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A social goals perspective on bullying in schools

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Abstract

Contrasting approaches to explaining the social-cognitive contributors to bullying in schools have stressed the importance of a child's social goals in determining whether he or she will bully. In spite of this, the social goals of bullies and victims have not been adequately investigated in empirical research. This thesis aimed to address this issue by investigating the social goals associated with bullying/victimisation, determining whether these goals were able to predict bullying/victimisation even after other social processing biases and theory of mind had been taken into account, and considering the influence social goals have on children's response to provocation. In a series of six studies, 583 children from Primary schools in the UK completed several measures aimed at assessing their engagement in behaviours related to bullying and being victimised, their social goals (both as general interpersonal goals and also specific to hypothetical social scenarios), and other social-cognitive factors (including theory of mind).

Although the pattern of results across studies was not always uniform, there was a general trend for bullying in boys to be associated with situation-specific goals that protected their physical dominance within their peer group, while bullying in girls was better predicted by an overall concern for maintaining an image of popularity. Interestingly, victimisation in boys was predicted by an inappropriate concern for others' feelings in certain scenarios, while victimisation in girls was associated with a low level of concern for behaving prosocially. Importantly, these kinds of social goals remained predictive of bullying and victimisation even after controlling for variance accounted for by theory of mind and other social information processing biases. Finally, social goals were found to mediate the

relationship between bullying/victimisation and aggressive/submissive response strategies. Findings are discussed in relation to the existing literature as well as to their potential impact on intervention strategies.

Chapter 1:   An Overview of Research on Bullying and Victimisation

Since Olweus' (1978) seminal work into peer harassment, bullying is now recognised as a worldwide problem, and something perhaps more prevalent than first assumed. Studies in English Primary schools have found that as many as one in four children report being bullied at least 'sometimes' during their last school term (Austin & Joseph, 1996; Boulton & Underwood, 1992; Whitney & Smith, 1993). There is also "considerable evidence that a minority of children are chronically targeted for verbal and physical maltreatment by peers" (Toblin, Schwartz, Hopmeyer Gorman, & Abou-ezzeddine, 2005, p 330), and there is likely to be a 'hard core' of children who orchestrate the bullying (Eslea & Smith, 1998). The effects of bullying should not be underestimated. Victimised children suffer from an array of internalised problems, and are at risk of social withdrawal and relationship problems in later life (Hawker & Boulton, 2000). Bullies are also more likely to experience relationship problems and social maladjustment in the long-term (Rigby & Slee, 1993), and exhibit a range of more immediate behavioural problems, such as violence, dropping out of school and alcohol abuse (Loeber & Dishion, 1983).

This chapter aims to provide a foundation for discussion and research into bullying in schools. The varying definitions and modes of bullying are discussed, and the measures used to assess bullying and categorise bullies and victims are detailed. The bulk of the chapter is dedicated to reviewing the broad range of studies conducted that have examined the characteristics of bullies, victims and bully-victims.

1.1   **Definitions**

In order to operationalise related research or intervention strategies, the term "bullying" needs to be properly defined. In what has become the "industry standard" for bullying research in the UK, Whitney and Smith (1993) made clear the need for aggression to be *intentional* and *repeated* to be classified as bullying. The aggression may take many forms but for it to be classified as bullying it must also involve an *imbalance of power* between the provocateur and the recipient:

> "We say a child is being bullied, or picked on when another child or young person, or a group of children or young people, say nasty and unpleasant things to him or her. It is also bullying when a child or a young person is hit, kicked, threatened, locked inside a room, sent nasty notes, when no one ever talks to them and things like that. These things can happen frequently and it is difficult for the child or the young person being bullied to defend himself or herself. It is also bullying when a child or young person is teased repeatedly in a nasty way. But it is not bullying when two children or young people of about the same strength have the odd fight or quarrel"
> Whitney and Smith (1993), p7, adapted from Olweus (1991)

The intentional nature of bullying can be hard to establish as aggression need not always be goal-directed and deliberate, but can sometimes result from a hot-headed defensive response to provocation, often accompanied by anger (Pellegrini, Bartini, & Brooks, 1999). As such, Coie, Dodge, Terry and Wright (1991, cf Crick & Dodge, 1999, p129) describe bullying specifically as involving "*proactive* aggression in which aggressive acts are employed to achieve interpersonal dominance over another." With recent research indicating

that bullies show both reactive and proactive aggressive behaviour (Camodeca & Goossens, 2005; Camodeca, Goossens, Meerum Terwogt, & Schuengel, 2002; Salmivalli & Nieminen, 2002), and victims often perceiving malicious intent even in social settings where the provocation is ambiguous, it may be difficult for research to maintain this differentiation in practice. It is worth noting that the latter hurdle only exists for self-reports of victimisation however, perhaps explaining why there is often disagreement between self-reported and peer-reported victimisation (Hawker & Boulton, 2000).

The forms of aggression associated with bullying have diversified considerably from the traditional association with physical harassment. Bullying need not always be overt but can also take more discreet forms. While several overlapping classification systems have been proffered, physical bullying (which harms others through physical damage and verbal threats) has usually been distinguished from relational bullying: "harming others through purposeful manipulation and damage of peer relationships" (Crick & Grotpeter, 1995, p711).

It should be noted that aggression is not limited to the forms discussed above. Several forms of 'bias bullying' also exist (such as bullying based on ethnicity, national origin, religion, gender, sexual orientation or disability, amongst others), and are very much active within the UK. For example, Eslea and Mukhtar (2000) reported 57% of boys and 43% of girls of a Hindu, Indian Muslim, and Pakistani sample had experienced ethnic bullying within the last term, and in a retrospective study, Warwick, Chase, and Aggleton (2004) reported that 30-50% of homosexual adults had experienced homophobic bullying in educational settings. There may be significant variance in the degree of bias bullying occurring in any one school, and the rates are often particularly low in schools with predominantly middle-class students (especially in relation to racist bullying, see Eslea & Mukhtar, 2000). Because the

samples in the present research project were taken from areas that enjoyed at least moderately high socio-economic status, bias bullying was not included in the assessment of bullying and victimisation, other than when it was incorporated into the more traditional forms of bullying (such as name calling).

The manner in which "cyberbullying" – bullying via the internet or mobile phone - has impacted schools of late is deeply concerning (e.g., Kiriakidis & Kavoura, 2010). Cyberbullying has rightly come under the research microscope in recent years (for a review, see Smith & Slonje, in press), and is now believed to account for about a third of all bullying (Smith, 2010). The literature in the area has reported many similarities between cyberbullying and other forms of bullying, but also several differences (Smith, 2010). Compared to the more traditional forms of bullying, cyberbullying peaks at a slightly later age (in mid-adolescence), is more prevalent in girls, and is more likely to be perpetrated and experienced outside of school (Smith et al., 2008). Furthermore, the imbalance of power (discussed in relation to physical and relational bullying below) involved in cyberbullying is especially unclear, with individuals from all levels of social status, and within any given peer group, able to aggress with the reassurance that their actions can remain anonymous, should they so wish. As Dooley, Pyzalski, and Cross (2009) point out, it can be difficult to distinguish cyber*bullying* from cyber*aggression*, with the latter conceivably the product of a child's frustration at experiencing direct forms of bullying at school. Cyberbullying is therefore deemed to be outside of the scope of this thesis, especially given that much of the empirical work (Studies 1 to 4) is exploratory and it is unclear whether separate hypotheses would be necessary if measures for cyberbullying had been included.

The *imbalance of power* needed for effective bullying may vary according to the mode of aggression performed (physical or relational). While physical bullying requires perceived superiority of strength (either in muscle or in numbers), relational bullying relies upon the manipulation of others in its success, and thus may require a degree of mental-state understanding to provide insight into the levels of aggression that will be deemed acceptable by the peer group, as well as aiding in recruiting reinforcers (Sutton, Smith & Swettenham, 1999a, 1999b). As such, in these cases the pertinent imbalance of power required to bully indirectly may be of a social-cognitive nature and is likely to be maintained through social standing (such as a perception of popularity, Puckett, Aikins, & Cillessen, 2008; or see Hawker & Boulton, 2001 for an application of social rank theory to peer harassment). Indeed, it should be noted that for repeated successful bullying of even a physical nature, social understanding is likely to prove a key facilitator, although it is likely to be less influential in sporadic episodes (Sutton, Smith & Swettenham, 2001). This is returned to in detail in Chapter 2.

1.2 **Measures used in bullying research and prevalence rates**

Identification of bullies and victims within school samples has generally been achieved through self and peer-report questionnaires and/or interviews (see Hawker & Boulton, 2000 for a meta-analysis on victimisation measures). Teacher-reports have also been utilised but as effective bullying will largely take place outside of the teachers' gaze (Atlas & Pepler, 1998), these are often in addition to rather than instead of the aforementioned methods. Additionally, observational studies have occasionally been adapted from aggression research for use in the bullying domain, but given the range of settings bullying can occur in

and the variety of forms it can take, these studies are difficult to carry out with sufficient validity.

By and large, self-report measures used in bullying research ask participants to indicate the frequency they have engaged in, or been the recipient of, bullying behaviours. However, the cut-off point for classification as bully or victim has varied, influencing reported prevalence rates. While roughly one in four children report having been bullied at least sometimes during the last school term (Austin & Joseph, 1996; Boulton & Underwood, 1992; Whitney & Smith, 1993), the prevalence rate drops to roughly 10% for those that report themselves as being victimised 'frequently', 'pretty often' or 'once a week' (Mellor, 1990; Pateraki & Houndoumadi, 2001; Rigby & Slee, 1991; Whitney & Smith, 1993). Studies have generally suggested that 7-10% of children admit to bullying others (Austin & Joseph, 1996; Karatzias, Power, & Swanson, 2002; Olweus, 1994; Smith & Levan, 1995), although studies have reported bullying rates ranging from 2-3% (Wolke, Woods, Bloomfield, & Karstadt, 2000) to 17% of school samples (Boulton & Underwood, 1992).

Juvonen, Nishina and Graham (2001) note that self-nomination procedures fall foul to "paranoid" individuals who identify themselves as victims in contrast to their peers' perception, and also to individuals who deny that that they are victimised in the face of evidence to the contrary. Self-reports are privately framed subjective experiences but bullying in the main is a social construct and perhaps better reflected by social reputations determined by one's peers. Peer-nominations also have the benefit of being based on multiple assessments of behaviour since each child is evaluated by all of his/her classmates (Crick & Grotpeter, 1995), and have the additional advantage that they avoid the social desirability bias (Ladd & Kochenderfer-Ladd, 2002) that may be responsible for the "paranoids" and

"deniers" identified by Juvonen et al. (2001). However, peer-reports may suffer from associations with prejudice and reputation or halo effects (Ladd & Kochenderfer-Ladd, 2002). Because peer-reports are determined by the observation of peers' behaviour, they may be better at identifying correlates with other externalised behaviours, whereas self-reports correlate higher with internalised problems such as depression and loneliness (Hawker & Boulton, 2000). Finally, peer-reports are likely to be more effective in Primary schools where the limited sizes of year groups (usually less than 100 per year in the UK), mean that children spend a lot of time with their classmates and are therefore able to give valid reports on their behaviour.

Peer-report assessments have varied in the technique used to classify bullies and victims. Salmivalli, Lagerspetz, Björkqvist, Österman and Kaukiainen (1996) categorised children as victims and/or bullies (amongst other groups within the bullying dynamic) if over 30% of their classmates named them as such. Using this method they found 12% of their sample to be classified as victims, and 8% as bullies. Subsequent studies utilising this procedure (and adapted versions thereof) have reported some variation in prevalence rates (e.g., 18% victims, 13% bullies; Sutton & Smith, 1999). This method is likely to be particularly dependent upon the general school ethos. In schools where aggression is more commonplace, bullying behaviours are less likely to result in classification as a bully. Alternatively, some researchers have identified bullies and victims through bullying and victimisation scores, achieved by tallying up nominations for either being a bully/victim (such as Nabuzoka & Smith, 1993) or engaging in behaviours associated with bullying and victimisation (such as Schwartz, Dodge, Pettit & Bates, 1997). Scores are standardised within a class, creating continuous variables that can be used for correlational analysis (e.g., Boivin, Hymel & Bukowski, 1995; Hodges, Malone, & Perry, 1997). Regarding categorisation,

children scoring more than one standard deviation (for example) above the mean in bullying/victimisation are classified as bullies/victims. Using this procedure, studies have reported prevalence rates of around 8% for victims and 13-17% for bullies (Nabuzoka & Smith, 1993; Schwartz et al., 1997).

The studies discussed above have typically reported higher prevalence rates in self-reported victimisation (especially in terms of ceiling estimates). This is most likely a consequence of "paranoid" self-identified victims - Juvonen et al. (2001) found that 23% of self-rated victims were not rated as such by their peers - and social desirability bias. Prevalence rates are also likely to vary if the participant is asked to report on their experience of bullying *this term* or *this year*, and may depend on the time point of testing. Children may recall more experiences of bullying at school in the middle of the academic year than if asked shortly after the summer break. Further, many children may experience a short spell of bullying until they work out how to deal it. It is unclear whether they should be defined as 'true' victims and accordingly whether they bias the data collected at any one time point. Retrospective studies have found between 46% and 86% of adults recall being bullied at some point during their school years (Hoover, Oliver & Hazler, 1992; Hugh-Jones & Smith, 1999). To consider this proportion of any given sample as victims is clearly not productive to research efforts, indicating the importance of longitudinal studies in identifying the particular individuals who are repeatedly subjected to bullying.

As noted earlier, many researchers have argued that bullying cannot be generalised across physical and relational domains (Camodeca et al., 2002; Crick & Bigbee, 1998; Crick et al., 1999). Justification of the distinction between the two forms of bullying has generally taken the form of factor analysis (e.g., Grotpeter & Crick, 1996) and has also been

demonstrated when testing for differences between groups of individuals (e.g., between genders; Crick & Bigbee, 1998). Early studies reported varied results, but the general consensus was that the two constructs are relatively non-overlapping, with some claiming them to be entirely un-correlated (Perry et al., 1988). The distinction remains using multi-informant (self-report, peer-report, and teacher-report) methods (Crick & Bigbee, 1998).

While reviewing the methods for identifying bullies and victims, a subgroup of children who both bully and are bullied has thus far escaped attention. Studies have typically reported that about half of bullies report being victimised as well, with prevalence rates falling between 2% and 5% of the school sample (Austin & Joseph, 1996; Espelage & Swearer, 2003; Haynie et al., 2001; Karatzias et al., 2002; Pateraki & Houndoumadi, 2001; Schwartz, 2000). Research that has investigated the specific bullying sub-group of bully-victims has widely reported them to be poorly adjusted, both emotionally and socially (Nansel et al., 2004; Schwartz, 2000; Toblin et al., 2005; Veenstra et al., 2005), and to function more poorly than either bullies or victims (Hanish & Guerra, 2004). Accordingly, they warrant consideration as a subgroup in the domain of bullying and victimisation and are profiled independently in Section 1.5.3.

1.3   **Gender differences and developmental trends**

Sex differences in bullying predominantly revolve around the sub-type of bullying in consideration. While boys almost always admit to bullying others more than girls (Andreou, 2001; Boulton & Underwood, 1992; Veenstra, Lindenberg, Zijlstra, De Winter, Verhulst, & Ormel, 2007; Whitney & Smith, 1993), this may be the result of gender-specific perceptions of socially acceptable behaviours (Rose & Rudolph, 2006). However, boy bullies, as a rule,

are physically bigger and stronger (Olweus, 1993), and more extroverted (Slee & Rigby, 1993) than their female bullying counterparts. Accordingly, while no notable gender differences are evident for non-physical methods of bullying, boy bullies are significantly more physically aggressive than girls (Crick & Grotpeter, 1995; Wolke et al., 2000). Boys also appear to experience more physical bullying than girls (Ahmad & Smith, 1994; Crick & Grotpeter, 1996; Whitney & Smith, 1993) and are bullied mainly by other boys (Ahmad & Smith, 1994; Boulton & Underwood, 1992; Whitney & Smith, 1993).

Conversely, Crick and Bigbee (1998) reported girls to be victimised significantly more by relational methods, experiencing very little physical victimisation. Although these results were limited to 9-12 year olds, they have been replicated in pre-schoolers as young as 3 years old (Crick et al., 1999). Similarly, girls are more likely to be relationally aggressive than physically aggressive (Grotpeter & Crick, 1996). While boys engage in more physical than relational bullying, the two forms often occur together. Of the 24.7% of victimised boys in Crick and Bigbee's study, nearly half reported being bullied *both* physically and relationally – significantly more than those who reported experiencing either physical *or* relational bullying. Thus it is quite possible that relational aggression is a pertinent form of bullying in both sexes, but physical aggression is more facilitated in boys, due to the physical nature of their play (Else-Quest, Hyde, Goldsmith, & Van Hulle, 2006).

The rates of children being bullied seems to decrease as they get older (Boulton & Underwood, 1992; Olweus, 1994; Salmivalli, Lappalainen & Lagerspetz, 1998; Wolke, Woods, Stanford & Schulz, 2001). This may be specific to physical forms of bullying however, as verbal and relational aggression has been found to increase with age (up to 15 year-olds; Galen & Underwood, 1997; Österman, Bjorkvist, Lagerspetz, Kaukiainen, Landau,

Fraczek & Caprara, 1998) and endures, whereas physical aggression is less stable over time (Camodeca et al., 2002; Crick et al., 1999). Developmental trends of the prevalence of bullying and victimisation also appear to depend on the methodologies used. A multivariate analysis conducted by Salmivalli (2002) found that while rates of self-reported victimisation declined with age, teacher and peer-reported victimisation remained fairly consistent. She argues that the more extensive definitions of bullying held by younger pupils may lead them to report more negative social experiences as bullying than older pupils.

1.4   School and societal influences on bullying in schools

Before the various factors that may contribute to an individual becoming a bully and/or victim are outlined in the following section, it is worth noting that prevalence rates of bullying are also impacted by the environment children find themselves in. Research in the area has highlighted how various aspects of school climate can influence levels of bullying, how awareness and representations of bullying can serve to reduce incidents, the role societal factors have to play, and the effect of intervention and prevention strategies.

1.4.1   School Climate

Some of the significant variation in the incidence of bullying found between schools is likely to be explained by differences in the school climates (Smith & Sharp, 1994; Oliver & Candappa, 2003). Specifically, high levels of bullying have been found in schools that have low staff morale, high teacher turnover, a lack of consistent discipline and rules of behaviour, low supervision of children and a lack of awareness of children as autonomous individuals (Mishna, 2003). A supportive school climate may help to reduce bullying in a variety of ways (such as through improving social adjustment and school safety; Astor,

Benbenishty, Zeira, & Vinokur, 2002; Gottfredson, Gottfredson, Payne, & Gottfredson, 2005), but of particular interest is its role in influencing children's decisions to approach teachers in response to being bullied, and in inducing bystanders to intervene in bullying episodes. These are discussed below.

Children who tell someone that they are being bullied are less likely to continue to experience bullying than those who do not tell anyone (Smith et al., 2004; Troop-Gordon & Quenelle, 2010), and sharing unpleasant or traumatic experiences may also serve to decrease distress and isolation associated with its onset. However, despite the apparent benefits of telling someone, many children perceive the risks of disclosure may outweigh the likely benefits. Mishna and Alaggia's (2005) review of research on the issue identified the following barriers and/or risks of disclosure: fear that telling an adult will worsen the situation; belief that adults will not help; self blame, and the feeling that they should be able to deal with it by themselves; fear of retaliation; and lack of confidence in the adult's reaction or intervention. Indeed, research on children's experiences of telling teachers reveals that reporting it does not necessarily result in action being taken (Atlas & Pepler, 1998), and that there is considerable variance in the way teachers respond (Oliver & Candappa, 2003). Thus, the absence of a supportive school climate can leave children feeling unsure whether they should seek help and may consequently serve to reinforce bullies' beliefs that they can 'get away with it'. Conversely, Williams and Cornell (2006) reported that willingness to seek help was associated with safer school conditions and, according to teachers, less aggressive behaviour and lower rates of bullying and teasing.

Bullying interactions extend well beyond the key participants, and the interventions of bystanders may offer much in reducing rates of bullying in schools. Indeed, studies observing

behaviour in school playgrounds and classrooms indicate that the vast majority of children are involved in bullying incidents in some capacity, if not as bullies and/or victims themselves, then as observers or interveners (Mishna, 2003). In practice, many children are hesitant about offering assistance even though they want or feel that they should (Salmivalli et al., 1996; O'Connell et al, 1999). However, bystander intervention can be an effective way of stopping an incident of bullying, with different studies finding that peer interventions were effective in 50-75% of instances (O'Connell et al., 1999; Hawkins et al., 2001). Bystander intervention has been found to be positively influenced by a supportive school climate, with whole school interventions focused on increasing empathy towards victims and providing strategies which can be used to intervene proving particularly effective (Hawkins et al., 2001). On the other hand, passive bystanders may worsen the experience of being bullied (Pellegrini et al., 1999), and serve to reinforce victims' negative perceptions of student supportiveness.

While it is clear that school climate has an important role to play in reducing levels of bullying, it has also been argued that the impact of bullying goes beyond individual experiences and that there is a wider impact on the institution where the incident is taking place. For example, in schools where high levels of bullying are not addressed, researchers have observed an atmosphere of fear and intimidation permeating the entire school (Whitted & Dupper, 2005). It is therefore crucial to consider the effects of school climate when evaluating the influences to the levels of bullying in any given school.

1.4.2   Awareness and media effects

It has already been argued that bullying in schools can be reduced when children report their experiences of being bullied and when bystanders intervene. However, both are reliant upon children's comprehension of exactly what comprises a bullying incident. Pupils are likely to have an incomplete understanding of the different forms bullying can take, and tend to exclude aspects of relational bullying within their concept (Boulton & Flemington, 1996). Awareness campaigns, such as classroom posters, videos and more recently, specially designed computer games, have been shown to improve children's awareness of bullying (Casdagli & Gobey, 1990; Cowie & Sharp, 1994; Rubin-Vaughan, Pepler, Brown, & Craig, 2010; Soutter & McKenzie, 2000), and may subsequently promote the reporting of and intervening in bullying incidents, alongside other intervention strategies.

While most schools in the UK have been active in undertaking various awareness campaigns (especially since it has become a government enforced requirement), there remains significant variance in their effectiveness. Awareness-raising is most effective when it is a continuous, rather than one-off activity, and when it serves to remind pupils and staff about the school's policies with regard to bullying (Schubotz & Sinclair, 2006). Clearly, the between-school variance in pupil's understanding as to what bullying is may prove a strong influence on the levels of bullying reported and experienced in any given school. Moreover, these campaigns have come about as governmental pressure and media interest in bullying have increased over the past 10-15 years. Prevalence rates in bullying may therefore vary dependent upon the year in which the assessment was taken, with recent assessments likely to be more strongly influenced by awareness campaigns and media coverage. Finally, it may also be worth noting that awareness for cyberbullying remains generally fairly low,

particularly when carried out in chat rooms, with only 12% of children aware of its occurrence (Smith, Mahdavi, Carvalho, & Tippett, 2006).

1.4.3   Societal Effects

Bullying may also be affected by broader social and cultural factors, including socio-economic conditions (Salmivalli, 1999), wider social attitudes towards race, sexuality and disability, and the degree to which violence is accepted within cultures and becomes internalised (Mishna, 2003). For example, cross-national data has found an appreciable correlation between countries' level of income inequality and rates of bullying others. However, the association is less apparent for the UK, being ranked 8 out of 37 in income inequality, but only 31 out of 37 in the index of bullying others used (although this may simply indicate the impact of sustained anti-bullying work in the UK over the last 15 years; Elgar et al., 2009). It is likely that socio-economic effects on levels of bullying are likely to have more influence over physical rather than relational methods. Schools from more deprived areas have been reported to hold a less punitive ethos in dealing with physically aggressive behavior, but the same differences have not been replicated for relational aggression (Farrington, 1991; Dodge et al., 1994).

It may also be worth noting that bullying seems higher amongst looked after children, especially those living in residential care (Berridge & Brodie, 1998; Farmer & Pollock, 1998; Sinclair & Gibbs, 1998). In a study looking at children's homes, 4 in 10 young people reported being bullied before arrival in their current home and 4 in 10 after their arrival. Importantly, levels of bullying varied across homes, implying the importance of home cultures, staff morale and clear rules for managing bullying effectively.

1.4.4   Interventions

Perhaps the strongest influence on levels of bullying in schools comes from the varying intervention and prevention schemes employed by them. A more encompassing review of the intervention and prevention schemes used by schools is given later in the discussion chapter of this thesis (with reference to the contributions the present research can offer them; see Section 7.5), but a brief review of the current strategies are outlined here. As well as the awareness campaigns detailed above, schools have traditionally focused on encouraging peer interventions, developing peer support systems, and getting parents and the outside communities involved.

As discussed earlier, peer interventions can prevent or stop bullying taking place (Hawkins et al., 2001), especially considering that once a child has intervened in a bullying situation, they are more likely to intervene again (McMahon et al., 2000). Peer support systems (peer mentoring) on the other hand, revolve around improving children's access to peer support and aim to counteract anti-social behaviour and peer group difficulties accordingly. These systems seem to be liked by children (Cunningham et al., 1998) and can improve the climate of the school (Sharp et al., 1994), especially if peer support is central to the school's ethos of care (Naylor & Cowie, 1999). However, it would appear that, in its current form, peer support is more likely to be provided by and used by girls and administered by female teachers, and that male peer supporters can be bullied themselves on account of assuming such a role (Cowie, 1998). Much as with the reporting of bullying incidents and bystander intervention, the effectiveness of peer support is dependent upon the quality and level of supervision from school staff (Cowie & Olafsson, 1999). Indeed, there is a risk that the system can be misused to perpetrate bullying and other antisocial behaviour.

Finally, schools have begun to understand the ongoing need to educate and raise awareness among parents. Parents are seen to have an important role in reinforcing teaching in school about the importance of supporting victims and intervening in bullying situations (Rigby & Johnson, 2005). Similarly, interventions with victims designed to improve their assertiveness and coping strategies need to be shared with parents and reinforced at home (Sharp & Cowie, 1994; Sharp, 1996).

While the existence of any bullying intervention and prevention strategies has a clear impact in lowering levels of bullying in schools, this is particularly apparent when schools adopt a whole school approach rather than simply targeting high risk children (Stevens et al., 2001; Atlas & Pepler, 1998; Garrity et al., 1997; Larson et al., 2002; Skiba & Fontanini, 2000). Researchers agree that interventions need to "target the school, classroom and individual and must be supported by broader structural initiatives" (Mishna, 2003, p517). In addition, the most effective anti-bullying interventions are those which involve all members of the school community: paid staff (teaching and non-teaching), pupils, volunteers, and even members of the local community (Smith & Sharp, 1994).

1.4.5   Summary

The above review of the school and societal contributors to levels of bullying, while not exhaustive, indicates the importance of considering such factors in any empirical endeavour to further our understanding of bullying in schools. While the behaviour, emotionality and cognitive processing of any individual may influence the likelihood of their being involved in a bullying incident, these contributors are likely to be moderated, at least in part, by the school and home environments that they find themselves in. This is returned to later in the general discussion of this research programme's empirical findings in Chapter 7.

1.5 Profiles of bullies, victims, and bully-victims

This section aims to consider the characteristics of bullies, victims, and bully-victims by means of a review of the studies conducted to date. Over the past 30 years, much has become known about the behavioural and emotional correlates of bullying and of being victimised (Olthof & Goossens, 2008), and these are discussed in turn. Although Chapter 2 is dedicated to discussing the social-cognitive aspects of bullies, a brief synopsis of the cognitive characteristics of bullies is given here to provide wholeness to their profile. Finally, the contributions of family environment and other distal factors are reviewed, alongside the role of social groups in the instigation and perseverance of bullying behaviour.

1.5.1 Bullies

1.5.1.1 Behavioural correlates

With bullying inherently externalised in its nature, it is unsurprising that bullies demonstrate a distinct behavioural profile. The aggressive behaviour inherent within bullying is discussed with specific attention to the forms the aggression takes: physical versus relational and proactive versus reactive. Any additional behavioural correlates of bullying are also discussed, including the somewhat split opinions put forward by the literature as to whether bullies engage in less prosocial behaviour than their peers.

As would be expected, research has consistently found bullies to display more aggressive behaviours than the non-bullying population (e.g., Pellegrini & Bartini, 2000).

This association has been found across cultures (Olweus, 1993), and race (e.g., African American youth; Estell, Farmer, & Cairns, 2007). More specifically, Crick and Dodge (1999) have argued that bullies are proactively aggressive (goal-directed and deliberate aggression) as opposed to reactively aggressive (a defensive response to provocation, often accompanied by anger). Bullies aggressive behaviour should not be considered to be exclusively instrumental in nature however. Pellegrini et al. (1999) reported that bullies are also more reactively aggressive than their non-involved peers, and bullies often report that they are provoked into being aggressive (although this view is not usually shared by their peers; Boulton & Underwood, 1992). Nevertheless, reactive aggression is evident mainly when the bully is also (or has been) victimised (Camodeca, et al., 2002; Salmivalli & Nieminen, 2002).

Bullies are likely to engage in high levels of aggressive behaviour because they consider it to be justified and advantageous to their social standing, values often at odds with those of their peer group. Bullies defend their aggression as being the outcome of provocation or simply because they do not like the victim (Boulton & Underwood, 1992), and believe they will achieve success through their aggression (Perry, Perry, & Kennedy, 1992). Further, Craig and Pepler (2007) reported that bullies may use their aggression to control others. Proactive aggression may well indicate to other aggressive children a level of competence, assertiveness and leadership (Pellegrini et al., 1999) and hence benefit the social status of the bully. Bullies' initial aggressive behaviour may thus be explained as an effort to achieve dominance, and with the stability of bullies' aggressive behaviour well documented (even with assessments as long as eight years apart; Sourander, Helstelä, Helenius, & Piha, 2000), it is likely that they continue to hold positive beliefs as to the efficacy of their aggression.

There is little dispute that bullies behave aggressively, but caution is due when interpreting levels of aggression reported in the literature, not least because of methodological issues concerned with identifying aggression. Self-reports usually underestimate, as aggressors may be reluctant to identify themselves (Sharp & Smith, 1994), and teacher ratings may reflect bias and are limited to a restricted range of settings (Pellegrini & Smith, 1998). This is likely to be particularly evident for relational aggression which is less accessible for teachers to observe. Utilising peer and teacher reports, Tomada and Schneider (1997) found scores for relational aggression to be highly stable but with very poor concordance between them, suggesting that care over the method of data collection is warranted. Regardless, in a multivariate analysis performed by Veenstra et al. (2005), bullying remained strongly related to scores of aggressiveness despite the variance in measures used to assess it.

