy and Sympathy

8.1 Introduction

Thus far, the purpose of the research reported in this thesis has been to identify the potential cognitive antecedents of empathy and sympathy, to develop a tool to measure such factors, and to examine their influences on empathic responding and helping behaviours. The results have allowed for the identification of the most influential cognitive antecedents of empathy and sympathy, and some common themes have emerged. The findings of those studies reported in chapters 5-7 can now be combined, so as to draw overall conclusions for our understanding of how these cognitions contribute to the overall empathic process.

Before discussing the results, as all findings are based upon data gleaned from the CAERS, it is important to confirm the factor structure of the scale at this stage. The same confirmatory factor analysis reported in Study 3 (Chapter 5) was conducted using data from those studies not included in this original analysis (i.e., studies 2, 4, and 5) (n = 244), in order to see whether model fit can be replicated in novel samples. Goodness of fit indices (χ^2/df = 1.69; NNFI = .88; CFI = .90; RMSEA = .05) were acceptable according to recommended values (Bentler and Bonett 1980, MacCallum, Browne, and Sugawara 1996, Ullman 2001), providing support for the validity of the CAERS. However, values for the NNFI and CFI did still remain below Hu and Bentler's (1999) more stringent recommendations of .95. It is likely that model complexity is still a disadvantage at present, as it is more difficult to achieve good model fit with a large number of scale items (Anderson and Gerbing 1991). Incorporating all the data collected within this thesis (i.e., including the sample used for the original validation; n = 421) improved the above model fit indices (χ^2/df = 1.85; NNFI = .92; CFI = .93; RMSEA = .05), again suggesting that further increases in power may be able to

match Hu and Bentlers (1999) more stringent recommendations. Further testing will be required to establish whether shortening the scale (perhaps by removing less influential subscales; see below) can also lead to further improvements.

8.2 Building a hierarchical model of cognitive antecedents

Encouragingly, several similarities appeared across each of the studies described in Chapters 5-7. For example, valuing had a significant influence on empathy in all three studies, with perceived need, morality and similarity having a significant influence in two studies each (i.e., Studies 3 and 5 for perceived need and similarity; Studies 4 and 5 for morality). Similarly, valuing significantly influenced sympathy in all three studies, while perceived need and self-interest were significant predictors of sympathy in two studies each (i.e., Studies 3 and 5). All of these relationships were in the directions consistent with the research described in Chapter 3.

Despite these significant relationships, several cognitions did not appear to significantly influence empathy (i.e., blame, perceived power, and self-interest) and/or sympathy (e.g., blame, perceived power, and agency) in any of the studies reported here. There are three possibilities that may explain these findings. Firstly, these variables may indeed have no relationship with empathy / sympathy. This suggestion is unlikely, however, given the past research in this field (see Chapter 3). Secondly, the power of the studies reported here may have been too small to capture the effects of so many variables of interest. Thirdly, the influences of these variables may be mediated through those variables with significant influences. Aggregating the data from Studies 2-5 would allow for substantially greater power, allowing for an investigation into these possibilities. Although there appears to be some variation in the antecedents of empathy/sympathy (see above), which requires

further examination, this method allows for the development of a preliminary model of the antecedents of empathic responding.

A data-driven procedure was therefore used to build a hierarchical model of the influences of CAERS cognitions on empathy and sympathy (i.e., to identify primary and secondary influences). Using data from all four studies that employed the CAERS (n = 421), linear regressions were conducted to identify which cognitions had direct influences on empathy and sympathy; henceforth termed 'first-order antecedents'. Durbin-Watson tests indicated acceptable autocorrelation when both empathy and sympathy were entered as the dependent variable (d = 1.96 for both tests). Similarly, low variance inflation factor (VIF) values (< 2) indicated acceptable multicollinearity for both tests. The residuals for each test were also normally distributed. The results (Table 8.1) suggested that the first-order antecedents of empathy are perceived need, valuing, cognitive empathy, morality, and similarity. The first-order antecedents of sympathy are perceived need, self-interest, valuing, cognitive empathy, and morality. Similar to the findings presented in Table 5.4, the fact that nearly all variables individually correlated with empathy/sympathy (as found in previous research) but did not all maintain this relationship when covariates were taken into account, reaffirms the need to test such variables in combination, and demonstrates that not all antecedents are equally influential.

As noted on the previous page, a lack of power in previous studies may have resulted in type II errors with regards to the influence of some variables on empathy (blame, perceived power, and self-interest) and/or sympathy (blame, perceived power, and agency). The fact that the aggregated data still exhibits small (according to Cohen 1988) and non-statistically-significant regression coefficients suggests that when these variables exhibited non-statistically significant relationships with empathy or sympathy in Studies 3-5, this was not due to a lack of power. The alternative suggestion therefore needed testing: that such

variables have an indirect influence on empathy / sympathy, mediated through first-order antecedents. Variables with such indirect influences will henceforth be termed 'second-order antecedents'.

Table 8.1
Linear regressions with empathy and sympathy as the dependent variable

	Empathy		Sympathy	
Cognitions	*r*	β[a] (*t*)	*r*	β[a] (*t*)
Block 1				
SDS	.14**	.14 (2.88**)	.17***	.17 (3.60***)
Block 2				
Perceived Need	.41***	.18 (4.45***)	.52***	.26 (6.34***)
Blame	-.32***	.00 (0.03)	-.32***	-.05 (-1.32)
Self-Interest	-.34***	-.03 (-0.73)	-.39***	-.09 (-2.23*)
Perceived Power	-.17***	-.04 (-1.06)	-.05	.01 (0.30)
Valuing	.66***	.47 (11.79***)	.55***	.33 (7.91***)
Morality	.33***	.12 (3.00**)	.44***	.20 (5.00***)
Agency	.23***	.04 (1.20)	.30***	.05 (1.33)
Cog. Empathy	.43***	.14 (3.66***)	.42***	.12 (2.72**)
Similarity	.28***	.13 (3.60**)	.13**	.06 (1.64)

Note. "SDS" = social desirability scale.
[a]All variables entered on the first block.
*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

Linear regressions were conducted to determine the relationships between second- and first-order antecedents. Durbin-Watson and VIF statistics were again within acceptable limits. The results of these regressions can be found in Table 8.2 for empathy and in Table 8.3 for sympathy. One could argue that the causal direction may be reversed for these relationships (i.e., that first-order antecedents influence second-order antecedents, and that the latter therefore has no indirect influence on empathic responding). However, the fact that

nearly all second-order antecedents correlate with empathy/sympathy seems to preclude this possibility.

Table 8.2
Regressions for the relationship between first- and second-order antecedents of empathy

Second-order antecedents (IVs)	First-order antecedents (DVs)				
	Cog. Empathy	Perceived need	Valuing	Morality	Similarity
	β (*t*)	β (*t*)	β (*t*)	β (*t*)	β (*t*)
Self interest	-.16 (-3.13**)	-.28 (-5.30***)	-.19 (-3.75***)	-.10 (-1.88)	.05 (0.90)
Blame	-.35 (-7.11***)	-.02 (-0.29)	-.56 (-7.67***)	-.10 (-2.08*)	-.19 (-3.68***)
Agency	.08 (1.56)	.21 (4.07***)	.07 (1.36)	.35 (6.85***)	-.04 (-0.77)
PP	.02 (0.45)	.15 (3.01**)	-.21 (-4.62***)	.14 (2.78**)	-.33 (-6.68***)

Note: 'PP' = perceived power.
*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

Table 8.3
Regressions for the relationship between first- and second-order antecedents of sympathy

Second-order antecedents (IVs)	First-order antecedents (DVs)				
	Cog. Empathy	Perceived need	Valuing	Morality	Self-Interest
	β (*t*)	β (*t*)	β (*t*)	β (*t*)	β (*t*)
Similarity	.14 (2.71**)	-.12 (-2.12*)	.20 (4.15***)	-.05 (-1.03)	.05 (0.90)
Blame	-.36 (-7.29***)	-.09 (-1.79)	-.36 (-7.78***)	-.13 (-2.68**)	.21 (4.23***)
Agency	.14 (2.88**)	.29 (5.82***)	.14 (2.99**)	.38 (7.80***)	-.31 (-6.47***)
PP	.04 (0.82)	.07 (1.26)	-.18 (-3.67***)	.10 (2.01*)	.17 (3.34**)

Note: 'PP' = perceived power.
*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

One additional consideration that should be examined is whether the influences of the antecedents of sympathy (Tables 8.1 and 8.3) are mediated through their effects on empathy. Building on the suggestions of others (e.g., Eisenberg et al. 1991), the initial model proposed in Chapter 3 denoted that empathy precedes sympathy within the empathic process. Given that empathy and sympathy share many common antecedents it is possible that a mediation effect is present. To test this possibility, the above regression was repeated with sympathy as the dependent variable (i.e., the right hand side of Table 8.1), but with empathy entered as a

control variable. The results of this regression (Table 8.4) are much the same as in Table 8.1, with the exception being the now non-statistically significant influence of cognitive empathy; suggesting that the influence of this variable on sympathy is mediated through empathy. To test the alternative possibility that sympathy precedes empathy, empathy was entered as the dependent variable, and sympathy was entered as the control variable. Similar to the above, most of the effects from Table 8.1 remained; the exception being the now non-significant influence of morality, which suggests that this variable is mediated through sympathy. In summary, these results seem to contradict the original model presented in Chapter 3 (i.e., Figure 3.1), and instead suggest that the cognitive antecedents act independently on both empathy and sympathy.

Table 8.4
Investigating the possibility of mediation effects between empathy and sympathy

	Sympathy		Empathy	
Cognitions	β	*t*	β	*t*
Block 1 (controls)				
SDS	.08	2.20*	.02	0.56
Empathy	.68	19.29***	-	-
Sympathy	-	-	.69	19.29***
Block 2				
Perceived Need	.19	4.86***	.09	2.17*
Blame	-.05	-1.41	.02	0.51
Self-Interest	-.08	-2.11*	.01	0.13
Perceived Power	.03	0.76	-.04	-1.27
Valuing	.14	3.17**	.35	8.83***
Morality	.15	4.11***	.04	1.16
Agency	.03	0.94	.03	0.74
Cognitive Empathy	.05	1.41	.10	2.80**
Similarity	.01	0.27	.11	3.21**

Note. "SDS" = social desirability scale.
*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

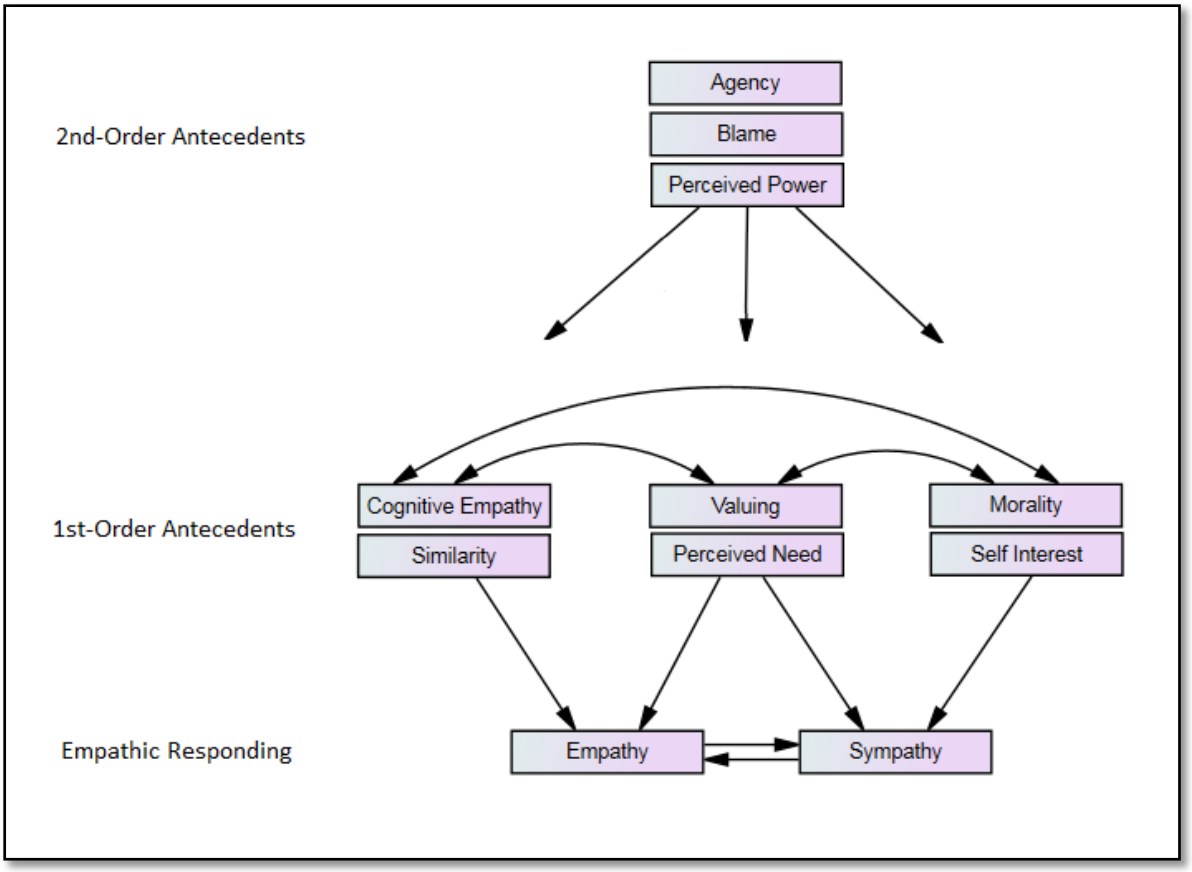

Figure 8.1. A model of the cognitive antecedents of empathy and sympathy.

By drawing together the findings reported above, a new model of the antecedents of empathic responding can be presented (Figure 8.1). In summary, cognitive empathy and similarity have a direct influence on empathy; morality and self-interest have a direct influence on sympathy; and valuing and perceived need have a direct influence on both empathy and sympathy. These first-order antecedents are in turn influenced by second-order antecedents: agency, blame, and perceived power. This is a rather simplified model, and more complex relationships do exist within each order of antecedents. For example, Batson et al. (2007) have previously reported that valuing has an influence on perspective taking (cognitive empathy). Davis et al. (1996) have suggested that perspective taking can increase perceived similarity. Batson et al. (1995) have reported that increased similarity can increase valuing. More complex relationships between variables can be gleaned from Table 8.5,

however, the model presented in Figure 8.1 should nevertheless prove useful in identifying the most pressing targets for those wishing to enhance empathy and/or sympathy in others. The implications that these results have for our understanding of each of the cognitive antecedents of empathy and sympathy can now be discussed in greater depth.

Table 8.5
Subscale correlation matrix (n = 421)

	PN	Blame	SI	PP	Valuing	Morality	Agency	CE	Similar.
PN	-	-.12*	-.32***	.11*	.26***	.46***	.30***	.32***	-.11*
Blame	-	-	.23***	.03	-.40***	-.17***	-.04	-.38***	-.17***
SI	-	-	-	.12*	-.32***	-.21***	-.31***	-.27***	-.04
PP	-	-	-	-	-.24***	.10*	-.01	-.01	-.34***
Valuing	-	-	-	-	-	.18***	.12*	.35***	.29***
Morality	-	-	-	-	-	-	.39***	.19***	-.06
Agency	-	-	-	-	-	-	-	.15**	-.03
CE	-	-	-	-	-	-	-	-	.18***
Similar.	-	-	-	-	-	-	-	-	-

notes: "PN" = Perceived Need"; "SI" = self-interest; "PP" = perceived power; "CE" = Cognitive Empathy.
*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

8.2.1 The antecedents of both empathy and sympathy

Valuing. Across all of the studies reported here, the extent to which participants liked/valued the target consistently had the strongest influence on the elicitation of empathy and sympathy (although the diminished beta value for the sympathy regression in Table 8.4 suggests that much of this effect may be mediated through empathy). This finding is unsurprising given the common sense assumption that we will become more emotional/concerned when a loved one is in pain, versus somebody whom we do not like.

However, although the relationship between valuing and empathic responding has been noted in the literature (e.g., Batson et al. 2007, Stocks et al. 2011), it has not received the level of research attention that is deserved, given the current results. The exception to this is Batson et al. (2007), who placed the importance of valuing above other variables such as perceived need and perspective taking. These findings mean that those wishing to enhance empathic responding should certainly be aware of how much their client values the target(s) of concern. As noted by Batson et al. (2007), individuals value others at least moderately unless there is a cause for devaluation (e.g., an adversarial relationship; Hanson 2003), meaning that those wishing to enhance empathic responding should also be particularly mindful of potential reasons for devaluation.

Perceived Need. The degree to which participants were able to discern an emotional need in the target also determined the degree to which empathy and sympathy were elicited, whereby the more needy targets elicited the most empathy/sympathy. This is again unsurprising as without this perception there would be nothing to feel emotional/concerned about. Such a finding is again consistent with prior research (e.g., Lishner, Batson, and Huss 2011). Although perceived need did not appear to be an antecedent of either empathy or sympathy in Study 4, the results of Study 5 suggested that this may have been due to a lack of power.

Although in some cases individuals may have a particular difficulty with recognising emotions in others (e.g., those with autism; Poljac, Poljac, and Wagemans 2012), it is assumed that generally people possess the ability to do this. Therefore, it is important that those wishing to enhance empathy/sympathy are aware that perceptions of need can be minimised to inhibit empathy when such an action would be of benefit to the perceiver. For example, Brown et al. (2013) discussed how empathy for victims can be avoided when offenders deny the consequences of their actions. Yates (2009) also argued that such denials

are not limited to offenders. Therefore, when enhancing empathy/sympathy, one should make sure that practitioners are aware of such potential blocks to recognising emotional needs in others, and efforts should be made to avoid such blocks.

8.2.2 The antecedents of empathy

Cognitive empathy. The fact that one's ability to understand another's emotions featured as an antecedent of empathy was expected, especially given the importance attributed to perspective taking in the literature (e.g., Davis 1996, Lamm, Batson, and Decety 2007), but also because of those other ways of understanding another's emotions such as reading facial expressions (Besel and Yuille 2010). However, this finding was somewhat unexpected in light of the non-statistically significant regression coefficients reported in Studies 4 and 5. The most likely explanation for this is that although cognitive empathy does appear to influence empathy (and therefore should be included as an antecedent of empathy in the model), this influence is relatively weak. Therefore, the relationship was only discoverable with greater statistical power (i.e., the analyses in the current chapter had considerably greater power than analyses in previous chapters). This suggests that, although important, understanding another's emotions is perhaps not as important (when compared to the other variables discussed here) as has been suggested in the past. Although understanding is needed for empathic responding, it might be that the influence of cognitive empathy is dichotomous (i.e., one either understands or does not understand another's emotions), and that the depth of this understanding (i.e., as a continuous variable) is not as important as the depth of other variables, such as valuing. This is reflected in the relatively small regression coefficients reported in the analyses above.

