The impact of social identity on prosocial behaviour in middle childhood

Joseph Patrick Pelletier

Centre for the Study of Group Processes

School of Psychology

University of Kent

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Memorandum

The research for this thesis was conducted at the School of Psychology, University of Kent, while the author was a full-time postgraduate student receiving funding from the University of Kent.

The theoretical and empirical work presented within this thesis is the independent work of the author. Intellectual debts are acknowledged within the text and referenced. The studies reported in the thesis were conducted with limited practical and technical assistance from others.

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Abstract

The present research examines the impact of social identity on prosocial behaviour during middle childhood. A great deal of prior research has evaluated the process of social identity development and its impact on children's intergroup processes. Additionally, children's propensity to behave prosocially has received a considerable amount of empirical attention. However, very little research has been conducted as to how children's social identity can promote or deter intergroup prosocial behaviour. The present studies evaluate the social identity salience of children from 5 to 10-years-old as well as their ability to consider a variety of group related factors when making social judgements. The three prosocial behaviour types used were sharing, helping, and comforting. These behaviours were selected because of their prior use in prosocial research as well as their relevance to children's personal experience. Empathy, perspective taking, and target typicality were also examined in order to better define the relationship in question. The present research involved four studies that included a minimal group paradigm as well as highly salient and well-defined intergroup contexts. The bi-directional potential of the relationship between social identity and prosocial behaviour was also examined through a twelve month longitudinal study. The results indicated that prosocial behaviour was affected by children's social identity. In general, the children were considerably less willing to exhibit prosocial behaviour towards an outgroup than an ingroup member. Furthermore, their prosocial behaviour was related to their ability to empathize with the target. However, in a competitive context, empathy was replaced by perspective taking as a critical factor in their prosocial judgement. Finally, the results differed by age, gender, and behaviour type; suggesting that the relationship between social identity and prosocial behaviour is highly dependent on socio-cognitive development as well as context.

CHAPTER ONE

Introduction

"I expect to pass through this world but once; any good thing therefore that I can do, or any kindness that I can show to any fellow creature, let me do it now; let me not defer or neglect it, for I shall not pass this way again."

Ettiene De Grellet (*attributed*)

A motorist is stranded on the side of a busy road and countless cars drive past before someone chooses to stop and help. A young child becomes separated from his parents on a crowded high street for 20 minutes until someone comes to comfort him. An elderly woman carrying heavy bags walks past a dozen people on a crowded bus before someone offers her their seat. Are the passing motorists, shoppers, and bus passengers deliberately choosing not to help, comfort, and share with other people? Or is it that the people who chose to help, comfort, and share are simply more prosocial individuals? What factors guide and impact our prosocial decision-making and when are these factors developed or learned? What are the processes that change highly prosocial children into adults who are frequently unwilling to exhibit such behaviours towards their peers?

A shocking and well-documented incident in which prosocial behaviour was withheld involved the tragic death of a young woman in New York City (Howard and Hollander, 1996). Kitty Genovese was stabbed repeatedly on a neighbourhood street while walking back to her apartment. During the initial attack, Miss Genovese cried out that someone had just stabbed her, alerting many people in nearby buildings. The attacker fled only to return a few minutes later to continue the assault, finding that his victim had dragged herself several feet down the road. In plain view of over thirty witnesses, the

assailant continued the attack and eventually killed his victim. During the course of the attack, which lasted nearly thirty five minutes, none of the dozens of witnesses offered any help to the woman. It was more than half an hour after the attack started that the police were even contacted. A case such as this inspires countless questions regarding the lack of action on behalf of the bystanders. Why did no one offer help to a woman who was clearly in grave danger? What factors inhibited their actions to such a degree that they all chose to do nothing? Although a convenient answer would be that the witnesses were all 'bad' people or lacked any sense of morality or duty, their choices reflect the conflicting processes that dictate our prosocial behaviour. From birth, we are encouraged to behave prosocially in all circumstances by sharing, helping and comforting others whenever we can. However, during the socialization process, children develop the socio-cognitive capacities to differentiate between which situations they will choose to exhibit prosocial behaviour. It is the awareness of these factors that might ultimately explain why, as adults, people consciously choose to withhold prosocial behaviours in given situations. The present research examines the development of social identity and empathy as two integral factors in children's prosocial decision-making.

Throughout our lives, humans are inundated by countless influences encouraging us to behave in a prosocial manner. From birth, parents and carers strive to emphasize the importance of helping, sharing, and comforting other people under any circumstances. Children are encouraged to play nicely with each other and come to the aid of anyone in need. This is particularly evident in females in whom caring, altruistic play is expressed through dolls at a very early age. Moreover, children are exposed to a great deal of external influences in the form of various media throughout infancy and early childhood.

From children's books to television programs, children are exposed to lessons of altruism, kindness, and prosocial behaviour practically from birth. Additionally, depending on their upbringing and culture, religion might also play a significant role in their prosocial decision-making. As noted by Carlo (2006), the primary figure in nearly all major religions is endowed with characteristics which promote and encourage prosocial behaviour. Furthermore, endless accounts of virtue, generosity and kindness can be found in the Bible, Torah, and Koran. This influence is particularly strong in the United Kingdom, where a considerable number of children attend Church of England schools from a very early age. In addition to the typical, secular encouragement of prosocial behaviour found in other schools, children in religiously affiliated schools are also exposed to the altruistic lessons of that particular faith.

Evolutionary psychologists posit that prosocial behaviour represents an adaptive advantage which might be mediated by neurotransmitters (see Carter, 1998; Gimpl & Farenholz, 2001). The rationale behind this is that by helping others we will be well received by ingroup members and, thus, increase the likelihood of reciprocal prosocial behaviour. Research from this area would suggest that prosocial behaviour is not a set of learned actions based on concern or empathy for another; but, rather as a method of reducing the adverse physiological response to the suffering or peril of another. This perspective contends that our prosocial actions are motivated less by the concern to help another and more by the desire to help ourselves. These findings would support prior research which has indicated that despite very limited socio-cognitive development, infants react to the distressed state of another even before the age of two (see Eisenberg, 1982). The same research indicated that slightly later in their development, infants

attempt to alleviate the distress of another without any tangible knowledge of social principles or altruism. These findings, in conjunction with those of evolutionary psychologists, would suggest that we are genetically programmed to engage in prosocial behaviour regardless of our socio-cognitive development.

Upon reaching school age, children encounter yet another influential factor of prosocial behaviour. Not only are children overtly encouraged to engage in prosocial behaviour by their teachers, the socialization process itself encourages them to engage in said behaviour. Additionally, most schools have a reward system in which children are recognized and rewarded for displaying prosocial behaviour towards others. Thus, one would conclude that by the first year of primary school, children have established a fairly consistent and relatively high level of prosocial behaviour under almost any circumstances. Indeed, there is strong evidence (Eisenberg *et al.*, 1999) that an individual's prosocial tendencies are somewhat consistent from late infancy through middle adulthood. This would indicate that an individual's prosocial tendencies are not easily manipulated by circumstances or whim, but are, instead, a very stable schema based on established socio-cognitive factors and ingrained intergroup perspectives.

However, as exemplified by the Genovese case, people can be very selective with the prosocial behaviour they are willing to engage in as well as the circumstances in which they exhibit it. From the perspective of developmental and evolutionary psychology, it is very difficult to justify why more than thirty bystanders would decide to do nothing when presented with the obvious and critical suffering of another individual. The present research contends that the process that frequently regulates the expression of prosocial behaviour in both children and adults is social identity. Prior research among

adults has indicated that a salient social identity has motivated participants to withhold positive resources from and attribute negative traits to outgroup members (see Mummendey & Simon, 1991; Mummendey *et al,* 1992). There have been a variety of cases in which people engaged in behaviours that they would previously have considered appalling or unacceptable when they strongly identify with a salient group membership. In the case of the infamous Abu Ghraib prison abuse and photographs, members of the United States armed forces subjected prisoners to a variety of humiliating and torturous acts (see Higham & Stephens, 2004). In the pictures, the military personnel seem to be taking pleasure in abusing the prisoners and appear oblivious to their suffering. Once the abuse was discovered, all of the soldiers involved have expressed remorse and disgust over their actions. This was clearly a case where the salience of an ingroup identity (i.e. military personnel) overruled individuals' concepts of morality and blinded them to the suffering of a very separate outgroup (prisoners). Based on prior research and documented cases like Abu Ghraib, it was hypothesized that social identity can have a very strong effect on the expression of various types of prosocial behaviour in different group scenarios.

The choice to test this hypothesis on primary school children was due primarily to three reasons. First of all, primary school children have a very high exposure to influences that encourage prosocial behaviour in most circumstances (see Eisenberg, 1982; Eisenberg, Cameron, Tryon, & Dodez, 1981). Thus, it is highly likely that children at this age will have a predisposition to exhibit various types of prosocial behaviour. However, as will be discussed further, their expression of prosocial behaviour will also be dictated by their level of socio-cognitive development through primary school. One of

the hypotheses examined by this research is whether awareness of individuals as outgroup members will cause reduced willingness to exhibit prosocial behaviour towards that individual. It is during primary school that a great deal of initial intergroup socialization begins to take place. Children are introduced to and engage with individuals from other backgrounds, races, religions, and genders. For most primary school children, this is their first real exposure to other children who might be different from them in a variety of ways. It is during this time that children begin to develop their opinions and perceptions of many different group categories (see Feshbach, 1982; Jahoda, 1968; Katz, 1976). Finally, prior research has indicated (see Doise, 1976) that due to their limited socio-cognitive abilities, children rely heavily on group categorization as a means of social differentiation and decision-making during this time. As they have difficulty attenuating the plethora of personal characteristics found in every individual, young children are liable to resort to rudimentary group categorization as a means of interpersonal classification (Bigler & Liben, 1993; Bigler, Jones, & Lobliner, 1997). They lack the capacity to see their peers as individuals and, instead, simply identify them by their gender or skin colour. Given these reasons, it was anticipated that should there be validity in the hypothesized relationship, the effects would be most evident during middle childhood.

The following research involves four studies that examined various aspects of the relationship between social identity and prosocial behaviour in preadolescents. The next two chapters review prior research and theoretical perspectives on prosocial behaviour and social identity which have guided this research. The subsequent four chapters focus on validating, identifying, and testing the nature of the hypothesized relationship. The

first study was designed to establish the impact of social identity processes on prosocial behaviour, even in the most basic of intergroup contexts. Chapter 6 further explores the strength of the effect of social identity on prosocial behaviour in a highly salient and established group context, as well as the possible impact of target typicality. This is followed by a longitudinal study involving the manipulation of prosocial behaviour in order to test the possibility of the changes in prosocial behaviour effecting children's social identity. The final study looks more closely at group awareness, empathy, and socio-cognitive development as possible factors in this relationship. Finally, social identity and prosocial behaviour are examined and re-evaluated in the context of the results from each of the four studies. Broader implications, limitations, and future research are also discussed in detail.

CHAPTER TWO

Prosocial Behaviour

"A single act of kindness throws out roots in all directions, and the roots spring up and make new trees. The greatest work that kindness does to others is that it makes them kind themselves."

Amelia Earhart, *Magic City Morning Star*
June 1, 2005

While much of the general population is unfamiliar with the term 'prosocial behaviour,' the actions and attitudes that define it affect all our lives on a daily basis and are endlessly promoted all around us. We are inundated with encouragement to behave in a prosocial manner from a very early age and by a multitude of sources including religions, schools, and the media. Particularly as young children, we are constantly being told to help, share, and comfort other people. As we get older, the behaviours themselves change from assisting a schoolmate who is having difficulty with their work to helping a stranded motorist by the side of the road; however, the nature and driving factors of these behaviours remain fairly consistent and unchanged from early childhood. The foremost of these constants is the ability to empathize with other individuals and their circumstances. A great deal of prior research has indicated that empathy is a critical catalyst for a variety of prosocial behaviours (see Eisenberg & Miller, 1987; Underwood & Moore, 1982, for meta-analyses). This is particularly true for behaviour types that involve a significant degree of emotional involvement, such as helping and comforting. The following chapter examines prosocial behaviour in detail; from its definitions and specific behaviours to its

antecedents and patterns in early childhood. Additionally, prior research and hypotheses of prosocial behaviour, particularly those focused on children, will be reviewed.

Defining Prosocial Behaviour

The term prosocial behaviour encompasses a variety of different actions as well as the motivations and circumstances that are involved. In their definitions of prosocial behaviour, many researchers differ in their considerations of the role of personal sacrifice. Hay (1994) characterizes prosocial behaviour as, 'any action that, as it happens, benefits others, or promotes harmonious relations with others, even if there is no sacrifice on the actor's part and even if there is some benefit to the actor.' The most notable distinction of this definition is that personal sacrifice on the actor's part is not required to be considered a prosocial behaviour. Contradicting this aspect of the definition, Janssens and Dekovic (1997) describe it as, 'action on the behalf of someone else that involves a net cost to the actor.' However, this seems a rather basic and narrow view of prosocial behaviour as it does not consider the possibility of actions that do not involve any tangible sacrifice. An example of this would be if a child were to comfort a schoolmate who has just fallen down and hurt himself. In this situation, the actor would not experience any 'net cost' and could actually benefit from the behaviour through more positive distinctiveness in the eyes of his peers. Additionally, previous research with preschoolers (Eisenberg *et al.*, 1981; Strayer, 1980) has shown that children's social lives can benefit from reciprocated prosocial behaviour. It may be possible, though, that Janssens and Dekovic did not consider this in their definition because they did not feel that comforting was necessarily a prosocial behaviour. As will be discussed later,

researchers differ to some degree in the actions examined when exploring prosocial behaviour in children.

Another clear contrast between these two definitions is their inclusion or omission of the possibility of benefits for the actor. The definition used by Hay considers the potential of benefits for the actor while the latter only speaks of the costs. In terms of benefit, other researchers only consider the person who is the receiver of the prosocial behaviour. In her research on the topic, Eisenberg (1986) defines it as, 'voluntary behaviour intended to benefit another.' Although it is quite a simplistic view, it does address the issue of the behaviour being voluntary and not imposed. This is an important consideration in circumstances like community service in lieu of prison terms. In this case, the offender would be involved in some sort of beneficial or amiable behaviour; however, the fact that it was imposed by the court would discount it as being entirely prosocial. A further simplification of the definition can be found in work by Shaffer (1979), who described it as, 'behaviour that benefits others.' This definition is useful in that it encompasses a wide variety of actions and circumstances, but is somewhat vague in that it lacks consideration of the actor, their motivations, and specific situations that might constitute a grey area. Given the multitude of components that characterize prosocial behaviour, a good definition should provide for that variety of behaviours and situations that might be involved.

For the purpose of the present research, these definitions have been combined to form a general explorative description of prosocial behaviour. To some extent this research endeavours to examine the various aspects and characteristics in order to better define the term and its relationship with social identification. Prior research has varied

not only in the functional definitions of prosocial behaviour, but in the actions measured and participants tested with varying results. Jackson and Tisak (2001) observed that, 'depending on the specific type of prosocial behaviour being measured, the methodology utilized, and the ages studied, prosocial behaviour and prosocial thinking have been shown to increase, decrease, or not change.' The present research combines many of these differing aspects of prior research in order to form a better perspective of how each of these factors impacts prosocial behaviour. The following section explores the various types of behaviour measured in prior research and the centrality of these types of actions to the issue of prosocial behaviour.

Altruism. Prior to further examination of the different aspects of prosocial behaviour, it is first necessary to define the term 'altruism.' In some research (Eisenberg *et al.,* 1999), altruism refers to a more specifically defined type of prosocial behaviour that accounts for motivation. In this study, Eisenberg and colleagues define altruism as, "intrinsically motivated, voluntary behaviour intended to benefit another." However, the present research was not concerned with the two specific qualifiers of motivation type and whether or not the behaviour was voluntary or obligatory. The present research focused more on which behaviours were exhibited and to whom, with regards to the participants' social identity. Additionally, all of the present studies involve prosocial behaviour that was solicited by various targets rather than voluntarily offered by the participants. Thus, this perspective of altruism was considered much too constrictive and short-sighted for the purposes of the present study. Contrary to the aforementioned definition used by Eisenberg and colleagues, Shaffer (1979) argues that altruism is, "an

act that provides assistance to another person, regardless of the helper's motives." Clearly, this description is quite similar to the definitions of prosocial used in prior research (e.g. Hay, 1994; Janssen & Dekovic, 1997). Additionally, a considerable amount of prior research on prosocial theory uses the two terms interchangeably (e.g. Rushton & Weiner, 1975; Shaffer, 1979, Ugrel-Semin, 1952). Thus, in the present research, altruism and prosocial behaviour were viewed as two different ways of labelling the same concept.

Empathy. In the present research, the most important moderating factor between social identification and prosocial behaviour was thought to be empathy. It was hypothesized that the more that participants identified with other individuals, the higher their levels of empathic concern. In turn, higher levels of empathy would lead to increased willingness and frequency of a variety of prosocial behaviours. However, as will be discussed in connection to prosocial theories, empathy is a socio-cognitive skill that develops gradually over several years during middle childhood. Prior research (Feshbach, 1982; Kohlberg, 1969; Rushton, 1975) has shown that levels of empathy vary with age and socio-cognitive development as well as gender throughout early childhood. Thus, it is quite possible that age and perspective-taking abilities could also play a moderating role in this relationship. Prior research by Hoffman (2000) defines empathy as both, "the cognitive awareness of another person's internal states" and as "the vicarious affective response to another person." As observed by Ickes (1997) this 'vicarious' emotional response is typically quite similar to the emotional state of the victim. Likewise, the emotional state caused by the 'cognitive awareness' of another's

distress has been linked to higher levels of prosocial behaviour in participants (Berndt, 1979; Otten, Penner, & Altabe, 1991). Another possible factor in the present research could be that empathy drives both social identification and prosocial behaviour. Using Hoffman's (2000) definition, it could be that children more closely identify with individuals whose 'internal states' they are more cognitively aware of. Additionally, the 'vicarious affective response' could be responsible for the child behaving prosocially towards the distressed target. However, contrary to this perspective, some prior research (Aboud, 1988; Bigler & Liben, 1993; Kohlberg, 1969) has shown that social identification begins to decline at around 7- to 8-years-old; this is also the approximate age where most children have fully developed the socio-cognitive abilities necessary for empathic concern. Following these findings, the present research might find that social identification drives prosocial behaviour in children at the lower end of the examined age range; while, empathy becomes the motivating factor for said behaviour in children at the higher end of the age range. Given its considerable possible impact on both social identification and prosocial behaviour, empathy was thoroughly examined in the present research.

Specific Prosocial Behaviours

As previously mentioned, there is great diversity among the types of actions that could be considered prosocial behaviour. Within each of these types, there is also a considerable amount of variation with regard to sacrifice and necessity. When examining prosocial behaviour, it is critical to identify the kinds of actions that are central to the term. This is particularly true when measuring several behaviour types in a study that

examines prosocial behaviour. Additionally, the type and nature of the behaviours being measured must be highly salient to the participants. One of the challenges of the present studies was to measure behaviour types that were paramount to the definition of prosocial behaviour, but to structure them in a context that would be salient to children from five to 10-years-old.

When selecting which behaviours to measure, the hypotheses and samples of many studies had to be examined. The most widely used behaviour type and most pertinent action to the definition of prosocial behaviour among previous studies was helping. Among a variety of age ranges and utilizing numerous methods of measurement, helping behaviour can be found in countless studies of this topic (e.g. Denham, 1986; Eisenberg *et al,* 1999; Feshbach, 1982). For quite obvious reasons, helping is a behaviour type that is directly relevant to defining prosocial behaviour. Additionally, it is quite a flexible measure as it can be adapted to be salient to participants of all ages. Unlike other prosocial behaviours like donating, which is somewhat limited in its adaptability and salience, helping measures can be manipulated for a wide range of circumstances and costs to the actor. When defining the term 'helping' in their research on prosocial behaviour, Eisenberg *et al.* (1999) describe it as when a "child attempts to alleviate another's nonemotional needs." The definition continues to include the examples of when a "child assists another by giving information" or "helps another with a task." The types of helping behaviour used in previous studies has varied from rather critical situations in which participants are helping peers who are hospitalized (e.g. Eisenberg, McCreath, & Ahn, 1988; Rothenberg, 1984; Sturtevant, 1985) to the mundane task of helping an adult pick up dropped paper clips and toys (Eisenberg, Pasternack, & Lennon, 1984). While the

studies involving helping a hospitalized peer do definitely measure prosocial behaviour, they involve situations which could be considered a bit contrived. This is mainly due to the fact that the majority of children have not and will not find themselves in this type of situation and, thus, it would have little salience to their everyday lives. A much more relevant task was used by Eisenberg and colleagues (1984) as it was a situation that most children will have experienced on more than one occasion and could easily relate to. When developing a social behaviour scale, Warden and Christie (1997) used a helping measure that was also particularly salient as it asked if children would help a classmate with their problem. When conducting research on children, it is particularly important that the scenarios and decisions involved are applicable to their lives and require a minimal amount of hypothetical perspective taking. With an adult sample, this is less critical as they possess the socio-cognitive abilities to process foreign contexts as well as a much more diverse range of experience. In their work on prosocial behaviour, Greener and Crick (1999) noted that the types of behaviour adults have had the opportunity to witness may be qualitatively different than that experienced by children with their peers. For the present research, only helping behaviours that were distinctly salient to the experiences of primary school children were utilized. As will be discussed later in more detail, the present studies contained several measures of helping behaviour which were applicable to the participants' experience. Due to its centrality to the definition of prosocial behaviour as well as the highly adaptable and diverse nature of the behaviour, helping was included throughout the present research.

Another behaviour that can be found throughout prosocial research on children is sharing. While this behaviour is compliant with the variety of definitions for prosocial

behaviour mention previously, it does differ considerably from helping in that it almost always requires a sacrifice on the part of the actor. As defined by Eisenberg *et al.* (1999), sharing is when "the child gives away or allows another temporary use of a material object previously in the child's possession." Although this description of sharing does specifically provide that the behaviour is temporary, this can imply a considerable sacrifice to a child when resources (i.e. crayons, toy cars, sweets) are limited. Likewise, Tisak and Ford (1986) described it as "giving up one's own resources to benefit another." Unlike helping, though, sharing can be done with minimal emotional involvement. In this respect, they represent two different levels of prosocial behaviour: empathetically motivated and empathetically disengaged. Even though situations do arise in which empathy play an important role in sharing (i.e. a child shares a pencil with a classmate who has just broken his and is crying), it is a behaviour that does not necessarily require empathetic concern. One can share resources, with little or no concern for the plight of the receiver. Whereas, helping behaviours are predominantly driven by the actor's empathetic concern for the receiver. Prior research (Dreman & Greenbaum, 1973) has indicated that the possibility of reciprocation, rather than empathy, is a critical motivating factor for sharing in children. Regardless of the socio-cognitive process that drives the behaviour, sharing is an action that has been used as a prosocial measure in a considerable amount of prior research (e.g. Bryant & Crockenberg, 1980; Denham, 1986; Jackson & Tisak, 2001). Much of the prior research on sharing behaviour (e.g. Elliott & Vasta, 1970; Roberts & Strayer, 1996) has included various types of donating as a form of sharing. Arguably, the two represent very similar actions with definitions that do not differ greatly. However, donating behaviour is characterized by very specific

circumstances with social dynamics that are not found in most instances of sharing. Furthermore, the issues of social desirability and derogation for either donating or not donating, respectively, can greatly impact the actor's decision making. Additionally, the act of donating might not be as salient in the experiences of primary school children, particularly those from the youngest age group. Thus, even though the present research did examine donation behaviour to a small extent, it was considered separately from sharing. In order to capture sharing behaviour in the most accurate way, the scenario technique utilized by Jackson and Tisak (2001) was used throughout the present research. In their study, they presented the participants with situations in which they must decide whether or not to share snacks, school supplies, and some other personal item with another child. The present studies used the same categories of items in the sharing measures because of the salience of the situation as well as the common value of each of the items. As will be discussed later, this scenario method was used to measure several different types of prosocial behaviour in most of the studies in the present research. In addition to the scenario method used for sharing behaviour, several resource allocation tasks were used to explore differential sharing. Based on findings by Olson and Spelke (2008) which showed differential resource allocation among preschoolers, the present study hypothesized that similar results would be seen in primary school children. In each of the studies in the present research, several different measures of sharing behaviour are used to examine children's prosocial tendencies.

The majority of the prosocial behaviour measures in the present study involved three behaviour types considered to be paramount to the definition of prosocial behaviour: helping, sharing, and comforting. Similar to helping, comforting behaviour is

motivated primarily by empathetic concern for another individual and does not usually involve any degree of personal sacrifice. In the aforementioned study by Jackson and Tisak (2001), comforting is defined as "actions taken to improve the overall mood of another person." Eisenberg *et al.* (1999) elaborate on this description by defining it as when "the child attempts to alleviate the emotional needs of another, for example, tries to make another feel better when in distress." Comforting behaviour was critical in the present research in that the action explicitly indicates empathetic concern for another person. Unlike sharing, which does not require the slightest emotional response, comforting behaviour is typically only exhibited when the actor feels a genuine concern for the emotional or physical welfare of another. Prior research on comforting behaviour in children has yielded mixed results. Studies by Burleson (1982) as well as Whiting and Whiting (1973) indicated that comforting behaviour increases with age. These results might signify a possible link to children's social perspective taking abilities, which will be discussed in more detail later. However, other research has shown that comforting behaviour decreases with age or that the two are unrelated (Gottman & Parkhurst, 1980; Yarrow & Waxler, 1976). Thus, when designing the present research, it was crucial that the comforting measures be salient and accessible to children from every age group tested. To achieve this, the situations used in these measures involved relevant circumstances such as injured classmate or another child who has just been bullied and is crying. In early research by Hartup and Keller (1960), comforting was categorized under the broad concept of 'emotional support,' which included sympathy, reassurance, and protection. While sympathy and reassurance are applicable terms to comforting behaviour, protection was not considered an acceptable addition to the behaviour's

definition. In the context of the present research, protection in response to bullying or otherwise was not considered a form of prosocial behaviour as it implied the use of force when other viable and more prosocial options are available to the actors. Therefore in the present studies, the comforting measures which involved a bullied child only provided participants with the option of giving comfort and making him/her feel better. In the present research, the prerequisite of empathy for comforting behaviour made it an absolutely necessary factor when examining the relationship between social identity and prosocial behaviour.

To only closely examine three types of prosocial behaviour in the present research might initially seem to provide a very limited view of the subject, the most notable omissions being cooperating and volunteering. Used as a prosocial measure by Tisak and Ford (1986), cooperating fit their construct of prosocial behaviour as it "promotes harmonious relations with others" (Hay, 1994). Although it meets the criteria for this definition of prosocial behaviour, cooperating was considered to not be a critical component of prosocial for the purposes of the present study. The reason for this is that cooperating quite often is not motivated by empathy and does not provide any inherent cost to the actor. Additionally, cooperating usually includes benefits for the actor which frequently provides the motivator for said action. It was felt that any cooperating that was motivated by empathy and provided benefits solely to the receiver would be captured by certain helping measures. A further measure of prosocial behaviour used in prior research (Carlo, Roesch, & Melby, 1998; Green & Schneider, 1974) was volunteering. Again, this behaviour does typically involve the selfless donation of time and effort on the part of the actor, but was judged as not entirely central to examining prosocial behaviour. Also, it

was believed that the concept of volunteering would lack relevance in the lives of most of the children involved in the studies. Few would likely have had the opportunity to volunteer in any real sense. Furthermore, there are considerable complications when attempting to measure this behaviour accurately with such young participants. Unlike adults, children have little control over how their time is spent and, therefore, could not realistically indicate how much time they would choose to volunteer. The issue of accurate measurement is important in all research, but particularly complicated when dealing with a population whose behaviour and responses can be quite difficult to measure. The following section addresses the various types of measurement utilized in prior research as well as the method selected in the present studies.

Methods of Measurement

Research on primary school children entails a multitude of barriers that make it one of the more difficult populations to involve in studies. Among these are accessibility, cognitive skills, and their lack of mobility. For these reasons, lab-based testing is a logistical nightmare that includes many confounding variables. The benefit of this particular method of testing is that the researcher can examine actual behaviour, rather than intended behaviour. In a study by Staub (1974), participants were placed in a controlled laboratory environment that simulated situations in which prosocial behaviours might be exhibited. Likewise, Rosenhan and White (1967) simulated an emergency scenario in a laboratory in order to test children's prosocial behaviour in critical situations. As mentioned before, the primary benefit of these two studies was that the children's actual behaviour was measured. However the laboratory environment, no

matter how controlled, represents a serious confound in itself. As it is a foreign environment for the young participants, it creates a consciousness of their surroundings that can affect their behaviour. In particular, there would definitely be a heightened sense of social desirability. In designing the present research, particular attention was paid to eliminating the confound of surroundings. By conducting the studies in a school library or classroom, the participants would feel much more at ease and would be more inclined to respond as they would ordinarily.

Other studies (Eisenberg *et al*, 1999; Janssens & Dekovic, 1997) examined prosocial behaviour through the observational method. Researchers would observe the children in their typical school environment and record the type and number of prosocial behaviours they exhibited. As with the aforementioned laboratory studies, the researchers were examining the children's actual rather than intended behaviour but with the additional benefit of non-artificial situations and settings. Thus, the external validity was quite high as they were directly recording the exact behaviours they intended to examine. The major drawback to this type of research, though, is the researcher himself. Their presence in the classroom is a confound in itself and this method requires the researcher to make judgements regarding the behaviour witnessed. When one considers the varying definitions of prosocial behaviours in conjunction with the judgements of the researcher, it is quite clear that this form of research can be rather subjective. In their research, Janssens and Dekovic (1997) also interviewed the parents and teachers of the participants to get a more complete concept of their prosocial behaviour patterns. In conjunction with observation, this would allow for a better perspective of the children's behaviour at home as well as school. Once again, though, the data collected would be entirely subjective as it

would be based on the judgements of the parents and teachers. For the purposes of the present research, the familiar testing environment was desirable; however, in the interest of accurate results and consistency of the data, a less subjective means of research was required.

In order to adequately examine the relationship between prosocial behaviour and social identity in the present research, a number of design requirements needed to be met. The research method needed to be highly salient to the children's experience, the testing environment must be familiar, and the data had to be as objective as possible. Additionally, the measures needed to be highly adaptable for each of the behaviour types and had to be accessible to participants who might vary greatly in their socio-cognitive abilities. In order to meet all of these requirements, the present research utilized a stimulus response method similar to that used in research by Jackson and Tisak (2001). In this study, the participants would be read a story and were then asked to answer questions about it. Children were interviewed individually in order to eliminate any possibility of group effects. Also, by reading the story to the children, the researcher had some degree of control over the information they received as well as maintained consistency of the stimulus. In their research on prosocial moral reasoning, Eisenberg-Berg and Hand (1979) used the same method of presenting fictional scenarios and then asking the participants questions. As will be discussed in more detail later, in the present research many of the measures include a free-response component as well as a Likert response scale in order to gain further insight into their judgements. This method of testing was considered ideal for the purposes of the present research as it allowed the participants an acceptable option of choosing to not exhibit prosocial behaviour towards a certain

individual or in a particular situation. If the participants had been put in actual situations where they might choose to help, share, or comfort another individual, their social desirability awareness might influence their behaviour. As the participants have the acceptable option of refusing to behave prosocially, the data should be much more representative of the relationship between prosocial behaviour and social identity. A slightly different technique of the stimulus-response method used in social identity research involves using pictures of people as the stimulus (e.g. Brand, Ruiz, & Padilla, 1974; Katz, 1976; Stephan & Rosenfield, 1979). In these studies, participants were presented with a picture before being asked questions to examine the prejudicial effects of social identity. For the present research, this type of stimulus was quite viable in that it could be used to assess how children identify with someone they have never met as well as if they would behave prosocially towards this person. By allowing the participants to choose whether or not to exhibit different prosocial behaviours in some studies as well as examining who they choose to show these behaviours towards, the present research gained a more complete perspective of the processes that dictate prosocial behaviour. Moreover, this complete context of prosocial behaviour provided the present research a better context to evaluate the theoretical perspectives from which it was designed. The following section will discuss the theories and hypotheses of prior research and their roles in the present studies.

Prosocial Theory

Current theoretical perspectives in both prosocial behaviour and social identity were critical in the design and analysis of the present research. Given that the primary

aim was to characterize the relationship between social identity and prosocial behaviour in children, it was necessary to fully explore the theories that dominate each area. Particularly when selecting the age range of the participants, it was important to examine the critical period during preadolescence when changes in social identification would be correlative of variations in prosocial behaviour. Thus, when examining data pertaining to both social identity and prosocial behaviour in the present study, it would be possible to map the two processes into an integrated socio-cognitive timeline. The design and hypotheses of the present research were based on three prosocial behavioural perspectives: Evolutionary Theory, Social-Learning Theory, and Cognitive-Developmental Theory. The following sections outline these theories as well as their effect on the design of the present studies.

Evolutionary Theory. Currently a very popular behavioural perspective, Evolutionary theory explains the prosocial behaviour of animals and humans alike as the result of natural instincts. This contention of the in-born desire to behave in a prosocial manner is based on the argument that animals possess 'altruistic genes' which can be passed on to future generations. One proponent of this theory, Donald Campbell, suggested that by living in cooperative, altruistic social groups we would increase our protection from enemies as well as better satisfy our basic needs (Shaffer, 1979). This, in turn would increase one's chances of reproducing and successfully passing on these 'altruistic genes' to one's offspring. It is because of this ability to successfully exist and procreate in social groups that evolution has favoured more altruistic individuals over thousands of years. Campbell argued the importance of these 'altruistic genes' in saying

that "the tremendous survival value of being social makes innate social motives as likely on *a priori* grounds as self-centered ones" (Campbell, 1965). However, there has been considerable evidence to suggest that the principles of Evolutionary Theory extend beyond humans to other animal species (Hebb & Thompson, 1954; Hebb, 1949; Nissen & Crawford, 1936). In their work with canines, Hebb and Thompson (1954) noted that dogs would try to prevent children from going swimming and 'rescue' them when they did enter the water, despite having never been trained to do so. Some might argue that a domesticated dog has the ability to recognize humans as a provider of food and, therefore, might behave prosocially in the hopes of reciprocation. However, this is a somewhat impractical assertion that does not discount the fact that the dog provided help to an animal of another species without any obvious motivation. Convergent results were also seen when the same researchers observed porpoises aiding an injured companion by lifting it to the surface for air (Hebb & Thompson, 1954). Likewise, research by Nissen and Crawford (1936) documented food sharing among chimpanzees. These results are a direct contradiction to the traditional dogma of evolutionary theory: 'Survival of the fittest.' Clearly, the injured porpoise could not be considered 'fit' among its companions and yet they provided aide at the cost of their own expended energy. Also, the sharing of a precious resource such as food among chimpanzees would seem to be quite indicative of a natural predisposition to behave altruistically. Both of these studies indicated that altruism might be such a strong instinct that it can possibly supersede an animal's own motivation to survive. Although there is a great deal of research to support the evolutionary perspective of prosocial behaviour, it fails to account for the varying levels of prosocial behaviour at different ages. One example of this shortfall are studies

involving primary school children that showed remarkably low levels of cooperating, sharing, and helping behaviour at that age (Hartup & Coates, 1967; Hartup & Keller, 1960). Presumably, if prosocial behaviour is a genetic trait, there would be little fluctuation in the levels of the various behaviour types exhibited. Further questioning the validity of Evolutionary Theory, several studies (Ugrel-Semin, 1952; Rushton & Weiner, 1975; Rushton, 1975) have shown a considerable increase in prosocial behaviours from preschool to middle childhood. As there is a great deal of socialization taking place during these years, it might be argued that these behaviours are learned rather than instinctive. A further explanation of these fluctuations of behaviour is that children develop the ability to better identify and differentiate individuals, thereby facilitating the task of choosing when to exhibit prosocial behaviour. The present studies slightly contradict the principles of Evolutionary Theory of prosocial behaviour in that the design is based on the assumption that some children are born with a predisposition to empathy, which drives their altruistic behaviour. Rather than assuming that altruism is innate and passed from one generation to the next, the present research proposes that the capacity for empathy is what is passed down in a hereditary manner. This perspective would better account for the fluctuations in prosocial behaviour at different ages that is not explained by strict Evolutionary Theory. Based on this assumption, children's levels of empathy were explicitly tested at various ages in an effort to establish empathy as a moderating factor. The relationship between empathy, social identification, and prosocial behaviour in the context of Evolutionary Theory will be discussed in detail later.

Social-Learning Theory. In stark contrast to the principles of Evolutionary Theory, Social-Learning Theory proposes that prosocial behaviour is entirely learned through social interaction and not on genetic predisposition. Shaffer (1979) summarizes the Social-Learning perspective as when "people repeat behaviours that are reinforced and avoid the repetition of responses that prove costly or punishing." While there is some contradiction with regard to the idea of costs as there is often some degree of sacrifice required with prosocial behaviour, the overall principle accounts for these actions quite accurately. Additionally, Shaffer (1979) argues that all prosocial behaviour is driven by the slightest possibility of reward or positive return for the actor. Basically, the Social-Learning perspective of prosocial behaviour would suggest that a child does not share a crayon with a peer out of pure kindness or an instinctive response, but instead in the hope of the receiver sharing a crayon with the actor at a later date, the actor gaining the receiver as a friend, or the possibility of positive distinctiveness in the eyes of peers. This concept seems rather intuitive as most behaviours are learned or discarded by the process of reinforcement or punishment, respectively. As will be discussed in the following chapter, the desire for positive distinctiveness is particularly important to social identification and the socio-cognitive processes involved. As with many acquired actions, proponents of this theory contend that children learn about prosocial behaviour through direct tuition as well as observational learning (Rushton, 1975). During the early years of a child's socialization, direct intuition of prosocial behaviour is at a considerably high level. Particularly once they start to attend school, they are constantly being instructed to behave in a prosocial manner by teachers as well as parents or caregivers. As the socialization process continues, prosocial behaviour is reinforced through the observation

of these actions exhibited by peers and adults. This perspective entirely accounts for the previously mentioned studies that showed very low levels of prosocial behaviour in preschool followed by a considerable increase in middle childhood (e.g. Hartup & Coates, 1967; Hartup & Keller, 1960; Ugrel-Semin, 1952). As preschool children have only been in school for a limited time, they have had little chance to learn and acquire prosocial behaviours; whereas, children in middle childhood would have had several more years of direct tuition and observational learning as well as the more advance socio-cognitive abilities to identify the behaviours. David, Grace, and Ryan (2004) argue that gender roles are also learned "from society to the individual," in accordance with the Social-Learning Theory. While gender differences in prosocial behaviour and social identification were of only minor importance in the present research, there has been research that provides credibility to the theory that altruism and gender roles are socially learned. For instance, Burleson (1982) found that females were much more inclined to exhibit comforting behaviour than their male counterparts over several age groups. These results could indicate that young children are learning that the female gender role includes much more compassion and nurturing than the male gender role. Moreover, one could conclude that the more salient their female identity becomes, the more they might choose to exhibit prosocial behaviour. During their middle childhood, students are given less direct instruction on prosocial behaviour, but have more opportunities to observe altruistic actions as their social worlds expand. The benefits of observational learning have been well documented by several studies which indicated that children who observed an altruistic model would, in turn, behave more altruistically (Bryan & London, 1970; Krebs, 1970; Rosenhan, 1972). For instance, Rosenhan and White (1967)

conducted a study in which children were given two gift certificates after completing a task. They then observed an adult donating their gift certificates to a children's charity or choosing to keep them for themselves. A considerable majority of the participants donated their gift certificates after observing an adult doing the same compared to those who observed an adult keeping the gift certificates. From these studies, it is clear that the impact that observational learning has on the prosocial behaviour of young children is considerable. Kohlberg (1969) agreed with this perspective and contended that children learn appropriate conduct in given situations by observing a more mature and competent individual. Thus, continued exposure to teachers and academic staff should continually increase the children's levels of prosocial behaviour throughout their primary school years. Furthermore, Bandura (1971) argued that children learn that altruistic behaviour is self-reinforcing when they observe models showing contentedness at having helped another person. Therefore, simply by observing people behaving prosocially without any tangible reward or motivation would encourage children to mimic this behaviour and obtain satisfaction through the action itself. The hypotheses involved in the present research were considerably influenced by the principles of Social-Learning Theory of prosocial behaviour; particularly the differences in various behaviours between each of the age groups and how this corresponds to both their socio-cognitive development and social identification. As will be discussed in the following section, the Cognitive-Developmental Theory takes a similar perspective to prosocial actions as it explains the patterns of behaviour in terms of corresponding development of children's socio-cognitive abilities.

Cognitive-Developmental Theory. As with the Social-Learning Theory, Cognitive-Developmental Theory of prosocial behaviour does not attribute prosocial behaviour to heredity, but rather as continual learning process. Likewise, this theory contends that the critical period for the development of prosocial behaviours takes place during middle child, with relatively low levels of said behaviour prior to this (Kohlberg, 1969; Rushton, 1975). However, where the two theories differ is that Social-Learning Theory focuses on the acquisition of prosocial behaviours through social interaction, Cognitive-Developmental deals with the socio-cognitive abilities that are conducive to these actions. The primary contention of this theory is that prior to middle childhood, most children have yet to develop the socio-cognitive abilities that motivate the various types of prosocial behaviour. Of the cognitive abilities that children lack prior to this time, is empathic concern for others. In their research of prosocial behaviour in children, Eisenberg *et al.* (1999) define empathy as, "an emotional reaction elicited by and congruent with another's emotional state or condition." While this seems like a very basic cognitive ability that should develop at quite a young age, it is largely absent among preschool children. The complicating factor of this ability is that it requires the child to take the perspective of another in order to understand 'another's emotional state.' By understanding the individual's emotions and projecting those emotions on themselves, children are more inclined to alleviate this distress as they would want others to do so for them. Research by Batson and colleagues (Batson, 1987; Batson & Shaw, 1991) has indicated that empathy is a critical motivating factor in helping behaviour. In this research, it was shown that children's level of empathic concern for another corresponded to their level of helping behaviour. As previously mentioned, empathy is based on the

ability to understand and internalize the emotions and thoughts of another, typically referred to as 'theory of mind' cognition. The complexity of processes involved in 'theory of mind' cognition and empathic concern has been shown to be well beyond the socio-cognitive abilities of individuals in early childhood. When examining prosocial behaviour and delayed gratification in young children, Thompson, Barresi, and Moore (1997) found that while three-year-olds struggled with 'theory of mind' tasks, many four-year-olds began showing higher proficiency with the same tasks. Also, the four-year-olds showed the ability to make judgements based on these 'theory of mind' tasks. It is this ability to make decisions based on perspective taking that is critical to empathy driven prosocial behaviour. A study on preschool children by Flavell (1968) further validates this assertion of the importance of perspective taking to empathy. This study indicated that preschool children had considerable difficulty viewing objects and events from a perspective different from their own due to their high levels of egocentrism. The conclusion of this study was that the lower levels of empathic cognition in preschool children resulted in them not attempting to take on the perspective of others. Thus, as their level of egocentrism declines and their ability to empathize increases with their further development of socio-cognitive abilities, their desire to behave prosocially should also increase. As noted by Shaffer (1979), there is a considerable importance of "fundamental cognitive changes that normally occur during the middle childhood era, including loss of egocentrism, a refinement of empathic abilities, and the development of role-taking skills" in the altruistic concern and prosocial behaviour of children. Following this theoretical perspective, middle childhood was considered the critical period for measuring changes and patterns in prosocial behaviour in the present study. Furthermore,

as will be discussed in more detail later, the same period is also characterized by important fluctuations in the salience and nature of social identification.

