

**Children's Moral Reasoning, Moral Emotions and Prosocial Behaviour: The
Educational Implications**

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Abstract

In the 20th century, the field of moral psychology was dominated by the assumption that moral judgements were reached exclusively by a process of reasoning (Gibbs, Basinger, Grime, & Snarey, 2007). Research ascertained a relationship between Kohlberg's stage theory, antisocial and prosocial behaviour. However, research in the 21st century has emphasised the, "...power and prevalence of emotionally based moral intuition..." (Paxton & Greene, 2010, p.2). Theorists (Malti and Latzko, 2010) have proposed an integrative developmental perspective, in which moral emotions and moral cognition are considered to interact reciprocally over the course of development. The current study tests the hypothesis that there will be positive relationships between children's moral reasoning, moral emotion attributions and the type of moral emotion attributions that they make, based on Tangney, Stuewig, & Mashek's (2007) distinction between self-conscious emotions and other-focussed moral emotions. The current study tests the hypothesis that these variables will be able to predict variance in children's scores of prosocial behaviour. Consequently, 108 7-to 8-year-olds were asked to examine two illustrated transgressions and one illustrated dilemma. Children's moral reasoning and moral emotion attributions to the victim, victimiser and themselves as observers of moral scenarios were assessed. Additionally, 13 teachers, 12 teaching assistants and 108 parents provided ratings for children's prosocial behaviour. Positive correlations were found between the predictor variables. Children's scores of moral reasoning were able to predict some variance in scores of prosocial behaviour. Interpretations of the findings are discussed with regard to children's moral reasoning, moral emotions and social behaviour. Implications for educators and educational psychologists are considered.

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TABLE OF ABBREVIATIONS

Word	Abbreviation
Educational psychologist	EP
Local authority	LA
Functional Magnetic Resonance Imaging	fMRI
Medial prefrontal cortex	MPC
Constructionist model of informed reasoned action	COMOIRA
Composite scores of moral reasoning	CMR
Composite scores of emotion attributions	CEA
Composite scores for the type of emotion attributions	CTEA

TABLE OF TERMS

Term	Brief definition
Moral reasoning	Conscious mental activity, through which, one evaluates a moral judgement
Moral emotions	Emotions that are linked to the interests or welfare either of society as a whole, or a least of persons other than the judge or agent
Prosocial behaviour	Voluntary behaviours that are intended to benefit another
Moral emotion attributions	Emotions that children attribute to an actor as a consequence of a morally relevant action
Standard multiple regression analysis	Based on correlation, it allows for an exploration of the interrelationship among a set of variables. It can explore how well a set of variables is able to predict a particular outcome.

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PART ONE

Literature Review

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(Excluding tables and references)

Children's Moral Reasoning, Moral Emotions and Prosocial Behaviour: The Educational Implications

Kohlberg and Piaget postulated rationalist models of moral development in the twentieth century (Pizarro & Bloom, 2003). The cognitive mechanisms thought to underpin these were, "...conscious, language-based thinking..." (Haidt, 2001, pg. 817). Moral reasoning and rational argument were deemed central to moral psychology. Moral reasoning has subsequently been defined as, "...conscious mental activity through which one evaluates a moral judgement for its (in)consistency with other moral commitments, where these commitments are to one or more moral principles and (in some cases) particular moral judgements." (Paxton & Greene, 2010, pg. 6).

In contrast, Haidt (2003) defines moral emotions as those, "...that are linked to the interests or welfare either of society as a whole or a least of persons other than the judge or agent." (p.276). Moral emotions are recognised as influencing a person's understanding of the prescriptive nature of the norms of fairness and caring (Horberg, Oveis, & Keltner, 2011). These sorts of moral emotions are key components of children's burgeoning morality since they express a moral orientation of caring and are likely to influence and/or be strongly associated with prosocial behaviours (Malti & Latzko, 2010). Prosocial behaviours have been defined as voluntary behaviours that are intended to benefit another (Eisenberg, Cumberland, Guthrie, Murphy, & Shepard, 2005). They may be motivated by the attempt to gain social approval, internalised moral standards, or empathy and sympathy. The moral nature of prosocial behaviour depends upon the genuineness of the actions, the urgency of others' needs in contrast to one's own, and the possibility that the altruistic behaviour may come into conflict with societal expectation and conformity (Eisenberg et al., 2005).

Debate pertaining to morality occurs frequently in social discourse (Killen & Smetana, 2010). There have been concerns about rates of antisocial behaviour, knife and gun crime in

recent years; these relate to civil liberties the judicial system and education, which all reflect moral issues (Killen & Smetana, 2010). Following the city riots in August 2011, Prime Minister David Cameron delivered a speech. In this, he attributed the riots to, "...people with a twisted moral code...", "...moral decline and bad behaviour..." and, "...moral collapse..." (Cameron, 2011). Arguably, this has implications for educators and educational psychologists (EPs).

A literature review was undertaken using databases, which included PsychInfo, ERIC (Educational Resource Information Centre) and Web of Knowledge. Search terms, together with variations and truncations included: moral development; moral reasoning; moral emotions; prosocial behaviour; and school based moral interventions. All of the research described below is peer reviewed. For the purposes of the current paper, first, literature regarding moral reasoning will be reviewed. This review will include alternative perspectives to Kohlberg's stage theory of moral reasoning, as well as the factors that influence the development of moral reasoning. Second, literature regarding moral emotions will be evaluated. This evaluation will consider the relationship between moral emotions and social behaviour. Third, literature regarding prosocial behaviour will also be discussed. This discussion will further explore the relationship between prosocial behaviour and moral emotions. Then alternative variables, which elucidate the development and expression of prosocial behaviour, will be reviewed. Finally, implications for education and the educational psychologist (EP) will also be examined, before the rationale and research questions of the subsequent study will be presented.

I. A critical review of the literature regarding moral reasoning

In the early twentieth century, children's moral development was explored via two methods. First, Piaget (1932/1965) presented children with contrasting stories in an attempt to

analyse their reasoning. Second, Piaget observed children's games, including the game of marbles. In Piaget's interviews, children were asked to compare the morality of a boy who breaks 15 cups whilst entering the dining room, in contrast to a boy who breaks one cup whilst stealing jam from a cupboard. Subsequently, Piaget (1932/1965) constructed a theory of children's moral development. This model of moral development outlined age related trends, in a sequence of qualitatively distinct stages. This sequence was deemed universal across different genders, cultures and social classes.

Kohlberg's theory differed to that of his predecessor, since moral development beyond childhood was considered (Dawson, 2002). In contrast, Kohlberg (1984) developed standardised hypothetical dilemmas, which utilised conflicting moral rules. The best known of these dilemmas is 'Heinz and the druggist' (Kohlberg, 1984), where the righteousness of preserving life is contrasted with the iniquity of theft. Kohlberg (1984) hypothesised that children progress through a sequence of qualitatively discrete stages of reasoning, and advanced six cognitive-developmental stages of moral development, presented in Table 1. Thus, Kohlberg (1984) attempted to identify structural stages of moral development.

Table 1

Kohlberg's six stage model of moral development (Kohlberg, 1984; Kohlberg & Candee, 1984)

Levels	Stages	Subtypes
Level 1 <i>Preconventional moral reasoning</i>	Stage 1 Heteronomous morality reflects the adherence to rules inspired merely through fear of punishment from authority.	Type A Reasoning will evidence deference toward authority
	Stage 2 Individualism, instrumental purpose and exchange reflect moral reasoning that is regulated purely by egotism and self-interest.	
Level 2 <i>Conventional moral reasoning</i>	Stage 3 Mutual interpersonal refers to moral reasoning where social norms are considered with regard to close personal relationships, but only those that conform to expected social roles.	
	Stage 4 Social system and conscience is achieved when an individual appreciates his/her membership within society.	
Level 3 <i>Postconventional moral reasoning</i>	Stage 5 Social contract or utility and individual rights corresponds to an appreciation of different moral perspectives	Type B Reasoning is more autonomous.
	Stage 6 Universal ethical principles occur when societal norms are rejected as the basis of moral authority in favour of self-chosen ethical principles, which are maintained even in the face of opposition.	

In accordance with Piaget's hypothesis, Kohlberg also proposed that his model was universal (Gibbs, Basinger, Grime, & Snarey, 2007; Dawson, 2002). Cultural groups, however, have distinct systems and expectations, which influence their notions of what constitutes right and wrong (Dawson, 2002). It follows that the ways in which boys and girls

acquire orientations toward morality, will depend upon the society in which they grow-up (Dawson, 2002; Danovitch & Kiel, 2008). Further, Gilligan (1982) has argued that Kohlberg's stages do not reflect female moral development. The socialisation process for males and females is often divergent and Kohlberg's model may better reflect a 'justice orientation' (Gilligan, 1982; Eisenberg, Spinard & Sadovsky, 2006). A 'justice orientation' has an emphasis on issues of fairness, which characterises male moral reasoning (Gilligan, 1982). This stands in contrast to the ways in which females might reason about moral issues. Females have been suggested to take a care orientation toward moral matters, whereby they are more likely to consider their relationships with others (Gilligan, 1982). Danovitch and Kiel (2008) suggest that according to the moral problems they encounter, boys and girls are capable of applying both justice and care-based judgements. Arguably, these orientations are not mutually exclusive.

Kohlberg (1984) speculated that young children, at a less advanced stage of reasoning, believe that convention and morality are homogeneous. Over the course of development, Kohlberg hypothesised that children learn to differentiate social norms from morality. In contrast, 6-to 13-year-old children were observed interacting with peers and interviewed regarding their judgements about moral events (e.g., issues of fairness, rights and harm) and social conventions (e.g., rule violation or disobedience of authority) (Turiel, 2008). All age groups were able to distinguish between moral and social convention events. Turiel (2008) posits that social convention and morality constitute two entirely separate conceptual domains, which children are able to distinguish.

Consequently, in recent decades, the exploration of moral judgements has moved away from the Kohlbergian conceptualisation of children's stages of reasoning. An alternative methodology has been developed (Arsenio & Fleiss, 1996; Smetana, Campione-Bar, & Yell,

2003; Malti et al., 2009, 2010). Two moral transgressions are used to evaluate children's moral reasoning and moral judgements, including a child being hit by another child and a child being teased by another child. Questions relate to four subscale items. One item explores how severe children deem a moral transgression to be. A second item explores how children evaluate three features of a moral transgression (i.e., what is the moral rule; how generalizable is that rule; and what is the authority of that rule). A third item explores children's perceptions of whether a victim deserves to be punished for his/her transgression. A final item explores moral reasoning.

Gasser and Malti (2012) adapted this methodology further. Interviews were recorded and transcribed, in contrast to previous research in which children's responses were hand-written and subsequently coded (Smetana et al., 2003; Malti et al., 2009; Malti et al., 2010; Lane, Wellman, Olson, LaBounty, & Kerr, 2010). Gasser and Malti (2012) explored moral reasoning by coding children's justifications for their answers to the questions developed in the previous methodology. Children were also asked to attribute emotions to the victimiser in four hypothetical transgressions. The participants were asked to justify these emotion attributions and they were coded according to criteria (moral, authority oriented, hedonistic or undifferentiated). These scores were used to compute moral emotion reasoning. Gasser and Malti (2012) reported that this methodology is a reliable and valid measure of moral reasoning and moral judgements.

I b. Alternative perspectives on moral reasoning

Whilst Plato crowned reason as, "...the king of the soul and ruler of the passions...", many centuries later, Hume conversely claimed that reason is the slave of the passions (Hume, 1748/ 1975). In psychological theory, Freud, who suggested that the ego is subservient to the id, the passionate human drive, supported the views of Hume. In the latter half of the twentieth

century, there was a paradigm shift toward cognitive psychology and the study of morality reflected the zeitgeist (Haidt, 2003). However, Kagan and Lamb (1987) subsequently hypothesised that emotional reactions are the driving force of moral judgement; moral reasoning was framed as simply post hoc rationalisation. Subsequent research emerged that stressed the moral function of a range of emotions, including shame, guilt and embarrassment (Tangney, Stuewig, & Mashek, 2007).

The rationalist perspective has been criticised for failing to consider the role of emotions in moral judgements and implicating the supremacy of a priori reasoning (Haidt, 2001). Haidt (2001) developed an alternative theory, termed the social intuitionist model. This model proposed that reasoning is used in moral judgements after a decision has been made, in a process of post hoc rationalisation. Haidt (2003, p. 853) commented, the model places, “...emotions firmly in control...whereas reason is demoted to the status of not-so-humble servant.” In contrast to Kohlberg’s belief that reasoning is a slow, deliberate and conscious process, intuitions are considered automatic (Haidt, 2001). Moral intuitions are considered to drive judgement in Haidt’s model. These intuitions are derived from family systems, peer groups, social and cultural convention.

In previous research (Haidt, 2001; Haidt, 2004), adult participants were presented with a story about an incident of incest occurring between a brother and sister. Participants were questioned as to the rectitude of this incident and they reported that it was morally wrong. Participants reported concerns about the consequences of inbreeding and the emotional impact on the siblings after the event. The story had explicitly stated that two different forms of contraception had been used and the siblings had felt closer after the incident, thus the participants concerns were groundless (Haidt, 2001). Their responses were suggestive that ‘a

gut feeling', or intuition, had driven their judgements, since participants could not provide other justifications for their responses (Haidt, 2001).

Arguably, the distinction between intuitions and reasoning might not be so straightforward. Our tools for adaptation are inextricably linked (Narvaez, 2010a), such as with reasoning, intuitions and emotions. Thinking is formed during early emotional interactions with caregivers. This in turn shapes the concepts and perceptions we hold, which provide the foundation for our inferences and developing sense of self (Narvaez, 2010a). Conscious reasoning is essential for judgement when there is a great deal at stake, but both intuition and unconscious reasoning contribute to such decision making. Narvaez (2010a, p. 185) comments that, "As with salt in cooking, conscious deliberation in a situation is more often a light but essential guiding hand ensuring that things don't fall flat. That is, conscious reasoning may be useful mostly in small doses." Narvaez (2010a) argues that mature moral functioning involves multiple skills, in which reasoning and intuition are dynamically interrelated.

Time could be a key variable in determining which processes, judgements and actions an individual engages in, when responding to a moral event (Suter & Hertwig, 2011). The distinction between deontology and consequentialism has relevance to this issue. Consequentialism refers to the notion that an action can be deemed correct and morally right because it results in positive consequences that serve the majority. Deontology refers to the notion that moral rights and duties are not flexible and not dependent on the consequences of an action (Suter & Hertwig, 2011). For example, in an overcrowded lifeboat, where one person's sacrifice will save the rest of the boat, a consequentialist response would promote the sacrifice of the individual to save the majority. In contrast, a deontological response would suggest that killing one to save many violates the innocent person's rights (Suter & Hertwig, 2011).