Similarity. The more that participants perceived similarity with the target, the more likely they were to empathise with that person, consistent with prior research in this area (e.g., Eklund, Andersson-Stråberg, and Hansen 2009, Feshbach 1978). This appears to be a

direct relationship, rather than being mediated through cognitive empathy or valuing; a possibility raised in Chapter 3. It is important therefore, when wishing to enhance empathy, that similarities between the target and observer are emphasised. However, although there is evidence to suggest that similarity between the target and observer can improve prosocial responses (e.g., Feeny and Clarke 2009), other evidence suggests that such similarity can impede them. For example, Eayrs and Ellis (1990) reported that emphasising the equal rights and capabilities of 'handicapped people' can reduce monetary donations; possibly because similar capability implies they do not need help. Similarity should therefore only be emphasised when it does not impede on perceptions of need.

It was interesting to note that similarity did not feature as a significant predictor of empathy in Study 4. This could be due to a lack of power (as suggested in Chapter 7), but might also be explained by the work of Houston (1990), who reported that similarity has the greatest effect on empathic responding when the observer and target are similar on the factor most pertinent to the target's distress. It could be that the participants had less in common with the issues presented in Study 4 (i.e., the distressing consequences of war), and had more similar experiences to the targets in Study 3 (i.e., bullying) and Study 5 (i.e., the breakup of a relationship); explaining the greater effect of similarity on empathic responding in Studies 3 and 5. Empathy enhancers may again wish to bear this in mind.

8.2.3 The antecedents of sympathy

The antecedents of sympathy are a rather under-researched area, with research into factors relating to sympathy often being merged with empathy, and not presented explicitly (see Chapter 2). The results reported here suggest that sympathy is perhaps not as important as empathy in relation to helping behaviours, which is usually the ultimate goal for those wishing to enhance empathic responding. Nevertheless, these results do offer novel findings

with regards to sympathy, and also further add to the arguments made in Chapter 2 that sympathy should be separated from empathy in the research literature.

Morality. The results reported here suggest that the more participants believed what had happened to the target was morally wrong, the more concerned they became for that target (consistent with Schulz et al. 2013). Although morality also appeared to have an effect on empathy, which would be consistent with previous suggestions (e.g., Bandura et al. 1996), further analyses determined that this appears to be mediated through feelings of sympathy.

Goetz, Keltner, and Simon-Thomas (2010) suggested that when individuals perceive unjustified suffering, compassion (related to sympathy; see Chapter 2) is elicited to motivate individuals to remedy this suffering. Individuals may therefore fail to feel sympathetic for a target either because they failed to perceive a breach of morals (i.e., the suffering is justified), or because that target falls outside of the individual's "moral community" (i.e., the range of people for which morality is applied; Hills 2001: 55), and so considerations of fairness are not applied to that target (Opotow 1990). One way in which practitioners may enhance a sense of concern for others, therefore, might be to encourage relevant moral codes in their clients, and to ensure that morality is applied to relevant targets. Such a task may be difficult however, as although most people at least have the intention to act in a morally just way, such moral codes are easily violated when they could act in a manner more consistent with self-interest (Batson, Ahmad, and Tsang 2002).

Self-Interest. Hardin's (1977 cited in Batson, Ahmad, and Tsang 2002: 436) "cardinal rule" is to "never ask a person to act against self-interest". This certainly seems to be the case for those participants in Study 5, who appeared to base their helping decisions primarily on the salience of their own interests. The fact that self-interest also appears to have a negative impact on feelings of concern (i.e., sympathy) is also consistent with past research (e.g., Wang et al. 2014). As noted by Hills (2001), individuals can actively ignore the emotions of

others when addressing these would interfere with personal goals. In relation to sympathy, it would seem that when self-interest is salient, concern for one's own needs (i.e., self-interest) takes priority over concern for the other person's needs (i.e., sympathy). For example, Arsenio and Lemrise (2001) discussed how bullies are less concerned about their victims when bullying behaviours can help achieve self-satisfaction. Those wishing to enhance feelings of concern in individuals may therefore try to enhance the salience of targets' needs, aiming to supersede the salience of self-needs. Although this suggestion requires empirical support, such methods may prove more fruitful than targeting self-interest itself; attempting to break Hardin's (1977 cited in Batson et al. 2002) cardinal rule. Alternatively, practitioners could attempt to re-frame self-interest factors, to make them more compatible with the needs of others (e.g., by emphasising the potential self-benefits of helping behaviours).

8.2.4 Second-order antecedents

Agency. Past research has tentatively suggested that the degree to which one feels able to help the target positively influences the amount of empathy felt for that person (see Chapter 3). The results presented in this thesis suggest that this is not the case in a direct sense. Rather, the effects of agency on empathy appear to be mediated through perceived need; in that feeling able to improve the target's situation encourages one to perceive greater need in that target. With respects to the antecedents of sympathy, agency increases perceptions of a breach of moral codes, perceived need, and valuing; while decreasing the salience of self-interest. It should be noted that although agency did not contribute to the empathy model in Chapter 5, Chapter 7, and in the current chapter, it did in Chapter 6. It is difficult to explain this anomaly at the present time, and this requires further investigation.

Although agency seems to hold less importance than other variables in terms of empathic responding, it seems more important for the motivation of helping behaviours; consistent with theories of self-efficacy and behaviour (Bandura 1986). In Study 4, agency

had a direct influence on helping behaviours (partially mediated through empathy in this case), and in Study 5 agency had an influence on helping behaviours mediated through self-interest. Therefore, while agency might not be a focus for those wishing to promote empathic responding, it might attract greater focus when the desire is to improve prosocial responding.

Blame. Similar to agency, blame appears to be more important for the promotion of helping behaviours than for the enhancement of empathic responding. Blame had a direct influence on helping in Study 4, and an indirect influence (mediated through self-interest) in Study 5; consistent with past research demonstrating a negative impact of blame on charitable donation behaviours (e.g., Eveland and Crutchfield 2007, Griffin et al. 1993). In terms of the antecedents of empathy and sympathy, blame appears to have an indirect effect mediated via negative influences on cognitive empathy, valuing, morality, and similarity. As with agency, although blame might not be a priority for those wishing to enhance empathy/sympathy, it might be a priority when the ultimate goal is to enhance prosocial behaviours (e.g., when trying to encourage charitable donation behaviours).

Perceived Power. The perceived power imbalance between an observer and a target appeared to have no influence on helping behaviours, but did have an indirect influence on both empathy and sympathy. When participants believed that they were more powerful than the target, they perceived a greater degree of need and perceived a greater breach of morals. This would suggest an overall enhancement of empathic responding (e.g., Côté et al. 2011). However, perceived power also reduced valuing and similarity; suggesting an inhibition of empathic responding (e.g., Lee and Tiedens 2001). As demonstrated with these examples, research continues to be inconclusive regarding the prosocial or antisocial nature of power (see Handgraaf et al. 2008), and so more research is required to disentangle these relationships (c.f. Mast, Jonas, and Hall 2009). As with agency and blame, although the lack of a direct influence is somewhat contradictory to previous research, this is perhaps explained

by the fact that previous studies did not include measurement of covarying variables such as those presented here.

8.3 Modelling the empathic process

As well as having implications for our understanding of the antecedents of empathy and sympathy, the current results also add to our understanding of the overall empathic process. Although context (i.e., the target's situation) differed across each of the studies reported here, combining the data to analyse the antecedents of empathy and sympathy was justified due to similarities in the results of Studies 2-5. However, because of the differences in the results between Studies 4 and 5, it would not be justified to combine results regarding the antecedents of helping behaviours. Nevertheless, the results presented in Chapters 6 and 7 have resulted in novel understanding regarding how the cognitive antecedents of empathic responding also contribute to the development of behavioural responses, thus further contributing to the development of the empathic process model.

In the original model presented in Chapter 3 (Figure 3.1) it was presumed that the effects of cognitive antecedents on sympathy would be mediated through empathy. The current results, however, suggest this not to be the case. In addition, it was presumed that helping behaviours would be based upon sympathetic responses. However, the results reported in this thesis suggest that helping behaviours may be based either upon empathy (Study 4) or upon the salience of self-interest (Study 5). Nevertheless, the results reported here seem supportive of the arguments made in Chapter 2. Specifically, that functional differences exist between empathy and sympathy, and that feelings of empathy do not necessarily lead to behavioural outcomes. Based on these findings, a revised version of the model is presented in Figure 8.2, with changes from the original model (i.e., Figure 3.1) being depicted in blue (for clarity, Figure 3.1 is also reproduced on p.156).

This model serves as a useful demonstration of how the cognitive antecedents of empathy contribute to the overall empathic process. However, researchers should avoid making generalisations about the model at this stage, as data informing the latter stages (i.e., helping responses) was gleaned from studies investigating empathic responding in a monetary donation context. Further research is needed to determine whether the empathic process as described here remains consistent across different forms of prosocial behaviours (e.g., in healthcare or forensic contexts). Nevertheless, the consistencies in the antecedents of empathy and sympathy between different contexts (i.e., highschool bullying [Study 3], the effects of war [Study 4], and the ending of close relationships [Study 5]) are encouraging.

In addition to the above, further research is needed to confirm whether this model remains applicable in samples outside of the largely young, university educated, Caucasian female participants employed within the studies reported here. Nevertheless, as noted in Chapter 5, although differences in *absolute* levels of empathy have been reported between genders and with increasing age (Lennon and Eisenberg 1987), there is no reason to assume at the current time that *relative* effects (i.e., the relationships between cognition and emotion) also differ in this manner. However, more work is needed to confirm this preposition.

8.4 Conclusions

The results of Studies 1-5 make important contributions to our overall understanding of the influences of multiple cognitions on empathy and sympathy, and how these emotions are affected as state variables. Although previous research (see Chapter 3) has demonstrated that each of the cognitions discussed above have a significant influence on empathic responding, each cognition has typically been examined in isolation. By combining the full range of influences, analyses have allowed for the identification of which cognitions are most important in terms of promoting empathic responding and prosocial behaviours. This should

prove valuable in terms of identifying the most appropriate targets for those wishing to enhance empathy, sympathy, and/or prosocial behaviours in others; representing an important novel contribution of the current research.

In addition, the changes represented in Figure 8.2 have implications for our overall understanding of the empathic process. For example, previous authors (e.g., Eisenberg 1986, Singer and Lamm 2009) have suggested that sympathy (rather than empathy) should be most important for helping behaviours. The results reported here, however, contradict this proposal; instead suggesting that empathy and self-interest might be more important. It was also initially thought that cognitions would occur early on in the empathic process (before empathy; see Figure 3.1), influencing later variables (e.g., sympathy) indirectly. The results reported here instead suggest that cognitions have an influence on all stages of the model that were measured. The interactions present within this process are certainly complex, and more research is needed to confidently determine the full nature of these relationships.

Although the influence of mood and self-esteem was not considered beyond the studies reported in Chapter 5, and therefore is not included in Figure 8.2, this does not mean that researchers should cease to investigate the influences of mood and self-esteem on empathic responding and prosocial behaviours. As discussed in Chapter 5, the CAERS was unsatisfactory in appropriately measuring the mood states of the participants in Study 3. Future research using alternative methods is needed to fully determine how empathic responding and prosocial behaviours may vary according to mood and self-esteem, and therefore how mood may also contribute to the model depicted in Figure 8.2.

The results of the current research also further supports the need to move away from the predominantly trait view of empathy; consistent with those suggestions made in Chapters 2 and 3. Although individuals may differ in their tendencies to feel empathy / sympathy for others, this narrow view largely ignores the numerous contextual factors that influence the

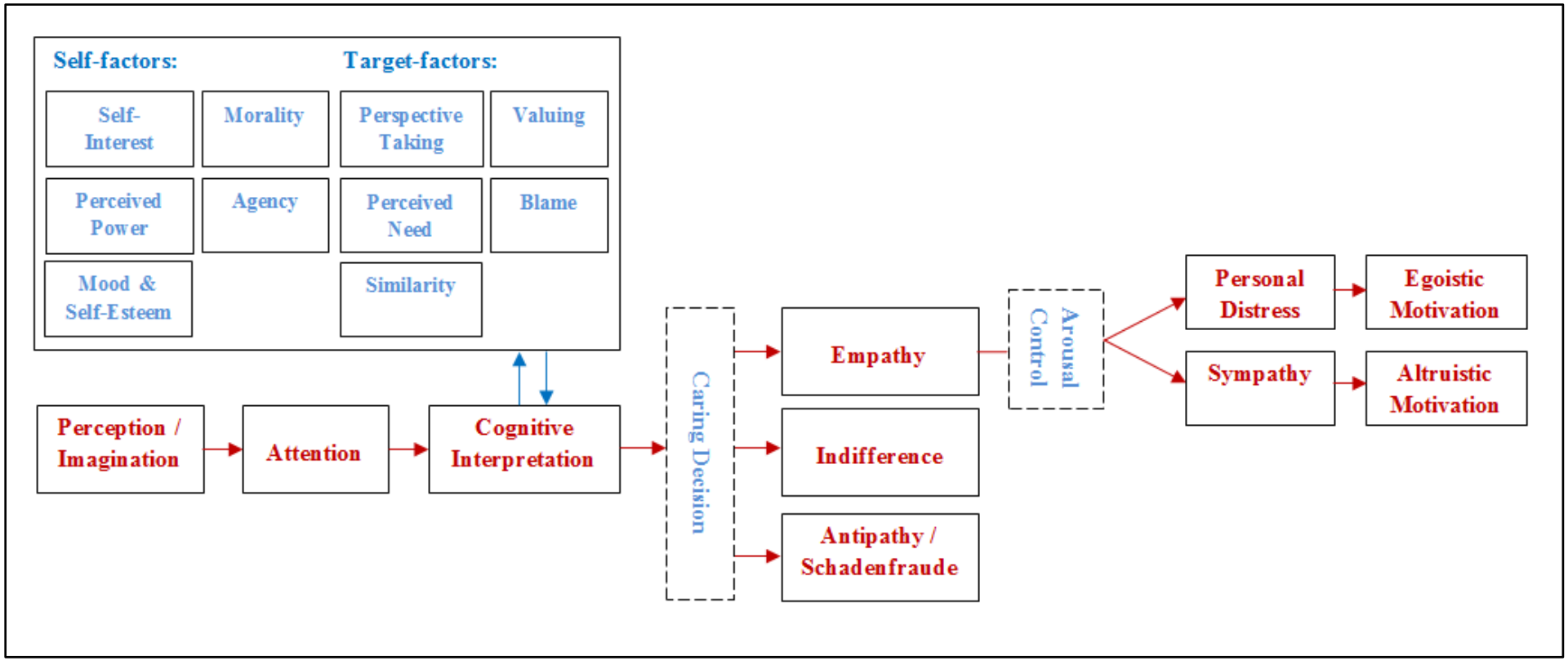

Figure 3.1. Original model of the empathic process (reproduced from Chapter 3).

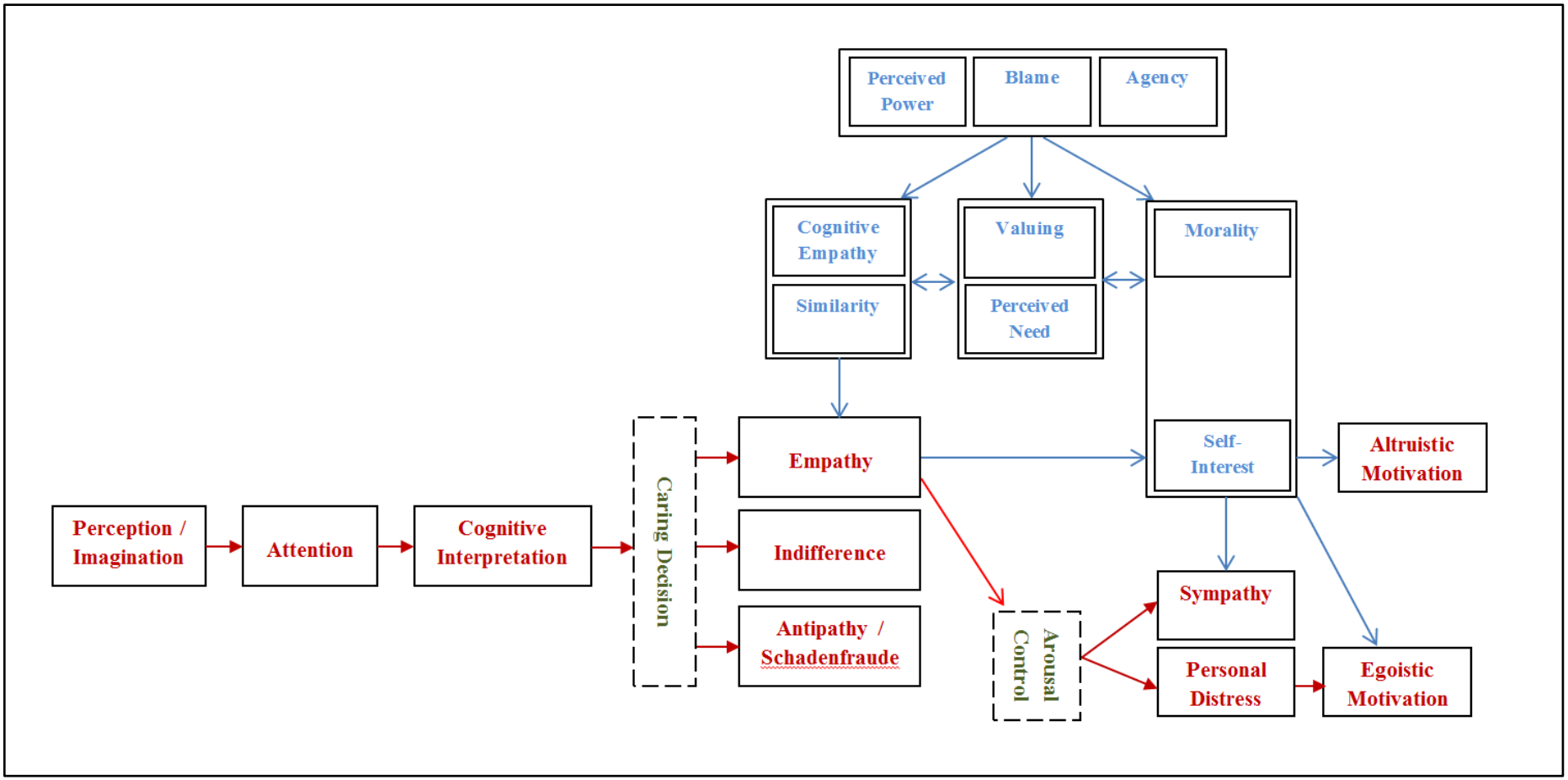

Figure 8.2. A revised model of the empathic process. Changes from the original model (Figure 3.1) are depicted in blue.

actual expression of these emotions. The variables reported here are far from an exhaustive list, as other factors such as stress, anger, and intoxication may affect the expression of empathy/sympathy (Keenan and Ward 2000). There is clear importance in continuing research into the reasons behind the variation of empathy, sympathy, and prosocial behaviours according to context and persons involved; which shall be further explored in the following chapter.