In the context of the present study, the three aforementioned theoretical perspectives of prosocial behaviour present three very different views of the predicted fluctuations of said behaviour over the critical age range. Following the perspectives of Social-Learning Theory and Cognitive-Developmental Theory, the present research examines the changes in prosocial behaviour in children from five- to ten-years-old. This age range was also based on a considerable amount of prior research on prosocial behaviour in children (e.g. Eisenberg *et al.*, 1999; Ugrel-Semin, 1952; Janssens & Dekovic, 1997). Based on these three prosocial theories, Figure 1 represents the predicted levels of prosocial behaviour in the first, middle, and last year of the investigated age range.

	Evolutionary Theory	Social-Learning Theory	Cognitive-Developmental Theory
Year 1	Consistently high levels of prosocial behaviour	Lower levels of prosocial behaviour	Lower levels of prosocial behaviour
Year 3	Consistently high levels of prosocial behaviour	Prosocial behaviour increases dramatically	Prosocial behaviour increases dramatically
Year 5	Consistently high levels of prosocial behaviour	Prosocial behaviour plateaus at relatively high levels	Prosocial behaviour reaches its highest levels

Figure 2.1: Predicted levels of prosocial behaviour at Years 1, 3, and 5

As figure one demonstrates, Evolutionary Theory of prosocial behaviour does not provide any explanation for age-related changes in these behaviours. According to this

perspective levels of prosocial behaviour should be consistent through early and middle childhood and be relatively high evolutionary elimination of less altruistic individuals. Social-Learning and Cognitive-Developmental theories predict similar patterns for the lower and middle end of the critical age range. However, the contrast between these two lies at the upper end of age range where one predicts further increase while the other suggests that the behaviour pattern will level off. The Cognitive-Developmental Theory contends that these behaviours will continue to increase through this age range as children are still developing and refining certain socio-cognitive abilities. As will be discussed later, the continued development of their social cognition also has an effect on their social identification and categorization abilities. In the present research, the majority of the prosocial behaviour hypotheses were formed according to the principles of Social-Learning and Cognitive-Developmental Theories. The convergence or contradiction of the results of the present research with prosocial theory will also be examined.

The present chapter has examined various types of prosocial behaviour and current theoretical perspectives as well as the definitive nature of the term. Additionally, the role of empathy in the relationship between prosocial behaviour and social identification has been examined. Previous studies and the predicted behaviour levels at various ages throughout early and middle childhood were reviewed as well. In the following chapter, the socio-cognitive processes and theories pertaining to social identification will be explored. The predicted age trends and prior research will also be examined in further detail.

CHAPTER THREE

Social Identification and Group Membership

"Common sense is the collection of prejudices acquired by age eighteen."

Albert Einstein (*attributed*)

Although it may not be something that we are consciously aware of, our various group memberships which form our individual social identities affect countless social experiences and judgements we engage in every day. Despite being entirely beyond our control, we are born into groups that will dictate our social identity to varying degrees for the rest of our lives. From the very first instant of our lives, we are placed into groups according to our gender, race, and nationality among many others. These intangible labels not only affect other people's judgement of us, but also how we judge and perceive ourselves. Due to their lower levels of social cognition and experience, these labels are particularly salient during early and middle childhood (Bigler, Jones, & Lobliner, 1997). As will be discussed further in this chapter, children rely quite heavily on these social categories when making judgements about other individuals and groups. The following chapter examines the definition of social identity (Tajfel & Turner, 1979) as well as the various theories that describe its salience during childhood. More specifically, Social Identity Theory, Socio-Cognitive Theory, and Self-Categorization Theory will be examined in the context of prior research as well as the present studies. To better define social identity, the methods, measures, and subjects of prior research will be reviewed and scrutinized. Furthermore, concepts relevant to social identity and group membership

such as social categorization, multiple categorization, positive/negative asymmetry, and group member typicality will also be discussed. Finally, the chapter briefly states the hypotheses involved in the present studies in terms of the effect and impact of social identity.

Defining Social Identification

Before examining some of the current theories of social identity, it is necessary to begin with an adequate definition of the term. As with any construct, there are a variety of different definitions of social identity, each with their own merits and validity relevant to each theoretical perspective. Abrams, Hogg, Hinkle, and Otten (2005) characterized one's social identity as being "based on attributes shared among members of particular social groups and categories." This perspective looks beyond the superficial labels of group membership to the actual 'attributes' that the individual has in common with other group members. This varies from other definitions of social identity in that it focuses strictly on actual attributes and not simply on group stereotypes perceived by others. For instance, Brown (2001) utilizes a much more simplistic view of social identity as "a person's sense of who he or she is, derived from his or her group memberships." This second definition clearly emphasizes the importance of group membership over common group member traits to social identity. Although they might seem like quite similar definitions of a rather simple construct, the slight contradiction of these two characterizations is indicative of the contrasting nature of social identity. Abrams *et al.* (2005) further clarify their definition by stating the critical feature of social identity is that the definitions and qualities are simply perceptions of an individual. For example,

suppose a particular country is stereotyped as having supporters who are fanatical about their country's football squad. However, the individuals from that country might consider themselves as quite stoic and sensible. Thus, for an outside observer, the fanatical supporter stereotype has an intrinsic value in their perception of that particular country; despite the fact that many of the country's citizens do not believe that they possess this attribute. While neither person is necessarily wrong in this example, it demonstrates that the often-contradictory nature of perception and reality is highly relevant to social identity processes. According to Ellemers, Spears, and Doosje (1999), a further definition of social identity is "that aspect of a person's self-concept based on their group memberships." Although this description seems to mirror that of Brown (2001), they further define social identity as a "person's definition of self in terms of some social group membership with the associated value connotations and emotional significance." It is this definition of social identity that was primarily used in the formation of hypotheses and design of the studies in the present research. This definition was selected mainly for the fact that it accounts for the self-perpetuating nature of social identity as well as its highly transitional state. Even though an individual might have certain perspectives on a given topic, their convictions are strengthened by merely joining a group that, at least partially, defines itself by that ideal. This particular group membership becomes more salient to their social identity and they, in turn, begin to feel even more strongly about that particular perspective. Furthermore, the use of the phrase 'some social group' in this definition suggests that an individual can choose to focus on a certain group membership at a given time. As an example, when an individual is in their own country, their social identity might be primarily based on the specific city or region they are from. However,

when they are in a foreign country, their social identity could mainly be defined by the country they are from. This fluctuation of one's social identity according to differing circumstances will be discussed further in discussion of the Self-Categorization Theory. In their definition, Abrams *et al.* (2005) discuss the fact that an individual's concept of social identity is based on perceptions of the group's attributes and opinions. As mentioned above, these perceptions of groups can vary between ingroup and outgroup members; however, these perceptions can also differ from individual to individual within the group. This possible contradiction of perception by ingroup members will be explored in further detail, as it was a critical factor in the present research. The following sections will explain and clarify the theories and concepts that motivated and influenced the hypotheses and design of the present research.

Critical Concepts of Social Identification

A variety of socio-cognitive abilities and behaviours are paramount to fully understanding social identification and its effects on the prosocial tendencies of children. Of particular importance in the present research are the socio-cognitive abilities that influence social identity as these vary greatly among children in middle childhood. As will be discussed further, children between the ages of five- and ten-years-old develop and enhance a great deal of socio-cognitive abilities that can considerably impact their social judgements and behaviour. The following sections outline the impact and importance of social categorization, multiple categorization, positive/negative asymmetry, and group member typicality in the present research.

Social categorization. During the early years of socialization, both prior to and during primary school years, children's socio-cognitive abilities continue to develop and become further refined. Among the first of these abilities to be acquired during early childhood is social categorization. As a rather simplistic method of differentiating individuals, children categorize themselves and others into broadly generalized social groups. The simplicity of this method of differentiation is due to children's poorly developed or non-existent capacity to distinguish individuals among a wide variety of factors simultaneously at that age (Cameron *et al,* 2001; Ruble & Dweck, 1995). For example, suppose there is a five-year-old child named Steven who is friendly, smart, kind, and good at football. If one were to ask a classmate of the same age why he likes Steven, the child might respond that it is because Steven is a boy. Although there are various individual qualities that might cause classmates to favour Steven, their relatively minimal levels of social cognition do not include the capacity to make judgements beyond these broad categorizations. As a means of socio-cognitive compensation, children at this stage of development rely heavily on the process of categorical differentiation. Brown (2001) defines categorical differentiation as "the exaggeration of real differences between two categories." By exaggerating the difference between these social categorizations, it facilitates the process of making judgements based on these categories. For example, young children are inclined to believe that only girls play with dolls as a boy playing with a doll would violate these categorizations and lead to cognitive dissonance. Initial assessment of this cognitive process might cause one to judge it as the early stages of prejudice, despite the fact that it is a considerably valuable social tool to children at this stage of development. Research by Doise (1976) indicates

that this differentiation is an invaluable cognitive tool, which complements categorical differentiation. He argues that this differentiation is necessary for social categorization to be a useful and simplifying cognitive process. In terms of children's socio-cognitive processes, by focusing on the differences and marginalizing the similarities between two groups, any individual can be placed in either Category A or Category B. If there were to be a third category or, worse yet, a grey area between the two categories, young children would have considerable difficulty structuring their social world. This process of differentiation is so cognitively useful that individuals continue to utilize it throughout adulthood, despite the acquisition of the capacity for multiple categorization. Research involving the minimal group paradigm with adults has shown that the introduction of categorical groups was sufficient for eliciting differentiation and discriminatory effects (see Brewer, 1979; Tajfel, 1982). As the following section shows, this would seem a contradiction of processes as children acquire the capacity of multiple categorization around or after seven-years-old (see Cameron, Alvarez, Ruble, & Fuligni, 2001; Ruble & Dweck, 1995). As socialization continues, children reach the concrete operational stage of development and begin to utilize multiple categorization as a means of structuring their social environment.

Multiple categorization. Prior to the concrete operational stage of development, typically reached around six- to seven-years-old, children lack the ability to categorize individuals by more than one characteristic. This cognitive acquisition is significant to present research as it is typically achieved around the middle of the age range examined and can greatly impact their social decision-making. Prior research has indicated that the capacity for multiple categorization impacts a variety of social judgements in children

(Cameron *et al,* 2001; Ruble & Dweck, 1995) and, thus, was predicted to be a factor in the relationship examined presently. The socio-cognitive process of multiple categorization is the ability to categorize an individual using several different characterizations at once. Whereas social categorization was merely the capacity to define individuals by broad categorical groups; multiple categorization takes this process a step further and makes the categories smaller and much more specific due to the addition of supplemental factors. The initial step in developing this capacity is cross categorization (see Figure 3.1), which is the identification of individuals by two categories simultaneously. Following this step, the child develops the ability to define individuals by several factors at one time (see Figure 3.2).

	Same School	Different School
Male	Male Schoolmate	Male Non-Schoolmate
Female	Female Schoolmate	Female Non-Schoolmate

Figure 3.1: Cross categorization (Sex x School)

		Manchester	Spain
Male	Same School	Manchester Male Schoolmate	Spanish Male Schoolmate
	Different School	Manchester Male Non-Schoolmate	Spanish Male Non-Schoolmate
Female	Same School	Manchester Female Schoolmate	Spanish Female Schoolmate
	Different School	Manchester Female Non-Schoolmate	Spanish Female Non-Schoolmate

Figure 3.2: Multiple categorization (Sex x School x Birthplace)

Prior to reaching the concrete operational stage of cognitive development, children's social world is compartmentalized into a few broadly defined group categories. However, as Figure 3.2 indicates, they develop the ability to perceive individuals by several characteristics during this socio-cognitive stage. Additionally, children are able to perceive individuals according to much more intangible qualities (i.e. kind, helpful, friendly) that were previously too complex to be included in their social categorization construct (Cameron *et al,* 2001; Ruble & Dweck, 1995). Returning to the previously discussed example of Steven and his classmates, the response given by an eight-year-old would most likely be very different than that of a five-year-old. Due to their further socio-cognitive development, an eight-year-old would probably refer to Steven's friendliness or his skill at football rather than simply favouring him based on his gender. Likewise, the same child would most likely offer several reasons for liking Steven, a reflection of their new found ability to perceive individuals by several qualities. The

impact of this socio-cognitive development on children's prosocial decision-making, though, has not yet been adequately explored. One might take the perspective that no longer relying on generalized social group categorizations would mean that children would focus less on intergroup differences and more on their similarities; thus, children during and after this developmental stage would be more likely to exhibit prosocial behaviour to a wider variety of individuals than younger children. An opposing viewpoint could be taken that children would become far more specific in who they would exhibit these behaviours towards due to their ability to perceive individuals according to several characteristics simultaneously. Likewise, one must consider the constant fluctuation in group salience during the course of middle childhood that accompanies the socio-cognitive development. The gender of one of their classmates will most likely be far more salient to a five-year-old child than to a ten-year-old child. Furthermore, one must question whether sharing more categories with another child would increase the likelihood of displaying prosocial behaviour. The impact of these questions on the hypotheses and design of the present research will be discussed in later sections.

Positive/Negative asymmetry. One of the behavioural aspects of social identity is intergroup discrimination, which is typically due to a desire to create and maintain ingroup social distinctiveness. Prior research (Hewstone, Fincham, & Jaspars, 1981; Mummendey & Simon, 1991; Mummendey *et al,* 1992) has indicated that intergroup discrimination is quite often characterized by positive/negative asymmetry. The term simply refers to group members' tendency to show higher levels of ingroup favouritism than outgroup derogation. This behavioural phenomenon indicates that group members are more likely to show support for their ingroup rather than negativity towards the

outgroup in order to maintain positive social distinctiveness. Like ingroup favouritism, outgroup derogation includes a variety of behaviours including negative evaluation, non-allocation of positive resources, and withdrawal of resources. In what seems to be a compensatory behaviour pattern, levels of ingroup favouritism are significantly reduced when resource withdrawal is used in a study (Hewstone *et al*, 1981). In their work with minimal groups, Hewstone *et al.* (1981) found that ingroup favouritism was reduced when resource withdrawal (in this instance, money) was used when compared to similar studies that did not include this manipulation. These results would seem to indicate that the type of group can greatly impact the degree of positive/negative asymmetry reflective in intergroup discrimination. Furthermore, this study shows that there is not always a direct relationship between ingroup favouritism and outgroup derogation as might be expected. The positive/negative asymmetry effect has also been observed when comparing studies with various types of reinforcement. In the aforementioned study by Mummendey *et al.* (1992), participants demonstrated a significant level of ingroup favouritism when allocating positive resources. However, a similar study conducted by Otten, Mummendey, and Blanz (1996) showed that participants were much fairer and less discriminating in their distribution when allocating negative characteristics or burdens (the duration of an unpleasant task) to ingroup or outgroup members. These results are of particular importance in the present research due to the possible impact of positive/negative asymmetry on children's decision about prosocial and antisocial behaviour. More specifically, children might be more inclined to allocate negative traits or behaviours towards the outgroup in addition to being more willing to exhibit prosocial behaviours towards the ingroup. If their judgements are affected by the positive/negative

asymmetry effect, children would show more willingness to exhibit prosocial behaviour towards ingroup targets while also being significantly less inclined to show the same behaviour towards an outgroup member. When considering hypotheses and research designs to address these questions, one must also consider how the participants perceive the target. Once the concrete operational stage of development is reached, the previously utilized social categorizations are still present but they overlap more and the differences between them become less distinct. Thus, the typicality of the ingroup or outgroup member in the eyes of the participant may greatly impact their decisions about prosocial behaviours.

Group member typicality. Just as each individual perceives social groups differently, the perception of typicality of group members is just as variable and influential on social decision-making. While both ingroup and outgroup members are subject to judgements of typicality, the effects of these perceptions are amplified when the target is an ingroup member. Prior research (Marques, 1990; Marques, Yzerbyt, & Leyens, 1988) has shown that ingroup members with unfavourable qualities were judged much more harshly than outgroup members that possessed the same qualities.

Current Theories of Social Identity

A topic that has gained considerable popularity over the last thirty years, social identity has been shown to dictate countless areas of our social interactions and judgements. Since its conception as a theoretical perspective (Tajfel & Turner, 1979), it has been a dominant topic of research in the field of social psychology. However, the majority of this research has been conducted primarily on samples of adults and

adolescents. The following section examines three of the more prevalent theoretical perspectives of social identity as well their relevance to children in middle to late childhood. Beginning with Social Identity Theory (Tajfel & Turner, 1979), which essentially laid the framework for later research and perspectives, Socio-Cognitive and Self-Categorization Theories will also be discussed in the context of the present research. Of particular importance will be each theory's perspective of age trends, group salience, research methods, and socio-cognitive development.

Social Identity Theory. It was through their work with social comparison and the minimal group paradigm (Tajfel, Flament, Billig, & Bundy, 1971; Turner, 1975; Tajfel & Turner, 1979) that Tajfel and Turner developed the Social Identity Theory. Stemming from the aforementioned research, one of the cornerstones of the theory is social comparison and, thus, is the focal point of a great deal of research based on Social Identity Theory (SIT). As noted by Ellemers *et al.* (1999), an underlying supposition of the theory is the human desire to have and maintain a positive social identity which compares favourably to other individuals as well as groups. As an individual's social identity is tied directly to the 'positive distinctiveness' of their group, they will endeavour to perpetuate this perception of said group (Tajfel, 1978). Further research (Lemyre & Smith, 1985; Oakes & Turner, 1980) indicated that individuals strive for positive distinctiveness not simply in existing groups, but also in minimal group situations. At this point, it would be beneficial to clarify what is meant by the term 'minimal groups.' This quite common research method is defined by Brown (2001) as "a set of experimental procedures designed to create ad hoc groups on essentially arbitrary criteria with no interaction within or between them." The most important components of this definition

are that the groups are arbitrarily designed and that there is no interaction between them. Thus, they lack pre-existing structure (i.e. gender, race, age) and the participants involved do not have the opportunity to form individual perceptions of outgroup members based on interaction or experience. The primary benefit of this methodology is that all that the participants know about the groups is what the researcher tells them; they have no additional information relating to either group that might sway their judgements. However, participants in minimal group paradigms have shown a tendency for ingroup favouritism and intergroup discrimination despite the arbitrary nature of the groups (Lemyre & Smith, 1985; Oakes & Turner, 1980). Also, research by Abrams and Hogg (1988) showed that this type of intergroup discrimination was linked to heightened levels of self-esteem. According to Social Identity Theory, the participants engaged in intergroup discrimination as a means of creating positive group distinctiveness; this, in turn, elevated participant's levels of self-esteem which is directly related to status of the group due to their group membership. In the context of the present research, the question is whether or not the desire to maintain positive group and individual distinctiveness will affect children's judgements about prosocial and antisocial behaviour. Likewise, the present research examines if the exhibition of prosocial behaviour towards an outgroup member is inhibited when the behaviour involves some level of sacrifice for the ingroup.

Social categorization, also considered a defining factor of the Social Identity Theory (Hogg & Abrams, 1988; Tajfel & Turner, 1979), is something of a prerequisite for group comparison. If individuals did not categorize others by their social group memberships, group comparison would be of little importance. As previously mentioned, social categorization is a socio-cognitive ability that children develop very early and

which is considerably augmented upon the acquisition of the capacity for multiple categorization. Both socio-cognitive tools involve focusing on the differences between groups and minimizing similarities, albeit to differing levels. According to Social Identity Theory, these intergroup differences are maximized and the similarities are further ignored when social identity is particularly salient (Abrams & Hogg, 1988; Tajfel, 1974). Of particular importance in the examination of the present relationship, prior research has indicated that preadolescents tend to exhibit ingroup favouritism at varying levels of social salience (Aboud, 1988; Bigler, 1995; Cameron, Alvarez, Ruble, & Fuligni, 2001). Based on both SIT and prior research, the present studies endeavour to examine how varying levels of social group salience can affect levels of ingroup favouritism as well as prosocial behaviour. The aforementioned research has shown that during preadolescence (between 5 to 10 years of age) children tend to show considerably high levels of ingroup favouritism as a result of social category salience. Likewise, previous research has indicated that these raised levels of category salience can have a significant impact on children's social decision-making (Aboud & Doyle, 1996; Gaertner & Insko, 2000). In the present studies, it was examined whether or not the increased salience of social identity during this stage of development would affect their decisions to exhibit or withhold various types of prosocial behaviour. The specific hypotheses of the present studies dictated by Social Identity Theory will be detailed in a later chapter.

Socio-Cognitive Theory. While initial evaluation might indicate a great deal of similarity between Socio-Cognitive Theory and Social Learning or Cognitive-Developmental Theory, all three refer to quite different aspects of socialization-based

learning. As previously mentioned, Social Learning Theory described various behaviours and abilities that were assimilated gradually over the continuous course of socialization. Alternatively, Cognitive-Developmental Theory centred on the socio-cognitive growth that facilitated prosocial behaviour through the acquisition of the capacities of empathy and moral reasoning. In contrast to both, Socio-Cognitive Theory focuses on the changes in children's evaluations and perceptions of individuals and groups due to the acquisition of more refined socio-cognitive abilities. Originally devised by Aboud and her colleagues (Aboud, 1988; Aboud & Doyle, 1996), this theory describes changes in social judgement and behaviour in terms of socio-cognitive growth and acquisition during this critical period of preadolescence. Socio-Cognitive Theory posits that the social judgements made by young children are largely based on basic and categorical features (i.e. sex, skin colour, weight) due their rather rudimentary socio-cognitive capacities (Bigler & Liben, 1993). As children lack the capacities to attend to more unique features that define an individual (i.e. personality, interests, positive traits) during this early stage of cognitive development, their perceptions are based on more based social categorizations. At this stage, children tend to rely quite heavily on these superficial, broad categorizations as a means of determining interpersonal differentiation. Given the superficial nature of these judgements, much of the research based on this perspective focuses on racial prejudice and the formation of these attitudes and behaviours in children (Aboud, 1988; Bigler & Liben, 1993). This research indicates that perceived physical attributes form the basis for social preference and are critical in the process of ingroup/outgroup differentiation in children around 6 to 7 years old. However, this is in complete contrast to Social Learning Theory that describes racial prejudice as an attribute learned gradually through

socialization rather than the result of inferior socio-cognitive capacities as this theory contends (Allport, 1954; Rosenfield & Stephan, 1981). Those in favour of the Social Learning Theory perspective of prejudice would argue that racial attitudes are acquired by exposure to said attitudes and observation of behaviour reflecting these perceptions. Conversely, prior research based on the Socio-Cognitive Theory (Aboud, 1988, Bigler & Liben, 1993) indicated that around the age which children typically enter the concrete operational stage of development, there was significant decline in prejudicial attitudes. Upon entering this stage of socio-cognitive development, children typically acquire the capacity to perceive others based on more individual qualities rather than broad group memberships or categorizations. Likewise, this developmental stage is also characterized by children acquiring the ability to perceive individuals in terms of multiple categories. In addition to decreased prejudicial attitudes, the aforementioned research by Aboud and colleagues indicated a dramatic decline in ingroup favouritism and outgroup negativity upon entering this stage of development. Based on these findings, the present studies examined the changes in prosocial behaviour, ingroup favouritism, and outgroup derogation in terms of age. Furthermore, children's ability to make decisions based on multiple categorizations at different age levels was also explored.

Self-Categorization Theory. Although the previous two theoretical perspectives present views justified by considerable research, both fail to acknowledge the impact that the situation has on social judgements. Self-Categorization Theory, first published by Turner *et al* (1987), focuses on the transformation of a self concept from an individual to a group member. When referring to the transitory nature of the social identity, Abrams *et*

al (2005) state that, "identities are simply self-categorizations that operate at different levels of abstraction." Similarly, Hogg, Terry, and White (1995) argued that social identity is "the dynamic responsiveness of the self concept to social interactive contexts." Following these two contentions of Self-Categorization Theory, one would argue that an individual's social identity as well as the manner in which they perceive other individuals is not necessarily constant and can depend greatly on the situation involved. For example, if two supporters of opposing football teams were to encounter each other in a pub, they would most likely define themselves in terms of the team they supported. Additionally, if these two teams were to be involved in a match against each other, the salience of the team they supported to their individual identities would be greatly increased. However, if their national football team were to be competing in an international event, these two individuals would likely perceive themselves and each other as having similar social identities. Thus, by a simple change in circumstances, the same two individuals may view each other as either threatening or innocuous based on their own changing social identity. Prior research (Stapel, Reicher, & Spears, 1994) based on Self-Categorization Theory has shown that categorical relations affected perceptions of entities as personally relevant or threatening. In the present research, should the children find certain individuals threatening due to their perceived differences or similarities in categorization, they may be more willing to exhibit or withhold certain prosocial behaviours. In relation to this theoretical perspective, one must also consider the level of depersonalization that takes place when social categories are highly salient. For instance, a boy might choose not to share with a fellow classmate simply because she is a girl. In his decision-making, the boy would focus on the most salient categorization (i.e. gender) and ignore any shared

categorization (i.e. classmates) that might encourage sharing. In the previously mentioned research by Abrams *et al* (2005), it is noted that, "the more salient and meaningful a social categorization becomes, the more group members and the self will be depersonalized." Further to this point is the idea that individuals might choose to act in differently when they perceive themselves as part of a group. If a child perceives another as simply a member of an outgroup and not as an individual, they will most likely feel less of a social stigma about not exhibiting prosocial behaviours. Particularly among children who have not entered the concrete operational stage of development, there might be lower levels of prosocial behaviour exhibited when the difference between ingroup and outgroup members is emphasized. As will be discussed in the following section, the specific group categorizations that might be highly salient to preadolescents vary greatly by age and socio-cognitive development.

Salient social group categories

A critical consideration in the design of any research on preadolescents is how their perspectives and experiences might differ from those of adults. While a study on preadolescents might be examining similar topics as previous research conducted on adults, the necessary accommodations must be made in order for the study to have relevance to children. The foremost accommodation made in the present research was the various social groups used in each of the studies and their salience to the participants. It was paramount that the group categorizations selected were particularly meaningful to children in this age range. Similar studies on adults might utilize occupation, social status, or religion as salient social groups; however, the limited experience and socio-

cognitive abilities of young children precludes the use of complex categorizations. Likewise, the aforementioned categories would lack salience to nearly all of the children in the selected age range. Additionally, one must consider that the categories selected will not have a uniform level of salience to children of various ages. Due to their rather basic socio-cognitive abilities, 5 and 6-year-olds would most likely focus on rather simplistic social categorizations. As these abilities are gradually enhanced over the following few years, the social groups which are particularly salient to them change as well. Thus, it was necessary to utilize social categorizations that would have some degree of salience to children throughout the age range in the interest of design uniformity as well as examining the effect of further socio-cognitive acquisitions. Given these considerations, the social categorizations selected for the present studies were gender, age, race, nationality, school affiliation, and minimal groups. The following sections outline the expected outcomes and reasons for selection of each of these social categorizations.

Gender. The most obvious social categorization to dominate a child's social identity would be gender as it is typically the first method of individual differentiation that children acquire. Research by Banaji and Prentice (1994) has indicated that "gender is the most fundamental" social categorization to preadolescent children. This result is to be expected as many children find themselves inundated with environmental gender cues from birth. These gender cues have also been found in parent/infant interactions in which the parents encourage exploratory behaviour with their sons while quietly constraining their daughters (Lewis, 1972). During infancy children tend not only to choose gender specific toys, but also have a predisposition to engage in gender specific play. From a

very early age, children tend to define and categorize themselves and others according to gender. Prior research has indicated that from around 2 to 3-years old children can categorically distinguish by gender, identify themselves as male or female, and become distressed when assigned to the wrong gender by an adult (Bussey, 1986; Money & Ehrhardt, 1972). Before even reaching preschool age, most children have been exposed to several years of gender stereotyping as well as environmental and behaviour cues. Several studies have shown that children are already showing ingroup favouritism based on gender by 3 to 4-years-old (Aboud, 1988; Nesdale, 2001; Powlishta, Serbin, Doyle, & White, 1994). Further research on gender identity in preschool children by Adler, Kless, and Adler (1992) characterized gender salience as creating "segregated sexual cultures." Maccoby and colleagues (Maccoby, 1988; Maccoby & Jacklin, 1987) observed that this segregation has been shown to continue through primary school with boys and girls avoiding voluntary contact with and purposely engaging in derogation of the opposite sex. Furthermore, Aboud and colleagues (Aboud, 1988; Aboud & Doyle, 1996) found that around 6 to 7 years of age, ingroup and outgroup preference and differentiation is based on perceived physical attributes like body size, skin tone, and hair colour. Based on these findings, one can assume that children at this age would continue to utilize a perceived physical trait like gender as a means of categorization. Additionally, one could infer that due to the high social salience of gender during their first five years, children would have some difficulty in discarding it as a means of categorization. In contrast, given that children typically acquire the capacity for multiple categorization around the age of 7, gender might tend to gradually decline in salience as a dominant social category. As their socio-cognitive skills continue to develop, children should begin to

attenuate to more personal characteristics as a means of individual differentiation rather than the superficiality of gender. Thus, it was predicted in the present research that children at the higher end of the age range would show less intergroup differentiation and favouritism based on gender than the younger children. Although prior research by Vaughan, Tajfel, and Williams (1981) has shown that children around 9 and 10-years-old still show ingroup preference based on gender, it should be significantly lower than that expressed by 5 and 6-year-olds. It is among the older participants that the present research predicts that more complex categories will become more salient to their social identities.

Race and Ethnicity. A popular topic amongst developmental psychologists as of late has been the development of ethnic attitudes and prejudice in children (see Aboud, 1988; Milner, 1996; Nesdale, Maass, Griffiths, & Durkin, 2003). Unfortunately, most of the research involves attitudes towards ethnicities that frequently include some sort of differentiating physical characteristic such as skin tone or facial features. While these studies successfully examined what was intended, for the purposes of the present research it was necessary to differentiate between race and nationality. In the current studies, nationality categorizations did not include any outgroups which might be distinguished by their physical attributes. In doing so it could be insured that the participants' judgements were based solely on a perception of the nationality and not due to a superficial physical feature. As mentioned above, at around 3 to 4-years-old children can start to show categorical differentiation based on ethnicity. Further research has indicated that until around the age of 7, children will exhibit ingroup favouritism and outgroup

derogation based on ethnicity (Bigler & Liben, 1993; Doyle & Aboud, 1995). Although some researchers contend that ethnic prejudice is due to the influence of parents and peers, others argue that these attitudes are learned through socialization, like conversational etiquette and cooperating (Allport, 1954; Rosenfield & Stephan, 1981). Corroborating this assertion, research by Doyle and colleagues (Doyle & Aboud, 1995; Doyle, Beaudet, & Aboud, 1988) has found that levels of ethnic prejudice are reduced as children acquire more advanced socio-cognitive abilities. Children in these studies showed an increase in the exhibition of ethnic prejudice until the age of 6 or 7 when the evidence suggests a considerable decline in the use of ethnicity as a salient social categorization. These findings indicate that just as children enter the concrete operational stage of development and acquire the capacity for multiple categorization, they no longer focus simply on single social attributes.

Nationality. There is currently a considerable amount of research being conducted investigating the development of ethnic and prejudicial attitudes in children (see Doyle, Beaudet, & Aboud, 1988; Milner, 1996; Nesdale *et al,* 2003). Unfortunately, much of the research in this area involves evaluating ethnic attitudes towards a group that is distinguishable by physical attributes such as skin tone or facial structure. By contrast, nationality is a social categorization that often does not include any physical distinctions and is based largely on preconceptions and personal experiences. For this reason, nationality was utilized as a higher-level social categorization in the present research. Furthermore, as social judgements based on both race and nationality were evaluated in the present research, it will be possible to calculate the importance of physical

differentiation on these judgements. Clearly, the age and level of socio-cognitive development of the participants should have a significant impact on their use of nationality as a social category. Following the acquisition of the capacity for multiple categorization, children should show greater willingness to judge and categorize themselves and others by nationality. Prior research (see Jahoda, 1963, 1964) has shown that at 5 and 6-years-old, children have very limited knowledge of their own country despite being aware of it; by contrast, other studies (Axia & Bremner, 1992; Barrett, 1996) indicated that by 8 to 10-years-old, children have an improved perception of the geography of their own and other European countries. Furthermore, when asked to evaluate their own and other countries, children exhibited a definite preference for their own country that increased significantly with age (Johnson, Middleton, & Tajfel, 1970; Middleton, Tajfel, & Johnson, 1970). Of critical importance when designing a study with nationality as a means of social categorization and judgement, is the outgroup nationality to be used. This is particularly relevant, when the research involves children who might have very limited experience with other nationalities. Following prior research, a country with a history of opposition to the ingroup nationality was selected. Research by Barrett, Wilson, and Lyons (2003) observed that national groups that were traditional enemies of the participants' ingroup were given less positive trait attributions than groups that weren't. In this particular study, the participants were English children and the less positively rated national group were Germans, an historical foe of the English. This corroborated earlier research by Barrett and Short (1992), which indicated that children from 5 to 10-years-old showed a preference to other European countries over both Germany and Italy. Clearly, these young English children have been exposed to some

degree of anti-German sentiments during their relatively short social experience. Also, it is quite likely that most English primary school children would have had limited personal contact with German individuals. Finally, German is a national group that does not typically include physical distinctions from the English. Based on these reasons, Germany was selected as the most suitable outgroup nationality for the purposes of the present research.

School Affiliation and Minimal Groups. While the present research endeavoured to explore the relationship between permanent group membership and prosocial behaviour, analyzing the impact of minimal and transitory groups in this interaction was also a central aim. Prior research (see Bigler, Brown, & Markel, 2001; Nesdale & Flesser, 2001; Vaughan *et al*, 1981) has shown that children around the age of 5 exhibit ingroup favouritism in minimal or transitory groups. School affiliation is a fairly unique group categorization for children in that it is not permanent as is the case with race, gender and nationality. Likewise, it is a form of social categorization with established and recognizable features, which would not be found in a minimal group situation. Thus, it falls into a bit of a grey area of social categorization as it is only quasi-permanent and will, inevitably, change. However, many of the actions involved with school attendance unintentionally increase the salience of the school affiliation. In their work with minimal groups, Bigler, Jones, and Lobliner (1997) increased the salience of the groups by having the children wear shirts of the group's colour as well as verbally emphasizing group affiliation. Their results showed that children gave more positive evaluations of the ingroup and were more likely to allocate benefits to the ingroup over the outgroup, when

compared to children in the control condition. The findings of the study were consistent throughout the age range (6 to 11 years old) as well as for both genders, which is consistent with Social Identity Theory. In line with these results, it could be expected that wearing school uniforms and being addressed specifically as students of a particular school (in school assemblies, for example) would increase the salience of school affiliation and cause similar behavioural outcomes to the work of Bigler and colleagues. Furthermore, children are encouraged to have a sense of pride and ownership in their school. The ability to utilize school affiliation as a form of social categorization and basis for social judgement is representative of further socio-cognitive development as well as the capacity for multiple categorization. Previously, children have been focusing on superficial categories such as gender and race as part of their social decision making. School affiliation, however, transcends these lower-level categories and requires that children look past the qualities they previously viewed as paramount. Moreover, it is most likely the first form of social categorization they will utilize that does not involve a simple dichotomy (boy or girl, black or white, etc.). Whilst examining the effect of the school environment on social and cognitive development, Buchanan-Barrow (2005) observed that primary schools act as a "small-scale society" and have a "real physical presence" to pupils. She goes on to state that the students feel a "sense of belonging to a community," which is enhanced by geographical location and school uniforms as well as competitions between schools. While the present research does hypothesize similar results to prior minimal groups studies for school affiliation (see Bigler *et al*, 2001; Nesdale & Flesser, 2001; Vaughan *et al*, 1981), some variations are expected. As the use of school affiliation in social judgements involves higher-level socio-cognitive abilities, it

is predicted that younger participants will show differing results to those of the older age groups. Given that they are unlikely to use school affiliation as a social categorization, the younger participants will probably show lower levels of social identification with their school as well as prosocial behaviour that is unaffected by school affiliation. However, this is in sharp contrast to children of the 7 to 8 year old age group who are predicted to exhibit high levels of school identification and reduced prosocial behaviour towards outgroup schools.

For obvious reasons, it was not possible to examine the impact of every salient social group on children's prosocial behaviour in the present research. However, the social categorizations used were selected for a variety of practical and theoretical reasons. As the present research examines the aforementioned relationship over a 5-year age range, it was deemed necessary that the social categories chosen represented a socio-cognitive hierarchy with varying levels of salience. Being able to observe changes in prosocial behaviour that correspond to socio-cognitive development and the appropriate social category would only strengthen the argument for the hypothesized role of social identity. For the Year 1 children, who possess only a basic schema of social categorization, gender was the most obvious selection for a highly salient aspect of their social identity. As previously mentioned, by age 5 children have been utilizing gender as their primary form of social differentiation for the majority of their lives. Likewise, race is another physical attribute which young children use from a very early age when making social decisions. Depending on the degree of exposure to a multi-race environment, some children might be inclined to rely on race equally or more than gender as a social categorization. However, due to their limited socio-cognitive abilities, most of

the children at that age will lack the ability to categorize individuals in ways beyond physical appearance. Year 3 represents a transitional time for children in that they should continue to utilize gender a method of social categorization to some level, but will also start to use more complex categories of differentiation (Aboud, 1988, Bigler & Liben, 1993). Having reached the concrete operational stage of development, most of the children in Year 3 will be capable of multiple categorization. It is during this time when they will begin to rely on multi-faceted categories for social decision-making such as ethnicity, nationality, and school affiliation. Moreover, in accordance with Socio-Cognitive Theory, children in Year 3 will be the considerably more reliant on social identity and group membership when making decisions than either of the two years examined. Finally, by Year 5 most of the children should show complete mastery of multiple categorization and the ability to consider group categories without physical or superficial attributes. In contrast, the use of minimal groups in the present research was included to show that social identity and group membership impact prosocial behaviour regardless of age. It is hypothesized that the very creation of groups, however transitory, will be sufficient to affect children's prosocial judgements. Further details of the specific hypotheses guiding this research will be discussed in the following chapter.

CHAPTER FOUR

Hypotheses

As discussed in the previous chapters, a number of theoretical perspectives and prior research were considered in the formation of the present hypotheses. In an effort to connect two distinct areas of social psychology research, the positions and principles of social identity and prosocial research were examined. Additionally, it was necessary to account for the variety of factors which might play a role in this relationship. Aside from the age and gender of the participants, components critical to these processes such as empathy and socio-cognitive development were also examined. The principal hypothesis of this research was that social identity would have a significant effect on children's expression or withholding of prosocial behaviour. However, as the following hypotheses indicate, the nature and strength of this effect can vary greatly by situation as well as target and behaviour type. The various aspects and factors of the primary hypothesis will be divided and detailed in terms of each of the studies in the following section.

The initial study was designed to simply establish the existence of a relationship between social identity and prosocial behaviour using a minimal group context. This study was designed with the contention that social identity processes will affect children's prosocial behaviour regardless of the salience or permanence of the group. Likewise, it was hypothesized that it was not necessary to have any intergroup contact or prior knowledge of the outgroup for this relationship to be observed. There was also the expectation that a competitive context would enhance the salience of group membership and, thus, the effect on prosocial behaviour would be even more pronounced.

Furthermore, males were expected to indicate higher levels of competitiveness in a competitive scenario than their female counterparts and, thus, would show a more pronounced effect of social identity. Finally, participants in Year 3 in the competitive condition were expected to show the largest effect of social identity on prosocial behaviour. By establishing the existence of the effect of social identity on prosocial behaviour even in the most basic group contexts, the initial study was to serve as the foundation on which further research was designed.

The second study was designed to examine the effect of social identity on prosocial behaviour in the context of highly-salient, established groups. Thus, by conducting the research shortly after the Football World Cup and focusing on nationality, we were able to explore the potential effects of a group membership at the height of its potential salience. Additionally, the typicality of the target was explored as a possible factor in children's decision to express or withhold prosocial behaviour. It was hypothesized that as social identification with the ingroup (England) increased, children's willingness to exhibit prosocial behaviour towards the outgroup (Germany) would diminish. Likewise, the extent to which the participants liked outgroup members would decrease with higher levels of ingroup identification. Moreover, based on the Black Sheep Effect (Marques & Yzerbyt, 1988) the hierarchy of target preference and prosocial behaviour was established as ingroup normative, outgroup deviant, outgroup normative, and ingroup deviant. Therefore, participants were expected to rate the ingroup normative target most positively and be more willing to exhibit prosocial behaviour towards them than the other targets. Once again, age and gender effects were expected. As males typically have a greater affinity for football than females do, the relationship should be

more prominent in the results for males. Also, based on socio-cognitive theory, the Year 3 participants should rely on social identity in their prosocial decision-making considerably more than either their younger or older counterparts.

The third study examined the relationship between social identity and prosocial behaviour as a potential reciprocal process. The two previous studies treated social identity as though it had a strictly causal impact on children's judgements of prosocial behaviour. However, this study explores the possibility that changes in prosocial behaviour might directly impact children's social identity processes. In a one-year longitudinal study, participants in the experimental condition were involved in a primary school intervention aimed at increasing their prosocial behaviour towards both ingroup and outgroup members. The hypotheses for this study were simply the reverse of that of the previous studies. It was predicted that successful encouragement of prosocial behaviour towards outgroup members would lead to an increase in outgroup favouritism and reduced ingroup bias. Therefore, not only should their prosocial behaviour be increased in comparison to control schools, their social identity should be positively impacted, despite the fact that the intervention did not attempt to manipulate these processes in any way. A further examination of this directional relationship included a final testing session several months after the intervention ended. For this testing session, it was hypothesized that there would be a slight reduction in prosocial behaviour that would be reflected in a negative change in social identity processes. Based on previous research on gender roles and prosocial judgements, female participants were expected to respond somewhat more positively to the intervention (see Skoe, Cumberland, Eisenberg, Hansen, & Perry, 2002). The Year 3 participants, for whom social identity might be the

most salient, should show a significantly higher response to the intervention. This primary purpose of this study was specifically to examine the potential for mutual impact between social identity and prosocial behaviour.