It is also important to consider sex differences in aggressive behaviour. Traditionally, the aggression literature has taken the view that boys are significantly more aggressive than girls. This has been explained by sex differences in socially accepted behaviours, such as rough-and-tumble play (for a review of gender differences, see Rose & Rudolph, 2006). Some researchers, however, have contended that gender differences may be overestimated (Galen & Underwood, 1997). Although boy bullies are physically bigger and stronger than girls (Olweus, 1993), and are described as more extroverted than their female bullying counterparts (Slee & Rigby, 1993), gender differences are largely dependent upon the definition applied to aggression (Eagly & Steffen, 1986). Gender differences in bullies' aggression are likely to revolve around research that specifically refers to *physical* aggression. In fact, since Crick and Grotpeter's (1995) seminal paper distinguishing relational

from physical aggression, relational aggression in girls has been reported as being on par with, or even higher than in boys.

Bullies' non-normative behaviour is not exclusive to the domain of aggression. Lagerspetz, Björkqvist, Berts, and King (1982, cf Kumpulainen et al., 1998, p706) reported that male bullies are also "dominating, disruptive in class, unable to concentrate, and try to maintain an image of toughness", often by showing off. Female bullies on the other hand are "characterised as unbalanced, talkative, rude, dominating, and using bad language". Perhaps as a consequence of their disruptive behaviour, bullies from both sexes claim to receive less social support from teachers (Demaray & Malecki, 2003). Bullies' disruptive behaviour is likely to persist outside of school, and is often stable over time, resulting in negative social connotations. Using a longitudinal design, Wolke et al. (2000) found bullies to have increased conduct problems. Specifically, bullies are at increased risk of becoming involved in delinquency, crime, and alcohol abuse (Nansel et al., 2004).

Bullies' antisocial behaviour is well reported, but opinion is somewhat split on their levels of prosocial behaviour. Veenstra et al. (2005) found bullies to perform notably less prosocial behaviour, and Rigby, Cox, and Black (1997) reported low levels of cooperativeness to be characteristic of both boys and girls who engage in bullying. Perhaps because of this, bullies are often disliked and have more problems with their peers (Wolke et al., 2000). However, some researchers have highlighted the importance of social connections to carry out certain aggressive acts effectively, especially when the aggression is of a relational nature. Salmivalli, Kaukiainen, and Lagerspetz (2000) argued that relational aggression requires at least average to positive peer status, something that is difficult to achieve in the absence of prosocial behaviour. In fact, Newcomb, Bukowski, and Pattee

(1993) and Rubin, Bukowski and Parker (1998) reported that relational aggression has longer lasting benefits if intermingled with prosocial behaviour. Similarly, children who are perceived as popular (as relational bullies often are; see Veenstra et al., 2007), display a mix of prosocial and socially dominant traits (Rodkin, Farmer, Pearl, & Van Acker, 2000). The literature implies that bullies may exhibit less prosocial behaviour overall than their well liked peers, but still utilise it to get away with sustained aggression towards their peers without ensuing subsequent peer-rejection.

In summary, research has almost invariably found bullies to be aggressive. Their aggression tends to be proactive with bullies holding the belief that they will achieve success through it. Bullies' aggressive behaviour is stable over time but takes different forms (physical, verbal and relational) depending upon sex and age. Bullies have also been described as impulsive, hyperactive, disruptive, hostile, domineering, and are more at risk for conduct problems. Finally, physical bullies score lowest in measures of prosocial and cooperative behaviours, while relational bullies utilise a mix of prosocial and aggressive behaviours to achieve dominance.

1.5.1.2   Internalised problems

It has already been reported that bullies are at risk of long term conduct problems, but they may also experience more immediate internalised problems. It is thus important to consider the emotional problems that might belie or result from being a bully. The associations between bullying and the internalised problems of depression, loneliness, anxiety and self-worth are discussed before it is considered how bullies' emotional adjustment compares to others involved in the bullying dynamic.

The aggression prevalent in bullies is often instrumental, and may result from feelings of insecurity within their school environment. Indeed, Glew, Fan, Katon, and Rivara (2008) found bullies to be significantly more likely to report feeling unsafe at school than their non-involved peers and claim to feel sad most days. Moreover, the frequent bullying of others has been found to be related to high risks of depression, suicide ideation and attempted suicide (Kaltiala-Heino, Rimpelä, Marttunen, Rimpelä, & Rantanen, 1999). Infrequent involvement in bullying is also related to increased depression, especially in girls (Klomek, Marrocco, Kleinman, Schonfeld, & Gould, 2007), perhaps because of the antisocial nature of their behaviour. Depression in bullies may be linked to their general distrust in human nature (Andreou, 2004), which may also explain why they feel less guilt in harassing others (Menesini et al., 2003).

On the other hand, other research suggests that bullies report being more self-confident than their non-involved peers (Rigby & Slee, 1993), and exhibit little anxiety or insecurity in social interaction (Craig, 1998; Kumpulainen et al., 1998), especially when in control (Batsche & Knoff, 1994). However, Salmivalli (2001) and Salmivalli, Kaukiainen, Kaistaniemi, and Lagerspetz (1999) have argued that bullies' self-esteem is not genuine, describing them as narcissistic in their self-perception, potentially leading to arrogant and domineering behaviours.

With bullying associated with depressive symptoms, it begs the question as to why it is persisted with. Baumeister and Leary (1995) posit that bullies harbour a pertinent need for social acceptance, and hope to use aggression to achieve it. Similarly Owens, Shute, and Slee (2000) reported that bullies claimed they had participated in bullying because they did not

want to be left out. Thus bullies may use aggression as a shoe-in to social interaction, perhaps feeling that it provides a safeguard against social rejection. This would also explain why bullies report feeling isolated and lonely (Nansel et al., 2001; Veenstra et al., 2005), despite often being part of large social groups (Boulton, 1999; Huttunen & Salmivalli, 1996; see also Section 1.5.1.4).

Despite the evidence discussed above, in comparison to victims and bully-victims, "pure" bullies manifested the fewest number of emotional adjustment problems (Gini, 2007). There is also evidence that they lack affective empathy (Endreson & Olweus, 2001) and feel little guilt (Menosini & Camodeca, 2008; Menesini et al., 2003), which may explain their high levels of aggressive behaviour. Indeed, relationships between emotional adjustment and bullying may be more indicative of individuals who are predominantly reactively aggressive. As Parker and Asher (1987) point out, reactive aggression elicits negative reactions from peers and subsequently contributes to the aggressor's psychological maladjustment. Further, in their meta-analysis of the associations between aggression and internalised problems, Card and Little (2006) reported reactive rather than proactive aggression to be more strongly related to indices of adjustment. Because the two forms of aggression are often highly correlated however, support for this position is inconsistent at best (Poulin & Boivin, 2000).

In summary, "pure" bullies seem to report few internalised problems compared to victims and bully-victims. However, they still report worse psychological adjustment than their non-involved peers. Research has indicated that bullies have an inflated self-esteem and experience little anxiety in social situations, but that they also report feeling sad, isolated and unhappy in the school environment.

1.5.1.3   Cognitive aspects

Both the aggression literature, and more recently researchers interested in children's theory of mind, have demonstrated a unique social-cognitive profile in children who bully. Specifically, researchers have argued that bullies experience biases in their social information processing, yet in spite of this, there is a growing body of evidence that finds bullying to require "social intelligence" to be carried out effectively, with bullies reported to possess a highly developed theory of mind.

Children's interpretation and understanding of social situations has been conceptualised as occurring in a number of steps (see Crick & Dodge, 1994; and also Section 2.1). Bullies may experience biases in any or all of these steps, which potentially leads to the construction of an aggressive schema in dealing with social interaction (Dodge, 1993). With regard to their emotionality, bullies report feeling more anger than their peers in response to provocation (Camodeca & Goossens, 2005). This may result in a tendency to attribute hostile intentions to others (Coie et al., 1991), although this is more likely to be relevant to reactive aggressors, with bullies more likely to be the provocateurs in conflicts. Proactive aggressors on the other hand demonstrate a cool, calculated, and callous social-cognitive profile, formulating instrumental goals that are self-enhancing and often relationship damaging (such as dominating others or protecting oneself; Crick & Dodge, 1996; Erdley & Asher, 1996; Lochman, Wayland, & White, 1993). Bullies hold high efficacy in using aggression to achieve their goals (Crick & Dodge, 1996; Smithmyer, Hubbard, & Simons, 2000), and are seemingly unaffected by inflicting pain and suffering, processing information about their

victims in an unemotional manner (Perry et al., 1992). With such high expectations for

aggressive behaviour comes an aggressive-impulsive response repertoire, which has been

found to strongly predict physical and relational aggression, as well as various other forms of

delinquency (Lösel, Bliesener, & Bender, 2007).

Although researchers have outlined various biases in aggressors' social cognitive

functioning, this does not necessarily imply that it is poor. Ring-leader bullies may actually

possess well-developed social skills and an acute ability to process the mental states of others

which facilitate their manipulation of others (Sutton et al., 1999b). Mental-state reasoning (or

theory of mind) is arguably more important in developing strategies for relational bullying

because such strategies are heavily dependent on the ability to manipulate peer groups

(Sutton et al., 1999a), but is likely to play a key part in laying the foundations for physical

bullying as well. Björkqvist, Österman and Kaukiainen (1992) posited that successful bullies

need to be able avoid detection and to choose the most effective time and method for each

bullying episode.

Bullies have also been reported to have intact *cognitive* empathic ability (Jolliffe &

Farrington, 2006), but may be unsympathetic to the hurtful nature of their aggression, relying

instead on a kind of cold cognition (as termed by Mealey, 1995) to facilitate effective

manipulation of others without interference from their emotions (Randall, 1997). A cool

controller in social situations, bullies have been reported to be efficient in using both coercive

and prosocial strategies with peers to effective ends, often developing a reputation for

popularity in spite of their aggressive behaviour (Hawley, 2003; Puckett et al., 2008)

In summary, research into the social-cognitive aspects involved in bullying provides two contrasting perspectives: one that considers bullying behaviour as the consequence of biases in social-cognitive functioning, and the other that sees bullying as facilitated by "social intelligence". From either viewpoint, the social-cognitive functioning of bullies is likely to be critical in understanding their aggressive behaviour. In Chapter 2 a thorough review of the biases that are present in the various stages of bullies' social information processing is given (in Section 2.1) and the role theory of mind research has to play in understanding bullying in schools considered (Section 2.2).

1.5.1.4   Familial, genetic and peer group influences

The role that more distal influences play in the emergence of bullying behaviour has yet to be considered. The familial influences to bullying are outlined here, and put in context following recent research efforts that have highlighted the importance of genetic factors. Next, the role bullies' peer groups have to play are discussed, both in relation to the position bullies hold in their social networks, and with explicit reference to their school environment.

One avenue of research into the environmental influences of bullying reports various associations between parenting style and bullying behaviour. Bullies report more troubled relationships with their parents, and perceive them to be low in warmth and high in either over-protection or neglect (Bowers et al., 1994), which may contribute to a Machiavellian attitude to the world (Andreou, 2004). Moreover, bullies experience more inconsistent and hands-off parental monitoring than non-bullies (Espelage, Bosworth, & Simon, 2000), and there is some evidence that ring-leader bullying is associated with insecure attachment (Myron-Wilson, Sutton & Smith, nd, cf Sutton et al., 2001). Children who bully have also

been reported to be more likely to come from a single parent family structure, and have minimal involvement with their parents, enjoying less family support than their peers (Olweus, 1993; Epstein & Sheldon, 2002; Bowers, Smith, & Binney, 1994; Flouri & Buchanan, 2003, Perren & Hornung, 2005). Importantly, Spriggs, Iannotti, Nansel, and Haynie (2007) reported that family factors remain related to bullying involvement even after the effects of peer relationships have been accounted for.

The aggressive behaviour inherent in bullying may also be due, in part, to the modelling of aggressive behaviour within the home environment. Research that has considered how the home environment shapes bullying behaviour has tended to focus on the domain of aggression. Bullying may develop through the modelling of aggressive behaviour experienced within the family environment, especially if pro-aggressive norms have been established (Spriggs et al., 2007). Accordingly, Dodge (1991) proposed a theoretical model to explain the process by which reactive and proactive aggression develop from different socialisation experiences. While the reactive aggression more commonly associated with bully-victims develops in the presence of a threatening and unpredictable environment, and may be contributed to by abusive parenting, Dodge (1991) argues that proactive aggression (associated 'pure' bullies), may result from a stable home environment, but one that promotes the use of aggression as an acceptable means to achieve one's goals. In support of this, Vitaro, Barker, Boivin, Brendgen, and Trembley (2006) reported that parents of reactively rather than proactively aggressive children tend to be controlling and punitive, and show histories of physical abuse (Dodge, Lochman, Harnish, Bates, & Pettit, 1997). Conversely, proactively aggressive children seem to enjoy positive family relations although they report less parental monitoring and fewer household rules (Poulin & Boivin, 2000).

While the evidence discussed above highlights the importance of familial factors in becoming a bully, it is likely that the nature of the causality between these variables will remain somewhat unclear because genetic and environmental influences are confounded within families. For example, parents with Machievallian traits could have similarly natured children as a result of genetic transmission, lax parenting, or both. Studies that consider the genetic influences to bullying behaviour are therefore crucial in developing a full understanding of the influences to bullying.

In such a study, Brendgen, Vitaro, Boivin, Dionne, and Pérusse (2006) considered the heritability of proactive aggression. Specifically, proactive aggression may indicate underlying psychopathic characteristics, especially in relation to Machiavellian traits. Bullies are less reactive to threatening and emotionally distressing stimuli, and to cues of punishment, especially when a reward-oriented response is primed (Barry et al., 2000; Blair, 1999; Loney, Frick, Clements, Ellis, & Kerlin, 2003). In their twin study Brendgen et al. (2006) found genetic effects to account for 39% of the variance of reactive aggression and for 41% of the variance of proactive aggression. Other behavioural-genetic studies of antisocial behaviour (including bullying behaviours) have reported similar evidence of genetic influences but also stress the important role of nonshared environment, especially in comparison to shared environmental influences (Rhee & Waldman, 2002; Moffitt, 2005).

While there is markedly little research that has specifically considered the environmental and genetic influences to becoming a bully (as opposed to behaving anti-socially), that which exists has followed suit. In a large twin study (1,116 families), Ball et al. (2008) reported that bullying was influenced by nonshared environment, as well as by genetic factors, but was not significantly predicted by shared environment. The authors argued that

genetic influences (such as aspects of personality and impulsivity) are likely to play an important role in determining whether a child becomes a bully, and posited that these factors may operate via mediating characteristics such as social cognitive biases (Sutton et al., 1999a), low emotionality, and poor emotional regulation (see Dodge et al., 1997).

With regard to nonshared environmental influences, the effectiveness and sustainability of bullying is likely to depend heavily on the aggressor's peer group. Aggressive behaviour is generally not well accepted by peer groups, and may lead to peer-rejection (Coie & Dodge, 1998). However, some aggressive children enjoy prominent social positions (Bagwell, Coie, Terry, & Lochman, 2000; Farmer & Rodkin, 1996), and are even considered to be among the most popular in their peer group (Rodkin et al., 2000). In fact, bullies are often the leaders of their social groups (Cairns, Cairns, Neckerman, Gest, & Gariépy, 1988), which tend to consist of other similarly aggressive children who are less likely to reject bullies on account of their aggressive behaviour (Pellegrini et al., 1999; Crick & Dodge, 1998; Espelage, Holt, & Henkel, 2003). Arguably, bullies' aggressive behaviour may be deemed more acceptable by their peers because it is interspersed with prosocial behaviour as was outlined earlier.

Although bullies are often part of large social networks (Boulton, 1999; Huttunen & Salmivalli, 1996), and are perceived as popular, their popularity is not echoed in sociometric research. In fact, bullies are not well liked by their peers (LaFontana & Cillessen, 1999; Lease, Kennedy, & Axelrod, 2002; Parkhurst & Hopmeyer, 1998). It would seem that bullies use their image of positive social status to maintain a position of dominance within their peer group, but that their aggressive behaviour causes them to be rejected by their peers. Farmer, Estell, Bishop, O'Neal and Cairns (2003, p992) supported this position. They reported that

"popular" aggressive children are "more likely to be disliked by peers even though they were perceived by peers as socially prominent and socially skilled, and were identified by teachers as highly involved in extracurricular activities". Similarly, Farmer et al. (2002) describes aggressive, antisocial "tough boys" as perceived by their peers as being "cool".

Finally, because bullying in children predominantly takes place at school (or on the way to or from school), it is important to consider bullies' perceptions of their school environment. Rigby and Slee (1991) reported that bullies like school less and are less popular with teachers than their peers. This may be because school ethos is generally at odds with their aggressive behaviour. Involvement in bullying has also been demonstrated to have negative connotations regarding academic achievement (Nansel et al., 2001), although the influences are likely to be bi-directional (Catalano et al., 2003). In short, bullies do not seem to like school and this can be reflected in their poor academic performance.

To summarise, families may contribute to the likelihood a child will become a bully and can shape bullying behaviour through the establishment of aggressive norms and through low levels of parental monitoring. However, recent research has highlighted the importance of genetic and nonshared environmental influences. Research that has focused on bullies' peer group finds that bullies are often part of large social networks, with their immediate playmates often similarly aggressive in their behaviour. Bullies are not well liked but are perceived as popular, which may facilitate their social dominance. Lastly, bullies do not like school, and bullying predicts declines in academic performance.

1.5.2   Victims

While it is of clear importance to understand the various factors that contribute to an individual becoming a bully, it is also crucial to consider the psychological correlates that put an individual at risk of harassment. Next, the literature related to victimisation is reviewed. Again, a behavioural profile of victims is given, with specific reference to their aggressive and submissive behaviours. Their emotional adjustment is detailed, and the cognitive contributors to victimisation outlined. Finally, family and peer group influences are reviewed.

1.5.2.1   Behavioural correlates

The behavioural profile of victimised children can provide insight both as to why they become victimised, and how they deal with provocation. In terms of their non-normative behaviour, the literature implies that two distinct groups of victims may exist, one that is aggressive and the other that demonstrates submissive behaviours. Both are discussed here, alongside the literature that finds victims to be disruptive and hyperactive.

Some victimised children have been reported to be more aggressive than their peers, and this is evident across a range of studies and methods of data collection (see Newcomb et al., 1993, for a meta-analysis). However, the nature of their aggression is dissimilar to that performed by bullies. Victims tend to aggress in a hot-headed reactive manner in response to provocation (Poulin & Boivin, 2000; Salmivalli & Nieminen, 2002). Their reaction is likely to contribute to peer-rejection, because they are observed as acting aggressively by their peers. Additionally, an explosive reaction from victims serves to provide the bully with the necessary incentive to target them in future bullying episodes. In support of this position, Kochenderfer and Ladd (1997; see also Camodeca et al., 2002; and Salmivalli &

Helteenvuori, 2007) identified "fighting back" behaviours to predict stable victimisation, whereas "having a friend help" was associated with reduced victimisation.

Aggressive victims seem to be aware that their aggressive reactions are not effective in preventing future harassment. Schwartz, McFadyen-Ketchum, Dodge, Pettit, and Bates, (1998) found victims to hold little belief that their aggressive behaviour will prove an effective response to their harassment. Instead they may simply be unable to control their behaviour. Aggressive victims report feeling more anger and fear in response to provocation than their peers (Hanish & Guerra, 2002) and their aggressive behaviour is likely to represent the externalisation of these emotions. Indeed, Hanish et al. (2004) reported externalised emotions to be a significant predictor of victimisation. Victims' emotional reactions are likely to be the consequence of various biases when they encode social cues, and these are discussed later (in Section 1.5.2.3).

Not all victims are aggressive, and care needs to be taken to distinguish the two groups in research that considers the correlates of victimisation, not least because they may have distinct psychological profiles (Schwartz, 2000). Non-aggressive victims demonstrate withdrawn and submissive behaviours, especially in response to provocation (Erath, Flanagan, & Bierman, 2007; Courtney, Cohen, Deptula, & Kitzmann, 2003; Schwartz et al., 1998). Consistent with their behaviour, peers see non-aggressive victims as being shy and unassertive (Nabuzoka & Smith, 1993; Owens, Slee, & Shute, 2000), a view shared by trainee teachers (Nicolaides, Toda, & Smith, 2002). It is unclear whether victims' submissive behaviour places them at risk of being targeted for victimisation, or whether victims are submissive due to previous experiences of harassment. In support of the former, Olweus (1978) notes that withdrawn behaviour can contribute to victims' reputation as an easy target,

and boys who display submissive behaviour in early encounters with their peers are the most liable for subsequent victimisation (Schwartz, Dodge, & Coie, 1993). Zahn-Waxler, Cole, and Barrett (1991) suggested that some children may have an overactive concern for other's problems and this may promote feelings of anxiety and subsequently, submissive behaviour. Regardless, non-aggressive victims, like their aggressive namesakes, do not appear able to deal with provocation, and are subsequently targeted for victimisation.

In addition to research that has reported the aggressive and submissive behaviours associated with victimisation, victims have also been described as behaving disruptively. As with aggression, disruptive behaviour is likely that their behaviours contribute to subsequent victimisation. For example, Pope and Bierman (1999) found irritable-inattentive and disruptive-hyperactive behaviours to be associated with problematic peer-relations (including victimisation). In much the same way as some victims are non-aggressive, Olweus (1993) distinguishes "passive" from "provocative" victims, with only the latter displaying behaviour patterns that cause irritation and tension in peers (Besag, 1991; Brendan, 1994). Besag (1991) posits that "provocative" victims are intentionally disruptive and hold relationship damaging goals such as getting another into trouble, which might explain why peers believe that, to some extent, victims get "what they deserve" (Owens et al., 2000). As such, disruptive behaviours are likely to contribute to peer-rejection, and because continued victimisation is more likely to occur in the absence of a supportive peer network (as discussed later in Section 1.5.2.4), disruptive behaviours are likely to be present in victims who are chronically bullied.

To conclude, while some of the literature describes the victim as an individual who acts disruptively and aggressively, it is important to distinguish aggressive and provocative victims from non-aggressive passive victims, with the latter being more inclined to

submissive behaviours. This closely parallels the distinction between victims who also bully from "pure" victims. Unfortunately, there is limited research that has considered the subgroup of bully-victims, making it hard to reliably relate behavioural traits to one group or another. Because the behavioural profile of aggressive and submissive victims is likely to be the result of, and contributor to, internalised problems and cognitive biases, the subgroup of bully-victims is dealt with independently in Section 1.5.3. Whether reacting aggressively or submissively, victims' response to provocation is considered to be inappropriate for the situation and most likely contributes to their continued harassment.

1.5.2.2   Internalised problems

The literature that has investigated the internalised problems experienced by victims paints a concerning picture of victims' emotional adjustment. Extensive research leaves little doubt that victims suffer psychosocial maladjustment, reporting significantly lower self-worth, higher levels of depression, feelings of loneliness, and enhanced social anxiety when compared to their bullying and uninvolved counterparts (see Storch & Ledley, 2005, for a review). These problems are likely to be interrelated but are discussed in turn.

Peer-victimisation has been reliably associated with lower self-worth (Andreou, 2000; Peterson & Rigby, 1999; Salmivalli & Isaacs, 2005), and similarly with increased self-blame (Graham & Juvonen, 1998). Low self-regard may explain why non-aggressive victims engage in the submissive behaviours reported above, specifically because they lack the confidence to be assertive in the face of provocation. Indeed, Egan and Perry (1998) reported that low self-worth predicted victimisation even after externalised behaviours have been partialled out. Conversely, submissive behaviours have been found to contribute to low self-

concept (Boivin & Hymel, 1997). A bidirectional relationship is thereby inferred, supported by findings that concurrent victimisation (in comparison to previous or chronic victimisation) is most strongly associated with low self-worth (Juvonen, Nishina, & Graham, 2000).

While the association between self-worth and victimisation is apparent in both boys and girls it is strongest for relational victimisation (Owens et al., 2000), which is more commonly experienced (than physical victimisation) by girls. Indeed some studies have suggested the relationship to be specific to a relational form of victimisation with no associations evident for overt aggression (Prinstein, Boergers, & Vernberg, 2001). It should be considered, however, that girls generally report more internalised problems than boys (World Health Organisation, 2000), and these associations may reflect this. Finally, low self-concept has been associated with depressive symptoms and loneliness (Prinstein, Cheah, & Guyer, 2005), and suggested to contribute to social anxiety (Grills & Ollendick, 2002; La Greca & Fetter, 1995).

Given victims' low self-regard, higher instances of depression can be justifiably expected. Meta-analysis reveals victimisation to be most strongly related to depression of all the internalized problems cited in papers published 1978 to 1997 (Hawker & Boulton, 2000). Depression has been associated with victimisation in both boys and girls (Crick & Grotpeter, 1995; Owens et al., 2000), but more so with physical victimisation in boys and relational victimisation in girls (Prinstein et al., 2001).

While depression and victimisation are concurrently associated (Prinstein et al., 2005), it is widely posited that victimisation can cause children become depressed (e.g., Olweus, 1992). This is unsurprising as victims are likely to be emotionally affected, both

with experience of negative social experiences, and additionally with their inability to deal with it. Accordingly, Prinstein et al. (2005) reported that depression, when accompanied by high levels of victimisation, contributes to low self-regard.

Depression has also been reported to contribute to subsequent victimisation, specifically because, when depressed, victims tend to engage in less social interaction and maintain fewer friendships. Brendgen, Vitaro, Turgeon, and Poulin (2002) reported evidence that victimisation, coupled with the negative effects on social interaction that are characteristic of depression, often results in peer-group difficulties and a lack of dyadic friendships. The latter is particularly important as friendships provide an effective buffer to chronic victimisation (see Section 1.5.2.4).

Victims have few friends (again, see 1.4.2.4) and the submissive behaviour typical in non-aggressive victims limits the positive social interaction that is available to them. Victims' social exlusion may leave them feeling isolated, with research reliably indicating that victimisation is associated with high levels of loneliness (Buhs & Ladd, 2001; Crick & Bigbee, 1998; Crick, Casas, & Ku, 1999; Crick & Grotpeter, 1995; Prinstein et al., 2001). Loneliness appears to co-occur with the onset of victimisation, with 'recent' victims reporting more loneliness than chronic victims (Juvonen et al., 2000). This suggests that victims' exclusion from social interaction may become expected as their harassment continues, which may contribute to their low self-worth (Prinstein et al., 2005). Feelings of loneliness seem to stem specifically from social exclusion and may not persist in victims who are bullied physically rather than relationally. Indeed, while loneliness is strongly associated to relational victimisation (Crick & Grotpeter, 1995; Crick & Bigbee, 1998), it is not linked to physical

bullying (Prinstein et al., 2001). Again, this may simply reflect the higher levels of internalised problems reported in girls (World Health Organisation, 2000).

Finally, the association between victimisation and social anxiety is considered. Graham and Juvonen (1998) reported higher levels of social anxiety in victimised children than in their peers, and social anxiety has been reliably associated with victimisation in related literature (Crick & Grotpeter, 1995; Crick & Bigbee, 1998; Crick et al., 1999; Prinstein et al., 2001). Bullied girls show higher levels of social anxiety than bullied boys and are more likely to internalise negative acts directed at them (Grills & Ollendick, 2002). Social anxiety is associated with victimisation in boys as well (Erath et al., 2007) but once adjustment for availability of social relations has been made, recurrent victimisation predicts social anxiety in girls alone (Bond, Carlin, Thomas, Rubin, & Patton, 2001). Once more, it should be noted that these gender differences may not be reflective of differences between girl and boy victims, and may be due to the generally higher levels of internalised problems reported in girls (World Health Organisation, 2000). In comparison to other internalised problems, meta-analysis has found social anxiety to have the weakest relationship with victimisation (Hawker & Boulton, 2000).

As implied above, the association between victimisation and psychological adjustment is clear, but the causal direction of the relationship is less so. Hodges and Perry (1999) found internalising problems to contribute to gains in victimisation over time, but also that victimisation predicted increases in later internalising symptoms. Other longitudinal studies have echoed these findings (Boivin et al., 1995; Hanish & Guerra, 2002; Storch, Masia-Warner, Crisp, & Klein, 2005). Internalised problems are likely to play a role in maintaining victimisation, instigating a downward spiral where both victimisation and the

internalised problems contribute to each other. This would go some way to explain the troubling stability of victimisation.

In summary, victimisation is associated with depression, loneliness, low self-worth and increased social anxiety. Relationships are strongest for depression and weakest for social anxiety with associations clearer in girls. The relationship between internalised problems and victimisation is likely to be bidirectional, and may also contribute to the submissive behaviours associated with victimisation as well as having negative effects on subsequent social interaction, limiting the capacity for forming protective friendships.

1.5.2.3   Cognitive aspects

Victims' processing of social cues is a crucial precedent to their maladaptive behaviour. While the social-cognitive contributions to victimisation are dealt with in much more detail in Chapter 2, the key aspects are summarised here. Specifically, the various biases evident across victims' social information processing are reviewed, as well as the more general cognitive deficits reported in victimised children. Lastly, the studies that have found victims to demonstrate "social incompetence" as a result of cognitive biases are discussed and the affect this might have on their social status is discussed.

With reference to Crick and Dodge's (1994) Social Information Processing model, victims demonstrate biases throughout the steps involved in processing social cues. When encoding social cues victims are hampered by heightened emotional arousal (Schwartz et al., 1993), and may be biased in the specific cues that they attend to. Like their bullying counterparts, some victims report feeling more anger than those not involved in bullying incidents (Kochenderfer-Ladd, 2004), although this is likely to be representative of

aggressive rather than non-aggressive victims. Submissive behaviours on the other hand, are likely to be predicted by the increased levels of anxiety experienced by non-aggressive victims in response to social situations (Graham & Juvonen, 1998). Victims' heightened emotionality is especially likely to contribute to biases in the interpretation of social information. Dodge, Pettit, and Bates (1994) reported that victims have a distorted perception of the intentions, emotions, and behaviours of others, and interpret more threat in response to even ambiguous provocation (see also Garner & Lemerise, 2007; Harrist, Zaia, Bates, Dodge, & Pettit, 1997; Toblin et al., 2005).