Research regarding people's moral judgements has employed moral dilemmas that will evoke either a deontological or a consequentialist orientation (Greene, Morelli, Lowenberg, Nystrom & Cohen, 2008; Greene, Sommerville, Nystrom, Darley & Cohen, 2001). Greene and his colleagues (2001, 2008) have distinguished between personal and impersonal moral dilemmas, whereby the emotional response that such dilemmas prompt, or fail to prompt, influences the judgement that is made. Personal dilemmas tend to engage emotional processing more than impersonal, hypothetical moral dilemmas, which are more objective in nature and do not directly involve the individual. Consequently, Greene and his colleagues developed the dual-process theory of moral judgement (2001, 2008). This model posits that there are two kinds of information processing; a controlled cognitive process compared with an emotional and intuitive process. Controlled cognitive processes produce consequentialist judgements, whilst emotional, intuitive processing produces deontological judgements. These processes do not necessarily occur separately or contribute equally to a judgement, due to a dilemma's varying ability to elicit emotions. Research (Pizarro & Bloom, 2003, Greene, Nystrom, Engell, Darley & Cohen, 2004) has identified divergent patterns of neural activity in participants, when they consider different types of moral dilemma. Findings suggested that the medial prefrontal cortex showed increased activation when participants reflected upon a personal moral dilemma. The medial prefrontal cortex is the area of the brain implicated in social-emotional information processing. Greene et al. (2004) reported that participants' brain activity was similar to the activity elicited in problem solving tasks, when they were asked to consider impersonal moral dilemmas.

Correspondingly, Suter & Hertwig (2011) conducted two experiments to investigate whether participants' deontological impulse manifests more strongly when less time is available to engage in cognitive and rationale decision making. Suter and Hertwig (2011) manipulated time across two experiments. In one, participants were subject to time pressures

when asked to make decisions based on moral dilemmas. In the second experiment, participants were instructed to answer as quickly as possible or to deliberate thoroughly. Across both time manipulations, the prevalence of deontological judgements increased when people were asked to respond faster, consistent with Greene et al.'s (2001, 2008) dual-process model of moral judgements. The distinction between deontological and consequentialist judgements has implications for the way one interprets an individual's moral judgement and gives credence to the context in which decisions are made.

Malti and Latzko (2010) propose that an integrative developmental perspective on moral emotions and moral cognition provides an important conceptual framework for understanding children's burgeoning morality. From this perspective, moral emotions and moral cognition are considered to be interdependent and reciprocally interact over the course of development. Yet, little research has investigated the developmental relations between moral emotions and moral cognition (Malti & Latzko, 2010) and thus, requires greater exploration.

I c. Factors affecting the development of moral reasoning

Gasser and Malti (2012) explored the moral reasoning and moral emotion reasoning of aggressive children and their friends, in order to explore the relationship between the reasoning of aggressive children and their peers. A relationship was identified, indicative of the 'homophily hypothesis', which suggests, "...friends' characteristics in the moral domain, represent important contextual factors for children's behavioural socialisation..." (Gasser & Malti, 2012, p. 363).

Reese, Bird and Tripp (2007) explored the impact of conversations within the home on children's moral development and self-esteem. Both theory and research support the relevance of parent-child interactions for children's moral development and self-esteem.

Emotion discussions form an important part of early interactions and relates to conscience development (Reese et al., 2007). It has been hypothesised that the emotional and cognitive skills required for moral decision-making emerge as the result of past event discussions. Reese et al. (2007) aimed to examine the relationship between past emotional talk between child and parent, and the child's self-concept, self-esteem and sense of moral self. The research also examined associations between the aforementioned variables and conflict conversations between child and parent. Conflict conversations provide the opportunity for parents to discuss ideal and actual behaviour with their offspring (Reese et al., 2007). The research was conducted with a small sample (51 children) and only one father participated. Arguably, the findings might relate to the ways in which conversations between mothers and their children impact upon moral and self-esteem development. Nonetheless, parent-child emotion talk was found to be correlated with children's moral self, assessed via The Moral Self Scale (Kochanska, Murray, & Coy, 1997). In particular, conversations regarding negative past events were the most significantly correlated with children's moral self and levels of self-esteem. The research findings highlight the importance of child parent interactions in the development of moral identity.

Moral identity is defined in terms of the degree to which individuals perceive moral qualities as salient features of their self-concept (Patrick & Gibbs, 2012). Moral exemplars and other individuals high in moral identity are likely to display prosocial behaviours (Patrick & Gibbs, 2012). Research has suggested that during adolescence, the uses of moral terms in relation to the self, increases. Adolescents demonstrate increasing empathy and awareness of the needs of others (Hart & Carlo, 2005). Patrick and Gibbs (2012) argue that authoritative parenting styles, such as inductive discipline, where the victim's needs are emphasised, are likely to facilitate moral identity among adolescents. This is based on research findings that

suggested adolescents, who identified their parents as authoritative, were more likely to espouse values consistent with those of their parents (Hart & Carlo, 2005).

Patrick and Gibbs (2012) demonstrated that parental induction and particularly, expressions of disappointed expectations were viewed by adolescents' as an effective disciplinary technique. Parental use of inductive discipline, in which the plight of the victim was discussed, was found to be related to higher moral identity during adolescence. Moral identity was assessed to be high where specifically moral qualities (e.g., kindness, fairness, compassion) were ascribed to the self over non-moral qualities (e.g., intelligence). In contrast, moral identity was not associated with parental use of power assertion. One could argue that research of this kind, is likely to incur socially desirable responses from both adolescents and parents. Yet, this study corroborates the hypothesis that parenting practices over the course of childhood and adolescence influence moral development.

II. A critical review of the literature regarding moral emotions

The investigation of moral emotions is necessary since the process of constructing early moral judgements is likely to be related to the development of perspective-taking and empathic skills (Helwig, 2008). Malti, Gasser, & Gutzwiller-Helfenfinger (2010) comment, "...children's moral judgements are essential to morality, whereas moral emotions, particularly sympathy, are assumed to help children anticipate the negative outcomes of moral transgressions and co-ordinate their moral action tendencies accordingly." (p. 16). The authors propose that moral emotions are central to human moral experience. They indicate moral concern and the acceptance of personal responsibility (Malti, Gasser & Buchmann, 2009). Moral emotions may also be central to understanding why individuals adhere or fail to adhere to their own principles (Tangney et al., 2007).

Moral emotions are defined as emotions that, "...go beyond the direct interests of the self..." (Haidt, 2003, p. 853). Haidt (2003) classified four types or families of moral emotions

including, the other-condemning family (contempt, anger, and disgust), the self-conscious family (shame, embarrassment, and guilt), the other-suffering family (compassion), and the other-praising family (gratitude and elevation). Any emotion can be described as a moral emotion, as long as the emotion leads to a prosocial action tendency and is not evoked in relation to interests of the self (Haidt, 2003). Tangney et al. (2007) subsequently theorised about two distinct categories of moral emotions. They distinguished between self-conscious emotions, which are evoked by evaluations based on the self, for example, shame, guilt and embarrassment, and other-focused moral emotions, which are based on evaluations of another, for example, righteous anger, disgust, elevation and gratitude. Alternatively, Malti and Latzko (2010) conceptualise all moral emotions as self-conscious emotions, because they presuppose an understanding of the relation between the self and others that is obtained through self-evaluation. Thus, there exist subtle differences between conceptualisations of the moral emotions.

Arsenio, Gold & Adams (2006) updated a four-step model of how socio-moral affect links are formed, and how they act to guide children's reasoning and subsequent behaviour. This model, previously developed by Arsenio and Lover (1995), emphasises the importance of affect-event links or situational affect. First, this model posits that different types of socio-moral events, for example, a transgression compared with helping, inevitably have different emotional outcomes. Second, children's burgeoning conceptions of the relationships between an event and a specific emotional response become increasingly entrenched. The third step involves the understanding and application of these affect-event links to various situations, which enables children to predict the emotional response they are likely to experience. The fourth stage describes how this affectively salient knowledge is generalised across increasingly diverse situations and enables children to predict and co-ordinate responses. Thus, throughout infancy and early childhood, children develop a foundation for reciprocity

and fairness (Arsenio et al., 2006). This model is comparable with Damasio's (2003) hypothesis of a biologically based account of how emotions and cognition interact to influence behaviour. Consistent emotional responses to the outcomes of moral and non-moral events lead to the development of somatic markers in infancy and early childhood (Damasio, 2003). Consequently, positive or negative cognitions become associated with these moral and non-moral events. Over time, somatic makers manifest themselves as specific behaviours (Damasio, 2003). A finding from the literature, regarding children's emotion attributions in moral contexts, however, is difficult to integrate with existing socio-moral theories. Specifically, the finding termed 'the happy victimiser effect' is difficult to reconcile with the aforementioned theories. This finding describes the attribution of positive emotions to victimisers, which has been consistently found within research (Nunner-Winkler & Sodian, 1988; Arsenio, 1988; Lourenço, 1997).

Moral emotions have typically been investigated via the exploration of children's moral emotion attributions to either a victim or victimiser in a moral scenario. This research often identifies 'the happy victimiser effect' (Arsenio et al., 2006). For example, younger children (3-to 6-year-olds) suggest that a child who perpetrates a moral transgression, such as stealing something, would feel happy at carrying out this act (Arsenio et al., 2006). These young children tend to focus on the personal gain of the wrongdoer. In contrast, the attribution of negative emotions such as guilt, sadness or remorse is indicative of a child understanding and taking into account the harm done to the victim as well as the victimiser's deliberation of these consequences. A decrease in this attribution, or, "moral attributional shift" (Arsenio et al., 2006, p. 584), signals an important development transition in children's emotion understanding. This transition, which takes place at around age seven, involves a child understanding that immoral conduct causes a transgressor to feel a range of emotions including sadness, guilt and remorse (Malti et al., 2010).

When a large sample of children, aged from 5-to 9-years, were asked to attribute emotions to themselves as a victimiser and to attribute emotions to a hypothetical victimiser, children did make a clear distinction between the emotions they attributed to themselves versus those attributed to the hypothetical victimiser (Keller, Lourenço, Malti & Saalbach 2003). Children provided less positive emotions to themselves. Thus, younger children may believe they are describing a bully, and that the moral transgression is indicative of their bad character, when providing their emotion attributions (Keller et al., 2003). Equally, young children may simply strive to provide socially desirable responses (Arsenio et al., 2006; Malti et al., 2009). Whilst Arsenio et al. (2006) assert that the psychological meaning and relevance of ‘the happy victimiser effect’ is still unclear, other research has failed to replicate this finding (Gutzwiller-Helfensinger, Gasser, & Malti, 2010). Further, research in this paradigm has not examined children’s emotion attributions to themselves, as observers of moral scenarios. Arguably, this might provide insight into children’s empathic experiences during moral events.

II b. Moral emotions and social behaviour

Emotions are often analysed into component features, such as an eliciting event, a facial expression, a physiological reaction, a phenomenological experience and a motivation or action tendency (Haidt, 2003). The extent to which a moral emotion is likely to evoke a moral action has been long investigated. A moral emotion that is pivotal to expressions of moral and prosocial behaviour is empathy. This construct has received a great deal of scrutiny. Philosophers interested in morality (e.g., Hume, 1748/1975) have discussed the constructs of empathy and sympathy. Over two centuries ago, in his ‘Theory of Moral Sentiments’, Adam Smith described empathy as the ability to understand another’s perspective and to have a visceral or emotional reaction (Eisenberg et al., 2006). More recently, psychologists have assigned empathy and sympathy a central role in moral development, especially as a factor

that motivates prosocial behaviour (e.g., helping and sharing) and inhibits aggression. Empathy is defined as the recognition and sharing of another's emotional state (Hastings, Zahn-Waxler, & McShane, 2006). It is closely related to sympathy, which is an emotional response stemming from the apprehension of another's emotional state or condition. Theorists, however, have distinguished between two classes of empathy. Affective empathy is the unpleasant emotional reaction to the perception of another person's suffering. Cognitive empathy, on the other hand, is the insight one gains into thoughts, feelings, intentions and emotions of another (Maxwell & DesRoches, 2010).

Prosocial behaviour constitutes actions taken to benefit another's well-being, including actions to alleviate their distress. The broad behavioural category of prosocial behaviour can encompass altruism, which promote another's needs at some cost to oneself. These constructs are not interchangeable and each conveys a range of meanings and motives (Hastings et al., 2006). However, they all reflect to some degree, expressions of concern for the welfare of others. Hastings, Zahn-Waxler, Robinson, Usher and Bridges (2000) in previous work grouped these related affective, cognition and behavioural reactions under the rubric 'concern for others'. Thus, Hastings et al. (2006) position empathy and prosocial behaviour as symbiotic, although not interchangeable.

Malti et al. (2009) examined differences between prosocial and antisocial children's moral reasoning and moral emotion attributions. A moderate effect size indicated that 6-to 7-year-old children, identified as antisocial, attributed fewer negative emotions to 'self-as-victimiser', in comparison to prosocial children. Exploration of children's justifications for their moral emotion attributions revealed that the younger prosocial children were more likely to give hedonistic reasons, i.e., justifications that refer to the satisfaction of personal needs, than the older prosocial children. No relation, however, was found in the older age group, between children's social behaviour and the justification offered for their moral emotion

attributions. It is queried whether moral emotion attributions might lose their predictive validity for social behaviour, as children age and learn to give socially desirable answers (Malti et al., 2009).

Minimal research has examined adolescents' moral emotions and the ways in which they influence subsequent behaviour (Arsenio et al., 2006). A sample of one hundred adolescents' conceptions of the emotional outcomes of different forms of aggression, which included reactive aggression, provoked proactive aggression and unprovoked proactive aggression, were examined (Arsenio, Grossman, & Gold, 2004). The sample of adolescents was split into two groups, which included a group of 'behaviourally disruptive adolescents', who met criteria for conduct disorder or oppositional defiant disorder and a group of non-disruptive peers from the same schools. It is important to note that adolescents were assigned a category based upon only a single teacher report, which limits the validity of this categorisation. Further, these categories were arguably derogatory. Nonetheless, both groups, disruptive and non-disruptive, identified that victims are likely to experience a series of negative emotions because of the unfairness and harm caused from being victimised. The question remains as to how some children, deemed aggressive, are able to understand the victims' emotional experiences without having that knowledge influence their subsequent social behaviour (Arsenio et al., 2004; Arsenio et al., 2006). Thus, the link between individuals' reasoning, affective response and social behaviour remains unclear.

Malti and Latzko (2010) suggest, "It remains unclear what are a) the developmental relations between moral emotions and cognition, and b) the varying relations among different types of moral emotions...and moral cognition." (p. 4). Arsenio et al. (2006) raise a related issue, "Less is known about how children view the emotional consequences of affectively charged moral transgressions involving deliberate harm and victimisation, in particular, and whether these moral affect-event links have a meaningful influence on their related

behaviour.” (p. 527-528). Arguably, there remain some inconsistencies regarding the conceptualisation of moral emotions. There exists a disparity regarding the ways in which researchers categorise moral emotions (e.g., Haidt, 2003; Malti & Latzko, 2010; Tangney et al., 2007), which has implications for the mechanisms by which moral emotions are expressed and interpreted. It is unclear whether in a moral context any emotion can take on moral qualities, such as sadness or happiness. Moreover, the extent to which moral emotions and moral reasoning are interdependent remains vague. Additional research and analysis of moral emotions might lead to a consensus regarding what constitutes a moral emotion; how, if at all, moral emotions can be categorised; and how they are related to other aspects of morality and social behaviour.

III. A critical review of the literature regarding prosocial behaviour

Prosocial behaviour has been defined as voluntary behaviours, which are intended to benefit others (Fabes, Carlo, Kupanoff & Laible, 1999). There is evidence that moral reasoning is associated with prosocial and moral behaviours (Fabes et al., 1996; Eisenberg, Hofer, Sulik, Liew, 2013). Higher stages of moral reasoning, and other-oriented styles of moral reasoning, have been shown to be positively correlated to prosocial behaviours (Carlo, Koller, Eisenberg, Da Silva, & Frohlich, 1996). Malti et al. (2009) identified that children rated as prosocial, by teacher report, were less likely, compared to non-prosocial children, to provide rule-bound (sanction-oriented) explanations when evaluating moral rule transgressions as wrong. According to other research, moral reasoning is negatively associated with delinquency, cheating and aggression (Fabes et al., 1999).