The final study further analyzes the specific factors that impact this relationship by identifying the scope and nature of their individual effects. Specifically, the last study examined group awareness, empathy, and socio-cognitive development as salient factors in the relationship between social identity and prosocial behaviour. In terms of group awareness, it was predicted that higher levels would lead to reduced ingroup bias and elevated prosocial behaviour. In line with the hypothesis of the previous study, the Year 3 participants were expected to show the highest level of group awareness, which should have a significant effect on their prosocial behaviour. Higher levels of empathy were also expected to reduce intergroup bias and promote prosocial behaviour. It was anticipated that low levels of empathy would be found in Year 1, but steadily increase with age. Additionally, females were expected to show higher levels of empathy than their male counterparts at each age level (Eisenberg & Lennon, 1983). Finally, socio-cognitive development was expected to follow a similar age pattern as empathy. Likewise, it should also correspond to reduced ingroup bias and increased prosocial behaviour. The results of this study were expected to better identify the individual components which affect and define the relationship between social identity and prosocial behaviour.

The following research was designed to validate, measure, and define the relationship between social identity and prosocial behaviour in primary school children. Chapter Five establishes the existence of this relationship, even under the most basic group conditions. Chapter Six explores the importance of group salience as well as target

typicality on prosocial decision-making. Chapter Seven examines the possibility that the relationship in question can indeed be bi-directional. The penultimate chapter endeavoured to better identify several cognitive and emotional components which have varying effects on the relationship. Within each chapter, the results are analyzed in the full context of the research and discussed in terms of the primary hypothesis.

CHAPTER FIVE

The Effect of Social Identification on Prosocial Behaviours in a Minimal Groups Situation

"Be courteous to all, but intimate with few, and let those few be well tried before you give them your confidence."

-George Washington

The first step in defining the relationship between social identity and prosocial behaviour is to establish the effect of even the most basic and transitional groups. Prior research has shown the impact of minimal groups on a variety of processes including intergroup bias and outgroup derogation (see Bigler et al., 2001; Nesdale & Flesser, 2001). The present study examines the effect of minimal groups on children's prosocial behaviour in both competitive and neutral scenarios. The impact of the group's status (either high or low) on prosocial behaviour was also measured. 151 primary school children from Years 1, 3, and 5 from schools in Kent were individually tested. It was hypothesized that the creation of minimal groups would lead to a reduction of prosocial behaviour in both the competitive and neutral conditions. Additionally, it was expected that there would be a significant difference in prosocial behaviour between the high- and low-status groups. As predicted, results indicated a significant effect of minimal groups on prosocial behaviour in both conditions. However, there was not a significant difference between the high- and low-status conditions. The implications of these results on our hypotheses and further research are discussed.

Introduction

Prior to developing any further argument for the importance of a relationship between social identity and prosocial behaviour in children, it is paramount to first establish the existence of the relationship. One would expect to observe a whole host of group processes in a highly salient social group situation, but would these processes exist when the group itself is new or transitional? Although it is predicted that social identity will have a significant impact on prosocial behaviour in highly salient groups, the true test of the importance of this relationship is found when the group membership per se can be demonstrated as being relevant. Of particular concern in this study is whether or not children have the socio-cognitive ability to comprehend and make prosociality judgements based on new or temporary groups during early childhood. The possibility that these judgements are only present during competitive scenarios involving distinct teams is also addressed. The present study utilizes the minimal group paradigm (see Billig & Tajfel, 1973; Tajfel & Billig, 1974) to examine the potential effect that group membership has on prosocial behaviour.

While the impact of minimal groups on a variety of group processes and behaviours has been thoroughly researched (e.g. Brewer, 1979; Gaertner & Insko, 2000; Tajfel *et al.*, 1971), very little attention has been paid to how minimal groups affect children's perspective and behaviours. Early research by Tajfel, Billig, and colleagues (1971, 1973, 1974) indicated that social categorization alone consistently leads to intergroup discrimination. In these studies, the creation of new and distinct groups caused participants to allocate more positive resources to anonymous ingroup than outgroup members. In 1979, Tajfel and Turner established that, "the mere awareness of the

presence of an outgroup is sufficient to provide intergroup competitive or discriminatory response on the part of the ingroup." However, these studies are confounded, as pointed out by other researchers (e.g. Rabbie & Lodewijkx, 1994; Rabbie, Schot, & Visser, 1989), by the expectation of reciprocity. It was argued that the intergroup discrimination displayed by participants was due mostly to utilitarian motivations of individual and ingroup benefits. In the present study, this confound is addressed by examining participants' willingness to exhibit prosocial behaviour towards an anonymous outgroup member. Measurement of behaviour towards an outgroup rather than ingroup member should greatly reduce the expectation of reciprocity or utilitarian motivations of potential benefit.

The above contention by Tajfel and Turner (1979) focuses not on the specific qualities of either group but on the impact of the awareness of an outgroup and, thus, the presence of social categorization. In the context of the present study, the aforementioned stage perspective of socio-cognitive development (Aboud, 1988; Bigler & Liben, 1993) indicates that by primary school age, most children will have been utilizing social categorization for quite some time. Based on these previous findings, the present research should observe intergroup discrimination based on social categorization in all three age groups. The foremost challenge to this study was to create groups that the children would immediately assimilate as part of their social identity. Without any prior history or pre-existing categorical definitions, it was critical to establish the salience of the minimal groups. In their early work with the minimal group paradigm, Oakes and Turner (1980) used a questionnaire to increase the salience of the groups. Participants were asked to complete a questionnaire regarding their preference between two artists which was

presented as the basis for their group assignments, despite the fact that they were actually randomly assigned. Nevertheless, by completing the questionnaire the participants were more likely to assimilate their minimal group membership as part of their social identity. Moreover, Hertel and Kerr (2001) used a "test of cognitive representation styles" in order to increase the salience of groups which the participants believed were divided by cognitive abilities. Despite the fact that it highly unlikely that any of the participants would previously have included this group membership as part of their social identity, the test increased the likelihood and level of assimilation. In the present study, participants were informed that they were to be involved in either an art contest or exhibition and would be divided into groups on this basis. As a means of increasing the salience of these groups, each participant was asked to complete a drawing of anything they chose. While the task would not directly impact their judgements about prosocial behaviour, they should act as a way of encouraging the assimilation of the group membership as part of their social identities. This task was a replication of a prior study by Nesdale and Flesser (2001), which examined social identity and children's group attitudes. As with the Nesdale and Flesser study, the present research uses the drawing task to both increase the group membership salience as well as establish the possibility for group status differentiation.

It was of great importance in the present study that a strict minimal group paradigm was constructed. Tajfel *et al.* (1971) outlined the qualities a successful minimal group paradigm must have, including no previous history of interaction between the groups. The present research complies with this requirement as the groups involved are both fictional, created strictly for the study, and do not involve any prior history. This

study also does not allow any social interaction within or between groups, as is required by Tajfel and colleagues' guidelines. Finally, it is recommended that individuals' choices do not have any direct link their personal self-interest. As previously mentioned, the present study measures prosocial behaviour towards an outgroup rather than an ingroup member. By reducing the potential for reciprocity or ingroup benefit, the level of personal self-interest is entirely removed from the participant's decisions. Likewise, it was important that the participants knew as little about the outgroup as possible. Prior studies by Bigler and colleagues (e.g. Bigler *et al.*, 2001; Bigler *et al.*, 1997) have utilized t-shirt colour as a means of minimal group differentiation, but this method allows the participants to identify members of the outgroup. Moreover, the possibility for intergroup contact would counteract the purpose of the minimal group context. Thus, an alternate method of intergroup differentiation was devised for the present research.

In their research on valuable resource allocation with the minimal group paradigm, Gagnon and Bourhis (1996) measured the participants' level of identification with the ingroup after completion of the task. In their study, university students were divided in to minimal groups and asked to allocate five additional percentage points to the marks of ingroup or outgroup members. The participants were distributing a valuable, limited resource and were informed that they would not be able to allocate the points to themselves, thus, eliminating the link between their decision and personal self-interest. However, similar to the method utilized by Rabbie *et al.* (1989), participants' identification with the ingroup was not measured until after the allocation of resources. We viewed this as a design flaw in that the allocation task itself might cause the polarization of participants' attitudes towards both groups. As a means of avoiding this

confound, the present study measures participants' ingroup identities prior to any assessment of intergroup discrimination. It was believed that this would provide a more accurate representation of the level of identity with the minimal groups as well as the direct impact on prosocial behaviour towards an outgroup member.

While there has been limited research utilizing the minimal group paradigm with children, these few studies have produced very interesting results. For instance, Vaughan *et al.* (1981) used a minimal group context to test the consistency of children's positive resource allocation. They found that participants in a 'weak' intergroup context (i.e. minimal group) were just as likely to maximize the difference in resource allocation for ingroup over outgroup members as their 'strong' intergroup counterparts. In line with Social Identity Theory, these results indicate that children have a desire to maximize their ingroup's positive distinctiveness, even in a minimal group context. Thus, it would be logical to conclude that if children were willing to discriminate in their positive resource allocation, they will be likely to discriminate in their exhibition of prosocial behaviour within minimal groups. Additionally, prior research by Abrams, Rutland, Ferrell, and Pelletier (2008) documented the capacity of the minimal group context to influence the behaviour and judgments of children during preadolescence. Abrams and colleagues found that primary school children were able to make complex moral and group-based judgements within a minimal group context. Moreover, the participants were able to make judgements of target typicality based on loyalty to their minimal group. The results are quite encouraging in that they further confirm that the group processes relevant to various social judgements are observable in children even under the most contrived group situation. Based on these studies, it is predicted that the results of the present minimal

group study will be similar to those involving pre-existing and highly salient group categorizations.

As previously discussed, social identity theory (see Tajfel & Turner, 1979) posits that the internalization of group membership as a social identity is responsible for intergroup discrimination. Once individuals identify themselves as group members, intergroup discrimination is a way of creating positive distinction from the outgroup and its members. Based on this contention, the present study hypothesizes that the creation of simple, minimal groups will be sufficient to reduce the level of prosocial behaviour shown towards an outgroup member. The context of the group should also significantly affect the exhibition of prosocial behaviour, particularly in a competition. When working with summer camp groups organized into minimal groups, Sherif (1966) found that the presence of a competition increased intergroup bias. Additionally, prior research has indicated that children can be more willing to exhibit intergroup discrimination with positive attributes (see Bigler, Jones, & Lobliner, 1997; Bennett, Lyons, Sani & Barrett, 1998). This 'positive-negative asymmetry effect' described by Mummendey and Otten (1998) was observed in children 6 years old and older, but not children 3 to 5 years old (Rutland, Cameron, Bennett, & Ferrell, 2005). In the context of the present research, participants are not asked to exhibit negative attributes (i.e. punishment), but are, instead, expected to express a reduction in positive behaviour as a result of identifying with their minimal group. Thus, it is expected that a competitive scenario, in which the participants are assigned to teams, will further reduce their expression of prosocial behaviour towards an outgroup member.

Likewise, there should be a significant effect of group status on prosocial behaviour (see Bigler, Brown, & Markell, 2001; Nesdale, Durkin, Maass, & Griffiths, 2004; Otten, Mummendey, & Blanz, 1996). While prior research has produced varying results dependent on group size, salience, and stimuli, they consistently identify the effect of status. For instance, a high status group might be motivated to exhibit prosocial behaviour towards a low status group based on a concept of fairness. Conversely, the same high status group might choose to withhold prosocial behaviour from the outgroup due to a feeling of superiority. A similar variety of motivations and outcomes could be predicted for prosocial behaviour exhibited by low status groups. Thus, while a significant effect of group status is anticipated, the impact of the other variables involved makes it difficult to accurately predict the direction of this effect. Finally, it is hypothesized that there will be no significant effect of gender within the neutral group condition. However, as male children have been shown to be more competitive than females (see Knight & Kagan, 1977), a significant effect of gender is expected in the competitive condition.

Method

Participants

One hundred and fifty one (72 males, 79 females) children from two Church of England primary schools in Kent voluntarily participated in the study. The participants were randomly selected from Years 1, 3, and 5. The mean age and standard deviation for each year was: Year 1 ($M = 5.32$, $SD = .471$), Year 3 ($M = 7.55$, $SD = .503$), and Year 5

(M = 9.49, SD = .505). Participants at both schools were predominantly born in the United Kingdom and were of Anglo-European ancestry.

Design

The study used a 3 (group type) x 2 (order) between-subjects design with four dependent variables. Participants were randomly assigned to three different group types: high-status competitive (N = 59), low-status competitive (N = 57), and neutral (N = 35). In the both competitive conditions, participants were told that there was an art contest and that they had been assigned to one of the teams. In the high-status condition, participants were told that their team was winning the competition and the low-status condition had the participant's team losing. By contrast, in the neutral condition, participants were told that they had been put in a group and that some children had been put in another group. However, this condition did not involve a competition. The purpose of these three conditions was not only to establish the importance of minimal groups on prosocial behaviour, but to test that it was not simply the presence of a competition that was responsible for these behavioural changes. Additionally, a second independent variable, order, was included in the design. As participants were asked about their prosocial tendencies twice in this study, it was critical that we demonstrate that changes in prosocial behaviour were not the result of repetition. Thus, one order condition involved asking the participants about their general prosocial behaviour followed by question about how they would behave towards an outgroup member while the second condition simply reversed this order. There were five dependent variables in this study: general prosocial behaviour, ingroup favouritism, ingroup bias, competitiveness and outgroup

prosocial behaviour. While the order of these dependent variables differed by condition, all six conditions involved administration of the same measures.

Measures

Participants were first told that there was a big art contest or show (depending on condition) and that they would be assigned to one of the teams or groups (again, depending on condition). They were told of a fictional scenario involving neutral targets (children) set in the neutral environment of a park.

General prosocial behaviour. Participants were then asked three questions about their willingness to share with, help, and comfort a neutral target. Their response for each of these questions was recorded using a 5-point Likert scale which included text and pictures to ensure comprehension. Following this, participants were told that they have been assigned either to the green team or green group. In the competitive conditions, the participants are told that they will be drawing a picture that will be judged with the rest of their teams' in the art competition. Participants in the neutral condition are informed that they will be drawing a picture that will be exhibited with the rest of their groups in the art show. To increase the reality of each condition, participants then have two minutes to complete a drawing of anything they wish.

Ingroup/outgroup favouritism. Once their drawing is complete, participants are asked four questions about their own and the other team or group. These questions also utilized a 5-point Likert scale response method which involved only pictures (a series of faces from very sad to very happy). The questions included: *'How do you feel about being on the (ingroup) team?', 'How much do you like your team?', 'How much do you*

like the other team?', and '*How much would you like to be on the other team?'* Ingroup bias was calculated as the difference between the two means for ingroup and outgroup favouritism.

Competitiveness. The participants' level of competitiveness was measured using three different items. They included: '*Do you think your team will win?', 'How would you feel if your team won?'*, and *'How would you feel if the other team won and your team lost?'* A reversed score was calculated for the third item and a mean score of all three items was calculated.

Outgroup prosocial behaviour. Finally, participants were asked three questions to assess their willingness to share with, help, and comfort a member of the outgroup. As with the general prosocial behaviour measures, each item was scenario-based and involved helping, sharing with, or comforting an outgroup member. Additionally, the response method for these questions was identical to that used for the general prosocial behaviour questions. All three items were designed to involve a similar level of severity and urgency in the target's needs to eliminate any confounding effect these factors might cause.

The study involved two order conditions in which the order of the general and outgroup prosocial behaviour measures were reversed. The purpose of these conditions was to reduce the possibility of order effects in the children's prosocial responses. A full copy of the measures can be found in Appendix A.

Procedure

Prior to any testing, potential participants from Years 1, 3, and 5 were sent home with a letter of consent for their parent or carer. The letter included a description of the research as well as a debrief statement. Given the age and level of comprehension of most of the participants, the majority of the debrief information was given to the parents and carers rather than the children. Only children with parental consent and who expressed a desire to be involved were allowed to participate in the study. The eligible participants were removed from class at random and taken either to the library or an unused activity room where the questionnaire could be administered individually. The researcher would first explain the study in simple terms and then assess the participant's comprehension of the response methods. They were also informed that they may withdraw from the study and return to the classroom at any time and without any consequences. Prior to asking any questions, the participants were again asked if they would like to participate in the research. If the participant gave additional verbal consent, the researcher began administering the questionnaire in a structured interview format. In order to ensure consistency of administration and comprehension of the questionnaire, the researcher read all scripts, questions, and responses to the participant. The questionnaire was also placed in front of the participant so that they may follow along and utilize the Likert scale pictures for their responses. Once the testing was complete, participants were asked if they had any questions which were answered by the researcher. Finally, the participants were thanked for their involvement in the research and escorted back to class. Only one of the 152 participants involved in the study chose to withdraw during the testing. Their results were, therefore, withdrawn from the analysis in accordance to their wishes.

Results

The primary hypothesis of the present study was that the creation of minimal groups would decrease prosocial behaviour towards an outgroup member compared to general prosocial behaviour, regardless of the presence of a competition. This was confirmed by the results of an ANOVA on outgroup prosocial behaviour, which indicated that there was only a marginally significant main effect for the high (M = 3.59, SD = 1.19), low (M = 3.46, SD = 1.04), or neutral (M = 4.01, SD = .95) conditions ($F(2,148) = 2.88$, $p = .059$, partial $eta^2 = .04$). Further confirmation of this hypothesis was found in the paired t-test results comparing general and outgroup prosocial behaviour for each of the conditions. Prosocial behaviour was significantly reduced by the creation of a team/group in the high-status ($t(58) = 5.21$, $p < .001$), low status ($t(56) = 6.83$, $p < .001$), and neutral ($t(34) = 2.37$, $p < .05$) conditions. As previously mentioned, within each condition there were two different orders of question presentation to eliminate any primacy or recency effects in their prosocial behaviour responses. Additional ANOVAs did not indicate any significant main effect of order on the general and outgroup prosocial behaviour questions. Likewise, there were no significant interaction effects between the team/group and order conditions; thus indicating that the participants' judgements of prosocial behaviour were not significantly impacted by repetition or primacy effects. These results are particularly interesting in that they show how quickly young children can adapt and abandon group membership as a means of making prosocial judgements.

This ability to determine the relevance of social identity in social decision-making will be discussed further.

General prosocial behaviour

Despite the consistency of judgements by age and gender, an unexpected result was that the three prosocial behaviours did not all significantly correlate with each other, as can be seen in Table 5.1.

Table 5.1: Correlations between types of general prosocial behaviour (Study 1)

	Sharing	Comforting	Helping
Sharing	-	.254, $p < .01$	.245, $p < .01$
Comforting		-	.066, $p = .42$
Helping			-

It was anticipated that participants would show considerable consistency within their judgements of general prosocial behaviour, which was not the case. As is seen in the Table, the correlation between helping and comforting behaviour was far from significant and, while they were significant, the correlations between the other behaviour types were lower than anticipated. Moreover, the inconsistency of the participants' responses were reflected in the relatively reliability of the general prosocial behaviour scale ($\alpha = .41$). Independent samples t-test indicated that there were no gender differences for any of the three behaviour types. As expected, a full ANOVA on the participants' general level of prosocial behaviour did not yield any main effects of the team/group condition. Additionally, there were no main or interaction effects of gender or age, indicating that participants' levels of prosocial behaviour were fairly consistent throughout

preadolescence. General prosocial behaviour was significantly correlated with ingroup favouritism ($r = .31, p < .001$). As will be discussed later, this result might indicate that children who tend to be more prosocial are predisposed to group membership as a means of social identification. While this was not critical to the hypotheses of the present study, the lack of gender effects will be discussed in following chapters. Finally, there were no significant main effects or interaction effects for gender, age, or year in school on general prosocial behaviour.

Ingroup favouritism

As mentioned above, the participant's level of ingroup favouritism was measured prior to informing the participants of the team's status, as appropriate by condition. Unfortunately, an ANOVA did not yield a significant main effect for team or a group membership on ingroup favouritism. This would indicate that it is not the competition that drives ingroup favouritism, but rather the creation of and membership in groups. However, these results are somewhat contradicted by the three item competitiveness scale included in this study. A one-sample t-test indicated that the mean ingroup favouritism was significantly higher than the neutral point ($t(150) = 24.10, p < .001$), regardless of condition. It was found that competitiveness was significantly correlated with ingroup favouritism ($r = .20, p < .05$). As would be expected, there was a significant main effect of team/group membership on competitiveness ($F(1,149) = 15.43, p < .001$, partial $eta^2 = .09$). Thus, it can be concluded that while group membership contributes to ingroup favouritism, it can be significantly increased by a competitive scenario.

Ingroup bias

Ingroup bias was predicted to be higher in the competitive conditions than in the neutral. An ANOVA confirmed that there was a significant effect of condition on ingroup bias ($F(1,149) = 6.67$, $p < .05$, partial $eta^2 = .04$), with those in the team membership conditions showing much higher levels of ingroup bias. Table 5.2 shows the significant difference between ingroup and outgroup favouritism for each condition.

Table 5.2: Means, standard deviations, and *t*-test scores for ingroup and outgroup bias by condition (Study 1)

Condition	Ingroup Favouritism	Outgroup Favouritism	*t*
Neutral	4.14 (.64)	3.51 (.74)	4.17** (*df* = 34)
Low status	4.19 (.68)	3.20 (.86)	6.24** (*df* = 56)
High status	4.47 (.61)	3.06 (.97)	8.87** (*df* = 58)

*Note: ** indicates a significance of p< .001.*

An ANOVA also revealed that there was a significant main effect of gender ($F(1,145) = 3.96$, $p < .05$, partial $eta^2 = .03$), but not year in school on ingroup bias. As can be seen from Table 5.3, the mean ingroup bias scores for females are exactly as anticipated based on prior research (see Aboud, 1988; Bigler & Liben, 1993).

Table 5.3: Mean (and standard deviation) ingroup bias scores by gender and school year (Study 1)

	Year 1	Year 3	Year 5
Male	1.43 (1.37)	1.46 (.99)	.96 (.93)
Female	1.12 (1.67)	.85 (.96)	.67 (.65)

Note: The range for ingroup bias was -4 to 4.

The socio-cognitive theorists propose that ingroup bias decreases as children's social and cognitive capacities increase through primary school. As predicted by the socio-cognitive theory, the results show a continual decrease in ingroup bias for females across the age range. The results seem to indicate that males continue to exhibit more ingroup bias to a later age than their female counterparts. While the correlation between ingroup favouritism and competitiveness was significant, the relationship was not nearly as strong as that between ingroup bias and competitiveness ($r = .55, p < .001$). From these results, one would predict that competitive scenarios increase ingroup bias which should lead to reduced levels of prosocial behaviour towards the outgroup.

Competitiveness

Participants' level of competitiveness was measured as both a means of checking the effectiveness of the competition condition and to examine the specific impact of competition on prosocial behaviour. The three items used to examine competitiveness included whether the participant thought their team would win and how would they feel if their team or the other team won. An ANOVA confirmed the manipulation was effective and indicated a highly significant main effect of the group/team condition ($F(1,149) = 14.92, p < .001$, partial $eta^2 = .09$) on competitiveness. Children in the group conditions exhibited much higher levels of competitiveness (M = 2.42, SD = 1.57) than those in the neutral condition (M = 1.20, SD = 1.75). As participants were not informed of their group's status until after their competitiveness had been assessed, it was not necessary to examine the effect of status on competitiveness. Thus, all comparisons for competitiveness were made between the neutral and competition conditions.

A mediation analysis was conducted on the relationship between condition, competitiveness, and prosocial behaviour. The analysis indicated a significant relationship between participants' competitiveness and their willingness to exhibit prosocial behaviour towards an outgroup target ($\beta = -.35$, $t = -4.45$, $p < .001$), while the condition (competitive/neutral) no longer significantly predicted prosocial behaviour ($t = -.98$, *ns*, see Figure 5.1 below). This would indicate that the circumstances of the group interaction only impact prosocial behaviour when the individuals exhibit a necessary degree of competitiveness. The Sobel test of strength of the mediation was significant ($z = -3.09$, $p < .01$).

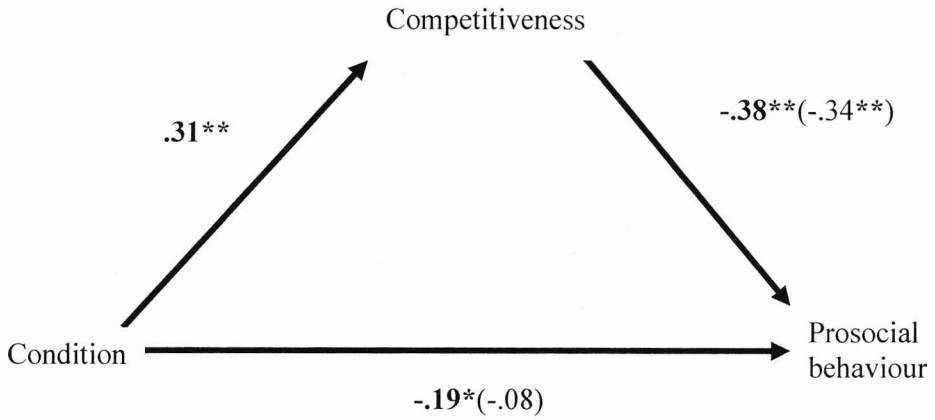


Figure 5.1: Mediation of the relationship between condition (competitive/neutral) and outgroup prosocial behaviour by the participant's level of competitiveness (Study 1)

(Note: * = p<.05; ** = p< .001. Figures are standardized regression coefficients. Figures indicated in parentheses represent Beta when the effect of the other predictor is accounted for.)

Contrary to the hypothesis, the results did not indicate a significant interaction effect between condition and gender. It was predicted that the male participants would exhibit significantly higher levels of competitiveness in the team conditions than their female counterparts. As can be seen in Table 5.4, while the males did have a higher mean

competitiveness than the females, the difference was not significant in either condition type.

Table 5.4: Mean (and standard deviation) competitiveness score by gender and condition type (Study 1)

	Male	Female
Neutral	1.43 (1.86)	.86 (1.56)
Competition	2.75 (1.35)	2.17 (1.69)

As the above table shows, the difference between condition types for both genders is highly significant. But, although the males show higher levels of competitiveness in both condition types, it is not a large enough difference for a significant interaction effect.

Outgroup prosocial behaviour

An ANOVA confirms the conclusion that prosocial behaviour towards outgroup members would be lower in a competitive scenario than a neutral scenario ($F(1,149) = 5.39, p < .05$, partial $eta^2 = .04$). However, a paired t-test indicated that levels of prosocial behaviour were significantly reduced in both the group ($t(34) = 2.37, p < .05$) and team ($t(115) = 8.46, p < .001$) conditions, when compared to general prosocial behaviour. It is easily concluded from the results of both of these tests that the reduction of prosocial behaviour in the competitive conditions was much more dramatic than that of the group. As mentioned above and can be seen in Table 5.5, the marginal significance of the main

effect of group/team status was due to the contrast in outgroup prosocial behaviour between the group and team conditions.

Table 5.5: Mean and standard deviation for outgroup prosocial behaviour scores by condition (Study 1)

	Mean	Standard Deviation
High status	3.59	1.19
Low status	3.46	1.04
Neutral	4.01	.95

Note: The range for outgroup prosocial behaviour was 1 to 5.

After establishing that the status of the team was less influential on prosocial behaviour than the presence of a competition, further analysis of the difference between groups and teams was conducted. When broken down by specific behaviour type, the only prosocial behaviour that showed a significant main effect for competition was helping ($F(1,149) = 4.79$, $p < .05$, partial $eta^2 = .03$). Additionally, a significant main effect of gender (males: $M = 3.04$, $SD = 1.54$; females: $M = 3.65$, $SD = 1.35$) could be found on only helping behaviour ($F(1,149) = 6.58$, $p < .05$, partial $eta^2 = .04$). The fact that these two factors impact only helping behaviour at a significant level would indicate the presence of a separate process which regulates the exhibition of this behaviour. The possible impact of empathy on helping behaviour will be discussed and examined in later chapters.

As was mentioned above, results for the three different general prosocial behaviour questions did not all significantly correlate. Moreover, those that were significant showed considerably weaker correlations than anticipated. By contrast, all

three outgroup prosocial behaviour items were significantly correlated at levels that were closer to what was expected. As Table 5.7 shows, all three behaviour types are highly correlated with each other with notably higher levels of significance compared to those of the general prosocial behaviour.

Table 5.6: Correlations between types of outgroup prosocial behaviour (Study 1)

	Sharing	Comforting	Helping
Sharing	-	.51, $p < .001$	.48, $p < .001$
Comforting		-	.45, $p < .001$
Helping			-

While the contrast in these results was not anticipated, they do provide welcome insight into how children make decisions regarding prosocial behaviour. As will be discussed further, it is possible that the increased group salience made the scenario seem much more real, which might have lead to higher consistency in their decisions for each behaviour type. This conclusion is corroborated by considerable difference in scale reliability between the general prosocial behaviour ($\alpha = .41$) and outgroup prosocial behaviour ($\alpha = .73$) measures. The differing results for outgroup helping behaviour (males: M = 3.04, *SD* = 1.54; females: M = 3.65, *SD* = 1.35) were also evident in the results of independent samples t-tests in which it was the only outgroup prosocial behaviour to significantly differ by gender ($t(149) = -2.57$, $p < .05$). This result is even more distinct in that there were no significant gender differences in any of the general prosocial behaviour types. While this study was not specifically concerned with gender effects, this post-hoc analysis has emphasized the necessity for further focus on helping behaviour.

The effectiveness of this manipulation is further confirmed by comparison of correlations between competitiveness and general as well as outgroup prosocial behaviour. As would be expected from the absence of competition in the general prosocial questions, competitiveness and general prosocial behaviour were not significantly correlated. Competitiveness, however, was significantly negatively correlated with outgroup prosocial behaviour ($r = -.38, p < .01$). Furthermore, as Table 5.4 indicates, there was a significant correlation for each of the behaviour types.

Table 5.7: Correlations between competitiveness and outgroup prosocial behaviour types (Study 1)

	Sharing	Helping	Comforting
Competitiveness	-.336, p < .001	-.304, p < .001	-.273, p < .01

These results would lead to the conclusion that it is not a competitive predisposition that is driving their prosocial decisions, but rather competitiveness in response to the presence of teams in the study.

Additional analysis of the behaviour specific results yielded further inconsistencies between group-based and general prosocial behaviour. There was a considerable degree of variation in the correlations for each of these behaviours between the conditions, as demonstrated by Table 5.8.

Table 5.8: Correlation between group-based and general prosocial behaviour by type of behaviour and condition (Study 1)

Condition	Sharing	Comforting	Helping
High	.31*	.39**	.256, ns
Low	.041, ns	.40**	.203, ns
Neutral	.45**	.013, ns	.243, ns

*Note: * indicates a significance of $p < .05$, ** indicates a significance of $p < .01$*

It is clear from the Table that group status does have some degree of varying effects on each of the prosocial behaviour types. However, contrary to our hypothesis, there was not a significant difference between the high and low status groups for any of the prosocial behaviour types. When considered with the results for the group/team condition, one could conclude that the mere existence of a competitive scenario has a much greater impact on prosocial behaviour than the group's status within the competition.

Discussion

The results clearly confirmed the hypothesis that the creation of minimal groups significantly reduced prosocial behaviour shown towards an outgroup member when compared to general prosocial behaviour. This confirms the present hypothesis that the social identity processes involved in the creation of minimal groups significantly impacts children's levels of prosocial behaviour. Additionally, these results emphasize the role of competition as a catalyst in the development and expression of these intergroup views and behaviours. While the creation of groups was sufficient for reducing prosocial behaviour, the formation of teams in a competitive scenario had an even more substantial impact. This position was further confirmed by results which indicated that all three behaviour types were significantly reduced as competitiveness increased. The following section discusses the results of this study in terms of prior research, hypotheses, and further examination of the relationship between social identity and prosocial behaviour.

As choosing to withhold prosocial behaviour from an outgroup member while exhibiting the same behaviour towards an ingroup member is clearly a form of intergroup discrimination, the findings of this study were consistent with those of Billig and Tajfel (1973, 1974). The results of the present study mirrored the unequal distribution of limited, positive resources to ingroup over outgroup members after the creation of basic, distinct groups found in early minimal group studies. However, the present study took this relationship further and examined the level of intergroup discrimination in prosocial judgements. While the aforementioned studies by Billig and Tajfel did establish the existence of intergroup discrimination in a minimal group context when positive resources are limited, the present study evaluates children's inclination to behave in a manner that it is not limited in any way. Should they have been disposed to exhibiting prosocial behaviour towards all targets, there was nothing limiting their potential to do so. Thus, the present study expands further on the extent to which the minimal group context and the social identity processes it promotes can affect prosocial judgements

The hypothesized effect of group status on prosocial behaviour was somewhat disconfirmed by the results. It was predicted that there would be a significant difference in the level of prosocial behaviour exhibited between children in the high or low status conditions. It was unclear what the motivation to behave in a prosocial manner might be for either team, but could have plausible reasoning. The high status team might feel pity on the low status team and would exhibit prosocial behaviour towards them out of the interest of fair play. Likewise, the low status team might feel that even though they will lose the competition, by exhibiting prosocial behaviour towards the outgroup they are identifying themselves as good sports. The results, however, did not indicate a significant

difference prosocial behaviour between the high and low status conditions. One might conclude that there was simply no effect of the groups' status in competition and that the children's prosocial judgement was based on an entirely different factor. Another perspective is that both conditions were affected by some sort of prosocial motivation similar to those previously mentioned. A further factor to consider is that the participants were informed of their group status by the experimenter, rather than becoming aware of it on their own. The fact that their status was unobservable might have limited its salience and, thus, might have limited its effect on prosocial behaviour. In order to more accurately examine the role of group status, the use of highly salient competitive scenarios is necessary. Additional research on this topic will need to examine if the status of pre-existing salient groups in a directly relevant competitive scenario can influence the exhibition or withholding of various prosocial behaviours. As will be discussed in subsequent chapters, the salience and importance of a competition can greatly alter its potential impact on children's social identity and prosocial behaviour.

The results of this study are also in complete agreement with the contentions made by Tajfel and Turner (1979) regarding the minimal group context. In their study, they observed an "intergroup competitive or discriminatory response" when participants were merely made aware of the existence of an outgroup. The results of the present study clearly support the second half of this assertion as a significant level of intergroup discrimination was found. Despite the argument that the awareness of minimal groups resulted in competitiveness, the researcher believed that the level of competitiveness would be minimal without the existence of a competition. Although the present study expected higher levels of competitiveness amongst the participants in the competition

conditions, the results contradicted this expectation. The findings indicated that all participants showed relatively high levels of competitiveness, but that there was a significant main effect of condition on competitiveness. Based on these findings and the assertions of Tajfel and Turner, further research on the effect of competitiveness on prosocial judgements is necessary. The significant negative correlations between competitiveness and prosocial behaviour towards an outgroup member found in this study would indicate the influential role of competition in the hypothesized relationship. However, further research of this relationship will need to examine the strength of this effect through manipulation of group identity salience.

The hypothesized effect of gender in the competitive conditions was also not significantly confirmed by the results. Although the males did score higher than the females in competitiveness for both group and team conditions, neither represented a significant difference for gender. Likewise, the level of competitiveness observed in the group condition was higher than anticipated for both genders. Contrary to the aforementioned contention by Tajfel and Turner (1979), the present study expected minimal competitiveness among participants in the neutral condition based on the lack of an acknowledged competition. What was not considered, though, in relation to this position was the fact that the group competitiveness is based on the desire for favourable intergroup differentiation. It would seem that the competitiveness found in the participants in the neutral condition was not based on a desire to beat the outgroup, but rather, their motivation to further their group's positive distinctiveness from the outgroup. This motivation would be in complete agreement with Social Identity Theory, which predicts this outcome if the participant's assigned minimal group has become a salient

addition to their social identity. Thus, the results would indicate that participants were able to almost immediately assimilate their minimal group into their social identity to such a degree that it would impact their prosocial judgement. Based on these findings, further research of this relationship can expect to produce even more substantial effects on prosocial behaviour, given an established group identity with a pre-existing high level of social salience.

As this was study was very direct and simplistic in its focus, there are a variety of limitations which might have affected the results. The foremost would be the manner in which the data for general and competitive prosocial behaviour were gathered. While the questions were counterbalanced through the use of different ordered conditions, this might not have entirely eliminated any primacy or repetition effects. Ideally the participants' level of general prosocial behaviour would have been assessed during a separate testing session. Additionally, the salience of their group or team membership might have been more strongly emphasized to better establish the existence of the groups. Further assertions of the existence of groups might have contributed to the assimilation of the group membership as part of the participants' social identity; thus, more accurately portraying the effect of the minimal group context on prosocial judgement.

There are several useful real-world implications for these findings, particularly in the school environment itself. Primary school teachers spend a great deal of time and energy increasing the salience of several different groups within the school. While some of the group reinforcement is intentional as in emphasizing the importance of their classroom group, other categories like gender are often reinforced by accident. When speaking to the class, many teachers will address their pupils as "Boys and girls." This

seemingly innocuous reference to gender might reinforce the difference between the children in the classroom. The results of this study indicate that the focus on these smaller groups might be the cause of intergroup discrimination and conflict. Although these group reinforcements are made with the best intentions, the data suggests that they could lead to increased competitiveness and reduced prosocial behaviour. The same conclusion could be drawn in several other contexts including corporations and society itself. By making a smaller group salient to an individual's social identity, their behaviour towards the outgroup could be greatly influenced. Thus, the data would agree with Tajfel and Turner (1979), in that the mere awareness of an outgroup is sufficient to alter the behaviour of individuals.

Based on these findings, there are many factors to consider in the further research of the relationship between prosocial behaviour and social identity. As this study established the existence of this relationship in a minimal group context, it is important to evaluate the effect in with highly salient groups. Likewise, the role of competitiveness will also require further examination through the manipulation and measurement of its importance to the participant. Finally, the present study examined changes in prosocial behaviour towards an unidentified outgroup member. However, it remains to be seen whether children will exhibit intergroup discrimination in the form of withheld prosocial behaviour towards an identifiable outgroup member. Further to this issue is whether or not children distinguish between different types of ingroup and outgroup members when making prosocial judgements. These specific issues are addressed in the subsequent chapter of the present research.

CHAPTER SIX

The Impact of Increased Group Salience on Judgements of Group Member Typicality and Prosocial Behaviour

"Some people think football is a matter of life and death. I don't like that attitude. I can assure them it is much more serious than that.'

Bill Shankly, *Sunday Times*
October 4, 1981.

Prior research has indicated that competitive situations increase group salience and can affect decision making towards ingroup and outgroup members. This study examines the effect that a recent football World Cup would have on children's judgements regarding prosocial behaviours as well as normative and deviant group members. The participants in this study were eighty-six primary school students between 5 and 10-years-old. Participants were asked to make judgements about two fictional targets from either England or Germany and evaluate how normative or deviant the targets were. Also, the participants made judgements about displaying or withholding prosocial behaviours towards the two targets and were asked the reasons for these judgements. The participants were asked to decide whether or not each target would be willing to engage in prosocial behaviour towards an ingroup or outgroup member as well. As predicted, participants rated an outgroup (German) normative target lower than all of the others. However, contrary to the predicted results, participants rated the outgroup deviant target the highest of all. Despite being an unexpected result, the majority of the findings remain consistent with the principle of Social Identity Theory (Tajfel & Turner, 1979).

Introduction

During the summer of 2006, the football World Cup produced a surge of patriotism that swept throughout England over a period of several months. Everywhere one turned, there were St. George's cross flags and banners emblazoned with the slogan, "Come on, England!" Additionally, there was a palpable desire to beat the host team, Germany, more than other nations' squads. It was clear that history was playing a part in the level and target of outgroup derogation expressed by the English fans. However, for the younger generations of England supporters, historical events should have a lower salience to their group processes than those who remember the Second World War more directly. Clearly, primary school children who have little or no experience, directly or otherwise, of World War II would not be subject to the same feelings of German outgroup derogation. This would lead one to question whether the effects of the football World Cup on children's group processes would also affect other areas of their social interactions, such as prosocial behaviour. The present research examined whether the increase in group salience caused by the recent football World Cup would cause more polarized judgements of suitable behaviour by and towards normative and deviant group members. Most specifically, would this affect their exhibition or withholding of the prosocial behaviours: helping, sharing, and comforting.

It is quite clear why a competitive situation would serve to enhance or exaggerate the salience of group membership as it is simply a social context in which one group or individual is pitted against another. Much of the conceptual structure of Social Identity Theory (Tajfel & Turner, 1979) involves comparison and competition within and between groups. While the competition is not typically explicit, by their very definition

groups are constantly struggling against each other for desirable social distinctiveness. As described by SIT, individuals as well as groups seek positive distinction from other individuals or groups through various means. When a competition is involved, these typically implicit social constructs are simply made more tangible. When dealing with children, the use of a competition scenario is quite beneficial as it provides a clear context for them to express feelings that they might otherwise struggle to identify. Many social identity studies involving children have previously utilized a competition scenario with considerable success (e.g. Nesdale & Flesser, 2001; Yee & Brown, 1992). While both of these studies were designed around SIT, their results did not entirely converge with the theory's principles. For instance, Yee and Brown (1992) found both gender and age intergroup bias effects; however, SIT proposes that age and gender differences would not be present due to the fact that the social desires that drive SIT are present throughout these age groups (three to nine years old). However, other studies (Aboud, 1988; Bigler & Liben, 1993) produced similar results which indicated that intergroup bias began to decline around the age of 7- to 8-years-old. Although the present study did not specifically examine the presence or absence of age and gender effects, post-hoc tests were conducted and will be discussed later.

Bigler and colleagues (Bigler, 1995; Bigler *et al.*, 1997) conducted studies involving the minimal group paradigm in order to examine different processes of social identity among children in a competitive situation. When testing children between 6 and 11-years-old, the studies found that the mere presence of an outgroup led to increased ingroup favouritism as well as confidence that their group would win a series of contests. The true impact of these results lies in the fact that the children were randomly placed in

these groups, which had been created solely for the study. Given a situation involving established groups that children are already somewhat familiar with, the results should be even more dramatic. Specifically, it is expected that in a highly salient group context, such as in this study, loyalty issues should affect prosociality. These loyalty issues would, most likely, not have been observable in the minimal group context; however, the context presented in this study should make loyalty an important factor in social judgements. While it has been noted that ingroup favouritism is not necessarily accompanied by outgroup derogation (Allport, 1954), given the context and circumstances surrounding the outgroup, some notable degree of negative sentiment is expected. In the present study, it is predicted that the increased group salience of nationality will produce similar and, presumably, more polarized results.

As previously mentioned in Chapter 3, the presence of ingroup favouritism does not guarantee the presence of outgroup derogation (see Feshbach, 1994; Struch & Schwartz, 1989). Prior research has also shown that a considerable amount of intergroup discrimination is due to preferential treatment given to the ingroup, rather than explicit animosity towards an outgroup (Brewer, 1999). This indicates that outgroup derogation might not necessarily represent negative feelings, but is perhaps the result of ingroup favouritism. In the context of the present study, this would cause participants to show differential selection between the participants when exhibiting prosocial behaviour. However, following this perspective, their selections would not be due to dislike or animosity towards the outgroup; but rather, their selections would merely be a reflection of their preference towards the ingroup. Furthermore, several studies (e.g. Brewer & Campbell, 1976; Hinkle & Brown, 1990; Kosterman & Feshbach, 1989) have shown that

there is no correlation between fluctuations of ingroup favouritism or social identity and levels of bias towards outgroups. In terms of social identity theory, this would indicate that it is possible for a group to maintain positive distinctiveness without resorting to outgroup derogation, a contention supported by the findings of Aboud (2003) as well as Nesdale (2001). In a slight contradiction to the perspective of the present study, prior research has shown that patriotism and ingroup pride are entirely unrelated to aggression towards outgroups (Feshbach, 1994; Struch & Schwartz, 1989). Thus, in the present study it might be assumed that participants will show a greater amount of ingroup favouritism without exhibiting any degree of outgroup negativity. However, this study was not particularly concerned with outgroup derogation, but rather if the intergroup discrimination caused by ingroup favouritism would include different prosocial behaviours.