Additionally, victims may hold different goals in social situations than their peers. Crick and Dodge (1994) cite evidence for socially maladjusted children to hold relationship damaging goals of revenge, although it is unclear whether this is specific to aggressive victims and to scenarios of provocation. Non-aggressive victims on the other hand favour goals of harm avoidance, although again, this may only be the case in response to conflict (Erdley & Asher, 1999; Perry et al., 1992). Alternatively, victims may simply endorse goals that are inappropriate to the situation as proposed by Schuster (2001), and Taylor and Gabriel (1989, cf Crick & Dodge, 1994). The social goals of victims are likely to be crucial in understanding their aggressive and/or submissive behaviours, and may provide a pertinent area for the development of bullying prevention strategies. Consequently, this area is dealt with independently in Chapter 2 (Section 2.3), and throughout the empirical work. Victims' social goals may also lead to biases in response construction and evaluation, and they have difficulties in generating adaptive responses for dealing with peer aggression (Kochenderfer-Ladd & Skinner, 2002; Mahady Wilton, Craig, & Pepler, 2000).

The biases in the individual steps of children's social information processing are held to have some level of sequential relationship with each other, but biases may also be affected by more general cognitive difficulties. Essentially, victims do not appear to be able to effectively regulate their behaviours, and are reported to have difficulties in attention regulation, inhibitory control and impulsivity. Attention regulation has been shown to predict the externalising problems of aggression and disruptiveness (Eisenberg, Fabes, Karbon, & Murphy, 1996; Lengua, West, & Sandler, 1998), as well as contributing to the internalising problems discussed in the previous section; lack of inhibitory control may contribute to antisocial behaviour and consequently has implications for internalised problems (Kochanska, Murray, & Coy, 1997); and impulsivity has been found to be a positive predictor of the externalising problems (Rothbart & Bates, 1998) and depression (Lengua et al., 1998) commonly associated with victimisation. In short, victims may experience general cognitive deficits which contribute not only to their ability to competently interpret and understand social cues, but also to the behavioural problems and emotional maladjustment detailed in the previous sections.

Importantly, the social-cognitive biases in victimised children appear to contribute to their social behaviour. Specifically, it is posited that regulating emotionality and impulsivity can contribute positively to a child's "social competence" (Lengua, 2003). Victims have been reported as lacking important social attributes, such as friendliness, cooperativeness, and a sense of humour, which may place them at risk of continued harassment (Egan & Perry, 1998; Owens et al., 2000). For example, Garner and Lemerise (2007) found that social competence (defined by self-reported engagement in positive social interactions) was a negative predictor of victimisation even after externalising behaviour was accounted for. The lack of positive social interactions may also hinder the victims' ability to make positive

friendships that may provide a buffer to victimisation. It is also likely that peer-rejected victimised children miss out on opportunities for social interaction subsequently stemming the development of social skills (Dodge et al., 2003), and social-cognitive biases may cause them not to benefit from what social interaction they do have in the same way their peers do (Bruner, 1990). Indeed, in a longitudinal study Fox and Boulton (2006) demonstrated that social exclusion predicted later submissive and non-assertive behaviours, which the authors argued to be representative of low levels of social skills. This is returned to in the following section.

In conclusion, victims tend to experience heightened emotionality (especially in response to provocation), interpret more threat, favour avoidant and sometimes relationship damaging goals, and have difficulty generating and enacting appropriate responses to provocation. They also suffer from problems regulating their attention, inhibiting their behaviours and react impulsively. Taken together, their cognitive biases can lead to the lack of positive social interaction necessary in developing friendships, consequently limiting their opportunity for future socialisation.

1.5.2.4   Familial, genetic and peer group influences

Next, the genetic and environmental influences on victimisation are discussed. Associations between attachment type and victimisation are reviewed, alongside the role parenting styles have to play in its onset. The impact victims' behavioural, emotional and cognitive difficulties have on their ability to form friendships has already been discussed, and here literature that reports on the consequences this has is reviewed. It is additionally considered how friendships can act as a buffer against, and on occasions as a contributor to, continued victimisation. Finally, the genetic influences to victimisation are discussed.

Research that has investigated the family influences on victimisation has typically reported on the relationship between insecure attachment and victimisation, and on parental child-rearing practices. Children who had an anxious resistant attachment during infancy are manifestly anxious (Finnegan, Hodges, & Perry, 1996) and are more likely to be victimised (LaFreniere & Sroufe, 1985; Troy & Sroufe, 1987), perhaps because they are inclined to engage in more submissive and non-assertive behaviour that leaves them prone to harassment.

With regard to parenting influences, the literature widely reports gender-specific patterns. Boys who have overprotective mothers who infantilise their children are at greater risk of subsequent victimisation (Olweus, 1978, 1992), while girls who consider themselves to be rejected by their mothers experience more peer harassment (Finnegan, Hodges, & Perry, 1998). Finnegan et al. (1998) specifically investigated how victimised children cope with conflicts with their mother and found victimised boys reported reacting with fear to such conflicts, while victimised girls reported aggressive coping strategies. These conflicts might provide the basis for their submissive and/or aggressive behaviour discussed earlier. Indeed, Schwartz et al. (1997) found that aggressive victims are often exposed to marital violence, harsh punitive discipline, and abuse. Finally, victimisation in boys and girls has been associated with high levels of intrusive demandingness and low responsiveness (Ladd & Kochenderfer-Ladd, 1998) characteristic of an authoritarian parenting style (see Baumrind, 1991).

Not all children who experience such family environments become chronically victimised. It may be that children who are able to develop meaningful friendships can

effectively compensate for the vulnerabilities acquired through their home environment (Bolger, Patterson, & Kupersmidt, 1998). In fact, Schwartz, Dodge, Pettit, and Bates (2000) reported that associations between harsh family environments and later victimisation were only present when the victimised children had few friends. There seems little doubt that friendships can provide a buffer against victimisation. Children who have many reciprocated friends, who are peer-accepted, and who play with others outside of class are widely reported to be less likely to be victimised (Boivin et al., 1995; Boulton, 1999; Hanish, Ryan, Martin, & Fabes, 2005; Hodges & Perry, 1999; Mouttapa, Valente, Gallaher, Rohrbach, & Unger, 2004). Correspondingly, victims have been found to have a limited number of friends (Hodges, Boivin, Vitaro, & Bukowski, 1999; Hodges et al., 1997).

For victimised children, making friendships is likely to be critical to putting a stop to continued harassment. In a longitudinal study conducted by Boulton, Trueman, Chau, Whitehand, and Amatya (1999), adolescents who had a reciprocated best friend in both initial and follow-up time points (6 months later) showed the highest decrease in victimisation, whereas those without a reciprocated best friend at both time points demonstrated significant increases in victimisation. This finding helps to explain the stability of victimisation, taking into consideration that a rejected child has fewer opportunities for friendships (Bukowski, Pizzamiglio, Newcomb, & Hoza, 1996), and thereby struggles to develop potentially protective friendships.

Various explanations have been offered for the inverse relationship between friendships and victimisation. Firstly, friendships may have a protective function. As well as providing strength in numbers, friendships have been argued to provide a powerful "marker" of child attributes (Parker & Asher, 1987, cf Schwartz, 2000), and may deter potential

aggressors. Secondly, friendships may serve to shape behaviour. Without a mutual "best friend", victimisation has been found to predict increases in internalised and externalised behavioural problems (Hodges et al., 1999), whereas positive social relationships may prove particularly effective in reducing submissive and disruptive behaviours by way of modelling (Hanish & Guerra, 2000; Schwartz, McFadyen-Ketchum, Dodge, Pettit, & Bates, 1999). Lastly, friendships can contribute to a higher self-worth, as well as providing cognitive and emotional resources for support and coping (Hartup, 1993). As such friendships provide an important intercept in the bi-directional relationship between victimisation and poor emotional well-being that were reviewed earlier.

Not all friendships help prevent victimisation. On the contrary, some may even provide a negative influence. For example, withdrawn victims who befriended similar children reported lower friendship quality than controls, and were increasingly victimised (Rubin, Wojslawowicz, Rose-Krasnor, Booth-LaForce, & Burgess, 2006). Further, exposure to aggressive peers is associated with increased aggression in victimised boys, as well as to higher rates of victimisation (Hanish et al., 2005; Lamarche et al., 2007). Additionally, bullying has been found to occur frequently *within* friendships (Crick & Nelson, 2002), with bullies sometimes becoming the victim's preferred playmates (although this is likely to be specific to aggressive victims; Perren & Alsaker, 2006). The benefits to be gained from friendships are likely to be moderated by the "qualities" of the individual befriended. Boulton et al. (1999) suggested that friendships associated with falls in victimisation did so through a decrease in reported conflict and betrayal within friendships. Similarly, Hodges et al. (1997) found that friends that were known to protect children from bullies were particularly influential in reducing their internalised behaviours.

While children's peer groups clearly play an important role in determining whether they will become a victim, recent research has moved to demonstrate the importance of genetic influences in victimisation. In fact, Ball et al. (2008) reported that over two-thirds of individual differences in victimisation scores were explained by genetic influences. It would seem that while genetics has little part to play in determining a child's susceptibility to maltreatment from adults (Jaffee, Caspi, Moffitt, & Taylor, 2004), it has a strong influence in determining a child's susceptibility to harassment from his/her peers. However, Ball et al. (2008) note that, 'because victimisation is an exposure rather than a direct behaviour, genetic influences could be a reflection of heritable characteristics that influence children's vulnerability to victimisation' (p. 108). For example, genetic influences may be mediated by an introverted personality (which has been reported to be prominent in victimised children; Mynard & Joseph, 1997, cf Ball et al., 2008) or by social cognitive deficits.

There are also likely to be gene-environment interactions when explaining victimisation. For example, aggressive-victims may have a genetic disposition to react angrily and aggressively, and this may result in them being selected by the school bully as an easily aggravated victim (Vitaro, Brendgen, & Arseneault, 2009). Indeed, in a study of 573 MZ twin pairs, Arseneault et al. (2008) reported that the unique (nonshared) effect of being bullied was significantly associated with later internalised problems, over and above the effect of factors common with their twin. Interestingly, the experience of being bullied has also been reported to lead to physiological changes in the victim that could contribute to their personality and behaviour as perceived by their peers. Vaillancourt, DeCatanzaro, Duku, & Muir (2009) reported that verbally bullied girls produced less, and verbally bullied boys produced more testosterone than their non-bullied counterparts, and this could have important influence on coping styles (internalised vs. externalised).

To sum up, while there are various family factors that can contribute to a child becoming victimised, friendships are of particular importance. In the majority of cases, friends offer a potential buffer to victimisation. Socially competent friends who reciprocate trust and positive regard have a positive effect on victims' behaviour, emotional well being, and also offer protective qualities in a peer context. However, aggressive and withdrawn friends can serve to manifest behavioural problems and some reciprocated "friends" may even be the source of their harassment. There may also be genetic influences which, when combined with a certain environment (such as confrontation), hold strong influence over whether a child will become chronically victimised.

1.5.3   Bully-victims

Around 10-30% of victims also engage in aggressive, bullying behaviour (Olweus, 1991; Brockenbrough, Cornell, & Loper, 2002; Mishna, 2003). They have been distinguished from the other bullying subgroups in one of two ways: as individuals who score high on self or peer-nominations for both bullying and victimisation behaviours (e.g., Camodeca et al., 2002), or as individuals who score high on scales of both *aggression* and victimisation (e.g., Toblin et al., 2005). As was argued earlier, the existing literature that has considered the sub-group of bully-victims has widely implied that they have a distinct psychological profile from both "pure" bullies and "pure" victims. Consequently, the behavioural, emotional, cognitive and environmental influences that may be specific to bully-victims are considered here.

1.5.3.1   Behavioural correlates

The externalised problems of bullies and victims have now been well documented, and bully-victims exhibit similarly aggressive behaviours to their non-victimised counterparts. However, the nature of their behaviour suggests a distinct behavioural profile, especially in relation to the antecedents to its enactment. While comparably few studies have distinguished a subgroup of bully-victims in their sample (presumably because of the large sample sizes of children needed to identify a comparable group of bully-victims), those that have are reviewed here.

In a two-year study, Bierman and Wargo (1995) identified aggressive-rejected children as the most likely to experience poor behavioural and social outcomes. Studies that have considered the specific subgroup of bully-victims have followed suit. Bully-victims have been found to score highest in externalising behaviour problems (Kumpulainen et al., 1998), and are more easily and more often provoked others (Stephenson & Smith, 1989). Moreover, while non-aggressive rejected children may be informed by their peers that their behaviour needs to change, aggressive rejected children are less approachable and do not receive the same feedback (Coie, Terry, Lenox, & Lochman, 1995). This position is compounded by findings that bully-victims are at highest risk for hyperactivity (Gini, 2007).

While bullies predominantly aggress proactively, reactive aggression is evident mainly when the bully is also (or has been) victimised (Camodeca et al., 2002), and bully-victims have been reported as engaging in more reactive aggression than all other bullying subgroups. Bully-victims utilise both physical and relational forms of aggression with a preference for the latter in girls, but bully-victims involved in both physical and relational bullying exhibit the highest rates of behaviour problems (Wolke et al., 2000).

Unlike "pure" bullies, bully-victims hold little belief that their aggression will prove an effective response to their harassment (Schwartz et al., 1998). Their reactive aggression is regularly accompanied by, and most likely influenced by, externalised emotions such as anger (Hanish & Guerra, 2002). Additionally, with bully-victims far more likely to nominate other aggressive children as their preferred playmates (Perren & Alasker, 2006), their proactive aggression is likely to be modelled from their peer groups rather than as a calculated effort to achieve social dominance. With such foundations for their aggressive behaviour, it is not surprising that bully-victims score highest on scales of dislikeability and demonstrate the least prosocial behaviour (Veenstra et al., 2005). Finally, bully-victims have higher risk for conduct problems (Gini, 2007) and demonstrate the poorest academic functioning substantiated by their low achievement test scores (Toblin et al., 2005).

To conclude, bully-victims appear to be the most aggressive of all the subgroups, being both provocatively aggressive and also reacting aggressively to provocation. They are disruptive, hyperactive, and demonstrate the least prosocial behaviour, which contributes to their rejected status and subsequent conduct disorders.

1.5.3.2   Internalised problems

In the review of the literature that has reported on the internalised problems experienced by victimised children (Section 1.5.2.2), a concerning picture of their emotional well-being was developed. However, bully-victims appear to experience poorer emotional adjustment than both bullies and victims. Here the literature that has compared the internalised problems of bully, victim, and bully-victim subgroups is discussed, and I consider how reactive aggression may serve to perpetuate their poor emotional adjustment.

Of those involved in bullying behaviour, studies that have considered the subgroup of bully-victims found that these individuals experienced the poorest psychosocial functioning of all (Austin & Joseph, 1996; Haynie et al., 2001), and have even worse psychological health than victims (Stein, Dukes, & Warren, 2007). These findings are consistent across physical and relational techniques of bullying (Marini, Dane, Bosacki, & Ylc-Cura, 2006), and have been replicated in mixed-race studies: Peskin, Tortolero, Markham, Addy, and Baumler (2007) found middle school bully-victims were more likely than non-involved adolescents to experience internalising symptoms in a sample of low-income black and Hispanic students. Further, in a cross-national study of 25 countries and a sample size of 113,200, bully-victims reported poorer emotional adjustment than their peers across all involved countries (Nansel et al., 2004).

Related literature finds bully-victims to suffer the internalised problems reported in both bullies *and* victims. They are more likely to report feeling unsafe at school (Glew et al., 2008), and are at a greater risk of depression than either bullies or victims (Kaltiala-Heino et al., 1999). They are also at greater risk for suicide ideation (Kaltiala-Heino et al., 1999) and attempts (Klomek et al., 2007). Toblin et al. (2005) reported that bully-victims indicated a higher desire for social acceptance than non-aggressive victims. Consequently their ineffective social interaction is likely to lead to a negative self-appraisal. Accordingly, bully-victims report more feelings of ineffectiveness (Kumpulainen et al., 1998), score lowest on measures of self-esteem (Andreou, 2001), and report feeling lonely more than their peers (Kumpulainen et al., 1998). Associations with social anxiety are less clear. While some studies find bully-victims to be more assertive than their non-bullying counterparts (Stephenson & Smith, 1989), others have found them to score relatively low on measures of

assertiveness and report anxiety in scenarios depicting attempts at group entry (Toblin et al., 2005).

One explanation for the difference in the prevalence of internalising problems between bully and bully-victim groups is that bully-victims are unable to apply their aggression effectively, and consequently become rejected by their peers. With bully-victims taking experiences of peer-rejection particularly badly, they are more prone to reacting aggressively. However, reactive aggression elicits negative reactions from peers and is likely to contribute to the aggressor's psychological maladjustment (Parker & Asher, 1987; Card & Little, 2006). Because bully-victims also have less belief that their aggression will prove effective, their antisocial behaviour is likely to contribute to their low levels of self worth.

In summary, bully-victims have been found to be the most psychologically maladjusted group, experiencing more depression, loneliness, low self-esteem and suicidal ideations than any of their peers. This is likely to be confounded by their aggressive reactions to provocation which may lead to increased peer-rejection, which, in turn, may serve to perpetuate their internalised problems.

1.5.3.3   Cognitive aspects

The social information processing biases in aggressive victims that were detailed earlier are likely to hold for bully-victims. The majority of related research comes from the aggression literature and fails to distinguish the bully-victim subgroup, preferring instead to consider the distinctions between the cognitive processing of proactive versus reactive aggressors. Those studies that have are discussed here.

Because of the hot-headed reactive aggression that is particularly prevalent in bully-victims, their behaviour is likely to reflect "an underlying state of poorly modulated anger and irritability" (Toblin et al., 2005, p. 330). Indeed, bully-victims have been reported to feel more anger in response to provocation than their peers (Camodeca & Goossens, 2005). Pakaslahti (2000) posits that their emotionality may be responsible for a considerable degree of their maladaptive behaviour and may also have negative influence over their cognitive capacity to solve problems. Arguably, bully-victims' anger could follow from holding others responsible for negative actions against them (Weiner, 1995) and could be considered to be a product of past experience. However, it is likely to be compounded with their hot-headed temperament.

In a study specifically investigating the social information processing of the bullying subgroups, Camodeca, Goossens, Schuengel and Meerum Terwogt (2003) found bully-victims to attribute more blame to perpetrators in scenarios of ambiguous conflict than their counterparts. They also endorse goals for retaliation and revenge (Camodeca & Goossens, 2005), suggesting that they clearly considered the perpetrator to have intended harm. Bully-victims choose more assertive response strategies but hold no beliefs that their aggression would be beneficial in the long-term (Gottfredson & Hirschi, 1990). Taken together, bully-victims demonstrate biases throughout Crick and Dodge's (1994) social information processing model, especially in response to provocation. These biases are most likely contributed to by their heightened emotional arousal and may lead to the development of an aggressive schema that is applied to future social interactions (Dodge, 1993).

Alternatively, bully-victims' preference for aggressive response strategies may be more related to an overall lack of skill in social interaction (Carney & Merrell, 2001), causing them to develop a kind of learned helplessness in dealing with provocation. This would explain why Erdley and Asher (1996) reported that aggressive victims hold no positive beliefs for outcomes in general, but rate their efficacy for antisocial responses as higher than for prosocial responses.

In summary, bully-victims seem to suffer from inhibitory related cognitive deficits throughout their social information processing. They are more impulsive and irritable than their peers, and they experience more intense emotions in response to perceived provocation. Consequently, they interpret more threat in social situations than even victims, generating an antisocial response repertoire despite holding no aspirations that their aggression will be productive.

1.5.3.4 Familial, genetic and peer group influences

The literature already reviewed has found bully-victims to be the poorest functioning group within the bullying domain. As outlined here, their cognitive deficits and behavioural problems are likely to be contributed to by both genetic and family factors, and are compounded by their poor social standing.

The reactive aggression most prominent in bully-victims is strongly associated with certain highly heritable temperamental characteristics (Cyphers, Phillips, Fulker, & Mrazek, 1990; Vitaro, Brendgen, & Tremblay, 2002). Specifically, bully-victims have a temperamental disposition towards emotional dysregulation and inattention, which makes

them particularly prone to anxiety and anger when reacting to social cues (Dodge & Coie, 1987; Dodge, et al., 1997; Price & Dodge, 1989; Shields & Cicchetti, 1998; Vitaro et al., 2002). Nevertheless, twin studies have reported that reactive aggression is influenced mostly by social factors, with only a very small degree accountable to specific genes (Brendgen et al., 2006).

In contrast to Brendgen et al.'s (2006) findings, studies that have specifically examined the genetic and environmental influences on the covariation between bullying and victimisation scores (effectively, the influences on children who both bully and are bullied) have reported that variance was explained solely by genetic factors (Ball et al., 2008). One of the most likely candidates is the highly heritable emotional dysregulation (Kozak, Strelau, & Miles, 2005), which conceivably promotes the likelihood of both bullying and being bullied. However, because the size of the correlation between genes involved in bullying and genes involved in victimisation was modest, Ball et al. (2008) suggest that there are likely to be more influences to only one trait (bullying *or* victimisation) than influences to both traits (bullying *and* victimisation).

In addition to the genetic influences, bully-victims' parents demonstrate particularly dysfunctional parenting (Bowers et al., 1994; Smith & Myron-Wilson, 1998), and have been found to be controlling and unresponsive (Vitaro et al., 2006; Ladd & Kochenderfer-Ladd, 1998). For bully-victims, the harsh home environment provided by their parents is often compounded by the presence of aggressive siblings who are low in warmth (Duncan, 2004), and bully-victims' hot-headed temperament is unlikely to aid in appeasing conflicts within the family. The home environment of bully-victims thus offers little positive social interaction from which they can model adaptive responses to provocation.

Given their difficult home environment, it is unsurprising that bully-victims have specific difficulties in making friends. Bully-victims report fewer friendships than their bullying counterparts (Ray, Cohen, Secrist, & Duncan, 1997) and are highly disliked by their peers (Schwartz, Proctor, & Chien, 2001; Perry et al., 1988), no doubt because of their repeatedly aggressive behaviour. In fact, bully-victims have the lowest peer preference scores of all the bullying subgroups (Toblin et al., 2005). Because of the extent of their peer-rejection, bully-victims spend the least time in positive social interaction, which may contribute to their poor socialisation skills (Carney & Merrell, 2001). The friends that bully-victims do have are likely to be similarly aggressive (Spriggs et al., 2007), which may serve to reinforce their aggressive behaviour and lead to amplified victimisation in boys (Lamarche et al., 2007).

In short, bully-victims are likely to suffer from temperamental dispositions toward disruptiveness and emotional dysregulation, and experience a dysfunctional and aggressive family environment. Together, these factors contribute to the development of an anti-social and aggressive behaviour repertoire leading to subsequent peer-rejection and social isolation.

1.6 **Summary of Chapter 1**

In a broad review of the literature available on the various contributors to bullying and victimisation, distinct profiles for bullies, victims and bully-victims were developed. In comparison to their non-involved peers, these subgroups demonstrate abnormal psychological functioning through their social behaviours, emotional adjustment, and cognitive processing. These factors may be contributed to by a difficult home environment, and directly affect their

social adjustment. The difficulties that these subgroups experience are substantial, and serve to emphasise the importance of empirical work in the field.

Although dealt with them individually, the areas discussed are likely to have strong associations with each other. Bullies' proactive aggression may well stem from lax parental supervision, but is likely to be facilitated by a degree of "social intelligence", allowing the bully to successfully achieve goals of social dominance. The process requires an appropriate target however. In victims, they find an individual who is not protected by their peer group, and is often submissive and unassertive in reaction to provocation, a response no doubt reinforced by their low self-worth and feelings of helplessness. In bully-victims they find an individual who has trouble masking their emotionality and reacts explosively to provocation. Because bully-victims' impulsivity and disruptive behaviour leave them strongly rejected by their peers, they may provide a particularly easy target for bullies.

The wide array of studies reviewed here, while providing useful insight into the psychological profiles of bullies, victims and bully-victims, has considered a very large range of contributors to bullying and victimisation. I now move to a detailed review of the literature specifically related to the area of the present empirical work, namely the social-cognitive and socio-motivational factors associated with bullying and victimisation.

Chapter 2:   Social-Cognitive and Socio-Motivational Contributions to Bullying and Victimisation

Children's social-cognitive processing has immediate influence on the outcome of each individual bullying episode, and also shapes the likelihood that similar interactions will reoccur in future. In order to provide direction to bullying intervention and prevention strategies, it is therefore vital to understand how bullies and their victims perceive and process social situations, and to investigate what they hope to achieve through their behaviour.

As detailed in Chapter 1, children's behaviour, emotional adjustment, and home environment are likely to contribute to their cognitive processing, and thus each merits specific focus. However, this chapter focuses on the social-cognitive factors that may be fundamental in understanding why children become bullies and/or victims by means of a review of the literature available in the area. In doing this, justification is provided for the value of related work, developing a sound theoretical framework for research into the social motivations and goals of bullies and victims.

The literature reviewed is closely associated with a recent debate between Crick and Dodge (1999) and Sutton et al. (1999a, 1999b, 1999c, 2001) but is not limited to it. To a significant extent, this debate instigated the subsequent investigation outlined in the empirical chapters of this thesis (Chapters 3 to 6). The debate, in brief, proceeded as follows. Crick and Dodge (1994) put forward their social information processing model outlining the aggressive behaviour inherent in bullying as the consequence of what they consider to be biases in one or more of the steps within their model (outlined in the following section). Sutton et al.

(1999a, 1999b, 1999c), while acknowledging the importance of much of this research, argued that the model may lead researchers to underestimate the social skill required to bully successfully. They proposed that the biases that lead to aggressive behaviour as observed by Crick and Dodge (1994, 1996) are better conceived of as differences (Sutton et al., 2001), and may even be indicative that some bullies process social situations particularly effectively and may possess some aspects of superior social-cognitive processing (namely an advanced theory of mind). Crick and Dodge (1999) rejected the proposition that competent social cognition could produce bullying behaviours and Arsenio and Lemerise (2001) go on to claim that having a superior theory of mind only results in antisocial behaviour when it is met with a non-conforming set of values, and differences in emotion processing (e.g., empathy), which should be recognised as biases. While it remains open to debate whether bullies' social cognitive processing should be considered competent or not, a consensus seems to be forming that research needs to focus less on how bullies' social information processing may differ from their peers and more on the *motivations* behind their behaviour.

This chapter begins by reviewing Crick and Dodge's (1994) Social Information Processing Model, detailing the biases held to contribute to social maladjustment and where possible, to bullying and victimisation. Attention then turns to the theory of mind literature. A background to theory of mind research is given, and the associations reported between theory of mind ability and bullying/victimisation are discussed. Next, focus switches to the literature on children's social goals and the limited understanding we have as to the specific goals bullies and victims hold, in that they might be critical to understanding the relationship between bullying and social information processing biases and theory of mind. Finally, the contribution the literature has made to the conceptualisation of this programme of empirical work is outlined.

2.1 Social Information Processing (SIP)

2.1.1 Crick and Dodge's (1994) Social Information Processing Model

One avenue of social adjustment research has specifically focused on the individual aspects of cognitive processing that are involved in social interactions (Crick & Dodge, 1994). Over the past two decades, SIP models of children's social behaviour have considerably developed our understanding of children's social adjustment. Models aim to provide a detailed account of how children, when faced with a social situational cue, progress through a series of mental states that precede their behaviour. Perhaps the most established SIP model is that of Crick and Dodge (1994), in turn a reformulation of Dodge's (1986) previous work. Crick and Dodge argued that children come equipped with a set of biologically determined capabilities and past experiences which influence their cognitive processing during any given encounter, and that it is the processing of the social cues available in said encounter that determines their behavioural response. Crick and Dodge depict this processing as occurring over several steps as shown in Figure 2.1. The steps of the model are hypothesised to occur rapidly and in parallel, with numerous feedback loops.

According to Crick and Dodge (1994), SIP begins when the child attends to and encodes social cues (step one). The child must then interpret these cues (step two), and subsequently determine his/her goals for the situation (step three). Responses to the situation are generated (step four), and evaluated for anticipated outcomes, the likelihood that the response will help the child to achieve his/her goals, and with respect to the self-efficacy held in performing the response (step five). Finally, the most positive evaluated response is selected and behaviourally enacted (step six). After step six the cycle starts again.

5. RESPONSE DECISION
- response evaluation
- outcome expectations
- self-efficacy evaluation
- response selection

4. RESPONSE ACCESS OR CONSTRUCTION

DATA BASE
- memory store
- acquired rules
- social schemas
- social knowledge

3. CLARIFICATION OF GOALS
- arousal regulation

6. BEHAVIORAL ENACTMENT

PEER EVALUATION AND RESPONSE

2. INTERPRETATION OF CUES
- causal attributions
- intent attributions
- other interpretative processes
  - evaluation of goal attainment
  - evaluation of past performance
  - self-evaluations
  - other-evaluations

1. ENCODING OF CUES (both internal and external)

Figure 2.1: *Crick and Dodge's Social Information Processing model of children's social adjustment*

To illustrate, imagine a child who has been bumped into from behind and fallen over. In step one, the child may selectively attend to certain aspects of the situation, which may lead them to be more or less inclined to interpret intent behind the provocation (step two). If hostility is assumed, the child must determine what his/her goals are – to avoid the provocateur or to get revenge on them (step three). In order to get revenge the child generates predominantly aggressive responses (step four) and selects one that (s)he believes will have a positive outcome and that (s)he holds him/herself capable of carrying out (step five). This is likely to be epitomised in physical or verbal aggression (step six).

The information processing does not end there. The child will then evaluate the effectiveness of their behaviour thereby providing valuable insight into processing a similar situation in future. The database depicted at the centre of the model represents this process, contributing influential information to the processing of each step, and adapting itself accordingly in light of new experience. In the example above, the child may have experienced much hostility at home and thus inappropriately encodes anger from the provocateur (step one). Previous experience could also contribute to the likelihood that hostility is attributed in step two. Similarly, avoidance may have proven ineffective in previous encounters biasing the child to focus on revenge driven goals (step three). (S)he may have found aggression to be an easy and pertinent way to achieve revenge in the past and thus generates hostile responses (step four) that (s)he believes will be effective in resolving the conflict (step five). Finally, the child responds by hitting out at the provocateur (step six).