Miller, Eisenberg, Fabes and Shell (1996) conducted research into the relations between moral reasoning, vicarious emotions and prosocial behaviour in children aged 4-to 5-years of age. The participants' responses to two 'peer distress films' and two 'adult distress simulations' were recorded via a two-way mirror. Moral reasoning was assessed with the use

of prosocial moral dilemmas. The findings were suggestive that preschool children's emotional reactions to the films and scenarios were positively related to higher levels of moral reasoning. Social-normative reasoning was reported to be significantly, positively related to children's self-reported sad affect and to both boys' and girls' facial concern (Miller et al., 1996). These findings are suggestive that from early on in development children's emotional experiences and moral reasoning are related to the ways in which children respond prosocially. The effect sizes of finding, however, were reported to be small to moderate.

It is suggested by theorists that prosocial and moral behaviour increases with age (Kohlberg, 1984; Piaget 1932/1965). According to this speculation, young adolescents should evidence more prosocial behaviour than they did when they were children. In earlier research, Eisenberg and her colleagues had identified that young children tend to use more hedonistic and selfish forms of reasoning. However, in longitudinal research, it was identified that older children tend to demonstrate more other-oriented moral reasoning. In adolescence, it was reported that individuals tended to reflect abstract principles in their reasoning. Yet, Fabes and Eisenberg (1996) found that the age differences in prosocial behaviour are complex. For example, the type of prosocial behaviour under investigation, affects the magnitude of the age difference that is found. Nonetheless, Fabes and Eisenberg (1996) concluded that there are changes in both moral and prosocial tendencies, as children reach adolescence. A contributory factor in these age related changes is considered to be perspective-taking.

Penner and Finkelstein (1998) have argued that empathy, sympathy and perspective taking can be considered measures of a prosocial disposition expected to motivate actual prosocial behaviours. Perspective taking has been defined as the ability to understand how another is thinking and feeling within a particular social context (Eisenberg et al., 2013). Eisenberg et al. (2013) report that it involves, "...cognitively taking the role of the other or accessing information from memory to assist in understanding another's emotion/ situation."

(p 3). Perspective taking is believed to undergo a series of developmental stages (Penner & Finkelstein, 1998). These stages move from egocentric to 'sociocentric', as children move away from considering their own experiences and begin to contemplate the internal states of others. It is reported that by the age of 10 years, children typically begin to understand and empathise with the experiences of others and reflect upon social issues (Eisenberg et al., 2013). As a result of interactions with peers and adults, young adolescents are exposed to differing viewpoints and effective perspective-taking skills become increasingly important for successful social interaction and socio-moral development (Eisenberg et al., 2013).

Eisenberg et al. (2013) attempted to examine changes during adolescence and early adulthood in prosocial moral reasoning, described as moral dilemmas in which one person's needs come in to conflict with those of other. The study also examined whether a prosocial orientation in preschool and adolescence predicted a prosocial orientation during adulthood. Previously, Carlo, Mestre, Samper, Tur and Armenta (2011) identified that children's and adolescents' prosocial behaviour are related to 'needs-oriented' prosocial moral reasoning. Prosocial moral reasoning has been modestly related to prosocial behaviour, in particular costly behaviour, such as donating blood. Eisenberg et al.'s (2013) findings were suggestive that prosocial moral reasoning is related to sympathy in adolescence, which supports other-oriented cognitive and emotional responses. A gender difference was found, with females reporting more prosocial tendencies than males. Arguably, this could be reflecting socially desirable responses, as both males and females wish to reflect gender norms. Findings were also suggestive that reasoning that reflected a regard for social convention, increased during early adulthood. Eisenberg et al. (2013) argue that young adults become increasingly concerned with behaving in ways that are in accordance with societal expectations. This finding might be the result of young adults' increasing participation in institutions and places of work (Eisenberg et al., 2013).

However, in the research of Eisenberg et al. (2013), the reported sample size is relatively small. This sample was composed of middle to upper middle class children from Caucasian families. Hispanic and African American children were underrepresented in this sample. It is not entirely clear whether the findings would be replicable in a more representative sample. Eisenberg et al. (2013) acknowledge that replication is required with a more diverse, larger sample. Arguably, parenting practices, which are strongly related to prosocial behaviours (Reese et al., 2007), should be controlled for within future research of this kind. Further, Dovidio, Piliavin, Schroeder and Penner (2006) suggested that the study of prosocial behaviour is problematic since these behaviours frequently vary as a function of the context, such as the cost of the prosocial behaviour. Consequently, moral reasoning maturity should not be considered the solitary cause of a whole range of prosocial behaviours.

III b. Prosocial behaviour and moral emotions

Research has explored the association between prosocial behaviour and moral emotions, including empathy and sympathy (Hastings et al., 2006). Sympathy has been described as the feeling of concern for others. Research conducted by Vaish, Carpenter and Tomasello (2009) illustrated the early development of sympathy and empathic related responding in infancy (Vaish et al., 2009). Sympathy is thought to increase the likelihood of prosocial behaviour, such as helping or attending to a situation, in children as young as 18-months-old (Vaish et al., 2009). Prosocial behaviours were predicted by the extent of distress and concern demonstrated by the infants, when a researcher was placed in a negative situation. In another condition, the researcher did not use any facial expressions. Nonetheless, infants still demonstrated concern and attempted to help the researcher.

The association between trait empathy and prosocial behaviour, however, is difficult to establish (Marsh, Kozak, & Ambady, 2007). Measures of empathy, utilised in research, have

received criticism for their lack of validity. For example, self-report measures of empathy may incur socially desirable responses. Empathy measures that do not rely on self-report, such as scanning techniques including fMRI, better predict prosocial behaviour (Marsh et al., 2007; Rameson, Morelli, & Lieberman, 2012). A brain-behaviour link was investigated by connecting empathy related neural activity to everyday, real-world helping behaviour, to link empathy to prosocial behaviour more explicitly (Rameson et al., 2012). Thirty two undergraduate students completed a daily diary study of helping behaviour. Correspondingly, an fMRI scan was conducted with participants whilst they viewed images deemed sad by researchers. Images were presented in three conditions, watching naturally, under cognitive load and whilst empathising. Across all conditions, higher levels of self-reported experienced empathy were associated with greater activity in the medial prefrontal cortex (MPC). Activity in the MPC was also correlated with daily helping behaviour. Stronger neural responses were observed when participants were 'instructed' to empathise, which suggests top-down effortful cognition may amplify empathic responses (Rameson et al., 2012). Trait empathy was also measured using the empathy quotient (Baron-Cohen & Wheelwright, 2004). Participants identified as having high trait empathy reported greater experienced empathy and displayed stronger medial prefrontal cortex responses relative to participants with low trait empathy.

Whilst the MPC might be implicated in empathy and real-world prosocial behaviour, there are limitations with this and other research of its kind. The use of fMRI to tap empathy might be conceptually challenging, since theorists have postulated two distinct categories of empathy, cognitive (insight into a person's distress) and affective (emotional reaction to a person's distress) (Maxwell & DesRoches, 2010). It is unclear what type of empathic response is under investigation. It is also uncertain how genuine the empathy was, since researchers 'instructed' participants to empathise, or in fact how participants were instructed. There has been criticism levelled as to the benefit of using neuroimaging techniques in psychology more

generally. Coltheart (2006) claims the mind should be studied independently of the brain, since the underlying physiology of the brain and how this relates to functions of the mind is not yet fully understood. He also asserts that neuroimaging is reductionist and merely a glorified phrenology. Alternatively, Henson (2005) claims, the functions tested in fMRI rely on a large body of theory and data, which distinguishes it entirely from phrenology. Hence, functional neuroimaging can tell researchers how a task is performed by virtue of supporting or contesting a theory, permitting inferences to be made (Henson, 2005). The study conducted by Rameson et al. (2012) utilised a small sample of undergraduate students. Thus, inferences regarding the expression of empathy and prosocial behaviour in children should be made tentatively.

III c. Alternative variables that elucidate prosocial behaviour

Scourfield, John, Martin and McGuffin (2004) describe prosocial behaviour as positive interactions with other people that include helping, sharing, cooperating and comforting. These social interactions provide useful information in the assessment of children's social adjustment and psychopathology (Scourfield et al., 2004). Twin data are considered a useful opportunity to examine aspects of children's prosocial behaviour. Such data are useful in identifying genetic and environmental influences on prosocial behaviour. These data can also illuminate how gender and age might contribute to these effects. The twin study method is a popular methodology, which allows for the variance of scores in a population to be separated into either genetic or environmental influences. Environmental influences are typically divided into factors that make twins more alike and factors that make twins different. The former is the shared environment and the latter is the unique environment (Scourfield et al., 2004).

Research findings have suggested that both genes and environment significantly influence children's prosocial behavioural tendencies. Scourfield et al. (2004) examined the genetic and environmental influences on prosocial behaviour. The researchers used parent and teacher reports from a population-based sample of twins aged 5-17. Scourfield et al. (2004) suggest that genetic influences become more apparent across adolescence. Results also indicated that girls were more prosocial compared to boys, which is consistent with other research (Eisenberg et al., 2006). However, this gender difference was only found for adolescents aged twelve to seventeen. Gender differences are typically more pronounced as children enter adolescence (Scourfield et al., 2004). Data from boys and girls were compared in genetic models and no evidence was found for separate effects in males and females. Scourfield et al. (2004, p. 933) commented that, "...phenotypic differences observed are not associated with sex differences in genetic and environmental effects." Therefore, the presence of a gender difference might be the result of adolescents' increasing awareness and sensitivity to gender norms, where prosocial behaviours are typically associated with femininity (Eisenberg et al., 2006).

Hart and Carlo (2005) suggest that parenting practices influence children's expression of prosocial behaviour. Reliable, warm and authoritative parenting has been consistently associated with prosocial behaviours across infancy, childhood and adolescence. In research (Farrant, Devine, Maybery, & Fletcher, 2012), parenting that encourages children to take the perspective of others was strongly predictive of children's subsequent prosocial behaviour. The benefits of warm, sensitive and responsive parenting in infancy were also predictive of empathy and prosocial behaviour. Hart and Carlo (2005) also highlight the role of peers in adolescents' socialisation. Peers are an important source of novel moral behaviours, since they provide role taking opportunities (Hart & Atkins, 2002). Hart and Carlo (2005) also

argue that romantic and intimate relationships that develop during this period provoke greater perspective taking and empathic skills.

Other research (Slaughter, Dennis & Pritchard, 2002), has explored the relations between prosocial behaviour, peer acceptance and theory of mind ability in childhood. Research findings have suggested that children's theory of mind ability is strongly associated with their social experiences. Peer acceptance has been defined as the extent to which children are accepted or rejected by their peers. This was hypothesised to be related to a child's level of prosocial behaviour and their theory of mind ability. These associations are thought to interact via two reciprocal pathways. First, children with advanced theory of mind are likely to be able to understand the beliefs, thought and feelings of another and in turn, these interpersonal skills will make them better socially equipped, more prosocial and more socially accepted. Second, the social context provided by positive peer relationships is likely to offer children the necessary opportunities that will enable them to develop theory of mind, which is likely to further reinforce prosocial behaviours (Slaughter et al., 2002). Research has suggested that prosocial children tend to be the most popular, socially accepted among their peers. In comparison, aggressive children tend to be less socially adjusted and the least popular (Newcomb, Bekowski & Pattee, 1993). The directions of those relationships, however, are not clear. Slaughter et al. (2002) argue that theory of mind related skills such as empathy and perspective taking is influential in determining children's prosocial behaviour and peer acceptance.

Slaughter et al. (2002) identified that four to six year old children rated as most popular received the highest prosocial scores. Even when language and age were controlled, peer acceptance and aggressive behaviour were negatively correlated. However, theory of mind ability and prosocial behaviour was not found to be significantly correlated, when both language skills and age were controlled. This is inconsistent with other research findings

(Newcomb et al., 1993). Slaughter et al. (2002) suggest that more research is required to elucidate the link between prosocial behaviour and theory of mind ability. The correlation between these two variables has been found to be modest. Thus, any effect might be influenced by the methodology used to measure both prosocial behaviour and theory of mind ability (Slaughter et al., 2002).

Thus, prosocial behaviour is multifaceted and complex. It cannot be considered the unique consequence of mature moral reasoning or other-focussed moral emotions. Further, expressions of prosocial behaviour may be context dependent (Hastings et al., 2006). A number of factors influence the development and manifestations of prosocial behaviour, including genetic contributions, peer relationships and parenting practices (Eisenberg et al., 2013).

IV. Morality in practice: educational implications

Malti et al. (2009) propose that little research has been conducted into the influence of both emotion attributions and moral reasoning on the moral quality of children's social behaviour. More research, which integrates these aspects of moral development, is necessary to further current knowledge of individual differences in children's social adaptation (Malti et al., 2009, 2010). A more differentiated understanding of the moral strengths and deficits involved in children's moral actions can only be reached by considering different components of morality (Malti et al., 2010). This knowledge is important for designing preventative strategies aimed at promoting children's resilience and adaptive development (Malti et al., 2010; Maxwell & DesRoches, 2010).

Moral philosophers, moral psychologists and educators have sought to incorporate tenets of moral psychology into an educational context, whereby pupils' sense of justice, fairness and ethical judgements can be fostered. One such psychologist, who endeavoured to

nurture moral individuals, was Kohlberg during the 1970s (Killen & Smetana, 2010).

Kohlberg and his colleagues developed 'just community schools', small classes developed within school settings. The 'moral atmosphere' was deemed necessary to foster a sense of responsibility to the community and to promote prosocial behaviour (Narvaez, 2010b). By the mid-1980s, however, the interest in the Kohlbergian approach to moral education had begun to diminish. This can be attributed to limitations in Kohlbergian theory, a poor evidence-base that informed the educational practices and concern regarding the culturally biased imposition of Westernised values and notions (Nucci, 2006).

Nonetheless, Nucci (2006) suggests that calls for character education persist within the USA. Such calls for character education are generally accompanied by claims of moral crisis. These warnings regarding moral decay have been routinely disputed. Writers have pointed to the cyclical nature of such claims throughout recorded history, and thus positioned moral youth crises within their historical contexts (Nucci, 2006). They tend to occur during periods of rapid social change and so resonate with the anxieties of members of the older generation within the public (Nucci, 2006). This has significant pertinence to the UK based August riots of 2011, where the Prime Minister David Cameron attributed the riots to, "...people with a twisted moral code...", "...moral decline..." and "...moral collapse..." (Cameron, 2011). Teachers were identified as needing to meet the behavioural demands of children 'at risk' of antisocial behaviour (Cameron, 2011). In this way, young people's moral selves were deemed to require intensive classroom based support. Arguably, the dissemination of a didactic moral educational programme is unlikely to inspire truly moral and ethical consideration, but instead encourage prescriptive, one dimensional judgements. Nucci (2006, p. 660) argues:

The broader purpose of moral education as enabling a citizenry to reach a postconventional principled moral orientation... is at risk of becoming reduced to conformity to the moral status quo. By definition, such a conventional moral orientation ensures that whatever moral shortcomings may exist, within the current

social consensus, are not examined; in effect it is a recipe for guaranteeing moral blindness in the name of moral virtue.