To further examine the effects of increased group favouritism on intergroup discrimination, it was important to consider the typicality of ingroup as well as outgroup members. By examining both the group membership and typicality of individual targets, the present study could better define the relationship between intergroup discrimination and prosocial behaviour. Prior research by Marques and colleagues (Marques, 1990; Marques, Yzerbyt, & Leyens, 1988) showed that ingroup members with dislikeable characteristics were judged more harshly than outgroup members with the same dislikeable qualities. This 'black sheep effect' describes how group members attempt to distance themselves from deviant ingroup members in an attempt to maintain positive ingroup distinctiveness. Additional research (Branscombe, Wann, & Noel, 1994) found that this pattern of behaviour was particularly found when the participants identified with

their ingroup. Following this perspective, it is hypothesized that participants will rate the ingroup deviant target (Germany-supporting English child) much less favourably than any of the others. Likewise, the ingroup normative target should receive the highest rating followed by the outgroup deviant and the outgroup normative target. Furthermore, it is predicted that there will be a negative correlation between participants' ingroup favouritism and their rating of a deviant ingroup member.

The present study shares a very similar research design with previous research involving the World Cup by Abrams, Rutland, and Cameron (2003). Their work involved between subjects design with a scenario in which two targets (one normative and the other deviant) supported either the ingroup (English) or outgroup (German) football teams. The measures included evaluations of intergroup bias, target typicality, intergroup differentiation, and group identification. Similar research on subjective group dynamics by Abrams, Rutland, Ferrell, and Pelletier (2008) further examined participants' evaluations of normative and deviant targets, either an ingroup or outgroup member. The study involved similar measures of target evaluation, group inclusion, and group allocation. In their early work with Social Identity Theory, Tajfel and Turner (1979) found that category membership was positively correlated with behaviour. In the present study, it is critical that we examine the extent to which the participants categorize themselves as English. Also, it is important that participants recognize that the German targets are categorically different from the English targets, even if they share the same attitudes. Thus, it can be expected that if participants utilize the English and German group categorizations, they will display some level of discrimination in their prosocial behaviour. While Abrams *et al.* (2008) focused primarily on participants' social

judgements of minimal group members, the resource allocation suggested that social judgements could also affect prosocial behaviour. Specifically, this study confirmed children's intergroup bias in their tendency to allocate positive resources to fellow group members. The present research builds on of the design of these previous studies to evaluate whether group identification, target typicality, and target evaluation can affect children's willingness to behave prosocially towards each target. Likewise, the perceived prosocial tendencies of the targets were also examined.

The present study utilized a between subjects design with the nationality of the target as the independent variable. The dependent variables were consistent in both conditions, consisting of: ingroup favouritism, normative/deviant target evaluation, target typicality, perceived prosocial tendencies of the targets, and intended prosocial behaviour shown towards the targets. It was predicted that participants would show more positive evaluations of the English (ingroup) targets as a results of ingroup favouritism. Likewise, they should respond more positively to the targets that support English football. Participants were predicted to rate English targets as more typical of the ingroup (English) than German targets. However, participants should rate both deviant targets as being more prosocial than their normative counterparts, as they are not biased against either team. Also, intended prosocial behaviour should be reflective of their typicality ratings with participants being more willing to exhibit these behaviours towards the ingroup normative and outgroup deviant targets. Finally, the ingroup normative and outgroup deviant targets should be perceived as more willing to show prosocial behaviour towards an ingroup (English) peer.

Method

Participants

Eighty-six primary school students (40 males, 46 females) from Cage Green Primary School in Tonbridge, England participated voluntarily. The children were selected at random from each of Years 1 – 5. The mean age and standard deviation for each year were: Year 1 (M = 5.60, SD = .52), Year 2 (M = 6.57, SD = .51), Year 3 (M = 7.54, SD = .51), Year 4 (M = 8.64, SD = .51), Year 5 (M = 9.56, SD = .51). Of the participants from all schools years, 83% reported having been born in England while 17% reported being born elsewhere or not knowing their place of birth. The large majority of the 17% were, in fact, born in England but were not entirely certain of this.

Design

The study involved a between-subjects design with the targets' nationality (English vs. German) as the independent variable. The dependent variables in both conditions were ingroup favouritism, normative target evaluation, deviant target evaluation, target typicality, predicted prosocial behaviour shown by normative/deviant target, and intended prosocial behaviour towards either the normative or deviant target. Participants were randomly assigned to either the English condition (N = 39) or the German condition (N = 47). Both conditions were identical in structure and varied solely in target nationality. In the English condition, participants were told about two fictional characters named Carl and Mark who are both English primary school students. Carl, the ingroup normative target, expressed the opinion that he feels England has the best football team in the world and that they should definitely have won the World Cup.

However, Mark, the ingroup deviant target, stated that he liked the English team but also cheered for the German team as well. Within the German condition, the two fictional targets were Axel and Hans. Axel, the outgroup normative target, expressed a very strong liking for the German team that included stating that they should have won. Hans, on the other hand, supported Germany and also expressed a positive attitude toward the English football team.

Measures

Ingroup favouritism. Each of the dependent variables was measured using several questions, some of which were reverse coded as necessary. For ingroup favouritism, the following items were included: "*How English are you?*"; "*How proud are you to be English?*"; "*How important is it that you are English?*"; "*How do you feel about being English?*" As with all of the measures with multiple items, a mean score was calculated. The responses to these measures were recorded using a 5-point Likert scale that corresponded to the nature of the question (1 = *not at all* to 5 = *very*, or *a picture of a very sad face* to *a picture of a very happy face*).

Competitiveness. In order to fully examine the importance of a competition on the participants' social judgements, it was necessary to measure their explicit competitiveness. The four items used to assess competitiveness were: "*How did you feel when England lost?*"; "*How would you feel if England won?*"; "*How did you feel when Germany lost?*"; "*How would you feel if Germany won?*" Participants' responded to these questions utilizing the aforementioned 5-point Likert scale.

Target evaluations. For the normative and deviant target preference evaluations, the following direct evaluation measures were used: "*How do you feel about (normative/deviant target)?*" and "*How much would you like to be (normative/deviant target) 's friend?*" Both of these questions utilized the same 5-point scale as the ingroup favouritism measures.

Trait attribution. Participants were also asked to attribute traits to the normative target and then later asked to do the same for the deviant target. In each measure, participants were provided with a list of twelve adjectives (6 positive and 6 negative) that were marked if they described the particular target. The positive attributes ($\alpha = .73$) that the child could select were: *friendly, thoughtful, clever, kind, strong,* and *tidy*. The negative traits ($\alpha = .71$) that the child could attribute to the targets were: *stupid, selfish, slow, mean, weak,* and *uncaring*. These attributes formed the indirect target evaluations.

Target typicality. It was critical to measure the degree to which participants identified the targets as either normative or deviant members of the ingroup or outgroup. The following questions were used to measure perceived target attitudes: "*How English is (normative/deviant target)?*"; "*How proud of being English is (normative/deviant target)?*"; "*How did (normative/deviant target) feel when England lost?*"; "*How would (normative/deviant target) feel if England won?*"; "*How did (normative/deviant target) feel when Germany lost?*"; "*How would (normative/deviant target) feel if Germany won?*" Additionally, the item used to measure ingroup typicality was: "*How many English kids feel the same way as the (normative/deviant target)?*" Finally, perceived ingroup inclusion was measured by asking the children: "*How do English kids feel about*

the (normative/deviant target)? *Why?*" The responses were recorded using the same 5-point scale described above.

Perceived prosocial behaviour. The questions assessing the predicted prosocial behaviour of the targets involved sharing, for reasons discussed in Chapter 2. The measures used were: "Would (normative/deviant target) share with a Germany supporter?"; "Would (normative/deviant target) share with an England supporter?" Participants utilized a 5-point to indicate how they felt the target would behave towards a supporter of each country's team.

Intended prosocial behaviour. Finally, four items were selected to evaluate the intended prosocial behaviour toward either of the targets. Three of the items followed the same pattern of a forced choice scenario: "Who would you (help/share with/comfort)?" Each of these was followed by the free response question: "Why would you (help/share with/comfort) this person?" The last task for this variable involved describing a hypothetical situation in which the participants are given ten sweets to share with someone. They were asked to choose which target to share with and how many sweets they would like to share. Again, this item was a forced choice as the participant could only share with one of the targets.

Procedure

Participants were recruited at random form Cage Green Primary School in Tonbridge, England. Parental consent letters were sent home to for all students in Years 1 through 5, which included a debrief of the study. Only participants who had parental consent and expressed a willingness to participate were administered the questionnaire.

The students were individually removed from class and taken to the library where the questionnaires were administered on a one-to-one basis. The researcher informed the students about the purpose of the study and briefly tested their comprehension of the response methods. Additionally, all participants were informed of their ability to withdraw from the study at any time and return to class. Before the questions were administered, verbal consent was obtained by asking the participants if they would like to begin the questionnaire. The questionnaires were administered in a structured interview format in which the researcher read all questions and responses to the participants. The participants also had the questionnaire in front of them so that they could follow along with the questions and utilize the visual cues in both the questions and responses. After completing the questionnaire, participants were asked if they had any questions about the research. Following this, the participants were thanked for their help and rewarded with stickers or coloured pencils. Of the eighty-six participants, none expressed a desire to withdraw from the research at any time during the testing.

Results

The variety of different measures presented to the participants yielded considerably different results in terms of the hypotheses. Tests for age effects yielded very few results to indicate that these processes are moderated by age. A MANOVA conducted on participant English typicality, participant support for English football, and participant dislike for German football did not yield any main effects for age or gender and age interactions. There was, however, quite a strong main effect of gender on the participants' dislike for German football ($F(1,76) = 15.38, p < .001$, partial $eta^2 = .168$).

This effect was to be expected as males (M = 4.35, SD = .87), who are typically more interested in football than females (M = 3.52, SD = 1.19) are, would be more inclined to express negative attitudes about an opposing squad. A related main effect was found for gender on the number of positive ($F(1,76) = 4.88$, $p < .05$, partial $eta^2 = .06$) and negative ($F(1,76) = 4.72$, $p < .05$, partial $eta^2 = .06$) traits attributed to the deviant target, but not those attributed to the normative target.

Table 6.1: Means, standard deviations, and univariate effects by gender for positive and negative traits attributed to the deviant target (Study 2)

	Positive traits	Negative traits
Male	4.70 (1.70)	1.03 (1.61)
Female	5.15 (1.03)	.48 (1.07)
Univariate effects	$F = 4.88$, $p < .05$	$F = 4.72$, $p < .05$

Once again, males might be more inclined to attribute fewer positive and more negative traits to deviant targets than female due to their competitive interest in the sport. Due to the relatively small size of the sample, factor analysis would be of little statistical value and was, therefore, omitted. As the items examined a variety of different attributes of the relationship in question, they were analyzed separately prior to exploring any interactions between them.

Ingroup favouritism

The degree to which the subject favours the ingroup as well as the English football team is a critical comparative variable. For quite obvious reasons, it was

expected that the scores for overall ingroup favouritism would be quite high. The four aforementioned items all pertained to how the participant felt about being English and responses were rated on 1 to 5 scale (very negative to very positive) with an overall ingroup preference score range of 0 to 20. As predicted, the mean overall score for ingroup preference was 17.27 (SD = 2.63), just below the maximum achievable for the scale. Despite being slightly lower than expected, all four items were significantly positively correlated to each other as well to the total (See Table 6.2). While the reliability analysis of internal consistency for these items was not ideal ($\alpha = .61$), it was a fairly acceptable level.

Table 6.2: Correlations among measures in the English Ingroup favouritism scale (Study 2)

	How English are you?	How proud are you to be English?	How important is it that you are English?	How do you feel about being English?
How English are you?	-	.285	.289	.270
How proud are you to be English?		-	.217	.379
How important is it that you are English?			-	.407
How do you feel about being English?				-

Note: All correlations were significant at p<.05.

Two of the other items asked the participant how they felt when England lost and how they would feel if they had won. Additionally, the same questions were asked about the German football squad. While it was predicted that there would be a strong negative correlation between these two sets of items, the results were convergent with prior research (e.g. Feshbach, 1994; Struch & Schwartz, 1989). These previous studies showed that ingroup favouritism and outgroup derogation were not directly correlated. The results

indicated that the amount of support the participants reported for the English team was not indicative of their support for the German squad. However, there was a very strong negative correlation between both the both questions for the English team (r = -.53, p < .001) and those for the German team (r = -.670, p < .001). As all of these items were conducted prior to any relevant information about ingroup or outgroup members, it was not necessary to make a comparison between conditions.

Competitiveness

As in the previous study (see Chapter 5), competitiveness was measured in order to examine its role in the effect of social identity on prosocial behaviour. Children's competitiveness was an averaged score which included the four items regarding their feelings about both teams winning or losing. The items involving Germany winning and England winning were reversed prior to calculating the mean score. The four variables generated a somewhat high reliability score (α = .57). Once again, the moderate reliability of this scale is most likely attributable to the fact that ingroup favouritism and outgroup derogation are not directly correlated (see Feshbach, 1994; Struch & Schwartz, 1989). As these items were administered prior to any target differentiation in the questionnaire, the effect of condition was not tested. As would be expected, there was a significant main effect of gender ($F(1,84) = 10.47$, $p < .01$, partial $eta^2 = .11$) with males (M = 4.39, SD = .61) showing higher levels than the females (M = 3.92, SD = .72). However, there were not any main effects of year in school or interaction effects between gender and school year. Further analysis indicated that competitiveness was not

correlated to positive or negative trait attribution towards either target. Interestingly, there was also no significant relationship between ingroup favouritism and competitiveness.

Target evaluation

The results for the overall ratings of the individual targets were not entirely consistent with the predictions. The ANOVA on evaluations of each target revealed a non-significant main effect of condition. However, there was a significant main effect of target, $F(1,84) = 4.02$, $p < .05$, partial $eta^2 = .046$ because the rating of deviant group members was significantly higher than that of normative group members. Importantly, the condition x target interaction was also significant, $F(1,84) = 31.16$, $p < .001$, partial $eta^2 = .271$. Means and standard deviations for this interaction are shown below in Table 6.3.

Table 6.3: Means and standard deviations for overall target evaluations by condition and target (Study 2)

	Condition	Mean	SD
Normative Target	Ingroup (English)	8.26	1.50
	Outgroup (German)	6.60	1.87
Deviant Target	Ingroup (English)	7.33	1.83
	Outgroup (German)	8.55	1.57

Tests of simple main effects revealed that in both the ingroup ($F(1,84) = 5.86$, $p < .05$, partial $eta^2 = .065$) and outgroup ($F(1,84) = 31.73$, $p < .001$, partial $eta^2 = .274$) conditions, there was a significant effect of target. Likewise, a simple effects test indicated that for both normative and deviant target types, condition had a significant

effect, $F(1,84) = 20.01$, $p < .001$, partial $eta^2 = .192$ and $F(1,84) = 11.01$, $p < .005$, partial $eta^2 = .117$, respectively. Furthermore, a one sample t-test indicated a significant level of differential evaluation across conditions, $t(85) = -17.21$, $p < .001$. As indicated in Table 3, participants gave the most positive overall rating to the outgroup deviant target, a German child who also supported the English team. As expected, the normative ingroup member received a higher rating than the deviant ingroup member. Finally, the normative outgroup target yielded a predictably low preference rating.

Target typicality

The results found for target typicality were just as predicted in the ingroup condition and nearly so in the outgroup condition. The four main measures of target ingroup typicality for the normative target showed quite a high level of internal consistency ($\alpha = .83$), but the reliability of the deviant target measures was slightly lower ($\alpha = .69$). The two primary measures used for target typicality (not including support of the football squad) were, "How English is the (normative/deviant target)?" and "How proud of being English is (normative/deviant target)?" The ANOVA on typicality of each target showed a significant main effect of condition, $F(1,84) = 7.75$, $p < .01$, partial $eta^2 = .084$. There was not a significant effect of target. However, the condition x target interaction was highly significant, $F(1,84) = 111.90$, $p < .001$, partial $eta^2 = .571$). Means and standard deviations are shown below in Table 6.4. Test of simple main effects showed that there was a significant effect of target in both the ingroup ($F(1,84) = 41.82$, $p < .001$, partial $eta^2 = .332$) and outgroup ($F(1,84) = 74.12$, $p < .001$, partial $eta^2 = .469$) conditions. Furthermore, there were also simple main effects of condition for both

normative ($F(1,84) = 74.24$, $p < .001$, partial $eta^2 = .469$) and deviant ($F(1,84) = 21.34$, $p < .001$, partial $eta^2 = .203$) targets. As seen in Table 6.4, when rating English targets, participants rated the normative target very highly with very little variance, however, the mean rating for the deviant ingroup target was much lower. A paired t-test revealed this to be a highly significant difference between the two means, $t(38) = 7.14$, $p < .001$. While the mean rating for the deviant member might seem a bit higher than expected, it is important to consider that the deviant is still an ingroup member. The results for the outgroup condition were nearly perfect opposites of the ingroup results with the normative target receiving a very low mean and the deviant German target being rated as very English.

Table 6.4: Means and standard deviations for ingroup and outgroup condition ratings of target typicality (Study 2)

	Normative	Deviant
Ingroup target	9.21 (.92)	6.54 (2.38)
Outgroup target	5.30 (2.70)	8.53 (1.65)

Although these results were predicted, the ratings of the outgroup for this measure were considerably higher than expected given that both targets were German, not English.

The results for all of the additional items of typicality converge with the primary item (*How English is (the target)?*) and are highly significant. Participants indicated that the ingroup norm and outgroup deviant would both be more proud to be English than their respective counterparts, $t(38) = 5.78$, $p < .001$; $t(46) = -5.60$, $p < .001$, respectively. The trend continued in both conditions when asking participants how the normative and

deviant targets felt when England or Germany lost as well as how they would feel if England or Germany won the World Cup. Also of note, was the item that asked participants to rate how many English children feel the same as each of the two targets. As expected, participants gave a higher rating to the ingroup normative target than the ingroup deviant ($t(38) = 3.54, p = .001$) in addition to a higher rating given to the outgroup deviant than the outgroup norm, $t(44) = -4.11, p < .001$).

Target inclusion

In addition to measuring the participant's own opinions about the targets and their ingroup typicality, we also asked them to assess how their ingroup peers might feel about the targets. The results for the questions, "How do English kids feel about the (normative/deviant target)?" differed greatly depending on the target. For the normative target, there was a highly significant main effect for condition, $F(1,84) = 63.42, p < .001$, partial $eta^2 = .43$. As expected these results indicate that English children would be much more likely to include a normative English target (M = 4.36, SD = .74) than a normative German target (M = 2.66, SD = 1.15) in their ingroup. By contrast, the results showed that English children would be more likely to include a deviant German target (M = 4.11, SD = 1.13) than a deviant English target (M = 3.74, SD = 1.07) in their ingroup. However, this main effect was not significant. Further analysis did not indicate any significant main effects of gender or school year on target inclusion. Likewise, there were no significant two or three-way interaction effects between condition, gender, and school year. When compared to the outcomes from the other measures, these results indicate that

participants were consistent in their judgements of the normative and deviant group members and have an adequate concept of group member typicality.

Perceived prosocial behaviour

The results for the prosocial behaviour items were mixed. The ANOVA on overall perceived prosocial behaviour of each target revealed a significant main effect of condition, $F(1,84) = 4.71$, $p < .05$, partial $eta^2 = .053$. There was also a significant effect of target, $F(1,84) = 14.21$, $p < .001$, partial $eta^2 = .145$. However, the interaction of condition x target did not yield significant results. The means and standard deviations are shown in Table 6.5.

Table 6.5: Means and standard deviations for perceived prosocial behaviour for each of the targets (Study 2)

	Condition	Mean	SD
Normative Target	Ingroup (English)	7.10	1.48
	Outgroup (German)	6.23	1.48
Deviant Target	Ingroup (English)	7.49	1.43
	Outgroup (German)	7.34	1.47

As Figure 6.1 shows, the difference between the normative and deviant target in the ingroup condition was fairly minimal, while there was a substantial difference between the two targets in the outgroup condition. Additionally, as hypothesized, the ingroup deviant was predicted as being more prosocial than the ingroup normative target. Furthermore, the results indicated that the ingroup normative target was perceived as

much more prosocial than the outgroup normative target, despite the fact that they are both biased against the outgroup.

Figure 6.1: Plot of perceived prosocial behaviour by condition and target type (1 = Normative, 2 = Deviant) (Study 2)

These results indicate that participants clearly showed a preference for targets that support their ingroup football team. However, they also seem to consider the typicality of the target when making their assessments of preference. Due to the fact that condition affected both judgements of target typicality as well as perceived prosocial behaviour of the target, further analysis was needed to examine the strength of these factors in affecting children's prosocial behaviour. The typicality of the English target as well as the target's willingness to share with an English student was regressed on the overall evaluation of the normative target. The analysis indicated a significant relationship

between the norm's willingness to share and the norm's overall target preference (β = .40, t = 3.61, p < .005), while the norm's English typicality no longer predicted the norm's overall preference score (t = .42, *ns*, see Figure 6.2 below). This mediation indicates that the participants seemed to base their target preferences more on normative target's perceived willingness to share with an English child over their typicality as an English ingroup member. A Sobel test of the strength of the mediation yielded a significant result of z = 2.27 (p < .05).

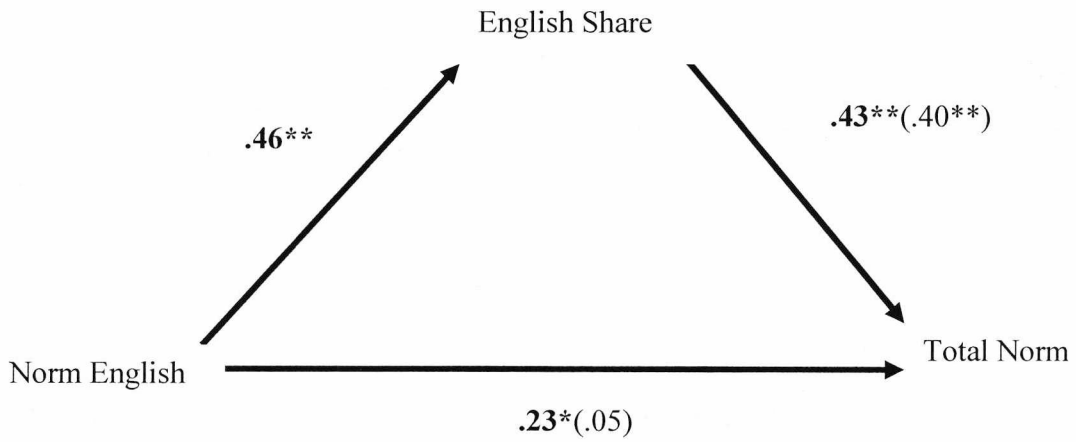


Figure 6.2: Mediation of the relationship between normative target's English typicality (Norm English) and preference score (Total Norm) by the normative target's perceived willingness to share with an English child (English Share) (Study 2)

(Note: * = p<.05; ** = p< .005. Figures are standardized regression coefficients. Figures indicated in parentheses represent Beta when the effect of the other predictor is accounted for.)

A regression analysis was conducted on the same relationship involving the deviant target, with slightly different results. This analysis indicating a significant relationship between the deviant's typicality as an English ingroup member and their overall preference score (β = .50, t = 3.39, p < .005), which remained significant when

controlling for the perceived sharing behaviour of the target with an English child. However, when controlling for deviant member ingroup typicality, the relationship between the deviant target's perceived sharing behaviour and overall preference rating is reduced to non-significance. This relationship differs from its normative target counterpart in that the participants seem to focus more on the deviant target's English ingroup typicality when forming their evaluations. The target's prosocial behaviour towards English children can clearly be interpreted as far more critical to the target's evaluation when said target is a normative group member rather than a deviant. This shift in trait/behaviour focus will be discussed further in later sections.

Intended prosocial behaviour

Tests of simple main effects revealed that in the ingroup condition there was a non-significant effect of target on intended prosocial behaviour; while in the outgroup condition, the effect of target was significant, $F(1,84) = 16.15$, $p < .001$, partial $eta^2 = .161$. Further simple effects tests indicated a non-significant effect of condition with deviant targets, but a significant effect with normative targets, $F(1,84) = 7.34$, $p < .01$, partial $eta^2 = .080$. Analysis of the participants' intended prosocial behaviour towards each of the targets produced results which indicated that target typicality is not an important factor with ingroup members, but rather paramount when making judgements about outgroup members. This was particularly true in the three forced choice items, in which the results indicate a substantial difference between behaviour types (see Table 6.6).

Table 6.6: Frequency distribution of prosocial choices for helping, sharing, and comforting over both conditions (Study 2)

	Ingroup Condition (n = 39)		Outgroup condition (n = 47)	
	Normative	Deviant	Normative	Deviant
Helping	23	16	4	43
Sharing	18	21	20	27
Comforting	21	18	11	36
Total	62	55	35	106

For the ingroup condition, the results for each behaviour type were fairly equal with participants choosing to show prosocial behaviour towards an ingroup normative member 53.0% of the time and an ingroup deviant member 47.0% of the time. However, this was not the case in the outgroup condition where deviant group members received prosocial behaviour 75.2% of the time while normative members were chosen it a mere 24.8%. The sharing item had a fairly equal distribution between the normative and deviant outgroup members with 42.6% and 57.4%, respectively. The considerable difference, though, could be found in the comforting item (normative: 23.4%, deviant: 76.6%) and particularly in the helping item (normative: 8.5%, deviant: 91.5%). Interestingly, these results are convergent with the issues of emotional involvement of prosocial behaviour discussed in Chapter 2. A chi-square test by condition was highly significant for the helping item, $\chi^2 = 25.20$, $\varphi = .541$, $p < .001$. As expected, the results of a chi-square test by condition for the sharing item were non-significant. However, when comparing the sharing item with the shared sweets item, there was a significant positive correlation of .491 ($p < .001$), indicating consistency in their choices. As with helping behaviour, the comforting item yielded significant results from a chi-square test by

condition, $\chi^2 = 8.45$, $\varphi = .314$, $p < .005$. Finally, the chi-square test by condition for the totals was also significant, $\chi^2 = 23.43$, $\varphi = .521$, $p < .001$.

It was predicted that participants' perception of the normative target's willingness to share with an English child would be a more reliable predictor of the sweets shared with this target than the overall preference score of the target. A regression analysis yielded a mediation relationship between the overall preference rating and the perceived sharing tendencies of the norm when predicting the number of sweets the participant would share with said target. The analysis indicated a significant relationship between the normative's overall target preference and the number of sweets participant chose to share with the normative target ($\beta = .26$, $t = 2.27$, $p < .05$), while the norm's perceived sharing behaviour with an English child fell slightly below the acceptable degree of significance for predicting the level of sweet sharing with the normative by the participants ($t = 1.74.$, *ns*, see Figure 6.3 below). A Sobel test conducted on this mediation indicated that the relationship was only marginally significant, $z = 1.44$, $p = .075$.

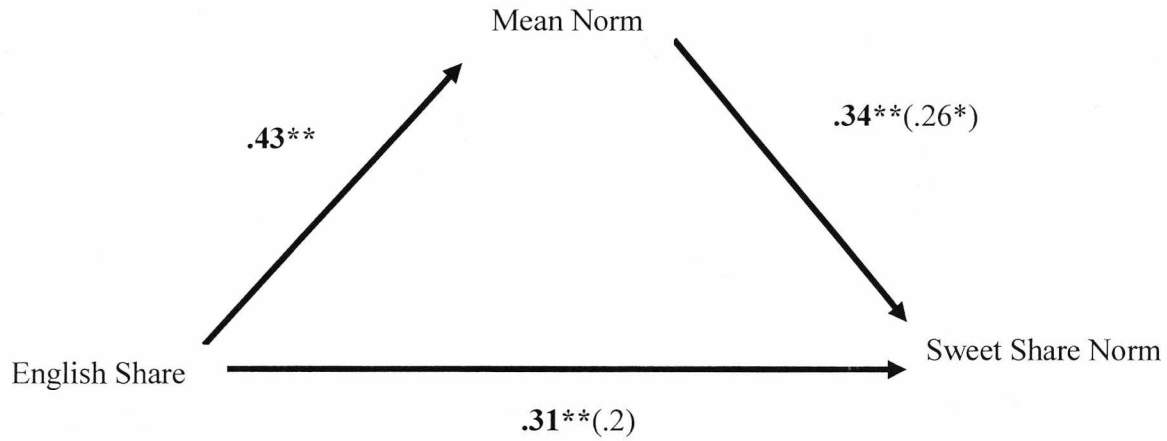


Figure 6.3: Mediation of the relationship between normative target's perceived willingness to share with an English child (English Share) and the level of sweet sharing with the normative by the participant (Sweet Share Norm) by the normative target's mean preference score (Mean Norm) (Study 2)

(Note: * = p<.05; ** = p< .005. Figures are standardized regression coefficients. Figures indicated in parentheses represent Beta when the effect of the other predictor is accounted for.)

A similar regression analysis was conducted on these variables for the deviant target, with very different results. Most likely due to the mixed reaction to the deviant target from the participants, the relationships between each of these two variables were not significant. Similar results were found for both the ingroup and outgroup when mediation analysis was conducted by condition. For both conditions, there was no significant mediation relationship found between these variables for either normative or deviant targets. The lack of evidence to support a mediation relationship within each of these conditions could be due to the relatively small sample size for each condition. As will be discussed later, a larger sample size might have produced significant results for mediation analysis between these variables.

As previously mentioned, sharing is a behaviour that requires very little emotional involvement by the person choosing to share. Prosocial behaviours like helping, comforting, and donating require that the person exhibiting the behaviour become much more involved with the target and situation. In the ingroup condition the results indicated a very strong correlation of .692 (p <.001) between the helping and comforting measures as well as a correlation of -.381 (p <.05) in the outgroup condition. Given that one relationship is positive and the other is negative, one could make the argument that the level of empathic involvement for these behaviours is different and impacted by the target. In the outgroup condition, participants may be willing to help the normative target, but because they cannot relate to that target, they may be unwilling to provide comfort. Further to this point, there was a significant main effect of condition (ingroup/outgroup) on comforting ($F(3,80) = 3.56$, $p < .05$, partial $eta^2 = .12$), but not on any of the other prosocial measures. While this does not represent a large effect size, it is quite clear that the group status (either high or low) of the target had an effect on participants' comforting behaviour. An ANOVA conducted on prosocial behaviour by condition and gender yielded no main effects for gender as well as a non-significant interaction between the two. However, there was a significant main effect of school year on prosocial behaviour ($F(4,81) = 2.97$, $p < .05$, partial $eta^2 = .128$) which indicated a constant increase from one year to the next. Further analysis did not indicate any two-way interactions between school year and condition or gender. Finally, a three-way interaction between these factors did not yield significant results.

With regard to the sharing sweets item, the only significant main effect found was condition for the number of sweets shared with the normative target, $F(1,64) = 4.68$, $p <$

.05, partial eta^2 = .068. While this result was quite predictable and does not really have much analytical merit, it does further characterize the nature of the relationship in question. As there was a main effect for condition with normative targets and not deviant targets, the importance of group membership is emphasized when making these judgements. Based on this result, one might conclude that group member typicality is a secondary, if not absent, factor in children's judgements of their own prosocial behaviour. In the outgroup condition helping and sharing were also correlated, but not as strongly at .372 (p <.05). However, there was only a minimal relationship between these items and those that asked the children about the targets' prosocial tendencies. Within the ingroup condition, there were no significant correlations between the items. Although this was not the case in the outgroup condition in which there was a strong positive correlation of .377 (p <.01) between the normative target sharing with a Germany supporter and a deviant target sharing with an England supporter. This would indicate that the participants believed that the normative outgroup member would be more inclined to favour a fellow Germany supporter and a deviant outgroup member would choose to share with a fellow England supporter.

Discussion

The results of the present study are generally quite convergent with the findings of Allport (1954) and Brewer (1999). While the participants clearly showed a considerable amount of ingroup favouritism, this was not accompanied by any notable degree of outgroup derogation or animosity. The most clear evidence that there was not the slightest degree of outgroup derogation lies in the fact that the outgroup deviant

member was rated more favourably than any of the other three targets. Contrary to the hypothesized target preference, even the ingroup normative target received a less favourable rating than an English-supporting German child. This seemed quite unusual as the participants, being English and generally showing very strong support for English football, should more easily identify with a normative ingroup member. Further complicating the results is that the target that received the lowest rating was the outgroup normative. It was predicted that the ingroup deviant would receive significantly lower ratings than any of the other targets based on the Black Sheep Effect (Marques & Yzerbyt, 1988). In an effort to maintain positive distinctiveness of their ingroup, participants were predicted to show very low ratings of an English target that supported the German squad. This is a particularly unusual result when one considers that the participants showed such strong identification with being English that there was a slight ceiling effect for the measures. A possible explanation for this is that the participants took the targets' typicality into consideration when rating their favourability. Clearly, a German child who supports the English team would be considered far less typical than an English child supporting his or her own squad. Thus, perhaps participants felt that a target who contradicted the stereotype for his group was showing stronger support for the English team than a target who behaved as a typical ingroup member would. Additionally, there is the possibility that participants identified more strongly with supporting the English squad than actually being English. A post-hoc analysis was conducted to examine the possible mediation effect of target typicality on the relationship between ingroup favouritism and target evaluation. However, there seemed to be no significant target typicality mediation for either the normative or deviant target in either

condition. Therefore, the data would indicate that participants did not focus solely on their own ingroup favouritism or target typicality when making their evaluations of either target, regardless of condition.

When analyzing the free response questions, participants seemed more inclined to make decisions about prosocial behaviour based on who the target supported, rather than their nationality. Further research of this topic would benefit from distinguishing between the identifying category (i.e. English, female, child) and the various behavioural characteristics (i.e. supporting English football, playing with dolls, going to school) of the identity. In making this distinction, it would be possible to examine if participants identify more with the category or with the typical behavioural qualities of said category.

While the target typicality results for the ingroup were just as predicted, the outgroup results differed slightly from the hypothesis. Participants in the ingroup condition showed consistent understanding of the typicality of both the normative and deviant targets. Even when rating the deviant ingroup member, participants were able to recognize that he was still English despite expressing opinions that differed from that of a normative group member. Nonetheless, the results indicated that the normative ingroup member was rated as significantly more typical than the deviant ingroup member. The results for the outgroup condition were just as predicted with the deviant member receiving a higher English typicality score than the normative member. However, both German targets received ingroup (English) typicality ratings that were considerably higher than predicted. It was expected that participants would recognize that neither of the targets were English and, thus, give them low scores for English typicality. Although, one must consider that each participant was making a between target judgement of

typicality, which would explain these results. Obviously, as the deviant target supported the English football team, he was expected to receive higher score than the normative. Once again, the children seemed to focus on which squad the targets supported more than the targets' nationality. This is most likely explained by the fact that target nationality was a between subjects factor, thus making the target's team preference more of a salient component of their social judgements. As with the favourability ratings, in the outgroup condition it seemed to be more important that one target supported the English team than the fact that both were German. This adds further credibility to the aforementioned perspective that children will sometimes focus on the behavioural characteristics of a particular group identity rather than the identity itself.

The results pertaining to prosocial behaviour were rather supportive of several of the hypotheses. Contrary to the favourability ratings, the participants seemed to disregard group member typicality when making judgements of prosocial behaviour in the ingroup condition. This is shown in the nearly equal split when making a choice to exhibit prosocial behaviour towards either a normative or deviant target. However, this was clearly not the case in the outgroup condition, with the deviant being chosen over 75% of the time. These results were slightly contrary to the predicted outcomes as it was expected that participants would consider group membership and target typicality in both conditions. However, typicality seemed to have very little salience when making decisions of prosocial behaviour with two ingroup targets. As could be expected, analysis of the frequency of individual behaviours showed little variation in the ingroup condition, but quite considerable differences with the outgroup. As was predicted, the sharing measure yielded a fairly equal distribution between the two targets. The results for

comforting and helping, though, showed a considerable majority of these behaviours would be exhibited towards a deviant outgroup member. With regard to helping behaviour, participants indicated that they would rather help the outgroup deviant than the outgroup normative target over 91% of the time. These predictions were based on the fact that sharing merely requires the giving of tangible resources, which are sometimes of little value, while helping and comforting behaviour includes a considerable degree of emotional involvement on the part of the actor. These results would support the contention of the present research that helping and comforting behaviours are driven by empathic concern for the distressed individual. Later studies in the present research examine the role of empathy in sharing, helping, and comforting more closely.

A most unexpected outcome of the present study involved the perceived prosociality of the targets. As hypothesized, the deviant targets from either condition were rated as more prosocial than their normative counterparts. This prediction was based on the fact that the deviants were not expressing any intergroup bias and, thus, would be more inclined to exhibit prosocial behaviour towards a variety of individuals. Interestingly, the results would seem to indicate that participants do not mind a biased target, as long as the target happens to be part of the ingroup. The responses showed the ingroup normative target was rated as much more prosocial than the outgroup normative target. These results could also be due to the fact that group members typically have a desire to create the greatest amount of positive distinction from the outgroup. To this end, the participants seem to overlook the bias expressed by the ingroup normative target, while choosing to focus on the outgroup normative target's bias as a negative trait. These results are quite similar to those of Abrams *et al.* (2008), which found that children can

utilize different criteria when evaluating peers, depending on the situation and information available. Further exploration of this outcome would be beneficial in providing a trait hierarchy that dictates judgements of perceived prosociality in both ingroup and outgroup members.

Although the present study yielded results which were beneficial to further defining the relationship between prosocial behaviour and social identification, there were some limitations that could be addressed. The primary limitation is the small sample size for quite a large age range. Given that the present research endeavours to examine the possible age effects on social identification and prosocial behaviour, a larger sample size in further studies would be required. Alternatively, further studies might focus on selected stages of the desired age range. By examining participants at the bottom, middle, and top of the age range, it would be possible to get a clear description of the age-related fluctuations in these two areas. An additional design flaw of the present study was that it focused on an event which might have only affected males to any noticeable degree. As many young females have little to no interest in football, the effect of the World Cup on their English group salience might be rather minimal. Further studies on these topics would benefit from utilizing a social identification that would have fairly equal levels of importance to both male and female participants. While the use of a competition in the design seemed to be an effective choice, further use of a competitive scenario should be adapted for optimal relevance to participants regardless of gender.

Further research on this topic will include exploration of the social identity categorizations that are most salient to children from this age range. Additionally, the role of empathy in the relationship between prosocial behaviour and social identification will

be explored. Likewise, the motivating effect of empathy on different types of prosocial behaviour will also be examined. The role of gender on empathic concern, prosocial, behaviour, and social identification is a further component that will require further exploration. Finally, the critical stages of the examined age range will be identified so that they may be more closely focused on in further study.

CHAPTER SEVEN

A Longitudinal Examination of the Relationship in Question as well as the Role of Empathy

"They always say that time changes things, but you actually have to change them yourself."

Andy Warhol, *The Philosophy of Andy Warhol*

This study was carried out in conjunction with a kindness project conducted by a charitable organization, People United. The project, entitled 'We All Do Good Things,' focused on encouraging prosocial behaviour in all its forms and was conducted over the period of about eight months. The research involved a longitudinal study with 240 primary school participants who were tested three times over the course of approximately 12 months. Included in the study were three experimental schools where the People United initiative was being conducted as well as two control schools. The research examined the similarity of the changes in children's prosocial behaviour and their social identity processes. Additionally, the role of empathy in this relationship was evaluated. It was hypothesized that as their prosocial behaviour increased, children's levels of outgroup favouritism and ingroup bias would decrease. Moreover, children's level of empathy was expected to be highly correlated to prosocial behaviour and show a strong negative correlation with ingroup bias. The results confirmed the primary hypothesis and indicated that negative outgroup attitudes decreased in relation to increases in prosocial behaviour. The results for empathy were less conclusive and are discussed in further detail.

Introduction

Previously, the present research has been concerned with establishing a causal relationship between social identity and prosocial behaviour without further examination of the nature of the relationship. The previous studies were solely concerned with measuring the relationship from a single direction rather than as a bi-directional relationship. The present study evaluates the possible effect that changes in prosocial behaviour might have on social identity processes as a means of better defining the hypothesized relationship. The role of empathy as a moderating or mediating factor in this relationship was also examined.

There are a variety of different ways of manipulating social identity and group membership in a research context. Prior research has altered group size (see Brewer, 1991; Brewer & Kramer, 1986) as well as simulated competitions (see Nesdale & Flesser, 2001; Turner, 1975) as a means of manipulating social identity. While these methods have been proven to be quite successful, manipulations of prosocial behaviour are much more difficult to execute and evaluate. Research on prosocial behaviour with children has previously used manipulation techniques such as model observation (Rosenhan & White, 1967) in which the participant observes an individual engaging in a specific prosocial behaviour. Although this type of manipulation did result in the desired temporary effect, it would not be a particularly useful technique for long-term manipulation of children's prosocial behaviour. In order to fully examine the impact of changes in prosocial behaviour on intergroup processes, a more involved and thorough manipulation that would alter both their behaviour and perspective was necessary.

The prospect of measuring the changes in prosocial behaviour and social identity processes due to an intervention in a longitudinal format is further complicated by the conclusions of one particular longitudinal study. In a unique piece of research, Eisenberg *et al.* (1999) examined the development and fluctuation of prosocial behaviour of participants over nearly twenty years. The study was designed to explore the consistency of individuals' prosocial judgement and whether an altruistic disposition during childhood may predict a prosocial disposition later in life. The results indicated that there was a high level of consistency between early childhood prosocial behaviour and that found in later childhood as well as early adulthood. While these results represent a critical discovery in the development of prosocial behaviour, it does present two important questions in the context of the present study. Mainly, are children's prosocial judgements malleable enough to respond to a relatively short intervention? Additionally, will these possible changes to prosocial behaviour have long-term effects or will they simply be a reflection of children's inclination towards social desirability?

By contrast, earlier prosocial research by Eisenberg (1982) indicated that during the years of primary school, further development of children's social cognition causes drastic changes in their perspective-taking abilities as well as their social judgements. As they further develop the capacity to understand another individual's cognitive and emotional state, they are able to respond in a more empathic way to the needs of others. In this study, Eisenberg noted that by the end of primary school, most children will have fully developed the capacity to understand the affective and perceptual state of another individual. In a general sense, these findings indicate that the level of socio-cognitive development that is taking place during the primary school years would make children

susceptible to interventions which encourage certain types of behaviour. Thus, there is a strong possibility that a program designed to promote prosocial behaviour in primary school children would be met with notable success.