The involvement of a database in the model enables Crick and Dodge (1994) to explain how social experiences (such as social rejection) can manifest themselves in maladaptive information processing and can also explain how maladaptive patterns can become habituated. This is particularly important as children may develop maladaptive schemata –organised sets of cognitive perceptions that influence every stage of SIP based upon their *representation* of events - which are often inaccurate and in contrast to peers' perceptions (Dodge, 1993). The development of an aggressive schema for example, could lead the child to feel in persistent threat from their peer group, interpreting even ambiguous provocation as indicative of targeted aggression, and cause them to respond inappropriately for the situation in hand (such as withdrawing from social interaction or reacting aggressively to non-threatening stimuli). Encouragingly, the most likely part of an individual's SIP to change is the database of social knowledge, and experiences of positive social interaction

may thus provide a potential route out of maladaptive behaviour. If the child repeatedly experienced positive outcomes to their cooperative behaviour they might be led to revaluate their interpretations of others, reconsider their social goals and even establish a new set of appropriate social behaviours.

Finally, a recent development of the model (Lemerise & Arsenio, 2000) is reported on, that explicitly considers the role of emotions within social information processing. Lemerise and Arsenio (2000) posit that peer provocation situations are especially likely to be emotionally arousing for children. They argue that a child's database of past experiences consists of affective as well as cognitive components, and that children vary in their ability to regulate arousal or mood. Poor emotion regulators are held to be less competent throughout the SIP stages and therefore at higher risk for maladjustment (see Eisenberg et al., 1996).

In specific relation to the steps within Crick and Dodge's model: encoding negative emotional cues (such as anger; step one) in the provocateur would facilitate hostile attributions to even ambiguous provocation (step two; Lemerise, Gregory, Leitner, & Hobgood, 1999, cf Lemerise & Arsenio, 2000); being emotionally charged (in an angry mood) makes it more likely that a child will focus on instrumental goals of revenge (step three; Lemerise, Harper, Caverly, & Hopgood, 1998, cf Lemerise & Arsenio, 2000); and subsequently too self-focused to generate and evaluate a sufficient variety of responses, engaging instead in "preemptive processing" (steps four and five; see Crick & Dodge, 1994). The consequence of these processing biases is an emotionally fuelled maladaptive response unlikely to further social interaction (e.g., running away or retaliating angrily).

2.1.2   Social information processing, aggression, and social adjustment

Next, the literature that has associated biases throughout children's SIP with aggression and social maladjustment is reported on. By focusing on individual aspects of social processing, Crick and Dodge's model has proven particularly useful in explaining the cognitive processing of aggressive children (Crick & Dodge, 1999; Pakaslahti, 2000; Pettit, Polaha, & Mize, 2001). Aggressive children are held to demonstrate biased processing throughout the cycle culminating in the enactment of anti-social behaviour (Crick & Dodge, 1994). These biases are reviewed in the sequential order of social information processing steps outlined by Crick and Dodge (1994), and displayed in Figure 2.1. While the vast majority of SIP research has focused around aggressive behaviour, direct relations with peer-rejection and bullying/victimisation are also discussed where available.

In the first stage of SIP, children need to encode the information available to them effectively in order to deal with the situation appropriately. Aggressive children however, have been found to use fewer social cues than their peers when making interpretations of social situations (Dodge & Newman, 1981). This has been argued to be the consequence of memory deficits that lead to the child attending to particular types of information, namely aggressive cues (Gouze, 1987). Similarly, the experience of peer-rejection may itself induce biases in this encoding step (Dodge et al., 2003). Consequently, an over-developed set of aggressive schemata is used to make sense of social interaction, overriding the immediate social cues that are available to them (Dodge & Tomlin, 1987).

As detailed in the previous chapter, in relation to peer-rejection, there may be justification to consider aggressive and withdrawn children as distinct in their SIP, the former

bearing stronger behavioural resemblance to bully-victims, the latter to "pure" victims. Using hypothetical social dilemmas, Harrist et al. (1997) identified a subgroup of aggressive rejected (termed active-isolate) children who were less accurate in their encoding of relevant information while withdrawn (passive-anxious) rejected children did not suffer the same deficit. These two rejected groups may differ in their ability to regulate emotion, with overwhelming feelings of anger interfering with the processing of available social information in the aggressive-rejected subgroup (Lemerise & Arsenio, 2000). Fittingly, while aggressive victims have been found to demonstrate impulsivity and emotion-dysregulation when responding to cues, passive victims did not (Toblin et al., 2005).

When interpreting cues (step two), aggressive children have difficulties recognising the intentions and motivations of others (Dodge, Price, Bachorowski, & Newman, 1990), and attribute hostile intent even when provocation is ambiguous (Lochman & Dodge, 1998; Zelli, Dodge, Lochman, Laird, & Conduct Problems Prevention Research Group, 1999). Children who interpret threat are also likely to be aggressive. Erdley and Asher (1996) reported that 63% (109 out of 173) of children who interpreted hostile intent in ambiguous provocation scenarios were also described by their teacher as engaging in more aggressive behaviour than their peers (defined as being one standard deviation over the mean scores within their class).

Research has found a similar bias in peer-rejected and socially maladjusted children (Dodge & Somberg, 1987; Feldman & Dodge, 1987). Rejected children who feel threatened demonstrate inclinations to respond impulsively (Dodge & Newman, 1981), often aggressively (Crick & Dodge, 1994). When the subgroups of aggressive and withdrawn-rejected children have been distinguished in research, both aggressive and passive rejected children have been found to demonstrate a bias in the interpretation step (Harrist et al., 1997;

Toblin et al., 2005). Similarly in a two year longitudinal study, Camodeca et al. (2003) used a set of ambiguous provocation scenarios to assess how much bullies, victims and bully-victims blame the provocateur. All of the subgroups attributed more blame than their non-involved peers, but the difference was only significant in the bully-victims. The bully-victims also reported feeling more angry than all other groups, and demonstrated a clear tendency for retaliation.

By and large, research into the goals step (step three) of the SIP model has found aggressive and socially maladjusted children (predominantly boys) to endorse high goal values for instrumental ends (such as dominance and revenge), and low goal values for affiliation (Lochman et al., 1993; Erdley & Asher, 1999). In fact, aggressive children are inclined to select goals that are likely to be relationship damaging (Crick & Dodge, 1989; Taylor & Asher, 1989, cf Crick & Dodge, 1994). Crick and Dodge (1996) considered both proactive and reactive aggressors' goals in conflict and group entry scenarios and found proactively aggressive children to select more instrumental and less relational goals than their reactively aggressive and nonaggressive peers, but in conflict scenarios only. As proactive aggression is depicted as deliberate and instrumental this is not surprising, but the lack of associations in group entry scenarios suggest that the social goals of aggressive children may vary in social settings that do not explicitly depict conflict. In fact, very little research has considered the social goals of aggressors outside of conflict scenarios and this provides an important direction for further research. The social goals of children in a range of social situations could serve to shape peer opinions on themselves and could provide some explanation as to why and when proactive aggressors will choose to aggress. This is returned to later (Section 2.3).

In social adjustment research, Renshaw and Asher (1983) and Wentzel (1991) both found that low accepted children do not *openly* endorse antisocial goals but may focus more on instrumental goals because they have little faith in their ability to fulfil relationship-oriented goals (Crick & Ladd, 1990). Further, socially maladjusted children often report wanting to be liked (Crick & Dodge, 1992) and wanting to improve social competence (Taylor & Asher, 1989, cf Crick & Dodge, 1994). It may be that aggressive-rejected children experience feelings of anger upon interpreting hostility which serves to energise particular goals (Crick & Dodge, 1992; Crick & Dodge, 1996), specifically aggressive instrumental ones such as retaliation (Lemerise et al., 1998, cf Lemerise & Arsenio, 2000). Withdrawn-rejected children have also been found to endorse instrumental goals over relational goals but favour self-protective goals of harm avoidance (Erdley & Asher, 1999; Perry et al., 1992) potentially energised by feelings of anxiety (Lemerise & Arsenio, 2001).

Effectively, aggressive and/or rejected children might endorse instrumental goals but have different outcomes in mind. Proactive aggressors endorse goals that are self-enhancing, reactive aggressors endorse goals for retaliation, and withdrawn-rejected children seek harm avoidance. Very little research has distinguished these goals within the framework of the SIP model, and of that which has (e.g., Erdley & Asher, 1996), the author knows of no incidences where the specific goals of bullies, victims, and bully-victims have been investigated across different social situations. As outlined in Chapter 1, bullies, victims, and bully-victims appear to have unique psychological profiles, so they are also likely to hold unique sets of social goals. Understanding these goals is likely to be critical in explaining their maladaptive social behaviours. The role social goals have to play in predicting bullying and victimisation is central to this empirical work, and because of this, is returned to in greater detail later in the chapter (Section 2.3).

In the phase of response access or construction (step four), aggressive children generate more aggressive and hostile alternatives (Zelli et al., 1999; Quiggle, Garber, Panak, & Dodge, 1992). Although previous experiences of conflict are likely to contribute to aggressive response generation, there are likely to be other contributing factors, such as peer-rejection. In a five year longitudinal study, Dodge et al. (2003) found that social rejection in 6-8 year-olds predicted the generation of more aggressive responses to hypothetical scenarios of group entry rejection by the time they were entering adolescence (10-12 years old), which in turn predicted aggression a year later.

Rejected children have similarly been reported to have difficulties formulating productive strategies for resolving interpersonal problems (Asher, Renshaw, & Geraci, 1980; Pettit, Dodge, & Brown, 1988; Rubin, Daniels-Bierness & Hayvren, 1982). Once more, a distinction between withdrawn-rejected and aggressive-rejected children is likely to exist for this step of SIP. Rejected children who are also withdrawn tend to generate responses for conflict scenarios that are more submissive than their aggressive namesakes (Deluty, 1981; Rubin, 1982; Asher et al., 1980), although they still demonstrate non-normative processing in overall response generation (Dodge & Frame, 1983; Harrist, et al., 1997; Pettit et al., 1988). Finally, the ability to regulate emotions has been suggested to influence response generation (Lemersise & Arsenio, 2000), with good regulators of emotion unimpeded by feelings of anger or fear and more likely to consider the situation from multiple perspectives, thereby facilitating generation of a more comprehensive set of response options (Saarni, 1999; Pakaslahti, 2000).

In step five, aggressive children hold high efficacy in their ability to perform aggressive acts, and anticipate more positive outcomes from aggressing (Zelli et al., 1999; Crick & Ladd, 1990; Perry, Perry, & Rasmussen, 1986). They also evaluate affiliative responses more negatively than their peers (Crick & Ladd, 1990; Quiggle et al., 1992), and would expect less positive outcomes for enacting prosocial behaviour (Crick & Dodge, 1989; Dodge, Pettit, McClasky, & Brown, 1986; Quiggle et al., 1992). Peer-rejected children have similarly been identified as holding high efficacy for aggressive behaviour (Feldman & Dodge, 1987; Hart, Ladd, & Burleson 1990), especially verbal aggression (Crick & Ladd, 1990).

There may be some differences between the subgroups of aggressive and peer-rejected children. Interestingly, the favourable expectations of the outcome of aggression are particularly evident in proactively aggressive children (Crick & Dodge, 1992). Reactive aggressors, while rating their efficacy for antisocial responses as higher than for prosocial responses (Erdley & Asher, 1996), still hold little belief that their aggression would be beneficial in the long-term (Gottfredson & Hirschi, 1990). Moreover, non-aggressive rejected children have been reported to hold *negative* outcome expectations for aggressive behaviour (Crick & Dodge, 1989; Toblin et al., 2005). Regardless, these subgroups have still been reported to demonstrate non-normative processing in response evaluation in comparison to their non-rejected peers (Harrist et al., 1997).

In summary, aggressive behaviour has been comprehensively associated with biases across all the stages of Crick and Dodge's SIP model. However, very little research has actually considered the SIP of bullies and victims. That which has, taken with the assumption that bullies are predominantly proactive aggressors, suggests that bullies hold instrumental

goals of self-enhancement and low goals for relationship building, generate more aggressive responses, and evaluate those responses more favourably. That which has considered victims (often labelled as non-aggressive or withdrawn-rejected children) finds them to interpret more threat to ambiguous provocation, to hold instrumental goals of harm avoidance, and to generate submissive responses, evaluating aggressive responses less favourably. Bully-victims (labelled as aggressive victims) have difficulty in encoding cues because of difficulties regulating their attention and emotion, interpret more threat to ambiguous provocation, endorse goals of retaliation and generate more aggressive responses even though they do not expect them to provide them with a positive outcome.

2.2   **The role of theory of mind in bullying**

As outlined in the previous section, aggression has been argued to occur as the result of biases throughout SIP. With bullying itself an antisocial and aggressive act, SIP theorists hold that these biases should be evident in bullies as well (Crick & Dodge, 1999). However, while Crick and Dodge (amongst others) argue that aggression should be considered the consequence of "maladaptive" SIP, it is equally conceivable that it could be the product of *adaptive* processing. For example, bullies are likely to hold high hopes for aggressive behaviour if they are capable of carrying out their aggression to achieve their instrumental goals, especially if they are able to manipulate their peer group such that there is limited risk to their social status. Indeed, the existing literature that has examined the SIP of bullies (e.g., Camodeca and Goossens, 2005; Toblin et al., 2005) has painted a picture far less clear than might have been predicted. The associations between SIP biases and bullying appear to be moderated by three (not necessarily independent) factors. Bullies are more likely to demonstrate SIP biases if their aggression is deemed as physical rather than relational (Crick

& Grotpeter, 1996); reactive rather than proactive (Arsenio, Adams, & Gold, 2009); and if they are concurrently rejected (or victimised) by their peers (Bierman, Smoot, & Aumiller, 1993; Toblin et al., 2005).

Accordingly, Sutton et al. (1999a) have argued that there is little to be gained from considering bullies as part of a homogenous group with other aggressive children because the reasons behind their aggressive behaviour are likely to vary. In contrast to the perception of bullies as maladaptive social cognitive processors, evidence is building for a conceptualisation of bullies as being especially good at processing certain aspects of social situations. Specifically, bullies may 'have an accomplished ability to understand, and even manipulate the mental states of others – an acute theory of mind' (Sutton et al., 1999a, p120; see also Sutton, 2003; Sutton et al., 1999b, 1999c).

Once the traditional view of a bully as an unintelligent thug who knows no better than to be aggressive is removed, the reported associations between bullying and theory of mind (ToM) make a lot of sense. When considering the social context of bullying it follows that bullies need to be able to understand how they are perceived by others (Hazler, 1996). As well as selecting a victim, avoiding detection and determining what kind of justification peers might accept for aggression towards the victim, the successful bully must also be able to evaluate the efficiency of his/her behaviour (Björkqvist, Lagerspetz, & Kaukainen, 1992). This idea is not without empirical support: Keating and Heltman (1994) found pre-schoolers who successfully deceived another into drinking a nasty-tasting drink also tended to terrorise the playground and were rated as dominant; Happé and Frith (1996) found that children best represented their mentalising abilities in the domains of lying, cheating, teasing and bullying;

and Sutton et al. (1999b) found ring-leader bullies to score highest on scores of emotional and cognitive understanding.

In order to provide a context in which to discuss the role ToM has to play in bullying, a brief history of theory of mind research is outlined and a definition of ToM provided to ground this literature review. The studies that have reported on associations between ToM and bullying, peer-rejection and victimisation are then detailed, before I argue for the importance of social goals in determining whether an acute ToM leads to bullying behaviours.

2.2.1   A brief history of theory of mind research

Originally, ToM referred to the ability to impute mental states to the self and to others (Premack & Woodruff, 1978), the measure of this being the ability to attribute a misguided belief – the false-belief task (e.g., Baron-Cohen, Leslie & Frith, 1985; Wimmer & Perner, 1983). In an adaption to Wimmer and Perner's (1983) false-belief measure, Baron-Cohen et al. (1985) devised the Sally-Anne task to determine whether children under the age of seven were unable to see the world from another's perspective. They acted out a scenario with the use of two dolls – Sally and Anne. Sally places a marble in her box then leaves the room. While she is away, Anne takes the marble from Sally's box and places it in her own basket. Sally then returns and children are asked where she will look for her marble. Children under the age of four indicated that Sally would look in Anne's basket, and subsequently failed the task. By age six however, the vast majority of normal functioning children are able to understand that Sally does not know her marble has been moved, and thus will search for it in her box, where she last left it.

By and large the false-belief task was considered the acid test of ToM throughout the 1980s and 1990s (Carpendale & Lewis, 2006). Success at this task has been found to facilitate the development of shared pretense (Hughes & Dunn, 1997), communication (Slomkowski & Dunn, 1996), but also a sensitivity to criticism (Cutting & Dunn, 2002). However, while several methodological variations to the task were put forward, a meta-analysis conducted by Welman, Cross and Watson (2001) suggested that the only consistently significant effect on false-belief performance was age, with the onset of ToM for the vast majority of children evident somewhere between 3 and 5-years-old (Jenkins & Oatley, 2004). Consequently, the predominance of the false-belief task in ToM research led to a narrow research focus on 3 to 5-year old children. Further, difficulties in false-belief understanding may not necessarily imply all round social incompetence, and the task has consequently been criticised in modern literature on the grounds that there is more to ToM than false-belief (e.g., Dahlgren & Trillingsgaard, 1996; Bloom & German, 2000).

In light of these criticisms, there has been a call for a broader definition of ToM (e.g., Flavell, 1999) – namely one that is more encompassing than the ability to attribute false beliefs. While Tager-Flusberg (2001) has gone into considerable depth regarding the contrasting definitions of ToM, for the purpose of this thesis ToM will be considered as a set of 'socio-perceptual skills that provide an implicit social know-how that allows us to negotiate the mental domain' (Hughes & Leekam, 2004, p591). In other words, ToM is defined as the ability to understand mental states pertaining to social situations, providing a foundation for their ensuing behaviour. To the author's knowledge, social adjustment research has predominantly adopted this position (e.g., Badenes, Estevan, & Bacete, 2000;

Banerjee & Watling, 2005; Banerjee et al., in press; Monks, Smith, & Swettenham, 2005; Sutton et al., 1999b).

An alternative to the false-belief task in assessing ToM, revolves around the understanding of deception (Moses, 2001), the child's identification of which improves if they understand it to be strategically planned (Chandler & Hala, 1994; Hala & Chandler, 1996). Variants of this task (such as the double bluff second-order false-belief scenarios developed by Happé, 1994) are considered to provide a useful measure of the more advanced components of ToM. Of similar cognitive complexity is the faux-pas task presented by Baron-Cohen et al. (1999). The task requires insights into the mental states involved in unintentional insults, where children must detect and identify the faux-pas in a number of naturalistic hypothetical scenarios. Initial evidence from three studies carried out by Baron-Cohen et al. (1999) suggested that performance on the faux-pas task increases with age between 7 and 11 within the normal population, and is less evident among children with Asperger's syndrome and high-functioning autistic individuals. It is not unusual to see a battery of these and other related tests used in ToM research, allowing for variation in scores of mental-state understanding in older children, which was not previously attainable using false-belief tasks (e.g., Badenes et al., 2000; Banerjee and Watling, 2005; Banerjee et al., in press; Sutton et al., 1999b).

One avenue of research has taken a slightly different approach to assessing children's ToM skills. Researchers interested in children's self-presentational awareness have suggested that evidence for socio-perceptual skills can be obtained through a child's ability to identify and comprehend the usage of display rules (Banerjee, 2002a, 2002b; Banerjee & Yuill, 1999a, 1999b). Display rules are principles that guide when and how people regulate their

emotional expressions (Ekman & Friesen, 1975). Research has identified various types of these display rules, but they essentially come under two forms: prosocial and self-protective (Ekman & Friesen, 1975; Gnepp & Heiss, 1986). Prosocial display rules demonstrate an attempt to behave in ways that preserve relational harmony and protect others (such as smiling upon receipt of a gift regardless of whether it is desirable). Self-protective display rules are used for personal gain and revolve around the anticipated outcomes of expressing a particular emotion in a given situation, often influenced by an individual's perceived self-image projected onto others (i.e., self-presentational display rules; for instance, laughing at a joke others are laughing at despite not understanding it).

Like other socio-perceptual measures, children's understanding of display rules has been investigated through hypothetical scenarios. For example, Banerjee (2002a) presented children with a set of stories in which a story character behaves (through display of emotion) in such a way as to manipulate others' beliefs of him/her. These stories were specific to the self-presentational subcategory of self-protective display rules. Following each story the child was questioned as to why the protagonist acted in this way. The child's responses were then categorised to determine whether the child had understood the display rule or not. Responses that gave reference to others' beliefs about the self were considered sufficient to have understood self-presentational display rules (see also Banerjee & Yuill, 1999a, 1999b).

Findings have supported an association between understanding of self-presentational display rules and mental-state understanding (e.g., Banerjee & Yuill, 1999b). However, Banerjee (2002a) notes that ability to identify self-presentational motives was not solely explained by a general ability to pass a second order false-belief task indicative of a developed ToM. Banerjee (2002a) concluded that the additional variance is likely to be the

consequence of socio-motivational factors. Indeed, while the cited research has tended to consider children's ability to pass these tasks as indicative of their mental-state reasoning and self-presentational awareness, the variety of responses children gave demonstrates that children may vary in their socio-motivations in scenarios where display rules might be employed. Responses referenced a concern for others' feelings and/or a concern for the potential outcomes of the situation as well responses that focused on self-presentational apprehension. The display rule task may thus also provide a window into the socio-motivations of children in a variety of social settings. This will be returned to later in Section 2.4.

2.2.2   Theory of mind and bullying

Attention now turns to the links between ToM and bullying, and the associations between ToM, prosocial behaviour, and social status. It is considered how ToM can serve to enhance perceived social status, thus facilitating effective bullying (i.e., bullying that achieves the outcomes intended). Clearly, an acute ToM is not a definitive precursor to bullying, and the potential influences on this relationship are discussed. The roles of moral development and empathic understanding are discussed before building a case for the importance of social goals in predicting bullying in children.

Using the various tasks outlined in the previous section, evidence has indicated that ToM is related to prosocial behaviour and positive social adjustment: Baird and Astington (2004) reported significant correlations between second-order false-belief understanding and teachers' ratings of prosocial behaviour and peer competence; Slaughter, Denis and Pritchard (2002) identified popular children as more advanced in their understanding of false-beliefs

and emotions than their rejected counterparts; and Banerjee and colleagues (Banerjee & Watling, 2005; Banerjee, Watling, & Caputi, in press) found that, in a sample of 8 to 9 year olds, there are inverse links between peer-rejection and faux-pas performance, operating bidirectionally over time.

The social implications of ToM are far from uniform, however. While ToM may be an important prerequisite for prosocial behaviour, it may also be used to deceive and exploit others (Hughes & Leekam, 2004; Ronald, Happé, Hughes, & Plomin, 2005), and might provide the basis for calculated aggression towards peers (Crick & Grotpeter, 1996; Sutton et al., 1999a). In fact, Sutton et al. (1999b) reported that "ring-leader bullies" scored higher on a battery of social cognition tasks than any of the other groups involved in the bullying dynamic (as determined by the Participant Role Scale; Salmivalli et al., 1996). Sutton et al. (1999a, 1999b) argued that some bullies possess a superior ToM, a position which has gathered support over the past decade (e.g., Gini, 2006; Monks et al., 2005). Given the socio-perceptual skills inherent in ToM, Sutton et al. (1999a, 1999b, 2001) argue that an advanced ToM can aid the bully in several ways, including selecting an appropriately socially rejected victim, and enabling the bully to avoid detection from teachers.

Because aggression is negatively perceived by peer groups, ToM is also likely to play an important role in allowing the aggressor to "get away with it", especially in relational aggression where the vehicle of harm is other people. Moreover, bullies may be part of a highly structured social group, requiring a comprehensive ToM to negotiate allegiances and achieve positions of power (Sutton et al., 1999b; Sutton & Keogh, 2000). Again, this is likely to be especially evident in bullies who utilise relational forms of aggression such as social exclusion or rumour spreading (Björkqvist et al., 1992; Kaukianen et al., 1999; Sutton et al.,

1999a). The relationship between relational bullying and ToM gains further support from studies that have reported age and gender differences in ToM scores: Relational aggression increases with age alongside ToM (Rivers & Smith, 1994), and ToM studies which show a sex difference reliably do so in favour of girls whose bullying is predominantly relational (Baron-Cohen & Hammer, 1996).

Clearly, not all children who bully have an advanced ToM (Sutton et al., 2001), but those that do are likely to be protected from peer-rejection by their ability to manipulate their peer groups. Bullies who are also victimised, however, have been found to demonstrate impairments in perspective taking (Gasser & Keller, 2009), and do not demonstrate the mix of prosocial and aggressive behaviour that is needed to keep peers "on side" (Puckett et al., 2008). Their aggression is often reactive which is characterised by impulsivity and defensive hostility and related to emotional dysregulation, and lower social understanding (Crick & Dodge, 1996; Coie & Dodge, 1998; Jones & Carpendale, 2002). When they aggress proactively, it is likely to be a behaviour modelled from their aggressive immediate peer group (as discussed in Section 1.5.3.4), and enacted with little skill. In fact, "provocative" bully-victims are described by multiple informants as the least socially skilled amongst peers (Carney & Merrell, 2001). The proactive aggression of "pure" bullies on the other hand, has been described as goal directed and calculated, with researchers reporting positive associations between proactive aggression and social competence, popularity, dominance, and communicative skills (e.g., Poulin & Boivin, 2000; Prinstein & Cillessen, 2003; Schwartz et al., 1993). The distinction between the subgroups of non-victimised bullies and bully-victims (including, most likely, aggressive victims) is expected to be critical in understanding the relationship between bullying and ToM (Gasser & Keller, 2009; Solberg, Olweus, & Endresen, 2007).

Despite the growing evidence relating bullying to ToM, Crick and Dodge (1999) remain unconvinced that bullies' aggressive behaviour can be described as the product of an acute ToM. They argue that, while aggressive behaviour need not be unskilled, a range of cognitive processes other than ToM are likely to explain bullies' socially undesirable behaviour. If not, why do similarly socially competent children select prosocial rather than aggressive behaviours? There must be other decisive factors in play here that provide the necessary influence for a child who enjoys an advanced ToM to utilise it to dominate others. Specifically, the literature has considered the roles of moral development and empathy in the relationship between ToM and bullying (Arsenio & Lemerise, 2001; Gasser & Keller, 2009; Sutton et al., 2001).

From a moral perspective, Arsenio and Lemerise (2001) have argued that bullies' aggressive behaviour should be deemed as maladaptive because it violates the moral principles of justice and welfare (see also Arsenio & Lemerise, 2004; Guerra, Nucci, & Huesmann, 1994). Recent studies have found both bullies and bully-victims to report low levels of moral motivation (e.g., Dunn & Hughes, 2001; Gasser & Keller, 2009), and that bullies score higher than their peers on moral disengagement (Gini, 2006), but this is not to say that they lack insight into moral rules (Gibbs, 2003). Correspondingly, low empathy (both affective and cognitive) has been found to be indicative of antisocial behaviour (for meta-analyses see Miller & Eisenberg, 1988; Jolliffe & Farrington, 2004). However, there is little research that has explicitly reported associations between empathy and *bullying*. Studies have found small negative associations between bullying and affective empathy (e.g., Endreson & Olweus, 2001), most notably in females (Warden & Mackinnon, 2003; Jolliffe & Farrington, 2006), and only when the bullies utilised relational as opposed to physical or verbal

aggression (Kaukianen et al., 1999). However, associations with cognitive empathy have been widely been reported as non-existent (Jolliffe & Farrington, 2006).

The lack of clear cut findings in the moral development and empathy literature reviewed above may owe in part to the lack of distinction between bullies and bully-victims in related research. Bully-victims are emotionally dysregulated (Schwartz, 2000) and their empathic and moral judgement may be subsequently impaired (Arsenio & Lemerise, 2004), while "pure" bullies are less likely to have the same difficulties. Moreover, the relationship between bullying and ToM is unlikely to be regulated by bullies' ability to gather and understand information as to whether their aggressive behaviour is morally sound or not. After all, they know they need to avoid the detection of the teacher. Nor is it likely to be regulated by their ability to understand how others are feeling, as this information is useful in predicting how their target will respond to provocation. Instead, it is argued that bullies may simply hold different social goals to their peers, and see aggression as a means to achieve these goals. This provides the crux of this empirical work, which aims to provide support that bullies' social goals are able to predict bullying and victimisation independently of ToM scores and SIP biases. The social goals of bullies are discussed at length in Section 2.3.

Bullies' social goals may vary from their peers because they see the world in a different way. Indeed, research has reliably demonstrated bullies to adopt a Machiavellian attitude towards social interaction (e.g., Andreou, 2004; Sutton & Keogh, 2000). A Machiavellian attitude holds that that other people are untrustworthy and manipulable in interpersonal situations (see Christie & Geis, 1970). Machiavellianism has been reported to be higher in bullies, and is positively correlated with a desire for social success and negatively with pro-victim attitudes (Sutton & Keogh, 2000). This may explain why bullies

report feeling less shame and guilt than their peers (Menesini & Camodeca, 2008). It should be considered that there may be sex differences concerning the particular construct of Machiavellianism related to bullying (as measured by the Kiddie Mach; Christie & Geis, 1970). Andreou (2004) found that while bullying in boys was strongly related to their Lack of Faith in Human Nature subscale, bullying in girls was instead related to efficacy for manipulation.

In summary, over the past decade, there has been considerable support for bullies as possessing a superior ToM. However, not all children who bully have an acute ToM, nor do all children with an acute ToM bully. Rather, ToM may serve to facilitate the successful application of aggression to achieve one's means. Research that has considered the associations between bullying and moral development and empathy has proved inconclusive. Instead the association between ToM and bullying is likely to be related to the social goals held by bullies (Arsenio & Lemerise, 2001; Gini, Albiero, Benelli, & Altoè, 2007; Menesini & Camodeca, 2008; Olthof & Goossens, 2008; Sijtsema, Veenstra, Lindenberg, & Salmivalli, 2009; Sutton et al., 2001).

2.2.3   *Theory of mind, peer-rejection and victimisation*

Next the literature which considers the consequences of an underdeveloped ToM is reviewed. Specifically, it is questioned whether peer-rejection and victimisation may be contributed to by a lack of socio-perceptual skills, and whether ToM can serve to protect against continued harassment.

At present, some inverse associations between peer-rejection and ToM can be found (e.g., Banerjee & Watling, 2005; Banerjee et al., in press). As Mitchell (1997, in Badenes et al., 2000, p.272) points out, 'if we did not take into consideration other people's thoughts and feelings, we would become very unpopular indeed'. A sociocultural view on development suggests that rejected children do not benefit from social interaction in the same way their peers do, thereby hindering the development of their theory of mind (Bruner, 1990). Indeed, rejected children spend more time in unoccupied behaviour and engage in less positive interactions with their peers (Coie, Dodge, & Kupersmidt, 1990; Dodge et al., 2003; Ladd & Price, 1993), suggesting that the time that they do spend interacting with peers is unlikely to contribute to their ToM.