Chapter 9: Implications for research and practice

9.1 Introduction

In the previous chapter, a number of suggestions were made with regards to the implications of each cognitive antecedent, and how they may be taken into account by those wishing to enhance empathic responding in others. In summary, the results suggested that those wishing to enhance emotionality towards a target's suffering (i.e., empathy) should focus upon how much that individual values or likes the target, how able the individual is to understand the target's emotional responses, and the degree of perceived need and similarity with the target. Those wishing to make an individual more concerned about a target's suffering (i.e., sympathy) should also focus upon the degree of valuing and perceptions of need, as well as encouraging a sense of morality in the individual and reducing the salience or importance of self-interest factors. Those wishing to encourage prosocial behaviours should also focus upon perceptions of agency, blame, and self-interest.

The discussions presented within the previous chapter were kept deliberately general, in order to summarise the knowledge gained from this research regarding the cognitive antecedents of empathic responding. However, as mentioned in Chapter 1, empathy (along with its related terms) is a concept that features across a wide range of social contexts, and is particularly important within offender interventions, therapeutic relationships, and the encouragement of charitable donation behaviours. Therefore, as the implications of the current research apply to each of these themes, more specific discussions are needed. Consequently, the purpose of the current chapter is to build upon the discussions of Chapter 8, by providing suggestions for those wishing to enhance empathy/sympathy within these different areas of research practice (i.e., for those in forensic, healthcare, and charity

marketing contexts), through illustrating how the current research may be furthered within these specific fields of interest.

9.2 Implications for Those Working With Offenders

9.2.1 Cognition, empathy, and offending

It is often assumed that a lack of empathy[12] held by offenders towards their victims allows them to commit their offences, and that by fostering empathy, more socially acceptable behaviour may be encouraged (Brown et al. 2013; Mann and Barnett 2013). As such, empathy components are commonly included in offender treatment programmes. For example, empathy components have been included within sex offender treatment programmes (SOTPs) for the past 30-40 years (Brown, Harkins, and Beech 2012, Kirsch and Becker 2006), and empathy is included within 87-100% of programmes in the US[13] (McGrath et al. 2009: 66). Although sex offender research largely dominates the empathy literature, empathy training modules are also offered to other groups such as violent offenders (e.g., Lauterbach and Hosser 2007, Serin, Gobeil, and Preston 2008, Ware, Cieplucha, and Matsuo 2011), and in other areas where individuals hurt others, such as bullying (e.g., van Noorden et al. 2015).

Before considering the implications for treatment, one first needs to address the question of whether offenders do indeed have deficits in empathy (i.e., do they require an intervention?). The literature suggests that the answer to this question is yes; at least on some

[12] Although typically using the term 'empathy', the forensic intervention literature does not tend to make the distinction between empathy and sympathy, and so more research is needed to disentangle these concepts. Nevertheless, this point is perhaps rendered moot as most programmes primarily focus upon the cognitive antecedents that precede these emotions (see Carich et al. 2003, Ward, Polaschek, and Beech 2006), rather than the emotions themselves.

[13] More recently these empathy modules have been revoked in the UK due to a lack of empirical support. This is based upon reviews such as Mann and Barnett (2013), who argued that there is no evidence that empathy work reduces recidivism; expressing the need for more research into empathy and offending.

level. Although some researchers have claimed that offenders exhibit generalised problems with empathy (i.e., they have overall deficits in their abilities to feel empathy), others have reported no such deficits (see Marshall et al. 1995 for a review). As such, the evidence for trait deficits has been deemed equivocal at best (Brown et al. 2013). More contemporary accounts have moved, therefore, towards the view that although offenders generally possess the ability to feel empathy[14], they may inhibit empathy towards certain people. Marshall and colleagues (e.g., Fernandez et al. 1999, Marshall et al. 1997, Marshall, Hamilton, and Fernandez 2001) in particular have demonstrated that offenders exhibit significant deficits in empathy towards their own victims compared to other victims of sexual abuse and victims of accidents; implying that these offenders inhibit empathy towards specific individuals only.

Given that offenders appear to show state deficits in empathic responding, calls have been made to abandon generalised approaches to empathy, and to take more individualistic approaches to understand the variation of empathic responding according to context (Barnett and Mann 2013a, Marshall et al. 1995). Consequently, it has been suggested that one might investigate the reasons why deficits in empathic responding arise, rather than targeting deficits in empathic responding themselves (Barnett and Mann 2013a). Indeed, several models of offending include a disinhibition or 'blocking' stage (e.g., Finkelhor 1984, Marshall and Barbaree 1990), which might prevent 'normal' empathic responding from occurring. Of importance to the current research is the suggestion that these blocks may be achieved via cognitions (i.e., the cognitive antecedents of empathic responding) and, as noted by Barnett and Mann (2013a), it is these cognitive factors that should form the key targets for assessment and treatment.

[14] There are some exceptions to this generalisation. For example, Smallbone, Wheaton, and Hourigan (2003) reported trait deficits among versatile offenders (i.e., those committing a range of crimes). Other populations such as psychopaths or those with autism or frontal lobe damage have trait empathy deficits (Preston 2007).

Research into the cognitive inhibition of empathy is nothing new, and has already been widely investigated in terms of offence supportive beliefs[15] (Blake and Gannon 2008). Such beliefs can interrupt normal empathic responding (as argued by Ward, Polaschek, and Beech 2006), and thus inhibit or block empathic processes in the manner discussed above. Should one wish to enhance empathic responding (in the effort to reduce offending behaviour), one would therefore need to first address any offence supportive distortions (Ward, Polaschek, and Beech 2006). The effectiveness of such approaches has received some empirical support (e.g., Bumby 1996, Watson and Stermac 1994), which has formed the basis of a significant proportion of offender intervention programmes. However, support is nevertheless equivocal at present and as such, the effectiveness of cognitive restructuring approaches is subject to on-going debate (e.g., see Gannon and Polaschek 2006).

9.2.2 Implications of the current research

Although the above certainly suggests the utility of addressing offence supportive cognitions, two criticisms might be raised. Firstly, popular theories of offender cognitions are mostly specific to offence situations, and less interest has been paid to how offenders perceive their victims more generally (i.e., as people, rather than simply in terms of their victim status). Accordingly, it has been suggested that we search for beliefs "indicating a more pervasive way of seeing the world outside of the offence episode" (Gannon, Polaschek, and Ward 2005: 240-241). Secondly, these theories often assume a static and impersonal approach to cognition (Ward, Polaschek, and Beech 2005), whereas cognitions vary according to context and persons involved. The variables investigated within the current thesis are not specific to offending, and are not held in common towards all people; thus they

[15] The reader is referred to the 'cognitive distortion' literature, although the use of this term has been deliberately avoided here due to confusion surrounding its definition (see Blake and Gannon 2008; Ó Ciardha and Gannon 2011).

may prove to be a useful addition to research in this area; complimenting the existing offence supportive beliefs literature.

To give an example, one of the blocks to empathy-consistent behaviour occurs when offenders dehumanise their victims (e.g., Bandura et al. 1996), believing them to be 'sub-human objects' (Bandura 2002) and treating them more harshly than if they were humanised (see Bandura, Underwood, and Fromson 1975). Alleyne, Fernandes, and Pritchard (2014) have demonstrated a positive relationship between dehumanization and violence in gang members. Efforts have therefore been made to develop interventions that re-humanise victims (e.g., see Carich et al. 2003), aiming to remove this block to empathy-consistent responding. However, using the current research may allow one to gain a more detailed understanding of an offender's cognitive structure (i.e., exactly how the offender perceives his/her victim(s)), which would further inform the processes necessary for the success of such an intervention. To illustrate, based upon the conclusions drawn in Chapter 8, programmes may wish to ensure that offenders value others, perceiving them as fellow humans "with feelings, hopes, and concerns" (Bandura et al. 1996). Perceiving victims as fellow humans, rather than as objects, might also increase perceived similarity. With this increased valuing and similarity, offenders may be able to reintroduce victims into their 'moral communities' (see Hills 2001), encouraging behaviour to align with socially accepted moral codes that would otherwise be disengaged (Bandura 1999, Bandura et al. 1996). Once victims are re-humanised, offenders may start to think about their victims' perspectives more (c.f. Harris and Fiske 2006), which may lead to increases in perceived need (as a result of this increased understanding).

As the above example demonstrates, making use of the current research would allow one to glean a more detailed understanding of the complex cognitive processes occurring within overarching changes such as 're-humanisation', which provides a wider range of potential treatment targets (e.g., valuing, similarity, morality, cognitive empathy, and

perceived need; instead of just ‘victims are objects’). Such changes can be monitored using the CAERS, with subscale scores also providing markers for treatment success. Programme facilitators would need to take self-interest into account alongside any such changes, as suggested by the results of Study 5 (i.e., see Figure 7.2). It might be that making the above changes to cognition would have little effect on behaviour should self-interest take priority during an offence situation. Alternatively, it might be that changes to cognition (e.g., greater valuing) towards particular targets would minimise the salience of self-interest during future encounters, eliciting prosocial motivations. Future research is needed to test these hypotheses.

All of the first-order antecedents described in Chapter 8 have been linked to offending behaviour to some degree, and so all have the potential to be used in the above way. For example, offending behaviour has been associated with lower levels of (trait) cognitive empathy (Jolliffe and Farrington 2004), perceived similarity (see Bandura et al. 1996), valuing (see Hanson 2003), perceived need (via harm denial; Brown et al. 2013), moral disengagement (Bandura et al. 1996); and greater pursuance of self-interest (via a lack of self-control; Gottfredson and Hirschi 1990). The influence of each second-order antecedent has also received support. Lower agency (via responsibility shifting) and greater victim blaming have both been associated with offending behaviours (e.g., Brown et al. 2013); and there is evidence that child molesters choose their victims based on their victims’ lack of power (Howells 1978). However, these cognitions have typically been dealt with in isolation. Examining these antecedents in combination (similar to the approach taken in the current research) will allow us to identify which cognitions are the most influential on empathic responding, which changes in cognition can lead to the greatest behavioural change in a forensic context, and therefore which should receive the most attention during interventions.

9.2.3 The use of empathy to hurt others

One assumption that should be avoided is the view that promoting empathy will necessarily lead to an increase in prosocial behaviours; a pitfall that is particularly relevant to offending contexts. For example, the results of Nitschke et al.'s (2012) study suggested that sexual sadists do not lack empathy while committing their offences, but rather made use of empathy to understand their victims' suffering, so as to increase the pleasure derived from such acts. Similarly, Elliott, Browne, and Kilcoyne (1995) reported that child molesters use elements of empathy to identify vulnerable targets. In samples such as this, enhancing individuals' abilities to perceive emotions will be unlikely to have the desired effect, and may even make offending behaviour worse (e.g., Hilton 1993, Rice et al. 1994). This further emphasises the importance of understanding each offender's specific cognitive structure, and how this relates to his/her behaviours, before enrolment into intervention programmes. Hanson (2003) argued for the importance of sympathy, stating that empathy (i.e., emotional understanding) should occur in tandem with feelings of concern (i.e., sympathy) in order to encourage positive, rather than negative, changes to behaviour. This again supports the current argument: i.e., that it is important to understand specifically how the offender perceives his/her victim, rather than simply focussing upon enhancing feelings of empathy for them. For example, enhancing cognitive empathy or perceptions of need may have little (or even a negative) effect on behaviour should an offender lack appropriate morals or focus upon self-interests (i.e., antecedents of sympathy).

9.2.4 Suggestions for future research

Researchers should examine the relative influence of each CAERS cognition on offending behaviour; as well as which cognitive changes are able to bring about the greatest treatment change. Several cognitive antecedents are already being addressed within

intervention programmes designed to enhance empathy. For example, within Carich et al.'s (2003) review of treatment programmes, one can see the encouragement of perceived need in interventions emphasising victim impact; agency in letter writing interventions where offenders take ownership of their actions; valuing and morality in personalisation interventions; and the discouragement of victim blame in belief confrontation exercises. However, the development of these tasks appears to have been largely based upon what seemed most intuitive. The current research provides more specific (and empirically grounded) guidance for how to change cognition in a way that may lead to greater empathic responding, and the individual cognitions that may serve as markers for risk assessment and effective treatment change.

Should these cognitions be targeted within interventions, it is important that programmes be evaluated to determine which component is the most important for behavioural change, as currently there has been very little research carried out to examine the relative influence of individual components of empathy interventions (Marshall and Serran 2000). For example, although researchers (e.g., Beggs and Grace 2010; Olver et al. 2014) have reported that changes in other individual dynamic risk factors (e.g., sexual deviance, offence supportive beliefs, treatment compliance) predict a risk of recidivism, it is often unclear which components of the treatment programme have caused such changes. As suggested by Marshall and Serran (2000: 210), each component of an intervention should be evaluated to establish whether it: (i) causes the desired changes (e.g., to victim empathy); (ii) is necessary in its own right (i.e., the desired changes are not also caused by another component); and, (iii) results in long term reductions in recidivism. These suggestions would need to be followed before incorporating any of the variables investigated here into existing treatment approaches.

Ultimately, more research is needed in general as to the efficacy of empathy intervention programmes (which is currently lacking; Brown 2005, Mann and Barnett 2013), and components should not be included until one can demonstrate that they predict recidivism, or that addressing them can reduce recidivism (Mann and Barnett 2013). In particular, research is needed to determine the nature of the relationship (if any) between these cognitions and offending behaviour. For example, targeting cognitive deficits will have limited effectiveness if they only occur as post-hoc excuses for behaviour (Marshall, Marshall, and Kingston 2011), but may have more effectiveness should they facilitate or maintain general criminality (Ó Ciardha and Gannon 2011). Researchers would also need to consider the impact of self-interest in relation to these specific cognitive deficits, as the results of Study 5 suggest that self-interest can act as a key mediator between cognition and prosocial responding (although more research is required to determine whether this also applies to a forensic context). As discussed previously, future research is needed to determine whether changes in cognition are meaningless in the face of self-interest, or whether such changes are able to minimise the salience of self-interest, thus promoting prosocial responses.

Once the above themes have been more thoroughly researched, practitioners could use this information to identify specific thought patterns within each individual that allow blocks to victim-empathy to occur (i.e., that individual's dynamic risk factors). Treatments could then be individually tailored to each offender's cognitive shortcomings (Barnett and Mann 2013b); consistent with the *need* principle of the Risk-Needs-Responsivity model (Andrews and Bonta 2010). The current cognitions may also tie in with Ward and Durrant's (2013) more recent suggestions to take Kitcher's (2010) five dimensions of altruistic responding into account during assessment and intervention. Adding to Ward and Durrant's suggestions, a consideration of valuing and similarity might help to explain the *range* of people excluded from the offender's list of altruism targets. One might assess the degree of cognitive empathy

deficits and the salience of self-interest during sexual arousal to determine the *scope* of situations where the offender is altruistically compromised. An assessment of the offender's ability to perceive need and control self-interest could determine his/her ability in the *discernment* of the consequences of his/her behaviour. Cognitive empathy and perceived need could also be assessed as an indication of the offender's *empathic skills*, and the *intensity* of altruistic behaviours could be enhanced via consideration of agency (i.e., the ability to change one's behaviour) and perceptions of need.

Future research could examine the efficacy of using the cognitive antecedents discussed here to complement existing practice in the manner discussed above. CAERS scores taken pre- and post- treatment will aid in tracking any specific changes occurring during intervention (although there are limitations associated with using change scores as an indication of treatment success; Wakeling and Barnett 2014). It is important that interventions remain "future focussed" (Barnett and Mann 2013b: 30), and so research is needed to examine whether facilitating changes in the cognitive antecedents of empathic responding can lead to improvements in future behaviour. An examination of interactions with past victims to identify pertinent cognitive deficits (e.g., low valuing) will serve as a useful starting point, but the challenge will be to ensure that appropriate cognitions are applied to future potential victims; especially when faced with barriers such as schema activation during strong affective states, sexual arousal, and intoxication (see e.g., Gannon, Polaschek, and Ward 2005), which may lead to an increased pursuance of self-interests.

9.3 Implications for Those Working With Healthcare Professionals

'Compassionate care' is considered to be one of the six key values for healthcare professionals (NHS 2012); defined as "care … given through relationships based on empathy,

respect and dignity" (NHS 2012: 13). Compassionate practice is important for perceived quality of care in patients (Irurita 1999), can help to minimise patients' distress (Olson 1995), and can improve treatment outcomes through the creation of a 'healing climate', enabling hope and confidence in patients (von Dietze and Orbe 2000). Compassionate practice is therefore a central interest for patient satisfaction and wellbeing. However, there have been a number of concerns raised in recent years by several UK agencies with regards to low levels of compassionate care delivered by healthcare professionals (e.g., Care Quality Commission 2014, Department of Health 2013, Francis 2013, Keogh 2013, The Patients' Association *n.d.*), and so approaches are needed to instil and maintain compassion consistent values in those working in healthcare.

As with other fields, the definitional issues present within the healthcare literature make the application of the current research somewhat difficult. Authors rarely provide explicit definitions for terms used, and definitions are inconsistent when provided. For example, definitions have focused upon what I have defined as empathy (e.g., von Dietze and Orbe 2000) and sympathy (e.g., Goetz, Keltner, and Simon-Thomas 2010). Other authors (e.g., Low and LaScala 2014) have chosen to use the term 'empathy', but have included 'compassion' in their definition. Given the lack of distinction between these terms, authors in this field would be wise to consider similar investigations to that given to empathy in Chapter 2. The results of one such study (Kneafsey et al. 2015) suggested that practitioners understand compassion to include empathic emotions as well as a behavioural component. This is consistent with von Dietze and Orbe (2000), who suggested that compassion goes one step further than empathic responding, and includes the desire to improve another's condition, and to work together with the patient to resolve any problems. As this means that therapeutic relationships are dyadic in nature (i.e., between the healthcare professional and their patient), it is important to consider both the empathic responding within the healthcare

professional, as well as how this is communicated to the patient. Each of these themes shall be considered below.