It is the aforementioned ability to understand the affective state of another individual and the emotional response that it triggers which is predicted to further define the relationship between prosocial behaviour and social identity. However, a great deal of prior research has examined the connection between prosocial behaviour and empathy (see Eisenberg & Miller, 1987; Underwood & Moore, 1982), with varying conclusions and levels of success. Some studies concluded that there is a weak, but significant, relationship between empathy and prosocial behaviour (see Cohen, 1974; Feshbach, 1982). However, quite a few studies indicated that empathy and prosocial behaviour were unrelated (see Bazar, 1977) or that there was a negative relationship (see Amato, 1985; Eisenberg-Berg & Mussen, 1978), depending on condition and gender. In their meta-analysis of this research, Eisenberg and Miller (1987) concluded that a considerable amount of variation in the results and conclusions of the prior studies were due mainly to the method of measuring empathy. Included in this meta-analysis were studies that measured empathy by utilizing self-report, parental report, observational, and questionnaire methods. They noted that of all the measurement techniques used, the questionnaire method seemed to produce the most consistent results. More specifically, the results indicated that the Mehrabian and Epstein (1972) scale of emotional tendency, or a variation of this scale, was a rather reliable measure of empathy.

Although the Mehrabian and Epstein (1972) scale had previously been used almost entirely on older adolescents and adults, modified versions have also been used

successfully on primary school children (see Dolan, 1983; Reichman, 1982). For the purposes of measuring the children's empathy in the present research, a modified version of this scale was deemed the most viable based on the positive results of the aforementioned prior research. Additionally, items could be selected and adapted to match the range of social experiences and cognitive abilities of children in primary school. Finally, due to the nonspecific nature of the items in the Mehrabian and Epstein (1972) scale, the effect of social desirability should be minimal. By carefully wording each item and developing a more elaborate response scale, children should feel more inclined to provide completely honest responses. A full account of the adapted items will be provided below and can be found in Appendix B.

Thus, in order to better define the relationship between social identity and prosocial behaviour it was necessary to examine the role of empathy and the possibility that changes in prosocial behaviour can impact intergroup processes. While the previous studies have examined the relationship from just one perspective during a single testing session, the present study would need to manipulate prosocial behaviour successfully and involve several testing sessions.

People United

Fortunately, whilst investigating the present hypothesized relationship, the researchers were approached by a local charity, People United. They were planning to begin a project in which they would encourage prosocial behaviour in all its forms. The project was to be conducted in two schools in Kent and a third school in Halifax. The charity was looking for a way to evaluate the benefits of the project, entitled 'We All Do

Good Things.' As part of the project, children were encouraged to share their experiences of prosocial behaviour and express them in various ways including artwork, comic books, and performances. Likewise, they were asked to think of the prosocial behaviour they see all around them and how this might benefit society. The purpose of the project was to increase the level of prosocial behaviour by raising awareness and appreciation for it, rather than by instruction. As this provided an excellent opportunity to measure the effect of the manipulation of prosocial behaviour on social identity processes, the researchers agreed.

In line with prior research (see Nesdale & Flesser, 2001; Turner, 1975) as well as previous studies in the present research, the design of the present study included a competitive context to further define the relationship between social identity and prosocial behaviour. While the 'We All Do Good Things' project might increase prosocial behaviour in general, there is a possibility that this change might not translate into different contexts. Specifically, the competitive context was designed to examine the consistency of the increase in prosocial behaviour between a neutral and a highly salient intergroup context. The anticipated reduction in ingroup bias as a result of increased prosocial behaviour might not be found in contexts when the children's social identity is particularly salient.

As this was quite a large study with a multitude of different components, there were several hypotheses being tested. Based on prior research (Eisenberg & Miller, 1987; Underwood & Moore, 1982), prosocial behaviour towards outgroup members is expected to be motivated and justified by empathy. Thus, it is hypothesized that the increase in prosocial behaviour will be accompanied by elevated levels of empathy. The children's

increase in prosocial tendency should include an improved understanding of the affective states of their peers due to a desire to relieve sadness or discomfort. By encouraging the children to engage in prosocial behaviour, the Project is teaching the children to show more concern and interest in the feelings and emotions of others. Although there should be no difference between the schools at the initial testing time, both of the subsequent testing sessions should indicate a significant difference in both of these factors between conditions.

The main hypothesis was that changes in prosocial behaviour in both competitive and neutral conditions would impact intergroup processes. More specifically, it was hypothesized that an increase in prosocial behaviour caused by the Project would cause an increase in outgroup favouritism as well as a reduction in ingroup bias. This prediction is based on the idea that if children show a greater willingness to exhibit prosocial behaviour, this tendency will overrule negative intergroup processes in the hierarchy of factors involved in their social judgements. Given their increased willingness to behave prosocially, children should attenuate less to group membership when making prosocial decisions; this should, in turn, result in a reduced tendency to focus on group membership when other social judgements and evaluations. This project should cause the children to focus more on the action, rather than the target, involved in social interactions.

Additionally, it is expected that not only will there be a significant change in these social identity processes, but there will also be a significant difference between schools involved in the Project and the control schools. These changes should be particularly noticeable in the competitive context, where prosocial behaviour towards outgroup members is predicted to show the highest increase. As mentioned above, due to the

increase in their tendency to behave prosocially, children should be less concerned with group membership than the prosocial behaviour involved when making social judgements. Thus, while they might have focused primarily on which team they were on when making prosocial judgements at the beginning of the project, group membership should be a secondary factor in their social decision-making hierarchy by the end of the intervention.

It is also hypothesized that the increase in prosocial behaviour will be long lasting and should be observed at the final testing time. As the Project invites the children to share their experiences, opinions, and thoughts about prosocial behaviour, it is the children themselves who are affecting the change. If the Project took more of an instructional or dictatorial approach to encouraging prosociality, the impact on the children's behaviour would likely be short lived. The strength and benefit of this Project lies in the fact that it encouraged the children to increase their willingness to exhibit prosocial behaviour and, subsequently, their intergroup perspectives. Thus, the impact of the increased prosociality on intergroup behaviour should also be observable several months after the Project's conclusion.

Finally, it is expected that the prosocial effects of the project and subsequent impact on intergroup processes will be significantly affected by age. It is anticipated that children in Year 1, who have limited experience and very high prosocial tendencies, will be less impacted by the Project. Additionally, they lack the socio-cognitive capacities involved in understanding the societal benefits of prosocial behaviour. Children in Year 3, however, are expected to show the most substantial change in prosocial behaviour over the course of the project. This prediction is based on the fact that social identity salience

is at its highest at this age, which affects their willingness to exhibit prosocial behaviour. If the project is successful in increasing the prosociality of children in Year 3, this change should be accompanied by a considerable improvement in the intergroup perspective. Particularly when compared to their control group counterparts, the results from children in Year 3 should be the best indication of the success of the Project as well as the strength of the relationship between social identity and prosocial behaviour. Participants in Year 5 are expected to show an increase in prosocial behaviour, but the change in intergroup processes should be less than that of Year 3. This is due mostly to their lack of focus on group membership as a means of social judgement due to their socio-cognitive capacity to consider a variety of individual characteristics simultaneously. While it is anticipated that all three age groups will show some changes in prosocial behaviour as well as intergroup processes, the results should differ significantly by age.

Method

Participants

The study involved 240 participants from five primary schools in Ashford, Charing, and Lyminge in Kent as well as two schools in Halifax. The three experimental schools were selected by willingness to participate while the control schools were chosen based on proximity and a similarity in size to the experimental schools. Only students in Years 1, 3, and 5 were measured, although all of the students at the experimental schools were involved in the People United project. At the start of the project, the participants' mean ages were: Year 1 (M = 5.33, SD = .50), Year 3 (M = 7.41, SD .49), Year 5 (M = 9.32, SD = .47). The schools did vary in terms of ethnic diversity, but overall 84.6%

(209) indicated that they were born in England while 10.9% (26) were born in a different country. The remainder of the participants were not sure where they were born. 46.2% (111) of the participants were male and 53.8% (129) were female. Finally, 55.4% (133) participants were from the experimental schools and 44.6% (107) were from control schools.

Design

As the study was longitudinal and involved the administration of the same questions at three testing times, the design was both between and within subjects. Obviously the primary independent variable was whether or not the child was from an experimental or control school. However, other independent factors that were analyzed included gender, age, and school. The dependent variables included ingroup favouritism, outgroup favouritism, ingroup bias, prosocial behaviour in a competitive scenario, prosocial behaviour, and empathy. Participants in the control condition were unaware that other schools involved in the research were also engaged in the People United initiative, thus reducing the possible impact of social desirability. The 'We All Do Good Things' project focused on the abundance and variety of prosocial behaviour all around us as well as its beneficial impact on people. Children were encouraged to share stories of kindness and prosocial behaviour exhibited by them or someone they knew. Additionally, professional artists were brought into schools to help the children express their kind stories in various ways including painting, comic books, and live performances. Children also went out into the community to speak to people about prosocial behaviour and to engage in acts of kindness. One of the schools made individual, hand-made gifts for

every student at a nearby school. Another school visited a local fire department and brought them drinks and biscuits. At two of the schools, the children wrote and acted in a performance that highlighted the importance of kindness and prosocial behaviour. One of the head teachers, Mrs. Michele Rowland, at a school involved in the project described it as providing "an understanding of how little things can make a big difference to other people through the sharing of some heartbreaking stories and acts of kindness from friends and strangers." Another head teacher, Mrs. Karen Lomas, said that her pupils were "now so aware of kindness and the impact it can have on others." The principal objective of the project was to demonstrate and encourage kindness and prosocial behaviour in all its forms. Pictures of activities and the children's involvement in the 'We All Do Good Things' Project can be found in Appendix F. The research endeavoured to measure children's prosocial behaviour and social identity processes in a manner that would not seem like a project assessment to the children. Furthermore, children at the project schools were not aware of the control schools or the intended comparison of results.

Measures

The study employed a considerable number of measures as there were a large number of possible behavioural and socio-cognitive components involved. Several different measures were used for each of the dependent variables in order to obtain a more detailed representation of each factor. In the event that one measure included several different items, the mean was calculated prior to analysis. The competitive context was introduced in the guise of a hypothetical sandcastle competition prior to any

assessment of ingroup or outgroup favouritism. The purpose of this was to provide the children with a context in which they could be entirely honest about their feelings towards their own and another group. Had the children been asked questions explicitly pertaining to their own and another school, they might be very hesitant to express anything but entirely positive opinions. Thus, the children were told to imagine that their school was in sandcastle context against another school and that they are on their school's team. They were not told anything about the status of either team except that each would like to win the big prize. The other team was a fictional school that included the name of a local town that the children would be familiar with. Particular care was taken to control all information the children had about the teams to avoid any confounding factors in their social judgements.

Ingroup favouritism. Ingroup favouritism was evaluated using five different measures which corresponded to various aspects of group membership. Each of the five measures involved a 5-point Likert response scale comprised of just pictures (a series of faces) or pictures and words (circles of increasing size which correspond to 1 = 'Not at all' through 5 = 'Very Much') in one case. Participants were asked how they felt about being on and how much they liked their team. Additionally, they were asked how much they would like their team to win and how they would feel if they did so. The last measure questioned the importance of other team members to the team itself. Each question was designed to ensure comprehension as well as make the participant feel comfortable expressing any possible negative sentiments.

Outgroup favouritism and ingroup bias. Outgroup favouritism was assessed using a similar set of five items. The measures followed the exact same format as those for

ingroup favouritism with regard to the outgroup team. The similarity of the measures was designed to make the most direct comparison between sentiments for each group. Finally, ingroup bias was a comparative measure that reflected the difference between participants' liking of their own versus the other group. It was calculated by simply subtracting the mean outgroup favouritism score from the mean ingroup favouritism score. While ingroup bias is a principal process of intergroup relations, it was hypothesized that its reduction would be related to elevated levels of prosocial behaviour.

Competitive prosocial behaviour. For competitive prosocial behaviour, there were three different measures used to assess children's willingness to share with, comfort and help another child. All of the prosocial behaviour measures used a 5-point Likert scale (1 = 'Definitely Not' through 5 = 'Definitely Would') which included pictures to ensure comprehension among younger participants. However, these measures were in the context of the aforementioned sandcastle competition. Participants were told that a member of an opposing team in the sandcastle competition needed them to help, share with, or comfort them during the competition. The severity of the outgroup target's need was designed to be comparable in each of the measures and did not represent any kind of emergency. Each situation differed slightly from those in the neutral environment in order to avoid repetition effects.

General prosocial behaviour. The six general prosocial behaviour items followed a similar format to the competitive prosocial items. Participants responded using the same Likert scale and the same three behaviour types were measured. These items involved a scenario occurring in a neutral environment (a park) as well as a neutral target. Participants were told to imagine that they are playing at a park where there are lots of

other children. For each of the six questions, participants are asked to assess whether or not they would exhibit a certain prosocial behaviour towards the neutral target. Each behaviour type was tested twice and each scenario differed slightly to avoid repetition effects.

Empathy. The incorporation of empathy measures into the design was in an effort to identify any mediating processes in the relationship between social identity and prosocial behaviour. The items themselves were adapted from an emotional tendency scale designed by Mehrabian and Epstein (1972) of which, many versions have been successfully used on both adult and child samples. From this scale, the ten measures most applicable to children were selected and the wording was changed slightly to facilitate comprehension. The items included statements like: "People who cry because they are happy are silly" and "I get upset when I see someone getting hurt." Participants were asked to indicate how much they agreed or disagreed with each statement using a 5-point Likert scale which consisted of pictures and words (1 = "Definitely Disagree" through 5 = "Definitely Agree"). The items were counterbalanced in order to discourage response sets and promote individual consideration. The empathy items were included after all of the prosocial behaviour questions had been answered in order to reduce any research-triggered social desirability effects. A complete copy of the questionnaire can be found in Appendix B.

Procedure

In addition to providing informed consent for participation in the 'We All Do Good Things' project, potential participants from Years 1, 3, and 5 were sent home with a

letter of consent for taking part in the research. Of the letters sent home, very few indicated they would rather not participate in the research. However, participants who did not have parental consent as well as express willingness to participate were not allowed to take part in the research.

The study consisted of three testing times which took place over the course of approximately twelve months. The initial testing session took place in the late autumn, prior to any involvement of People United in the schools and served as a comparative baseline. The next assessment took place about 7 to 8 months later at the conclusion of the 'We All Do Good Things' project. The project concluded shortly before the end of term before the summer holidays. The final testing time took place approximately 4 to 5 months later, after the children had returned and settled back in after their summer holidays. This final testing time examined the long term changes in social identity processes and prosocial behaviour that might still exist months after the project concluded. The control schools were tested at the same intervals as the experimental schools to ensure consistency of comparison. The only difference between the questionnaires given to each school was that the names of the opposing schools in the sandcastle competition were changed to reflect the specific testing location.

Prior to the testing, it was unclear how the participants would respond to such a lengthy (21 pages) and involved questionnaire. In order to ensure complete comprehension with participants of all ages, it was decided that the best method of administration at the first testing session would be one-to-one. During the initial testing time, participants with informed consent were individually removed from the classroom and taken to a familiar setting (an empty classroom, library, or IT suite). The researcher

introduced himself and briefly explained the nature of the questions. The child was then asked if they still wished to participate. When verbal consent was given, the researcher would guide the participants through the instruction sheet and inform them that they were free to leave, without consequences, at any time. If the participant was still willing to participate, the researcher began the study. The questionnaire was placed in front of the participant and the researcher read the whole thing aloud as the participant followed along. Due to the varying levels of reading skills in primary school children, this was considered the best method to ensure full understanding among all of the participants. Once the questionnaire was complete, participants were asked if they had any questions which were answered by the researcher. The children were then thanked for their participation, given a small reward, and returned to class.

However, an unforeseen complication was encountered during the administration of the first testing session. Some of the participants from Years 3 and 5 did not seem to like the pace set by the researcher when completing the questionnaire and preferred to work at their own speed. While the Year 1 children were content to be guided through the questionnaire, they did seem to be rather anxious to be removed from their class individually to answer questions. Assuming that participants who are more comfortable with the pace of the questions would be inclined to answer them more accurately, the administration format was changed for the last two testing times. Participants in Year 1 were still guided through the questionnaire by the researcher at a slow pace, but would be removed from class two or three at a time to make them feel more at ease. However, there was strictly no talking or sharing of answers between participants in small groups. For the older participants, the questionnaire was administered to the whole class during

the second and third testing times. The participants were told that they were not to speak to or share answers with each other, which was strictly enforced by the teacher and researcher. The researcher would read each page through and then pause after each question to allow the participants to answer. When the researcher reached the end of the page, they would wait for all of the participants to finish before continuing. This method seemed preferable as it still allowed the comprehension benefits of the researcher reading the questionnaire combined with the comfort of working at their own pace. Likewise, it was thought that this method would reduce the impact of social desirability in that participants could directly record their responses rather than convey them to the researcher.

Once the final testing sessions were complete, the participants were thanked as a group and informed of the basic premises of the study. The control schools were informed that their results were to be compared to those of other schools; however, the expectations of the results of this comparison were not disclosed. Participants were asked one last time if they had any questions, which were answered by the researcher.

Results

The results of this study were quite encouraging both for the present research and the 'We All Do Good Things' project. It was anticipated that the program would make some degree of behavioural and perceptual change, but we were slightly doubtful about the size of the difference. Additionally, it was quite uncertain whether these changes would have any degree of permanence. The results, however, were very positive in terms of the impact on both social identity processes and prosocial behaviour.

Each testing session was analyzed individually to examine the relationship between social identity processes and prosocial behaviour as well as the role of empathy. Additionally, the results of each testing time were compared. The purpose of this comparison was two fold: 1) to examine the change in prosocial behaviour and, possible, subsequent change in social identity processes and 2) explore the strength and consistency of the hypothesized relationships between the variables. Of particular importance was whether factors from Time 1 would significantly predict the same factors as well as hypothesized results at Time 2. Through regression analysis of these factors, it will be possible to form more reliable conclusions regarding the relationship between social identity processes and prosocial behaviour and the components that affect this relationship.

Baseline: Testing session one

Two outcomes were hopefully anticipated for the first testing time: there would be no significant difference between the experimental and control schools and the measures would not exhibit either a ceiling or floor effect. If either one of these outcomes was not met, it would affect the integrity of the design for all three testing times.

Ingroup favouritism. An ANOVA indicated that there was not a significant main effect of school on ingroup favouritism. Likewise, a separate ANOVA showed there was not a significant main effect of condition on ingroup favouritism, as expected. These results were just as we hoped as this was prior to any involvement with the project in the experimental schools. This would indicate that the control schools were well-matched

with the experimental schools, which also seem to be very similar. The consistency in the baseline results for ingroup favouritism can be seen in Table 7.1.

Table 7.1: Mean, standard deviation, and sample size for ingroup favouritism (Study 3, Time 1)

Condition	School	Mean	Standard deviation	N
Experimental	Lyminge	23.24	1.84	51
	Charing	23.16	2.34	43
	Savile Park	23.56	1.6	39
Control	Beaver Green	23.35	1.92	55
	Mount Pellon	23.29	2.67	52

Note: Range is 5 to 25.

Although the mean scores are very close to the maximum of the range, this was anticipated due to the nature of the questions. Unfortunately, the reliability of the ingroup favouritism scale ($\alpha = .48$) was a bit lower than anticipated, but was almost certainly due to a ceiling effect. Potential causes and effects of this low reliability will be discussed later in further detail.

Outgroup favouritism. The results for outgroup favouritism are almost exactly the same with ANOVAs indicating a non-significant main effect for either school or condition on outgroup favouritism. Although most children will unerringly favour their own group, the degree to which they like the outgroup varied more and was not subject to a ceiling or floor effect, as is seen in Table 7.2.

Table 7.2: Mean and standard deviation for outgroup favouritism (Study 3, Time 1)

School	Mean	Standard deviation
Lyminge	15.08	4.77
Charing	13.42	5.31
Savile Park	14.10	4.64
Beaver Green	13.51	5.53
Mount Pellon	14.52	5.82

Note: Range is 5 to 25.

As the table illustrates, there is a greater range in the means and the standard deviations compared with those of ingroup favouritism. This level of variability would indicate a strong potential for change, which will be discussed in later testing times. Unsurprisingly, the outgroup favouritism scale was much more reliable ($\alpha = .80$) than that of ingroup favouritism.

Intergroup bias. As would be expected from the previously mentioned results, there were no significant differences in levels of ingroup bias between the two conditions at Time 1. ANOVAs indicated that neither school nor condition produced a significant main effect on ingroup bias. A repeated measures ANOVA conducted on ingroup bias indicated a highly significant difference between ingroup and outgroup favouritism scores, $F(1,239) = 613.46$, $p < .001$, partial $eta^2 = .72$. The mean and standard deviation of the ingroup bias score for both conditions was 9.17 and 5.74, respectively. However, like outgroup favouritism, there was a considerable degree of variation between the schools as well as within each school sample. As with outgroup favouritism, Table 7.3 illustrates the high potential for changing ingroup bias.

Table 7.3: Mean and standard deviation for ingroup bias (Study 3, Time 1)

School	Mean	Standard deviation
Lyminge	8.16	4.94
Charing	9.74	6.25
Savile Park	9.46	4.86
Beaver Green	9.84	6.01
Mount Pellon	8.77	6.35

Note: Range is 0 to 20.

As the ingroup bias scores were directly determined by the ingroup and outgroup favouritism scores, it might seem somewhat redundant to analyze all three. However, for Times 2 and 3, it will be quite important to understand which of these perceptual components is being affected and to what degree.

Prosocial behaviour in competition. An unexpected result found at Time 1 involved the children's prosocial behaviour in a competitive situation. There was a considerable amount of variation between the individual schools as indicated by a significant main effect for school ($F(4,235) = 3.70$, $p < .01$, partial $eta^2 = .06$). The means are depicted in Table 7.4.

Table 7.4: Mean and standard deviation for competitive prosocial behaviour (Study 3, Time 1)

School	Mean	Standard deviation
Lyminge	9.71	3.05
Charing	7.74	3.03
Savile Park	8.97	3.46
Beaver Green	7.95	3.46
Mount Pellon	9.56	3.44

Note: Range is 3 to 15.

However, these results do not present a confound as an ANOVA revealed that there was no significant main effect of condition on competitive prosocial behaviour. Thus, while

there was considerable variation between the schools, it was to the same degree in both the experimental and control conditions.

The means for the individual competitive prosocial behaviours also showed a great deal of variation. Interestingly, the results for competitive prosocial behaviour were the exact opposite of the hypothesized results for general prosocial behaviour. This would indicate that not only does competition affect children's exhibition of prosocial behaviour, but also that each behaviour type is affected differently. It was hypothesized that children would show higher levels of sharing than either of the other two behaviours. Additionally, it was predicted that children would exhibit the lowest levels of comforting behaviour. As can be seen from Table 7.5, the results for both conditions indicated higher levels of comforting than either helping or sharing.

Table 7.5: Mean (and standard deviation) for competitive prosocial behaviour type (Study 3, Time 1)

	Sharing	Helping	Comforting
Experimental	2.34 (1.47)	2.98 (1.42)	3.53 (1.51)
Control	2.17 (1.50)	2.92 (1.68)	3.64 (1.43)

Note: Range is 1 to 5.

While the general prosocial behaviour type hypotheses were based on the effect of empathy, these results would indicate that empathy plays a minimal role in certain types competitive prosocial behaviour. From these means, one could conclude that the possible impact of competition on prosocial behaviour replaces empathy as a mediating factor for helping and sharing behaviour. Comforting behaviour, however, seems to be consistently driven by concern for the target individual and remains somewhat unaffected by ingroup

bias or competitiveness. Nevertheless, all three prosocial behaviour types were significantly correlated with each other, as illustrated by Table 8.6.

Table 7.6: Correlations between competitive prosocial behaviour types (Study 3, Time 1)

	Sharing	Helping	Comforting
Sharing	-	.427, p < .001	.264, p < .001
Helping		-	.343, p < .001
Comforting			-

As hypothesized, there was a highly significant negative correlation (r = -.39, p < .001) between ingroup bias and total prosocial behaviour in a competitive scenario. However, this correlation was not the same for all three behaviour types. While sharing (r = -.43, p < .001) and helping (r = -.35, p < .001) behaviour showed strong significant correlations, comforting (r = -.098, p = .131) behaviour appeared to be somewhat unrelated to ingroup bias. A possible explanation for these differences is that in the instance that a child is hurt or upset, empathy may replace any competitive or biased disposition.

General prosocial behaviour. Results for general prosocial behaviour at Time 1 were rather different to those of the competitive situation. Once again, there was no significant main effect for condition on prosocial behaviour, as was hoped. Additionally, an ANOVA indicated that there was no significant main effect of school, unlike the results for competitive prosocial behaviour. These results, considered with those above, further confirm the assertion of the present research that competitive situations alter and exaggerate judgements of prosocial behaviour.

The results for the individual prosocial behaviour types also contrasted from those of the competitive situation. As previously mentioned, although sharing does require some degree of personal sacrifice, its low dependence on empathy was responsible for the reason high levels of sharing were predicted. By contrast, helping and comforting behaviours which both require higher levels of empathy, were predicted to show lower results which are more strongly impacted by social identity. As can be seen in Table 7.7, the individual behaviour type results for Time 1, contradict these hypotheses.

Table 7.7: Means (and standard deviations) for prosocial behaviour types (Study 3, Time 1)

	Sharing	Helping	Comforting
Experimental	7.08 (2.17)	8.96 (1.68)	8.50 (1.89)
Control	7.35 (2.25)	8.96 (1.55)	8.66 (1.82)

Note: Range is 2 to 10.

Early analysis based on the Time 1 results would indicate that personal costs encountered in prosocial behaviour are more of a deciding factor than empathy. As the means suggest, children seem more likely to express empathic concern for their peers than to share their resources with them. As with those in the competitive scenario, each prosocial behaviour type was significantly correlated with each other.

Table 7.8: Correlations between prosocial behaviour types (Study 3, Time 1)

	Sharing	Helping	Comforting
Sharing	-	.278, $p < .001$	.462, $p < .001$
Helping		-	.299, $p < .001$
Comforting			-

As Table 7.8 demonstrates, participants were approximately as consistent with their judgements of prosocial behaviours both regardless of the existence of a competition. The level of their consistency, though, varied by behaviour type. For sharing behaviour, children exhibited a significant positive correlation ($r = .28, p < .001$) between judgements during and outside of a competitive situation. Likewise, there was an even higher level of consistency between judgements of comforting behaviour ($r = .47, p < .001$).

Further analysis indicated that there was no significant main effect of school year on sharing or comforting behaviour (see Appendix E for means). However, in the case of helping behaviour, a significant main effect of school year was found ($F(2,236) = 5.75, p < .01$, partial $eta^2 = .05$). While further testing times might show the contrary, these initial results would indicate that empathy plays a smaller role in prosocial behaviour than hypothesized.

Empathy. Despite previous successful use of a similar scale (Mehrabian & Epstein, 1972), the ten item empathy scale adapted for this study proved somewhat unreliable ($\alpha = .14$). A factor analysis was conducted in order to find the items that were most reliably indicative of empathic concern (see Appendix C). From the results of the factor analysis, the empathy scale was reduced to six items which provided a much higher level of reliability ($\alpha = .50$). The same six question reduced empathy scale was used in the analysis of both testing times in which the empathy items were administered.

As expected, the initial testing session did not indicate a main effect of condition on the participants' empathy scores. Contrary to expectations, there was also no main effect of year in school on empathy. However, an ANOVA indicated that females showed

significantly higher levels of empathy than males ($F(1,235) = 4.84$, $p < .05$, partial $eta^2 = .02$). The main effect of gender on empathy was hypothesized based on prior research indicating females are predisposed to higher levels of empathic concern (Eisenberg & Lennon, 1983; Hoffman, 1977). However, the results did not indicate any two or three-way interactions between condition, gender, or school year.

Empathy appeared to be less of a factor in the competitive scenario as there was no significant correlation between competitive prosocial behaviour and empathy. As hypothesized, though, the results indicated a significant correlation between total empathy and general prosocial behaviour ($r = .21$, $p < .01$). These results would indicate that competitiveness might take the place of empathy in children's prosocial judgements in a competitive situation. When the results were analysed by behaviour type, there was a significant correlation between empathy and helping ($r = .16$, $p < .05$) and comforting ($r = .21$, $p < .001$) behaviour, but not for sharing. The results for comforting behaviour were just as hypothesized in that it showed the highest correlation with empathy. Additionally, comforting behaviour was the only behaviour type which was significantly correlated with empathy in the competitive scenario ($r = .18$, $p < .01$). With a nonsignificant correlation, children's judgements of sharing seem to be affected by a factor other than empathy. The nature of the resource being shared as well as the possibility of reciprocity are two possible contributing factors that will be discussed further.

Additional analysis indicated that empathy was unrelated to children's positive feelings of either their ingroup or the outgroup. However, empathy was not expected to be explicitly related to social identity processes. It was anticipated that higher levels of outgroup positivity would inspire more empathy as the children would be more likely to

understand and share the affective state of an individual they like. Results from the second testing session will provide a more clear idea of whether empathy impacts both components of the hypothesized relationship.

End of Project: Testing session 2

The second testing session was designed to measure the impact of the People United project and, thus, was conducted at the very conclusion of activities. Of particular interest were the changes in prosocial behaviour and how these related to any possible changes in intergroup attitudes.

Ingroup favouritism. When examining the results, it must be considered that the 'We All Do Good Things' project was not designed to decrease the level of ingroup bias in any way. An ANOVA indicates that the main effect of condition on ingroup favouritism was only marginally significant at Time 2 ($F(1,196) = 3.50$, $p = .063$, partial $eta^2 = .02$). This main effect reflects a consistency in ingroup favouritism for the experimental schools as well as a significant decrease for the control schools. A paired t-test showed a significant decrease in ingroup favouritism ($t(82) = 2.16$, $p < .05$) in control schools between Times 1 and 2. While this was a somewhat unexpected result, it was particularly encouraging in that it indicates that the increases in prosocial behaviour might be linked with sustained levels of ingroup favouritism. At the very least, by promoting prosocial behaviour, the project was able counteract the reduction of ingroup favouritism exhibited by the control schools. Additionally, there was a considerably higher level of scale reliability for ingroup favouritism at Time 2 ($\alpha = .74$) than at Time 1 ($\alpha = .48$).

Outgroup favouritism. More importantly, the Time 2 results for outgroup favouritism indicated a significant main effect for condition ($F(1,196) = 6.01, p < .05$, partial $eta^2 = .03$), with the mean outgroup favouritism scores for experimental and control schools being 15.47 and 13.52, respectively. There was also a significant interaction effect of condition and year in school ($F(2,192) = 5.29, p < .01$, partial $eta^2 = .05$) indicating that the encouragement of prosocial behaviour had varying levels of impact on outgroup favouritism at different ages. However, a paired t-test showed that there was a significant increase in the mean outgroup favouritism scores from Time 1 to 2 for the experimental schools as is demonstrated in Table 7.9. The interaction effect of condition and gender at Time 2 was only marginally significant ($F(1,194) = 3.82, p = .052$, partial $eta^2 = .02$).

Table 7.9: Means, standard deviations, and t-test values for outgroup favouritism (Study 3, Time 2)

	Time 1	Time 2	*t*-test
Experimental	14.09 (4.98)	15.47 (5.66)	$t(114) = -2.30, p < .05$
Control	14.81(5.51)	13.52 (5.33)	$t(82) = 1.86, p = .067$

As the Table indicates, the increase found in the experimental schools was nearly matched by the decrease in outgroup favouritism exhibited by the control schools. Likewise, an independent t-test revealed that while there was not a significant difference between the two conditions' scores at Time 1, the difference was significant at Time 2 ($t(196) = 2.45, p < .05$). Interestingly, the decrease in outgroup favouritism found in the control schools corresponds to the decline in ingroup favouritism at the same schools over the same duration. An analysis of this relationship showed that there was a

significant negative correlation between ingroup and outgroup favouritism in the control condition (r = -.35, p < .01), while no such relationship was present in the experimental condition. These results would indicate that not only is the encouragement of prosocial behaviour counteracting the normal tendency for reduced ingroup and outgroup favouritism, it has contributed to the increase in positive assessment of the outgroup.

Ingroup bias. As would be expected based on the ingroup and outgroup favouritism scores, the results for ingroup bias were similarly positive. Although an ANOVA did not indicate a significant main effect of condition on outgroup favouritism, this was due mainly to a considerable level of variation between schools. However, there was a significant interaction effect of condition and year in school ($F(2,192) = 3.97$, $p <$ .05, partial $eta^2 = .04$). This result is in agreement with the aforementioned stage theory of socio-cognitive development which posits the varying salience of social identity at different ages during preadolescence. Additionally, a paired samples t-test indicated a significant decrease in ingroup bias for the experimental schools ($t(114) = 2.41$, $p <.05$). The slight increase in ingroup bias found in the control schools was not significant, but this was due to the fact that both ingroup and outgroup favouritism scores decreased in these schools between Time 1 and 2.

Prosocial behaviour in a competition. An ANOVA indicated that there was a significant main effect of condition on competitive prosocial behaviour at Time 2 ($F(1,196) = 4.51$, $p < .05$, partial $eta^2 = .02$). There was also a significant interaction effect of condition and school year at Time 2 ($F(2,192) = 4.53$, $p < .05$, partial $eta^2 = .05$). A paired samples t-test indicated that the experimental schools had shown a significant increase in competitive prosocial behaviour between start and end of the project ($t(114) =$

-3.58, $p < .01$). The mean competitive prosocial behaviour scores for the control schools did decrease during this same period, but only by the slightest of margins. Furthermore, in the experimental schools there was a strong significant correlation between ingroup bias and competitive prosocial behaviour ($r = -.61$, $p < .001$). Initial assessment of this statistic might be somewhat negative; however, one must consider this correlation in conjunction with the significant decrease in ingroup bias and significant increase in competitive prosocial behaviour found in the experimental schools. Thus, these findings can be interpreted to indicate that as prosocial behaviour was encouraged and increased in the experimental schools, there was a dramatic reduction in their ingroup bias. As was expected, this correlation was not significant in the control condition.

Unlike Time 1, the results for Time 2 indicated a significant main effect of gender on competitive prosocial behaviour ($F(1,196) = 4.30$, $p < .05$, partial $eta^2 = .02$). When broken down by condition, ANOVAs indicated a significant main effect of gender on competitive prosocial behaviour within the experimental condition ($F(1,113) = 4.29$, $p < .05$, partial $eta^2 = .04$), but not in the control schools. The results of this ANOVA are due almost entirely to the significant increase in competitive prosocial behaviour in females at the control school ($t(70) = -3.59$, $p < .01$). Males in either condition as well as females from the control schools did not show a significant change in competitive prosocial behaviour. These results would conclusively indicate that females are much more responsive to encouragement of prosocial behaviour than males. While the male participants did show some increase in competitive prosocial behaviour, it was far from significant. However, an additional factor to consider would be gender differences in competitiveness which could have easily effected their judgements.

General prosocial behaviour. General prosocial behaviour was also dramatically increased over the course of the program. Although there were no interaction effects with year in school or gender at Time 2, there was a significant main effect of condition on general prosocial behaviour ($F(1,194) = 5.59$, $p < .05$, partial $eta^2 = .03$), which was not present at the initial testing time. Unfortunately, a paired samples t-test indicated that the increase in general prosocial behaviour found in the experimental condition was not significant. As can be seen in Table 7.10, though, there was a significant decline in general prosocial behaviour in the control group.

Table 7.10: Mean, standard deviation, and t-test results for general prosocial behaviour (Study 3, Time 2)

	Time 1	Time 2	*t*-test
Experimental	24.85 (4.31)	25.34 (4.90)	$t(113) = 1.08$, $p = .29$
Control	25.07 (4.36)	23.41 (6.46)	$t(80) = -2.25$, $p < .05$

As with ingroup favouritism, the results for general prosocial behaviour must be interpreted considering both of the conditions. The prosocial benefits of the People United project might seem rather limited when one considers the non-significant increase in general prosocial behaviour; however, when the significant decrease in the same behaviour in the control schools is taken into account, the results are far more positive. The comparative nature of the results will be discussed later in further detail.

Further benefits of the project can be seen in the consistency of children's judgements of each prosocial behaviour type. Both conditions exhibited significant levels of consistency within each behaviour type but, as Table 7.11 shows, the experimental schools showed higher and stronger correlations between Times 1 and 2.

Table 7.11: Correlations between Time 1 and 2 for each prosocial behaviour type (Study 3, Times 1 & 2)

	Sharing	Helping	Comforting
Experimental	.348**	.413**	.447**
Control	.268*	.257*	.252*

*Note: ** indicates significance of $p < .001$ and * indicates significance of $p < .01$*

As the correlations indicate, the participants in the 'We All Do Good Things' project showed much higher consistency in their judgements of prosocial behaviours than the control schools. As the general prosocial measures included both ingroup and outgroup targets, these higher correlations would indicate that participants in the experimental condition are focusing less on group membership in their prosocial judgements. This elevated consistency corroborates our hypothesis that encouraging prosocial behaviour reduces the negative effects of social identity processes such as ingroup bias.

General prosocial behaviour results for Time 2 indicated an extraordinarily strong main effect for gender ($F(1,194) = 16.94$, $p < .001$, partial $eta^2 = .08$), which was not present at Time 1. Further analysis showed that the females seemed to respond much more strongly to the prosocial intervention than the males. In the experimental condition, the main effect for gender ($F(1,113) = 9.64$, $p < .01$, partial $eta^2 = .08$) was characterized by a significant increase in female prosocial behaviour ($t(69) = 2.72$, $p < .01$) along with a slight decrease in the males' (from 23.81 to 23.59). There was also a slightly weaker main effect for gender at Time 2 in the control condition ($F(1,79) = 5.76$, $p < .05$, partial $eta^2 = .07$), which was due almost entirely to quite a significant decrease in prosocial behaviour among the males ($t(40) = -3.46$, $p < .01$). Once again, the benefits of the project must be considered in relation to the control schools. While the slight decrease in

male prosocial behaviour found in the control schools was somewhat disappointing, the significant decrease found in the control schools puts these results into more positive perspective. The possible effect of competitiveness on male's responsiveness to encouragement of prosocial behaviour was previously suggested. Likewise, a considerable part of the female identity, at least in preadolescents, is a general predisposition toward prosocial behaviour. Examination of the similarity of the gender effect on both competitive and general prosocial behaviour makes it quite clear that various aspects of male and female gender identity can impact their expression of prosocial behaviour. Thus, we can conclude that gender identity has a significant effect on the encouragement and expression of prosocial behaviour.

The present hypothesis was also confirmed with correlation analysis of ingroup bias and general prosocial behaviour. The results indicated a significant negative correlation between ingroup bias and prosocial behaviour in the experimental condition ($r = -.32, p < .001$), but not in the control condition. These results are in agreement with those of the competitive prosocial behaviour and indicate that the encouragement of prosocial behaviour seems to be somewhat responsible for the decrease in negative group processes.

Empathy. At the second testing time, the scale reliability for the modified empathy scale was approximately the same as that achieved in the first ($\alpha = .51$). Contrary to the hypothesis, there was a non significant main effect of condition on empathy at the second testing session. Despite the aforementioned main effect of condition on prosocial behaviour, a similar increase in empathy was not found at Time 2. This would indicate that empathy may not be the dominant factor in children's

judgements of prosocial behaviour, but, rather, one of several components that are considered. Although no main effect of condition was found, there was a significant main effect of age group ($F(2,192) = 3.36$, $p < .05$, partial $eta^2 = .02$). Unexpectedly, across both conditions, the mean total empathy scores indicated a consistent decrease from Year 1 ($M = 21.78$, $SD = 4.72$) to Year 3 ($M = 20.06$, $SD = 5.01$) and on to Year 5 ($M = 19.55$, $SD = 4.93$). This outcome was in complete contrast to the prediction that empathy would increase with age due to further socio-cognitive development that would allow for improved affective perspective taking. Further analysis of each item indicated that the most substantial decrease in the overall means was due to the item: 'People who kiss and hug in public are silly.' A possible explanation for this decrease could be due to the child's understanding emotional displays and the target involved. For instance, a child entering primary school might readily invite a good-bye hug or kiss from a parent when being dropped off for school. However, a child in Year 5 might be horrified by the idea of a public display of emotion from a parent. Likewise, this disapproval of hugging and kissing may be due to preadolescent anxiety towards the other sex. Regardless of the explanation, these results better define the impact of socio-cognitive development and empathy in the relationship between social identity and prosocial behaviour.

As with the initial testing session, there was a significant correlation between empathy and general prosocial behaviour ($r = .28$, $p < .001$). However, unlike the first testing session, there was also a significant correlation between empathy and competitive prosocial behaviour ($r = .20$, $p < .01$). As demonstrated by Table 7.12, when broken down by behaviour type and scenario, the correlations with empathy describe an interesting pattern of judgement.

Table 7.12: Correlations between behaviour and empathy by scenario (Study 3, Time 2)

	Sharing	Helping	Comforting
General	.173**	.228**	.342**
Competitive	.125	.114	.232**

*Note: * indicates a significance of $p < .05$, while ** indicates a significance of $p < .01$*

As the table illustrates, comforting behaviour seems to be the type most motivated or affected by empathic concern. As previously mentioned, comforting behaviour was predicted to involve the most empathy and the least amount of personal sacrifice. From the results, positive resources seem to be viewed as an even more precious commodity in a competitive scenario. Likewise, children's empathy seems to be entirely over-ruled by their desire to win once they are organized into competing teams. This does not seem to be the case with comforting behaviour, though, which maintains the highest correlation with empathy despite a slight decline due to competitiveness. The structure and implications of this hierarchy of factors in children's prosocial judgement will be discussed further.

Once the data was divided by condition, a clearer picture of the relationship between prosocial behaviour and empathy was presented. In both the experimental ($\beta = .30$, $t = 3.38$, $p < .01$) and control ($\beta = .26$, $t = 2.38$, $p < .05$) empathy was a significant predictor of general prosocial behaviour. With competitive prosocial behaviour, however, only the control group indicated a significant linear relationship ($\beta = .37$, $t = 3.49$, $p < .01$). This result could be explained by the fact that competitive prosocial behaviour in the experimental condition was significantly higher ($t(196) = 2.12$, $p < .05$) than the control condition. Thus, it could be assumed that the intervention caused the children in the

experimental condition to behave prosocially in the competitive scenario, regardless of their level of empathy.