Conversely, low levels of social skills are likely to contribute to peer-rejection. For example, Fox and Boulton (2006) reported that children with low levels of social skills in dealing with provocation became increasingly socially excluded a year later. Similarly, Banerje et al. (in press) reported a bidirectional relationship between ToM and peer-rejection. Specifically, peer-rejection at age 9 contributed to low ToM (faux-pas) scores at age 10, which in turn predicted increased peer-rejection at age 11. This finding is particularly concerning, as it implies that it becomes increasingly difficult for these children to achieve peer-acceptance. They are likely to have fewer opportunities to develop their socio-perceptual skills, and in the absence of these skills have even less ability with which to prove their social worth to their peers.

Encouragingly, there is growing evidence that social adjustment and friendships contribute to ToM development: Peterson and Siegal (2002) found rejected children who had a stable mutual friendship were more advanced in their ToM than rejected children who did

not; and quality of sibling relationship (Dunn, Brown, Slomkowski, Tesla, & Youngblade, 1991), and number of siblings (Perner, Ruffman, & Leekam, 1994) predicted a more advanced ToM. Thus there may be a way out of the cycle for some peer-rejected children.

Very few studies have focused on the specific relationship between ToM and victimisation. Research on school-age children has found victims of bullying to lack important social skills, such as friendliness, prosocial competence, and a sense of humour (Egan & Perry, 1998; Owens et al., 2000), and Sutton et al. (1999b) found victims scored lower in measures of social understanding than all other subgroups in the Participant Role Scale, although differences were not always significant, and with the exception of "reinforcers". Additionally, Fox and Boulton (2006) reported that victimised children who experienced social exclusion bullying techniques lacked the social skills to deal with provocation and were submissive and non-assertive, and were consequently more likely to be victimised this way in the future. However, findings regarding associations between victimisation and ToM are, as yet, far from conclusive.

Studies that have distinguished aggressive bully-victims from passive (non-aggressive) victims have suggested that while the former demonstrated biases throughout SIP, it was the passive victims who were characterised by non-assertive behaviours and low levels of social skills (inferred through teacher ratings of their social behaviour; Toblin et al., 2005). However, studies of pre-schoolers failed to replicate these findings (Badenes et al., 2000; Monks et al., 2005). The discrepancy in these findings might result from the age range of the samples. The participants in Toblin et al.'s (2005) study were all over eight years old, a similar age to the inception of relational aggression. Given the nature of relational aggression, and supported by findings that relational aggression is predicted by cognitive aspects of

social intelligence (Andreou, 2006), and by ToM (Rivers & Smith, 1994), it is conceivable that the contrasting levels of ToM in bullies and victims provides the power imbalance necessary for effective indirect bullying (Björkqvist et al., 1992; Sutton et al., 1999a).

Perhaps a more appropriate way to consider the role ToM has to play in mediating victimisation is as a potential buffer to its continuation. In theory, ToM may empower children with the ability to distinguish between accidental and intended behaviour, and between truth and deception. Consequently they would be able to identify hostility where it is intended (selecting socially acceptable responses to it) and would be less susceptible to trickery and ridicule by their harasser (Wellman, 1990). Indeed, those who perform well on ToM tasks are rarely identified as victims (e.g., Sutton et al., 1999b). Similarly, teacher and teacher assistant reports of social competence proved a negative predictor of victimisation even after externalising behaviour was accounted for (Garner & Lemerise, 2007), and the development of social skills has been found to intervene in continued victimisation (Hodges et al., 1999). Conversely, continued harassment can cause victims to employ avoidant strategies (Ryan & Shim, 2008) resulting in less opportunity to develop their ToM and related social skills.

In summary, there is little definitive opinion as to whether victims have a limited ToM. It appears that you do not need to have a low ToM to be victimised, although in terms of relational victimisation, it could be a contributing factor. Victimisation is strongly related to peer-rejection however (Schuster, 2001), and social isolation can restrict ToM development. Further, a low ToM seems to restrict the ability to form friendships that could potentially provide a buffer to continued victimisation (as discussed in Section 1.5.2.4).

2.3   Social goals in bullying research

Several references have already been made to the importance of social goals in predicting bullying. Indeed, whether one endorses the SIP or ToM approach to understanding social-cognitive contributions to bullying in schools, or indeed if one holds the two approaches to be compatible (as is considered to be the case), the role of social goals is likely to be a critical one. For SIP theorists, social goals play a key role in predicting aggressive behaviour by their selective influence on the subsequent steps of response generation, evaluation and selection (Crick & Dodge, 1994). Children who hold instrumental or relationship damaging goals will generate more aggressive responses (Erdley & Asher, 1999) and are more likely to engage in both reactive and proactive aggression (Camodeca & Goossens, 2005). From a ToM point of view, having a 'superior' ToM says nothing about whether that knowledge will be used for prosocial or instrumental ends (Arsenio & Lemerise, 2001). With studies concerning the empathic ability and moral development of bullies proving inconclusive, it is unlikely that bullies' aggressive behaviour is the product of an inability to understand what another is feeling or what is morally right or wrong. Rather, bullies seem to differ in their *responsiveness* to the empathic and moral understanding that they have available to them in social settings (Gini et al., 2007), determined in no small part by their social goals (Olthof & Goossens, 2008).

This section reviews the methods employed in social goals research, and details the associations that have been reported between social goals and both aggressive behaviour and social adjustment. Given the consensus that social goals are likely to play a critical part in predicting bullying, it is surprising that it has, thus far, largely escaped empirical focus

(Lemerise, Fredstrom, Kelley, Bowersox, & Waford, 2006). However, where it is available, the literature that considers the social goals of bullies, victims and bully-victims is reviewed.

2.3.1 *Assessing children's social goals*

Measures for assessing social goals in social adjustment and bullying research come from two distinct camps. On the one hand, research from a social-cognitive perspective utilises hypothetical scenarios involving peer provocation or attempts at group entry to provide a context for assessing children's social goals (Crick & Dodge, 1994). On the other hand, researchers focused specifically on individuals' goals and motivations have adapted measures aimed at determining interpersonal goals in adults to examine a range of more global motivational dispositions in children (e.g., Ojanen, Grönroos, & Salmivalli, 2005).

2.3.1.1 Hypothetical scenarios

Studies utilising hypothetical scenarios generally depict a child interacting with a peer when an unpleasant incident is caused by the peer, as the ability to manage such social conflicts is likely to play an important role in children's social development (see Laursen, 1996; Shantz & Hartup, 1992 for reviews). Presentation of the stimuli typically involves reading the scenario out to the participants, although the scenarios are sometimes depicted in video form. In each scenario, children are asked to imagine that they were on the receiving end of peer-provocation. In some studies the intention behind the provocation is ambiguous:

> *'Imagine you are taking turns on a computer game with a classmate. When*
> *one is finished, it is the other's turn. Now it is your turn and you're doing*

well. You have already reached the highest level, but you have only one life

left. You have never gotten as far as this, so you are really doing your best.

The other boy/girl is looking over your shoulder. (S)he sees how far you have

got. Then (s)he says: "Watch out! You have to be quick!" and pushes a

button. But it was the wrong one, and now you're dead'.

<div align="right">Camodeca and Goossens (2005), p. 190</div>

In others the provocateur is quite clearly being aggressive:

'You are standing together with other students in the schoolyard. Suddenly,

Carl comes up to you, a boy you always had problems with. He pushes you

and shouts, "You are going to get it today!"'

<div align="right">Lösel, Bleisener, and Bender (2007), p. 332</div>

The situational stimuli are selected because they are presumed to hold immediate relevance to social adaptation (Crick & Dodge, 1994). The drawback to this process of course, is that the stimuli are likely to arouse highly situation-specific responses, and therefore may not provide meaningful assessment of the person-centred aspects of the participants' social-cognitive functioning. Despite this weakness, the use of hypothetical scenarios has been validated in the existing literature that finds children categorised as socially maladjusted (such as withdrawn, aggressive, or peer-rejected children) to respond differently from their peers (see Section 2.1 for a review). Nevertheless, caution should be taken in the interpretation of such findings, especially in the absence of a comprehensive array of relevant hypothetical situations (or cross-situational measures of social cognitive processing).

Furthermore, the hypothetical nature of the scenarios may lack ecological validity. When generating strategies for dealing with scenarios that they have not directly experienced, children are forced to report what they believe that they would do, or perhaps what they feel that they *ought* to do in such a scenario. However, situations that involve provocation can invoke strong emotional responses (Lemerise & Arsenio, 2001), which in turn could hold sway over their social cognitive processing (Lemerise and Arsenio, 2000). Children's preconceptions about how they would behave are likely to be made in the absence of the influence of their emotionality. In spite of this, relatively few studies have asked children to draw on their personal social experiences when assessing their social cognitive processing (see Steinberg & Dodge, 1983 for an exception). Indeed, while asking children to report on their own personal experiences may offer validity, it is restricted in that it can only be used to assess children who have experienced provocation, and it doesn't allow for the variance in the severity of each child's experience. In fact, those who are familiar with provocation, and whose experiences may offer much to the researcher, may well be the same children who are able to report with accuracy in response to hypothetical scenarios.

A variety of methods have been employed to subsequently tap the child's social goals. Traditionally, children are asked to describe, in an open-ended fashion, why they would follow specified courses of action in the presented situation (see Crick & Dodge, 1994 for a review). Responses are then analysed and coded into specific categories for subsequent analysis. By utilising an open-ended response system, children are able to identify goals that hold particular relevance and salience for them. However, this technique has met with difficulties associated with asking children to verbalise goals (e.g., poor verbal skills or inability to spontaneously generate reasons for their behaviour; Erdley & Asher, 1996).

Responding to such criticisms, SIP research has also employed fixed choice responding measures where children choose whether they would be more likely to endorse one goal or another (e.g., instrumental versus relational; Crick & Dodge, 1996).

More recently, researchers have asked children to consider a variety of goals that might be pursued in a given situation, and to indicate how important each goal is for them using a Likert-scale to respond (e.g., Camodeca & Goossens, 2005; Erdley & Asher, 1996; Lemerise, et al., 2006; Underwood & Bjornstad, 2001). By considering a wider range of goals, researchers can more readily test whether certain goals might be associated with specific behavioural responses to provocation. Additionally, in any given situation, children may need to coordinate multiple goals simultaneously (Dodge, Asher, & Parkhurst, 1989), and by rating the importance of several goals, researchers are able to investigate this eventuality (Ojanen et al., 2005). Of course, this technique has the added advantage that it provides information about the *extent* to which children would pursue various goals (Erdley & Asher, 1996).

So what social goals do children endorse in conflict scenarios? Because access to the open-ended responses given in related studies is not readily available, the best strategy in answering this question is to review the different classification criteria employed across them.

In general, SIP research that has considered social goals in relation to social adjustment has tended to categorise children's goals as being either relationship enhancing (relational) or outcome-controlling (instrumental; Crick & Dodge, 1989; Renshaw & Asher, 1983). Relational and instrumental goals are generally pursued to a more or less equal extent during peer conflicts (Rose & Asher, 1999). The distinction between relational and

instrumental goals has been supported through group differences with socially maladjusted children reported to prefer instrumental goals of revenge over relationship building goals (Crick & Dodge, 1989; Renshaw & Asher, 1983). Further, studies that have asked children to consider a wider range of goals have subsequently reported that they could be classified under these two dimensions. Asked to imagine they were on the receiving end of ambiguous provocation, Camodeca and Goossens (2005) asked children how important it would be for them: (a) to forget as soon as possible; (b) to feel less angry; (c) to retaliate for what (s)he did; (d) to have a nice time together; (e) that the other child does not feel guilty about what (s)he did. The researchers performed factor analysis on their data and reported that two factors were revealed: retaliation (c), and prosocial goals (a, b, d, e).

However, the instrumental/relational distinction has been widely criticised for being too simplistic (e.g., Sutton et al., 2001). The two are not mutually exclusive – children may successfully entertain multiple goals in conflict and cooperative scenarios (Rabiner & Gordon, 1992). Similarly, children may use instrumental goals to achieve a relational end (e.g., striving for social dominance to protect against social exclusion, Pellegrini & Bartini, 2001), or relational goals to achieve an instrumental end (e.g., endorsing cooperative goals to achieve popularity, Chung & Asher, 1996). Further, the classification of goals along just two dimensions is likely to be simplistic. For example, the category of relational goals does not distinguish children who want to build relationships from children who are specifically concerned with not upsetting others, perhaps the result of an overactive affective empathy or a general anxiety experienced in social settings (Malti, Perren, & Buchmann, 2010; Zahn-Waxler et al., 1991). Additionally, goals for social dominance, revenge and harm avoidance are all instrumental but are likely to result in different behaviours. As such, the distinction of

relational and instrumental goals does little to operationalise the construction of specific hypotheses as to the goals employed by social subgroups, such as bullies and victims.

There is therefore some sense in considering a wider range of more specific goals. Using scenarios of ambiguous hostility, Erdley and Asher (1996) asked children how they would respond to the provocation and 'what you [the child] would be trying to do' through that response. Erdley and Asher (1996) put forward eight alternatives based upon previous research on differences in children's social goals (e.g., Renshaw & Asher, 1983; Taylor & Asher, 1984, cf Erdley & Asher, 1999). These were as follows: (a) getting back at the protagonist; (b) working out the problem peacefully; (c) avoiding the protagonist; (d) hurting the person's feelings; (e) protecting the self; (f) taking care of the problem created by the protagonist; (g) maintaining the relationship; and (h) maintaining an assertive reputation. The researchers reported fairly high internal reliability for each of the eight goals. Across a range of children who either interpreted threat in the scenario or did not, none of the goals was significantly preferred to another, but there were differences in the goals preferred between aggressive, withdrawn and problem solving groups of children.

Research that has utilised hypothetical scenarios to determine children's social goals has almost invariably relied on conflict to provide a pertinent social scene. In fact the author knows of only three investigations that have not. Two of these studies utilised a game playing scenario (Taylor & Asher, 1984, cf Erdley & Asher, 1999; Taylor & Gabriel, 1989, cf Crick & Dodge, 1994) and focused on the ability of children to switch their goals according to the situation. The other (Crick & Dodge, 1996) asked children to choose between relational and instrumental goals in scenarios that depicted group entry. Taken together, these studies do not provide much insight into what social goals children endorse in settings that do not

specifically depict some form of provocation. As proactive aggressors, bullies are likely to instigate the scenarios of conflict that they are engaged in. They are therefore likely to hold specific goals in these scenarios; goals that may not apply to more normative social situations. It is argued that any attempt to investigate the social goals associated with bullying and victimisation needs to consider a wider range of social settings to properly understand the motivations behind their social behaviour. This is returned to later (in Section 2.4).

When considering which social goals to carry over into the empirical work, it makes sense to consider which have been found to relate to social maladjustment and more specifically bullying and victimisation. Retaliation, for example, proves a more likely goal for aggressive responders (Slaby & Guerra, 1988), while children who withdraw in the face of provocation are more likely to endorse self-protection goals (Perry et al., 1992). The literature that has found associations between social goals and social adjustment, bullying and victimisation is therefore reviewed below in Section 2.3.2.

2.3.1.2   Cross-situational social goal assessment

Because studies have varied in the social goal categories that they have assessed, Ojanen et al. (2005) have argued that it is difficult to develop a broad understanding on how social goals relate to children's social adjustment. Additionally, the focus on problem-driven selection of goals (through conflict scenarios) fails to represent a comprehensive range of interpersonal dispositions (Ojanen, Aunola, & Salmivalli, 2007). Consequently, recent research has considered methods where children provide importance ratings for global social goals, applicable *across* situations (e.g., Ojanen, et al., 2005; Ojanen et al., 2007; Sijtsema et al., 2009). These goals have been termed 'interpersonal' goals (i.e. goals targeted at attaining,

maintaining or avoiding specific end states for self in relation to peers; see Fitzsimons &
Bargh, 2003, cf Ojanen et al., 2005).

In an interesting parallel to the instrumental/relational distinction outlined above,
interpersonal goals are described by Buhrmester (1996) as organised around the dimensions
of agency (A) and communality (C). The former distinguishes between reflecting authority
and appearing confident (agency) and avoiding arguments and anger by going along with
others' expectations (submission), and the latter distinguishes between the striving for
closeness and affiliation with others (communality) and concealing one's thoughts and
feelings (separation). In an adaption of Locke's (2000) CSIV (Circumplex Scales of
Interpersonal Values) utilised in the adult population, Ojanen et al. (2005) developed the IGI-
C (Interpersonal Goals Inventory for Children) to organise these interpersonal values.
Interpersonal goals were conceptualised across eight scales as depicted in Figure 2.2 below.

The IGI-C is made up of 33 items, with at least three items per goal scale. Because
the model includes goals similar to those previously associated with striving for social status
(+A), prosocial strategies (+C), and submissive behaviours (-A), the goal scales of the IGI-C
can be used to formulate meaningful hypotheses in relation to various social adjustment
indexes. Research that has done so is reviewed in Section 2.3.2.

"The others respect and admire you."

"The group does what you say."

"The others listen to your opinion."

+A-C

+A+C

'You keep the others at a suitable distance."

-C

+C

"You feel close the others."

-A-C

-A+C

"You don't make a fool of yourself in front of the others."

"The others accept you."

-A

"You don't annoy the others."

Figure 2.2: *The placement of the interpersonal goal scales of the IGI-C*

While the IGI-C is still young, initial analysis of its reliability finds the survey to have satisfactory internal consistency (αs ranged between .68 to .73), and adequate test-retest stability (see Ojanen et al., 2005). Likewise, tests of its construct validity found the scale intercorrelations indicated circular ordering, supporting a circumplex fit of the data. In other words, their analysis validated the arrangement of social goals under the dimensions of agency and communality as depicted in Figure 2.2. Children have been found to assign more importance to communal than agentic goals in preadolescence (Ojanen et al., 2005, 2007; Waldinger et al., 2002), but agentic goals increased significantly more over time (Sijtsema et al., 2009). Boys pursued more agentic goals than girls, and girls more communal goals than boys (Ojanen et al., 2005, 2007; Sijtsema et al., 2009).

There have been very few attempts to assess the cross-situational social goals of children. Although young, the IGI-C represents such an attempt, and one that might prove fruitful in identifying the global social goals of bullies and victims in schools. However, studies that have utilised the measure to investigate associations between social goals and social adjustment have tended to consider individual goal scales (e.g., status goals: +A; Sijtsema et al., 2009), or vector scores constructed from the weight each of the individual goal scales has on the dimensions of agency and communality (e.g., Ojanen et al. 2007). Because of this, the usefulness of the eight individual goal scales in related research is, as yet, not validated. Further, the studies that have utilised the IGI-C have only done so in samples of children aged between 10 and 15. It is unclear which goal scales are reliably represented in younger children. Nevertheless, the IGI-C may provide a good basis from which to investigate this.

2.3.2   *Social goals, social adjustment and bullying*

Because the focus of this thesis concerns the social goals held by bullies and victims, it is imperative that the social goals that the related literature has associated with social adjustment and bullying are identified so that they can be carried over into the empirical work. The relevant studies are reviewed here before discussion is given as to how the literature reviewed has provided a theoretical framework from which to investigate the specific aims of this project.

Research using conflict scenarios has indicated that well-liked prosocial children endorse social relational goals (Chung & Asher, 1996; Nelson & Crick, 1999; Renshaw & Asher, 1983), and studies that utilised the IGI-C have found peer-reported prosocial

behaviour and peer-acceptance to be positively associated with communal (+C), submissive-communal (-A+C), and submissive (-A) goal scales (Ojanen et al., 2005). Aggressive-rejected children on the other hand select goals that damage the relationship (Crick & Dodge, 1999; Camodeca & Goossens, 2005).

While there is little research from a SIP perspective that specifically considers the social goals of bullies, it can be inferred from the aggression literature that the aggression utilised by bullies, bully-victims and (other) aggressive-rejected children is likely to stem from goals that are self-focused and instrumental (Chung & Asher, 1996; Crick & Dodge, 1994; Rabiner & Gordon, 1992). Studies have reported similar patterns of social goals endorsed in children from preschool years through to secondary school. Correspondingly, in studies using the IGI-C, aggressive behaviour and peer-rejection was positively associated with agentic-separate (+A-C) goals, and the agentic vector was related overall to low peer-status (Ojanen et al., 2005) and peer-rejection (Ojanen et al., 2007), although these studies have only assessed the social goals of children from the age of ten. In a similar study specifically investigating the social goals involved in bullying, Sijtsema et al. (2009) reported that bullies hold direct status (agentic) goals (+A) rather than communal ones.

Studies that have used ambiguous provocation scenarios have noted that aggressive children are more likely to select hostile goals (e.g., Slaby & Guerra, 1988). Similarly, Erdley and Asher (1996) reported that aggressive children preferred goals that involved getting revenge on the provocateur. There may, however, be differences between aggressors who do so reactively and those who are acting proactively. Reactively aggressive rejected children wished to retaliate more than their non-rejected peers (Camodeca & Goossens, 2005), whereas proactive aggression has been reported to be more strongly related to the pursuit of

dominance (Hawley, 2003; LaFontana & Cillessen, 2002; Lochman et al., 1993; Rodkin et al., 2000; Salmivalli, Ojanen, Haanpää, & Peets, 2005). It follows therefore that aggressive-rejected children and/or bully-victims, who are predominantly reactively aggressive, endorse goals of retaliation and revenge. Proactively aggressive bullies on the other hand, hold self-enhancing goals of social dominance.

Bullies are not covert in their goals, and openly admit that they want to be dominant within their peer group (Boulton & Underwood, 1992; Kiefer & Ryan, 2008), and that they use their aggression to 'feel powerful' or 'look cool' (Ziegler & Rosenstein-Manner, 1991, cf Sutton et al., 1999a). It often works – bullying behaviour has been related to prestige in terms of perceived popularity (Juvonen & Galvan, 2009; Sijtsema et al. 2009), especially when it involves indirect methods of aggression (Andreou, 2006). Bullies' goals for social dominance serve to facilitate the aggressive relationship they have with their victims through an imbalance of power in social standing (Hawley, 1999; Vaillancourt, Hymel, & MacDougall, 2003; Veenstra et al., 2007). Social dominance may also help the bully gain access to more desirable partners and/or playmates, although this is notably more evident in adolescent samples (Hawley, 2003; Olthof & Goossens, 2008). Indeed, bullies' valuing of social dominance has been found to increase by the onset of adolescence when more importance is placed on heterosexual relationships (Pellegrini, 2002).

With an image of coolness and perceived popularity seemingly critical in bullies' social dominance, it is likely that bullies will also entertain goals of self-presentation, although to the author's knowledge this has thus far escaped empirical investigation. As discussed earlier, the display rule research carried out by Banerjee and Yuill (1999a, 1999b; see also Banerjee 2002a) identified socio-motivations behind display rules that specifically

related to a concern for others' beliefs about the self. Research has yet to consider the associations that might exist between bullying/victimisation and the socio-motivations children hold for carrying out display rules, but it is believe that they could prove fruitful in developing an understanding of the social goals endorsed by bullies and victims outside of conflict scenarios. Furthermore, Banerjee (2002a) reported variance in the understanding of display rules that was not directly attributable to ToM. Understanding children's motivations for performing display rules could, therefore, potentially add to existing research on the association between ToM and bullying.

The inclusion of self-presentational goals in any investigation into the social goals of bullies is validated in related social adjustment research. Banerjee (2002b) found that ability to control one's image in front of different audiences was significantly associated with reciprocated friendship nominations, so it is likely that self-presentational goals may serve to facilitate social preference even when coupled with aggressive behaviour. Indeed, Puckett et al. (2008, p. 565) posit that "relational aggression has longer lasting benefits when it is alternated with perceived prosocial behaviours that positively predict peer-acceptance" (see also Newcomb et al., 1993; Rubin et al., 1998). In support of this position, bullies have been reported to express the need for social approval (Gilbert & McGuire, 1998; Olthof & Goosens, 2008).

While there is little research into the social goals of bullies, there is even less into the social goals of victims. In one study, withdrawn-rejected children were reported to endorse goals of self-protection and avoidance (Erdley & Asher, 1996). This may prove an ineffective strategy as social avoidance goals have been found to hinder the formation of positive peer-relationships (Ryan & Shim, 2008), and effect a lack of social prestige (Sijtsema et al., 2009).

Further, victims may be selected for aggression because they lack status goals in harassment situations (Ojanen et al., 2007), focusing on harm avoidance instead (Veenstra et al., 2007). The causality here is unclear as the experience of relational victimisation may cause children to distrust others (Andreou, 2004), and hold negative beliefs about peers' intentions (Salmivalli & Isaacs, 2005; Troop-Gordon & Ladd, 2005; Rudolph, Troop-Gordon, & Flynn, 2009), thus contributing to the construction of avoidant goals. Similarly, children who withdraw in the face of provocation (as withdrawn victims do) are more likely to endorse self-protection goals over relational goals as a means of preventing future harassment (Perry et al., 1992).

In summary, there appear to be several goals that could be important in bullying research. Bullies appear to be motivated by the outcomes of a situation, specifically in achieving social dominance, but are also concerned with their social standing suggesting they might hold self-presentational goals to some degree. Aggressive-rejected children and/or bully-victims seem to endorse goals of retaliation and revenge, while withdrawn passive victims seem to prefer goals of avoidance and self-protection. Finally, well-liked children prefer prosocial and problem solving goals but these goals have been widely reported as lacking in each of the bullying subgroups.

2.4   **Framework for empirical work**

This chapter has provided a review of the social-cognitive contributors to bullying and victimisation. Despite proposing seemingly contrasting accounts of the social-cognitive processing of bullies, both the SIP and ToM approach highlight the importance of social goals in predicting whether children will engage in bullying behaviours. Accordingly, the

overall aim of this programme of empirical work was to extend the emerging evidence base regarding the social goals of bullies and victims. This section begins by considering the gaps in understanding of the social goals associated with bullying and victimisation, in an effort to provide a framework for the general aims of this research. Next, the measures that were used to achieve these aims are reviewed, before the subsidiary aims held within each empirical chapters put forward.

There has been markedly little research into children's social adjustment that has considered their social goals. That which has has predominantly utilised vignettes that depict a hypothetical story character as being on the receiving end of some sort of provocation to provide a context from which to assess them. However, because bullying is more strongly related to proactive rather than reactive aggression, bullies are more likely to be the provocateurs themselves. Thus, it is argued that conflict scenarios alone do not provide a specifically pertinent context within which to assess the social goals associated with bullying. Indeed, children are faced with a variety of social situations in everyday life (Asher, Tolan, Rose, & Guerra, 1998, cf Erdley & Asher, 1999), and endorse different goals dependent upon the situation they are confronted with (see Erdley & Asher, 1999). As well as dealing with the immediate concern of conflict, children also have to negotiate social scenarios where they are trying to gain entry into a peer group, and similarly, situations where their social image, and subsequently their social status may be at stake. Because bullies report desiring dominance over their peers (Boulton & Underwood, 1992; Kiefer & Ryan, 2008), they might be expected to hold particular concerns in situations with a peer audience. Yet, in spite of this, the author knows of only one paper that has considered the social goals of bullies (as proactive aggressors) in group entry scenarios (Crick & Dodge, 1996, who reported that proactive aggressors did not hold the same preference for instrumental goals that they did in

conflict scenarios), and no papers to date have considered the social goals associated with bullying in scenarios where children's social image is at stake.

Further, there may be good reason to believe that the social goals of victims may differ from the peer group in certain situations. In a game playing context, both Taylor and Gabriel (1989, cf Crick & Dodge, 1994) and Schuster (2001) reported that victims are unable to switch their goals to adapt to changing situations. Accordingly, victims could conceivably have difficulty in adapting their goals to consider their self-presentation in social situations that involve a peer audience, leaving themselves as potentially easy targets for harassment. However, as with bullying, no research to date has considered whether specific goals are associated with victimisation in such scenarios.

It is now widely reported that there are gender differences in the forms of bullying and victimisation engaged in. Girls more commonly use relational methods to bully, whereas boys perform a mix of physical and relational aggression[1]. The two forms of bullying require very different attributes to carry out effectively. While physical bullies have some sort of physical power over their peers, relational aggressors require social status to achieve dominance (Veenstra et al., 2007). Consequently, any investigation into the correlates of bullying should distinguish both gender, and the two forms of aggression. While this has been done in much of the related research, studies of children's social goals have thus far neglected to do so.

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[1] Note that there are also gender differences in the prevalence rates of cyberbullying, with girls perpetrating and experiencing slightly more than boys (Smith, 2010). However, because of the conceptual differences between cyberbullying and the more traditional forms of bullying discussed in Section 1.3, cyberbullying was deemed to be beyond the empirical scope of this study.

Our early empirical focus was influenced, in part, by the findings of Sutton et al. (1999b), namely that bullies scored significantly higher in tasks of cognitive and emotional understanding than any other group within the bullying dynamic. In their discussion, the authors suggest that bullies, equipped with a similar ToM to their prosocial and popular peers, may opt for aggressive rather than prosocial behaviour because they hold different social goals. However, research has yet to consider whether bullying can be independently predicted by both social goals and ToM, and as such it is currently unclear whether social goals are indeed pivotal in determining whether a child will use their superior ToM to effectively bully.

Similarly, while SIP theorists argue that each step within Crick and Dodge's (1994) model contributes individually to subsequent behaviour, research has yet to assess whether the associations between social goals and bullying and victimisation remain after allowing for the variance explained by the previous steps of their model, or by emotionality.

Finally, research into the social goals of bullies, victims, and other socially maladjusted children, has largely used samples of young adolescents (Lochman et al., 1993; Ojanen et al., 2007; Vaillancourt et al. 2003; Veensta et al., 2007). In fact, there is some indication that the social goals that have been reported to be held by bullies (such as for dominance and/or social status) are not manifested until adolescence (Sijtsema et al., 2009; Boulton & Underwood, 1992). As such, there is a clear lack of indication as to the goals employed by bullies and victims within Primary school samples. Children are likely to evaluate their efficacy to achieve certain goals before they reach Secondary schools, and thus it is surprising that so

little research has considered how their goals might have developed in their early, socially formative years.

In light of this, this research programme had the following aims:

1. To develop understanding of the social goals that are related to bullying and victimisation in Primary school children, and to investigate whether associations remain across a variety of social settings, across forms of bullying (physical and relational), and across gender.