9.3.1 Empathic responding

Although it is generally accepted that empathic responding is important for compassionate care (e.g., NHS 2012, Rogers 1980), specific guidance as to how to encourage empathic responding is rarely provided for healthcare educators (Decety et al. 2014). As such (similar to the forensic literature), empathy interventions lack consistency (see Brunero, Lamont, and Coates 2009, Stepien and Baernstein 1997) and are seemingly based upon what appears most intuitive. The results of the current research can be used to draw together existing knowledge in this field, and provide specific suggestions for how to encourage and maintain empathic responding. For example, the current research is consistent with the suggestion that healthcare professionals should be encouraged to understand the issues faced by their patients (i.e., cognitive empathy) (Fox 1990). One may build upon this, and make use of the results presented in Table 8.5 to determine which cognitions may increase one's motivation to seek this understanding (significant correlations were reported between cognitive empathy and perceived need, blame, self-interest, valuing, agency, and morality).

The other cognitive antecedents of empathy may also be considered (e.g., perceived need, valuing, and similarity). For example, encouraging practitioners to reflect upon their patients' levels of pain (i.e., perceived need) can lead to the appropriate delivery of compassionate care (see Goubert et al. 2005), which is important as evidence suggests that nurses routinely underestimate the amount of pain experienced by their patients (e.g., Sloman et al. 2005). Low empathy has also been associated with the objectification of one's patients (i.e., low valuing / similarity) (see Haque and Waytz 2012), and so educators may wish to discourage patient objectification in practice. Although each of these factors has already

received some research interest in isolation, future researchers could again follow the combined approach taken here, to determine which aspects of cognition are the most important for compassionate care, and which specific changes in cognition bring about the greatest changes in practice.

Research in this field has not examined the benefits of sympathy as it has been defined here. However, it seems sensible to assume that healthcare professionals would be more motivated to help another when they are concerned for their patients' wellbeing; especially given the common association between sympathy and helping behaviours (e.g., Eisenberg, Fabes, and Spinrad 2006). The antecedents of sympathy might be considered in addition to the above, as healthcare workers must have a strong sense of morals, and behaviours should be based upon these moral principles rather than the satisfaction of one's self-interest (von Dietze and Orb 2000). Downie and Calman (1994) have also suggested that individuals will most likely act in a compassionate manner when they believe that one should help others, treat others fairly, and help the majority rather than oneself. Again, research is needed to examine the comparative importance of empathy and sympathy in the delivery of compassionate care.

'Ward culture' (i.e., the common values and practices held within healthcare teams) might also be taken into account, as this could help or hinder any cognitive changes in the above manner, should a healthcare professional's colleagues promote positive or negative values / practices respectively. For example, there is evidence to suggest that patient centred care is strongly associated with a 'positive ward climate' (Abdelhadi and Drach-Zahavy 2012). Hospital managers could take this into consideration and try to encourage a culture of positive cognition towards patients, which may encourage greater empathic responding in individual staff members. Healthcare professionals should also be wary of the language they use to avoid promoting an uncompassionate ward culture, as derogatory terms can serve to

dehumanise patients, leading to lower valuing, in turn leading to deficits in compassionate care. Richman and Mercer (2004) provided examples of various derogatory terms commonly used within modern healthcare to describe certain patient groups.

Targeting more senior nurses (e.g., team leaders) might be a particularly effective approach for each of the suggestions presented in this section. Richman and Mercer (2004) proposed that more senior staff serve as examples of best practice, and that these examples are likely to be adopted within the culture of the ward. Masterson et al. (2014) also demonstrated that a compassion programme for band 6 and 7 nurses improved compassion not only in those participating in the programme, but also in their respective teams. Effective leadership is also able to foster greater engagement with personal professional development in nursing teams (e.g., Day 2014), which might again increase the success of any intervention targeting the cognitive antecedents of empathy. Taken together, these points suggest that attempts to make changes to individual nurses' empathy-related cognitions would have greater effectiveness in a culture that is conducive to change and promotes compassionate practices. Intervention developers may therefore be wise to also focus on improving prosocial cognitions at the ward culture level, which may help to support changes made within individual healthcare professionals.

9.3.2 Communicating empathy

As noted before, compassionate care goes beyond empathic responding, and involves a behavioural element. Compassion is about working *with* another person (von Dietze and Orbe 2000), rather than simply feeling the same *as* them (i.e., empathy; Hein and Singer 2008). As such, although empathic responding may motivate the health-worker to behave compassionately (and so remains important), the focus should be on patient experience; meaning that empathy must be communicated to the patient in order for them to recognise it

(Doyle, Hungerford, and Cruickshank 2014; see also Barret-Lennard 1981). Accordingly, it is how carers *behave* that will determine the degree of compassionate care experienced by the patient (Yu and Kirk 2009); with the nature of this behaviour being at least partly determined by cognition. However, it seems that when opportunities arise, doctors rarely communicate empathy to their patients (Morse, Edwardsen, and Gordon 2008). The current research can be used as a starting point to examine which aspects of empathy/sympathy should be communicated most to patients (i.e., what would lead to the greatest improvement in patients' perceptions of care); thus facilitating the benefits of compassionate care to the greatest degree.

To use empathy as an example, the model presented in Figure 8.1 suggests that practitioners might communicate valuing, similarity, cognitive empathy, and perceived need to their patients. Two processes perhaps encapsulate these four variables: Firstly, healthcare professionals should ensure that they humanise patients, and attempt to move away from the objectivity based 'cure-rather-than-care' approach (Kelly 2007), and towards patient-oriented methods (see Kelly 2007, Neumann et al. 2011). Incorporating this into behaviour will make their patients feel valued as persons rather than mechanical objects, which enables carers and patients to work in partnership (as emphasised by von Dietze and Orbe 2000). Working in partnership may also allow patients to feel on the same level as their carers (i.e., similar, as they are no longer objectified). Carers may also achieve similarity by drawing upon personal experiences to form emotional connections with their patients (Fahrenwwald et al. 2005). Secondly, carers should be encouraged to reflect upon their patients' perspectives, to gain an understanding of their emotional needs (i.e., cognitive empathy and perceived need), and communicate this understanding back to their patients (e.g., "I understand how you feel"; Nightingale, Yarnold, and Greenberg 1991: 420). These approaches are perhaps already taken as part of the principles of reflective practice. However, as with the other sections discussed

here, research has rarely examined the individual components of empathy education practices, and so we know little about which aspects of communication are the most important from a patient experience point of view.

9.3.3 Personal distress and staff burnout

Although empathy seems beneficial for therapeutic relationships, one should be wary of overexposure. Consistent with the model presented in Figure 8.2, overbearing feelings of empathy and a lack of emotional regulation can lead to personal distress, which can lead to reductions in prosocial behaviour (as suggested by the results of Study 4; also see Batson 1991, Batson, Fultz, and Schoenrade 1987). In a healthcare context this can lead to lower job performance (Riggio and Taylor 2000) and secondary issues such as burnout or compassion fatigue (Abendroth and Flannery 2006): conditions typified by emotional disengagement with one's patients (Figley 1995). Sources of stress within healthcare professions such as high workloads, inadequate staffing, and interpersonal conflicts (see Maytum, Bielski-Heiman, and Garwick 2004, Zander, Hutton, and King 2010) can also lead to burnout or compassion fatigue (Abendroth and Flannery 2006, Aycock and Boyle 2009). Interventions for these stress-based issues are likely best dealt with at a policy level (e.g., addressing staff shortages), or through increased resilience to stress via mindfulness training (e.g., Martín-Asuero and García-Banda 2010) or self-reflection (see Brown et al. 2015). However, the variables highlighted in the current research may be used to track specific changes in one's cognitive structure during empathic decline; which should lead to the identification of specific targets for prevention and intervention. For example, if decreases in empathic responding due to personal distress are caused primarily by deficient valuing (i.e., patient objectification and detachment), then patient valuing could be monitored as a risk factor for burnout and compassion fatigue, and could form a marker for success of treatment programmes. The

CAERS can be used to fulfil both these aims (e.g., the CAERS could be used to monitor patient valuing in nurses deemed to be at risk of burnout, and by measuring valuing before and after a compassion fatigue intervention).

9.3.4 Suggestions for future research

Future research may build upon the findings presented within this thesis by investigating the specific changes occurring in healthcare practitioners' cognitions towards their patients. Researchers might wish to more closely examine which of these variables should be both experienced and communicated to patients (e.g., cognitive empathy; Nightingale, Yarnold, and Greenberg 1991), which should be experienced but not communicated (e.g., affective empathy, which could detract focus away from the patient; see Ruusuvuori 2005), and which should neither be experienced nor communicated (e.g., self-interest; Downie and Calman 1994, von Dietze and Orb 2000). Research may even examine whether communicating the antecedents of empathic responding (i.e., that the patient is valued etc.), but experiencing the affective element to a lesser degree, can effectively ensure patient satisfaction, while simultaneously reducing the risk of personal distress. Ward culture should also be taken into account, as this may allow one to make positive changes to whole teams, as well as support changes made at an individual level. Specific knowledge of the cognitive antecedents to empathic care may lead to the development of more informed (and specific) intervention and education strategies aiming to enhance and maintain compassionate care.

Finally, although this discussion has focussed on empathy in a healthcare context, many of the issues discussed above are ultimately an occupational psychological concern. The same discussions may apply to any contexts where people are expected to care for others. For example, researchers could examine teachers' empathy towards their students, and

whether an empathic environment may foster a better school experience (see Aspey and Roebuck 1975). The themes discussed here may also apply to maternal fatigue: a condition similar to compassion fatigue, typified by a lack of warmth of a mother towards her child (Giallo, Rose, and Vittorino 2011). The current research can be used a starting point to foster an understanding of the specific cognitive changes necessary to improve empathic responding (and behaviour) in these other areas of caring.

9.4 Implications for Those Aiming to Encourage Charitable Giving

The implications for charitable giving have already been discussed in Chapter 6, and so unnecessary repetition shall be avoided here. However, to remind the reader, it was concluded in Chapter 6 that charity advertisers should avoid notions of blame (e.g., victimisation due to poor decision making), while making observers aware how their donations can make a difference to the recipient (i.e., agency). The elicitation of empathy should also be encouraged; best achieved by presenting targets as valuable individuals, and emphasising the moral injustice of the target's situation. These latter findings in particular should prove useful to advertisers who wish to evoke empathy in their audiences, as how to achieve such a result is not immediately obvious. The results reported here therefore offer more specific guidance on how to present the targets of charitable efforts, so as to enhance the elicitation of empathy and donation behaviours. It is envisaged that the current findings will be used to develop more effective campaigns for charitable organisations, with the overall aim to improve income generation for those who need it. However, there are several avenues for further research.

Firstly, the results of Study 5 suggested that once genuine elements of self-interest (e.g., the desire to hold on to one's money) are introduced, participants' decision making

processes are altered. Future research could examine this idea further, and identify the factors that determine the threshold at which donation behaviours motivated by empathic responding overrule non-donation behaviours motivated by self-interest; and vice versa. This might have implications for charities with regards to how much they ask of their potential donors. For example, a common approach at present is to ask donors to make monthly payments via direct debit. However, this may serve to increase the perceived costs to self-interest in potential donors (versus asking for a single payment), which may lessen the likelihood of a donation (as suggested by the results of Study 5). A potential avenue for further research, therefore, is to examine whether requests for direct debit payments lead to a lower likelihood of donating compared to requests for single payments, mediated via increased perceived costs to self-interest.

Secondly, perceived benefits to the self (such as pride or social approval; Fisher, Vandenbosch, and Antia 2008) may also encourage donation behaviours; a factor not investigated in the current research. Although charity advertisers should avoid emphasising benefits to the self (which may actually reduce the likelihood of donating; Fisher, Vandenbosch, and Antia 2008), it may again be interesting to investigate how perceived self-benefits interact with perceived self-costs and empathic responding; in turn deducing the most important factors for generation income.

Thirdly, the assumption that manipulating the above variables can bring about increases in donations needs confirming, as research to date has largely been correlational in nature (i.e., describing the features of existing campaigns). This is especially important should an overuse of these methods cause observers to down-regulate emotional engagement in order to avoid feelings of personal distress (e.g., see Cameron and Payne 2011). Similarly, organisations would be wise to avoid an overuse of these methods should they be powerful enough to cause distress and emotional exhaustion in their audience. For example, although

the results of Study 4 suggest that increasing valuing might be an effective way of increasing prosocial feelings of empathy, it may be that this also increases feelings of personal distress. This would not only reduce the likelihood of donating but would also have ethical implications. Future research should aim to replicate Study 4, with the inclusion of a state personal distress measure. This would allow one to identify which variables lead to the greatest elicitation of empathy (thus increasing the likelihood of a donation) but without any associated increases in personal distress (which could decrease the likelihood of donation, and have harmful effects on one's audience). As an example, the reader is referred to a recent news story illustrating the dangers of overwhelming charity campaigns (BBC 2015).

9.5 Other Considerations

Although the current research should prove useful as a starting point for those concerned with the cognitive antecedents of empathic responding, further research is necessary with regards to the effects of social desirability, the controlled/automaticity debate, and to the causal order of factors within the empathic process.

9.5.1 Social desirability

When measuring levels of empathic responding it is important to consider the effects of social desirability, as existing measures have previously been criticised for self-presentation bias (e.g., Curwen 2003, Kampfe et al. 2013). Although efforts were taken to avoid social desirability correlates (see Chapter 4), the same criticism can be applied to the CAERS, with some subscales significantly correlating with the social desirability measure. Encouragingly, correlation coefficients were small (according to Cohen 1988). However, such effects may become more pronounced within more sensitive contexts (Fazio and Olsen 2003). For example, offenders may be more motivated than student samples (as used here) to

respond in a socially desirable manner; especially when their progression through the justice system may be dependent upon favourable assessment scores. Indeed, those that have assessed scales using samples of offenders have reported social desirability correlates (e.g., Curwen 2003, Kampfe et al. 2013, Lauterbach and Hosser 2007, McGrath, Cann, and Konopasky 1998). As such, an offender's cognitions towards his/her victim may be particularly susceptible to this bias (Hanson and Scott 1995), and so validation with more diverse samples would be needed before adapting the CAERS for use in sensitive contexts.

The social desirability measure employed in these studies also has its limitations, which may affect the interpretability of the relationships between the M-C form C (Reynolds, 1982) and the various CAERS subscales. The scale developed by Crowne and Marlowe (1960) (from which the M-C form C was developed) has been extensively validated which, added to the fact that it can be quickly and easily administered, has resulted in it being used in over 1000 studies (Tatman et al. 2009). This is also why the scale was selected for use in the current research. However, the scale is now considered outdated by some (e.g., Ballard et al. 1988, Stöber 1999, 2001), as authors have questioned whether the social standards of the 1950s (when the Marlowe-Crowne scale was first developed) remain applicable in today's society. Stöber (2001) noted that this may be particularly problematic when used with student samples, who have had no exposure to 1950s social norms. This may mean that some participants in the current research wished to portray themselves in a favourable light, but did not agree with some items of the M-C form C, because they do not see these statements as being socially desirable qualities (i.e., when these old social norms no longer apply). It may have been more appropriate to use a less dated version of the Marlow-Crowne scale, such as that developed by Stöber (1991, 2001), which will more closely represent the social norms of the current era. Future researchers may use such a scale to further assess the social desirability correlates of the CAERS.

As an alternative approach, several authors have called for the development of implicit empathy measures (e.g., the Implicit Association Task; Greenwald et al. 1998) to combat the potential for desirability biases (e.g., Day et al. 2012, Kampfe et al. 2013, Webster et al. 2005), as these are less susceptible to bias due to decreased transparency of scale aims. Implicit measurement may also help to reduce other issues such as inaccurate introspection on one's cognitions (e.g., Gannon and Polaschek 2006, Keown, Gannon, and Ward 2008). A potential avenue for further research, therefore, is to investigate the potential of adapting the CAERS for implicit measurement. As stated in Chapter 4, psychometric methods were necessary in the current context to compare a wide range of cognitions. However, as the possible most influential antecedents of empathy / sympathy / prosocial behaviour have now been identified (i.e., see Chapter 8), one can narrow the focus of the current research to compare and contrast the influence of a smaller number of variables at a time using the Implicit Association Task (Greenwald et al. 1998) or other behavioural measures (for example, to see whether valuing has a stronger association with empathic responding than perceived need).

9.5.2 The controlled / automaticity debate

As with other measures of empathy, the use of self-report methods is attributed with certain other limitations. For example, Kämpfe et al. (2009) argued that self-report tools (such as the one presented here) measure accessible, and consciously processed attitudes. However, the elicitation of empathy is largely automatic (Singer et al. 2004) and thus based upon unconscious cognitions. Although later (consciously controlled) cognitions may shape affective outcomes, it is unclear how implicative unconscious cognitions are on the elicitation of empathy, and how well self-report measures are able to capture these thoughts. Additionally, it is unclear how accurately participants are able to self-report their own cognitions, due to imperfect introspection (Banaji 2001). Again, although the use of

psychometrics served as a useful starting point for the current research, the use of non-self-report measures such as the Implicit Association Task (Greenwald, McGhee, and Schwartz 1998) may allow for a greater understanding of the differing influences of conscious and sub-conscious cognitions.

Additionally, although useful in allowing one to examine the influence of each of these thoughts on empathy, the measures of affect (i.e., the empathy and sympathy subscales) may have been subject to bias. Research shows that people may have difficulty reporting their own emotions accurately (e.g., Quirin et al. 2009) and that introspecting on one's own emotions (in order to generate self-report responses) may alter one's emotional state (Lieberman 2007). Further work is therefore required to validate the effects of the CAERS subscales on more rigorous measures of affect such as behavioural or implicit methods.

9.5.3 The causal order of cognitions and emotions

Throughout this thesis, discussions have been based upon the preposition that cognitions precede empathic emotions within the empathic process model (i.e., see Figure 3.1). This reasoning has been founded twofold: i) that previous research has demonstrated experimentally that manipulations of cognitions included in the CAERS lead to changes in empathic responding (see Section 5.6.1); and ii) that in a large number of cases (e.g., within relationships) individuals have had time to develop attitudes towards a particular target before the empathy event occurs. For example, it has been demonstrated that the amount we value another is an enduring attitude, and that empathic responding is partially dependent upon how much we like the target (Batson et al. 1995).