Regression analysis was conducted to test the consistency of the hypotheses regarding the relationships between various factors. As anticipated, outgroup favouritism at Time 1 significantly predicted outgroup favouritism at Time 2 ($\beta = .29$, $t = 3.97$, $p < .001$). Thus, the participants were consistent in their judgements of the outgroup. Although it predicted general prosocial behaviour within the first testing session, outgroup favouritism did not significantly predict general prosocial behaviour at Time 2. However, initial outgroup favouritism was a significant indication of competitive prosocial behaviour at Time 2 ($\beta = .09$, $t = 2.10$, $p < .05$). These contrasting results might be due to the fact that general prosocial behaviour included ingroup members, whereas competitive prosocial behaviour only involved members of the outgroup. As expected, general prosocial behaviour at the baseline testing session significantly predicted the children's general prosocial behaviour at the conclusion of the intervention ($\beta = .47$, $t = 5.31$, $p < .001$). Similarly, competitive prosocial behaviour at Time 2 was significantly predicted by competitive prosocial behaviour at Time 1 ($\beta = .36$, $t = 5.50$, $p < .001$). These results are quite encouraging as they indicate that children's prosocial judgements are somewhat consistent, which would indicate that they utilize a reliable construct of socio-cognitive capacities when making these judgements.

The most important result in terms of this path analysis was that empathy at Time 1 predicted both empathy ($\beta = .22$, $t = 2.94$, $p < .005$) as well as general prosocial behaviour ($\beta = .20$, $t = 2.50$, $p < .05$) at Time 2. These results indicate that the children's empathy was consistent over time and that empathy is a critical factor in their prosocial

behaviour. The nature of the role of empathy is further defined by the fact that empathy at Time 1 did not significantly predict competitive prosocial behaviour at Time 2. The contrast in these results might be due to competitive context factors such as group salience, competitive motivation, and social perspective taking. These results are further corroborated by the fact that empathy at Time 1 significantly predicted general prosocial behaviour ($\beta = .23$, $t = 4.17$, $p < .001$), but not competitive prosocial behaviour. The similarity in these findings clearly indicates that empathy is a secondary factor in a competitive context, where prosocial judgements are more reliant on other factors.

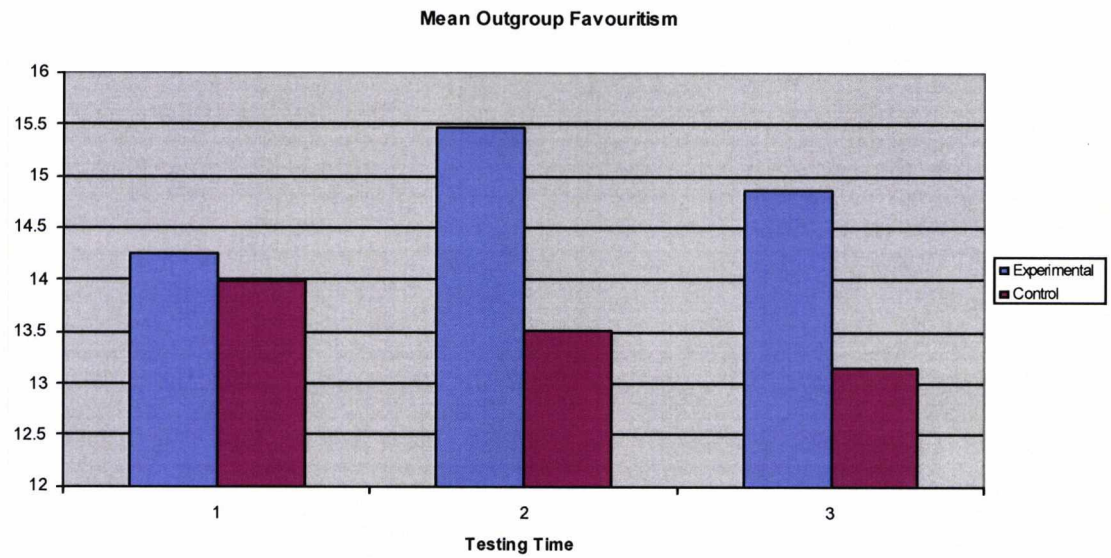
Long-term outcomes: Testing time 3

The primary purpose of the third and final testing session was to examine the more long-term effects on prosocial behaviour and social identity processes. It was anticipated that prosocial behaviour would decline slightly, but would be at a level that was still higher than that of the baseline testing session. We were most eager to see if the changes in social identity processes remained and if they were still related to prosocial behaviour.

Ingroup favouritism. In slight contrast to the marginally significant results from the second testing session, at Time 3 there was no significant main effect for condition on ingroup favouritism. Likewise, an ANOVA yielded no significant interaction effects of gender or year in school on children's ingroup favouritism. These results are a testament to the lack of direct impact the project had on social identity processes. Had the program focused on group membership or social identity to any considerable degree, we could expect a consistent and significant increase in ingroup favouritism, particularly as this

aspect of social identity that is considerably easier to manipulate than outgroup favouritism. However, as children are naturally inclined to exhibit prosocial behaviour towards and favour their own group, the encouragement of prosocial behaviour would have little impact on ingroup favouritism.

Outgroup favouritism. Corroborating this perspective, the results showed a significant main effect of condition on outgroup favouritism at the final testing session ($F(1,197) = 3.96$, $p < .05$, partial $eta^2 = .02$). As Graph 7.1 shows, despite the decrease in outgroup favouritism among the experimental schools between Times 2 and 3, the mean score was still higher than when the project began.



Graph 7.1: Mean outgroup favouritism scores by condition (Study 3, Times 1, 2, & 3)

As the Graph demonstrates, the difference between Times 1 and 3 is not significant for the experimental schools alone; however, there is clearly a main effect of condition at the second and third testing sessions. It is important to note the apparent trend for children in the control school to become consistently less positive towards outgroup members.

Although there was not a significant interaction between condition and gender, the interaction effect of condition and year in school on outgroup favouritism yielded very interesting results ($F(2,193) = 7.07$, $p < .01$, partial $eta^2 = .07$ or .112). Stage theory of socio-cognitive development indicates that social identity is most salient in preadolescents at around the age of 8, which the data for the control schools indicated. By contrast, though, the lowest level of outgroup favouritism was among the Year 1 participants. A possible explanation for this is that the impact that the People United project had on the social identity processes of the older participants was beyond the socio-cognitive capacity of the younger ones. It is quite possible that at that age, children's judgements of prosocial behaviour are almost entirely disconnected from their social identity.

Ingroup bias. Time 3 results did not show a significant main effect of condition on ingroup bias, but there was an interaction effect for condition and year in school ($F(2,192) = 5.34$, $p < .01$, partial $eta^2 = .05$ or .07). As Table 7.13 illustrates, results for participants in the control schools follow the pattern predicted by the stage theory of socio-cognitive development, while the experimental schools do not.

Table 7.13: Time 3 mean (and standard deviations) ingroup bias scores by condition and school year (Study 3, Time 3)

	Year 2	Year 4	Year 6	Total
Experimental	10.47 (5.99)	6.58 (7.08)	7.59 (5.52)	8.11 (6.51)
Control	8.34 (7.30)	11.82 (6.95)	8.04 (6.67)	9.46 (7.11)

As mentioned above, the project seems to have had little impact on the social identity processes of the younger participants. Unexpectedly, the participants at the apex of social identity salience in preadolescence seemed to be most influenced by the encouragement of prosocial behaviour. Given that stage theory of socio-cognitive development indicated the high importance of social identity in judgements during Years 3 and 4, it was hypothesized that the results for these years would be less reflective of the relationship between social identity and prosocial behaviour. However, the results for Time 3 strongly contradicted this position. Figure 7.1 clearly shows the nature of the interaction between condition, year in school, and ingroup bias.

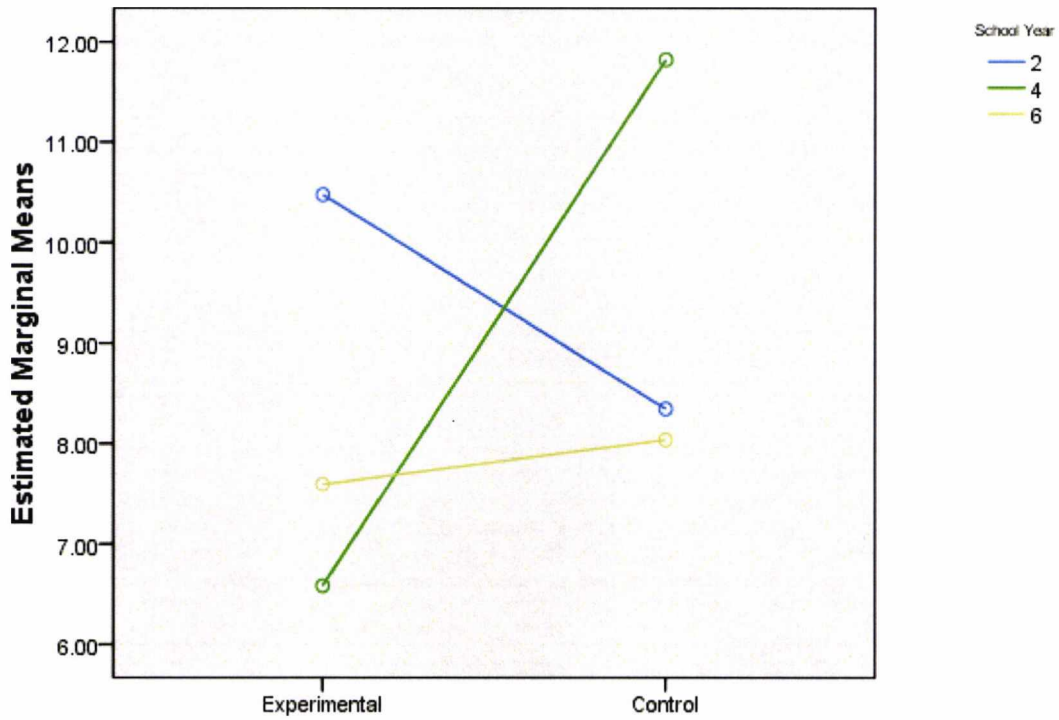
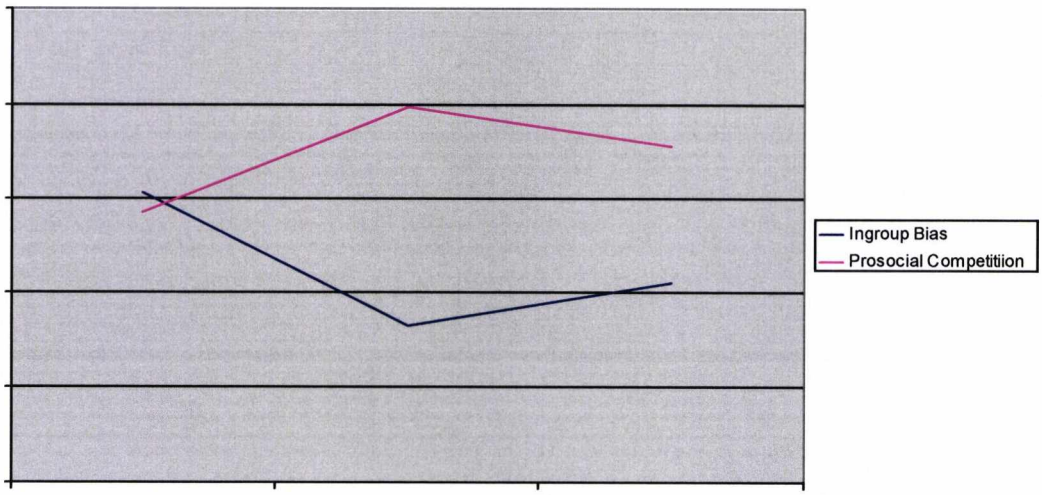


Figure 7.1: Estimated marginal means of ingroup bias by condition and year in school (Study 3, Time 3)

As the Table and Figure indicate, the difference between the control and experimental conditions among Year 4 participants is highly significant ($t(74) = -3.13, p < .01$). Also, this was the only school year with a significant difference between experimental and

control conditions at Time 3. Thus, one might conclude that despite the elevated salience of social identity around Years 3 and 4, it is simply a transitional phase that is quite susceptible to influential factors. Further implications of age factors will be discussed in more detail.

Prosocial behaviour in a competition. The Time 3 results for competitive prosocial behaviour further confirm the long-term benefits of the project as well as the stage theory of socio-cognitive development. Both the main effect for condition ($F(1,198) = 3.75$, $p = .054$, partial $eta^2 = .02$) and interaction effect of condition and school year ($F(2,194) = 3.04$, $p = .05$, partial $eta^2 = .03$ or $.05$) at Time 3 were only marginally significant. These results for the experimental condition correspond almost perfectly to the participants' levels of ingroup bias over the course of the study, as can be seen in Graph 7.2.



Graph 7.2: Mean ingroup bias and competitive prosocial behaviour scores in the experimental condition (Study 3, Times 1, 2, & 3)

As the Graph demonstrates, the changes in children's ingroup bias scores almost perfectly mirrored those in their competitive prosocial behaviour. The similarities in these patterns would suggest that the increase in prosocial behaviour caused by the People United project directly impacted the children's judgements about the outgroup. Additionally, the interaction between condition and year in school had a significant effect on both ingroup bias and competitive prosocial behaviour. Once again, participants from the control condition who began the project in Year 3 seemed to be the most responsive to the encouragement of prosocial behaviour. The interaction between condition and school year at Time 3 is illustrated in Figure 7.2.

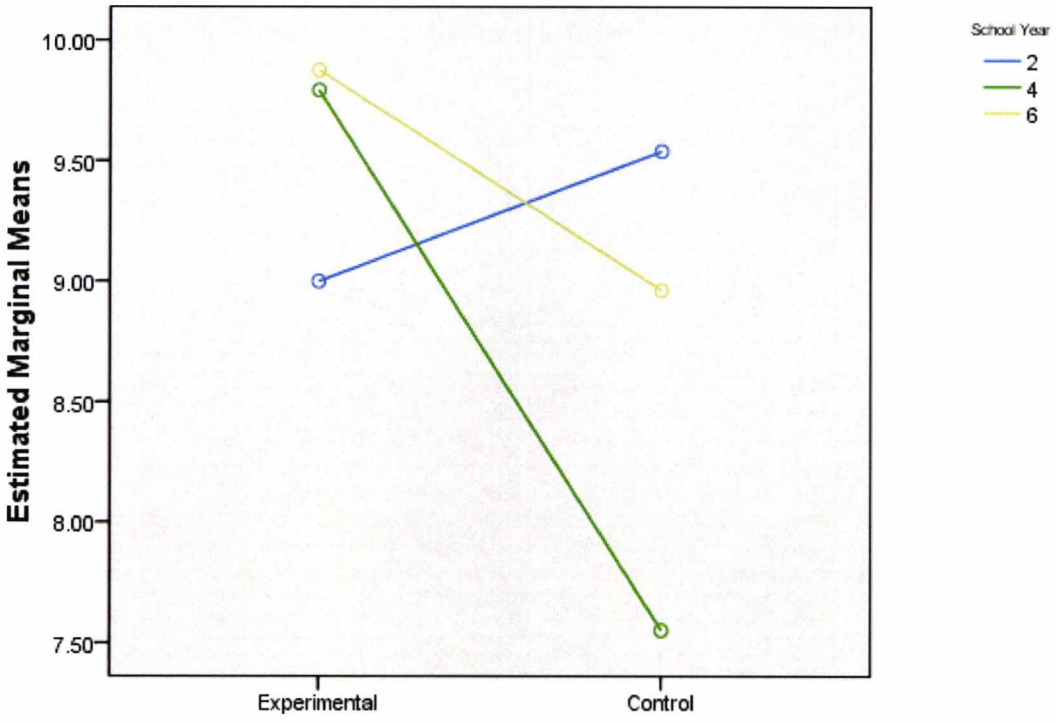
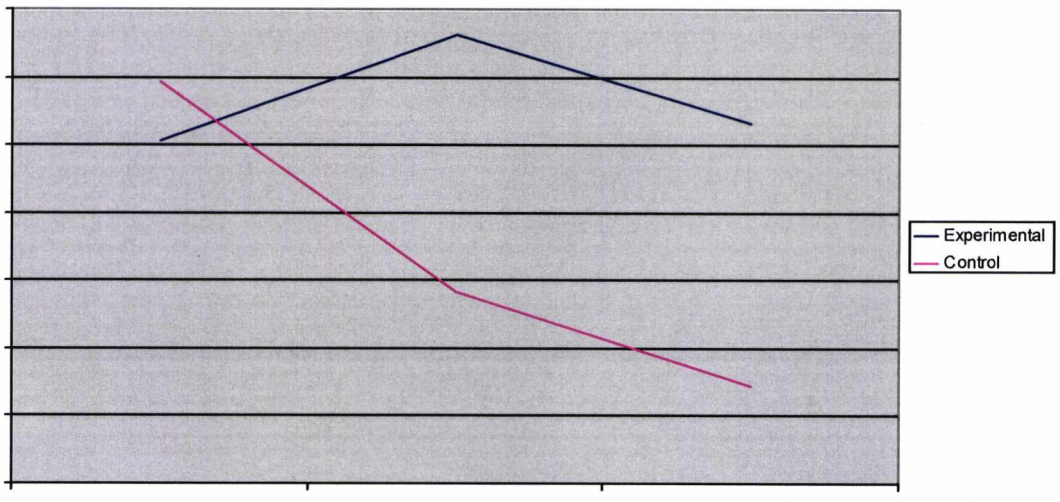


Figure 7.2: Estimated marginal means of competitive prosocial behaviour by condition and year in school (Study 3, Time 3)

The strength of the relationship between prosocial behaviour and social identity processes can be clearly seen through comparison of the two plots. Each plot is nearly a mirror

reflection of the other, particularly when one compares the lines for the Year 4 participants. As stage theory posits that during this age social identity salience is at its highest during preadolescence, the fact that increased prosocial behaviour impacted ingroup bias is further confirmation of the strength of the hypothesized relationship.

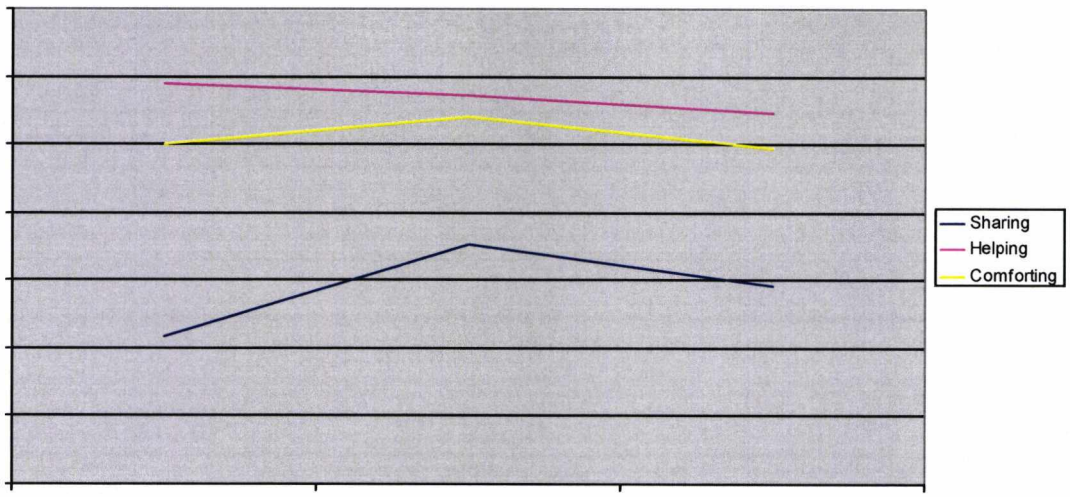
General prosocial behaviour. As with the competitive prosocial behaviour, an ANOVA indicated a significant main effect of condition on general prosocial behaviour at Time 3 ($F(1,198) = 6.21$, $p < .05$, partial $eta^2 = .03$). However, there were no significant two- or three-way interactions with gender or year in school. A paired samples t-test showed that while the increase in general prosocial behaviour between Times 1 and 3 in the experimental schools was only marginal, the control schools exhibited a significant decline ($t(81) = 2.95$, $p < .01$). Graph 7.3 illustrates the changes in general prosocial behaviour across the three testing times.



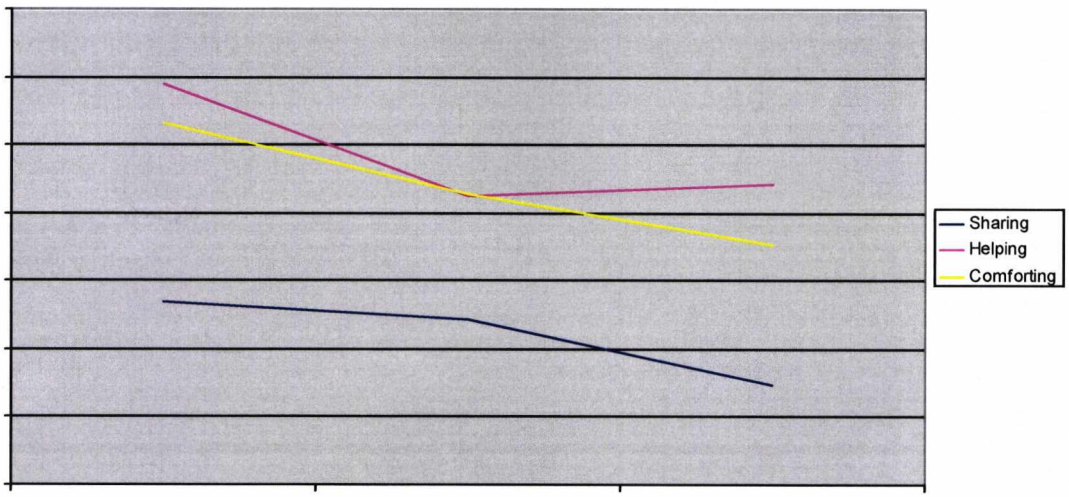
Graph 7.3: Mean general prosocial behaviour across three testing sessions (Study 3, Times 1, 2, & 3)

Above particular importance is the similarity between this graph and that of outgroup favouritism (Graph 7.1), which follows a nearly identical trend. In the control condition, participants exhibited a continual decline in general prosocial behaviour as well as outgroup favouritism. Additionally, the pattern was the same for both factors within the experimental condition. Once again, the comparative results would lead to the conclusion that the encouragement and increase in prosocial behaviour seems to affect a decrease in negative social identity processes.

Analysis of each of the three general prosocial behaviour types indicated a significant main effect of condition on sharing ($F(1,198) = 3.96$, $p < .05$, partial $eta^2 = .02$) and comforting ($F(1,198) = 5.22$, $p < .05$, partial $eta^2 = .03$), but a non-significant result for helping behaviour ($F(1,198) = 3.21$, $p = .075$, partial $eta^2 = .016$). Throughout this study, the results for helping behaviour have consistently differed from the other two behaviour types. As can be seen from Graphs 7.4 and 7.5, in both the experimental and control conditions, helping behaviour did not follow the same pattern as the other two prosocial behaviour types.



Graph 7.4: Mean prosocial behaviour scores by type in the experimental condition (Study 3, Times 1, 2, & 3)



Graph 7.5: Mean prosocial behaviour scores by type in the control condition (Study 3, Times 1, 2, & 3)

The fact that another factor is affecting helping behaviour can be clearly seen from these two graphs. Based on these results it is quite possible that empathy plays a more influential role on this particular type of helping behaviour than originally hypothesized.

Discussion

Overall, the results firmly supported our hypothesis of the two-directional nature of the relationship between social identity processes and prosocial behaviour. While the previous studies within the present research have analyzed the relationship from a single direction, the findings in this study clearly indicate that manipulations of prosocial behaviour can lead to changes in social identity processes. The following section discusses the implications, limitations, and research potential of the present study.

The results from the initial testing session indicated that there was not a significant difference in general prosocial behaviour between each of the five schools tested. Although this was result was just as we predicted, it is still a further confirmation of the consistency of prosocial judgement in children, particularly when one considers the fact that the schools were from contrasting socioeconomic areas with very different demographics. Likewise, the various social identity processes examined did not yield significant effects of school or condition during baseline testing. This consistency between schools supports the contention of the present research that social identity and prosocial behaviour are both reflective of the continuous socio-cognitive development among primary school children. Even though the children were from very different environments, their socio-cognitive development was following the same pattern which impacted their social identity processes and prosocial judgements in a similar manner.

An unexpected result of the initial testing session was the degree to which children were willing to engage in each of the prosocial behaviour types. It was hypothesized that children would show the higher levels of sharing than either of the other two prosocial behaviours. This prediction was based on the fact that sharing did not require empathic concern for the target, while empathy was considered essential in helping and comforting behaviour. The results, however, indicated that participants were least likely to engage in sharing behaviour by a considerable margin. Additionally, the means for helping and comforting behaviours were both well over the level indicating a positive response to questions regarding these behaviours. The results indicate that the prosocial judgements made by participants were more strongly influenced by the loss of a positive resource than initially expected. Judging by the means, it would seem that their judgements are based both on level of empathy as well as personal cost. Children seemed to view helping behaviour, which had the highest mean, as requiring a small amount of empathy and minimal personal sacrifice. Comforting was characterised by a high level of empathic concern and no personal cost, which resulted in a high level of positive responses. By contrast, sharing requires the sacrifice of a tangible, positive resource that seems to play a considerable role in their willingness to engage in such behaviour. This same pattern can also be found in their competitive prosocial behaviour, where positive resources would be even more valuable to the participants. Additionally, the somewhat low correlations between the prosocial behaviour types indicate that children do make judgements of these behaviours based on multiple factors. Based on these findings, it is suggested that the two main factors in this judgement are empathy and personal cost. Further research on individual prosocial behaviour types could focus on manipulating the

level of personal cost to the participant. Through this manipulation, it would be possible to identify the point at which children feel the personal sacrifice is greater than the need of the target.

The second testing session took place just after completion of the "We All Do Good Things" project, and the results were just as hypothesized. In general, there was a clear effect of encouragement of prosocial behaviour on social identity processes. Although the increase in prosocial behaviour between the first and second testing times was not significant in the experimental schools, the results must be analysed in conjunction with the findings for the control group. In the control schools, there was a significant decrease in prosocial behaviour between the first two testing sessions. Thus, at Time 2, there was a significant main effect of condition on general prosocial behaviour that was not found at Time 1. These results indicate the success of the project in reversing the general trend of reduced prosocial behaviour found in the control condition. Similar results were found with competitive prosocial behaviour, where a main effect of condition was also found at Time 2. What makes these results even more substantial is the corresponding effect the project had on the social identity processes of the participants. At the second testing time, there was a marginally significant main effect of condition on ingroup favouritism that was characterized by a significant decrease found in the control schools. Conversely, in the experimental condition, the level of ingroup favouritism remained consistently high between the first two testing sessions. Moreover, there was a very strong main effect of condition on outgroup favouritism at the conclusion of the project. The emphasis on prosocial behaviour in the project seems to have had the greatest impact on children's outgroup favouritism. While the control

schools exhibited a nearly significant decrease in outgroup favouritism, the schools involved in the People United project showed a significant increase in said process. The lack of a main effect of condition on ingroup bias was due entirely to the results of the control condition. As their liking of the ingroup and outgroup decreased to a similar degree, the level of ingroup bias changed very little in the control condition. By contrast, the experimental schools showed a significant decrease in their level of ingroup bias at the conclusion of the project.

Thus, the results indicate that by merely encouraging and emphasizing prosocial behaviour, children's attitudes towards ingroup and outgroup members can be changed. Not only did children's attitudes towards their ingroup remain highly positive, their perception of the outgroup also became more favourable in the experimental condition. These results thoroughly confirm our hypothesis that the relationship between social identity and prosocial behaviour is a two-way interaction. Further examination of this finding could explore the effects of manipulating the target of children's prosocial behaviour. Based on the results of the present study, one could test if encouraging prosocial behaviour towards a specific outgroup affects participant's favouritism towards only that group. By examining this interaction further, it would be possible to discover if encouraging prosocial behaviour changes children's general social identity processes or if the effect is localized to a specific group.

As with any large study, there were a few limitations which might have affected the results. The most inhibitive factor of any study of this nature is the social desirability effect. As the participants were administered the same questions about social identity and prosocial behaviour three times, they were able to develop a sense of what

responses were expected or preferred. The results would indicate that this social desirability did not affect the results to any severe degree as we did not observe any ceiling or floor effects. As this was a foreseeable limitation, the researchers made every effort to encourage the participants to responses exactly as they felt and emphasize that there were no 'wrong' answers. A further attempt to minimize the effect of social desirability was in the administration of the research itself. When possible, participants were permitted to complete the questionnaire themselves, under the supervision of the researcher, thus, eliminating the need to report their responses directly to the researcher and encouraging complete honesty in their answers.

Unfortunately, this differing administration procedure also represents a possible limitation of the study. Although the procedure was changed in order to eliminate the social desirability effect, this alteration might have affected participants' level of understanding. If the research had been administered individually to every participant, full comprehension of the questions and answers could have been ensured. Being aware of this conflict between comprehension and social desirability, the researcher was forced to decide on a procedure that addressed both issues. In addition to limiting understanding, the responses themselves might have been affected by the change in procedure. Individual interaction might have promoted honesty in their answers, while administering to a large group at once might have encouraged participants to exaggerate their responses. Modifying the procedure based on participants' age was considered the best way of minimizing social desirability while maximizing the consistency in participants' level of comprehension and response integrity.

Finally, the attrition rate over the course of the three testing times limited the conclusive accuracy of the findings. The attrition rate for the second testing session was nearly 17 % (40 participants) and there was a 16% (39 participants) reduction in participants from the first to the last session. In terms of a longitudinal study with primary school children, this level of attrition could be considered fairly minimal. Moreover, when one considers that the research was conducted over several school terms at five different schools, these loses were clearly inevitable. However, had all of the children been available for testing at all three of the sessions, the results might have been slightly different.

The beneficial findings of this research extend primarily to early education and parenting. As this study has shown that encouraging prosocial behaviour can lead to positive changes in social identity processes, the improvements to primary school education could be substantial. During nursery and early primary school years, children are actively encouraged to be kind and behave in a prosocial manner towards everyone. However, as the children progress through primary school, the emphasis on prosocial behaviour gradually diminishes. This study indicates that throughout primary school, children are receptive to encouragement of positive behaviour and that this can reduce the negative aspects of social identity. Thus, if teachers and parents continue to strongly emphasize the importance of prosocial behaviour throughout the age range, they might be able to avoid some of the conflict and negativity related to social identity. This is particularly so as early adolescence is a time when children are introduced to additional social groups which they might not have had contact with before. Furthermore, prior research has shown that during early and middle adolescence, children become less

critical and more accepting of antisocial behaviour (see Kiesner & Pastore, 2005). By instilling a strong sense of the benefits of prosocial behaviour during primary school, parents and teachers might reduce the attitudinal and behavioural negativity associated with adolescence.

As previously mentioned, a considerable amount of further research might be developed from the present study. Although the long term effects of the Project were measured four months after its conclusion at Time 3, an additional testing session might have provided a better assessment of the level of impact the initiative had. Aside from further retesting, the potential to examine several social identity and prosocial behaviour factors was presented by this study. Future research might consider using a variety of different outgroups to test the consistency of these results. It is possible that the changes in attitude observed in this study might only be seen in salient, but innocuous group situations. Additionally, it would be beneficial to evaluate participants' perceptions of the outgroup's feelings towards the ingroup. Participants in this study might have become more favourable towards the outgroup based on some expectation of reciprocity from the outgroup. In terms of prosocial behaviour, the severity of the circumstances might play a role in children's judgements to exhibit or withhold certain behaviours. Likewise, the present study indicated that children consider both personal cost as well as empathy in their prosocial judgements. Further research could focus on the judgemental hierarchy children utilize at various ages and the circumstances in which one factor outweighs another. The following chapter further examines the role of empathy in the relationship between social identity and prosocial behaviour. Additional factors such as socio-cognitive ability, group awareness, and group membership are also explored.

CHAPTER EIGHT

Further examination of the role of empathy, socio-cognitive abilities, and intergroup awareness on the proposed relationship

"Juvenile appraisals of other juveniles make up in clarity what they lack in charity."

- Edgar Z. Friedenberg

The present study was designed to more closely examine the various factors that have been shown to affect the relationship between social identity and prosocial behaviour. The study involved 129 participants in Years 1, 3, and 5 from three primary schools in Kent. The research was quasi-experimental and included measures of intergroup awareness, empathy, and socio-cognitive development. It was hypothesized that each of these factors would have differing, but significant, relationships with children's feelings of outgroup favouritism as well as their prosocial judgement. The results indicated that group awareness can reduce ingroup bias when group membership is highly salient to social identity as in Year 3. Likewise, during this same stage of development, empathy becomes an even more important factor in prosocial judgement and outgroup favourability. Across the age range, empathy was a significant predictor of prosocial behaviour. However, when broken down by age, the results indicate that children's empathy determines their prosocial behaviour to varying degrees. Theoretical perspectives for these age variations are discussed along with further implications and possible limitations.

Introduction

Thus far, the present research has focused on a variety of different participant and context characteristics that validate and affect the relationship between social identity and prosocial behaviour. Although the research involved examination of the socio-cognitive and contextual causes of these factors, further analysis into their specific impact on the hypothesized relationship was necessary. Of the countless catalysts and inhibitors of prosocial behaviour, the three which seemed to have the most serious effect in the previous research were group awareness, empathy, and socio-cognitive development. While the previous studies have addressed these factors as components in the hypothesized relationship, explicit examination of impact was needed. More specifically, how each of these factors affects social identity and prosocial behaviour individually or simultaneously. The previous studies have examined these components separately as unrelated pieces of a complex puzzle. However, the present study considers how these factors might interact to produce different effects, particularly with participants of varying ages. As Chapter 5 indicated, simple awareness of another group can cause feelings of competitiveness and outgroup negativity. Likewise, Chapter 7 showed that empathy can play a critical role on prosocial behaviour, depending on the behaviour and the context. The present study explicitly examines these components in an effort to further detail the nature of the relationship between social identity and prosocial behaviour.

Prior research has indicated that from a very early age, children show intergroup bias in a variety of group contexts (Aboud, 2003; Nesdale, Griffiths, Durkin, & Maass, 2007; Yee & Brown, 1992). Additionally, it has been shown that exclusion from social

relationships for personal reasons or due to group membership, can be painful and psychologically damaging for the excluded individual (Abrams & Christian, 2007). Despite the fact that most children have experienced the negative effects, either directly or through a peer, of socially exclusive behaviour, they choose to perpetuate these actions for a variety of reasons. Of particular concern is exclusivity in prosocial behaviour among children in primary school, where they are encouraged to help, share, and comfort other individuals in almost any circumstance. In terms of the present research, it is critical to identify the factors that promote or possibly discourage the exhibition of prosocial behaviour towards ingroup and outgroup members.

One of the factors which defines and affects intergroup encounters is competition. In some situations, competitiveness is due to the presence of an explicit contest between two or more groups in which each team is trying to best the other. In other circumstances, the competitiveness is due to an implicit desire to do better than another group, despite the absence of an explicit contest. As the Minimal Groups study of the present research has shown, the presence of an explicit competition significantly reduced prosocial behaviour towards an outgroup member. These findings further confirmed the results by Sherif (1966), which indicated that bias against outgroup members is elevated by the presence of a competition. Based on these conclusions, the present study utilizes a competitive scenario to increase the salience of group membership in order to further examine the effects of group awareness, empathy, and socio-cognitive development.

The inconclusive results for empathy achieved in the previous study follow the same pattern of limited success measuring the behavioural effects of empathy or affective perspective taking in prior research (see Underwood & Moore, 1982; Eisenberg & Miller,

1987, Krebs & Russell, 1981). A meta-analysis by Eisenberg and Miller (1987) noted that this limited success seems to be mostly due to the inconsistency of the various methods of measuring empathy. Their findings could also be due to the great deal of variation in the levels of socio-cognitive development during early and middle childhood. During this time, children's ability to understand the discomfort and needs of their peers increases. Furthermore, prior research has found that further development of children's perspective taking abilities contributes to their prosocial behaviour during middle childhood (see Batson, 1998; Eisenberg, Shea, Carlo, & Knight, 1991; Hoffman, 2000). The present study examines the role of both affective and social perspective taking on prosocial behaviour and social identity.

As much of the terminology in this area of research is often used interchangeably, it is important to establish the distinction between empathy and social perspective taking. The definition of perspective taking outlined by Shantz (1983) divides it into two socio-cognitive components: the capacity to differentiate between others and self and to understand the situation of another individual. More specifically, social perspective taking refers to the ability to comprehend the situation, thoughts, and intentions of another individual (see Carlo, 2006). While affective perspective taking pertains to the understanding of another individual's emotions, social perspective taking focuses on the circumstances and cognitive processes involved. Although the distinction between empathy and social perspective taking might seem somewhat negligible, the role that these socio-cognitive abilities might play in the hypothesized relationship might vary considerably. For instance, in a competitive scenario, a child might understand that an outgroup team member has a strong desire to win the competition and might choose not

to help that child based out of fear of their own team losing. However, if the child is aware of how sad an outgroup member would be if their team lost, they might empathise with this distress and choose to help the individual. Indeed, Abrams *et al.* (2009) found that children with more developed social perspective taking abilities showed greater sensitivity to social norms pertaining to inclusion and exclusion of group members. Thus, the effects of these two socio-cognitive abilities can vary greatly depending on the situation, behaviour type, and developmental capacity of the actor.

The importance of distinguishing between these two components lies in the fact that children experience an early stage in development where they understand another's situation, but are still entirely egocentric (see Eisenberg, 1982). Therefore, they can respond to the happiness or distress of another individual, but are unable to differentiate between their own emotional state and that of another individual. This position explains why one infant will begin to cry upon hearing the crying of another infant. While the second infant is entirely unaware of why the first might be crying, they engage in the negative response as a direct result of the first infant's distress. In order to feel empathy, an individual must both be aware of another's affective state and that awareness must produce the appropriate response in the observer. Thus, in terms of the present study, empathy is defined simply as the combination of affective perspective taking and the observer's response to the target's emotional state.

As mentioned in the previous chapter, research on the relationship between empathy and prosocial behaviour has been met with limited success. Two large meta-analyses have indicated a great deal of variation in the results of these studies as well as the research methods involved (see Eisenberg & Miller, 1987; Underwood & Moore,

1982). Despite the difficulty many researchers have encountered with adequately measuring empathy, several studies have produced very encouraging results. When using the Mehrabian and Epstein (1972) emotional tendency scale with both children and adults, significant evidence of a relationship between empathy and prosocial behaviour was found (Eisenberg & Miller, 1987). For example, Berndt (1979) conducted a study in which 11-year-olds were asked to focus on the emotional state of another individual rather than their own. The children involved in the condition which focused on the affective state of another individual volunteered more time at a children's hospital than their control condition counterparts. Likewise, studies conducted with university students indicated that those who scored higher on empathy scales were more likely to volunteer their time to help others (Penner, Fritzsche, Craiger, & Freifeld, 1995) or donate money (Davis, 1983). Based on these findings, one could conclude that with the correct empathy measures, a significant relationship between empathy and prosocial behaviour should be found. Therefore, due to the previous success of research involving the Mehrabian and Epstein (1972) emotional tendency scale, a modified version of the scale was again used in the present study.

As was discussed in Chapter 3, social identity salience should be highest amongst children who are 7 to 8-years-old (see Aboud, 1988; Bigler & Liben, 1993). Furthermore, intergroup contact research has indicated that making group boundaries less salient can reduce the amount of ingroup bias (Cameron, Rutland, Brown, & Douch, 2006). Based on these findings, the present study also examined the role of group awareness, including group membership, in the relationship between social identity and prosocial behaviour. According to the Stage Theory of socio-cognitive development, children's group

awareness should be somewhat low at the beginning of primary school. This is due mostly to their limited socialization and the fact that most children in Years 1 and 2 lack the socio-cognitive capacity of multiple categorization. However, Year 3 should represent the apex of group awareness and should also be the time when group awareness has its strongest effect on social judgement. Finally, by the end of primary school, children should still be aware of quite a few groups, but this awareness should have a diminished effect on their social judgements. The same school year pattern should appear in the number of groups they feel that they are a part of. Additional prior research has indicated that by decategorising social groups, intergroup relations can be improved (Brewer & Miller, 1984; Pettigrew, 1998). Thus, contrary to empathy or social perspective taking, group awareness was expected to have an inhibitory effect on prosocial behaviour depending on the age of the participant.

As with the previous research, the primary hypothesis of the present study is that there will be a significant relationship between social identity and prosocial behaviour. However, by identifying the strength of the effect of empathy, social perspective taking, and group awareness, the present study should more clearly define the hypothesized relationship. It is expected that higher levels of empathy and social perspective taking will each have a significant, positive effect on prosocial behaviour. Both empathy and social perspective taking are expected to increase with age and should be significantly higher from Year 1 to Year 5. Finally, group awareness is predicted to reduce children's willingness to engage in prosocial behaviour. The inhibitory effect of group awareness will follow the Stage Theory of socio-cognitive development and should be strongest amongst Year 3 participants.

Method

Participants

The study involved 129 primary school children from three different schools in Kent. The sample included both male and female participants in Years 1, 3, and 5. The mean ages of the participants were: Year 1 (M = 5.25, SD = .44), Year 3 (M = 7.29, SD = .46), Year 5 (M = 9.08, SD = .28). The sample was slightly unbalanced by gender with 54 (42%) male participants and 75 (58%) females, but this was mainly due to the children's willingness to participate. It seems that females were more willing to participate in the study than their male counterparts. The sample consisted mostly of Anglo-European participants born in the United Kingdom (96%), with only a few claiming to have been born elsewhere (4%). Participants were chosen randomly from those who had obtained parental consent and expressed willingness to be involved in the study.

Measures

The four independent variables in this study were intergroup awareness, group membership, empathy, and socio-cognitive development. The dependent variables were prosocial behaviour, ingroup/outgroup favouritism, and ingroup bias. Measures of each of these variables involved several items and the mean scores were calculated prior to analysis, where appropriate.

Intergroup awareness. Intergroup awareness was examined through the use of two very similar measures. The first of these two measures asked the participants to think of and name as many different groups within their school as they could. This measure was administered at the very beginning of the study and was designed to indicate both the

children's awareness of and emphasis on group membership. The second measure of group awareness came at the very end of the study and asked participants to name all of the different groups they belonged to. There were no limitations on the number of groups the children could name in either measure. Although the participants were informed verbally and in the instructions to be as honest as possible, their responses were unquestioned by the researcher regardless of their plausibility.

Empathy. Despite the low reliability of the empathy scale utilized in the previous study, the present research used the same ten items to examine the children's level of empathy. Given the previous success of the original scale emotional tendency scale designed by Mehrabian and Epstein (1972), the adapted empathy scale was used once more as both a means of measuring empathic concern as well as a further test of its reliability. The scale consisted of ten items based on those selected from Mehrabian and Epstein (1972) and adapted for use with a much younger audience. Each of the measures involved a statement which the participants were asked to agree or disagree with using a 5-point Likert scale. The statements included: "Seeing someone who is crying makes me feel like crying" and "Kids who don't have any friends probably don't want any." The response method was a 5-point verbal and pictorial ranging from "Definitely Disagree" to "Definitely Agree." The questions were once again counterbalanced to avoid any repetition or social desirability effects. The participants' overall empathy scores were calculated based on the correctness of each of the empathy items.