The notion that the emotional climate of the school and the pattern of peer and pupil-teacher interactions form a basic context within which schools directly and indirectly contribute to pupils' social and moral development has long held sway (Kohlberg & Candee, 1984; Nucci, 2006; Narvaez, 2010b). The Integrative Ethical Education model (IEE; Narvaez, 2006, 2008, 2010c) theorises about the prerequisites to foster moral character in schools and organisations. It is grounded in systems theory and social and emotional learning (Narvaez, 2010b). This model stresses the importance of establishing a secure, caring relationship between teacher and pupil. This model promotes the creation of a 'sustaining climate', which refers to classrooms where relationships are central, and emphasises an apprenticeship model of teaching whereby a set of ethical skills, such as ethical judgements and sensitivity, are modelled for pupils. Thus, educators can encourage self-authorship and self-actualisation in their pupils (Narvaez, 2010b). Finally, the model specifies that networks must be developed between families, communities and schools to align goals and practices for optimal child development. Narvaez (2010b) does not expound the mechanisms through which these key features of ethical education can enact moral development and subsequent prosocial behaviour. Research could attempt to evaluate the key components of this model through assessment of a range of outcomes for pupils.

Maxwell and DesRoches (2010) considered the problems with current moral and social emotional learning programmes. A number of theorists have pointed to the need for programme evaluation. However, it may be just one aspect of effective intervention (Maxwell & DesRoches, 2010). Another valuable part of setting up and running an intervention is the epidemiological perspective, which refers to the extent to which a programme takes the complex explanations of poor behaviour or limited social competence into consideration.

Another crucial aspect of any intervention is the extent to which its design is based upon theoretically valid theories and constructs in psychology (Maxwell & DesRoches, 2010). This has relevance to the educational psychologist (EP) providing psychological knowledge and skills. Edwards (1998), over a decade ago, considered that a major challenge for EPs was ensuring that well-founded psychological knowledge becomes integrated and routine for those in schools interacting daily with children and young people.

A common pitfall in school-based interventions, according to Maxwell and DesRoches (2010), is failing to distinguish between empathy as a feeling of concern for others, deemed affective empathy, and empathy as awareness of other people's feelings, desires and beliefs, deemed cognitive empathy, akin to social inferencing. This misconception can make intended outcomes confusing and difficult to evaluate and validate. A related pitfall in intervention work is the assumption that social inferencing leads to caring. Children are typically told to 'imagine' how they would feel in the role of victim. However, this only has motivational weight if the child regards others in the same way he or she views him or herself (Maxwell & DesRoches, 2010).

Correspondingly, Hoffman (2000) advanced two notions regarding children's empathic development. First, empathic development is relatively precocious. Second, empathic development requires adult support and intervention. The research finding that empathic development starts very early within development is corroborated by research (Hastings et al., 2000; Vaish et al., 2009). Hastings et al., (2000) studied the way children, identified as having behavioural problems, responded when they witnessed harm to others at age four. Aggressive children appeared to lack impulse control, they did not, however, lack empathic concern for the victim. Yet, at age seven, the empathic responsiveness of children with behaviour problems decreased. Thus, there appears to be a crucial period for empathic development

between early and middle childhood (Hoffman, 2000; Hastings et al., 2000). It is this period where 'at risk' children appear to fall away from the developmental trajectory, relative to their peers, with regard to progress in empathic responding (Maxwell & DesRoches, 2010).

Hoffmann (2000) claims, in contrast to Piagetian and Kohlbergian conceptions, empathic development and moral socialisation depend on adult intervention. Relevant studies on parenting style and prosocial behaviour tend to validate this position (Eisenberg et al., 2001; Bronstein et al., 2007). This has relevance to interventions, whereby parental support and involvement may be vital for effective and long term success.

In 2011, Action for Children implemented a programme in 15 local authorities across Scotland following investment from the Early Years Early Action Fund. This programme is called 'Roots of Empathy' and has been developed by Gordon and her colleagues in Canada. Infants with their parents are invited to attend school, where pupils observe the attentive, loving interaction between the parent and infant. This forms the basis of structured sessions, which are intended to teach pupils to understand their own feelings and the feelings of others. In this way, the programme intends to foster young children's empathy. Researchers from the University of British Columbia (Schonert-Reichl, Smith, Zaidman-Zait, & Hertzman, 2012) have evaluated the 'Roots of Empathy' (ROE) programme. This evaluation included measuring outcomes of a large sample of pupils involved in the Roots of Empathy programme compared with those in a control group. Measures included self-reports of understanding infant distress, empathy and perspective taking as well as peer and teacher reports of prosocial and aggressive behaviours. Children in the ROE intervention showed significant improvement across several of the domains that were assessed; particularly, peer nominations of prosocial behaviour. Improvements, generalised into the home setting, were not assessed. Further, self-report measures, used within the research, are likely to incur socially desirable responses (Marsh et al., 2007). Self-reported empathy and perspective taking, however, showed no

significant improvement as a result of the intervention. Further research of this kind needs to be conducted in order to assess its usefulness to a population based in the United Kingdom.

Evidently, children do not exist just at home or within school; a child is a part of a community, undertaking activities and pursuits, which should be considered in relation to moral development. In the last two decades, there has been a paradigm shift toward preventive work with children and youth, encompassed in Positive Youth Development and supported by the literature within positive psychology (Vargas & Gonzalez-Torres, 2009). This approach is oriented towards identifying positive subjective experiences, positive individual traits and positive institutions (e.g., school, family and community structures) (Vargas & Gonzalez-Torres, 2009). The concept of community psychology is relevant to the role of the EP, since there is recognition of the fact that behaviour cannot be viewed in isolation from its family as well as social context (Mackay, 2006). The child's school must be regarded as part of his or her community, where the EP works collaboratively as part of a multi-disciplinary team to address the wider needs of an area and the individuals who reside there (Mackay, 2006).

Arguably, it is important to provide a framework to understand children's moral development, and in turn foster this development. By working systemically, the EP can reframe within child behavioural difficulties, by bringing contextual and environmental factors, which affect the child, to the foreground (Pellegrini, 2009). By reframing, the systemic practitioner can bring fresh meaning to a situation. Language is fundamental to the construction and maintenance of the perceptions of problems and their definitions (Burr, 2003). Consequently, the EP can reframe the language and discourse that are used regarding children's behaviour, whether it is deemed prosocial or antisocial. This relates to the tenets of The Constructionist Model of Informed Reasoned Action (COMOIRA) (Gameson, Rhydderch, Ellis & Carroll, 2003), a model of professional practice for EPs. Gameson et al.

(2003, 2005) offer a framework in which hypotheses can be constructed from a perspective embedded within social constructionism, systemic thinking, enabling dialogue and informed and reasoned action. The EP is in a prime position to influence Local Authority (LA) policy and disseminate knowledge (Randall, 2010), particularly regarding children's moral development. Malti et al. (2009, p. 90) consider:

The question of how emotion attributions and moral reasoning impact children's social behaviour is of great significance for developmental and school psychologists, because it may help us gain further insight into the moral deficiencies as well as the strengths of aggressive and prosocial children... Such an enhanced understanding is important if future educational interventions aimed at fostering moral resilience and social competence in children are to be effective.

One could argue that, the EP has a role in planning, implementing and evaluating intervention strategies, which might be aimed at fostering prosocial behaviour in children. Debatably, an understanding of the relationship between moral reasoning, moral emotions and social behaviour will support EPs in this endeavour. However, the language used to construct these issues is socially and culturally determined (Burr, 2003). The aforementioned relationship is likely to be far more complex and dynamic and a whole host of factors influences children's social behaviour (Linley et al., 2007). The EP has a crucial role in exposing more reductionist conceptions of morality and social behaviour, in order that a more holistic perspective of the child can be obtained (Pellegrini, 2009).

V. Conclusion

A selective summary of the literature regarding moral reasoning, moral emotions, prosocial behaviour and moral education has been provided. The relevance these issues have for the role of the educational psychologist has been discussed. Two main conclusions can be drawn from this review. First, further research is required to explore moral emotions. They have been hypothesised to be emotions, "...that are linked to the interests and welfare either of

society as a whole or at least of persons other than the judger or agent.” (Haidt, 2003, p. 276). Tangney et al. (2007) theorised about two distinct categories of emotions. They distinguished between self-conscious emotions, which are evoked by evaluations based on self-interest, and other-focused moral emotions, which are based on evaluations of, and concern for, another. Haidt (2003) describes any emotion as a moral emotion, as long as it leads to a prosocial action tendency. Studies investigating the neural basis of moral emotions have suggested that they may have a role in prompting restitution or appeasement actions, which are prosocial behaviours (Blair & Fowler, 2008). Further research is required to corroborate these findings. Yet, Malti & Latzko (2010) call for an integrative-developmental approach to the study of both moral reasoning and moral emotions, since they both constitute components of children’s moral experience. The relationship between moral emotions and moral reasoning can be explored in relation to prosocial behaviour. This research will explore moral emotions; how they influence moral judgements; and ultimately, how they relate to the expression of prosocial behaviour (Arsenio et al., 2006).

Second, the exploration of moral emotions, moral reasoning and prosocial behaviour has implications for educational initiatives. Principles from moral psychology have long been incorporated into educational settings. Examples of this include Philosophy for Children, whereby pupils are encouraged to exercise moral thinking skills, related to issues of justice and fairness (Narvaez, 2010a), and the Roots of Empathy programme. Further, children’s social and emotional development can benefit from these school-based initiatives (Maxwell & DesRoches, 2010). This has relevance to the work of the educational psychologist. EPs aim to work as scientist-practitioners, who utilise psychological knowledge through the function of consultation, research and training (Fallon, Woods, & Rooney, 2010). Arguably, the EP can review the evidence base of such initiatives and advise individuals, parents and schools

accordingly. Subsequently, the EP can disseminate good practice across the county in which he or she works (Boyle & Lauchlan, 2009).

Research has not explored the validity of Tangney et al.'s (2007) conceptual framework, regarding moral emotions. This framework might support an exploration of the type of emotion attributions that children make. Research has frequently explored children's emotion attributions to a victim or victimiser (Keller et al., 2003; Malti et al., 2010). Arguably, exploring children's emotion attributions to themselves as observers of moral scenarios might shed light upon children's empathic experiences to moral events. The research study in Part Two has been designed to address the following research hypotheses. In line with an integrative developmental perspective (Malti & Latzko, 2010), it is predicted that there will be positive relationships between children's scores of moral reasoning, emotion attributions and type of emotion attributions, based on Tangney et al.'s (2007) distinction between self-conscious emotions and other-focussed moral emotions. Carlo (2006, p. 565) suggests, "...individuals' preference for some types of moral reasoning might be linked to values or emotions (e.g., sympathy, guilt) that facilitate responding to others' needs." It is, therefore, predicted that children's scores of moral reasoning, emotion attributions and type of emotion attributions will be able to predict variance in scores of prosocial behaviour.

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**Children's Moral Reasoning, Moral Emotions and Prosocial Behaviour: The
Educational Implications**

PART TWO

Empirical Study

5,999 words

(Excluding abstract, tables, references and appendices)

Abstract

In the 20th century, the field of moral psychology was dominated by the assumption that moral judgements were reached exclusively by a process of reasoning (Gibbs, Basinger, Grime, & Snarey, 2007). Research ascertained a relationship between Kohlberg's stage theory, antisocial and prosocial behaviour. However, research in the 21st century has emphasised the, "...power and prevalence of emotionally based moral intuition..." (Paxton & Greene, 2010, p.2). Theorists (Malti and Latzko, 2010) have proposed an integrative developmental perspective, in which moral emotions and moral cognition are considered to interact reciprocally over the course of development. The current study tests the hypothesis that there will be positive relationships between children's moral reasoning, moral emotion attributions and the type of moral emotion attributions that they make, based on Tangney, Stuewig, & Mashek's (2007) distinction between self-conscious emotions and other-focussed moral emotions. The current study tests the hypothesis that these variables will be able to predict variance in children's scores of prosocial behaviour. Consequently, 108 7-to 8-year-olds were asked to examine two illustrated transgressions and one illustrated dilemma. Children's moral reasoning and moral emotion attributions to the victim, victimiser and themselves as observers of moral scenarios were assessed. Additionally, 13 teachers, 12 teaching assistants and 108 parents provided ratings for children's prosocial behaviour. Positive correlations were found between the predictor variables. Children's scores of moral reasoning were able to predict some variance in scores of prosocial behaviour. Interpretations of the findings are discussed with regard to children's moral reasoning, moral emotions and social behaviour. Implications for educators and educational psychologists are considered.

Children's Moral Reasoning, Moral Emotions and Prosocial Behaviour: The Educational Implications

Morality has been defined as prescriptive norms concerning the ways in which people should treat one another (Decety & Howard, 2013). There are current concerns about rates of antisocial behaviour in British society (Cameron, 2011). These issues relate to the judicial system, civil liberties and education, which all reflect moral issues (Killen & Smetana, 2010). This has implications for educators and educational psychologists (EPs), working to promote positive, long-term outcomes for young people (Sayer, Beaven, Stringer, & Hermena, 2013). An understanding of the development and expression of morality has, "...far-reaching implications for our vision of a fair and just society and how to achieve it." (Killen & Smetana, 2006, p. 3). This paper investigates the relationship between children's moral emotions, moral reasoning and their prosocial behaviour. The literature concerning these issues will be discussed with regard to education and the role of the EP.

Moral cognition

In the twentieth century, Kohlberg and Piaget postulated rationalist models of moral development (Haidt, 2001). It was theorised that an individual reaches a judgement through a process of reasoning, whereby the issues of justice and fairness are deliberated (Kohlberg, 1984). Kohlberg's six-stage theory of moral development became the prevailing paradigm for psychological research during the 1970s and 1980s. However, the notion that Kohlberg's stages are invariant across genders, cultural and social groups has been contested and criticised (Gibbs, Basinger, Grime, & Snarey, 2007). Haidt (2001) conceived of an alternative theory, described as the social intuitionist model. An assumption of this theory is that moral intuitions drive judgement. In contrast, Turiel (2006) argues that moral judgements are often more than intuitions. They involve concepts about different groups, social relationships and

complex perspectives on society. Subsequently, theorists (Decety & Howard, 2013; Malti & Latzko, 2010) suggest that mature moral abilities emerge from a sophisticated integration of emotional, cognitive and motivational mechanisms. Moral reasoning has been defined as, “...conscious mental activity through which one evaluates a moral judgement for its (in)consistency with other moral commitments, where these commitments are to one or more moral principles and (in some cases) particular moral judgements.” (Paxton & Greene, 2010, p. 6).

Studies have demonstrated a relationship between children’s moral reasoning ability and social behaviour. Higher scores of moral reasoning, indicative of concern for a victim, have been associated with prosocial behaviours (Malti, Gasser & Buchmann, 2009), whilst low scores of moral reasoning have been associated with antisocial acts (Stams, Brugman, Dekovic, Rosmalen, van der Lann, & Gibbs, 2006). Yet, other research has failed to replicate these findings (Hart & Fegley, 1995; Krebs & Denton, 2005). Turiel (2006) suggests that early measures of moral reasoning, such as the Moral Judgement Interview (Kohlberg, 1984), require a far too interpretative process. A scorer must carefully interpret the responses of an individual. Similarly, moral reasoning is variable across different social circumstances. There are confounding effects that make reliability and validity more tenuous. These include an individual’s test-taking attitudes and verbal fluency (Turiel, 2006).