2. To determine whether these social goals are able to predict bullying and victimisation even after variance explained by SIP biases and ToM has been taken into account.

Finally, in Chapter 1, various behavioural correlates of bullying and victimisation were detailed, but the author knows of no research that has considered whether the behaviours associated with bullying and victimisation are mediated by social goals. Because bullying is ultimately a behavioural construct, it is particularly important to determine how the aggressive and victimisation behaviours are connected with children's social goals. As such, the third aim of this project was as follows:

3. To investigate the role social goals have to play in mediating the relationships between bullying/victimisation and the behavioural responses to social conflict that have characterised bullies and victims in the existing literature.

The rest of this section provides justification for the methodologies utilised in the present programme of empirical work, as well as outlining the empirical focus of Chapters 3 to 6.

2.4.1   Methodology review

2.4.1.1   Participant sampling

In light of the discussion (in Section 1.4) of school and societal influences on the rates and dynamics of bullying in schools, it is important to provide some detail and justification of the participant samples used in the empirical work before the measures themselves are detailed. This section reviews the process by which schools were recruited, any differences in the anti-bullying ethos and strategies between schools, and some general demographic information consistent across schools.

In all cases, schools were made aware that the project was ongoing, and volunteered to take part in the studies. This was done either via an e-mail to all the schools that had contacts with the University of Sussex through previous research involvement, or via bullying presentations given by the author at conferences put on by West Sussex Education Authority for professionals in the education sector that served to review and discuss current issues in schools in the region. In return for collaboration in the project, schools were offered consultation and feedback presentations which outlined recent research into bullying in schools with specific reference to the data collected from their school, including information as to the social dynamics of each class assessed in the form of sociograms. The anonymity of the children's responses was maintained throughout the presentations.

With the exception of the participant samples in Studies 2 and 3, which came from the same school, the studies were carried out in different schools, each from a different town. Data was collected between 2005 and 2010. During this period, the government, the media, and increasingly concerned parents placed increasing pressure on schools to recognise and intervene on bullying issues. Accordingly, the schools that took part varied slightly with regard to their anti-bullying ethos and strategies. Nevertheless, there were some key similarities between them. Although there was evidence of recent bullying awareness schemes in each of the schools, there was very little evidence of bullying intervention or prevention schemes, the one exception being Study 1, where children were advised to sit on the 'buddy bench' if they had no one to play with at break times. There were no cases where an external organisation had come into the school to carry out anti-bullying work. In each school, children were encouraged to tell an adult if they were bullied, but apart from the participant sample in Study 5, children were not aware who the school's nominated contact for bullying issues was. Most of the children identified their class teacher as the first point of contact in such situations. While children were not specifically asked whether they expected the reporting of bullying to adults in their school to prove an effective blocker to continued harassment, there were several cases where children informed me confidentially that they did not.

As is detailed in the Method sections in each study, all of the schools that took part in the study were from the Brighton and Hove and West Sussex areas. They were all primary schools from middle class areas that, with the exception of Study 4, were located in urban neighbourhoods. The clear majority of the children in each school were Caucasian and all were native English speakers. Finally it is worth noting that in Study 4, the children's classes

contained mixed year groups: Year 3/4 classes and Year 5/6 classes. The social dynamics in these classes may have differed slightly from the classes in other schools that contained children from a single year group. This is returned to later in the discussion of Chapter 4.

2.4.1.2   Bullying/victimisation questionnaire

In order to obtain bullying and victimisation scores for each child, a peer-nomination procedure was utilised whereby each child nominated up to three classmates that they had "often seen" engaging in, or being a recipient of, bullying behaviours. Because bullying within groups of girls is predominantly relational rather than physical in nature (Crick & Bigbee, 1998), and also to allow for investigation into the differences in the social goals associated with physical versus relational bullying/victimisation, items were included that referenced both physical and relational aggression. The initial questionnaire, adapted from Hodges and Perry (1999), consisted of twenty five items: four items for physical bullying, relational bullying, physical victimisation, and relational victimisation, as well as nine 'filler' items. Other than a few semantic modifications, this measure remained consistent throughout the empirical work with one exception. In Studies 3 and 4, in order to reduce the total testing time given that some additional social goal measures were included, the bullying questionnaire was cut down to eight items: two items for physical bullying, relational bullying, physical victimisation and relational victimisation.

A peer-report method of assessment was settled upon for various reasons. Firstly, peer-report has the advantage that it is based on multiple assessments of behaviour, in this case, by each member of the class. Secondly, peer-report avoids the social desirability bias that may be particularly influential in the case of self-report measures of bullying, with

children not wishing to be identified as bullies (see Crick & Grotpeter, 1995; Ladd & Kochenderfer-Ladd, 2002). Further, peer-report avoids the possibility that "paranoid" children might identify themselves as victims in contrast to the perceptions of their peer group, and also allows for "deniers" who do not believe that the aggressive behaviour directed at them constitutes bullying (Juvonen et al., 2001). Thirdly, peer-reports are likely to be particularly effective in Primary schools, where the children within each class spend most of their time together and are therefore expected to have a good understanding as to the behaviour of their classmates.

Children were asked to nominate classmates that they have seen engaging in bullying behaviours, rather than to nominate classmates as bullies or victims. Again, this was done for several reasons. First, while awareness strategies have helped to develop children's understanding of what is meant by bullying, and even when provided with definitions, there is still likely to be variance across schools in what children consider to constitute a bullying episode, especially in relation to relational aggression. By asking children to nominate others they have seen engaging in specific bullying behaviours rather than specifically asking them to identify bullies and victims, it was hoped that this eventuality would be allowed for. Secondly, because of the negative stigma that is becoming associated with being a bully, children might feel uncomfortable nominating a classmate as a bully, but be more comfortable in identifying classmates as engaging in various behaviours. Several less incriminating 'filler' items (such as nominating a classmate who's good at drawing) were therefore included to help prevent children feeling that they were 'telling on' their classmates. Thirdly, by tallying up nominations for bullying and victimisation over several items, continuous variables for *both physical and relational* bullying and victimisation were created that could be used for correlational analysis. It was particularly important to obtain

continuous scores for bullying and victimisation because much of the early empirical work is exploratory in nature and thus had comparatively small sample sizes (approximately 60 in Studies 1 through 4). The consequence of this is low power with which to conduct analyses of differences between subgroups of bullies, victims, bully-victims, and comparisons, or between the subgroups of Salmivalli et al.'s (1996) Participant Role Scale measure for involvement in bullying. Moreover, the creation of continuous variables helped to determine whether social goals are able to predict bullying and victimisation after other social-cognitive factors had been partialled out (our second overall aim), and also to determine whether social goals played a mediating role in the relationship between bullying/victimisation and their associated behaviours (our third overall aim). Overall, the peer nomination technique used was the most direct way of addressing the central interest in the factors underpinning the behaviour of physical and relational bullies and victims.

Although the main analysis was not conducted on bullying sub-group differences, children were classified into subgroups subgroups nonetheless. This meant that the general trends in the mean scores could be observed, and more importantly facilitated identification of the subgroup of children who were both aggressive and victimised. In Chapter 1, the distinct set of psychological attributes present in bully-victims was reviewed, not least in relation to their social-cognitive processing. In order to prevent this subgroup clouding associations between bullying/victimisation and the other dependent variables, they were removed from correlational and regression analyses. Bully-victims were identified by tallying up peer-nominations for bullying and victimisation, standardising these scores within class (to allow for variance in class size and ethos) and within gender (to allow for the widely reported differences in physical bullying and victimisation scores between the sexes), and classifying those who scored one standard deviation or more above the mean for bullying

nominations as bullies, for victimisation nominations as victims, and for both bullying and victimisation as bully-victims. All others were classified as 'comparison'. It should be noted that bully-victims were not removed from correlational analysis in Study 4, where all the children who scored more than one standard deviation above the mean for bullying were classified as bully-victims. In this case, in order to maintain a meaningful variable for bullying, the bully-victims were included victimisation was partialled out in the models to predict bullying, and bullying in the models to predict victimisation. Thus it was possible to retain a degree of confidence that the peer nomination data could accurately capture the distinctive behavioural profiles of 'pure' bullies and victims.

2.4.1.3   Social goals measures

Children's social goals are central to the empirical work, and a number of measures were utilised to assess them. Specifically, children were presented with a series of hypothetical scenarios that depicted a variety of social situations where children's social image was at stake (the display rule task; Studies 1 to 4), various items intended to assess children's general interpersonal goals (including the IGI-C; Studies 3 and 4), and a set of conflict situations depicting both hostile and ambiguous provocation (Studies 5 and 6). These measures are considered in turn.

In Studies 1 to 4 the display rule task that has been employed by researchers interested in children's self-presentational awareness was adapted. In a series of hypothetical scenarios, children were asked to explain why the story character masks their emotions in front of their peers. Banerjee and Yuill (1999a, 1999b; Banerjee, 2002a) reported that children give an array of explanations for the story character's behaviour. In addition to the

children who reference a concern as to others' beliefs about the self in these scenarios, children also give explanations that are focused on the immediate situational outcomes and on the feelings of others. As such, the display rule task can offer a window into a range of socio-motivations held by children in particular scenarios.

The display rule task had various advantages. Firstly, the display rule task provided a context, outside of provocation scenarios, whereby bullies might hold specific social goals. Throughout Studies 1 to 4, a set of scenarios were utilised whereby the story characters' social image was at stake. In these scenarios, the character was at risk of looking stupid, scared, or wimpish. As such, these scenarios were considered to relate to the child's image of proficiency. Children with behavioural problems are especially likely to exhibit social-cognitive biases in response to particular social tasks, and because bullies need to maintain at least an image of dominance to bully (Veenstra et al., 2007), it was argued that these 'proficiency scenarios' might provide a context within which bullies hold a distinct set of goals.

Secondly, display rules need not be used solely for self-presentation (and in effect self-protection), but can also be used for prosocial ends (Ekman & Friesen, 1975; Gnepp & Heiss, 1986). For instance, a child may mask their feeling of disappointment at an unwanted birthday present to spare the feelings of the giver (see Banerjee & Yuill, 1999a). Because the relational bullying prevalent in girls relies upon the skilled combination of prosocial as well as aggressive behaviours (Puckett et al., 2008), girl bullies may show instrumental motivations for prosocial behaviour. Thus the display rule task may be particularly useful in distinguishing the socio-motivations of girl bullies, attention to which, by and large, has been neglected in related research. Scenarios whereby a story character masked their emotions to

appear cooperative to his/her peers (cooperative scenarios) were therefore included in Studies 2 through 4. An additional scenario type was also introduced that depicted a story character hiding their true emotions so as to protect him/herself from potential future harassment (self-protective scenarios) in Studies 3 and 4. The latter was intended to provide a pertinent context by which children might be motivated by harm avoidance.

The display rule task has an additional advantage in assessing the socio-motivations of bullies and victims. Because children are asked to explain their motivations for enacting display rules in an open-ended manner, it provides an opportunity to review a potentially broad array of socio-motivations that children might hold in these situations. As very little research has considered the socio-motivations of children outside of conflict settings, this was considered to be essential to the formulation of meaningful hypotheses as to the socio-motivations endorsed by bullies and victims. Accordingly, in Studies 1 and 2, children were asked to respond in an open-ended manner, before being asked children to choose from a series of socio-motivations in Study 3 and to rate each of these socio-motivations in Study 4.

In Studies 3 and 4, a set of global interpersonal goals were added to the measures. The background literature has found bullies to be motivated by various general social goals such as for social status (Sijtsema et al., 2009). As such, assessing children's global social goals alongside situation-specific measures allowed for the development of a more comprehensive understanding of the social goals endorsed by bullies and victims. Moreover, researchers have suggested that there might be differences in the cross-situational goals employed by bullies depending upon their preferred mode of aggression, and varying between the sexes (Sutton et al., 1999a; Veenstra et al., 2007). As such, the inclusion of these measures was

critical in determining whether there were any sex differences in the social goals associated with bullying and victimisation.

Part of ther second aim of this project was to assess whether social goals were able to predict bullying/victimisation after other SIP biases had been taken into account. In order to do this, it was important to use scenarios that have been well established within social adjustment research to provide a context for aggressive children to exhibit various social-cognitive biases, including biases in the social goals step of SIP. Therefore, in Studies 5 and 6, hypothetical scenarios that depicted either hostile or ambiguous provocation were turned to to provide a context in which to assess social goals. These scenarios have been the most intensively studied within children's social goals research (Erdley & Asher, 1999), and research has indicated that bullies and victims may show biases in interpretation and emotionality in such settings, as well as selecting more instrumental goals than their peer group (Camodeca & Goossens, 2005; Toblin et al., 2005). Conflict scenarios had the additional advantage that they provided a situation from which children would hypothetically be forced to consider their response options. The third aim of this empirical work was to consider the influence that social goals have on the responses to conflict that have been associated with bullying and victimisation in previous research, and these scenarios provided a valid foundation for this to be investigated.

2.4.1.4   ToM and SIP measures

Finally, in order to achieve the second and third aim, measures were included to assess children's ToM and SIP. Children's ToM was measured by means of the faux-pas task,

ability to perform on which is well established to vary throughout the age range of the samples used in Studies 1 and 2 (7 to 9 year olds; Baron-Cohen et al., 1999).

In Studies 5 and 6, the hypothetical conflict scenarios outlined in Section 2.3.1.1 were utilised for a SIP measure, including items adapted from Camodeca and Goossens (2005) to measure children's emotionality and attribution of intent in response to both hostile and ambiguous conflict. These variables were used because bullies and victims have been reported to experience biases in these aspects of their social-cognitive processing (bullies have reported feeling more angry than their peers in response to conflict, and both bullies and victims tend to interpret more threat in ambiguous conflict, Camodeca et al., 2003). Children's emotionality and attributions of intent have also been associated with their social goals. Emotionality, especially anger, may serve to energise particular goals (Arsenio & Lemerise, 2001), and children who make hostile attributions have been reported to be more likely to endorse goals of retaliation (Erdey & Asher, 1996), or alternatively, may be motivated by harm avoidance (Erdley & Asher, 1996). In Study 6 a set of questions were introduced that asked children to rate how likely they would be to respond in certain ways to provocation. Responses were included that were conceptually associated with retaliation, submission and prosocial behaviour as these aspects of behaviour have been commonly studied in bullies and victims (see Chapter 1). The inclusion of this variable thus facilitated achievement of the third general aim: to investigate the role social goals have in mediating the relationship between bullying/victimisation and their associated behaviours.

2.4.2   Empirical focus of Chapter 3

As mentioned previously, the early empirical focus was very much shaped on the findings of Sutton et al. (1999b), namely that bullies scored well on measures of ToM, yet still chose to behave aggressively. In line with the first and second aim of this empirical work, it was important to determine whether, as the authors had implied, bullies' social goals led them to use their ToM to refine and get away with their aggressive behaviour. In Studies 1 and 2, this hypothesis was tested by assessing the social goals associated with bullying and victimisation alongside their ToM. If bullying could be independently predicted by social goals and ToM, it would provide some support for the position that social goals are pivotal in determining whether a child will use their superior ToM to effectively bully.

In order to assess children's social goals, the display rule task detailed in Section 2.4.1.2 was introduced. In Study 1, the proficiency scenarios were utilised as it was hypothesised that they would provide a context in which bullies' social image of dominance might be under threat, and that they might thus hold specific social goals. In Study 2, children socio-motivations in cooperative scenarios were also assessed. It was hoped that this would provide a more relevant context for girls' social image to be salient.

2.4.3   Empirical focus of Chapter 4

Having identified various scenario-specific socio-motivations in Chapter 3, next it was important to establish whether bullies and victims might also hold more general interpersonal goals, and if they do, to determine whether one or the other, or a combination of both provide the better predictors of bullying and victimisation scores.

In the literature review on the social goals of bullies, bullies (especially those who use predominantly relational methods) were identified as striving for social dominance, which can be maintained, among other means, through appearing popular to one's peers (Juvonen & Galvan, 2009; Puckett et al., 2009; Sijtsema et al. 2009). Additionally, in Chapter 1 it was noted that peer rejected children engage in less prosocial behaviour than their peers (for a review see Gifford-Smith & Brownell, 2003). I wanted to determine whether bullying and victimisation was associated with children's motivations to achieve these ends, specifically questioning whether bullying was associated with a desire to be popular, and whether victims were rejected because they held little desire to behave prosocially. Thus, in Studies 3 and 4, gender differences in the social goals that predict bullying and victimisation are reported on. Further, both the situation-specific goals referenced in response to display rule scenarios, and general interpersonal goal orientations (including those tapped by the IGI-C) are reported on.

Chapter 4 was focused on further developing the first aim of this empirical work, namely by assessing whether similar social goals were associated with bullying and victimisation across scenario types, and considering whether there were gender differences, or differences across bullying types (physical versus relational) in models of social goals as predictors of bullying and victimisation.

2.4.4   Empirical focus of Chapter 5

Chapter 5 focuses on the second part of the second overall aim. Specifically, it is investigated whether social goals are still able to predict bullying and victimisation even after the variance explained by other SIP biases had been taken into account. As part of the SIP measure detailed above, children's preferences for a selection of social goals were measured

(put forward to be associated with bullying and victimisation by Studies 1 to 4, as well as by the background literature) in ambiguous and hostile provocation scenarios, and it was determined whether they remained related to bullying and victimisation even after biases in emotionality and attribution of intent had been taken into account.

2.4.5   Empirical focus of Chapter 6

In Chapter 6, it was considered whether social goals play a role in predicting how children will respond to provocation. In doing so, I hoped to achieve the third aim, and provide support for the position that social goals play an important role in children's SIP, in particular considering whether they influence children's preference for certain behavioural responses to provocation. Children's attribution of intent to ambiguous provocation scenarios, the social goals that they endorsed, and ratings for how likely they would be to carry out various responses to provocation were assessed. Structural equation models for physical and relational bullying and victimisation were then put forward, and any meditational effects of social goals on the relationships between bullying/victimisation and their associated behaviours were evaluated.

Chapter 3:   Evidence for Situation-Specific Motivations in Bullying and Victimisation

Understanding of the social-cognitive processing involved in bullying has advanced significantly over the past 20 years. As discussed in detail in Chapter 2, bullies and victims demonstrate different social cognitive processing to their peers, especially in specific situations. For example, in response to overtly deliberate or even ambiguous provocation, bullies favour aggressive responses of retaliation and report aggressive responses as easier to carry out (see Crick & Dodge, 1994 for a review, and also Camodeca & Goossens, 2005; Camodeca et al., 2003; Toblin et al., 2005). It has been argued that these social cognitive biases may offer some explanation for bullies' aggressive behaviour. However, bullies' aggression is often proactive (Crick & Dodge, 1999) and has been distinguished from hot-headed reactive aggression (Coie et al., 1991). As such, they are likely to have specific aims that they hope to achieve through their aggression. In spite of this, relatively little research has specifically considered what motivates bullies' social behaviour. This paper reviews the existing literature on the social goals of bullies and victims, and investigates whether they hold similar goals in social settings that do not explicitly depict some degree of conflict. The present study aimed to investigate which socio-motivations bullies and victims hold in scenarios that could potentially influence peer perceptions of their social image, specifically in relation to their proficiency (being regarded as clever, brave, or strong) and cooperativeness (being regarded as kind and helpful).

Typically, children's social goals have been assessed through hypothetical scenarios. Children are asked to identify why they would follow a specific course of action in a presented situation, either from a range of social goals provided by the researcher, or in an open-ended fashion. By and large, research that has taken this approach to assessing

children's social goals has been born out of literature concerned with aggressive behaviour (for a review, see Crick and Dodge, 1994). Because of this, the situations presented almost invariably have depicted some form of confrontation as it provides a pertinent setting for subsequent aggressive behaviour. Aggressive children have been widely reported to endorse high goal values for instrumental ends of self enhancement and low goal values for social affiliation in response to conflict (Camodeca & Goossens, 2005; Erdley & Asher, 1996, 1999; Lochman et al., 1993). Moreover, studies that have specifically considered the proactive aggression that is characteristic of bullying have found proactively aggressive children to select even more instrumental and less relational goals than their reactively aggressive peers (Crick & Dodge, 1996).

The proactive aggression inherent in bullying is conceptually related to instigating social conflict rather than experiencing it. Therefore, scenarios whereby a story character is provoked are unlikely to provide a context that is especially effective in uncovering the social goals associated with bullying. Moreover, children experience a wide array of challenging social situations in school, so it is surprising that so few studies have considered which social goals are held by children outside of conflict scenarios (for an exception, see Crick & Dodge, 1996, who considered group entry scenarios). Research is clearly needed to determine whether the goal dimensions and categories identified in conflict scenarios are representative of children's motivations in other social settings. Arguably, social situations where one's social image is at stake may be of particular importance for bullies. Bullying requires some sort of interpersonal dominance over the victim, and social status is likely to contribute to this (Veenstra et al., 2007). It is conceivable that bullies appreciate the need to develop and maintain a certain social image in such settings, and may therefore report a specific set of social goals. Thus, the first aim of the present study was to determine which socio-

motivations are associated with bullying and victimisation in settings with potential influence on one's social image. The literature concerned with children's self-presentational awareness was consulted in order to provide relevant social contexts to do so.

Researchers have suggested that variation in children's self-presentational awareness is reflected in their ability to identify and comprehend the usage of display rules (Banerjee, 2002a, 2002b; Banerjee & Yuill, 1999a, 1999b). Display rules are principles that guide when and how people regulate their emotional expressions (Ekman & Friesen, 1975) and can hold self-protective implications. For example, when surrounded by his/her peers, a child may mask the pain experienced from falling over to give an image of toughness, or laugh at a joke they do not understand to give an image of acuity. Researchers have used children's explanations of hypothetical scenarios, in which a story character utilises display rules to manipulate an audience's beliefs about themselves, to evaluate their self-presentational awareness. However, the scenarios can be equally effectively employed to identify the socio-motivations of children. Banerjee and Yuill (1999a, p117) cited a range of explanations, implying notable variance in the socio-motivations children possess in these scenarios. As well as explanations focussing on self-presentational concern ('so she does not look stupid'), children suggested display rules might also be used for prosocial ends ('he does not want to upset the others'), and for outcome-focused self-benefit ('so she'll get a new present'). In light of these explanations, display rule scenarios can provide a window into the socio-motivations children hold in settings which hold specific relevance to their social image, and could provide an adaptive measure to assess whether socio-motivations for outcomes, prosocial concern, or self-presentation are associated with bullying and victimisation outside of conflict scenarios.

As outlined above, the bulk of literature on the socio-motivations of bullies indicates that they are instrumentally motivated, and as such would be expected to hold outcomes-focused goals of self-benefit. However, the display rule scenarios provide a setting specific to one's self image. Bullies have reported that they use their aggression to 'feel powerful' or 'look cool' (Ziegler and Rosenstein-Manner, 1991, cf Sutton et al., 1999a), and to achieve interpersonal dominance over another (Coie et al., 1991). While interpersonal dominance can take a physical form, children may also achieve an imbalance of power over their victims through their perceived social status (Hawley, 1999; Vaillancourt et al., 2003; Veenstra et al., 2007). As its name suggests, perceived social status is maintained though peers' perceptions of oneself, and bullies may therefore also place particular importance in self-presentational goals in the display rule task. Indeed, Veenstra et al. (2007) reported that bullies desire an image of toughness and social competence. It should be noted, however, that the bulk of research that has found bullies to hold goals for social status have focused on adolescent populations (for example, Hawley, 2003; Olthof & Goossens, 2008; Pellegrini, 2002), and it is therefore unclear the same associations will be evident in Primary school children.

With regard to the final socio-motivation category of prosocial intent, studies that have utilised scenarios of conflict have suggested that bullies hold goals that are relationship damaging, especially when they interpret hostile intent on behalf of the provocateur (Camodeca & Goosens, 2005; Crick & Dodge, 1989; Erdley & Asher, 1996; Renshaw & Asher, 1983; Taylor & Asher, 1989, cf Crick & Dodge, 1994). However, because the display rule scenarios do not depict confrontation, there is likely to be less concern for aggressive intent, and therefore bullies are not expected to endorse particularly low levels of prosocial motivations in the present study.

This account of the social goals involved in bullying has yet to consider the goals of victims. In fact, to the author's knowledge, very little research has done so. By and large, the aggression literature has considered reactively aggressive, rejected children to endorse the same goals as proactively aggressive bullies: low on prosocial affiliation (perhaps because of previous experiences of conflict) and high on instrumental motivations (although in the case of victims this is most likely to be demonstrated through a desire for harm avoidance; Veenstra et al., 2007). Because the display rule task does not provide a context from which harm avoidance might be sought, this is unlikely to influence the socio-motivations victims are found to hold in the present study. However, victims have been reported to lack appropriate status goals in some social settings (Ojanen et al., 2007), and demonstrate an inability to adapt their goals to the demands of the situation (Taylor & Gabriel, 1989, cf Crick & Dodge, 1994). It is therefore expected that victims will be poor at identifying the implications the scenario might have for their social image, and subsequently hold low concern for self-presentation.

Because Banerjee (2002b) reported variability in display rule explanations in children who demonstrated the mental-state reasoning required to pass a false-belief task, it is important to ensure that any variability found in the socio-motivations of bullies was not a by-product of mental-state understanding. While the aggression literature associates aggressive behaviour with biases in their social-cognitive processing, evidence is emerging that children who are proactively and/or reactively aggressive may not form a homogenous group with regard to their social-cognitive profile (Camodeca & Goossens, 2005; Camodeca et al., 2002). Sutton et al. (1999a) argue that ringleader bullies require advanced socio-perceptual skills to select an appropriate victim, to avoid detection from teachers, and to negotiate social allegiances. Indeed, bullies have been found to score significantly higher than

their peers on measures of social and emotional understanding (Sutton et al., 1999b). Advanced social understanding might be responsible for the high efficacy bullies hold for their aggressive behaviour (Zelli et al., 1999; Crick & Ladd, 1990), and consequently might serve to influence the goals that bullies hold.

In order to investigate this eventuality, a mental-state understanding task was included in the present study, namely, the faux-pas task presented by Baron-Cohen et al. (1999). The task requires insights into the mental states involved in unintentional insults, where children must detect and identify the faux-pas in a number of naturalistic hypothetical scenarios. Initial evidence from three studies carried out by Baron-Cohen et al. (1999) suggested that performance on the faux-pas task increases with age between 7 and 11 within the normal population, and is therefore appropriate for a sample of 7 to 9 year olds.

In line with Sutton et al.'s (1999b) findings, bullies are expected to perform well on the faux-pas task. Further, because Banerjee and Henderson (2001) found children who scored higher on the faux-pas task were also likely to give appropriate explanations to display rules (i.e., explanations that inferred a self-presentational intent to enacting them), the faux-pas task is expected to be related to the socio-motivation of self-presentation, and consequently may influence the association between bullying and the socio-motivation of self-presentation. However, faux-pas scores are not expected to influence the association between bullying and outcomes-focused socio-motivations. With regard to victims, while evidence points to their inability to hold appropriate goals for the situation (Taylor & Gabriel, 1989, cf Crick & Dodge, 1994), they do not score significantly lower than their non-victimised peers on measures of mental-state understanding (Sutton et al., 1999b).

Accordingly, performance on the faux-pas task is unlikely to influence the predicted negative relationship between victimisation and socio-motivations for self-presentation.

3.1 **Study 1**

In the present study children's socio-motivations were assessed by means of the display rule task. Specifically, scenarios where a story character's image of proficiency (e.g., cleverness, strength) was at stake were utilised to provide a context from which to investigate whether children's socio-motivations are able to predict scores of bullying and victimisation, and whether they remain able to do so after any influence of mental-state understanding had been taken into account. It is hypothesised that bullying will remain related to outcomes-focused socio-motivations after allowing for mental-state understanding, and that victimisation will be predicted by low self-presentational concern.

Research has consistently argued that, to fully understand associations between bullying and its social-cognitive correlates, it is important to consider both physical aggression (harming others through the threat of or actual physical damage) and relational aggression (harming others through purposeful manipulation and damage of peer relationships). While boys have been reported to utilise both methods in similar proportion, girls employ far more relational than physical methods (Crick & Bigbee, 1998). Consequently it is expected that the associations detailed above will be evident with both forms of bullying and victimisation in boys, but only with relational bullying and victimisation in girls.

3.1.1   Method

Participants

The sample consisted of 55 children from one Year 3 and one Year 4 class in a middle-class primary school in an urban neighbourhood. All the children completed all the measures, but the staff contact at the school indicated that two of the Year 3 boys might hold significantly different social cognitive profiles to their classmates as they had scored highly on the Autism-Spectrum Quotient when assessed earlier that year. These children were therefore excluded from subsequent analysis. Of the remaining sample, the Year 3 class consisted of 12 boys and 13 girls; the Year 4 class consisted of 15 boys and 13 girls. Children were aged 7 years 6 months to 9 years 7 months (mean age = 8,7; *SD* = 7.80 months). The vast majority of children were Caucasian, and all were native English speakers. Consent for participation was obtained via a letter sent home to parents that informed them of the experimental procedure and gave them the option to opt their child out of the study. Data was collected in the autumn term of 2005.

Measures

Three tasks were administered in the present study: a bullying questionnaire, a mental-state understanding task (the faux-pas task), and a socio-motivation task (the display rule task).

In the bullying questionnaire, the children were asked to nominate classmates they had seen engaging in particular behaviours. The questionnaire consisted of four physical bullying items (e.g., pushing or tripping another child on purpose), four relational bullying items (e.g., stopping another child joining in games), four physical victimisation items (e.g., being hit by other children), and four relational victimisation items (e.g., having rumours

made up about them behind their backs), along with four filler questions. For each item, children were asked to make *up to* three nominations, and were reassured that they could leave the question blank if they could not think of any appropriate nominations. Each child heard the same sequence of questions, read by a male experimenter with clarification of any terms given on request. Children nominated their classmates using code numbers that had been assigned to names on the class list and were reassured that neither the teachers nor their classmates could find out the answers they gave.

In order to assess social understanding, the faux-pas task used by Banerjee and Watling (2005) was adapted for the current study. Children heard four stories where one character unintentionally insults the other by means of a target object. The insulting character was always ignorant with respect to the insulted characters relationship with the target object. For example:

> *Kim helped to make a big apple pie for her cousin Tom when he came to visit. She's proud about making the pie, and she really hopes that her cousin Tom will like it. She carried it out of the kitchen. "I made this pie specially for you," said Kim. "Mmm," replied her cousin Tom. "That looks lovely. I love pies, except I hate apple pie, of course."*

Two of the stories involved a male character making the faux-pas and two stories, a female character. Children were then asked six forced-choice questions about the story as follows: Detection – In the story, did someone say something they should not have said? *(Yes or No)*; Identification – What was said that should not have been said? (*Cousin Tom said, "I hate apple pies" or Kim said "I made this specially for you)*; Feelings – How does Kim feel now?