However, although one can have confidence in the causal influence of cognition on emotion, backward influences are also a possibility. For example, as well as the above finding, Batson et al. (1995) reported that an empathy manipulation caused changes in the

degree of valuing. There is no doubt that cognitions and emotions are closely linked, and relationships are complex in nature (deemed a "false dichotomy" by Duan and Hill 1996: 263). However, the correlational evidence presented here is unable to establish cause and effect in these relationships. As such, each of the suggestions presented throughout this chapter should be considered preliminary, and would require extensive further research. In particular, researchers need to establish whether the suggested cognitive changes do indeed lead to changes in empathic responding, and in turn prosocial behaviours. Ultimately, although the current research serves as a useful starting point, the utility of putting the suggestions made here into practice will be dependent upon the outcome of this future research.

9.6 Conclusions

Based upon the research presented within this thesis, several recommendations have been made for those working in several different fields of interest. Perhaps the most pertinent conclusion to be drawn is that although the current research serves as a useful starting point for research in this area, much more is needed to examine the efficacy of the suggestions made within the current chapter. Nevertheless, the value of the research presented within this thesis lies in the fact that it grants a wider range of potential targets for enhancement than focussing upon the empathic emotions themselves, which has the potential to increase the effectiveness of prevention / intervention / enhancement strategies in a number of different contexts.

Three general recommendations can be made based on the current research, which will apply to each of fields of practice discussed within this chapter. Firstly, it is important that those concerned with the enhancement of empathy are working with shared definitions of related terms. As discussed in Chapter 2, the inconsistencies in definition have led to

inconsistencies in the way empathy is understood by both researchers and practitioners. This has made the interpretation of research outcomes difficult (Brown, Harkins, and Beech 2012, Gerdes, Segal, and Lietz 2010) and has led to a mismatch between research and treatment (Mann and Barnett 2013). Greater consistency between research and practice is especially important during the development and evaluation of intervention programmes. If empathy is defined in a consistent manner across disciplines (e.g., current definitions of empathy differ between the forensic and healthcare literatures), then effective treatment / education strategies would be more easily shared across these different fields of interest. Secondly, it is important that programme developers in each of these areas understand the differences between empathy and sympathy. This is important given the functional differences between empathy and sympathy suggested in the results of Studies 3-5. Thirdly, it is important that researchers place a greater focus on the state antecedents of empathy than is currently given, and apply this knowledge into the development of intervention programmes. Specific suggestions for those working in forensic, healthcare, and charitable donation contexts can be summarised as follows.

Firstly, in the forensic field, the fact that the current research suggests that empathic responding varies according to the persons involved advocates that we continue to move away from a trait deficit approach to offender intervention, and towards the more precise state and victim-specific deficits approach. However, more research is needed to more fully understand how an offender's thoughts about his/her victim(s) influence empathic responding, and offending behaviours. Specifically, the current research can be used in combination with the offence supportive beliefs literature to determine which antecedents of empathic responding and behaviour represent the most effective targets for intervention. This will allow practitioners to individualise treatment approaches, targeting each offender's own

criminogenic needs (perhaps identified using the CAERS), and has the potential to enhance more favourable (and prosocial) thoughts towards victims.

Secondly, more research is needed into the specific reasons behind the apparent lack of compassion exhibited within areas of modern healthcare. The CAERS can be used to examine how carers perceive their patients; which can be used to enhance feelings of empathy / sympathy towards them. Similarly, the current research may be further extended to investigate which aspects of empathy should or should not be communicated to patients; and how this impacts upon patient satisfaction. Finally, a full consideration of healthcare workers' cognitions towards their patients may help in overcoming conditions such as compassion fatigue. The current research therefore serves as a useful starting point for the examination of cognitive based deficits in compassionate practice. This research can also be further extended to any other social context where one individual cares for another or others.

Thirdly, one may build upon the current research to develop more effective promotional materials for charitable organisations. The results of Study 4 suggested that one should encourage greater valuing, morality, agency, and less blame. This should serve as a useful starting point, but more research will be needed to determine whether the manipulation of these variables can generate greater income for charitable organisations, as research has been largely correlational to date. Future research is also needed to disentangle the separate influences of self-benefits, self-interest, and empathic responding.

Finally, those wishing to extend the current research should pay consideration to factors such as social desirability and the causal order of cognition and emotion. Future investigation of these issues will allow for the development of measures such as the CAERS with greater validity, and will allow for a greater understanding of the overall empathic process. Ultimately, all of the above suggestions might go some way in order to improve our

theoretical understanding of the empathic process, and in turn to improve our ability to enhance the prosocial behaviours of those that need it.

Chapter 10: Overall Conclusions

In this thesis a number of longstanding issues present within the empathic responding literature have been addressed. The purpose of this has been to further our understanding of empathy and sympathy as state variables, and to emphasise the importance of researching the various cognitive antecedents that underlie the variation of empathy and sympathy according to context. Each of the aims presented at the start of this thesis have been addressed through critical discussions and the analysis of empirical evidence.

Firstly, empathy has been defined using a rational argument and evidence-based approach. It is envisaged that the discussions presented in Chapter 2 will stimulate further debate into the definition of empathy and related terms (e.g., sympathy, compassion, tenderness, etc.), encouraging consistency between researchers and practitioners, and thus reducing the confusion that has plagued the empathy literature for more than a century. Defining empathy with greater consistency will ultimately enhance both research and practice, will allow for greater comparability between research findings, and promote research in often overlooked areas such as the variation of empathic responding according to the cognitions researched here.

Secondly, a new scale has been constructed and validated to measure a number of key state-based cognitive antecedents of empathic responding. Although the CAERS requires further validation before being applied to different contexts (e.g., the comprehension of scale items needs confirming outside of university samples), it has proved useful in allowing for the development of our understanding of the empathic process. The CAERS has several potential applications outside of the largely theoretical nature of the current research. For example, subscales could be used to assess and track changes in offender cognition towards their victims, and healthcare professionals' cognition towards their patients.

Thirdly, the relationships between these cognitions and empathic responding and helping behaviours have been examined in three studies, leading to the development of a new model of empathic responding. The results of Studies 3-5 have allowed for a greater understanding of the relationships between cognition and empathic responding, thus further developing our understanding of how empathy and sympathy vary as state (as well as trait) constructs. Studies 4 and 5 have also added to our understanding of how these cognitive antecedents contribute to concurrent behavioural motivations; important as previous research has typically focussed mainly upon empathic emotions themselves, providing limited knowledge of how best to evoke these emotions in practice.

Fourthly, it has been demonstrated that not all cognitions are equally important within the empathic process (at least not in the contexts investigated here). This is an important novel contribution as these cognitions have previously been dealt with in isolation, limiting our understanding of which antecedents are the most influential on empathic responding. The development of the CAERS has allowed for a combined approach to be taken, leading to the development of a new model of the empathic process. In particular, valuing has been consistently identified as the most influential antecedent of both empathy and sympathy, despite the fact that it has received limited research interest to date. Other variables that have been deemed influential (e.g., blame, agency, and power) have been identified here as only having indirect influences on empathy/sympathy. The fact that not all cognitions are equally influential has important implications for our theoretical understanding of the empathic process, and for those working in practice. Nevertheless, although consistencies in the results between Studies 3-5 are encouraging for the generalisability of the model depicted in Figure 8.2, further research is needed to determine whether this model remains consistent across different contexts (e.g., forensic and healthcare), or whether the various relationships between cognitions and empathy also vary according to context.

The results of Study 4 (enhanced by the results of Study 5) not only demonstrated how this research can be used to enhance a specific field of interest (i.e., income generation for charitable organisations), but has allowed for the development of more specific (and empirically grounded) suggestions for charity advertisers wishing to elicit empathy in their audiences. These findings have value in the fact that no research to date has examined which antecedents of empathy may bring about the greatest changes in donation likelihood. Similarly, a number of suggestions were made in Chapter 9 for those working in other fields (i.e., healthcare and forensic). Although more research is needed to test these suggestions, the research presented here should serve as a useful starting point in terms of the identification of the most pressing targets for intervention, and which cognitions may serve as markers for risk assessment and effective treatment change. There has currently been very little research into how specific cognitions can be addressed in these ways.

In addition to the aims presented in Chapter 1, the results of Studies 3-5 have also built upon the arguments presented in Chapter 2 by presenting evidence of the differences between empathy and sympathy; important as these terms are commonly merged in the literature, resulting in difficulties establishing whether studies pertain to the examination of empathy or sympathy. The current results attest to differences in both the antecedents (see Figure 8.1) and outcomes (e.g., empathy contributed to the helping models but sympathy did not) of these concepts, further arguing for their separation in both research and practice.

In conclusion, the current research has demonstrated how a consideration of the cognitive antecedents of empathy can be used to gain a greater understanding of this important social emotion. By continuing to explore these themes, a better understanding of empathy as a state variable can be gained, which will ultimately enhance both research and practice in a number of important psychological disciplines.

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Appendix A: Scales

A.1 The Cognitive Antecedents of Empathic Responding Scale (Initial Item Pool)

[Demographic Information]

Gender *(please circle)*:	Male	Female			
Age:					
Ethnicity (please circle):	White-British	White & Black Caribbean	Indian	Black-African	Arab
	White-Irish	White & Black African	Pakistani	Black-Caribbean	
	Gypsy or Irish Traveller	White & Asian	Bangladeshi		
			Chinese		
	Other White	Other Mixed	Other Asian	Other Black	Any other

[Mood & Self-Esteem Items]

Please indicate your current mood according to the following scales:

	Not at all	Not very	Neutral	Somewhat	Very
Happy	1	2	3	4	5
Sad	1	2	3	4	5
Anxious	1	2	3	4	5
Relaxed	1	2	3	4	5
Angry	1	2	3	4	5
Tired	1	2	3	4	5

What is your current level of self-esteem?

Very Low	Low	Moderate	High	Very High

[The CAERS]

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	She needs help.	1	2	3	4	5
2	She should be held accountable for this.	1	2	3	4	5
3	Her needs should take priority over my own.	1	2	3	4	5
4	I am a more dominant person than her.	1	2	3	4	5
5	She is in need.	1	2	3	4	5
6	I care about her.	1	2	3	4	5
7	She is hurt.	1	2	3	4	5
8	I am in control of what happens.	1	2	3	4	5
9	I didn't find this particularly offensive.	1	2	3	4	5
10	I feel fondness for her.	1	2	3	4	5
11	This happened due to the choices that she made.	1	2	3	4	5
12	What happened was justifiable.	1	2	3	4	5
13	In terms of power, she is beneath me.	1	2	3	4	5
14	I felt empathy for her.	1	2	3	4	5
15	I feel hostility towards her.	1	2	3	4	5
16	I have greater authority than her.	1	2	3	4	5
17	She is innocent here.	1	2	3	4	5
18	I like her.	1	2	3	4	5
19	She brought this on herself.	1	2	3	4	5
20	I should focus on my own needs here.	1	2	3	4	5
21	My choices will determine her future.	1	2	3	4	5
22	She is upset.	1	2	3	4	5
23	Her response is confusing to me.	1	2	3	4	5
24	She should never have been treated this way.	1	2	3	4	5
25	I feel warmth towards her.	1	2	3	4	5
26	My own needs are more important here.	1	2	3	4	5
27	I do not have control over these events.	1	2	3	4	5
28	I find what happened to her offensive.	1	2	3	4	5
29	She is happy.	1	2	3	4	5
30	She had no control over these events.	1	2	3	4	5
31	The decisions I make will have an impact.	1	2	3	4	5
32	She resembles myself.	1	2	3	4	5
33	I am less likely to be a leader than her.	1	2	3	4	5
34	I am not the same as her.	1	2	3	4	5
35	I felt little sympathy for her.	1	2	3	4	5
36	She is a more dominant person than me.	1	2	3	4	5
37	What happened to her was not morally wrong.	1	2	3	4	5
38	I was puzzled by her emotional response.	1	2	3	4	5
39	She means nothing to me.	1	2	3	4	5
40	This is her fault.	1	2	3	4	5
41	She is blameless for what happened.	1	2	3	4	5
42	She is able to cope on her own.	1	2	3	4	5
43	She is OK.	1	2	3	4	5
44	I can imagine what she was thinking.	1	2	3	4	5
45	I am a more powerful person than her.	1	2	3	4	5
46	Nobody should experience what happened to her.	1	2	3	4	5
47	I cannot change what is going to happen.	1	2	3	4	5
48	I am very different to her.	1	2	3	4	5
49	I am not responsible for what happens.	1	2	3	4	5
50	I am weak compared to her.	1	2	3	4	5
51	I am a less powerful person than her.	1	2	3	4	5
52	The reasons for her response are clear.	1	2	3	4	5
53	I am not able to change this situation.	1	2	3	4	5
54	She is responsible for what happened.	1	2	3	4	5
55	She has reacted strangely.	1	2	3	4	5
56	She did not affect me emotionally.	1	2	3	4	5

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
57	I should not think only of myself here.	1	2	3	4	5
58	It is difficult to know what she was thinking.	1	2	3	4	5
59	She didn't make me feel anything.	1	2	3	4	5
60	I feel affection for her.	1	2	3	4	5
61	What happened to her was immoral.	1	2	3	4	5
62	Others would think that she reminds them of me.	1	2	3	4	5
63	It is important that I meet my own needs here.	1	2	3	4	5
64	I can see why she reacted like she did.	1	2	3	4	5
65	She is to blame here.	1	2	3	4	5
66	I should focus on her needs first.	1	2	3	4	5
67	I can recognise her thought process.	1	2	3	4	5
68	I should do what it takes to make myself happy here.	1	2	3	4	5
69	Her emotions made me emotional.	1	2	3	4	5
70	I need to think of myself here.	1	2	3	4	5
71	She and I are much alike.	1	2	3	4	5
72	In many ways, I am the same as her.	1	2	3	4	5
73	I don't understand why she acted like she did.	1	2	3	4	5
74	She reminds me of myself.	1	2	3	4	5
75	Her emotions were appropriate.	1	2	3	4	5
76	She couldn't have stopped this from happening.	1	2	3	4	5
77	She and myself are unalike.	1	2	3	4	5
78	What happened to her was fair.	1	2	3	4	5
79	This hasn't really affected her emotionally.	1	2	3	4	5
80	I feel ill will towards her.	1	2	3	4	5
81	The way this situation unfolds depends on what I do.	1	2	3	4	5
82	She is unhappy.	1	2	3	4	5
83	I am the opposite of her.	1	2	3	4	5
84	I should not act selfishly here.	1	2	3	4	5
85	I felt concern for her.	1	2	3	4	5
86	I am worried about her.	1	2	3	4	5
87	I am able to change her future.	1	2	3	4	5
88	I found this quite upsetting.	1	2	3	4	5
89	She is in distress.	1	2	3	4	5
90	I didn't feel any concern for her.	1	2	3	4	5
91	The way she was treated goes against my morals.	1	2	3	4	5
92	I am a superior person compared to her.	1	2	3	4	5
93	The way she was treated was wrong.	1	2	3	4	5
94	The outcome will be the same no matter what I do.	1	2	3	4	5
95	I felt sympathy for her.	1	2	3	4	5
96	She is more powerful than me.	1	2	3	4	5
97	I dislike her.	1	2	3	4	5
98	It doesn't matter what I need here.	1	2	3	4	5
99	I don't care what happens to her.	1	2	3	4	5
100	I am similar to her.	1	2	3	4	5

A.2 The Cognitive Antecedents of Empathic Responding Scale (Final Version)

[Demographic Information]

Age:	…… years				
Gender *(please circle)*:	Male	Female			
Ethnicity *(please circle):*	White-British	White & Black Caribbean	Indian	Black-African	Arab
	White-Irish	White & Black African	Pakistani	Black-Caribbean	
	Gypsy or Irish Traveller	White & Asian	Bangladeshi		
			Chinese		
	Other White	Other Mixed	Other Asian	Other Black	Any other

[The CAERS]

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	She is in need.	1	2	3	4	5
2	I am able to change her future.	1	2	3	4	5
3	She is hurt.	1	2	3	4	5
4	I feel fondness for her.	1	2	3	4	5
5	This happened due to the choices that she made.	1	2	3	4	5
6	I felt empathy for her.	1	2	3	4	5
7	I like her.	1	2	3	4	5
8	She brought this on herself.	1	2	3	4	5
9	I should focus on my own needs here.	1	2	3	4	5
10	She is upset.	1	2	3	4	5

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
11	She should never have been treated this way.	1	2	3	4	5
12	I feel warmth towards her.	1	2	3	4	5
13	My own needs are more important here.	1	2	3	4	5
14	She is a more dominant person than me.	1	2	3	4	5
15	This is her fault.	1	2	3	4	5
16	I cannot change what is going to happen.	1	2	3	4	5
17	I am weak compared to her.	1	2	3	4	5
18	She is responsible for what happened.	1	2	3	4	5
19	I am a less powerful person than her.	1	2	3	4	5
20	I am not able to change this situation.	1	2	3	4	5
21	She has reacted strangely.	1	2	3	4	5
22	She did not affect me emotionally.	1	2	3	4	5
23	I feel affection for her.	1	2	3	4	5
24	I didn’t feel any concern for her.	1	2	3	4	5
25	What happened to her was immoral.	1	2	3	4	5
26	I can see why she reacted like she did.	1	2	3	4	5
27	I should do what it takes to make myself happy	1	2	3	4	5
28	Her emotions made me emotional.	1	2	3	4	5
29	I need to think of myself here.	1	2	3	4	5
30	She and I are much alike.	1	2	3	4	5
31	In many ways, I am the same as her.	1	2	3	4	5
32	I don’t understand why she acted like she did.	1	2	3	4	5
33	She reminds me of myself.	1	2	3	4	5

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
34	Her emotions were appropriate.	1	2	3	4	5
35	I felt concern for her.	1	2	3	4	5
36	I am worried about her.	1	2	3	4	5
37	I found this quite upsetting.	1	2	3	4	5
38	She is in distress.	1	2	3	4	5
39	The way she was treated goes against my morals.	1	2	3	4	5
40	The outcome will be the same no matter what I do.	1	2	3	4	5
41	The way she was treated was wrong.	1	2	3	4	5
42	I felt sympathy for her.	1	2	3	4	5
43	She is more powerful than me.	1	2	3	4	5
44	I am similar to her.	1	2	3	4	5

Appendix B: Evidence of Ethics Approval

B.1 Studies 1-3

Medium to High Risk Research Ethics Approval Checklist

Project Information

Project Ref:	P13203
Full name:	Benjamin Cuff
Faculty:	[HLS] Faculty of Health and Life Sciences
Department:	[AA] ARC Psychology
Module Code:	N/A
Supervisor:	Sarah Brown
Project title:	Developing a new measure of empathy
Date(s):	01/05/2013 - 30/11/2013
Created:	19/04/2013 11:53

Project Summary

This project is part my ongoing PhD project with the aim to create a new measure of empathy. Whilst there are a range of existing scales, such as the Interpersonal Reactivity Index (Davis, 1980), these measure stable individual differences in empathic responding. However, we know that people feel different amounts of empathy for different people, leading to person specific effects. For example, we feel more empathy for people whom we care most about. There are currently no measures of empathy that examine the influence of cognitive factors such as these.