Moral emotions

Moral emotions are defined as emotions that, “...go beyond the direct interests of the self...” (Haidt, 2003, p. 853). Haidt (2003) classified four types or families of moral emotions including, the other-condemning family (contempt, anger, and disgust), the self-conscious family (shame, embarrassment, and guilt), the other-suffering family (compassion), and the other-praising family (gratitude and elevation). Any emotion can be described as a moral

emotion, as long as it leads to a prosocial action tendency and is not evoked in relation to interests of the self (Haidt, 2003). Tangney, Stuewig, & Mashek (2007) theorised about two distinct categories of moral emotions. They distinguished between self-conscious emotions, which are evoked by evaluations based on the self and other-focused moral emotions, which are based on evaluations of another. This distinction between types of moral emotions has received relatively little exploration.

Moral emotions are typically investigated via the exploration of children's moral emotion attributions to an actor as a consequence of a morally relevant event (Malti & Krettenauer, 2013). Most frequently, child participants are required to attribute emotions to a victim or victimiser (Krettenauer & Johnson, 2011; Malti, Gasser, & Gutzwiller-Helfenfinger, 2010). It is, generally, not before the ages of 7-8-years that children anticipate negatively charged emotions as a consequence of moral transgressions, since understanding mixed emotions requires cognitive and perspective taking skills that develop across childhood. This is termed 'the happy victimiser effect' (Arsenio, Gold, & Adams, 2006).

Malti and Krettenauer (2013) conducted a meta-analysis including 42 studies that explored the relationship between moral emotion attributions and social behaviour across childhood and adolescence. They identified small size relations between moral emotion attributions and prosocial behaviour. Moderate size relations between emotion attributions and antisocial behaviour were also identified. Malti and Krettenauer (2013) argue that moral emotion attributions are likely to reflect individual differences in morally relevant behavioural dispositions. Across the 42 studies, participants attributed emotions to others or to the self. The former (other-attributed emotions), indicate the emotions that participants would anticipate for the victim/victimiser in a hypothetical scenario. The latter (self-attributed emotions), indicate the emotions that participants would anticipate for themselves, in the role of victim/victimiser (Keller, Lourenço, Malti & Saalbach, 2003). Malti and Krettenauer

(2013) argue that self-attributed emotions are more likely to reflect the individual's subjective experience. Yet, research has not examined children's emotion attributions to themselves, as observers of a moral event. Arguably, this might provide insight into children's empathic experiences.

Prosocial behaviour

Prosocial behaviour is described as voluntary behaviours that are intended to benefit others (Eisenberg, Cumberland, Guthrie, Murphy, & Shepard, 2005). Research (Eisenberg, Spinard, Sadovsky, 2006; Carlo, Mestre, Samper, Tur, Armenta, 2011) has explored the relations between prosocial behaviour and moral emotions, such as sympathy and empathy. Tangney et al. (2007) suggest that moral emotions relate to behaviour in two ways: first, as consequential emotions following behaviour and, second, as anticipatory emotions when evaluating behavioural alternatives. Thus, moral emotions may, at the same time reflect past emotional experiences and represent emotion expectations, which then influences behaviour.

The association between the moral emotions and prosocial behaviour is difficult to establish, however (Marsh, Kozak, & Ambady, 2007). For example, self-report measures of empathy may incur socially desirable responses. Empathy measures that do not rely on self-report, such as scanning techniques including fMRI, better predict prosocial behaviour (Marsh et al., 2007; Rameson, Morelli, & Lieberman, 2012). Research of this kind is typically conducted with undergraduate students, whilst self-report measure are frequently used with children (Eisenberg et al., 2006)

A gender difference is often found in levels of prosocial behaviour when self-report indices are used. The gender difference found within research, however, may be an artefact of the socialisation processes within society. Questionnaire measures of prosocial behaviour often reflect gender stereotyped behaviour (Eisenberg et al., 2006). It remains that prosocial

behaviour is multifaceted and complex. Parents play a crucial role in moral socialisation (Carlo et al., 2011; Farrant, Devine, Maybery, & Fletcher, 2012). Further, a genetic contribution (Knafo & Plomin, 2006) and peer relationships (Chung-Hall & Chen, 2009) all contribute to the development and expression of prosocial behaviour.

Educational implications

Malti and Latzko (2010) posit an integrative developmental perspective. Moral emotions and moral cognition are considered to be interdependent and interact reciprocally across development. This perspective provides an important conceptual framework for understanding children's burgeoning morality and designing developmentally appropriate intervention strategies (Malti & Latzko, 2010). Maxwell and DesRoches (2010) claim, in the development of such strategies, researchers and educators often fail to distinguish between empathy, as a feeling of concern for others, deemed affective empathy, and empathy as awareness of others' feelings, desires and beliefs, deemed cognitive empathy, akin to social inferencing. This failure can make intended intervention outcomes difficult to evaluate and validate (Maxwell & DesRoches, 2010). A related pitfall in intervention work is the assumption that social inferencing leads to caring. Children are typically told to 'imagine' how they would feel in the role of victim. This only has motivational weight if children regard others in the same way they view themselves (Maxwell & DesRoches, 2010).

The design of any intervention should be based upon theoretically valid theories and constructs in psychology (Randall, 2010). Edwards (1998), over a decade ago, considered that a major challenge for EPs was ensuring that well-founded psychological knowledge becomes integrated and embedded within schools. Schools also have an important role in developing and maintaining beneficial geographical and relational communities (Sayer, et al., 2013; Mackay, 2006), since a child's sense of community and cohesion is integral to his/her socio-

moral development (Narvaez, 2010). Sayer et al. (2013) claim that the climate in which young people develop their socio-moral skills, understanding and sense of community needs to be managed actively, to which the EP can participate. EPs would seem ideally placed, in terms of their training and remit, to contribute strategically to the development and evaluation of educational provision aimed at supporting children's socio-moral skills (Ewen & Topping, 2012).

Rationale for the current study

The relationship between children's moral emotions and moral reasoning, and the impact they have on social behaviour, requires greater scrutiny (Chapman & Anderson, 2011; Horberg, Oveis & Keltner, 2011). Arguably, the measures utilised in previous research have been limited. Malti et al. (2009, 2010) explored relations between moral skills and social behaviour. Antisocial and prosocial behaviour were assessed using the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997). However, only teacher reports were collected. Similarly, Gasser and Malti (2012) explored the relationship between moral reasoning and social behaviour. This study explored children's overt aggressive behaviour, based exclusively on teacher ratings. Child participants attributed emotions to themselves, in the role of victimiser. This might explore skills more akin to theory of mind, since it requires participants to consider the thoughts, feelings and beliefs they might hold in the role of transgressor (Lane, Wellman, Olson, LaBounty, & Kerr, 2010). Arguably, moral emotions could be comprehensively explored by examining the *types* of emotion attributions and justifications children provide as observers of moral events. Further, research has not explored the validity of Tangney et al.'s (2007) conceptual framework, regarding moral emotions. This framework might support an exploration of the type of emotion attributions that children make.

The present study builds on previous research to test two hypotheses. First, in line with an integrative developmental perspective (Malti & Latzko, 2010), it is predicted that there will be positive relationships between children's scores of moral reasoning, emotion attributions and type of emotion attributions, based on Tangney et al.'s (2007) framework, which makes the distinction between self-conscious emotions and other-focussed moral emotions. Carlo (2006, p. 565) suggests, "...individuals' preference for some types of moral reasoning might be linked to values or emotions (e.g., sympathy, guilt) that facilitate responding to others' needs." Second, it is predicted that children's scores of moral reasoning, emotion attributions and type of emotion attributions, based on Tangney et al.'s (2007) framework, will be able to predict variance in scores of prosocial behaviour.

The present research is conducted in a critical realist paradigm. This is consistent with investigations conducted within this field of study. From this perspective, knowledge is considered a social and historical product and facts are identified as theory laden. The task of science is to devise theories to explain associations between events in the real-world and to test them by rational criteria (Robson, 2002). Research findings are interpreted with regard to their social and historical contexts (Maxwell & Delaney, 1999). However, the approach of this research relies upon significance testing. The significance test suggests whether results are obtained by chance. It does not reveal information regarding the practical importance of the relationship between variables (effect size); the quality of the research design; the reliability and validity of the measures; and whether the results are replicable. Thus, a significance test is one of many criteria by which findings should be assessed (Tabachnick & Fidell, 2007).

Methodology

Participants

Participants included 112 child participants (62 girls, 50 boys), 112 parent participants, 13 teacher participants and 12 teaching assistant participants. All participants were recruited from 13 primary schools in three counties in the UK. Thirty primary schools were invited to participate; a response rate of 43.3%. The majority of child participants were Caucasian ($n = 105$). Child participants were recruited from year three. This age group was selected since a transition occurs when children are around 7-years-old, which involves a child understanding that immoral conduct can cause a transgressor to feel negative emotions (Arsenio et al., 2006). Four children were tested but excluded from the final sample, due to incomplete or missing data. Data were excluded where more than one of the adult participants' data were missing, or a child failed to complete all questions. Consequently, 108 child participants, 108 parent participants, 13 teacher participants and 12 teaching assistant participants were included in the data analysis. A GPower Analysis identified that a minimum sample size of 107 child participants was needed to detect large effect sizes when conducting multiple regression analysis.

Research Design

The research design is correlational. Children obtained three scores for the criterion variable (prosocial behaviour) from teachers, TAs and parents. Children obtained scores for three predictor variables (moral reasoning, emotion attributions and type of emotion attributions) after responding to questions about three moral scenarios.

Measures

Prosocial behaviour

Five items on the SDQ (Goodman, 1997) generate a prosocial behaviour score (0-10). Parent participants completed these items for their child. Teacher and teaching assistant participants completed these items for children in their class. The psychometric properties of the SDQ are reported to be good (Goodman, 1997). Malti et al. (2010) recorded the internal consistency of the prosocial scale of the SDQ (Goodman, 1997) as $\alpha = .84$.

Moral reasoning

A scale to examine moral reasoning was adapted from previous research (Gasser & Malti, 2012; Malti et al., 2010; Malti et al., 2009). This scale explores children's reasoning regarding, how severe they deem a moral transgression to be; how much punishment the transgression deserves; whether the moral rule holds across different contexts; and what justification is there, for the moral rule. Gasser and Malti (2012) recorded the internal consistency of this scale as $\alpha = .68$, which is acceptable. According to Gasser and Malti (2012) the scoring system described below, "...has been validated in previous studies." (p. 361). In the present research, responses to two moral transgressions and one moral dilemma were assessed.

Judgements of the severity of the transgression and the necessity of punishment were scored on 3-point scales ranging from 1 (not very bad) to 3 (very bad) for severity, and from 1 (none) to 3 (a lot) for deserved punishment. Higher scores indicated higher severity and deserved punishment judgements. Child participants were asked whether a moral rule still applies in three different contexts (absence of a witness, a lack of knowledge, at home with a sibling). Responses that the behaviour was right scored 0, and responses that the behaviour was wrong scored 1. The three judgments were then summed and participants were given a moral evaluation score (range 0–3), whereby a higher score indicated a higher moral

evaluation. Moral evaluation scores, deserved punishment scores and severity judgement scores were converted into z -standardized scores. This was done since it was useful to express participants' scores with respect to both the mean of the group and the variability of the scores (Robson, 2002).

Participants provided moral justifications for their answers, i.e., justifications for the moral rule, according to the following categories. First, the category 'moral' was used, where justifications related to considerations of another's welfare. Second, the category 'authority oriented' was used, where justifications related to fear of negative sanctions from authorities or peers. Third, the category 'hedonistic' was used, where justifications related to satisfaction of personal needs. Fourth, the category 'undifferentiated' was used, where justifications were not given and the facts were merely re-stated. Moral/altruistic justifications were awarded a score of four; authority-oriented justifications were awarded a score of three; undifferentiated justifications were awarded a score of two; and hedonistic justifications were awarded a score of one. Participants were given a moral justification score across both severity and deserved punishment justifications (range 0-8), which were converted into z -standardized scores. A summary of the moral reasoning subscales is presented in Table 1.

Table 1. *Summary of the Moral Reasoning Subscales*

Subscale	Questions	Detail	Scoring	Total
Moral evaluation	Questions <i>b, c</i> & <i>d</i> of Appendix A	Children were asked whether a moral rule still applies in three different contexts: absence of a witness, a lack of knowledge, at home with a sibling.	Responses that the behaviour was right scored 0 and responses that the behaviour was wrong scored 1.	Moral evaluation score (range 0–3)
Severity Judgement	Question <i>a</i> of Appendix A	Children were asked to judge how severe the transgression was.	Judgements of the severity of the transgression were scored on a 3-point scale ranging from 1 (not very bad) to 3 (very bad)	Severity Judgement score (range 0-3)
Deserved Punishment Judgement	Question <i>e</i> of Appendix A	Children were asked to judge whether the victimiser deserved punishment	Judgements of the necessity of punishment were scored on a 3-point scale ranging from 1 (not a lot) to 3 (a lot)	Deserved punishment score (range 0-3)
Moral justification	Questions <i>a</i> & <i>e</i> of Appendix A	Children were asked to justify their severity <i>and</i> deserved punishment judgements	Justifications were categorised as follows: Moral: Score = 4 Authority oriented: Score = 3 Undifferentiated: Score = 2 Hedonistic: Score = 1	Moral justification score (range 0-8)

A moral reasoning composite score (range 0-51) was obtained for each participant by adding together each participant's scores for moral evaluation, severity judgement, deserved punishment and moral justifications across three scenarios (two transgression, one dilemma) that were viewed. The composite scores were converted into z -standardized scores. The internal consistency of this moral reasoning scale was assessed to be $\alpha = .75$, which is acceptable. However, there are only a small number of subscale items. Thus, it is useful to examine inter-item correlation values for the items. Optimal mean inter-item correlation values range from .2 to .4 (Tabachnick & Fidell, 2007). The mean inter-item correlation value is .43 in the current study. Correlations between subscale items were recorded (r ranging from .25 to .79). Interrater reliability between two coders, based on 10% of responses was $\kappa = .67$, which is acceptable (Stangor, 2007). The measure of moral reasoning is summarised in Table 2.

Table 2. *The Measure of Moral Reasoning*

	Subscales	Assessed across three moral scenarios	Composite total
Moral Reasoning	<p>Moral evaluation: Range 0-3</p> <p>Severity judgement: Range 0-3</p> <p>Deserved punishment judgement: Range 0-3</p> <p>Moral justifications: Range 0-8</p>	<ul style="list-style-type: none"> – Moral transgression: Child being teased by another child – Moral transgression: Child being hit by another child – Moral dilemma: Child stealing to provide for his/her brother 	Range 0-51

Emotion Attributions

Participants were asked to attribute an emotion to a victim, a victimiser and themselves as observers (see Appendix A). If participants attributed any appropriate negative or positive emotion to the victimiser (e.g., angry or happy) they received a score of 1. If no emotion was offered, the respondents received a score of 0. If participants attributed any appropriate negative emotion to the victim (e.g., sad/upset, scared, or angry) they received a score of 1. Any positive or neutral emotion received a score of 0. If participants attributed any appropriate negative emotion to themselves as observers, they received a score of 1. If any positive or neutral emotion was offered, they received a score of 0. A moral emotion attribution composite score was computed for each participant by adding up scores obtained for the emotions attributed to the victim, self as observer and victimiser across the three scenarios. The composite scores were converted into *z*-standardized scores. Interrater reliability between

two coders, based on 10% of responses was $\kappa = .87$, which is satisfactory (Stangor, 2007). The measure of emotion attributions is summarised in Table 3.