Socio-cognitive development. An underlying assumption of the present research is that the further development of children's socio-cognitive abilities not only affects their social identity process, but also their prosocial behaviour. This study utilized a scenario-

based measure of socio-cognitive ability to explicitly test this assumption. The scenario involved two children playing together for the first time. One of the children leaves and the other steals his toy while he is gone. Participants are then asked a series of questions beginning with whether or not the other child knows his toy has been stolen. They are then asked whether or not the child whose toy has been stolen likes the other child and then why they think he might feel that way. The responses for each of these questions were coded and a cumulative score of between zero and three was calculated based on their correctness and logical validity. A full copy of the socio-cognitive measure can be found in Appendix D.

Prosocial behaviour. The prosocial behaviour measures were also scenario-based and involved the same three behaviour types as the previous studies. Participants were asked to consider a situation in which they are playing by themselves in a park. They were told that the park was full of other children from their own and another school. Each of the six measures involved sharing, helping, or comforting either an ingroup (same school) or outgroup (other school) member. Using a 5-point Likert scale, participants were asked whether or not they would exhibit the specific prosocial behaviour towards the given target. The pictorial and verbal response scale involved a range of sad to smiling faces in addition to responses ranging from "Definitely Not" to "Definitely Would." The questions were counterbalanced by target type and behaviour in order to avoid any negative effects due to repetition.

Ingroup/outgroup favouritism. The participants' levels of ingroup favouritism, outgroup favouritism, and ingroup bias were examined using two sets of similar measures. The participants were told that their school was involved in a sandcastle

competition with another school from the local area. The outgroup school was, in fact, fictional in order to eliminate any pre-existing opinions or contact with the outgroup. Once they are aware of the situation, participants were then asked five questions about how much they like their team and how happy they are to be a member of their team. For each of these questions, participants responded using a 5-point scale and their cumulative ingroup favouritism score was calculated. For outgroup favouritism, a similar set of five questions was administered to examine their sentiments towards both the outgroup and its members. Once both the ingroup and outgroup favouritism scores were determined, the ingroup bias score was simply the calculated difference between the two.

Design

The study had a quasi-experimental design that did not involve any manipulation of the participants. The four independent variables were group awareness, group membership, empathy, and socio-cognitive development. The three dependent variables examined were outgroup favouritism, ingroup bias, and prosocial behaviour. The participants' year in school was an additional factor considered in the analysis.

Procedure

Once parental consent had been obtained for each potential participant, children were randomly selected for testing. They were individually removed from class and taken to a neutral and familiar location. Depending on the school, this was either another classroom, the library, or a communal area. The researcher would then identify himself to the participant and offer a brief explanation of the nature of the research. The child would

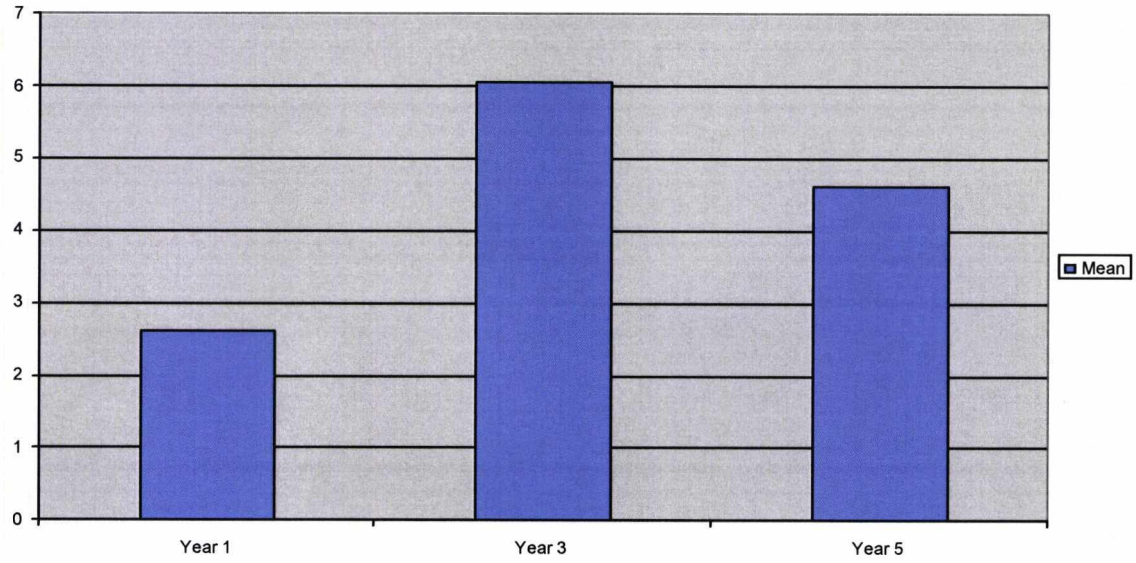
then be asked if they would like to participate in the study. When verbal consent was given, participants were guided through an instruction sheet that contained information on how to respond to each question type. Before any questions were administered, the participant was informed that they were free to withdraw at any time without any consequences. The researcher would then guide the participant through the questionnaire like a structured interview. The questionnaire would be placed in front of the participant, who was allowed to record their own answers if they wished. However, the researcher would read every question and answer aloud as the participant followed along. This method was used with all participants in order to ensure consistency of comprehension across the age range. Once the questionnaire was complete, participants were asked if they had any questions or comments about the study. After their questions were answered, the researcher would thank them for their participation and return them to class. After all testing was completed, the participants were informed as a group of the full details of the project and its aims.

Results

The results indicated that each of these factors did impact the relationship in question to varying degrees and in a multitude of ways. However, some factors, such as group awareness, seemed to only significantly impact the participants' social identity processes.

Intergroup awareness. Based on the Stage Theory of socio-cognitive development, participants in the 7 to 8-year-old age range were expected to indicate the highest level of focus on social group identity. An ANOVA indicated that there was a

significant main effect of age on the participants' awareness of groups within the school ($F(2,126) = 19.02, p < .001$, partial $eta^2 = .23$). Moreover, as Graph 8.1 indicates, the mean number of groups named forms the exact pattern predicted by Stage Theory.



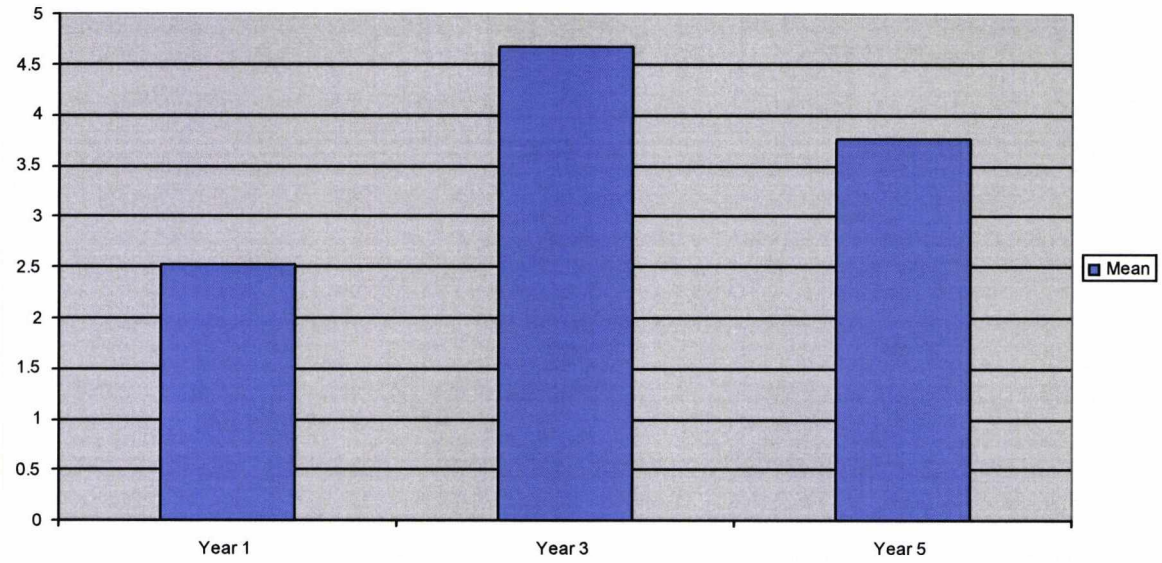
Graph 8.1: Mean group awareness scores by year in school (Study 4)

Participants in Year 3 were clearly aware of more groups within the school, indicating their tendency to rely on group membership as a highly salient means of social identification.

When the results for group awareness are analysed in terms of social identity processes, the outcomes show the considerable impact of age and socio-cognitive development. As hypothesized, group awareness was not significantly correlated to outgroup favouritism or ingroup bias among the Year 1 participants. This would indicate that prior to the concrete-operational stage of development, children do not rely on group membership as a salient means of social identification. However, the Year 3 participants indicated significant correlations between group awareness and both outgroup favouritism ($r = .46, p < .01$) and ingroup bias ($r = -.42, p < .01$). These results

corroborate the perspective of the present research that children in Year 3 would be less willing to exhibit prosocial behaviour based on their reliance on group membership to form their social categorizations. It was assumed that the more the children focused on group membership, the less positive their feelings towards outgroups would be. This, in turn, would reduce their willingness to exhibit prosocial behaviour towards outgroup members. Although there is not a significant correlation between group awareness and prosocial behaviour for Year 3 participants, the correlation is significant for children in Year 5 (r= .35, $p < .05$). Considering both the age trends in the means and correlations, one could conclude that the awareness of groups does have some inhibitory effect on prosocial behaviour when group membership is a highly salient aspect of social identity.

The hypotheses based on Stage Theory were further confirmed by the results of the group membership measure. As with group awareness, there was a significant main effect of school year on the number of groups that participants claimed to be a member of ($F(2,126) = 9.34$, $p < .001$, partial $eta^2 = .13$). Additionally, the pattern formed by the mean scores follows the hypothesized fluctuations due to age based on the Stage Theory.



Graph 8.2: Mean group membership scores by year in school (Study 4)

As the Graph indicates, participants in Year 3 were able to identify significantly more groups which they belonged to than their Year 1 and 5 counterparts. The salience of group membership at this age should directly impact their social identity processes which should, in turn, affect their prosocial judgement. As expected, there was a very high correlation between participants' group awareness and their group membership ($r = .57, p < .001$). When this correlation was broken down by age, the results for Year 3 ($r = .51, p < .001$) and Year 5 ($r = .68, p < .001$) showed very strong correlations while these two factors were not significantly correlated among Year 1 participants. These results seem to show that while older children identify themselves more based on group membership, awareness of groups has little impact on the salience of group membership on the social identity of younger children.

Contrary to the results for group awareness, there was a significant correlation between group membership and prosocial behaviour ($r = .25, p < .01$). Broken down by age, the results corroborate those of the group awareness measure as there was a

significant correlation between group membership and prosocial behaviour in Year 3 (r = .39, $p < .01$), which was not found in Year 1. However, the correlation unexpectedly becomes stronger among the Year 5 students (r = .44, $p < .01$). A possible explanation for this result is that nearly all Year 5 children have the socio-cognitive capacity to consider multiple group categorizations and can, therefore, name many group memberships. Likewise, the mean prosocial behaviour scores for Year 5 participants were higher than those of their Year 3 counterparts.

Outgroup favouritism and ingroup bias also seem to be related to group membership as both produced significant correlations (r = .27, $p < .01$ and r = -.20, $p <$ .05, respectively). Further analysis confirmed a significant linear relationship between group membership and outgroup favouritism (β = .27, t = 3.16, $p < .01$). Likewise, regression analysis confirmed the hypothesized relationship between group membership and ingroup bias (β = -.20, t = -2.34, $p < .05$). Similar to group awareness, the correlation between outgroup favouritism and group membership was only significant for the Year 3 participants (r = .45, $p < .01$); thus furthering the position that their focus on group membership actually makes them more accepting of and positive towards outgroup members. Considered with the results for prosocial behaviour, one could conclude that increased emphasis on group membership promotes more positive sentiments towards the outgroup and increases the level of intergroup prosocial behaviour. As would be expected, these results are further confirmed by a similar pattern in levels of ingroup bias. Year 3 participants were the only group to show a significant correlation between group membership and ingroup bias (r = -.34, $p < .05$). As will be discussed further, based on the results from the group awareness and group membership measures, one could

conclude that these factors can have a positive effect on the hypothesized relationship when group membership is highly salient.

Empathy. The role of empathy in the relationship between social identity and prosocial behaviour has been difficult to specify in the previous studies due to its varying level of impact. Depending both on the type of prosocial behaviour and the circumstances involved, the impact of empathy on prosocial judgement can range from negligible to significant. Contrary to predictions, there was not a significant main effect of school year on the participants' level of empathy. Although the Year 3 participants were expected to show the lowest level of empathy, the mean scores indicated a steady increase in empathic concern from Years 1 to 5 (see Table 8.1).

Table 8.1: Means (and standard deviations) for empathy and prosocial behaviour by school year (Study 4)

	Year 1	Year 3	Year 5
Empathy	33.97 (6.21)	34.72 (6.21)	35.03 (5.68)
Prosocial Behaviour	24.85 (4.83)	23.89 (6.27)	24.97 (4.18)

This pattern of empathy is particularly problematic when considered with their prosocial behaviour scores. Despite the fact that empathy steadily increases across the age range, participants in Year 3 showed the lowest level of prosocial behaviour. While the prosocial behaviour pattern corresponds to our hypothesis, the results for empathy contradict our predictions. It was hypothesized that empathy and prosocial behaviour would be at their lowest around Year 3, based on the salience of group membership to the social identity of children at that age.

However, correlation analysis of empathy and prosocial behaviour allowed further insight into this contradictory outcome. As hypothesized, across the age range there was a very high correlation between prosocial behaviour and empathy ($r = .47, p < .001$). Additionally, regression analysis indicated that empathy was a highly significant predictor of prosocial behaviour ($\beta = .47, t = 5.95, p < .001$). It is only when the correlation is broken down by age, though, that the nature of the relationship is fully detailed. In line with their limited socio-cognitive capacities, Participants in Year 1 indicated a significant correlation between empathy and prosocial behaviour ($r = .32, p < .05$). And, although the Year 5 participants exhibited a significant correlation ($r = .50, p < .01$), the Year 3 participants showed the strongest correlation between empathy and prosocial behaviour ($r = .56, p < .001$). Based on these results, one could conclude that despite the reduction in prosocial behaviour at that age, the prosocial behaviour that is exhibited is driven to a considerable extent by empathy.

Further regression analysis indicated that across the age range, empathy was a significant predictor of outgroup favouritism ($\beta = .22, t = 2.51, p < .05$). However, there was not a significant linear relationship between empathy and ingroup bias. This result can be explained by the fact that one of the two factors considered in ingroup bias, ingroup favouritism, has little or nothing to do with an individual's empathic concern. The results indicated that participants did not show a significant correlation between empathy and ingroup bias across at any age level. Nevertheless, the outgroup favouritism results for Year 3 differ from those of their counterparts. Only participants in Year 3 indicated a significant correlation between empathy and outgroup favouritism ($r = .31, p < .05$). These unique results correspond to the aforementioned results for empathy and

prosocial behaviour. Based on their responses to the outgroup favouritism and prosocial behaviour measures, one could conclude that when group membership is highly salient, many of children's social judgements seem to be motivated by empathy. Further implications of this conclusion will be discussed in more detail.

Socio-cognitive development. Socio-cognitive development followed the same age pattern as empathy but, unlike empathy, also indicated a main effect of year in school ($F(2,126) = 6.80$, $p < .01$, partial $eta^2 = .10$). The mean score for participants in Year 1 ($M = 1.45$, $SD = .99$) indicated that the majority of the children had insufficient social perspective taking abilities to correctly respond to the measure. However, as indicated by Stage Theory, their skills improve dramatically in Years 3 and 5 to a point where the majority of participants are responding correctly. Unexpectedly, the results indicated that there was no significant correlation between socio-cognitive development and competitive prosocial behaviour. As will be discussed further, this would indicate that understanding the situation of an outgroup member in a competitive situation does not increase the likelihood of exhibiting prosocial behaviour towards said member. This conclusion that the circumstances involved in the prosocial behaviour is confirmed by the significant correlation between socio-cognitive development and general prosocial behaviour ($r = .19$, $p < .05$). Thus, it would seem that being aware of another individual's situation is not a relevant factor in prosocial judgement when involved in a competition.

The importance of the context of the prosocial behaviour is further emphasized by the lack of a significant correlation between prosocial behaviour and empathy ($r = .10$, $p = .26$). While one might expect that being able to understand the situation of another individual might promote awareness of that individual's affective state and induce the

appropriate response in the observer, but the results do not support this perspective. As mentioned above, it was expected that the effects of empathy and social perspective taking would vary greatly by social context. However, the results indicate that rather than both empathy and social perspective taking being involved in all prosocial judgements, it seems that only one of these two factors is utilized depending on the social context.

Further analysis showed that socio-cognitive development is also not significantly related to outgroup favouritism or ingroup bias. By contrast, though, socio-cognitive development was significantly correlated with both group awareness ($r = .29, p < .01$) and group membership ($r = .25, p < .01$). These results would indicate that the further development of socio-cognitive abilities not only makes children more aware of social groups, but enhances their capacity to understand the situation of individual group members.

Discussion

The primary purpose of the present study was to further outline the factors that contribute to and define the relationship between social identity and prosocial behaviour. Although the results for the present research did confirm some of the hypotheses and corroborate the results of the previous studies, there were some notable contradictions to the predicted outcomes. For both group awareness and group membership, the results followed the hypothesized age group pattern based on Stage Theory. However, the relationship between these two variables and prosocial behaviour was not as predicted. This unexpected result is most likely due to the significant interaction between group awareness and group membership with social identification. Additionally, the results for

empathy were not ideal in that they did not follow the expected age pattern. Fortunately, across the age groups, there was a significant relationship between empathy and prosocial behaviour. Although it was not expected, the relationship between empathy and outgroup favouritism was also significant.

The foremost conclusion that can be drawn from these results would be the considerable effect of socio-cognitive development and group awareness on the exhibition of prosocial behaviour. When designing this study, it was expected that children's empathy and ability to understand the affective state of another individual would almost entirely guide children's prosocial judgements. By contrast, their social perspective taking skills were predicted to have an effect on both their social identity processes as well as their prosocial behaviour. However, the results indicated that the age group pattern for prosocial behaviour more closely matched the findings for group awareness than those of social perspective taking and empathy. As was expected, empathy and social perspective taking increased with age, which corresponded to an increase in prosocial behaviour in the oldest age group.

Where empathy and social perspective taking fall short is that they do not account for the distinct and predicted decline in prosocial behaviour among the Year 3 participants. As mentioned previously, social identity salience has been shown to be at its highest among children around the age of 7 to 8-years-old (Aboud, 1988; Bigler & Liben, 1993). Based on these findings, the present research expected prosocial behaviour to be at its lowest in the Year 3 the participants. However, the results indicated that both empathy and social perspective taking increased between Year 1 and Year 3, and that this pattern continued into Year 5. Despite gaining further socio-cognitive capacity which would

promote prosocial behaviour, children in Year 3 exhibited a sharp decrease which contradicted the age patterns of both of these components.

Even though this decline in prosocial behaviour was anticipated, the results are a testament to the strength of social identity salience in that age group. As can be seen in the tables above, participants in Year 3 were able to both identify more groups within their school and name a larger number of groups they belonged to than either their Year 1 or Year 5 counterparts. While exhibiting higher levels of social cognition than Year 1 participants might not be noteworthy, the fact that the Year 3 participants scored higher in both items than children in Year 5 is indicative of their focus on group membership as a means of social judgement. Although it cannot be concluded from these results that group awareness inhibits empathy and social perspective taking, these factors clearly form a hierarchy of social judgement which can vary by age.

One could interpret the results to indicate that prosocial behaviour in Year 1 participants is driven almost entirely by empathy due to their limited social perspective taking abilities and low social identity salience. By contrast, in Year 3, prosocial behaviour seems to be most strongly influenced in an inhibitory way by group awareness caused by the extremely high social identity salience at this age. During Year 3, empathy and social perspective still promote prosocial behaviour, but are limited by social identity salience. Finally, social perspective taking and addressing the distress of others from a more logical and analytical position seem to guide prosocial behaviour in Year 5. Group awareness still plays a role, as social identity is still a somewhat salient factor in social judgements at this age. However, among the three age groups, empathic concern for

another individual seems to have the least effect on prosocial behaviour amongst Year 5 participants.

The primary limitation of the present study was the continued reliability problems with the items in the modified Mehrabian and Epstein (1972) empathy scale. Including the two previous administrations of this measure in the previous study, the highest level of reliability achieved has been no more than .55. This is particularly low when one considers that the scale consists of only ten items and has been designed to ensure consistency of comprehension among the sample age group. Previous meta-analyses of empathy and prosocial behaviour have acknowledged the difficulty with developing a reliable empathy scale with both internal and external validity (see Eisenberg & Miller, 1987; Underwood & Moore, 1982). Although they concluded that the Mehrabian and Epstein inventory provided some of the more reliable results, there is still much room for improvement. Further research might include different items from the original scale which are modified to suit the cognitive capacities and experience of primary school children. Likewise, it is a possibility that the age range is simply too large and that more separate, more specific scales need to be developed for a limited age group. It might also be beneficial to further develop each of the items into individual scenarios, which might more accurately address the child's empathy and provide responses less impacted by social desirability.

The results of the present study would be most applicable to primary school teachers and parents. The results indicate that the factor which has the greatest capacity to limit prosocial behaviour is group awareness in a highly salient context. Additionally, the present study identified the age group in which the inhibitory effects of social identity are

at their highest. This information could be used to better promote unity within primary schools and to reduce the distinct barriers between different group categorizations. The findings of this study indicate that by diminishing the distinctions between social groups, teachers and parents will be able to encourage and promote prosocial behaviour in their children. Moreover, if this decline in prosocial behaviour found among the Year 3 participants could be prevented prior to reaching that age, the prosocial tendencies of those children should continue to increase to previously unachievable levels. Perhaps by slightly altering the curriculum during the first three years of primary school, prosocial behaviour can be greatly increased in addition to reducing friction between different group categorizations. In schools or communities with a great deal of tension caused by diversity, the results of the present study could prove very valuable in raising children with highly prosocial tendencies and a positive perspective towards outgroup members. Based on the findings of the present study, future research examining social identity and prosocial behaviour might focus more on the development of a prosocial judgement hierarchy. In order to do so, it would be necessary to further examine the inhibitory effects of social identity salience on prosocial behaviour. As a starting point, it might be best to examine only Year 3 participants to begin with due to the high identity salience on their social judgements. Additionally, by conducting further analysis to discover which groups are the most salient, it would be easier to establish the extent to which identifying with these groups can inhibit prosocial behaviour. Furthermore, it would be useful to identify which circumstances might encourage the children to ignore social identity and engage in prosocial behaviour, regardless of the group membership of the target.

CHAPTER NINE

Post-hoc comparative analysis of the effect of empathy by age, gender, and behaviour type

"The man who melts with social sympathy, though not allied, is of more worth than a thousand kinsmen."

-Euripides

Prior research examining the relationship between empathy and prosocial behaviour has yielded mixed results (see Eisenberg & Miller, 1987; Underwood & Moore, 1982). The results from these two meta-analyses indicated that depending on the sample and, more importantly, the method for measuring empathy, the results could present varying conclusions for this relationship. However, Eisenberg and Miller (1987) found that studies which used a self-report measure based on an emotional tendency scale developed by Mehrabian and Epstein (1972) provided the most consistent results. Based on these findings, the present research has utilized an adapted version of this scale to measure empathy to explore its impact on prosocial behaviour. Having administered the same measure on three separate occasions during the present research, a post-hoc comparative analysis of the relationship between empathy and prosocial behaviour indicated the importance of context. The analysis indicated that the relationship was most strongly affected by context and the type of behaviour involved. Additionally, somewhat consistent gender effects were found. However, due to the inconsistency in the results, no viable conclusions could be made regarding the impact of age on said relationship. Scale reliability, limitations, and future research are also discussed.

As discussed in previous chapters, prior research on the relationship between empathy and prosocial behaviour has yielded mixed results (see Eisenberg & Miller, 1987; Underwood & Moore, 1982). Depending on the context, participants, behaviour types, and method of measuring empathy, the results have supported a broad range of conclusions. The present chapter is a post-hoc examination of the three administrations of the empathy scale designed to highlight similar results and conclusions that might be drawn. In particular, the results of all three administrations will be analyzed for any trends in age, gender, or behaviour type. Additionally, the validity and reliability of the scale itself will also be examined. Finally, any overall conclusions regarding empathy and the scale used will be discussed.

Age. Throughout the present research, age has been hypothesized to be a factor that can greatly impact both social identity and prosocial behaviour. Likewise, it was hypothesized that empathy would increase with age, due to the development of further socio-cognitive capacities as children progress through primary school (see Eisenberg, 1982). In the three administrations, participants were tested in three age groups: Years 1, 3, and 5. Unfortunately, all three testing sessions yielded different patterns of empathy by age. The initial testing session for the People United project did not indicate a significant main effect of school year on empathy. Additionally, while the means were almost identical, the Year 3 participants showed slightly higher levels of empathy than the other two age groups. The second administration of the empathy scale in the People United project produced results that were almost significant by age, $F(2,192) = 2.50$, $p = .085$, partial $eta^2 = .03$). However, contradicting the first testing session and the hypothesis, the results indicated that participants showed less empathy as they got older (see Table 9.1)

Table 9.1: Means (and standard deviations) for empathy by year and testing session

	Study 3 (1)	Study 3 (2)	Study 4
Year 1	3.52(.88)	3.54(.83)	3.78(.75)
Year 3	3.55(.84)	3.27(.87)	3.20(.77)
Year 5	3.54(.71)	3.21(.86)	3.27(.64)

As the table indicates, the third testing session produced results which differed from both of the previous administrations. Unlike the first two administrations, an ANOVA indicated a significant main effect of age on empathy when testing in Study 4, $F(2,124) = 8.17$, $p < .001$, partial $eta^2 = .12$. The contrasting results of these three sessions make it somewhat difficult to form any viable conclusion with regards to age. More than anything the results show that during middle childhood, children's level of empathy can vary greatly. Contradicting the hypothesized age trend might indicate that due to the constant development of socio-cognitive capacities throughout primary school, children's empathy can fluctuate according to their most recent cognitive acquisition.

Gender. Based on the findings of prior research, it was predicted that female participants would show higher levels of empathy than their male counterparts (Eisenberg & Lennon, 1983). The results for the first administration in Study 3 corroborated these results and indicated a significant main effect of gender on empathy, $F(1,235) = 4.84$, $p < .05$, partial $eta^2 = .02$). As Table 9.2 indicates, the results for the second administration show the same pattern, but they were not significant.

Table 9.2: Means (and standard deviations) of empathy by gender and testing session

	Study 3 (1)	Study3 (2)	Study 4
Male	3.42(.85)	3.23(.87)	3.25(.87)
Female	3.65(.76)	3.40(.85)	3.51(.67)

Similar to the initial administration, the results for Study 4 indicated a marginally significant main effect of gender on empathy, $F(1,125) = 3.64$, $p = .058$, partial $eta^2 = .03$. Despite the fact that all three administrations did not produce significant results for gender, they do indicate a consistent difference between genders. Throughout all three testing times, females scored higher on the empathy scale than their male counterparts. As will be discussed later, the gender difference in empathy could provide an explanation for a similar gender difference found in the studies of the present research.

Context. All three administrations of the empathy scale included a competitive and a neutral context in which prosocial behaviour could be exhibited. Prior to conducting the research, no explicit hypotheses were made regarding empathy levels and context, but it is logical to expect the context to affect the role of empathy. In the first testing session of Study 3, there was a significant correlation between empathy and general prosocial behaviour, as was expected (see Table 9.3).

Table 9.3: Correlations between empathy and prosocial behaviour by context and testing session

	Study 3 (1)	Study 3 (2)	Study 4
Neutral	.262**	.337**	.375**
Competitive	.095	.239*	.219*

*Note: ** indicates p<.001, * indicates p<.05*

However, the correlation between empathy and prosocial behaviour in a competitive context was found to be non-significant. While the second testing session shows a similarly significant correlation between general prosocial behaviour and empathy, the results also indicated a significant relationship between competitive prosocial behaviour and empathy. Likewise, when the empathy scale was administered in Study 4, the results indicated that there was a significant relationship between empathy and prosocial behaviour in both contexts. One could conclude that when children find themselves in a neutral social context, their exhibition of prosocial behaviour is considerably dependent on their empathic concern for the target. However, it seems that in a competitive context, empathy does not seem to be as significant a factor in children's prosocial judgements. Although the relationship was significant in two of the three testing sessions, the correlations were consistently weaker than that found in the neutral context. Based on the findings of the present research, it is possible that a more important factor in children's prosocial judgements in a competitive context is their competitiveness.

Behaviour type. The present research took a generalized approach to prosocial behaviour and focused little on the differences between individual prosocial behaviour types. However, in terms of empathy, the three behaviour types examined in the present research could differ greatly due to their varying levels of personal cost and emotional involvement. It was anticipated, though, that empathy would be most strongly related to comforting behaviour because of the level of emotional involvement for this behaviour type. The initial testing session indicated that the empathy scale was significantly correlated to all three behaviour types (see Table 9.4). These results corroborated our

hypothesis that empathy was significantly related to prosocial behaviour, but there was a considerable range in the individual relationships.

Table 9.4: Correlations between empathy and individual behaviour types by testing session

	Study 3 (1)	Study 3 (2)	Study 4
Helping	.190*	.295**	.461**
Sharing	.156*	.206*	.134
Comforting	.256**	.388**	.397**

*Note: ** indicates p<.001, * indicates p<.05*

As the table demonstrates, the strongest correlation at the first administration was between empathy and comforting behaviour. This result is in line with the argument that empathy is something of a prerequisite for comforting behaviour. A similar pattern of results were found at the second testing time, with sharing behaviour again showing the weakest correlation with empathy. Results from Study 4 differ slightly in that helping behaviour has a considerably stronger relationship with empathy than comforting. While both involve some degree of emotional involvement, it is somewhat unusual that helping behaviour would surpass comforting at the final administration. Quite an obvious conclusion is the relatively low effect of empathic concern when making judgements about sharing. The results from Study 4 indicate that the relationship between empathy and sharing is not even significant. These results can be explained by the fact that sharing often involves more of a sacrifice of personal resources rather than any degree of emotional involvement with the target. For instance, sharing a crayon with another child does not require the same level of empathy as comforting a classmate when they are crying. These results indicate that further research on empathy and prosocial behaviour

should focus more on helping and comforting behaviour, which seem to be more affected by empathic concern.

Scale reliability. As mentioned in Chapter 8, one of the more consistent measures of empathy is the emotional tendency scale developed by Mehrabian and Epstein (1972). A considerable number of studies have used the original scale or an adapted version to examine the relationship between empathy and prosocial behaviour (Eisenberg & Miller, 1987; Underwood & Moore, 1982). However, the ten-item adapted scale utilized in the present research did not show the expected level of reliability. Therefore, after completing a factor analysis (see Appendix C), the scale was reduced to six items which produced an acceptable reliability score. To maintain uniformity in our analysis, the same six item scale was used when analyzing the results of the two subsequent administrations. Both of the following testing sessions yielded similar levels of reliability as that found in the initial administration. Additionally, the results from the initial testing session in Study 3 significantly predicted the empathy scores in the second administration ($\beta = .21$, $t = 2.94$, $p < .01$).

The difficulty experienced in the present study with consistently measuring children's empathy is most likely due to the considerable age range of the participants. Among an adult sample, a five-year age range would not typically explain a great deal of variation in responses. However, when conducting research involving primary school children, five years could account for a considerable difference in their socio-cognitive capacities and experiences. Additionally, their responses could be affected by their ability to understand the measures. In order to more accurately examine the relationship between empathy and prosocial behaviour in primary school children, it might be beneficial to

develop empathy scales to apply to individual age groups. This would insure that the items used were within the comprehension of the participants as well as being salient to their level of experience.

Through comparison of the results of all three administrations of the empathy scale, we can develop further conclusions about the relationship between empathy and prosocial behaviour as well as the prospects for future research. The results indicated that context is a critical factor in the aforementioned relationship. While empathy seems paramount in children's prosocial judgements in a neutral context, it appears to have less of an impact when there is a competition involved. This reduced impact could be due to children focusing on various aspects of the competition such as groups, status, and the importance of the outcome, rather than the emotions of the target. Also, various prosocial behaviour types seem to have differing relationships with empathy, based on the emotional involvement required of the behaviour. Comforting and helping behaviours seem to be the most reliant on empathic concern, while sharing would seem to be more affected by the level of personal sacrifice involved. As expected, females did show higher levels of empathy than males, but the results were not consistently significant. Although this does not contradict the argument that females are generally more empathic than males, it might indicate that this difference has been somewhat over-stated. Finally, the inconsistency in the empathy results by age made it difficult to develop any viable conclusions. It is quite possible that during the primary school years, children's empathy fluctuates constantly with their continuous socio-cognitive development. However, as mentioned above, future examination of the relationship between empathy and prosocial

behaviour would benefit from the adaptation of empathy scales to more specific age groups rather than a larger range.

CHAPTER TEN

Discussion of the Hypothesized Relationship as well as Conclusions, Implications, and Limitations

"No amount of experiments can prove me right; a single experiment can prove me wrong."

- Albert Einstein

The primary purpose of the present studies was to investigate the possible relationship between social identity and prosocial behaviour among primary school children. It was hypothesized that lower levels of outgroup favouritism and elevated ingroup bias would lead to reduced willingness to exhibit prosocial behaviour towards outgroup members. Likewise, higher levels of ingroup favouritism would also be related to increased willingness to exhibit prosocial behaviour towards ingroup members. In order to better identify and define the hypothesized relationship, a variety of socio-cognitive and behavioural variables were also examined.

The initial study, designed to ascertain the existence of this relationship in even the most simplistic intergroup situations, examined the role of a competitive situation on the hypothesized relationship. The primary hypothesis for this study was that the mere creation of minimal groups would be sufficient to reduce the willingness to exhibit prosocial behaviour towards an outgroup member. Additionally, it was predicted that a competitive situation would further emphasize group salience and, thus, lead to a more dramatic reduction in prosocial behaviour towards an outgroup member. Finally, it was expected that the status of the group would have a significant effect on their willingness to behave prosocially in the competitive condition.

The result for this study indicated that the creation of minimal groups was sufficient to reduce the willingness to exhibit prosocial behaviour towards an outgroup member. In all three conditions, participants were less likely to exhibit prosocial behaviour towards an outgroup member than an anonymous target in a neutral situation. Additionally, participants in the competitive conditions indicated significantly less willingness to engage in prosocial behaviour towards an outgroup member than their group condition counterpart. Thus, even though the creation of groups did significantly reduce prosocial behaviour, a competition scenario further emphasized the effects. Unfortunately, the results did not indicate any effect of the status of the groups on outgroup prosocial behaviour in the competitive conditions.

These results corroborate the behaviour observed by Vaughan *et al.* (1981), who found that children in a minimal group context were just as likely to maximise the difference in positive resource allocation between ingroup and outgroup targets as their 'strong' intergroup context counterparts. Furthermore, the findings of the present research confirm the results found by Abrams *et al.* (2008), which indicated that primary school children were capable of complex group-based judgements in a minimal group context. In the present study, children were clearly aware of the importance of their group membership and its social identity salience affected their judgements of prosocial behaviour. Research by Tajfel and Turner (1979) would contend that the creation of minimal groups would make the children more aware of the existence of an outgroup and, thus, would be more likely to rely on social categorization as a means of prosocial judgement.

The second study focused on the lingering social identity effects of a highly salient competitive scenario like the football World Cup. The study also examined the role of target typicality on the children's willingness to exhibit prosocial behaviour towards both ingroup and outgroups members. It was expected that children's evaluations of target typicality and positivity towards each target would coincide with their willingness to exhibit prosocial behaviour towards said targets. Likewise, it was expected that target typicality would dictate the level of positivity participants would express towards each target. The study extended the findings of the previous minimal groups study by examining the effect of a pre-existing, highly salient group and the importance of the target in prosocial judgements.

Contrary to the minimal groups results which indicated that group status does not seem to have an effect on outgroup prosociality, the results for the second study indicated a simple main effect of target on children's typicality ratings in both competitive and neutral conditions. In terms of prosocial behaviour, there was no main effect of target type within the ingroup condition indicating that participants are generally willing to exhibit prosociality towards an ingroup member regardless of their ingroup typicality. By contrast, there was a highly significant main effect of target type on prosocial behaviour within the outgroup condition. While participants were more likely to exhibit all three behaviour types towards an outgroup deviant member, helping and comforting behaviour showed the highest contrast between normative and deviant target. However, deviant targets were perceived as more prosocial than their normative counterparts, regardless of condition. Also, the results for positivity towards each target coincided with the perceived level of prosociality for each target.

The third study of the present research involved a longitudinal design that followed the progress of an 8-month prosocial intervention by the charity group, People United. The primary purpose of this study was to examine the possibility that the positive manipulation of prosocial behaviour would cause a reduction in negative social identity effects. It was hypothesised that participants in the experimental schools would not only exhibit higher levels of prosocial behaviour towards both ingroup and outgroup members, but they would also indicate increased outgroup favouritism and reduced ingroup bias. Moreover, it was expected that these results would be measurable several months after the conclusion of the intervention, indicating somewhat permanent changes in social perspectives. Additionally, empathy was examined as a possible motivating factor behind prosocial behaviour; however, the intervention did not make any specific efforts to encourage or increase empathic concern. The results were expected to show both changes over time within the experimental schools as well as the differences between the control and experimental schools at each testing session.

The intervention seemed to be highly successful as the participants in the experimental schools exhibited an increase in overall prosocial behaviour by the conclusion of the project. These results were significantly higher than those of the control school, who exhibited a significant decrease in prosocial behaviour over the same period. Additionally, the experimental schools showed a significant increase in outgroup favouritism at the end of the intervention as well as significantly reduced ingroup bias. Despite the increase in prosocial behaviour and the subsequent reduction in ingroup bias, empathy was not found to be significantly related to either prosocial behaviour or social identity. As is mentioned in that chapter, this might have been the result of the items used

to measure empathy, which has been noted to cause variation in empathy research (see Eisenberg & Miller, 1987). When retested several months after the conclusion of the People United intervention, participants still exhibited long-term effects of the project. Although the experimental condition's prosocial behaviour and ingroup bias were not significantly different from the beginning of the study, they were both significantly improved over their control school counterparts. Overall, the results seemed to indicate that the successful encouragement of prosocial behaviour is sufficient to reduce group salience, resulting in more positive attitudes towards outgroup members.

The final study was a further examination of the specific socio-cognitive and behavioural factors that impact the relationship between social identity and prosocial behaviour. This study explored both the nature and size of the effect of group awareness, socio-cognitive development, and empathy on the hypothesized relationship. Children were asked to name any groups they belonged to as well as all of the groups they could think of in their school. Socio-cognitive development was assessed using a Theory of Social Mind perspective taking task designed by Abrams, Rutland, Pelletier, and Ferrell (2009). Empathy was again measured using the same adapted version of the Mehrabian and Epstein (1972) empathy scale utilized in the People United study. Social identity and prosocial behaviour were measured using a scenario based context involving a fictional outgroup.

The results further confirmed the importance of further socio-cognitive development on the children's social judgements. As predicted, group awareness and group membership followed the age pattern suggested by Stage Theory. Younger participants were less aware of different social groups which corresponded to their

reduced ability to take the perspective of another individual. The predicted climax of these two factors at Year 3 corresponded to the lowest level of prosocial behaviour, despite a continual increase in empathy across the age range. Despite their superior socio-cognitive capacities, Year 5 participants showed reduced group awareness and group membership. This reduction corresponded to higher levels of prosocial behaviour, empathy, and social perspective taking. Empathy and social perspective taking were unrelated and had differing effects on prosocial behaviour depending on the context (either competitive or neutral). While there were some exceptions, the three factors examined seem to have more of an impact on prosocial behaviour than social identity processes.

Limitations

Despite the attention to detail that was given to the design and procedure of each of these studies, there are several limitations to the present research that must be acknowledged. When examining the results of these studies, one must also consider the potential limitations as well as how these limitations might have affected both the participants and their responses. The primary limitation of the present studies involves the method of measurement of prosocial behaviour, while the other two concern the sample itself.

Prior research on prosocial behaviour has involved a variety of methods including observation, scenario-based self report, and lab simulation (see Eisenberg *et al*, 1999; Jackson & Tisak, 2001; Staub, 1974). While each of these methods has distinct benefits, they also have individual flaws and limitations which can affect the results. The present

study utilized a scenario-based self report method for evaluating prosocial behaviour. However, this method involves several factors that may compromise the validity of the results. The primary concern with this method and, particularly, with utilizing this method when examining prosocial behaviour is the confounding factor of social desirability. Regardless of age or diversity of a sample, the participants' desire to respond in a way that society or the researcher would approve of is a constant threat to data integrity. This threat is even more substantial in studies where children, who are constantly encouraged to behave prosocially, are asked to make judgements regarding their prosocial behaviour. Due to their awareness of social norms and their perception of the researcher's expectations, the children's responses most likely expressed higher willingness to engage in prosocial behaviour than they might truly have felt. Although self report measures ensure consistency of comprehension and avoid the subjectivity of observational data, they might not provide a true perception of children's prosocial tendencies. Further research might achieve greater external validity if it involved both self report and observational measure of prosocial behaviour. This design would not only provide a highly valid depiction of prosociality, it would also identify the degree of effect of social desirability on prosocial judgements.

Further limitations of the present research involve both the size and composition of the sample. Although the results of each of these studies provided further insight into the relationship between social identity and prosocial behaviour, the use of larger samples might have provided a better depiction of the hypothesized relationship. That is not to say that the sample sizes of these studies were insufficient, but that stronger conclusions might have been achievable with more participants. Upon initial observation, the sample

sizes for each of these studies does not seem to be necessarily low, particularly when one considers the difficulty involved in arranging and testing primary school participants. However, it is the scope of each of these samples that makes the number of participants involved seem somewhat small.

The present studies focused on primary school children between the ages of 5 and 11-years-old. An age range of six years would not be considered large at all in adult studies, due to the relative comparability in socio-cognitive abilities among the adult population. However, when one considers the considerable and well-documented variation in children's socio-cognitive skills during primary school (see Batson, 1998; Eisenberg, 1982; Hoffman, 2000), this age range seems rather vast. As noted in these studies, children's further socio-cognitive development during primary school can greatly affect their social identity and prosocial judgements. Thus, a larger sample size with more participants in each age group might have provided a clearer picture of how this development affects the hypothesized relationship. A preferable research design might have been to focus solely on one age group, such as Year 3, and acquire a considerably larger sample. Including three different age groups with somewhat low sample sizes in the present research, led to less distinct results and difficulty describing the effect of this development on social identity and prosocial behaviour.