In an earlier paper (Cuff et al., in preparation), I have identified ten different cognitions that people have about themselves and others that may influence levels of empathy. In the proposed project I wish to test a new measure ('The Cognitive Antecedents of Empathy Scale') that examines the influence of these ten factors on empathic responding, and to establish scale validity/reliability.

Refs: Cuff, B.M.P., Brown, S.J., Taylor, L., & Howat, D.J. (in preparation). The Cognitive Antecedents of Empathy Model. Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. JSAS Catalog of Selected Docu	
Names of Co-investigators (CIs) and their organisational affiliation:	N/A
How many additional research staff will be employed on the project?	0
Names and their organisational affiliation (if known):	N/A
Who is funding the project?	N/A
Has the funding been confirmed?	No
Code of ethical practice and conduct most relevant to your project:	British Psychological Society

Does this project need ethical approval?

Questions	Yes	No
Does the project involve collecting primary data from, or about, living human beings?	X	
Does the project involve analysing primary or unpublished data from, or about, living human beings?	X	
Does the project involve collecting or analysing primary or unpublished data about people who have recently died other than data that are already in the public domain?		X
Does the project involve collecting or analysing primary or unpublished data about or from organisations or agencies of any kind other than data that are already in the public domain?		X
Does the project involve research with non-human vertebrates in their natural settings or behavioural work involving invertebrate species not covered by the Animals Scientific Procedures Act (1986)?		X
Does the project place the participants or the researchers in a dangerous	X	

environment, risk of physical harm, psychological or emotional distress?		
Does the nature of the project place the participant or researchers in a situation where they are at risk of investigation by the police or security services?		X
Does the project involve the researcher travelling outside the UK?		X

Does the project require Criminal Records Bureau checks?

Questions	Yes	No
Does the project involve direct contact by any member of the research team with children or young people under 18 years of age?		X
Does the project involve direct contact by any member of the research team with adults who have learning difficulties?		X
Does the project involve direct contact by any member of the research team with adults who are infirm or physically disabled?		X
Does the project involve direct contact by any member of the research team with adults who are resident in social care or medical establishments?		X
Does the project involve direct contact by any member of the research team with adults in the custody of the criminal justice system?		X
Has a Criminal Records Bureau (CRB) check been stipulated as a condition of access to any source of data required for the project?		X

Is this project liable to scrutiny by external ethical review arrangements?

Questions	Yes	No
Has a favourable ethical opinion been given for this project by an external research ethics committee (e.g. social care, NHS or another University)?		X
Will this project be submitted for ethical approval to an external research ethics committee (e.g. social care, NHS or another University)?		X

More detail about the project

What are the aims and objectives of the project?

I have developed a new measure of empathy and so the aims of the proposed project to assess whether the items make sense (i.e., readability) and to assess the internal reliability and validity of scale items.

Briefly describe the principal methods, the sources of data or evidence to be used and the number and type of research participants who will be recruited to the project.

This project will be conducted in three stages:

Phase 1) I shall recruit 10 colleagues (PhD students / staff) from within the psychology department and ask them read the items in my scale (the Cognitive Antecedents of Empathy Scale; CAES) to examine item readability and face validity.

Phase 2) 60 participants shall be recruited from those attending the MSc in forensic psychology and crime (years 1 & 2) residential week in June. Participants will also be sought from Psychology, Nursing, and Forensic Investigative Studies undergraduate courses. Gatekeeper permission has been acquired from course directors. Information sheets, consent forms, and CAES questionnaires will be distributed and those who do not wish to take part will be given the opportunity to leave. After completing the first page of the questionnaire participants will be shown a short video (http://www.tubechop.com/watch/1122369) and then will be asked to complete the rest of the questionnaire. The purpose of this stage is to assess the methodology, such as whether the video is sufficient to elicit empathy (whilst avoiding ceiling effects), and to identify sub-scales with poor internal reliability.

Phase 3)300 first-year undergraduate psychology students attending induction week at Coventry University in September shall be recruited at the end of a lecture. The same methodology as described in phase 2 above shall be used, providing data for factor analyses and reliability analyses. Participants will also be asked to complete an established empath

What research instrument(s), validated scales or methods will be used to collect data?

The Interpersonal Reactivity Index (An empathy scale)

If you are using an externally validated research instrument, technique or research method, please specify.

N/A

If you are not using an externally validated scale or research method, please attach a copy of the research instrument you will use to collect data. For example, a measurement scale, questionnaire, interview schedule, observation protocol for ethnographic work or, in the case of unstructured data collection, a topic list.

The Cognitive Antecedents of Empathy Scale (CAES). Use of an external video: http://www.tubechop.com/watch/1122369

Confidentiality, security and retention of research data

Questions	Yes	No
Are there any reasons why you cannot guarantee the full security and confidentiality of any personal or confidential data collected for the project?		X
Is there a significant possibility that any of your participants, or people associated with them, could be directly or indirectly identified in the outputs from this project?		X
Is there a significant possibility that confidential information could be traced back to a specific organisation or agency as a result of the way you write up the results of the project?		X
Will any members of the project team retain any personal or confidential data at the end of the project, other than in fully anonymised form?		X
Will you or any member of the team intend to make use of any confidential information, knowledge, trade secrets obtained for any other purpose than this research project?		X

Informed consent

Questions	Yes	No
Will all participants be fully informed why the project is being conducted and what their participation will involve and will this information be given before the project begins?	X	
Will every participant be asked to give written consent to participating in the project before it begins?	X	
Will all participants be fully informed about what data will be collected and what will be done with these data during and after the project?	X	
Will explicit consent be sought for audio, video or photographic recording of participants?		X
Will every participant understand what rights they have not to take part, and/or to withdraw themselves and their data from the project if they do take part?	X	

Will every participant understand that they do not need to give you reasons for deciding not to take part or to withdraw themselves and their data from the project and that there will be no repercussions as a result?	X	
If the project involves deceiving or covert observation of participants, will you debrief them at the earliest possible opportunity?		X

If you answered **No** to **any** of these questions:

Explain why it is essential for the project to be conducted in a way that will not allow all participants the opportunity to exercise fully-informed consent.

Explain how you propose to address the ethical issues arising from the absence of transparency.

Attach copies of your participant information sheet and consent form as evidence of your plans.

Consent forms and information sheets will be distributed along with the CAES questionnaires, and all completed forms will be collected at the end. This study does not require consent for audio/video/photographic recording and contains no element of deception.

Risk of harm

Questions	Yes	No
Is there any significant risk that your project may lead to physical harm to participants or researchers?		X
Is there any significant risk that your project may lead to psychological or emotional distress to participants or researchers?	X	
Is there any significant risk that your project may place the participants or the researchers in potentially dangerous situations or environments?		X
Is there any significant risk that your project may result in harm to the reputation of participants, researchers, their employers, or other persons or organisations?		X

If you answered **Yes** to **any** of these questions:

Explain the nature of the risks involved and why it is necessary for the participants or researchers to be exposed to such risks.

Explain how you propose to assess, manage and mitigate any risks to participants or researchers.

Explain the arrangements by which you will ensure that participants understand and consent to these risks.

Explain the arrangements you will make to refer participants or researchers to sources of help if they are seriously distressed or harmed as a result of taking part in the project.

Explain the arrangements for recording and reporting any adverse consequences of the research.

There is a potential risk of emotional distress due to the emotional nature of the video (http://www.tubechop.com/watch/1122369), which also hints at self-harming behavior. This emotional stimulus is necessary in order to evoke empathy and provoke responses on the empathy questionnaire. To avoid ethical issues the stimulus video that has been selected is mild enough so as to not elicit undue distress in the majority of participants. Participants will be advised both verbally and in the information sheet that they should not continue if this is likely to cause distress. Participants shall receive a debrief sheet at the end of the study, containing contact details for support services should this be needed.

Risk of disclosure of harm or potential harm

Questions	Yes	No
Is there a significant risk that the project will lead participants to disclose evidence of previous criminal offences or their intention to commit criminal offences?		X
Is there a significant risk that the project will lead participants to disclose evidence that children or vulnerable adults have or are being harmed or are at risk of harm?		X
Is there a significant risk that the project will lead participants to disclose evidence of serious risk of other types of harm?		X

Payment of participants

Questions	Yes	No

Do you intend to offer participants cash payments or any other kind of inducements or compensation for taking part in your project?	X	
Is there any significant possibility that such inducements will cause participants to consent to risks that they might not otherwise find acceptable?		X
Is there any significant possibility that the prospect of payment or other rewards will systematically skew the data provided by participants in any way?		X
Will you inform participants that accepting compensation or inducements does not negate their right to withdraw from the project?	X	

If you answered **Yes** to **any** of these questions:

Explain the nature of the inducements or the amount of the payments that will be offered.

Explain the reasons why it is necessary to offer payments.

Explain why you consider it is ethically and methodologically acceptable to offer payments.

Level 1 and 2 undergraduates that take part will receive 20 credits towards the research participation scheme ran by the Department of Psychology and Behavioural Sciences.

Capacity to give informed consent

Questions	**Yes**	**No**
Do you propose to recruit any participants who are under 18 years of age?		X
Do you propose to recruit any participants who have learning difficulties?		X
Do you propose to recruit any participants with communication difficulties including difficulties arising from limited facility with the English language?		X
Do you propose to recruit any participants who are very elderly or infirm?		X
Do you propose to recruit any participants with mental health problems or other medical problems that may impair their cognitive abilities?		X
Do you propose to recruit any participants who may not be able to understand fully the nature of the research and the implications for them of participating in it?		X

Is participation genuinely voluntary?

Questions	Yes	No
Are you proposing to recruit participants who are employees or students of Coventry University or of organisation(s) that are formal collaborators in the project?	X	
Are you proposing to recruit participants who are employees recruited through other business, voluntary or public sector organisations?		X
Are you proposing to recruit participants who are pupils or students recruited through educational institutions?		X
Are you proposing to recruit participants who are clients recruited through voluntary or public services?		X
Are you proposing to recruit participants who are living in residential communities or institutions?		X
Are you proposing to recruit participants who are in-patients in a hospital or other medical establishment?		X
Are you proposing to recruit participants who are recruited by virtue of their employment in the police or armed services?		X
Are you proposing to recruit participants who are being detained or sanctioned in the criminal justice system?		X
Are you proposing to recruit participants who may not feel empowered to refuse to participate in the research?		X

If you answered **Yes** to **any** of these questions:

Explain how your participants will be recruited.

Explain what steps you will take to ensure that participation in this project is genuinely voluntary.

In the first stage staff members and PhD students in the psychology department shall be recruited on a word of mouth basis. In the second and third stages, participants will be recruited at the end of lectures during residential (June) and induction (September) weeks. Participants will be informed by the consent form in both stages that participation is genuinely voluntary.

On-line and Internet Research

Questions	Yes	No
Will any part of your project involve collecting data by means of electronic media such as the Internet or e-mail?		X
Is there a significant possibility that the project will encourage children under 18 to access inappropriate websites or correspond with people who pose risk of harm?		X
Is there a significant possibility that the project will cause participants to become distressed or harmed in ways that may not be apparent to the researcher(s)?		X
Will the project incur risks of breaching participant confidentiality and anonymity that arise specifically from the use of electronic media?		X

Other ethical risks

Question	Yes	No
Are there any other ethical issues or risks of harm raised by your project that have not been covered by previous questions?		X

Research with non-human vertebrates

Questions	Yes	No
Will any part of your project involve the study of animals in their natural habitat?		X
Will your project involve the recording of behaviour of animals in a non-natural setting that is outside the control of the researcher?		X
Will your field work involve any direct intervention other than recording the behaviour of the animals available for observation?		X
Is the species you plan to research endangered, locally rare or part of a sensitive ecosystem protected by legislation?		X
Is there any significant possibility that the welfare of the target species or those sharing the local environment/habitat will be detrimentally affected?		X
Is there any significant possibility that the habitat of the animals will be damaged by the project such that their health and survival will be endangered?		X

Will project work involve intervention work in a non-natural setting in relation to invertebrate species other than *Octopus vulgaris*?		X

Blood Sampling / Human Tissue Analysis

Questions	Yes	No
Does your project involve blood sampling or human tissue analysis?		X
If your study involves blood samples or body fluids (e.g. urine, saliva) have you clearly stated in your application that appropriate guidelines are to be followed (e.g. The British Association of Sport and Exercise Science Physiological Testing Guidelines (2007) or equivalent) and that they are in line with the level of risk?		
If your study involves human tissue other than blood and saliva have you clearly stated in your application that appropriate guidelines are to be followed? (e.g. The Human Tissues Act, or equivalent) and that they are in line with the level of risk?		

Note: This checklist is based on an ethics approval form produce by Research Office of the College of Business, Law and Social Sciences at Nottingham Trent University. Copyright is acknowledged.

Approval Steps

Step	Status	Actioned by	Actioned on
Project	Submitted	Benjamin Cuff	Fri, 19 Apr 2013 11:53 AM
Supervisor	Not required	Sarah Brown	
Referrer	Not required	Elaine Cartmill	
Reviewer	Not required	Reviewer	
Finalizer	Approved	Elaine Cartmill	Mon, 03 Feb 2014 03:07 PM

5 Steps

B.2 Study 4

Medium to High Risk Research Ethics Approval Checklist

Project Information

Project Ref:	P24776
Full name:	Benjamin Cuff
Faculty:	[HLS] Faculty of Health and Life Sciences
Department:	[AA] FRC Psychology, Behaviour & Achievement
Module Code:	
Supervisor:	Sarah Brown
Project title:	The influence of empathy on charitable donations
Date(s):	23/06/2014 - 31/10/2014
Created:	18/06/2014 02:53

Project Summary

The purpose of this study is to investigate how our thoughts and attitudes towards individuals depicted in charity adverts affect the amount of empathy we feel, and how that impacts on donation behaviours. For example, if an individual depicted in a charity advert is not very likeable, then we may not feel as much empathy for that person and that may mean that we are less likely to donate to that charity. This research has the potential to be used to develop more effective promotional campaigns for charitable organisations.

Names of Co-investigators (CIs) and their organisational affiliation:	
How many additional research staff will be employed on the project?	0
Names and their organisational affiliation (if known):	
Who is funding the project?	N/A
Has the funding been confirmed?	No

Code of ethical practice and conduct most relevant to your project:	British Psychological Society

Does this project need ethical approval?

Questions	Yes	No
Does the project involve collecting primary data from, or about, living human beings?	X	
Does the project involve analysing primary or unpublished data from, or about, living human beings?	X	
Does the project involve collecting or analysing primary or unpublished data about people who have recently died other than data that are already in the public domain?		X
Does the project involve collecting or analysing primary or unpublished data about or from organisations or agencies of any kind other than data that are already in the public domain?		X
Does the project involve research with non-human vertebrates in their natural settings or behavioural work involving invertebrate species not covered by the Animals Scientific Procedures Act (1986)?		X
Does the project place the participants or the researchers in a dangerous environment, risk of physical harm, psychological or emotional distress?	X	
Does the nature of the project place the participant or researchers in a situation where they are at risk of investigation by the police or security services?		X
Does the project involve the researcher travelling outside the UK?		X

Does the project require Criminal Records Bureau checks?

Questions	Yes	No
Does the project involve direct contact by any member of the research team with children or young people under 18 years of age?		X
Does the project involve direct contact by any member of the research team with adults who have learning difficulties?		X
Does the project involve direct contact by any member of the research team with adults who are infirm or physically disabled?		X

Does the project involve direct contact by any member of the research team with adults who are resident in social care or medical establishments?		X
Does the project involve direct contact by any member of the research team with adults in the custody of the criminal justice system?		X
Has a Criminal Records Bureau (CRB) check been stipulated as a condition of access to any source of data required for the project?		X

Is this project liable to scrutiny by external ethical review arrangements?

Questions	Yes	No
Has a favourable ethical opinion been given for this project by an external research ethics committee (e.g. social care, NHS or another University)?		X
Will this project be submitted for ethical approval to an external research ethics committee (e.g. social care, NHS or another University)?		X

More detail about the project

What are the aims and objectives of the project? As part of my PhD, I wish to examine how various thoughts towards others affect the levels of empathy we feel, and whether this influences the likelihood of donating to charity.
Briefly describe the principal methods, the sources of data or evidence to be used and the number and type of research participants who will be recruited to the project. I will use the Bristol Online Survey system to collect data from up to 200 members of the public. Participants will be recruited by distributing links to the survey via social networking sites and internet message boards, using a snowballing procedure. Those who decide to take part will be shown the participant information and will be required to give consent via a tick-box in order to proceed. Demographic data will then be collected, followed by a social desirability measure, followed by a trait empathy measure (the IRI). Participants will then be asked to watch an audiovisual charity advert (https://www.youtube.com/watch?v=CK7svcKCAcQ&feature=kp). They will then be asked to complete my empathy scale (CAES). Finally, participants will be displayed the debrief information.
What research instrument(s), validated scales or methods will be used to collect data? The Interpersonal Reactivity Index & The Marlow-Crown social desirability scale (short form).

If you are using an externally validated research instrument, technique or research method, please specify. N/A
If you are not using an externally validated scale or research method, please attach a copy of the research instrument you will use to collect data. For example, a measurement scale, questionnaire, interview schedule, observation protocol for ethnographic work or, in the case of unstructured data collection, a topic list. The Cognitive Antecedents of Empathy Scale (CAES). Use of an external video: https://www.youtube.com/watch?v=CK7svcKCAcQ&feature=kp

Confidentiality, security and retention of research data

Questions	Yes	No
Are there any reasons why you cannot guarantee the full security and confidentiality of any personal or confidential data collected for the project?		X
Is there a significant possibility that any of your participants, or people associated with them, could be directly or indirectly identified in the outputs from this project?		X
Is there a significant possibility that confidential information could be traced back to a specific organisation or agency as a result of the way you write up the results of the project?		X
Will any members of the project team retain any personal or confidential data at the end of the project, other than in fully anonymised form?		X
Will you or any member of the team intend to make use of any confidential information, knowledge, trade secrets obtained for any other purpose than this research project?		X

If you answered **No** to **all** of these questions:

Explain how you will ensure the confidentiality and security of your research data, both during and after the project.