Table 3. *The Measure of Emotion Attributions*

	Attributions	Assessed across three moral scenarios	Composite total
Emotion Attributions	<ul style="list-style-type: none"> – Victim: Attribution of an appropriate negative emotion received a score of 1 – Victimiser: Attribution of an appropriate negative or positive emotion received a score of 1 – Self as observer: Attribution of an appropriate negative emotion received a score of 1 	<ul style="list-style-type: none"> – Moral transgression: Child being teased by another child – Moral transgression: Child being hit by another child – Moral dilemma: Child stealing to provide for his/her brother 	Range 0-9

Type of emotion attribution

Children's justifications for the emotions that were attributed to the victim, victimiser and themselves as observers were differentiated into four categories. First, attributions could be categorised as other-focussed attributions, where justifications were based on concern for another. Second, attributions could be categorised as self-conscious attributions, where justifications were based on concerns for the self. These categorisations were based on the distinction Tangney et al. (2007) made between self-conscious emotions and other-focussed moral emotions. Previous research (Lane et al., 2010; Sy, DeMeis & Scheinfeld, 2003) have identified that when young children justified their emotion attributions, they frequently demonstrated sanction-oriented concerns, regarding whether a rule was adhered to or violated.

Therefore, third, attributions could be categorised as sanction-orientation attributions, where justifications were based on concern for rule adherence. Fourth, attributions could be categorised as 'none', where there was a failure to respond or an 'I don't know' response was given. Other-focussed attributions received a score of 3. Sanction-orientation attributions received a score of 2. Self-conscious attributions received a score of 1. Attributions categorised as 'none' received a score of 0. Sanction-oriented justifications achieved a higher score than self-conscious justifications, since they evidenced concern for group norms (Sy et al., 2003), and are, therefore, less self-conscious. The type of moral attribution composite score was computed by addition of the child's scores he or she obtained for the type of emotions attributed to the victim, self as observer and the victimiser across the three scenarios that were viewed. For an example of the way these justifications were coded see Appendix B. Composite scores were converted into z -standardized scores. Interrater reliability between two coders, based on 10% of responses was $\kappa = .66$, which is acceptable (Stangor, 2007). The measure of the type of emotion attribution is summarised in Table 4.

Table 4. *The Measure of the Type of Emotion Attribution*

	Type of emotion attribution categories (<i>based on Tangney et al. 's (2007) framework</i>)	Attributions	Assessed across three moral scenarios	Composite total
Type of Emotion Attribution	<p>Other-focussed emotion attribution: Score = 3</p> <p>Sanction-oriented emotion attribution: Score = 2</p> <p>Self-conscious emotion attribution: Score = 1</p> <p>None: Score = 0</p>	<ul style="list-style-type: none"> – Victim – Victimiser – Self as observer 	<ul style="list-style-type: none"> – Moral transgression: Child being teased by another child – Moral transgression: Child being hit by another child – Moral dilemma: Child stealing to provide for his/her brother 	Range 0-27

Procedure

Ethical approval for this study was obtained from The School of Psychology, Cardiff University Ethics Committee. A detailed written request was sent to head teachers to seek permission to conduct the study with pupils from their schools (Appendix C). Consent was sought from the children, parents, teachers and teaching assistants (Appendix D). All children gave their consent to take part in the study. A volunteer sample was used. Participation relied

on completion of a questionnaire (items from the SDQ; Goodman, 1997) and consent form being returned by parents to their child's school by a given date.

Children participated individually in a separate room for approximately 10 minutes. Moral and affective judgements were assessed by the researcher using two hypothetical moral rule transgressions: a) teasing another child, and b) physically harming another child, which was adapted from Malti et al. (2009, 2010). Two pictures depicting a moral dilemma were also used. One picture depicted a sick, hungry child in bed and the other picture depicted his brother or sister (according to the gender of the participant) stealing food for a sick sibling. A moral dilemma was incorporated into the present research since moral dilemmas have been used consistently in research to explore participants' moral reasoning (Danovitch & Keil, 2008; Krebs & Denton, 2005; Lane et al., 2010; Leman, 2005).

The pictures were presented to participants on A4 laminated paper. The four pictures were stick-person drawings and were gender matched (see Appendix E). Each had a corresponding script to aid comprehension (see Appendix F). After each of the three scenarios was presented to participants, they were asked questions by the researcher in a fixed order (see Appendix A). When participants were asked how they would feel if they witnessed the actions depicted in the moral dilemma, they were told, "Imagine that you know Tom/Tara from school, you know he/she has a sick little brother and that they do not have much money". This ensured that they responded to this as a moral dilemma as opposed to a moral transgression (i.e., stealing for hedonistic purposes). Children's responses to the questions were recorded on an answer sheet, consistent with other research (Smetana et al., 2003; Malti et al., 2009; Malti et al., 2010). Children received one sticker for participating.

Prosocial behaviour was assessed by teacher, teaching assistant (TA) and parent ratings on the prosocial subscale from the SDQ (Goodman, 1997). This measure is used

consistently within research (Malti et al., 2009, 2010). Teachers, TAs and parents were provided with the five, prosocial items from the SDQ during consent procedures. Teachers, TAs and parents were made aware that they could omit any questions that they wished. These forms were returned to the researcher on the day children's moral and affective judgements were assessed.

At the end of the procedure, the researcher gave a debriefing letter to all participants (Appendix G). The child debrief letter was read aloud by the researcher to child participants to aid comprehension. Teachers were provided with debrief letters to provide to parents. All participants were invited to contact the researcher for further information and the research supervisor if concerns or complaints arose. One week after the collection of data, the details of names were removed to ensure anonymity. Participants were informed of this as part of the consent procedures. Child responses were combined with the respective parent, teacher and TA questionnaires, anonymised and given an ID number.

Pilot Study

Participants for a pilot study included nine children (four boys, five girls) from a year three class in one primary school in a UK authority. All materials were trialled to ensure understanding. After conducting the pilot study, procedures remained unchanged.

Results

Research hypothesis 1

Standard multiple regression was used to assess correlations between the three predictor variables. There was a moderate, positive correlation between composite scores of moral reasoning and composite scores of emotion attributions, $r = .367$, $N = 108$, $p < .001$. There was a small, positive correlation between composite scores of moral reasoning and

composite scores for the type of emotion attributions, $r = .172$, $N = 108$, $p < .05$. There was a small, positive correlation between composite scores of emotion attributions and composite scores for the type of emotion attributions, $r = .199$, $N = 108$, $p < .05$. Table 4 displays these results in a correlation matrix.

Table 5. *A Correlation Matrix of the Predictor Variables*

Predictor Variables	1. CMR	2. CEA	3. CTEA
1. Composite Moral Reasoning (CMR)	-	.367**	.172*
2. Composite Emotion Attributions (CEA)	.367**	-	.199*
3. Composite Type of Emotion Attributions (CTEA)	.172*	.199*	-

* $p < .05$, ** $p < .001$

Research hypothesis 2

Standard multiple regression was used to assess the ability of the three variables to predict scores for prosocial behaviour. Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity and homoscedasticity. The total variance explained by the model as a whole was 26.6%, $F(3, 99) = 11.946$, $p < .001$. Composite scores of moral reasoning (CMR) were statistically significant, recording a higher beta value ($beta = .507$, $p < .001$) than composite scores of emotion attributions (CEA) and

composite scores for the type of emotion attributions (CTEA). Composite scores of moral reasoning uniquely explain 21.9% of the variance in scores of prosocial behaviour. Table 6 displays the standardised regression coefficients (β) and the correlations between scores of prosocial behaviour and the predictor variables. For raw data, see Appendix H.

Table 6. *The Standardised Regression Coefficients (β) and Correlations between Scores of Prosocial Behaviour and the Independent Variables*

Independent Variables	Scores of Prosocial Behaviour	
	Correlation	Beta Values (β)
CMRS	.511**	.570
CEAS	.178*	-.022
CTEAS	.153	.071

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

Discussion

First, this study tested the hypothesis that there are positive relationships between children's scores of moral reasoning, emotion attributions and the type of emotion attributions, in line with an integrative developmental perspective (Malti & Latzko, 2010). The data were supportive of this hypothesis. The effect sizes ranged from small to moderate. Second, this study tested the hypothesis that children's scores of moral reasoning, emotion attributions and type of emotion attributions, based on Tangney et al.'s (2007) framework, will be able to predict variance in children's scores of prosocial behaviour. The data supported this hypothesis only partially. Scores of moral reasoning were predictive of variance in scores of prosocial behaviour. The strength of this relationship was small (Tabachnick & Fidell, 2007).

Children's scores of emotion attributions and scores denoting the type of emotion attributions were not predictive of variance in scores of prosocial behaviour. Possible accounts for these findings are discussed below.

In line with the first hypothesis, positive and significant correlations were found between the predictor variables. Horberg et al. (2011) suggest that emotions influence moral judgements through core appraisals that are semantically related to a specific socio-moral concern. Appraisals are described as, "...evaluations of the situation..." and act as a link between the moral event and the elicitation of an emotion (Chapman & Anderson, 2011, pg. 255). In the current research, the emotions elicited by the transgressions and dilemma frequently included anger, sadness and concern for the victim, revealing a socio-moral concern with justice (Horberg et al., 2011). Children might have reasoned about the issue and subsequently had an emotional experience, as a result of being explicitly asked what emotions the scenarios would evoke. Alternatively, children might have based their reasoning and justifications on an initial emotional response. The current research supports an interactive effect of reasoning and emotion on moral judgement. This supports the call for an integrative, pragmatic view of these components of morality (Malti & Latzko, 2010; Killen & Smetana, 2006). This research utilised a sample of children aged 7-8-years, since it is not typical for children under the age of seven to associate moral emotions, such as guilt, with immoral conduct (Malti & Krettenauer, 2013; Arsenio et al. 2006). Developmental changes in the relation between moral emotions and moral cognition require further exploration.

A positive, significant correlation was found between children's composite scores of moral reasoning and their scores of prosocial behaviour. This is supported by previous research (Carlo et al., 2011). Prosocial behaviour has been found to be positively correlated with moral reasoning, typified by judgements that are selfless and orientated towards others

(Eisenberg et al., 2005; Carlo et al., 2011). Yet, subjects in other research (Hart & Fegley, 1995), who possessed an advanced stage of moral reasoning, did not evidence greater prosocial behaviour. Eisenberg et al. (2006) suggest that measures of both moral reasoning and prosocial behaviour have been inconsistent. The current study utilised a methodology adapted from previous research (Gasser & Malti, 2012; Malti et al., 2010; Smetana et al., 2003), to ensure consistency, reliability and validity. However, the SDQ, used to capture children's prosocial behaviour, only contains five prosocial items. Attempts were made to ensure reliability via triangulation. Future research could make use of an observation schedule to capture prosocial behaviour more extensively (Malti et al., 2010).

One competing explanation for this finding is that children's ability to act prosocially might then influence the way they think and feel about moral issues. Carlo et al. (2011) suggest those who engage in prosocial behaviour typically experience social feedback (e.g., praise), which is likely to promote moral reasoning and moral emotion development. This has relevance to an attempt by Krebs and Denton (2005) to elucidate three possible pathways between moral reasoning and behaviour. First, individuals might utilise moral reasoning in order to find solutions to difficult dilemmas during interactions with others, with the aim of encouraging everyone to, "...uphold systems of cooperative exchange..." (Krebs & Denton, 2005, p. 641). Second, an individual might employ moral reasoning in order to influence and manipulate others; to increase the likelihood that the individual will accomplish his/her aims. Third, individuals may well behave first and then, as a means of justifying their behaviour, summon reasoning and judgements that support their actions, a process akin to cognitive dissonance (Krebs & Denton, 2005). Longitudinal research might help to clarify the direction of this relationship between moral reasoning and behaviour.

Contrary to the second hypothesis, emotion attributions were unable to predict any of the variance in scores of prosocial behaviour. The way emotion attributions are assessed, however, may moderate the link between emotion attributions and social behaviour (Malti & Krettenauer, 2013). Studies have utilised different assessment formats. Some have assessed moral emotion attributions dichotomously, i.e., whether a children attributes an emotion or not, an approach used within the present study. Other research has measured the intensity of moral emotion attributions. For example, Malti et al. (2010), placed emotion attributions to the victimiser in one of five affect categories. This enabled the researchers to examine discrete emotions (happy, angry, fearful, sad and neutral). The unique contribution of each emotion to moral judgements, interpretative understanding and social behaviour was assessed (Malti et al., 2010). Prosocial behaviour was predicted by the attribution of fear to the victimiser. Prosocial behaviour, therefore, might be motivated by fear of the associated consequences of transgressions, such as guilt, remorse or the loss of a relationship (Malti et al., 2010). In a meta-analysis (Malti & Krettenauer, 2013), studies that included measures on the intensity of moral emotion attributions showed larger effect sizes than did studies that relied on dichotomous scoring. Thus, the limited coding system used within the current research may have shielded more insightful results.

Further, contrary to the second hypothesis, scores denoting the type of emotion attributions were also unable to predict any of the variance in scores of prosocial behaviour. Debatably, the dichotomy Tangney et al. (2007) provides between self-conscious emotions, based on evaluations of the self, and other-focussed moral emotions might be too simplistic. Haidt (2003) has provided a more detailed framework, described in the introduction, which could provide a focus for future study. Alternatively, the scores on this measure were slightly negatively skewed, indicative that the majority of children obtained high scores. One may speculate, therefore, that the moral transgressions were too simplistic and might have elicited

socially desirable responses. Arguably, the moral dilemma provided the opportunity for children to reflect on a range of emotions, since the victimiser's motive was more complex (Krebs & Denton, 2005). The use of a range of dilemmas, as opposed to transgressions, might provide more normally distributed data and greater insight into children's emotional experiences to moral events. Similarly, hypothetical scenarios, used in research, typically assess moral emotion attributions by depicting rule transgressions and actions that are harmful to others, an approach used in the present study. Krettenauer and Johnson (2011) suggest that these moral emotion attributions might be more strongly related to antisocial than prosocial behaviour. Positively charged moral emotion attributions, such as pride, might be more closely related to prosocial behaviour (Malti & Krettenauer, 2013). Future research could explore relations between prosocial behaviour and moral emotion attributions, where emotions are attributed to actors and observers in positive, hypothetical scenarios, which depict, for example, acts of kindness.

Future research is required to address limitations of the current study. It is important to note that the present research cannot draw causal inferences regarding the relationships between the variables discussed above, since this was a correlational study. Therefore, these results need to be interpreted cautiously. As a result of the correlational nature of this study, language and parenting style could both be common-causal variables. Perspective taking might be a mediating variable (Killen & Smetana, 2010). Therefore, more in depth research is required to explore these causal relations. In earlier research, language ability of participants was assessed and controlled in data analysis (Malti et al., 2010). Language ability was not controlled within the present study and future investigations might wish to take language ability of participants into consideration. Further, a volunteer sample was used. As a consequence of this technique, the sample is likely to have been homogeneous and is, therefore, unlikely to be representative of the general population (Robson, 2002).