(*Happy or Upset*); Intention – Did Tom want to make Kim upset? (*Yes or No*); Comprehension – What kind of pie had Kim made? (*Apple or Plum*); Ignorance – Did Tom know that it was an *apple* pie? (*Yes or No*). The order of stories was randomised but the questions were asked in the fixed order as listed. Each story and subsequent questions were read aloud by a male experimenter.

In the socio-motivation task, children heard three stories, each describing a hypothetical story character who behaves in such a way as to manipulate others' beliefs about him or her. The stories tapped a self-presentational behaviour with an attempt made by the protagonist to shape the audience's evaluation of him or her. For example:

Simon/Sally is in the playground. Some big children are playing ball and they let Simon/Sally join in their game. They're all playing together happily when one of the children kicks the ball right up in the air, and when it lands it hits Simon/Sally on the arm. It really hurts. But when one of the big children says, 'Are you all right?', Simon/Sally smiles and says, 'Of course I am. That didn't hurt at all.'

Boys heard stories about a male story character, and girls heard stories about a female story character. Each story was accompanied by four cartoon-style illustrations captioned by the text of the story. All stories were of similar length and verbal complexity. Following the story, the child was asked why the protagonist had behaved as they did in the story. Because socially maladjusted children find it much more difficult to construct goals appropriate to a situation than to recognise them from a list of alternatives (Renshaw & Asher, 1983), ambiguous responses were followed up in an open ended manner to allow the child as much opportunity as possible to provide a meaningful response. Any ambiguous answers were

followed up for clarification. The stories were read by a male experimenter who rotated the illustration available to the child as appropriate to the story.

Scoring

Bullying questionnaire: With each nomination counted as one point, nominations were tallied for each of the four scales: physical bullying, relational bullying, physical victimisation, and relational victimisation. These scores were then standardised within class. Factor analysis supported a four-factor model explaining 66.70% of variance in girls [αs =.79, .79, .48, .71 respectively], with loadings of items onto the expected factors exceeding .45 in all cases. Factor analysis supported a two factor model in boys, explaining 75.09% of variance [αs =.92 for bullying and .92 for victimisation] with all loadings exceeding .70. This supports Crick and Bigbee's (1998) findings that physical and relational bullying co-occur in boys. However, in order to maintain consistency in the reported associations across gender, associations between the socio-motivations and all four bullying/victimisation scales will be reported on during the analysis.

Faux-pas task: Consistent with Banerjee and Watling (2005), children had to answer all questions correctly to pass a story (scoring 1 point), with a resulting score between 0 and 4.

Display rule task: Children's explanations were coded using the following classification scheme, modified from Banerjee (2002a) to include an outcomes-focused and a prosocial category:

Outcomes: Implicit or explicit reference to situational consequences of action (e.g. "So they'll stay his friends"; "So she won't get told off."; "So he'll be able to carry on playing.")

Prosocial: Implicit or explicit reference made to others' feelings (e.g. "So she won't get upset"; "Otherwise they might feel sad")

Self-Presentational: Implicit or explicit reference to others' beliefs about oneself (e.g. "Otherwise they'll think she's dumb"; "So they do not think he's a wimp")

Residuals: All responses that failed to fit into any of the above categories (e.g. "Do not know"; "The ball had a hole in it").

Responses were coded for their involvement in the above categories. Explanations for display rules that referred to one of the socio-motivations listed above scored one point for that category. Explanations could contribute to multiple category scores where they reflected more than one social goal. With three scenarios in total, children thus obtained scores between 0 and 3 for each of the four response categories. Inter-rater reliability was satisfactory for each response group (agreement for categorisation of 89%).

Design and procedure

Children were seen individually by a male experimenter. Each child undertook the bullying questionnaire before moving on to the stories. The order of the stories was randomised with faux-pas and emotional display stories mixed in together. Each question and story was read aloud by the experimenter. Children were instructed to request clarification of any of the terms used in the questionnaire if needed. In the majority of cases, children completed the entire set of measures in one 30 minute session. When break times interrupted the testing session, the participant completed the rest of the measures later that day, or on the following morning.

3.1.2   Results

First, the descriptive statistics of bullying and victimisation are reported on, before the associations between bullying/victimisation, faux-pas scores and socio-motivations are reviewed. Next, it is considered whether any associations between bullying/victimisation and socio-motivations remain after allowing for the variance explained by faux-pas scores.

Bullying and victimisation scores

Mean raw scores for bullying and victimisation are displayed in Table 3.1. A series of independent 2(sex) x 2(year) ANOVAs were run for physical bullying, relational bullying, physical victimisation and relational victimisation, to determine whether there were any gender or age-related effects on levels of either form of bullying and victimisation. The ANOVAs revealed physical bullying [$F(1,49)=4.49$; $p=.04$] to occur significantly more in boys than girls. There were no sex differences for relational bullying or for either form of victimisation. There were no effects of year group on either form of bullying or victimisation.[2]

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[2] None of the children in the present study were categorised as bully-victims (i.e., scored more than 1 *SD* above the mean for both bullying and victimisation scores). Consequently, all children were included in our main analysis.

Table 3.1: *Mean (SD) bullying and victimisation nominations by sex (bullying nominations ranged from 0-43 in boys and 0-16 in girls, and victimisation nominations ranged from 0-30 in boys and from 0-14 in girls), and year group*

	N	Bullying		Victimisation	
		Physical	Relational	Physical	Relational
Boys	27	7.41 (11.38)	6.03 (7.95)	5.14 (7.09)	5.97 (7.34)
Girls	26	1.50 (2.44)	4.88 (5.03)	2.92 (2.10)	4.81 (3.33)
Year 3	25	4.93 (8.16)	5.41 (5.69)	3.70 (2.60)	4.93 (3.20)
Year 4	28	4.32 (9.65)	5.57 (7.65)	4.46 (7.20)	5.89 (7.51)
Total	53	4.62 (8.87)	5.49 (6.70)	4.09 (5.42)	5.42 (5.78)

Social understanding and socio-motivations

Mean scores for the faux-pas task and socio-motivations (outcomes-focused, prosocial, self-presentational, and residual) are displayed in Table 3.2. A series of independent 2(sex) x 2(year) ANOVAs were run for faux-pas scores and for each socio-motivation to assess whether there were any effects of gender or year group on each of the dependent variables. Analysis revealed that girls held significantly more prosocial socio-motivations [$F(1,49)=3.97$, $p=.05$] and significantly less self-presentational socio-motivations [$F(1,49)=6.54$, $p=.01$]. Although differences between the year groups only neared significance, Year 3 children gave more residual responses [$F(1,49)=3.53$, $p=.07$] and fewer self-presentational socio-motivations [$F(1,49)=3.53$, $p=.07$]. There were no differences in faux-pas scores across gender or across year group. A one-way repeated-measures ANOVA was also ran to determine whether any of the socio-motivations were preferred to others. The ANOVA revealed a main effect of socio-motivation [$F(3,156)=6.20$, $p<.01$], with post-hoc

tests (Bonferroni) revealing the self-presentational socio-motivation to be significantly preferred to all other socio-motivations, as expected given the context of the stories.

Table 3.2: *Mean (SD) faux-pas and socio-motivation scores by category, sex, and year group*

| | *N* | Faux-pas score | Socio-motivations | | | |
			Outcomes-focused	Prosocial	Self-presentation	Residual
Boys	27	2.66 (1.37)	0.59 (0.78)	0.21 (0.62)	1.62 (1.05)	0.72 (1.07)
Girls	26	2.62 (1.30)	0.81 (0.94)	0.58 (0.81)	0.96 (1.00)	0.81 (0.94)
Year 3	25	2.74 (1.32)	0.63 (0.74)	0.37 (0.74)	1.07 (1.04)	1.00 (1.07)
Year 4	28	2.54 (1.35)	0.75 (0.97)	0.39 (0.74)	1.54 (1.07)	0.54 (0.88)
Total	53	2.64 (1.32)	0.69 (0.86)	0.38 (0.73)	1.31 (1.07)	0.76 (1.00)

Next, gender influences on the associations between bullying/victimisation scores, and faux-pas and socio-motivation scores were tested for. In a preliminary analysis, the four bullying and victimisation scores were regressed on faux-pas and socio-motivation scores, gender, and terms for the interactions between gender and faux-pas and socio-motivation scores. The regressions revealed several moderation effects of gender. Gender was found to moderate the association between physical bullying and faux-pas scores, between both forms of bullying and outcome-focused socio-motivations, and between both forms of victimisation and prosocial socio-motivations. Consequently, the rest of the analysis has been split by gender.

The main analysis focuses on the associations between bullying/victimisation and faux-pas scores and socio-motivations. The intercorrelations among all measures are displayed in Table 3.3. In boys, as predicted, bullying was positively associated with both faux-pas scores and outcome-focused explanations for display rules. In girls, the pattern was

less clear: only physical bullying was related to outcome-focused explanations and there was no association between bullying and faux-pas scores. Self-presentational socio-motivations were not associated with either form of bullying in either sex, suggesting that bullies are more interested in the concrete outcomes of the situation than the image they give off to their peers.

While victimisation was negatively associated with a socio-motivation for self-presentation in boys as expected, there was no association evident in girls. Because two of the three stories depicted a scenario where the hypothetical character would conceivably want to look 'tough', the lack of findings in girls might be due to a gender bias in story content. Analysis also revealed a strong correlation between victimisation and a prosocial socio-motivation in boys. This was an unexpected finding, but might represent victims' inability to select appropriate goals for the situation. In girls, there were no significant associations between victimisation and any of the socio-motivations although a negative association between physical victimisation and prosocial socio-motivations neared significance.

Finally, hierarchical regressions were run to investigate whether associations between bullying/victimisation and socio-motivation scores remained after taking into account the variance explained by faux-pas scores. In separate regression models to predict each form of bullying and victimisation, faux-pas scores were entered into block 1, and each of the socio-motivations entered into block 2 using stepwise criteria to determine inclusion into the final model. The final models for boys are displayed in Table 3.4, and for girls in Table 3.5. As predicted, the regression analysis supported inclusion of outcomes-focused socio-motivations in models to predict both physical bullying and relational bullying even after allowing for variance explained by faux-pas scores. In girls, the regression analysis supported inclusion of outcomes-focused socio-motivations in a model to predict physical bullying, but identified no

predictors for relational bullying. The regression analysis for victimisation supported the inclusion of prosocial socio-motivations in models to predict both physical and relational victimisation in boys, but only in models to predict physical victimisation in girls.

Table 3.3: *Correlation matrix for bullying/victimisation scores and all other measures in girls above and boys below the diagonal*

	Bullying		Victimisation		Faux-pas scores	Socio-motivations			
	Physical	Relational	Physical	Relational		Outcomes-focused	Prosocial	Self-presentation	Residual
Physical Bullying	-	.26	-.01	-.37†	-.18	.44*	.02	-.06	-.31
Relational Bullying	.87**	-	.22	.15	.01	.08	.30	-.13	-.19
Physical Victimisation	-.06	.09	-	.00	-.32	.09	-.34†	-.01	.17
Relational Victimisation	-.26	-.12	.91**	-	-.10	-.19	.01	-.02	.19
Faux-pas scores	.46*	.36†	-.01	-.14	-	-.03	.07	.27	-.19
Outcomes-focused	.51**	.56**	-.12	-.21	.16	-	-.16	-.31	-.41*
Prosocial	-.06	-.02	.70**	.62**	.04	-.04	-	-.37†	-.22
Self-presentation	-.10	-.21	-.45*	-.45*	-.19	-.11	-.42*	-	-.44*
Residual	-.11	-.02	.17	.23	.08	-.36†	-.07	-.74**	-

†$p<.10$; * $p<.05$; **$p<.01$
N=27 for boys, and 26 for girls

Table 3.4: *Hierarchical regression analysis for socio-motivations as predictors of bullying and victimisation scores in boys after accounting for faux-pas scores (N=27). Note: only significant predictors are shown.*

		Physical Bullying	Relational Bullying	Physical Victimisation	Relational Victimisation
Block 1	ΔR^2	**.21**	**.14**	**.00**	**.02**
Faux-pas	β	.46*	.36†	-.01	-.14
Block 2	ΔR^2	**.16**	**.20**	**.27**	**.22**
Faux-pas	β	.39*	.30†	.04	-.16
Outcomes-focused socio-motivation	β	.41*	.46**		
Prosocial socio-motivation	β			.52**	.47*

†p<.10; * p<.05; **p<.01

Table 3.5: *Hierarchical regression analysis for socio-motivations as predictors of bullying and victimisation scores in girls after accounting for faux-pas scores.(N=26) Note: only significant predictors are shown.*

		Physical Bullying	Relational Bullying	Physical Victimisation	Relational Victimisation
Block 1	ΔR^2	**.03**	**.00**	**.11**	**.01**
Faux-pas	β	-.18	.01	-.32	-.10
Block 2	ΔR^2	**.18**	**n/a**	**.10**	**n/a**
Faux-pas	β	-.17	.01	-.30	-.10
Outcomes-focused socio-motivation	β	.43*			
Prosocial socio-motivation	β			-.32†	

†p<.10; * p<.05; **p<.01

3.1.3 Discussion

The present study had two main aims: firstly, to identify which socio-motivations are associated with bullying and victimisation in social settings that offer opportunity to influence peer perceptions upon oneself, specifically in relation to one's image of proficiency (e.g., cleverness, bravery); and secondly, to evaluate whether these associations were independent of variance in mental-state understanding. The proposed final models for bullying indicated that bullies hold outcomes-focused socio-motivations in these scenarios, even after their high mental-state understanding had been taken into account. This association was present for both physical and relational forms of bullying in boys, but only for physical bullying in girls. The models for victimisation in boys suggested that victims hold prosocial socio-motivations. In girls, however physical victims were found to have low affiliation for prosocial goals. These findings are considered in light of the background literature, with potential directions for further investigation discussed.

The aggression literature finds generous support for proactive aggressors (such as bullies) endorsing relationship damaging goals for instrumental ends in conflict scenarios (Crick & Dodge, 1994). However, as Crick and Dodge (1994) point out, it is important to consider whether bullies report similar goals in a wider array of familiar social settings. The present findings suggest that *boy* bullies do indeed report instrumental (outcomes-focused) socio-motivations in settings where their social image of proficiency is at stake, although they do not hold relationship damaging goals. Previous research that has specifically considered the social goals of bullies finds them to hold the focal goal of social dominance (Vaillancourt et al., 2003; Veenstra et al., 2007), and many of the explanations for display rules that were categorised as being outcomes-focused reflected this. Boy bullies demonstrated a specific

concern not to compromise their position of dominance and social status. For example, in the story where Simon pretended not to be hurt by the ball, explanations for his motivation included 'so that the others won't make fun of him' or 'he'll have less friends if he cries'. Other responses in this category were more concerned with self-benefit: 'he wants to carry on playing' or 'if he gets upset he'll have to go inside'. Arguably, bullies seem to be concerned with providing themselves the best concrete outcome from the situation, with specific interest given to how their peers might act towards them as a consequence of their action.

Assuming that boy bullies desire social dominance, it is perhaps surprising that no associations were evident between bullying and socio-motivations for self-presentation. In order to maintain the image of superiority necessary to effectively dominate peers, it had been expected that bullies would demonstrate a specific self-presentational concern. Further, bullies' lack of self-presentational concern is unlikely to be a symptom of poor mental-state reasoning as, in line with Sutton et al. (1999b), bullying was associated with higher scores of mental-state understanding. In fact, all the boy bullies scored perfectly on this task.

Various alternative explanations for this finding are offered. Firstly, bullies may have placed more importance on maintaining their social dominance by not getting picked on, than with their social image. Indeed, although bullies are unlikely to sacrifice social approval, Arsenio and Lemerise (2001) argue that bullies' skills may be particularly focused on domination and less on whether they are considered to be socially competent by their peers. An alternative explanation is that children of this age are not yet focused on achieving social status, and do not consider their social image as a facilitator of dominating others. Bullies' desire for social status has been found to increase with age (Hawley, 2003) and may not become a significant contributor to their behaviour until adolescence (Sijtsema et al., 2009).

Finally, it is possible that the scenarios do not provide a sufficiently pertinent context for children to be concerned with their social image. However, as self-presentational explanations were preferred to any of the other socio-motivations the latter position is rejected.

A similar pattern of associations was present for physical bullying in girls. However, because levels of physical bullying were so low in girls, it is not appropriate to present a comprehensive account of what motivates girl bullies based upon these scenarios. There were no significant associations between relational bullying and any of the socio-motivations. One explanation for the lack of associations reported here is that the scenarios did not provide a context that was particularly relevant for girls. In one story the character pretended not to be hurt so as to give an image of toughness, in another a story character pretended not to be scared of climbing a high wall. These two stories in particular may be more relevant to protecting one's image of proficiency in boys than in girls. This is supported by the sex differences reported in explanations to the display rules that referenced self-presentation, finding girls to give significantly less self-presentational explanations than boys. Girls engage in more cooperative social interactions than boys (for a review, see Rose & Rudolph, 2006) and, assuming they aspire to gender typical behaviour, are therefore likely to be more concerned with giving off an image of cooperativeness than an image of toughness and bravery. Accordingly, ts is argued that future research would benefit from considering scenarios depicting cooperative behaviour in the presence of a peer audience to assess whether girl bullies and victims entertain different goals to their peers.

Although non-significant, and in contrast to studies that have utilised conflict scenarios, an association was identified between relational bullying in girls and prosocial

socio-motivations of a reasonable size (.30). Bullying in girls relies strongly on relational methods (Crick & Grotpeter, 1995), which are largely facilitated by a perception of popularity among one's peers (Vaillancourt et al., 2003). As girls who are perceived as popular engage in a mix of prosocial and aggressive behaviours (Parkhurst & Hopmeyer, 1998; Rodkin et al., 2000), it is conceivable that girl bullies are motivated to be prosocial when they have a peer audience because of the positive effects it has on their reputation. Again, it is argued that scenarios that specifically depict cooperative behaviours would offer a more appropriate context to test this hypothesis.

With regard to victimisation, as hypothesised, a negative relationship was reported between self-presentational socio-motivations and victimisation in boys, but the association between victimisation and prosocial socio-motivations was not expected. The former association indicates that boy victims fail to cite appropriate concern for the image they give off to their peers, but the latter association (which remained in the final models for victimisation in boys) is less readily explained. Indeed, previous research has suggested that peer rejected children are seen as disruptive (Pope & Bierman, 1999; Schwartz et al., 1998), and hold goals that are relationship damaging (see Crick & Dodge, 1994). However, despite strong links between peer-rejection and victimisation (see Schuster, 2001 for a meta-analysis), they do not necessarily form a homogenous group in relation to their behavioural profiles. For example, Schuster (2001) reported that victimised children behaved exceptionally cooperatively in the Prisoner's Dilemma game suggesting they take on a submissive role in social interaction and offering justification to the associations reported here.

An alternative explanation is that boy victims hold inappropriate socio-motivations in settings where their image of proficiency is at stake. Taylor and Gabriel (1989, cf Crick & Dodge, 1994) suggested that socially maladjusted children have difficulty switching goals to adapt to the situation, and the association between victimisation and prosocial motivations here might provide evidence of this. By way of investigating this, a new set of scenarios is needed whereby prosocial motivations are appropriate to the setting. If victims report less prosocial motivation behind cooperative behaviours than their peers, it would offer support for a theory that explains the goals of boy victims as being inappropriate for the situation.

In direct contrast to the pattern in boys, physical victimisation was *negatively* associated with prosocial socio-motivations in girls, although the association did not exist with relational victimisation. By and large, girls are physically bullied by boys (Boulton & Underwood, 1992), suggesting that girls who are not prosocially motivated are at specific risk of harassment from boys. With higher levels of cooperative play in girls (Rose & Rudolph, 2006), it is also possible that a low endorsement of prosocial goals isolates girl victims from their peers. Once more, this theory would be better tested in scenarios where children would be expected to hold prosocial motivations. If victimised girls continue to hold lower prosocial socio-motivations than their peers in these scenarios, then they are likely to be misfits within their peer group.

The present study has provided initial evidence for specific socio-motivations held by bullies and victims in social scenarios that do not depict conflict or provocation. However, there is a clear need to consider a wider range of scenarios to gain a more complete understanding of the goals bullies and victims hold in the presence of a peer audience,

especially for girls. In order to achieve this, the socio-motivations that children hold in scenarios where one's image of cooperativeness is at stake were investigated.

3.2   **Study 2**

In Study 1, bullies and victims were demonstrated to hold specific socio-motivations in scenarios that could potentially influence peer perceptions of their proficiency. The socio-motivations of victims in particular differed from those reported in studies that have utilised conflict scenarios, justifying the need to explore the goals of bullies and victims in a wider range of scenarios. It was contended that the proficiency scenarios utilised in Study 1 lacked contextual relevance for girls to be concerned with their social image. Accordingly, in the present study, an additional scenario type was included, where one's self-image is again at stake, but this time in relation to an image of cooperativeness. On the basis of Study 1, it is predicted that the new scenarios will once again distinguish the socio-motivations of bullies and victims, especially in girls.

Girl bullies have been reported to develop a perception of popularity among their peers (Cillessen & Mayeux, 2004; LaFontana & Cillessen, 2002; Sijtsema et al., 2009), and may use their social status to achieve dominance over their peers (Salmivalli et al., 2000; Vaillancourt et al., 2003). Accordingly, it is expected that they will hold outcomes-focused motivations for behaving cooperatively, namely with the aim of achieving popularity. In order for cooperative behaviour to achieve popularity however, it needs to be socially recognised. Thus it is predicted that bullying in girls will also be associated with a socio-motivation for self-presentation in cooperative scenarios.

The socio-motivations of boy bullies in the same scenarios are harder to predict. The previous study indicated that boy bullies of Primary school age do not appear to utilise social image as a direct means of achieving dominance (see also Sijtsema et al., 2009), so they are not expected to be motivated to behave cooperatively for instrumental or self-presentational ends. Accordingly, while it is predicted that bullying will be associated with outcomes-focused socio-motivations in the proficiency scenarios (as was reported in Study 1), the same associations are not expected in cooperative scenarios.

The previous study found some indication that victimisation in girls was negatively related to prosocial motivations. It was posited that girls that hold little concern for prosocial ends may become social misfits in their peer group. In line with this theory, it is predicted that victimisation in girls will be negatively related to prosocial socio-motivations in both scenario types here. Moreover, it is hypothesised that girl victims will fail to appreciate the self-presentational consequences of the situation, hence victimisation in girls is expected to be negatively related to self-presentational socio-motivations in cooperative scenarios.

In Study 1, it was reported that boy victims hold an inappropriate prosocial socio-motivation in proficiency scenarios. Two explanations for this finding were put forward: firstly, that boy victims place notable importance on cooperative behaviours, perhaps as a means of preventing future harassment (see Schuster, 2001); and secondly that boy victims fail to endorse socio-motivations appropriate to social settings (in accordance with Taylor & Gabriel, 1989, cf Crick & Dodge, 1994). In order to shed light on this association, the present study assessed whether boy victims continue to hold prosocial socio-motivations in scenarios where they are appropriate for the situation. If boy victims hold low prosocial concern in cooperative scenarios it would suggest that they are unable to apply appropriate social goals,

but if they hold high prosocial concern it would imply that boy victims do attach specific importance to behaving cooperatively, but that this does not offer them protection from harassment.

3.2.1   Method

Participants

The sample consisted of 55 children from one Year 3 and one Year 4 class in a middle-class Primary school in an urban neighbourhood. The Year 3 class consisted of 12 boys and 14 girls; the Year 4 class consisted of 17 boys and 12 girls. The dates of birth of these children were not made available by the school so it is not possible to report on the mean age of participants, although the range for these year groups is between 7 and 9 years. The vast majority of children were Caucasian, and all were native English speakers. Consent for participation was obtained via a letter sent home to parents that informed them of the experimental procedure and gave them the option to opt their child out of the study. Data was collected in the autumn term of 2007.

Measures

The bullying questionnaire and social understanding (faux-pas) task remained consistent with Study 1. However, three display rule stories that depicted a cooperative behaviour were added to the socio-motivation task. A pilot study indicated that the prosocial display rule stories utilised by Banerjee and Yuill (1999a, 1999b) produced little variance in explanations given by 7 to 9-year-olds. Consequently, new stories were devised that specifically focused on a story character masking their emotions so as to appear cooperative to their peers. For example:

Andrew/Andrea is playing dressing-up with his/her friends. Andrew/Andrea really hates playing the patient so gets out the doctor outfit. (S)he is about to put it on when one of her friends says 'Oh, there's the doctor costume. I want to play doctor, can I have it?' Andrew/Andrea is really annoyed about having to play patient again but smiles and says 'Of course you can, I wanted to play the patient anyway.'

Consistent with Study 1, children were then asked: *Why does Andrew/Andrea say that (s)he wants to play the patient?*

Scoring

The bullying/victimisation questionnaire was scored in the same way as in Study 1. Nominations were tallied up to obtain scores for physical bullying, relational bullying, physical victimisation and relational victimisation. Scores were again standardised within class for subsequent analysis. Consistent with Study 1, faux-pas scores again ranged from 0 to 4. Four socio-motivation scores (outcomes-focused, prosocial, self-presentational, and residual) were obtained for each story type. As there were three scenarios for each type, socio-motivation scores ranged from 0 to 3 for each of the four categories.

Design and procedure

As in Study 1, children were seen individually by a male experimenter and completed the entire set of measures in one 30 minute session.

3.2.2   Results

First, the descriptive statistics of bullying and victimisation are reported on then the associations between bullying/victimisation, faux-pas scores and socio-motivations for each

scenario type are detailed. Next, the scenario-specific socio-motivations provide the best predictors of bullying and victimisation after allowing for mental-state understanding are determined.

Bullying and victimisation scores

In Study 1, children who received several victimisation nominations were not also nominated by their peers as engaging in aggressive, bullying behaviour. However, in the present study, two boys scored more than one standard deviation above the mean in *both* bullying and victimisation. In order to maintain consistency across the two studies, these two 'bully-victims' have been excluded from the sample in all subsequent analysis. Mean raw scores for bullying and victimisation (before exclusion of the bully-victims) are displayed in Table 3.6.

Table 3.6: *Mean (SD) bullying and victimisation nominations by sex (bullying nominations ranged from 0-39 in boys and 0-16 in girls, victimisation nominations ranged from 0-26 in boys and from 0-20 in girls), and year group*

	N	Bullying		Victimisation	
		Physical	Relational	Physical	Relational
Boys	29	3.03 (7.50)	3.83 (5.13)	3.97 (3.62)	3.66 (5.11)
Girls	26	1.92 (2.02)	3.31 (4.14)	2.08 (2.86)	4.92 (5.42)
Year 3	25	3.36 (7.85)	3.72 (4.95)	3.72 (4.05)	3.68 (4.14)
Year 4	30	1.80 (2.51)	3.47 (4.48)	2.53 (2.67)	4.73 (6.05)
Total	55	2.51 (5.60)	3.58 (4.65)	3.07 (3.39)	4.25 (5.25)

A series of independent 2(sex) x 2(year) ANOVAs (with bully-victims excluded) were carried out to identify any effects of gender or year group on either form of bullying and

victimisation. The ANOVA revealed no sex differences in levels of physical or relational bullying. However, boys scored significantly higher on scores of physical victimisation than girls [F(1,49)=6.00, p=.02]. There were no differences between year groups in bullying or victimisation scores.

Social understanding and display rule explanations

Mean scores for the faux-pas and socio-motivation task are displayed in Table 3.7. A series of mixed 2(sex) x 2(year) x2(story type) ANOVAs were run for each dependent variable (faux-pas scores, and outcomes-focused, prosocial, self-presentational and residual socio-motivations) to determine whether there were any gender or year group effects on faux-pas and socio-motivation scores, and whether certain socio-motivations were preferred in certain scenarios. Analysis revealed that girls performed better on the faux-pas task than boys [F(1,49)=3.66, p=.06] and that Year 4 children performed better than Year 3 children [F(1,49)=8.23, p=.01]. There were no significant sex or year differences in display rule explanations. The ANOVA also indicated that there were significantly more prosocial explanations [F(1,49)=16.75, p<.01], less self-presentational explanations [F(1,49)=26.81, p<.01] and less residual explanations [F(1,49)=4.76, p=.03] given to cooperative display rule scenarios than to proficiency scenarios.

Table 3.7: *Mean (SD) faux-pas and display rule scores by category by sex, year group and story type*

	N	Faux-pas score	Socio-motivations			
			Outcome	Prosocial	Self-presentation	Residual
Boys	27	2.62 (1.40)	1.11 (0.56)	0.76 (0.53)	0.83 (0.72)	0.35 (0.52)
Girls	26	3.12 (1.11)	1.00 (0.75)	0.75 (0.90)	0.90 (0.77)	0.50 (0.69)
Year 3	25	2.36 (1.38)	1.17 (0.58)	0.54 (0.67)	0.92 (0.89)	0.58 (0.64)
Year 4	28	3.27 (1.05)	0.97 (0.71)	0.93 (0.73)	0.83 (0.60)	0.29 (0.56)
Total	53	2.85 (1.28)	1.06 (0.66)	0.75 (0.72)	0.87 (0.74)	0.42 (0.61)
		Proficiency Stories	0.91 (0.95)	0.38 (0.71)	1.30 (1.10)	0.55 (0.85)
		Cooperative Stories	1.21 (0.95)	1.13 (1.09)	0.43 (0.75)	0.30 (0.57)

The main analysis is concerned with the associations between bullying/victimisation and the dependent variables. As different patterns in the scenario-specific socio-motivations associated with bullying and victimisation were expected in boys and girls, the remaining analysis was split by gender. The intercorrelations among all measures are displayed in Table 3.8. As in Study 1, bullying in boys was positively associated with outcome-focused socio-motivations in proficiency scenarios. Bullying was also negatively associated with self-presentational socio-motivations in the same scenarios. As expected, there were no significant associations between bullying and any of the socio-motivations in cooperative scenarios, although an association neared significance between physical bullying and a prosocial socio-motivation in cooperative scenarios. In girls, consistent with the findings of Study 1, an association neared significance between physical bullying and outcomes-focused socio-motivations in proficiency scenarios. In cooperative scenarios the expected association between outcomes-focused socio-motivations and relational bullying was not apparent,

although it was in the expected direction (r=.28, p=.17). An unexpected *negative* association was, however, evident between physical bullying and self-presentational socio-motivations in cooperative scenarios.