Conclusions and Implications

From these studies, it can be concluded that social identity does have a significant effect on the willingness to express prosocial behaviour during middle childhood. However, within this conclusion, are a multitude of factors and variables which further

define this relationship. The effect of social identity can vary greatly depending on the type of group and the salience of the group membership. Additionally, the intergroup context can further emphasize group boundaries, such as in a competition. The target can greatly impact the expression of prosocial behaviour by both their group membership and perceived typicality. Finally, the specific behaviour type can affect children's willingness to be prosocial depending on the level of personal sacrifice as well as the degree of affective involvement with the behaviour. The child's age can have a substantial effect on both social identity and prosocial behaviour, due primarily to their level of socio-cognitive development. As primary school is a time in which children attain a variety of new socio-cognitive capacities, the factors that affect their social judgements can vary. Empathy and social perspective taking play a vital role in this relationship, with each affecting social identity and prosocial behaviour to different degrees. Finally, children's prosocial judgements can be manipulated through the use of a successful intervention, which can have fairly permanent outcomes. The present research indicated that by encouraging prosocial behaviour, children's intergroup relations were also improved.

Practical implications of these findings primarily involve primary schools as well as parenting in middle childhood. The implications are particularly important in schools or areas with a great deal of cultural, religious, or racial diversity. The results indicate that if children at this age are encouraged to look beyond the group memberships that differentiate their peers, they will be more inclined to exhibit prosocial behaviour towards both ingroup and outgroup members. By reducing the distinct boundaries between groups, teachers and parents can help to eliminate children's inhibitions for expressing

prosocial behaviour. As younger children struggle with the ability to clearly define groups, they could be encouraged to see their school or community simply as one group.

While some people might oppose minimizing intergroup boundaries because they feel it reduces children's awareness of their cultural or religious identity, this research has shown that there is an additional solution. By simply encouraging and promoting prosocial behaviour through a structured and rigorous intervention, intergroup relations can be significantly improved. Although the present research focused on an intervention involving an entire primary school, the same principles can be adapted for parents and carers to increase the prosocial behaviour and reduce the ingroup bias of their child. Should a school or parent actively endorse prosocial behaviour over the duration of a child's primary school years, the benefits to their prosocial tendency and social identity processes could be long lasting.

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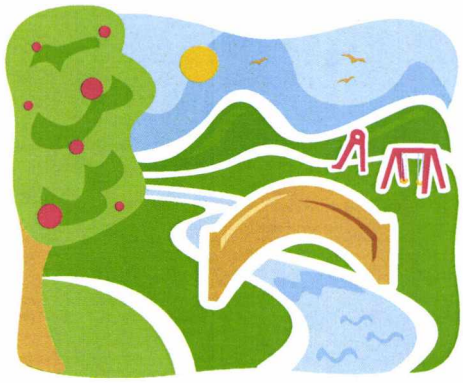
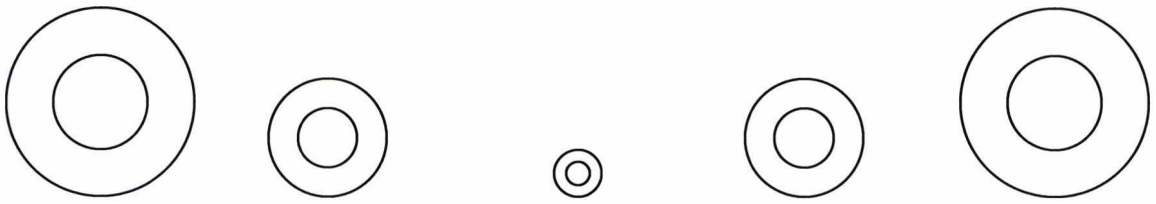
Appendix A: Minimal Group Study measures

I want you to pretend that you are playing at the park and there are lots of other children there as well. You are playing on your own and having a really nice time.

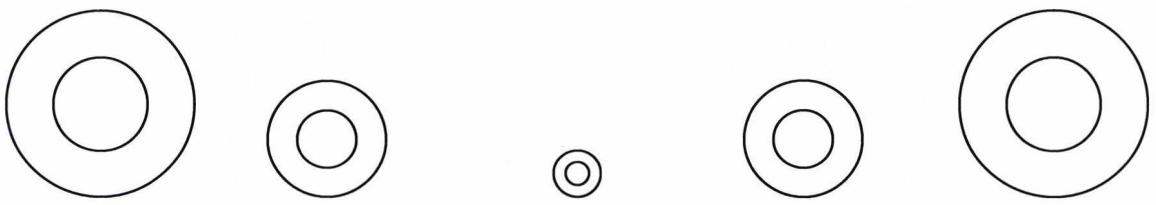


While you are playing, one of the other children comes over to you. He has nothing to play with and asks you if you will share some of your toys with him. Would you share your toys with him?



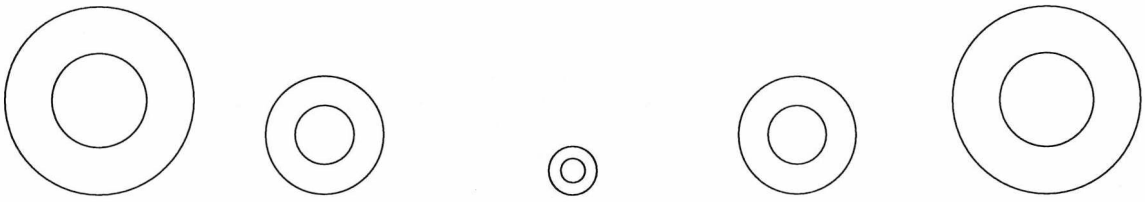
Definitely Not | Probably Not | Maybe | Probably Would | Definitely Would

You go back to playing with your toys and you notice a child has kicked her ball into a tree. She asks you if you will help her get it down. Would you help her?



Definitely Not | Probably Not | Maybe | Probably Would | Definitely Would

You go back to playing with your toys and when you see a child running across the park. As he is running, he trips over a rock and falls down. He gets upset and begins to cry. Would you go over and comfort him?



Definitely Not | Probably Not | Maybe | Probably Would | Definitely Would

You have been assigned to the Green Team. Your drawing will be included with the drawings of other members of the Green Team. The judges will look at all of the drawings from your Team and the other team and decide which team will win.

Now that you have been assigned to the Green Team, I would like to ask you some questions about your Team, the other team, and the contest.

How do you feel about being on the Green Team?

How much do you like your Team?

Do you think your Team will win?

How much do you like the other team?

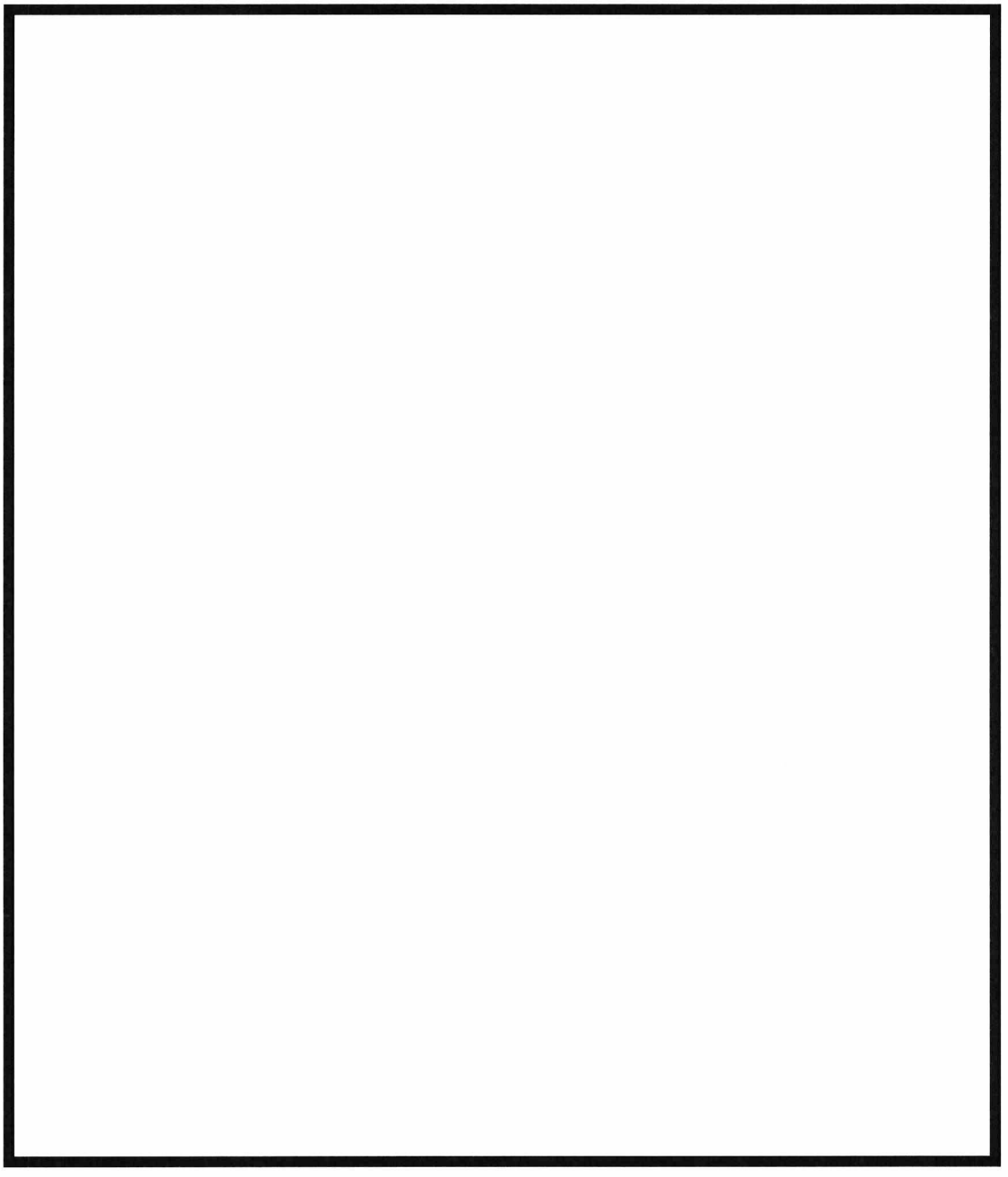
How much would you like to be on the other team?

How much do you like the children on the other team?

How would you feel if your Team won?

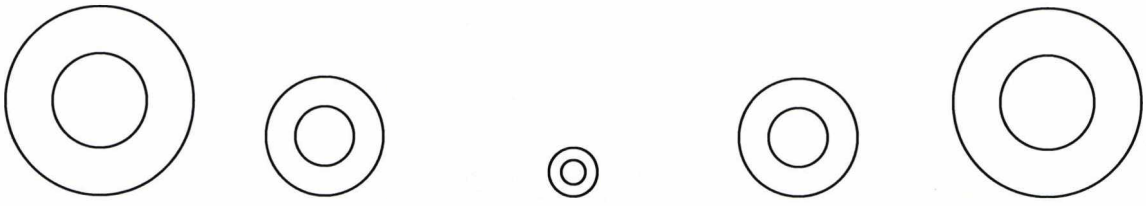
How would you feel if the other team won and your Team lost?

Now I am going to give you two minutes to create your drawing for the contest. Make sure your drawing fits within the box below. Remember, your drawing will be judged with the rest of your Teams' to see which team will win, so do your best!



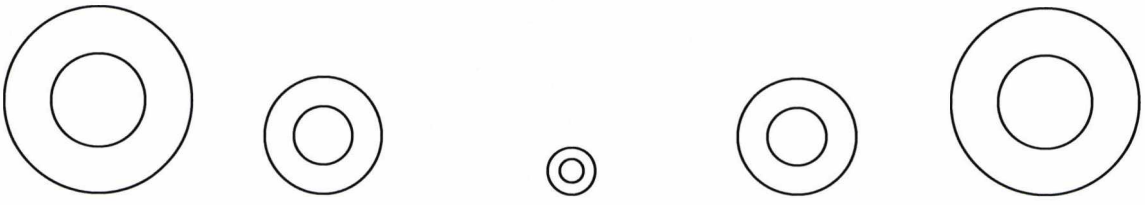
The judges have already looked at some of your Teams' and the other teams' drawings. The contest is not over, but right now your Team is winning. The judges still have to look at the rest of the drawings from both teams to decide if your team will win when the contest is over. Both teams need to finish the rest of their drawings before the contest wins.

The other team is running out of crayons to finish their pictures. They ask you if you will share some of your Teams' crayons with them. Would you share some of your Teams' crayons with the other team?



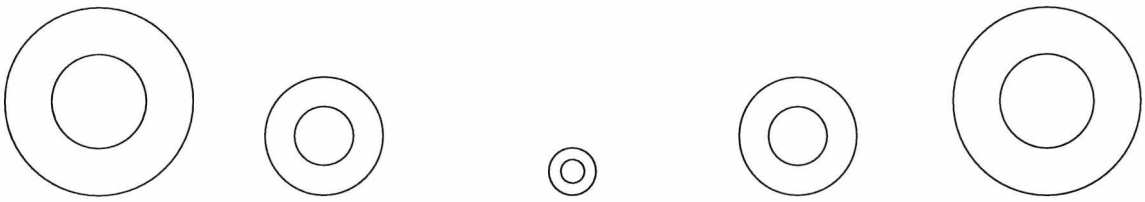
Definitely Not | Probably Not | Maybe | Probably Would | Definitely Would

One of the children is having difficulty completing their picture. She asks you if you would help her finish her picture. Would you help the member of the other team finish her picture?



Definitely Not | Probably Not | Maybe | Probably Would | Definitely Would

A child from the other team is afraid that his team might lose. He gets upset and begins to cry. Would you go over and comfort the boy from the other team?



Definitely Not | Probably Not | Maybe | Probably Would | Definitely Would

Appendix B: People United Study measures

Today there is a big sandcastle competition, and the team that builds the best sandcastle in a certain amount of time will win a big prize.

There is one team of students from your school, Charing Primary, and another team of students from Dover Primary School playing against each other.

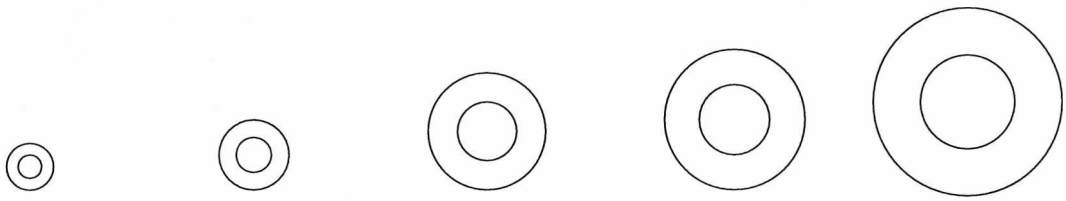
Each team really wants to win the big prize.

I want you to pretend that you are on your school's team and that you are trying to help them win the big prize too. I want you to think about how you would feel when you are building the sandcastle in the competition.

How do you feel about being on your school's team in the sandcastle competition?

How much do you like your school's team?

How much do you want your team to win?



Not at all | A little bit | A bit | Quite a bit | Very much

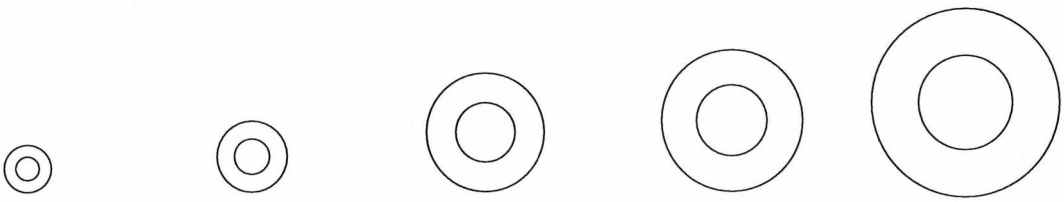
How would you feel if your team won?

Do you feel that everyone on your team is equally important to helping the team win?

How do you feel about the other school's team?

How much do you like the other school's team?

How much do you want the other school's team to win?

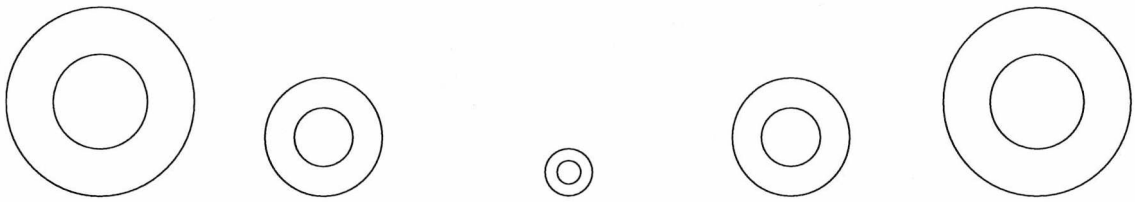


Not at all A little bit A bit Quite a bit Very much

How would you feel if the other school's team won?

How much do you like the children on the other school's team?

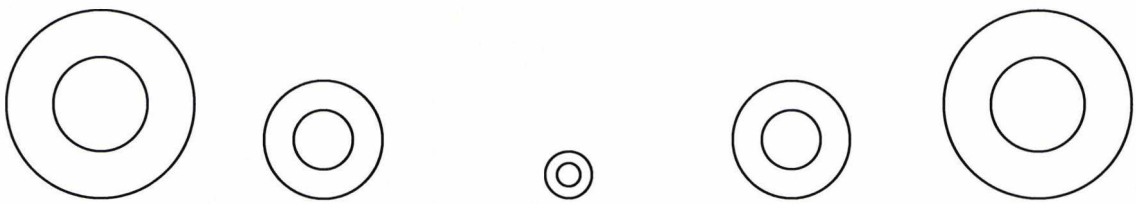
How much would you like to be on the other team?



Not at all | Not very much | Somewhat | A little bit | A lot

Now the sandcastle competition has started and both teams are working really hard to build their castles. You are helping as well by building a section of your team's castle. You are working really hard to help your team build a big castle and win the competition.

While you are building, you notice a really pretty seashell that would make your castle look nice. When you pick it up, a child from the other school's team asks you if he can have it. If you let him have it, it might make his team's castle look nicer than yours. Would you let him have it?



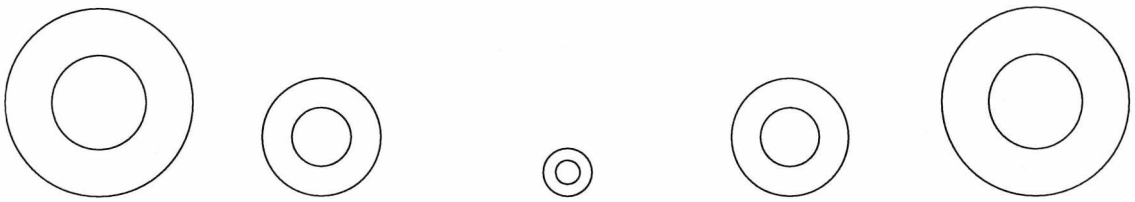
Definitely Not	Probably Not	Maybe	Probably Would	Definitely Would

Why would you do this? _____

_____

_____

You go back to building your sandcastle with your team. A child from the other team comes over to you and asks if you will share your bucket with him. Sharing your bucket would not be cheating, but it would help the other team build a nice castle. Would you share your bucket?



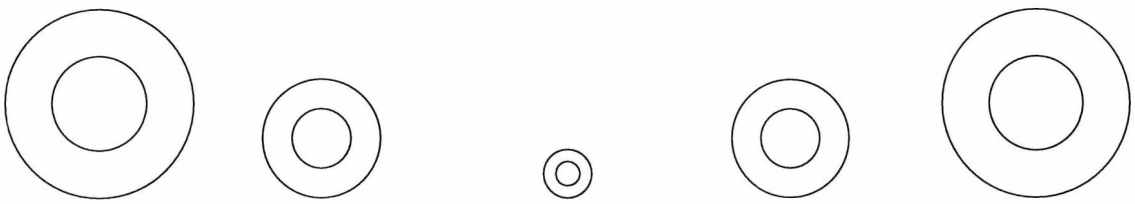
Definitely Not | Probably Not | Maybe | Probably Would | Definitely Would

Why would you do this? _____

_____

_____

As you are building your team's sandcastle, you see a child from the other team running to pick up a spade. He falls down and begins to cry. You could go over to comfort him, but your team needs you to keep building the sandcastle. Would you go over and comfort him?



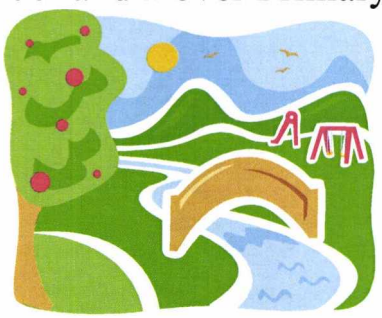
Definitely Not | Probably Not | Maybe | Probably Would | Definitely Would

Why would you do this? _____

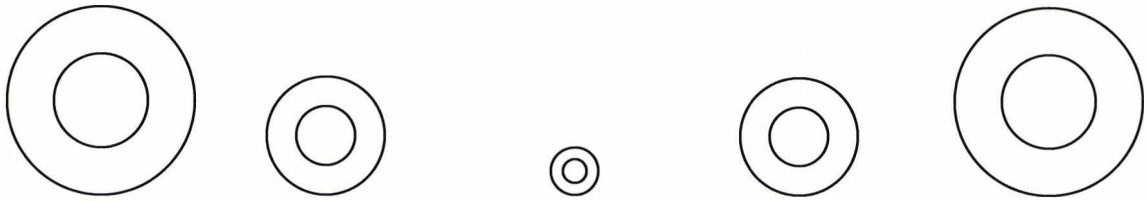
_____

_____

A few weeks later, you are playing at the park and there are lots of children from your school and Dover Primary School there.



You see a child from the other school who is playing on his own. He looks sad and lonely. Would you go over and play with him?



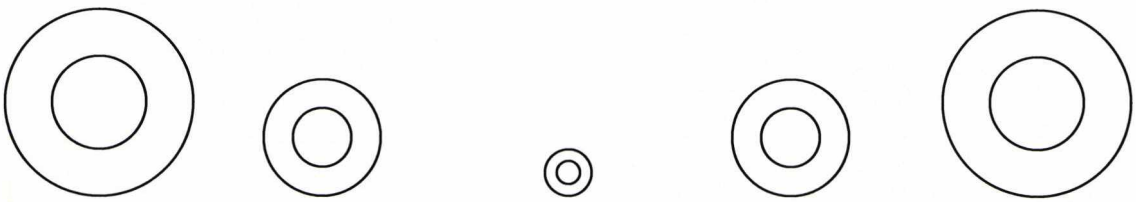
Definitely Not | Probably Not | Maybe | Probably Would | Definitely Would

Why would you do this? _____

_____

_____

Later, a child from your school asks if she can borrow one of your crayons to colour a picture. However, it is a crayon that you are using. Would you let her borrow it?



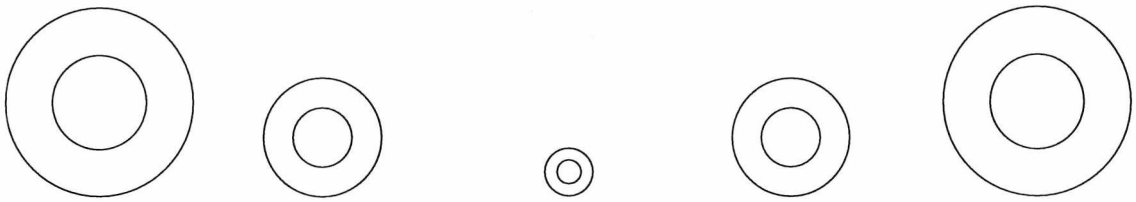
Definitely Not | Probably Not | Maybe | Probably Would | Definitely Would

Why would you do this? _____

_____

_____

Some children are making fun of a boy from Dover Primary and he is getting upset. The children leave and he begins to cry. Would you go over and comfort him?



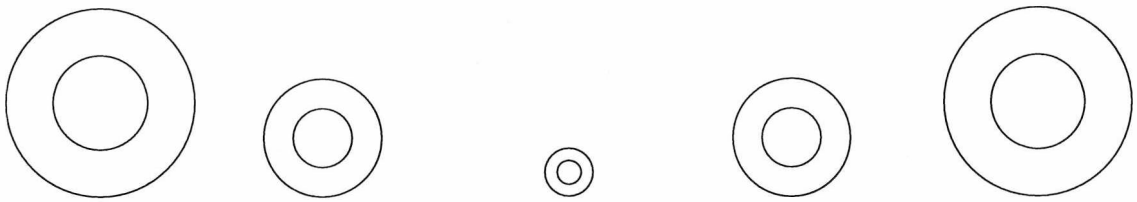
Definitely Not | Probably Not | Maybe | Probably Would | Definitely Would

Why would you do this? _____

_____

_____

A girl from your school is lost and looking for her friend. She asks you if you could help her find her friend. Would you help her?



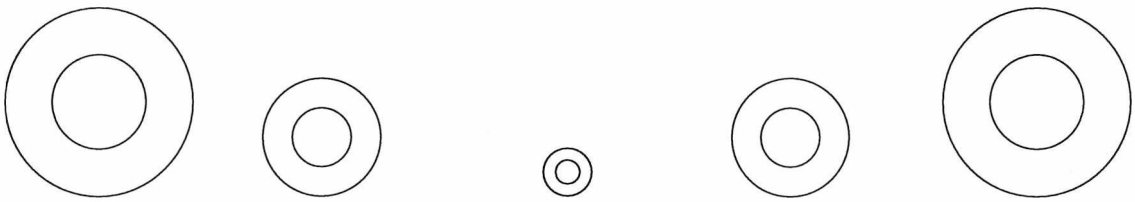
Definitely Not | Probably Not | Maybe | Probably Would | Definitely Would

Why would you do this? _____

_____

_____

You are playing football with some friends, but a boy from the other school comes over and asks if he can borrow a toy car. Would you let him borrow it?



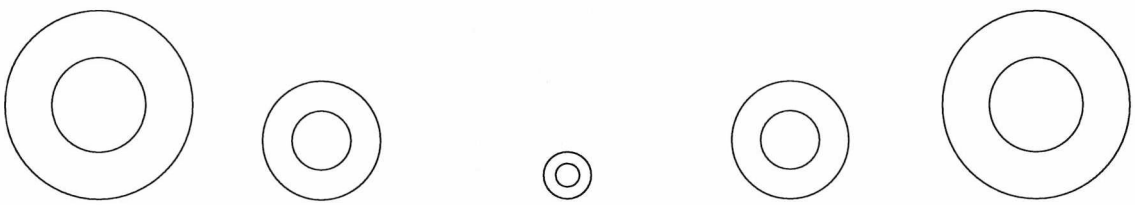
Definitely Not | Probably Not | Maybe | Probably Would | Definitely Would

Why would you do this? _____

_____

_____

A girl from your school is flying a kite and it gets stuck in a tree. She needs you to help her get it down and asks you if you will help. Would you help her?



Definitely Not | Probably Not | Maybe | Probably Would | Definitely Would

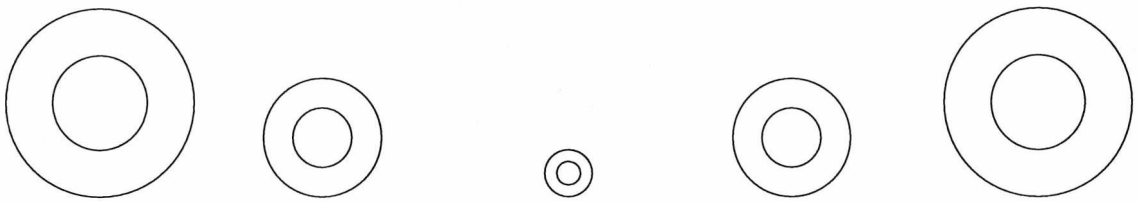
Why would you do this? _____

_____

_____

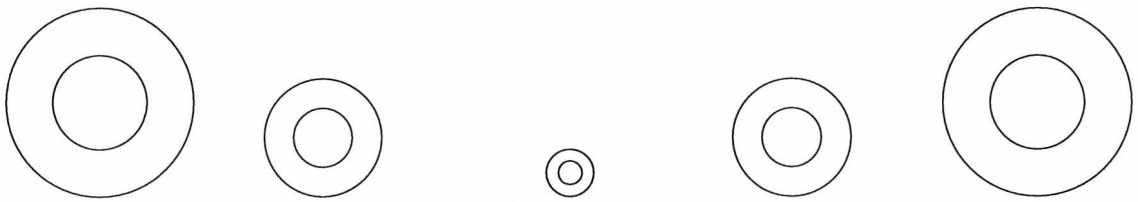
Now I am going to ask you some questions about how you think people feel. Listen to each statement carefully and tell me how much you agree or disagree with it.

1) It makes me sad when I see someone who can't find anyone to play with.



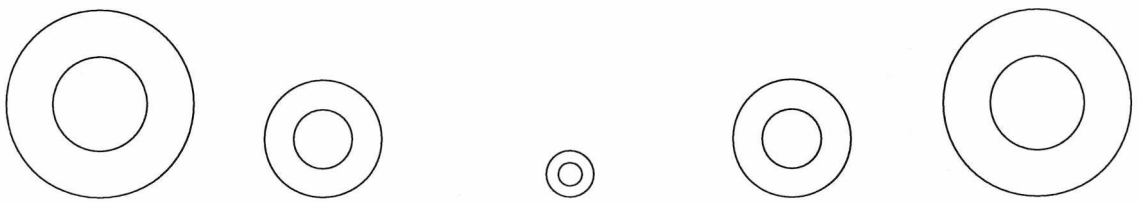
Definitely Disagree | Slightly Disagree | Maybe | Slightly Agree | Definitely Agree

2) People who kiss and hug in public are silly.



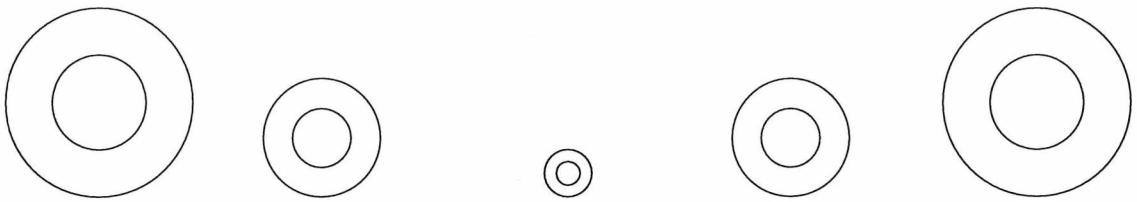
Definitely Disagree | Slightly Disagree | Maybe | Slightly Agree | Definitely Agree

3) Seeing someone who is crying makes me feel like crying.



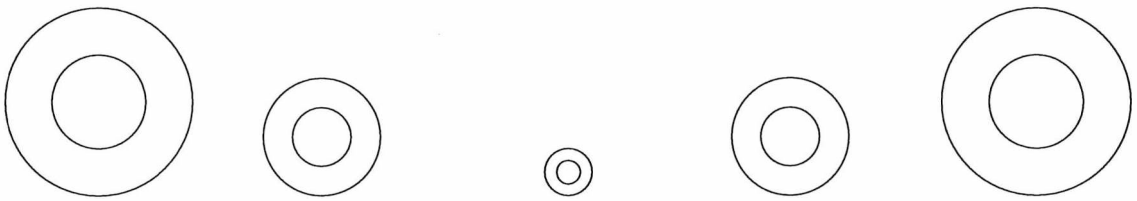
Definitely Disagree | Slightly Disagree | Maybe | Slightly Agree | Definitely Agree

4) It's hard for me to see why someone else gets upset.



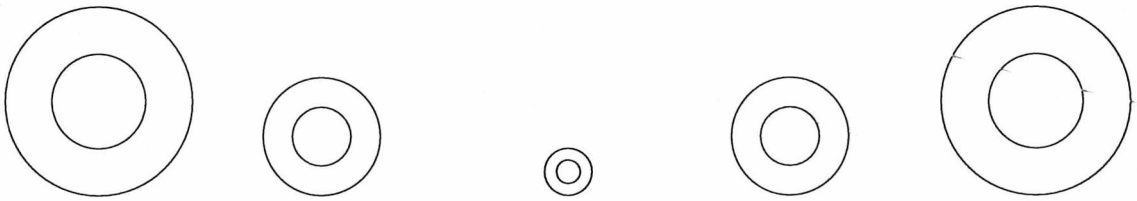
Definitely Disagree | Slightly Disagree | Maybe | Slightly Agree | Definitely Agree

5) Even when I don't know why someone is laughing, I laugh too.



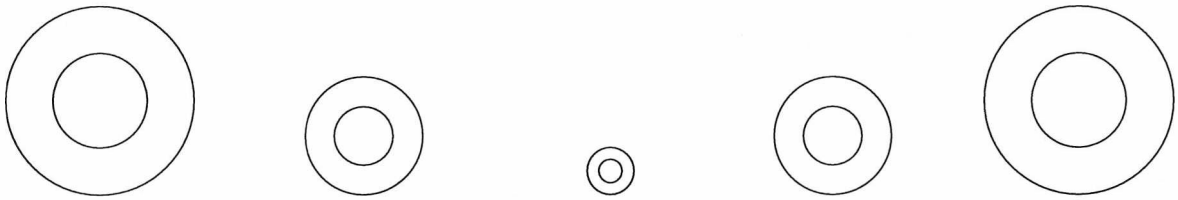
Definitely Disagree | Slightly Disagree | Maybe | Slightly Agree | Definitely Agree

6) People who cry because they are happy are silly.



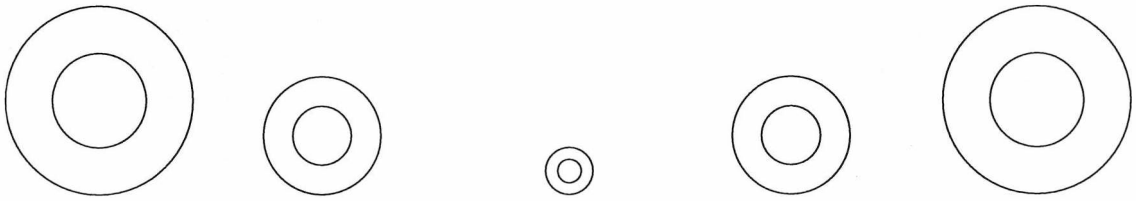
Definitely Disagree | Slightly Disagree | Maybe | Slightly Agree | Definitely Agree

7) I get upset when I see someone getting hurt.



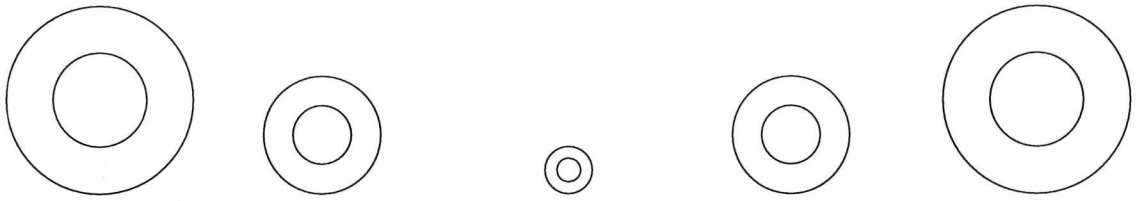
Definitely Disagree | Slightly Disagree | Maybe | Slightly Agree | Definitely Agree

8) Kids who don't have any friends probably don't want any.



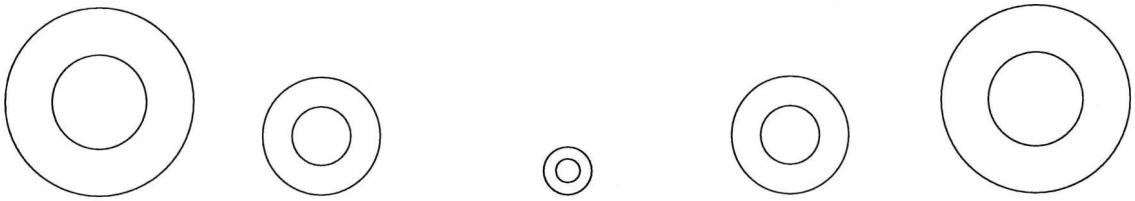
Definitely Disagree | Slightly Disagree | Maybe | Slightly Agree | Definitely Agree

9) Some songs make me happy.



Definitely Disagree | Slightly Disagree | Maybe | Slightly Agree | Definitely Agree

10) I don't feel upset when I see a classmate being punished by a teacher for not obeying school rules.



Definitely Disagree | Slightly Disagree | Maybe | Slightly Agree | Definitely Agree

Appendix C: Adapted empathy scale factor analysis

Component Matrix[a]

	Component			
	1	2	3	4
It makes me sad when I see someone who can't find anyone to play with.	.629	.332	-.033	-.028
People who kiss and hug in public are silly.	-.358	.460	.121	.086
Seeing someone who is crying makes me feel like crying.	.645	.024	.268	-.181
Its hard for me to see why someone else gets upset.	-.610	.038	.007	.428
Even when I don't know why someone is laughing, I laugh too.	.403	.057	.157	.722
People who cry because they are happy are silly.	-.414	.549	.252	-.139
I get upset when I see someone getting hurt.	.523	.004	.103	-.194
Kids who don't have any friends probably don't want any.	-.082	.648	-.017	-.282
Some songs make me happy.	.424	.483	-.089	.367
I don't feel upset when I see a classmate being punished by a teacher for not obeying school rules.	-.089	-.159	.914	.004

Extraction Method: Principal Component Analysis.

a. 4 components extracted.

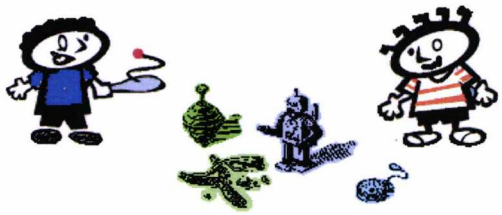
Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.115	21.147	21.147	2.115	21.147	21.147
2	1.306	13.063	34.210	1.306	13.063	34.210
3	1.030	10.298	44.508	1.030	10.298	44.508
4	1.017	10.172	54.680	1.017	10.172	54.680
5	.971	9.710	64.390			
6	.825	8.255	72.645			
7	.796	7.956	80.601			
8	.740	7.405	88.005			
9	.657	6.568	94.573			
10	.543	5.427	100.000			

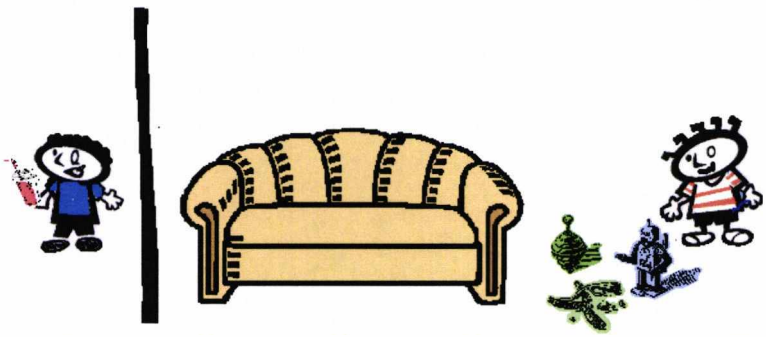
Extraction Method: Principal Component Analysis.

Appendix D: Theory of Social Mind task (Abrams et al., 2009)

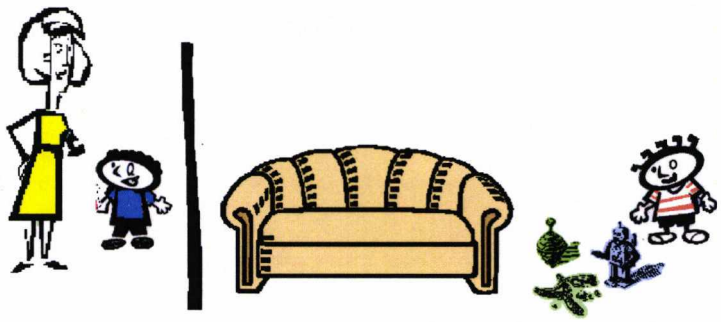
Mark and Chris have just met for the first time. Mark is playing a game with Chris. Mark is having fun and is enjoying playing the game a lot.



Then Mark leaves the room to get a drink. While Mark is gone, Chris steals some of Mark's toys and hides the toys in his pocket.



Before Mark goes back in the room to play again, Mark's mum asks Mark if he likes Chris or not.



1. Does Mark know that Chris took his toy?

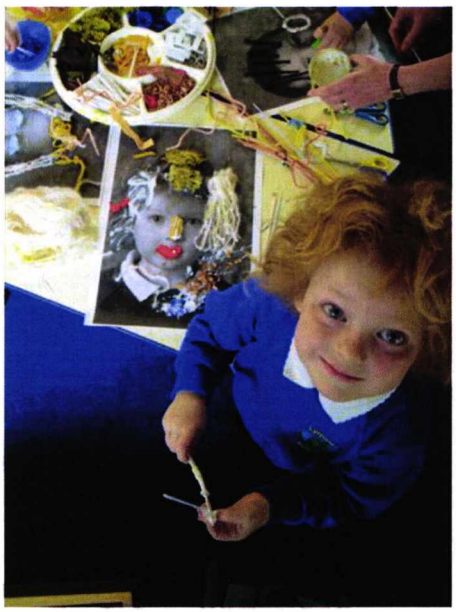
2. What do you think Mark says to his mum about Chris? That he likes him or that he doesn't like him?

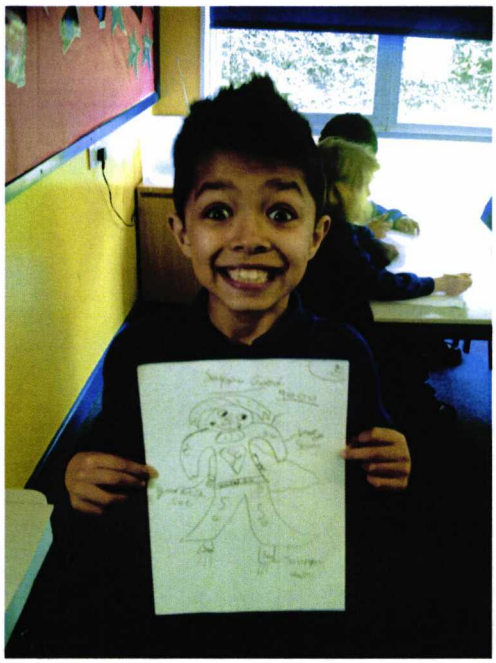
3. Why do you think he says that?

Appendix E: Means (and standard deviations) for prosocial behaviour types by year in school

	Helping	Sharing	Comforting
Year 1	4.69 (.55)	3.63 (1.35)	4.25 (1.06)
Year 3	4.52 (.87)	3.65 (1.09)	4.31 (.91)
Year 5	4.23 (.88)	3.53 (.87)	4.30 (.83)

Appendix F: Pictures from the 'We All Do Good Things' Project






KIND
Katy Jacoff


HIERGLYPHICS
This is my name in Hieroglyphics, can you workout who I am?
Mary
NHS