Nonetheless, the current study has implications for educators and EPs (Maxwell & DesRoches, 2010). Moral emotions and moral cognition are functionally integrated and mutually supporting. However, the two do not appear to be developmentally interchangeable and, as such, the two call for different educational responses. Thinking skills required for social inferencing and moral reasoning should be developed in young children (Maxwell & DesRoches, 2010). Debatably, the ability of children's scores of moral reasoning to predict variance in scores of prosocial behaviour supports this notion. Yet, the aforementioned effect size was small. Maxwell and DesRoches (2010) also consider that educators should support the facilitation of moral emotions, such as other-focussed or affective empathy, which may require outreach to parents and carers (Maxwell & DesRoches, 2010). Further research is required to evaluate this claim. Ewen and Topping (2012) assert that EPs have a number of roles, including contributing to policy development, research, consultation, training, assessment and intervention. Debatably, the EP is in a prime position to disseminate current psychological theory regarding children's socio-moral development to parents/carers, school staff and other professionals. In this way, one could argue, the EP can facilitate long-term fundamental change.

The current study is the first to utilise Tangney et al.'s (2007) conceptual framework to explore children's moral emotion attributions. In addition, this study is the first to contribute to the discussion of the role of the EP, in relation to the field of moral psychology. However, children's scores of emotion attributions and their scores denoting the type of emotion attributions were unable to predict variance in children's scores of prosocial behaviour. Behaviour is considered prosocial when a voluntary action is elicited to serve another (Eisenberg et al., 2006). Yet, the explanations of prosocial conduct should not be reduced to one solitary cause (Krebs & Denton, 2005). Prosocial behaviour cannot be considered the unique consequence of mature moral reasoning or other-focussed moral

emotions. Further, manifestations of prosocial behaviour may be context dependent (Hastings et al., 2006). Children's responses were coded, the variability of children's responses was not captured and motives were not explored. Qualitative analysis of children's emotion appraisals and attributions might have provided greater insight. Further, research is required to assess the unique contributions self-conscious and other-focussed moral emotions make to judgement and behaviour (Tangney et al., 2007). The SDQ was used in the present study, which utilises five items to assess children's prosocial behaviour. Arguably, the EP could develop a more comprehensive, observational tool to assess prosocial behaviour, which considers both motive and context. Such work will benefit educators' and EPs' understanding of children's social behaviour.

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APPENDICES

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APPENDIX A

Transgression 1: a child being teased

- a) **The severity of the moral transgression.** *Is it right or wrong for Billy/Sue to tease Jonny/Sally? Is it not bad, a little bit bad or very bad? And, Why?*
- b) **Authority independence.** *If the teacher did not see Billy/Sue tease Jonny/Sally is it OK or not OK for Billy/Sue to do that?*
- c) **Rule independence.** *If the teacher never told Billy/Sue that she/he shouldn't tease others, is it Ok or not OK for Billy/Sue to do that?*
- d) **Generalizability.** *Billy/Sue teased Jonny/Sally at school, but is it OK or not OK for Billy/Sue to tease someone at home?*
- e) **Deserved punishment.** *Should Billy/Sue get in trouble? None, a little bit or a lot? And Why?*
- f) **Attributions of emotion to the victimiser, the victim and the child as observer.** *How do you think Billy/Sue will feel after he/ she teases Jonny/Sally? Why? How do*

*you think Jonny/Sally will feel after he/she has been teased? Why? How do you think **you** would feel if you saw Billy/Sue teasing someone? Why?*

Transgression 2: a child being hit

- a) **The severity of the moral transgression.** *Is it right or wrong for Billy/Sue to hit Jonny/Sally? Is it not bad, a little bit bad or very bad? And, Why?*

- b) **Authority independence.** *If the teacher did not see Billy/Sue hit Jonny/Sally is it OK or not OK for Billy/Sue to do that?*

- c) **Rule independence.** *If the teacher never told Billy/Sue that she/he shouldn't hit others, is it Ok or not OK for Billy/Sue to do that?*

- d) **Generalizability.** *Billy/Sue hit Jonny/Sally at school, but is it OK or not OK for Billy/Sue to hit someone at home?*

- e) **Deserved punishment.** *Should Billy/Sue get in trouble? None, a little bit or a lot? And Why?*

- f) **Attributions of emotion to the victimiser, the victim and the child as observer.** *How do you think Billy/Sue will feel after he/ she has hit Jonny/Sally? Why? How do*

*you think Jonny/Sally will feel after he/she has been hit? Why? How do you think **you** would feel if you saw Billy/Sue hitting someone? Why?*

Moral dilemma

- a) **The severity of the moral transgression.** *Is it right or wrong for Tom/Tara to steal food for Freddy? Is it not bad, a little bit bad or very bad? And, Why?*

- b) **Authority independence.** *'If the shop worker did not see Tom/Tara, is it OK or not OK for Tom/Tara to steal food for Freddy?'*

- c) **Rule independence.** *'If Tom's/Tara's parents never told him/her not to steal, is it OK or not OK for Tom/Tara to steal food for Freddy?'*

- d) **Generalizability.** *'Tom/Tara stole from the shop, but is it OK or not OK for Tom/Tara to steal from his/her friend?'*

- e) **Deserved punishment.** *Should Tom/Tara get in trouble? None, a little bit or a lot? And Why?*

- f) **Attributions of emotion to the victimiser, the victim and the child as observer.** *How do you think Tom/Tara will feel after he/ she has stolen food for Freddy? Why? How do you think the shop keeper will feel when Tom/Tara stole from the shop? Why? How do you think **you** would feel if you saw Tom/Tara stealing food for Freddy? Why?*

APPENDIX B

Example of Children's Responses and Coding: Emotion Attributions and Type of Emotion Attributions

- **Question (Transgression):** *How do you think Billy/Sue will feel after he/ she teases/hits Jonny/Sally? Why? How do you think Jonny/Sally will feel after he/she has been hit/teased? Why? How do you think **you** would feel if you saw Billy/Sue hitting/teasing someone? Why?*

ID 10

Victim= (Emotion Attribution: Angry) "Sally would be a bully, she has no friends" (Scored 3. *Other-focussed emotion justification*).

Victimiser= (Emotion Attribution: Angry) "She is sad and lashes out because she has no friends" (Scored 3. *Other-focussed emotion justification*).

Self= (Emotion Attribution: Sad) "She is hurting someone's feeling, so I would feel sorry for them and look after them." (Scored 3. *Other-focussed emotion justification*).

ID 43

Victim= (Emotion Attribution: Really annoyed) "Why is Sue picking on her, she is probably thinking" (Scored 3. *Other-focussed emotion justification*).

Victimiser= (Emotion Attribution: Happy) "She wanted to annoy Sally may be" (Scored 1. *Self-focussed emotion justification*).

Self= (Emotion Attribution: Annoyed) "I hope Sue gets caught. I really would give Sally a hug, I would tell her, her hair is nice" (Scored 3. *Other-focussed emotion justification*).

ID 99

Victim= (Emotion Attribution: Upset) "I think he would be really hurt and also wanted to hit him too, to get him back." (Scored 1. *Self-focussed emotion justification*).

Victimiser= (Emotion Attribution: Happy) “He would be pleased with himself”
(Scored 1. *Self-focussed emotion justification*).

Self= (Emotion Attribution: Annoyed) “I’d be annoyed. I would go and tell the teacher” (Scored 2. *Sanction-oriented justification*).

- **Question (Moral dilemma):** *How do you think Tom/Tara will feel after he/ she has stolen food for Freddy? Why? How do you think the shop keeper will feel when Tom/Tara stole from the shop? Why? How do you think **you** would feel if you saw Tom/Tara stealing food for Freddy? Why?*

ID 6

Victim= (Emotion Attribution: Cross) “He has lost money.” (Scored 1. *Self-focussed emotion justification*).

Victimiser= (Emotion Attribution: Upset) “She went to do something really bad.”
(Scored 2. *Sanction-oriented emotion justification*).

Self= (Emotion Attribution: Sad) “It would be worrying. Will she be OK?” (Scored 3. *Other-focussed emotion justification*).

ID 38

Victim= (Emotion Attribution: Furious) “He wants to get the food back. He wants to call the police and stop the thief, because it’s his shop.” (Scored 1. *Self-focussed emotion justification*).

Victimiser= (Emotion Attribution: Upset and guilty) “She has to help her brother, but then she will feel bad too.” (Scored 3. *Other-focussed emotion justification*).

Self= (Emotion Attribution: A bit confused) “I shouldn’t tell the police. I’d just walk away and I’d wait for help” (Scored 1. *Self-focussed emotion attribution*).

ID 109

Victim= (Emotion Attribution: Really cross) “He doesn’t know why the little boy stole from him” (*Scored 3. Other-focussed emotion justification*).

Victimiser= (Emotion Attribution: Happy and sad) “He worries about his brother and now about that man.” (*Scored 3. Other-focussed emotion justification*).

Self= (Emotion Attribution: Happy and sad too) “I would be worried about that boy and his brother probably” (*Scored 3. Other-focussed emotion justification*).

APPENDIX C

[SCHOOL ADDRESS]

Date

Dear [HEAD TEACHER NAME],

I am a postgraduate student in the School of Psychology at Cardiff University. I am studying for a Doctorate in Educational Psychology. As part of my degree, I am carrying out research that hopes to examine children's socio-moral development. I am writing to enquire whether you and your school may be interested in participating in this project.

The research aims to examine the relationship between the way 7-8 year old children think and feel about moral issues and their prosocial behaviour. John Gameson, professional course director for the Doctorate in Educational Psychology, will supervise this research.

If you decide to participate, after gaining consent from children's parents, I would like to visit your school on a convenient day for an approximately 15 minute session with each child from Year 3. The study should not cause a significant disruption to classroom activities, as I would interview each child separately in another room, if possible.

The children will be invited to participate in the following activities:

- Children who participate will be presented with three pictures. One will depict a child being hit and the second will depict a child being teased. A final picture will depict a child stealing in order to feed his sick brother and will represent a moral dilemma. Each picture will be verbally described to the participants to ensure understanding.
- After presenting the child with each picture, I will ask six questions regarding the children's moral judgements about these moral transgressions and the moral dilemma.

If it is convenient, I would also like to ask the year 3 teacher and teaching assistant to complete the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) for each participant. The Strengths and Difficulties Questionnaire is a brief behavioural screening questionnaire for parents and teachers and relevant for 3-16 year olds. This questionnaire asks about 25 attributes, some positive and others negative. Respondents are asked to indicate how well each item describes the child. I will also invite parents of the participants to complete the SDQ. I aim to gain a measure of participants' prosocial behaviour. Therefore, I will ask parents, teachers and teaching assistants to complete *only five items* on the SDQ that refers to prosocial behaviour. These will be highlighted on the questionnaire for the participants and will be made clear to participants in the consent forms. This will take 10 minutes to complete

for each child. It is important to emphasize, however, that the focus is *not* on the individual child's responses, but on the combined results of *all* the participants.

Children who participate in the study may withdraw from a session at any time if they do not wish to continue. The data I collect will be held confidentially in a locked cabinet and then it will be anonymised one week after participation. Therefore, participants can withdraw their data at any point before it is anonymised. I will provide a debrief report to you, the year 3 teacher and all participants' parents. This study has received ethical review and approval from the school of Psychology Research Ethics Committee. I have CRB clearance to work with young people. I will maintain confidentiality at all times except in circumstances when I am told something that makes me think that an individual might come to harm.

I will contact you in the next week to see if you would be interested in having your school participate in the study or if you have any questions or would like more information. Many thanks in advance for your consideration of this project. Please let me know if you require further information. I would greatly appreciate your school's participation in this project.

Kindest regards,

Amy Selfe

Educational Psychologist in training

Amy Selfe
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APPENDICES D

Dear Parent/Guardian,

I am a postgraduate student in the School of Psychology at Cardiff University. I am studying for a Doctorate in Educational Psychology. As part of my degree, I am carrying out research that hopes to examine children's moral development. I aim to examine the relationship between the way 7-8 year old children think and feel about moral issues and their prosocial behaviour, which are giving, helping and sharing behaviours. John Gameson, professional course director for the Doctorate in Educational Psychology, is supervising this research.

The children will be invited to participate in the following activities:

- Children who participate will be presented with three pictures. One will depict a child being hit by another child and the second will depict a child being teased by another child. A final picture will depict a child stealing in order to feed his sick brother and will represent a moral dilemma. Each picture will be described verbally to ensure understanding. You have been provided with a sample of similar pictures. After presenting the child with each picture, I will ask six questions regarding the children's moral judgements about these moral transgressions and the moral dilemma.
- This will take approximately 15 minutes. The study should not cause a significant disruption to classroom activities, as I would interview each child separately in another room.

It is important to emphasize that the focus is not on the individual child's responses, but on the combined results of all the participants. In addition, I want to gain a measure of children's behaviour. Therefore, I would be extremely grateful if you would complete the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) for your child. The Strengths and Difficulties Questionnaire is a brief behavioural screening questionnaire for parents and teachers and relevant for 3-16 year olds. This questionnaire asks about 25 attributes, some positive and others negative. I aim to gain a measure of participants' prosocial behaviour. Therefore, you will be asked to complete *only five* questions from this questionnaire. These questions relate to children's prosocial behaviours, such as being kind and helping others. This will take approximately 10 minutes to complete. You have the right to omit any question on the SDQ if you wish. I will also ask the year 3 teacher and teaching assistant to complete this questionnaire. As all participants' responses will be anonymised one week after they are collected, it will not be possible to provide feedback on individual responses.

This study has received ethical review and approval from the school of Psychology Research Ethics Committee. **[Name of school head teacher]**, the Head Teacher, has also given permission for this study to be carried out. I have CRB clearance to work with young people. I will maintain confidentiality at all times except in circumstances when I am told something that makes me think that an individual might come to harm. I would greatly appreciate the participation of your child in this study because this will aid research in the important area of children's moral development. Please note that you need to complete and return the consent form overleaf if you consent for your child to participate.

Your responses and your child's responses will be held confidentially in a locked cabinet and then will be anonymised **one week** after the data have been collected. You have the right to

withdraw your child's data without explanation at any point, *before* the data are made anonymous, by contacting me using the details below. After the data are made anonymous, they will be kept indefinitely. Many thanks for your help with this and please do not hesitate to contact me if you need any further information. I have also included the details of my supervisor if you have any concerns. If you wish to make a complaint, you can contact the School of Psychology, Ethics Committee.

Kindest regards,

Amy Selfe

Educational Psychologist in Training

I understand that my son or daughter's participation in this project will involve answering six questions regarding two moral transgressions and a moral dilemma. I understand that my participation in this project will involve completing five items on the Strength and Difficulties Questionnaire for my child, which will take approximately 10 minutes.

I understand that my own and my child's participation in this study is entirely voluntary and that we can withdraw from the study at any time without giving a reason.

I understand that I am free to ask any questions at any time. I also understand that my child is free to ask questions at any time. My child and I are free to withdraw at any time.

I understand that I am free to discuss my concerns with John Gameson, who is supervising this project.

I understand that the information provided by my child and me will be held confidentially, such that only Amy Selfe can trace this information back to me individually. I understand that my data will be anonymised one week after the data are collected and that after this point no-one will be able to trace my information back to me. The information will be retained indefinitely. I understand that I can ask for the information I provide to be deleted/destroyed at any time up until the data has been anonymised and I can have access to the information up until the data has been anonymised.

I also understand that at the end of the study I will be provided with additional information and feedback about the purpose of the study.