Participants will not disclose any personal information (e.g., their name) when completing the questionnaire. Their data can be identified via self-generated participant codes should they wish to withdraw from the study. Raw data will be stored on a passworded computer.

Informed consent

Questions	Yes	No
Will all participants be fully informed why the project is being conducted and what their participation will involve and will this information be given before the project begins?	X	
Will every participant be asked to give written consent to participating in the project before it begins?	X	
Will all participants be fully informed about what data will be collected and what will be done with these data during and after the project?	X	
Will explicit consent be sought for audio, video or photographic recording of participants?		X
Will every participant understand what rights they have not to take part, and/or to withdraw themselves and their data from the project if they do take part?	X	
Will every participant understand that they do not need to give you reasons for deciding not to take part or to withdraw themselves and their data from the project and that there will be no repercussions as a result?	X	
If the project involves deceiving or covert observation of participants, will you debrief them at the earliest possible opportunity?		X

If you answered **No** to **any** of these questions:

Explain why it is essential for the project to be conducted in a way that will not allow all participants the opportunity to exercise fully-informed consent.

Explain how you propose to address the ethical issues arising from the absence of transparency.

Attach copies of your participant information sheet and consent form as evidence of your plans.

Participant information will be displayed on screen to participants, and consent will be required (by pressing continue) before participants begin filling out the questionnaire. This study does not require consent for audio/video/photographic recording and contains no element of deception.

Risk of harm

Questions	Yes	No
Is there any significant risk that your project may lead to physical harm to participants or researchers?		X
Is there any significant risk that your project may lead to psychological or emotional distress to participants or researchers?	X	
Is there any significant risk that your project may place the participants or the researchers in potentially dangerous situations or environments?		X
Is there any significant risk that your project may result in harm to the reputation of participants, researchers, their employers, or other persons or organisations?		X

If you answered **Yes** to **any** of these questions:

Explain the nature of the risks involved and why it is necessary for the participants or researchers to be exposed to such risks.

Explain how you propose to assess, manage and mitigate any risks to participants or researchers.

Explain the arrangements by which you will ensure that participants understand and consent to these risks.

Explain the arrangements you will make to refer participants or researchers to sources of help if they are seriously distressed or harmed as a result of taking part in the project.

Explain the arrangements for recording and reporting any adverse consequences of the research.

Due to the emotional nature of the video (https://www.youtube.com/watch?v=CK7svcKCAcQ&feature=kp), it is possible that participants may experience some distress. However, the stimulus (charity advert) used was designed to be shown on television and so the potential for distress should be no greater than usually posed by watching television adverts. Participants are advised in the information sheet not to continue should they find this subject matter upsetting. Participants are directed towards a support service in the debrief.

Risk of disclosure of harm or potential harm

Questions	Yes	No

Is there a significant risk that the project will lead participants to disclose evidence of previous criminal offences or their intention to commit criminal offences?		X
Is there a significant risk that the project will lead participants to disclose evidence that children or vulnerable adults have or are being harmed or are at risk of harm?		X
Is there a significant risk that the project will lead participants to disclose evidence of serious risk of other types of harm?		X

Payment of participants

Questions	Yes	No
Do you intend to offer participants cash payments or any other kind of inducements or compensation for taking part in your project?		X
Is there any significant possibility that such inducements will cause participants to consent to risks that they might not otherwise find acceptable?		X
Is there any significant possibility that the prospect of payment or other rewards will systematically skew the data provided by participants in any way?		X
Will you inform participants that accepting compensation or inducements does not negate their right to withdraw from the project?		X

Capacity to give informed consent

Questions	**Yes**	**No**
Do you propose to recruit any participants who are under 18 years of age?		X
Do you propose to recruit any participants who have learning difficulties?		X
Do you propose to recruit any participants with communication difficulties including difficulties arising from limited facility with the English language?		X
Do you propose to recruit any participants who are very elderly or infirm?		X
Do you propose to recruit any participants with mental health problems or other medical problems that may impair their cognitive abilities?		X
Do you propose to recruit any participants who may not be able to understand fully the nature of the research and the implications for them of participating in		X

it?		

Is participation genuinely voluntary?

Questions	Yes	No
Are you proposing to recruit participants who are employees or students of Coventry University or of organisation(s) that are formal collaborators in the project?	X	
Are you proposing to recruit participants who are employees recruited through other business, voluntary or public sector organisations?		X
Are you proposing to recruit participants who are pupils or students recruited through educational institutions?		X
Are you proposing to recruit participants who are clients recruited through voluntary or public services?		X
Are you proposing to recruit participants who are living in residential communities or institutions?		X
Are you proposing to recruit participants who are in-patients in a hospital or other medical establishment?		X
Are you proposing to recruit participants who are recruited by virtue of their employment in the police or armed services?		X
Are you proposing to recruit participants who are being detained or sanctioned in the criminal justice system?		X
Are you proposing to recruit participants who may not feel empowered to refuse to participate in the research?		X

If you answered **Yes** to **any** of these questions:

Explain how your participants will be recruited.

Explain what steps you will take to ensure that participation in this project is genuinely voluntary.

Participants will be recruited from the general public via a snowballing procedure. Links to the survey will be distributed via social networking and other internet message board sites (e.g., university forums). Participants will be informed by the consent form / participant information sheet that participation is genuinely voluntary. Participants will be able to close

the browser window at any time to terminate participation.

On-line and Internet Research

Questions	Yes	No
Will any part of your project involve collecting data by means of electronic media such as the Internet or e-mail?	X	
Is there a significant possibility that the project will encourage children under 18 to access inappropriate websites or correspond with people who pose risk of harm?		X
Is there a significant possibility that the project will cause participants to become distressed or harmed in ways that may not be apparent to the researcher(s)?		X
Will the project incur risks of breaching participant confidentiality and anonymity that arise specifically from the use of electronic media?		X

If you answered **Yes** to **any** of these questions:

Explain why you propose to use electronic media.

Explain how you propose to address the risks associated with online/internet research.

Ensure that your answers to the previous sections address any issues related to online research.

Online data collection will make recruitment much easier as I intend to use members of the public. It is important to use members of the public rather than student samples because this better reflects the range of people who donate to charity. Risks are accounted for by fully anonymising data and through the consent / debrief procedure.

Other ethical risks

Question	Yes	No
Are there any other ethical issues or risks of harm raised by your project that have not been covered by previous questions?		X

Research with non-human vertebrates

Questions	Yes	No
Will any part of your project involve the study of animals in their natural habitat?		X
Will your project involve the recording of behaviour of animals in a non-natural setting that is outside the control of the researcher?		X
Will your field work involve any direct intervention other than recording the behaviour of the animals available for observation?		X
Is the species you plan to research endangered, locally rare or part of a sensitive ecosystem protected by legislation?		X
Is there any significant possibility that the welfare of the target species or those sharing the local environment/habitat will be detrimentally affected?		X
Is there any significant possibility that the habitat of the animals will be damaged by the project such that their health and survival will be endangered?		X
Will project work involve intervention work in a non-natural setting in relation to invertebrate species other than *Octopus vulgaris*?		X

Blood Sampling / Human Tissue Analysis

Questions	Yes	No
Does your project involve blood sampling or human tissue analysis?		X
If your study involves blood samples or body fluids (e.g. urine, saliva) have you clearly stated in your application that appropriate guidelines are to be followed (e.g. The British Association of Sport and Exercise Science Physiological Testing Guidelines (2007) or equivalent) and that they are in line with the level of risk?		
If your study involves human tissue other than blood and saliva have you clearly stated in your application that appropriate guidelines are to be followed? (e.g. The Human Tissues Act, or equivalent) and that they are in line with the level of risk?		

Note: This checklist is based on an ethics approval form produce by Research Office of the College of Business, Law and Social Sciences at Nottingham Trent University. Copyright is acknowledged.

Approval Steps

Step	Status	Actioned by	Actioned on
Project	Submitted	Benjamin Cuff	Wed, 18 Jun 2014 02:53 AM
Supervisor	Approved	Sarah Brown	Wed, 18 Jun 2014 06:50 AM
Referrer	Referred to Reviewer	Elaine Cartmill	Wed, 18 Jun 2014 11:20 AM
Reviewer	Approved	Reviewer	Thu, 19 Jun 2014 09:31 AM
Finalizer	Approved	Elaine Cartmill	Mon, 23 Jun 2014 08:31 AM

5 Steps

B.3 Study 5

Medium to High Risk Research Ethics Approval Checklist

Project Information

Project Ref:	P26937
Full name:	Benjamin Cuff
Faculty:	[HLS] Faculty of Health and Life Sciences
Department:	[AA] FRC Psychology, Behaviour & Achievement
Module Code:	
Supervisor:	Sarah Brown
Project title:	Self vs. Other need in Empathic Helping Situations
Date(s):	01/10/2014 - 31/01/2015
Created:	22/09/2014 16:21

Project Summary

I am interested in how our own needs (self-interest) interacts with perceptions of another person's needs, and what effects this interaction has on feelings of empathy and helping behaviours. Previous research has suggested that perceptions of another's emotional needs can influence helping decisions in a one-trial prisoners dilemma (Batson & Ahmad, 2001). However, there is a lack of research into whether our own needs may alter this relationship.

Names of Co-investigators (CIs) and their organisational affiliation:	
How many additional research staff will be employed on the project?	0
Names and their organisational affiliation (if known):	
Who is funding the project?	
Has the funding been confirmed?	No

Code of ethical practice and conduct most relevant to your project:	British Psychological Society

Does this project need ethical approval?

Questions	Yes	No
Does the project involve collecting primary data from, or about, living human beings?	X	
Does the project involve analysing primary or unpublished data from, or about, living human beings?	X	
Does the project involve collecting or analysing primary or unpublished data about people who have recently died other than data that are already in the public domain?		X
Does the project involve collecting or analysing primary or unpublished data about or from organisations or agencies of any kind other than data that are already in the public domain?		X
Does the project involve research with non-human vertebrates in their natural settings or behavioural work involving invertebrate species not covered by the Animals Scientific Procedures Act (1986)?		X
Does the project place the participants or the researchers in a dangerous environment, risk of physical harm, psychological or emotional distress?		X
Does the nature of the project place the participant or researchers in a situation where they are at risk of investigation by the police or security services?		X
Does the project involve the researcher travelling outside the UK?		X

Does the project require Criminal Records Bureau checks?

Questions	Yes	No
Does the project involve direct contact by any member of the research team with children or young people under 18 years of age?		X
Does the project involve direct contact by any member of the research team with adults who have learning difficulties?		X
Does the project involve direct contact by any member of the research team with adults who are infirm or physically disabled?		X

Does the project involve direct contact by any member of the research team with adults who are resident in social care or medical establishments?		X
Does the project involve direct contact by any member of the research team with adults in the custody of the criminal justice system?		X
Has a Criminal Records Bureau (CRB) check been stipulated as a condition of access to any source of data required for the project?		X

Is this project liable to scrutiny by external ethical review arrangements?

Questions	Yes	No
Has a favourable ethical opinion been given for this project by an external research ethics committee (e.g. social care, NHS or another University)?		X
Will this project be submitted for ethical approval to an external research ethics committee (e.g. social care, NHS or another University)?		X

More detail about the project

What are the aims and objectives of the project?

I wish to examine how our pre-existing self-interests (need for money) affect our perceptions of another's emotional needs. In addition I am interested in whether perceiving another person's emotional needs can affect perceptions of our own needs (i.e., self-interest). Finally, I am interested in the effect that this interaction between self-interest and perceived-need has on feelings of empathy, along with effects on helping behaviours.

Briefly describe the principal methods, the sources of data or evidence to be used and the number and type of research participants who will be recruited to the project.

Participants will be divided in to 2 conditions: They will be told that they are competing for tickets to a prize draw worth £5 (condition 1) or £50 (condition 2). So that I can advertise the same prize value to all students, participants will be told that this is a two-phase study, and that in phase 2 they will be able to compete for the remaining prize value (i.e., £50 in condition 1; £5 in condition 2). However, there will only be one phase, and all participants will be entered into the £55 draw (one entry per participant).

Participants will be asked to fill in a questionnaire measuring demographics, trait empathy levels, and social desirability. They will also be asked to complete a manipulation check (to see whether those in the £50 condition believe this money is more important than those in the £5 condition).

Participants will then take part in a one-trial prisoners dilemma (see Batson & Ahmad, 2001).

In essence, participants will be told that they have been partnered up with another participant (this partner does not actually exist). Participants will receive a note from their 'partner' designed to evoke empathy, and they will have to decide whether to donate some of their prize tickets to their partner (as predicted by perceived need) or hold on to the tickets themselves (as predicted by self-interest). After making this decision, participants will be asked to complete my cognitions scale and will then be fully debriefed.
What research instrument(s), validated scales or methods will be used to collect data? The Cognitive Antecedents of Empathy Scale: A scale developed during my PhD that examines the effects of cognitions (e.g., perceived need and self-interest) on empathic responding.
If you are using an externally validated research instrument, technique or research method, please specify. The Interpersonal Reactivity Index: A trait empathy scale. Marlow-Crowne social desirability scale.
If you are not using an externally validated scale or research method, please attach a copy of the research instrument you will use to collect data. For example, a measurement scale, questionnaire, interview schedule, observation protocol for ethnographic work or, in the case of unstructured data collection, a topic list.

Confidentiality, security and retention of research data

Questions	Yes	No
Are there any reasons why you cannot guarantee the full security and confidentiality of any personal or confidential data collected for the project?		X
Is there a significant possibility that any of your participants, or people associated with them, could be directly or indirectly identified in the outputs from this project?		X
Is there a significant possibility that confidential information could be traced back to a specific organisation or agency as a result of the way you write up the results of the project?		X
Will any members of the project team retain any personal or confidential data at the end of the project, other than in fully anonymised form?		X

Will you or any member of the team intend to make use of any confidential information, knowledge, trade secrets obtained for any other purpose than this research project?		X

If you answered **No** to **all** of these questions:

Explain how you will ensure the confidentiality and security of your research data, both during and after the project.

Data will be entered only in reference to participant numbers. All forms will be kept in locked filing cabinets during and after the study.

Informed consent

Questions	Yes	No
Will all participants be fully informed why the project is being conducted and what their participation will involve and will this information be given before the project begins?		X
Will every participant be asked to give written consent to participating in the project before it begins?	X	
Will all participants be fully informed about what data will be collected and what will be done with these data during and after the project?	X	
Will explicit consent be sought for audio, video or photographic recording of participants?		X
Will every participant understand what rights they have not to take part, and/or to withdraw themselves and their data from the project if they do take part?	X	
Will every participant understand that they do not need to give you reasons for deciding not to take part or to withdraw themselves and their data from the project and that there will be no repercussions as a result?	X	
If the project involves deceiving or covert observation of participants, will you debrief them at the earliest possible opportunity?	X	

If you answered **No** to **any** of these questions:

Explain why it is essential for the project to be conducted in a way that will not allow all participants the opportunity to exercise fully-informed consent.

Explain how you propose to address the ethical issues arising from the absence of transparency.

Attach copies of your participant information sheet and consent form as evidence of your plans.

Some deceit in the participant information sheet is necessary regarding the purpose of the study. If participants are aware that we are interested in self-interest, empathy, and helping behaviours, then participants may be inclined to present themselves as selfless, empathic, and helpful individuals (distorting the results). Participants will be fully debriefed at the end of the study regarding the true nature of the project.

Risk of harm

Questions	Yes	No
Is there any significant risk that your project may lead to physical harm to participants or researchers?		X
Is there any significant risk that your project may lead to psychological or emotional distress to participants or researchers?		X
Is there any significant risk that your project may place the participants or the researchers in potentially dangerous situations or environments?		X
Is there any significant risk that your project may result in harm to the reputation of participants, researchers, their employers, or other persons or organisations?		X

Risk of disclosure of harm or potential harm

Questions	Yes	No
Is there a significant risk that the project will lead participants to disclose evidence of previous criminal offences or their intention to commit criminal offences?		X
Is there a significant risk that the project will lead participants to disclose evidence that children or vulnerable adults have or are being harmed or are at risk of harm?		X
Is there a significant risk that the project will lead participants to disclose evidence of serious risk of other types of harm?		X

Payment of participants

Questions	Yes	No
Do you intend to offer participants cash payments or any other kind of inducements or compensation for taking part in your project?	X	
Is there any significant possibility that such inducements will cause participants to consent to risks that they might not otherwise find acceptable?		X
Is there any significant possibility that the prospect of payment or other rewards will systematically skew the data provided by participants in any way?		X
Will you inform participants that accepting compensation or inducements does not negate their right to withdraw from the project?	X	

If you answered **Yes** to **any** of these questions:

Explain the nature of the inducements or the amount of the payments that will be offered.

Explain the reasons why it is necessary to offer payments.

Explain why you consider it is ethically and methodologically acceptable to offer payments.

The prize draw is necessary to introduce a genuine element of self-interest (i.e., participants' helping decisions will be influenced by how important this prize is to them). To keep things fair, all participants will receive one entry each into the prize draw. Participants will be informed that their right to withdraw does not affect their entry into the draw (and vice versa). Where applicable, students may also earn research credits as part of the research participation scheme. The above conditions apply.

Capacity to give informed consent

Questions	**Yes**	**No**
Do you propose to recruit any participants who are under 18 years of age?		X
Do you propose to recruit any participants who have learning difficulties?		X
Do you propose to recruit any participants with communication difficulties including difficulties arising from limited facility with the English language?		X
Do you propose to recruit any participants who are very elderly or infirm?		X
Do you propose to recruit any participants with mental health problems or other		X

medical problems that may impair their cognitive abilities?		
Do you propose to recruit any participants who may not be able to understand fully the nature of the research and the implications for them of participating in it?		X

Is participation genuinely voluntary?

Questions	Yes	No
Are you proposing to recruit participants who are employees or students of Coventry University or of organisation(s) that are formal collaborators in the project?	X	
Are you proposing to recruit participants who are employees recruited through other business, voluntary or public sector organisations?		X
Are you proposing to recruit participants who are pupils or students recruited through educational institutions?	X	
Are you proposing to recruit participants who are clients recruited through voluntary or public services?		X
Are you proposing to recruit participants who are living in residential communities or institutions?		X
Are you proposing to recruit participants who are in-patients in a hospital or other medical establishment?		X
Are you proposing to recruit participants who are recruited by virtue of their employment in the police or armed services?		X
Are you proposing to recruit participants who are being detained or sanctioned in the criminal justice system?		X
Are you proposing to recruit participants who may not feel empowered to refuse to participate in the research?		X

If you answered **Yes** to **any** of these questions:

Explain how your participants will be recruited.