I, _____(NAME) consent to participate and for my child to participate in the study conducted by Amy Selfe, School of Psychology, Cardiff University with the supervision of John Gameson.

Signed:

Date:

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In case of complaints, please
contact:
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Ethics Committee,
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Dear participant,

I am a postgraduate student in the School of Psychology at Cardiff University. I am studying for a Doctorate in Educational Psychology. As part of my degree, I am carrying out research that hopes to examine children's socio-moral development. The research project aims to examine the relationship between the way 7-8 year old children think and feel about moral issues and their prosocial behaviour. John Gameson, professional course director for the Doctorate in Educational Psychology, is supervising this research.

I want to gain a measure of children's behaviour. Therefore, I would be extremely grateful if you would complete the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) for each participant. The Strengths and Difficulties Questionnaire is a brief behavioural screening questionnaire for parents and teachers and relevant for 3-16 year olds. This questionnaire asks about 25 attributes, some positive and others negative. I aim to gain a measure of participants' prosocial behaviour. Therefore, you will be asked to complete *only five* questions from this questionnaire. These questions relate to children's prosocial behaviours, such as being kind and helping others. This will take approximately 10 minutes to complete for each participant. You have the right to omit any question on the SDQ if you wish.

All responses will be held confidentially in a locked cabinet and then it will be anonymised **one week** after the data have been collected. You have the right to withdraw your data without explanation at any point, *before* the data are made anonymous, by contacting me using the details below. Once the data have been made anonymous, they will be retained indefinitely.

Many thanks for your help with this and please do not hesitate to contact me if you need any further information. I have also included the details of my supervisor if you have any concerns. If you wish to make a complaint, you can contact the School of Psychology, Ethics Committee.

Kindest regards,

Amy Selfe

Educational Psychologist in Training

I understand that my participation in this project will involve completing five items on the Strength and Difficulties Questionnaire for each participant.

I understand that participation in this study is entirely voluntary and that I can withdraw from the study at any time without giving a reason.

I understand that I am free to ask any questions at any time. I am free to withdraw or discuss my concerns with John Gameson, who is supervising this project.

I understand that the information provided by me will be held confidentially, such that only Amy Selfe can trace this information back to me individually. I understand that my data will be anonymised one week after the data are collected and that after this point no-one will be able to trace my information back to me. The information will be retained indefinitely. I understand that I can ask for the information I provide to be deleted/destroyed at any time up until the data has been anonymised and I can have access to the information up until the data has been anonymised.

I also understand that at the end of the study I will be provided with additional information and feedback about the purpose of the study.

I, _____(NAME) consent to participate in the study conducted by Amy Selfe, School of Psychology, Cardiff University with the supervision of John Gameson.

Signed:

Date:

Amy Selfe
Postgraduate Student,
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John Gameson,
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Dear student,

I am a student at Cardiff University. As part of my degree, I am carrying out a project that hopes to look at how children think and feel about morals. Morals are the rules that we share, which help us to think about what is right and wrong. If you agree to take part in this project, you will be asked to complete the following short tasks:

1. Children who take part in this project will be shown three pictures. One will show a child being hit and the second will show a child being teased. The third picture will show a child stealing some food to give to his or her hungry brother who is not very well. I will describe what is happening in each picture.
2. I will then ask six questions about what *you* think is happening in these pictures.

Overall, this will take about 15 minutes. All your answers will be kept so that no one else will see them. **One week** after you take part in this project, your name will be taken off your answer sheet. This means that no one, not even me, will know what your answers are. You have the right to stop and leave today's session at any point, without giving a reason.

Thank you very much for taking part in my project.

Kindest regards,

Amy Selfe

I understand that taking part in this project will involve answering six questions about three pictures.

I understand that participation in this study is entirely voluntary, so I can stop and leave this study at any time without giving a reason.

I understand that I am free to ask any questions at any time.

I understand that the information provided by me will be held so that no-one will be able to see it. I understand that any names (including mine) will be removed from the answer sheets, one week *after* I have taken part in this study. Therefore, I can ask to be removed from the study at any point before my name is removed from my answer sheet. **I can do this by asking my parent or teacher to contact Amy Selfe or John Gameson using the telephone numbers and addresses below.**

I also understand that at the end of the study I will be told about why this project is being done.

I, _____(NAME) consent to participate in the study conducted by Amy Selfe, School of Psychology, Cardiff University with the supervision of John Gameson.

Signed:

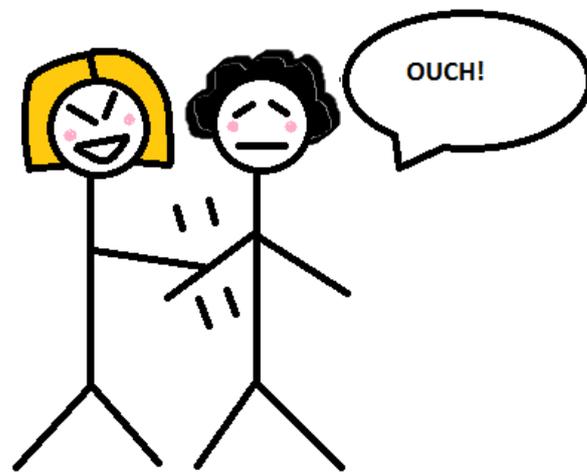
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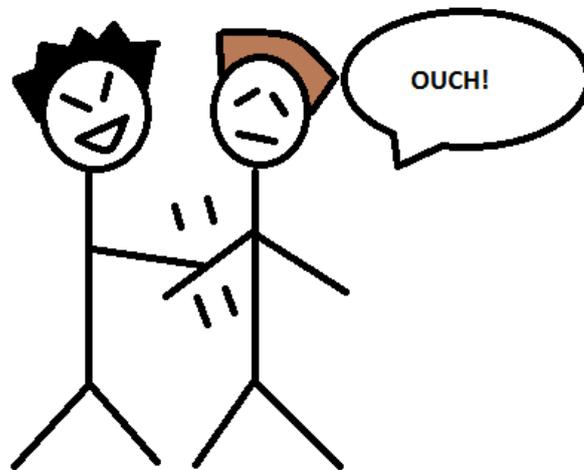
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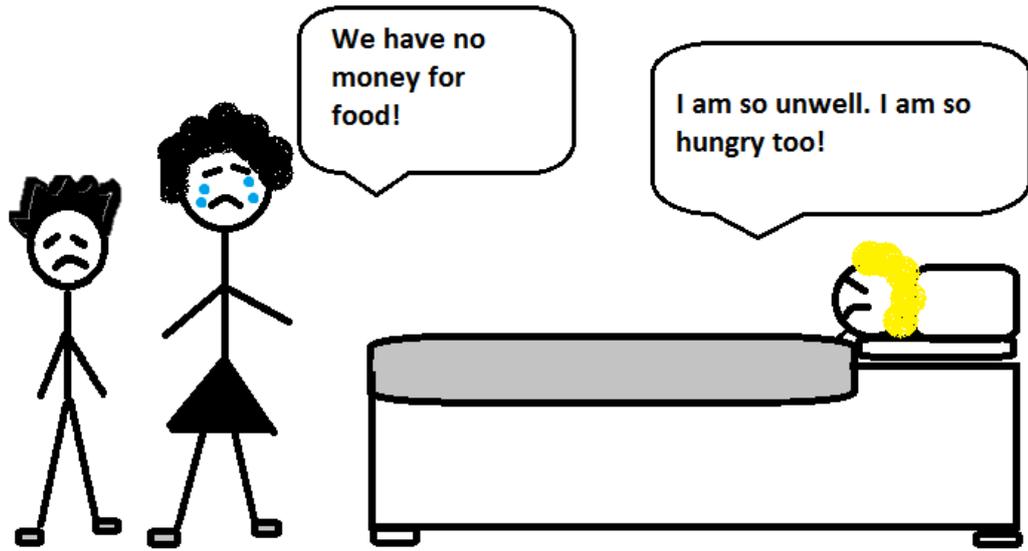
John Gameson,
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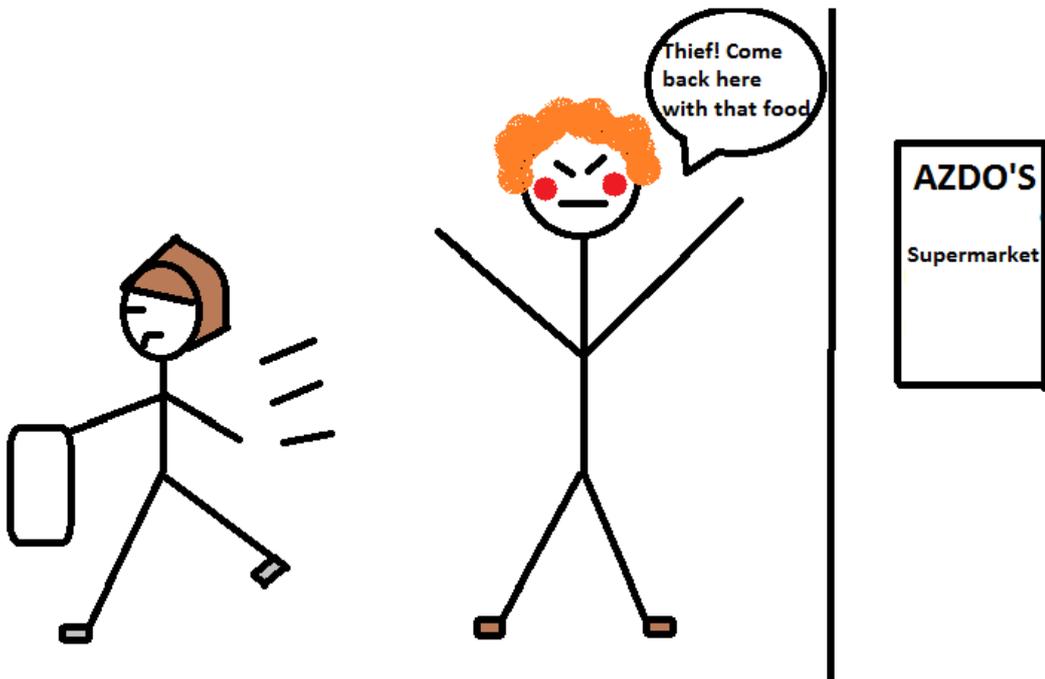
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APPENDICES E









APPENDIX F

Stories, which will be illustrated by Appendices E:

(For male participants)

- A. This picture shows Jonny (point to Jonny) being teased by Billy (point to Billy) about his new haircut.
- B. This picture shows Jonny (point to Jonny) being hit by Billy (point to Billy).
- C. This picture shows Freddy who is not very well (point to child in bed). That is his brother, Tom and his mother (point to appropriate drawings). Freddy is very hungry, but his Mum does not have *any* money to buy her sick son any food. (Turn to picture Ci) This next picture shows Freddy's brother, Tom (point to Freddy's brother), who has stolen some food to give to his sick and hungry brother.

(For female participants)

- A. This picture shows Sally (point to Sally) being teased by Sue (point to Sue) about her new haircut.
- B. This picture shows Sally (point to Sally) being hit by Sue (point to Sue).
- C. This picture shows Freddy who is not very well (point to child in bed). That is his sister, Tara and his mother (point to appropriate drawings). Freddy is very hungry, but his Mum does not have *any* money to buy her sick son any food. (Turn to picture Ci) This next picture shows Freddy's sister, Tara (point to Freddy's sister), who has stolen some food to give to her sick and hungry brother.

NB. When participants were asked how they would feel if they witnessed the actions depicted in the moral dilemma, they were told that, "*Imagine that you know Tom/Tara from school, you know he/she has a sick little brother and that they do not have much money*". This ensured that they responded to this as a moral dilemma as opposed to a moral transgression (i.e., stealing for hedonistic purposes).

APPENDICES G

Dear Parent/Guardian,

Thank you very much for allowing your child to participate in this project. This research was conducted in order to explore the relationship between 7-8-year-old children's prosocial behaviour and their moral reasoning and moral emotion attributions. I want to explore the educational implications this relationship might have. It is important to emphasize that the focus is not on the child's individual responses, but on the combined results of all the participants.

Morality, as a system of social rules, is an essential feature of our interactions with others. As children age they start to behave in accordance with their self-chosen moral standards. A relationship has, therefore, been established between children's moral behaviours and their ability to think about moral issues. Whilst much research has been conducted into the relationship between moral reasoning and behaviour, a comparatively small amount of research has been conducted into the relationship between children's moral behaviour and moral emotions, such as empathy and sympathy. Researchers have suggested that a more differentiated understanding of the moral strengths and deficits involved in children's moral actions can only be reached by considering these different components of morality. This knowledge is important for designing preventative strategies aimed at promoting children's moral resilience and adaptive development. Thus, your child's participation in this project will serve to further knowledge in this important area of research.

All responses will be held confidentially and then it will be anonymised **one week** after the data have been collected. You have the right to withdraw your child's data without explanation at any point, *before* the data are made anonymous, by contacting me using the details below.

Many thanks for your help with the project and please do not hesitate to contact me if you need any further information. I have also included the details of my supervisor and those for School of Psychology ethics committee if you have any concerns or wish to make a complaint. Thank you again.

Kindest regards,

Amy Selfe

Educational Psychologist in Training

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Dear participant,

Thank you very much for your participation in this project. This research was conducted in order to explore the relationship between 7-8-year-old children's prosocial behaviour and their moral reasoning and moral emotion attributions. I want to explore the educational implications this relationship might have.

Morality, as a system of social rules, is an essential feature of our interactions with others. As children age they start to behave in accordance with their self-chosen moral standards. A relationship has, therefore, been established between children's moral behaviours and their ability to think about moral issues. Whilst much research has been conducted into the relationship between moral reasoning and behaviour, a comparatively small amount of research has been conducted into the relationship between children's moral behaviour and moral emotions, such as empathy and sympathy. Researchers have suggested that a more differentiated understanding of the moral strengths and deficits involved in children's moral actions can only be reached by considering these different components of morality. This knowledge is important for designing preventative strategies aimed at promoting children's moral resilience and adaptive development. Thus, your participation in this research will serve to further knowledge in this important area.

All responses will be held confidentially and then it will be anonymised **one week** after the data have been collected. You have the right to withdraw your data without explanation at any point, *before* the data are made anonymous, by contacting me using the details below.

Many thanks for your help with the project and please do not hesitate to contact me if you need any further information. I have also included the details of my supervisor and those for School of Psychology ethics committee if you have any concerns or wish to make a complaint. Thank you again.

Kindest regards,

Amy Selfe

Educational Psychologist in Training

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Dear Student,

As I mentioned earlier, I am a student at Cardiff University. As part of the work I have to do at University, I am carrying out a project that hopes to look at how children think and feel about morals. Morals are the rules that we share, which help us to think about what is right and wrong.

I want to look at the way children of your age think and feel about morals. As well, I want to find out about how those children behave at school and at home. I am hoping to ask as many children as I can to tell me what they think of the pictures, I have shown you today, and then to ask parents and teachers how they behave at school and at home.

All your answers will be kept so that no one else will see them. **One week** after you take part in this project, so one week from today, your name will be taken off your answer sheet. This means that no one, not even me, will know what your answers are. You can ask to be removed from the project at any point **before** your name is removed from your answer sheet. **You can do this by asking your parent or teacher to contact Amy Selfe or John Gameson using the telephone numbers and addresses below.**

You have been really kind and worked really hard today. Thank you very much indeed for taking part in my project.

Kindest regards,

Amy Selfe

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