Explain what steps you will take to ensure that participation in this project is genuinely voluntary.

Coventry University undergraduate students shall be recruited via advertisements given at the end of usual university lectures. All participants will be informed that participation is genuinely voluntary in the Participant Information Sheet.

On-line and Internet Research

Questions	Yes	No
Will any part of your project involve collecting data by means of electronic media such as the Internet or e-mail?		X
Is there a significant possibility that the project will encourage children under 18 to access inappropriate websites or correspond with people who pose risk of harm?		X
Is there a significant possibility that the project will cause participants to become distressed or harmed in ways that may not be apparent to the researcher(s)?		X
Will the project incur risks of breaching participant confidentiality and anonymity that arise specifically from the use of electronic media?		X

Other ethical risks

Question	Yes	No
Are there any other ethical issues or risks of harm raised by your project that have not been covered by previous questions?		X

Research with non-human vertebrates

Questions	Yes	No
Will any part of your project involve the study of animals in their natural habitat?		X
Will your project involve the recording of behaviour of animals in a non-natural setting that is outside the control of the researcher?		X
Will your field work involve any direct intervention other than recording the behaviour of the animals available for observation?		X
Is the species you plan to research endangered, locally rare or part of a sensitive ecosystem protected by legislation?		X
Is there any significant possibility that the welfare of the target species or those sharing the local environment/habitat will be detrimentally affected?		X
Is there any significant possibility that the habitat of the animals will be damaged by the project such that their health and survival will be endangered?		X

Will project work involve intervention work in a non-natural setting in relation to invertebrate species other than *Octopus vulgaris*?		X

Blood Sampling / Human Tissue Analysis

Questions	Yes	No
Does your project involve blood sampling or human tissue analysis?		X
If your study involves blood samples or body fluids (e.g. urine, saliva) have you clearly stated in your application that appropriate guidelines are to be followed (e.g. The British Association of Sport and Exercise Science Physiological Testing Guidelines (2007) or equivalent) and that they are in line with the level of risk?		
If your study involves human tissue other than blood and saliva have you clearly stated in your application that appropriate guidelines are to be followed? (e.g. The Human Tissues Act, or equivalent) and that they are in line with the level of risk?		

Note: This checklist is based on an ethics approval form produce by Research Office of the College of Business, Law and Social Sciences at Nottingham Trent University. Copyright is acknowledged.

Approval Steps

Step	Status	Actioned by	Actioned on
Project	Submitted	Benjamin Cuff	Mon, 22 Sep 2014 04:21 PM
Supervisor	Approved	Sarah Brown	Tue, 23 Sep 2014 08:04 AM
Referrer	Referred to Reviewer	Sophie Krumins	Thu, 02 Oct 2014 08:34 AM
Reviewer	Approved	Reviewer	Fri, 03 Oct 2014 01:02 PM
Finalizer	Approved	Sophie Krumins	Fri, 03 Oct 2014 01:25 PM

5 Steps

Appendix C: Participant Information Sheets

C.1 Study 1

Developing a new measure of empathy

Participant Information Sheet

You are being invited to take part in a research study. Before you agree to participate, it is important that you understand the purpose and nature of the study.

What is the purpose of this study?

I am developing a new measure of empathy and the purpose of this study is to examine the face validity of scale items, including whether items make sense and whether you think items belong to their intended subscale.

Do I have to take part?

No. You are under no obligation to take part. If you decide to participate, then you may keep this information and you will be asked to sign a consent form. You are however, free to withdraw at any time, without any consequences, should you change your mind.

What do I have to do?

You will be asked to assign items to descriptions of subscales and identify any problems with comprehension and spelling etc.

What are the possible disadvantages and risks of taking part?

The only disadvantage of taking part is the impact on your time.

What are the possible benefits of taking part?

You will be contributing to the development of a new empathy scale, which has the potential to be applied to several different subject areas.

What will happen to my data?

Your data will be used to test the validity of this new measure, and to develop it for further testing. Group level data may be reported at conferences and in journal articles. Your individual

responses, however, will not.

What will happen if I don't want to continue with the study?

You are free to withdraw from the study at any time up to four weeks after today, without giving any reason. In the top corner of this page you have been allocated a participant number so that your data can be identified should you want to do this. Please contact the lead researcher (stating your participant number) to request that your data be withdrawn, at which point your data will be destroyed.

Will my taking part in the study be kept confidential?

Participants who complete the forms will be allocated unique participant codes and data will be entered with reference to these participant codes. The researcher will not know you by name and no reference to the participant number will be made in the official write up of the results. Consent forms and data will be kept in locked filing cabinets and will be stored for up to 3 years before being destroyed. Signed consent forms will be stored separately from your data.

Contact details:

Lead Researcher's name: Benjamin Cuff

Email: cuffb@uni.coventry.ac.uk

C.2 Study 2 & 3

Developing a new measure of empathy

Participant Information Sheet

You are being invited to take part in a research study. Before you agree to participate, it is important that you understand the purpose and nature of the study.

What is the purpose of this study?

I am developing a new measure of empathy and the purpose of this study is to test how it performs (validity and reliability). I am interested in the way people's thoughts and attitudes influence how much empathy they feel.

Do I have to take part?

No. You are under no obligation to take part. If you decide to participate, then you may keep this information and you will be asked to sign a consent form. You are however, free to withdraw at any time, without any consequences, should you change your mind.

What do I have to do?

You will be required to watch a short (1 minute) video of a high school bullying victim describing her experiences. You will then be asked to complete a questionnaire examining the thoughts you had about the girl in the video.

What are the possible disadvantages and risks of taking part?

The greatest disadvantage of taking part is the impact on your time. In addition, it is possible that the video may raise issues that you find difficult to deal with. You are advised not to take part should you find this subject (i.e., bullying) particularly distressing.

What are the possible benefits of taking part?

You will be contributing to the development of a new empathy scale, which has the potential to be applied to several different subject areas. You will also receive credits towards the research participation scheme. This does not negate your right to withdraw from the project

What will happen to my data?

Your data will be used to test the validity and reliability of this new measure. Group level data

may be reported at conferences and in journal articles. Your individual responses, however, will not.

What will happen if I don't want to continue with the study?

You are free to withdraw from the study at any time up to four weeks after today, without giving any reason. In the top corner of this page you have been allocated a participant number so that your data can be identified should you want to do this. Please contact the lead researcher (stating your participant number) to request that your data be withdrawn, at which point your data will be destroyed.

Will my taking part in the study be kept confidential?

Participants who complete the forms will be allocated unique participant codes and data will be entered with reference to these participant codes. The researcher will not know you by name and no reference to the participant number will be made in the official write up of the results. Consent forms and data will be kept in locked filing cabinets and will be stored for up to 3 years before being destroyed. Signed consent forms will be stored separately from your data.

Contact details:

Lead Researcher's name: Benjamin Cuff

Email: cuffb@uni.coventry.ac.uk

C.3 Study 4

Empathy and Charitable Donations

Participant Information Sheet

You are being invited to take part in a research study. Before you agree to participate, it is important that you understand the purpose and nature of the study.

What is the purpose of this study?

I am interested in the way people's thoughts and attitudes influence how much empathy they feel, and in turn, how likely they are to donate to charity.

Do I have to take part?

No. You are under no obligation to take part. If you decide to participate, you will be asked to complete a consent form on the following page. You are however, free to withdraw at any time, without any consequences, should you change your mind.

What do I have to do?

You will be asked some questions about yourself and will then be asked to watch a short (1 minute) video depicting a man who has been traumatised as a result of his time in the army. You will then be asked to complete a questionnaire examining the thoughts you had about the man in the video.

What are the possible disadvantages and risks of taking part?

The greatest disadvantage of taking part is the impact on your time. In addition, it is possible that the video may raise issues that you find difficult to deal with. You are advised not to take part should you find this subject (i.e., the effects of war on soldiers) particularly distressing.

What are the possible benefits of taking part?

You will be contributing to novel research into the relationship between empathy and charitable giving.

What will happen to my data?

Your data will be used to test the impact of thoughts and attitudes on feelings of empathy and the likelihood of donating to charity. Group level data may be reported at conferences and in

journal articles. Your individual responses, however, will not.

What will happen if I don't want to continue with the study?

You are free to withdraw from the study at any by closing your browser window, without giving any reason. In the top corner of this page you have been allocated a participant number so that your data can be identified should you want to do this. Please contact the lead researcher (stating your participant number) to request that your data be withdrawn, at which point your data will be destroyed.

Will my taking part in the study be kept confidential?

You will be asked to create a unique participant code and data will be entered with reference to this code. The researcher will not know you by name and no reference to the participant code will be made in the official write up of the results. Data will be kept on secure servers and will be stored for up to 3 years before being deleted.

Contact details:

Lead Researcher's name: Benjamin Cuff

Email: cuffb@uni.coventry.ac.uk

C.4 Study 5

A study on decisions involving the exchange of goods

Participant Information Sheet

You are being invited to take part in a research study. Before you agree to participate, it is important that you understand the purpose and nature of the study.

What is the purpose of this study?

We are interested in the effect of four factors on reactions to the exchange of goods: whether the two participants in a session started with the same or a different number of tickets (balance of initial resources), whether exchange was required or optional (choice), whether the exchange was simultaneous or sequential (timing of exchange), and whether the exchange was face-to-face or indirect (form of interaction).

Do I have to take part?

No. You are under no obligation to take part. If you decide to participate, then you may keep this information and you will be asked to sign a consent form. You are however, free to withdraw at any time, without any consequences, should you change your mind.

What do I have to do?

You will be paired up with another participant and play a game where you will exchange tickets for a prize draw. This is a two phase study. In one stage you will be competing for a £5 prize, and a £50 prize in the other (vouchers of your choice, should you win).

You will be asked to fill out some questionnaires about yourself and thoughts towards your participant partner.

What are the possible disadvantages and risks of taking part?

The only disadvantage of taking part is the impact on your time.

What are the possible benefits of taking part?

You will be contributing to our understanding of an important area of psychology, which has the potential to be applied to several different subject areas. You will also earn research credits (if applicable) and can earn tickets for a prize draw worth up to £55 (vouchers of your choice, should you win).

What will happen to my data?

Group level data may be reported at conferences and in journal articles. Your individual responses, however, will not.

What will happen if I don't want to continue with the study?

You are free to withdraw from the study at any time up to four weeks after today, without giving any reason. This will not affect your entry into the prize draw. In the top corner of this page you have been allocated a participant number so that your data can be identified should you want to do this. Please contact the lead researcher (stating your participant number) to request that your data be withdrawn, at which point your data will be destroyed.

Will my taking part in the study be kept confidential?

Participants who complete the study will be allocated unique participant codes and data will be entered with reference to these participant codes. The researcher will not know you by name and no reference to the participant number will be made in the official write up of the results. Consent forms and data will be kept in locked filing cabinets and will be stored for up to 3 years before being destroyed. Signed consent forms will be stored separately from your data.

Contact details:

Lead Researcher's name: Benjamin Cuff

Email: cuffb@uni.coventry.ac.uk

Appendix D: Consent Form (all studies)

Consent form

Project Title: [Study Title]

Name of researcher: Ben Cuff

By signing below I confirm that I agree with the following statements:

I have read and understand the participant information sheet and by continuing on with the study I will be consenting to participate in this study.

I have had the opportunity to consider the information, ask questions and have had these questions answered satisfactorily.

I understand that my participation is voluntary and that I am free to withdraw at any time without giving a reason.

I understand that the data will be treated according to the British Psychological Society Code of Ethics and the study has been reviewed by Coventry University's ethics committee. I also understand that this data will be securely stored for up to 3 years before being destroyed

I understand that the answers I give in this study will be analysed with the hope to publish any findings.

I understand that my anonymity will be maintained in any report of the research.

I understand that I also have the right to change my mind about participating in the study and withdraw from the study up to 4 weeks after participation in the study.

I agree to take part in the above study.

Signed:_____

Print Name:_____

Date:_____

Researcher's Signature:_____

Appendix E: Debrief Sheets

E.1 Study 1, 2, & 3

Developing a new measure of empathy

Debrief

Please do not read this page until after you have completed your responses. Feel free to detach this page and keep for your own records.

The purpose of this study was to pilot a new empathy measurement scale. While there are several different measurement scales already in use, the vast majority of these are 'trait' measures, i.e., they measure stable individual differences in typical displays of empathy. However, we know that certain 'state' (changeable) factors can change levels of empathy in different situations. For example, we hold different attitudes about different people. The effects that these attitudes have on empathy are what this new measurement scale examines.

If you feel that you would like to withdraw from the study you have 4 weeks following the completion of this research in which to do so. In order to withdraw from the study please contact the lead investigator, Benjamin Cuff at cuffb@uni.coventry.ac.uk If you require any additional information about the study or have any other queries that you would like to ask please do not hesitate to get in touch.

If taking part in this research led you to feel distressed or you would like to speak to someone about your thoughts and access advice, please contact one of the following:

Coventry University counselling services
http://students.coventry.ac.uk/counselling/pages/home.aspx
02477658029

Beatbullying support service
http://www.beatbullying.org/

If you are interested in this area of research, you may wish to read the following references:

Davis, M. H. (1996). *Empathy. A social psychological approach.* Boulder, CO: Westview Press.

Duan, C., & Hill, C. E. (1996). The current state of empathy research. *Journal of Counselling Psychology, 43(3),* 261-274. doi: 10.1037/0022-0167.43.3.261

Finally, thank you again for taking part in the research.

E.2 Study 4

Empathy and Charitable Donations

Debrief

The purpose of this study is to investigate how our thoughts and attitudes towards individuals depicted in charity adverts affect the amount of empathy we feel, and how that impacts on donation behaviours. For example, if an individual depicted in a charity advert is not very likeable, then we may not feel as much empathy for that person and that may mean that we are less likely to donate to that charity. This research has the potential to be used to develop more effective promotional campaigns for charitable organisations.

If you feel that you would like to withdraw from the study you have 4 weeks following the completion of this research in which to do so. In order to withdraw from the study please contact the lead investigator, Benjamin Cuff at cuffb@uni.coventry.ac.uk stating your unique participant code.

If you require any additional information about the study or have any other queries that you would like to ask please do not hesitate to get in touch.

- If you would like more information about the charity depicted in the video, you can find more information here: http://www.combatstress.org.uk/

- If taking part in this research led you to feel distressed or you would like to speak to someone about your thoughts and access advice, please see the following webpage: http://www.combatstress.org.uk/veterans/families/

- If you are interested in this area of research, you may wish to read the following resources:
    - http://www.psychologytoday.com/blog/ulterior-motives/201205/why-empathy-makes-you-more-helpful
    - Basil, D.Z., Ridgway, N.M., & Basil, M.D. (2007). Guilt and giving: A process model of empathy and efficacy. *Psychology and Marketing, 25,* 1-23.

Finally, thank you again for taking part in the research.

E.3 Study 5

A study on decisions involving the exchange of goods

Debrief

It is important that you read the following information as it was necessary to withhold some information from you at the start of this study.
It is important to note that your "partner" in this study did not exist, and the "partner's" actions had been pre-determined by the researcher. Because of this fact, you (and all other participants in this study) will receive one entry into a £55 prize draw, regardless of the decisions you made.

The purpose of this study was to examine how perceptions of our own needs (self-interest) interact with perceptions of another person's emotional needs. In addition we are interested in how this interaction influences the amount of empathy we feel for another person and how likely we are to provide help to that person.

To avoid compromising future data collection, please do not discuss the nature of this research with your fellow students.

If you feel that you would like to withdraw from the study you have 4 weeks following the completion of this research in which to do so. In order to withdraw from the study please contact the lead investigator, Benjamin Cuff at cuffb@uni.coventry.ac.uk If you require any additional information about the study or have any other queries that you would like to ask please do not hesitate to get in touch.

If you are interested in this area of research, you may wish to read the following references:

Batson, C.D., & Ahmad, N. (2001). Empathy-induced altruism in a prisoner's dilemma II: what if the target of empathy has defected? *European Journal of Social Psychology, 31,* 25-36.

Davis, M. H. (1996). *Empathy. A social psychological approach.* Boulder, CO: Westview Press.

Finally, thank you again for taking part in the research.

Appendix F: Sender's Note (Study 5)

Sender's Note

Please write a brief note describing something interesting of a personal nature that has happened to you recently.

Once you have written your note, please select the relevant 'Thoughts Questionnaire' from the pile and give these to the assistant.

Message to the receiver:

The sender wrote this note before learning anything about what this study involved so that she would not be influenced by such knowledge . . . . The content of the note is entirely confidential; only you will read it. The note will be delivered in a sealed envelope and not read by the assistant.

I'm supposed to write about something interesting that's happened to me lately. Well, I don't know if this will be interesting to anybody else, but the only thing I can think of is that two days ago I broke up with my boyfriend. We've been going out together since school and have been really close, and it's been great being at Cov Uni together. I thought he felt the same, but things have changed. Now, he wants to see other people. He says he still cares a lot about me, but he doesn't want to be tied down to just one person. I've been real down. It's all I think about. My friends all tell me that I'll meet other guys and they say that all I need is for something good to happen to cheer me up. I guess they're right, but so far that hasn't happened.

[Note: The text in this box was hand written by a female colleague for use in the study]

Appendix G: Study 5 Instruction Sheet

Condition 7

Balanced / Required / Sequential / Indirect

In this first stage, you will be competing for tickets in a raffle for a **£50** prize.

In this condition you will not meet your partner face-to-face, but you will receive information in the form of written communication. This will be written by your partner, and given to you by the researcher in a short while. You will not be required to write anything yourself.

In this condition, both you and your partner have the same initial resources:

You	Your Partner
	

Each of the cards indicates a number of raffle tickets that you will receive at the end of the experiment. At present, you both have a total of 5 tickets (+5 +5 -5 = 5) for the **£50** prize. The more tickets you end up with, the more chances you have to win the prize.

In this condition you will be required to exchange one card with your partner one after another (i.e., not at the same time). The person with the red cards will first give one red card to the person with blue cards. After receiving that card, the person with blue cards will give one blue card to the person with red cards. Only **one** exchange of tickets will be made.

[Continued]

Outcome Possibilities:

You		Your Partner	
	25 Tickets		25 Tickets
	5 Tickets		5 Tickets
	15 Tickets		15 Tickets
	0 Tickets		0 Tickets

An important additional consideration:

As can be seen above, a combination of two +5 cards, one red and one blue, is worth double its face value. Thus, if you (or your partner) end with a +5/+5 red-blue pair, that pair is worth 20 raffle tickets, not 10 . . . .

If one participant ends with a negative total, that person's final outcome is 0 raffle tickets.