In boys, replicating the findings of Study 1, victimisation was negatively associated with self-presentational socio-motivations in proficiency scenarios. Physical victimisation in boys was also negatively associated with self-presentational socio-motivations in cooperative scenarios. This suggests that boy victims are particularly unconcerned with their social image, even in front of a peer audience. Additionally an association between outcomes-focused socio-motivations and physical bullying neared significance. The association between victimisation and prosocial socio-motivations in both proficiency and cooperative scenarios was once more in a positive direction, but was not significant. In girls, relational victimisation was related to outcome-focused socio-motivations in proficiency scenarios. In cooperative scenarios, victimisation was associated with residual responses, and negatively related to the socio-motivation for self-presentation. This suggests that girl victims are less likely to offer a meaningful explanation for display rules in a cooperative setting.

Neither form of bullying was associated with faux-pas scores in either sex. While this was unexpected it does not necessarily imply that the bullies in this sample are not scoring well on the measure. In fact, the mean faux-pas score for the seven children who scored more than one standard deviation above the mean in physical or relational bullying scores was high (3.71 out of 4.00).

Table 3.8: *Correlation matrix for bullying/victimisation scores and all other measures in girls above and boys below the diagonal*

		1	2	3	4	5	6	7	8	9	10	11	12	13
1	Physical Bullying	-	.72**	.24	.37†	.09	.39†	.12	-.18	-.19	.26	.05	-.41*	-.11
2	Relational Bullying	.85**	-	.32	.38†	.12	.16	-.04	.08	-.25	.28	.01	-.27	-.21
3	Physical Victimisation	.22	.31	-	.91**	-.17	.16	-.12	-.23	.12	.05	-.15	-.24	.44*
4	Relational Victimisation	.03	.08	.75**	-	-.03	.36†	-.12	-.23	.06	.14	-.11	-.32†	.36†
5	Faux-pas scores	.23	.13	.12	.14	-	.15	-.23	.18	-.08	.21	.02	.04	-.35†
	Proficiency Scenarios													
6	Outcome-focused	.65**	.66**	.33†	.11	.33†	-	-.31	-.10	-.14	.14	.06	-.23	.01
7	Prosocial	-.19	-.24	.22	.26	-.09	-.46*	-	-.27	-.35†	-.43*	.51**	-.13	-.19
8	Self-presentation	-.40*	-.37†	-.49**	-.32†	.01	-.52**	-.16	-	-.61**	-.05	.05	.39*	-.38†
9	Residual	-.13	-.12	.07	.09	-.43*	-.13	-.04	-.58**	-	.24	-.34†	-.22	.55**
	Cooperative Scenarios													
10	Outcome-focused	-.06	-.04	-.12	-.11	-.29	-.24	-.14	.26	.05	-	-.65**	-.45*	.05
11	Prosocial	.33†	.32	.24	.14	.33†	.32†	-.16	-.07	-.26	-.62**	-	-.15	-.51**
12	Self-presentation	-.27	-.26	-.41*	-.21	-.43*	-.22	.17	.16	.01	-.14	-.40*	-	-.13
13	Residual	-.13	-.13	.22	.28	.33†	-.02	.16	-.29	.28	-.11	-.39*	-.12	-

†p<.10; * p<.05; **p<.01
N=27 for boys, and 26 for girls

Next, it was determined which scenario-specific socio-motivations were able to predict bullying and victimisation after allowing for variance in bullying and victimisation scores explained by faux-pas scores. In a series of regression models to predict physical bullying, relational bullying, physical victimisation and relational victimisation, faux-pas scores were entered first into block 1 of each model. Because relational bullying was associated with relational victimisation in girls it was important to ensure that any predictors included in models for relational bullying weren't explained by relational victimisation and vice versa. For the model of relational bullying in girls therefore, relational victimisation was included in the first block, and for the model of relational victimisation in girls, relational bullying was included in the first block. Next, bullying and victimisation scores were regressed on each of the eight scenario-specific socio-motivation scores (outcome-focused, prosocial, self-presentational, and residual scores in both proficiency and cooperative scenarios). Inclusion into the model was determined by stepwise criteria. Table 3.9 shows the results of these analyses for boys and Table 3.10 for girls. It is important to note that the ordering of dependent variables in the tables (from top to bottom) does *not* correspond to the order in which they were entered into the models.

The final models for predicting bullying and victimisation suggested distinctive patterns for boys and girls. In boys, bullying was predicted by outcomes-focused socio-motivations in proficiency scenarios only. Physical victimisation was predicted by a low self-presentational concern in both proficiency and cooperative scenarios. No socio-motivations were included in the model to predict relational victimisation in boys. In girls, physical bullying was predicted by a low concern for self-presentation in cooperative scenarios. No specific socio-motivations were included in the model to predict relational bullying, although it was inversely predicted by residual responses in cooperative scenarios. Finally, both

physical and relational victimisation scores in girls were predicted by residual responses in

cooperative scenarios.

Table 3.9: *Hierarchical regression analysis for socio-motivations as predictors of bullying and victimisation scores in boys after accounting for faux-pas scores (N=27). Note: only significant predictors are shown.*

		Physical Bullying	Relational Bullying	Physical Victimisation	Relational Victimisation
Block 1	ΔR^2	**.05**	**.02**	**.02**	**.02**
Faux-pas	β	.23	.13	.12	.14
Block 2	ΔR^2	**.37**	**.41**	**.33**	**n/a**
Proficiency scenarios					
Outcomes-focused socio-motivation	β	.64**	.68**		
Self-presentational socio-motivation	β			-.44*	
Cooperative scenarios					
Self-presentational socio-motivation	β			-.34†	

†p<.10; * p<.05; **p<.01

Table 3.10: *Hierarchical regression analysis for socio-motivations as predictors of bullying and victimisation scores in girls after accounting for faux-pas scores. (N=26)Note: only significant predictors are shown.*

		Physical Bullying	Relational Bullying	Physical Victimisation	Relational Victimisation
Block 1	ΔR^2	**.01**	**.16**	**.03**	**.15**
Faux-pas	β	.09	.13	-.17	-.07
Relational bullying	β				.39*
Relational victimisation	β		.38*		
Block 2	ΔR^2	**.17**	**n/a**	**.17**	**.20**
Cooperative scenarios					
Self-presentational socio-motivation	β	-.42*			
Residual responses	β		-.40†	.43*	.49*

3.2.3   Discussion

The analysis of the socio-motivations associated with bullying and victimisation has identified distinct patterns across both gender and story type. As predicted, bullying and victimisation were predicted by specific socio-motivations, but only in scenarios that could potentially influence peer perceptions of their proficiency in boys (with the exception of an inverse association between physical victimisation and a socio-motivation for self-presentation in cooperative scenarios), and only in scenarios that could potentially influence peer perceptions of their cooperativeness in girls. The associations between bullying and victimisation and scenario-specific socio-motivations reported in the present study are discussed in relation to the background literature, before some directions for future research are suggested.

The association reported in Study 1 between bullying in boys and outcomes-focused socio-motivations in proficiency scenarios was replicated but, as predicted, no associations were evident between bullying and the socio-motivations in the cooperative scenarios. Again, it is argued that boy bullies are motivated by providing themselves the best outcome from the situation, and are concerned with maintaining their social dominance by avoiding certain outcomes such as getting picked on. Also consistent with Study 1, bullying was negatively associated with a self-presentational socio-motivation in proficiency scenarios, indicating that bullies are more concerned with maintaining social dominance in terms of concrete outcomes rather than by their image of social competence (a similar position to that proposed by Arsenio & Lemerise, 2001). The lack of associations between bullying and the socio-motivations in cooperative scenarios suggest that they do not provide a context for boy bullies to achieve or maintain levels of social dominance.

It was hoped that the introduction of the cooperative scenarios would provide a suitable context for girl bullies to express their motivation for social dominance. Specifically, it was hypothesised that girl bullies would hold socio-motivations for the outcomes (to achieve social status through popularity) of cooperative behaviour as well as demonstrating a self-presentational concern. In fact, relational bullying in girls was found to be (non-significantly) negatively related to self-presentational socio-motivations in cooperative scenarios. However, relational bullying in girls was negatively related to residual responses in the same scenarios, suggesting that girl bullies reliably apply some meaningful socio-motivation behind cooperative behaviour. Further, although not included in the final model, associations between relational bullying and outcomes-focused socio-motivations in cooperative scenarios were in the expected direction (r=.28, p=.17), and the lack of

significance may be due, in part, to the small sample sizes and the generally low levels of bullying reported in girls.

The background literature suggests that girls use their social status (namely, perceived levels of popularity) to achieve dominance over their peers (Salmivalli et al., 2000; Vailancourt et al., 2003). It is therefore argued that the outcomes-focused explanations given to the cooperative behaviour in these scenarios is likely to demonstrate a pertinent concern for the implications of behaving cooperatively in the presence of a peer audience, specifically for their social status. This argument assumes that outcomes-focused socio-motivations in girl bullies represent a desire for popularity however, and in order to justify this assumption, further study is needed that specifically considers popularity as a distinct social goal.

If it is to be assumed that girl bullies are primarily concerned with achieving popularity when they behave cooperatively, some consideration must be given to the (non-significant) negative relationship between self-presentational motivations and bullying in cooperative scenarios. Two explanations for this are offered. Firstly, relational aggression may not necessarily be facilitated by perceived popularity. Although the two are often related (Pucket et al., 2008; Sijtsema et al., 2009), the causal direction could conceivably be reversed, with perceived popularity obtained through relational aggression. Although this position could explain why no associations were found between relational bullying and self-presentational socio-motivations in cooperative scenarios, it is unlikely to be validated. As Xie, Swift, Cairns, and Cairns (2002) note 'a rejected child cannot effectively exert influence when the vehicle of harm is other people' (cf Puckett et al., 2008, p564). Similarly, Salmivalli et al. (2000) suggest that effective relational aggression requires at least average to positive peer status. Alternatively, the lack of association between relational bullying and a socio-

motivation for self-presentation here may simply imply that self-presentational awareness is assumed when one is using cooperative behaviour to achieve popularity. In other words, any tendency towards self-presentation in bullies might be as a by-product of an overarching concern for the outcomes of the situation. Indeed, the outcomes-focused explanations given by girl bullies in the present study may have reflected this. Again, future research that specifically considers popularity as a social goal alongside the scenario-specific socio-motivations would shed light on this position.

With regard to victimisation in boys, it was hoped that the cooperative scenarios would provide a context by which it could be determined whether boy victims place particular importance in the prosocial implications of their behaviour (as implied by Schuster 2001), or whether victims endorse goals that are inappropriate to the social setting (in accordance with Taylor & Gabriel, 1989, cf Crick & Dodge, 1994). In fact, the results of the present study provided evidence to support both positions. Although the associations were non-significant, there were positive associations between prosocial socio-motivations and both forms of victimisation in boys in proficiency and cooperative scenarios. This suggests that victims hold some degree of prosocial motivation behind their social behaviours in non-conflict settings. However, in both scenario types victims demonstrated a lack of concern for self-presentation. This implies that victims do not hold self-presentational concern behind their behaviour despite being in the presence of a peer audience, and indicates that they may not endorse suitable goals in a social context.

The absence of clear relations between victimisation in boys and social goals may reflect the importance of some subtle considerations. Schuster (2001) suggests that boy victim's cooperative behaviour can be seen as evidence of a submissive nature. Further,

Ojanen et al. (2007) reported that boy victims lack status goals, especially in scenarios of provocation. Explanations to display rules that were categorised as 'prosocial' could therefore indicate a strategy for harm avoidance, by means of not upsetting peers. Responses were categorised as prosocial if they made explicit reference to the feelings of others, but various responses referred to 'not making the others upset' or 'not making the others angry', which is arguably more suggestive of an overall goal of harm avoidance (through fear of subsequent harassment). While there is plenty of evidence to suggest that victims are motivated by harm avoidance in conflict scenarios (e.g., Erdley & Asher, 1996; Veenstra et al., 2007), this is the first indication that they may also hold these goals in non-conflict settings. Further research is needed that specifically distinguishes a socio-motivation for harm avoidance in non-conflict settings to validate this position.

Alternatively, boy victims may hold prosocial goals because they want to be liked. Social maladjustment has been linked with goals that involve wanting to be liked (Crick & Dodge, 1992), and wanting to improve social competence (Taylor & Asher, 1989, cf Crick & Dodge, 1994). As such, associations between prosocial socio-motivations and victimisation may sometimes be indicative of self-enhancement, rather than of a general concern for the group to get on well together. Again, further research is needed that distinguishes the socio-motivation of concern for the group's happiness to test this hypothesis.

Finally, focus turns to the socio-motivations in girl victims. Analysis found few meaningful associations here, but the regression models found both forms of victimisation to be predicted by residual responses in cooperative scenarios. This suggests that girl victims are poor at identifying meaningful motivations behind cooperative behaviour. Accordingly, they could be argued to be less likely to engage in cooperative behaviours, placing them out of

sync with their non-victimised same sex peers. Although the associations are fairly small, prosocial socio-motivations were negatively associated with victimisation in both scenario types offering further support to this position. Boivin, Dodge, and Coie (1995) reported that peer preference is negatively affected by low levels of positive interactive behaviour in peer groups where such behaviour is high (as it often is in groups of girls; see Rose & Rudolph, 2006), and low motivations for prosocial behaviour might provide the critical precursor to low levels of interactive behaviour. Further research is needed to validate this position. Specifically, it would be important to determine whether girl victims are generally unconcerned with behaving prosocially.

3.3 Conclusion

The results reported in these two studies have provided important insight into the motivations held by bullies and victims. Bullies and victims have been demonstrated to hold distinct sets of motivations, their motivations appear to vary dependent upon the situation they are in, and there are gender differences in the socio-motivations of bullies and victims. While the research has provided a sound foundation for assessing scenario-specific socio-motivations in bullies and victims, there are many questions left unanswered. Further research is required to specifically distinguish the potentially prosocial motivations held by victimised boys, and there is need to consider whether more general interpersonal goals prove to be better predictors of bullying and victimisation in girls. Specifically research should be directed at determining whether girl bullies place high importance on achieving popularity, and whether girl victims hold low concern for behaving prosocially.

The findings reported here may also offer direction for effective intervention and prevention strategies to combat bullying in schools. Boy bullies of this age appear to be less concerned with achieving social dominance in settings of cooperative behaviour. Such a setting could therefore be employed to develop the interpersonal skills of bullies in a more positive way. While the specific socio-motivations of boy victims are less clear, girl victims struggle to identify the motivations behind cooperative behaviour. Intervention programmes could help victims to understand the positive consequences of cooperative behaviour and leave them less isolated from their peers. The contributions that the present empirical work can offer to intervention strategies is dealt with in much greater detail at the end of the thesis, in Section 7.5.

Chapter 4:   Gender Differences in Global and Scenario-Specific Social Goals Associated with Bullying and Victimisation

There is very limited literature that considers the socio-motivations of proactively aggressive bullies, and even less that considers the socio-motivations of their victims. What does exist suggests that bullies are motivated by instrumental ends, focused on what they can obtain from a given situation rather than building positive relationships (Lochman et al., 1993; Erdley & Asher, 1999). Non-aggressive victims may also endorse instrumental socio-motivations, but specifically towards harm avoidance (Erdley & Asher, 1996). However, the results of the previous studies have shown some indication that associations between bullying, victimisation and children's social motivations may vary dependent upon the context of the social situation as well as on the gender of the child. Studies 3 and 4 aim to provide clarification as to the associations between children's situation-specific socio-motivations and bullying/victimisation that were reported in Studies 1 and 2, and to consider whether scenario-specific socio-motivations or global social goals offer the best model for predicting bullying and victimisation in Primary school children.

As outlined in the previous chapter, the display rule task provides a window into which socio-motivations can predict bullying and victimisation in a variety of social situations. In studies 1 and 2, scenarios were utilised wherein a story character masks their true feelings to enhance their image of proficiency (e.g., by not looking like a wimp) and to give a social image of cooperativeness (e.g., by fitting in with what others are doing). By asking the children why they thought the character had behaved in that way, it was possible to to infer what motivates them in a variety of social situations.

In Studies 1 and 2, and in line with the existing literature, it was reported that bullying in boys was associated with outcomes-focused socio-motivations in scenarios where one's social image of proficiency was at stake. However, the same association was not evident in scenarios that concerned one's social image of cooperativeness. In girls, the association between relational bullying (the prevalent form of aggression in girls) and outcomes focused socio-motivations was not significant, but was stronger in the cooperative scenarios than in the proficiency scenarios. In other words, there appear to be scenario-specific sex differences in the socio-motivations held by bullies and victims. There are two possibilities here: either the proficiency scenarios are providing a specific setting whereby boy bullies are motivated by outcomes, and cooperative scenarios are providing a specific context where girls are motivated by outcomes, or bullies of either sex may hold generalised interpersonal motivations (such as for social dominance) that are more or less expressible in the different scenario types explored. In the latter case, the sex differences reported in the associations between socio-motivations and bullying/victimisation are explained by the differing sex-relevance of the scenario context. In order to investigate the validity of the two positions, it follows to assess children's general interpersonal goals alongside their scenario specific socio-motivations. Essentially, the aim was to provide insight into whether scenario specific or more general social goals provide the best predictors of bullying and victimisation, with particular consideration given to potential sex differences.

While the relationship between outcome-focused socio-motivations and bullying reported in Studies 1 and 2 was anticipated, the negative associations between scores of bullying and a socio-motivation for self-presentation were not. Again, the association was stronger for boys in the proficiency scenarios and for girls in the cooperative scenarios. Each of the scenarios utilised in the previous studies depicted a scenario where the story

character's social image was at stake. Bullies have been widely reported to be motivated by social dominance (Hawley, 2003; Kiefer & Ryan, 2008; LaFontana & Cillessen, 2002) and utilise a reputation for strength and popularity to achieve it (Juvonen & Galvan, 2009; Sijtsema et al., 2009; Vaillancourt et al., 2003). One would therefore expect them to have an acute self-presentational awareness in scenarios that involve a peer-audience, rather than the negative relationship reported here.

Thus, at present, results suggest that bullies do not hold immediate concern with their social image. While these results could have occurred because of the age range of the sample - the literature that associates bullying with social dominance notes that the association grows stronger with adolescence (Pellegrini, 2002) - an alternative explanation is that the scenarios used to assess social goals do not provide a salient context for bullies to be concerned for their social image. None of the stories depicted a scenario whereby bullies could directly affect their *perceived* popularity. Therefore their focus may simply have been on avoiding negative outcomes rather than on shaping their public self-image per se.

The present study aimed to investigate this further. Firstly it was considered whether bullying in either sex was predicted by a general desire for popularity in a sample of Primary school children. Arsenio and Lemerise (2001) posit that if the desire for social dominance in certain situations is strong, bullies are less likely to be concerned with whether they are considered socially competent by others. However, it is unlikely that the bully will needlessly sacrifice social approval. Because of the age range of the participant sample, it is hard to predict whether bullying will be related to a desire for popularity in either sex. Nonetheless, given the almost exclusively relational nature of bullying in girls, it is expected that they will place more importance on maintaining an image of social status through a perception of

popularity than boys. Indeed, in samples of Primary school children, boys are generally more physically aggressive than girls, less likely to engage prosocially (for a review, see Gifford-Smith & Brownell, 2003), and more likely to be openly self-proclaimed bullies (Veenstra et al., 2007). This would imply that their social dominance is less reliant upon a positive social reputation and an image of popularity, and more upon an assumed physical superiority.

Secondly, the current study assessed whether a desire for popularity is associated with a socio-motivation for self-presentation in any of the story types. If it is, it suggests that the display rule scenarios provide a context where children are concerned with their social image because they hope to achieve/maintain a perception of popularity. Because girls engage in more cooperative play (Rose & Rudolph, 2006), it is predicted that girls who desire popularity will be aware of how others perceive their cooperative behaviour. Therefore it is expected that a desire for popularity will be related to a self-presentational concern in cooperative scenarios in girls. Boys who desire popularity on the other hand are likely to believe that their social image is more strongly influenced in social scenarios where their proficiency is on view (i.e., how strong they are, or how clever they are). Accordingly, if proficiency scenarios provide a context where boys seek to enhance/protect their social status, it is hypothesised that a desire for popularity will be related to a self-presentational concern in proficiency scenarios in boys.

While a picture is starting to develop of how socio-motivations can be used to predict bullying, the nature of the associations between victimisation and socio-motivations reported in Studies 1 and 2 is far from clear. The limited literature on the social goals of victims suggests that they are primarily concerned with avoiding harassment. Erdley and Asher (1996) did not consider victims of bullying specifically but identified a group of children who

indicated that they would withdraw from ambiguous provocation. The researchers reported these withdrawn children as endorsing goals of avoidance. Further, Veenstra et al. (2007) describes victimised children as feeling vulnerable and as viewing interpersonal situations as stressful and anxiety producing. Victims are also likely to feel that they have little power in social situations resulting in inhibited status goals (Keltner, Gruenfeld, & Anderson, 2003), lending further support for victims as endorsing a focal goal of harm avoidance (Juvonen & Graham, 2001; Olweus, 1978).

Because the scenarios utilised in Studies 1 and 2 did not depict interpersonal conflict, they may not have offered a context whereby a goal of avoidance or protecting oneself from future harassment provided a meaningful social goal. Nor did the socio-motivation categories distinguish such goals. In the present study, this was remedied through the introduction of a third scenario type whereby protecting oneself from future harassment is a pertinent concern. Consistent with the other display rule scenarios, the story character again masks their true emotions but this time towards a group of children who are potential aggressors. An additional socio-motivation category of harm avoidance is also included so that children could indicate that they believed the story character masked his/her true feelings because '(s)he was scared the others would pick on him/her'. In the present study, it was investigated whether victimisation is associated with a socio-motivation for harm avoidance in any or all of the scenario types. Because the proficiency and cooperation scenarios do not provide a context whereby one might need be immediately worried about subsequent peer harassment, relationships between victimisation and the harm avoidance socio-motivation are not expected in either sex. However, the same association is hypothesised to be evident in the self-protection scenarios.

Studies 1 and 2 revealed some meaningful associations between scenario-specific socio-motivations and victimisation. In contrast to the aggression literature which finds peer rejected children to endorse instrumental goals (see Crick & Dodge, 1994 for a review), victimisation was not related to outcome-focused goals, suggesting that in relation to their social motivations, peer-rejected and victimised children do not form a homogenous group, and that the goals of non-aggressive victims should be considered independently. Additionally, in Study 1, victimisation in boys was positively related to the prosocial socio-motivation category. This was an unexpected finding, not least because socially rejected children have been widely reported to act disruptively (Schwartz et al., 1998; Pope & Bierman, 1999), displaying little prosocial behaviour (Besag, 1991; Owens et al., 2000). Moreover, victimised children have been reported to distrust peers (Andreou, 2004), and foster negative beliefs about peers' social orientation (Salmivalli & Isaacs, 2005).

There are various explanations for this finding. Firstly, the association might be the consequence of a socio-motivation category that grouped all references to another's feelings as 'prosocial.' Explanations that referred to 'not wanting to make the others angry' or 'not wanting to upset the others' may be more indicative of a concern for preventing potential conflict than at behaving prosocially. By including a socio-motivation category for avoiding harassment participants will have a more meaningful response option should their primary concern be for self-protection.

Secondly, this unexpected association may have been an indication that boy victims are particularly concerned with the feelings of others. Indeed, Malti, Perren and Buchmann (2010) report that at the onset of victimisation, victims display more emotional responses to the emotional state of another suggesting that they may possess an acute affective empathy.

In order to test this in the present study a socio-motivation category that specifically referenced a concern for 'not hurting the others' feelings' was included. This was distinguished from a socio-motivation category that was explicitly concerned with relationship building – specifically, for wanting 'everyone to play together happily'.

An overactive affective empathy might serve to exaggerate victims' negative experience of provocation regardless of whether it was malicious or not. Boys are generally more aggressive in their behaviour than girls (Maccoby & Jacklin, 1980) and are also more likely to be involved in rough and tumble play (for a review see Rose & Rudolph, 2006). Consequently, a heightened empathic response to these scenarios could cause boys to withdraw from such gender-specific social engagement and isolate them from their peer group, especially if they react to their emotional arousal. It is therefore expected that victimisation in boys will be associated with a concern for others' feelings but *only* in proficiency scenarios. A concern for others' feelings in cooperative scenarios is not necessarily misplaced and victims would be expected to be specifically concerned with avoiding harassment in self-protective scenarios. As girls tend to prefer cooperative, non-assertive behaviours in peers anyway (Coie et al., 1990), any associations with a socio-motivation for others' feelings and victimisation across scenario types are not expected in girls.

Lastly, the association between prosocial socio-motivations and victimisation in boys might have occurred because victimised children who were also aggressive were excluded from the sample. While both aggressive and non-aggressive victims might *enact* less prosocial behaviour the latter often withdraw from social situations and may still hold a *desire* to be prosocial. Non-aggressive victims have been reported to experience feelings of

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hopelessness and anxiety in social situations (Malti et al., 2010), choosing to withdraw from situations which subsequently limits the opportunities for them to be seen engaging in positive social interaction. There are two questions here: Is an overactive concern for the feelings of others representative of a desire to be prosocial? And if not, do boy victims also hold an independent desire to behave prosocially?

In order to address these questions, a generalised measure of 'desire for prosociability' was included in the present study. In boys, because aggressive victims are removed from the sample, victims are not expected to consider prosocial behaviour as unimportant, but it is unlikely that they would hold more concern for behaving prosocially than their peers. In girls however, because prosocial behaviour is more normative, a lack of concern for prosocial behaviour might be detrimental to their social image and could result in peer-rejection and victimisation. Indeed, in Study 2, victimisation in girls was related to explanations that implied an inability to assign a meaningful motivation to cooperative behaviour. Hence it is predicted that relational victimisation in girls will be negatively associated with a desire for prosocial behaviour.

4.1 **Study 3**

4.1.1 Method

Participants

The sample consisted of 63 children from two Year 5 classes in a middle-class Primary school in an urban neighbourhood. Consistent with Studies 1 and 2, the three children who scored over one standard deviation above the norm for both bullying and

victimisation were excluded on the grounds that aggressive victims have been found to demonstrate a unique social-cognitive profile. Of the remaining sample, one class contained 11 boys and 20 girls, and the other 14 boys and 15 girls. The date of birth of these children was not made available by the school so it is not possible to report on the mean age of participants, although the range for this year group is 9 to 10 years. The vast majority of children were Caucasian, and all were native English speakers. Consent for participation was obtained via a letter sent home to parents that informed them of the experimental procedure and gave them the option to opt their child out of the study. Data was collected in the summer term of 2008.

Measures

Three tasks were administered in the present study: a bullying questionnaire, a social motivation task (the display rule task), and a desire for popularity and prosocial behaviour questionnaire.

Consistent with Studies 1 and 2, the bullying questionnaire asked children to nominate classmates they had seen engaging in particular behaviours. Nominations were limited to three per question. Questions were designed to measure both physical and relational behaviours associated with bullying and being bullied. The questionnaire consisted of two physical bullying items (threatening to hurt another child if they do not do something; hitting or kicking another child), two relational bullying items (spreading nasty stories about another child; stopping another child joining in games), two physical victimisation items (getting really shouted at by other children; being hit by other children), and two relational victimisation items (getting left out of things when someone is mad at them; getting called nasty names by other children). The order of the questions was initially randomised and then

kept in a fixed order throughout data collection. Each question was read by a male experimenter with clarification of any terms given when needed. Children nominated their classmates using code numbers that had been assigned to names on the class list and were reassured that neither the teachers nor their classmates could find out the answers they gave.

Factor analysis (with varimax rotation, 71.83% of variance explained) revealed two factors in boys: *bullying* (four items, loadings as expected and all higher than .80; α =.87) and *victimisation* (four items, loadings as expected and all higher than .72; α =.78). In girls, a four-factor model was supported (80.05% of variance explained): *physical bullying* (two items, loadings as expected and all higher than .80; α =.66); *relational bullying* (two items, loadings as expected and all higher than .80; α =.70); *physical victimisation* (two items, loadings as expected and all higher than .79; α =.50); and *relational victimisation* (two items, loadings as expected and all higher than .87; α =.68). For the sake of comparison between the sexes, the two types of bullying and victimisation (physical and relational) are considered independently throughout this analysis.

The social motivation task differed in two ways from that used in Study 2: a new story type was added, and a forced choice responding system was introduced. The new scenarios depicted a hypothetical story character that hides how they actually feel about a peer who has been singled out for harassment. For example:

> *Steve is on the bus coming home from school. He hears some children at the back of the bus talking about his friend, Michael. 'I hate Michael' one of the children says, 'he's really annoying and he smells!' Then he points to Steve and says, 'I've seen you playing with Michael, you're not his friend are you?' Steve does really like Michael, but says 'No, I do not like Michael at all.'*

As in Studies 1 and 2, in order to assess children's socio-motivations, they were then asked: *Why does Steve say he does not like Michael?*

The open-ended response system utilised in Studies 1 and 2 encountered a methodological concern: the display rule explanations regularly became difficult to categorise. Some explanations may have conceivably fallen into more than one category. While the experimenter always gave the child more time to be more specific in his/her explanation, it was difficult to encourage a category distinguishing explanation without potentially biasing the outcome. In cases where explanations could conceivably be scored into multiple categories, they were. However, this meant that scores of certain categories may have been boosted where the explanation did not fully represent the relevant socio-motivation. In order to avoid this occurrence, a fixed-choice response system was employed in Study 3.

Children were given a choice of five socio-motivations from which to choose: (a) '*Because he was worried how he would look to the others*' (self-presentational); (b) '*Because he was scared the others would pick on him*' (harm avoidance); (c) '*Because he wanted everyone to play together happily*' (concern for group's happiness); (d) '*Because he didn't want to hurt the others' feelings'* (concern for others' feelings); (e) '*Because he wanted to have the most fun'* (self-gain). Each response was accompanied by a stick man picture illustrating the socio-motivation. Children were instructed to *'Choose the answer that was* most *likely to explain why Steve said he didn't like Michael'*. Children heard two of these self-protective stories along with two proficiency stories and two cooperative stories carried over from Study 2. The order of the stories was initially randomised and then kept in a fixed order throughout data collection.

Children's desire for popularity and prosocial behaviour were assessed through a six-item questionnaire. These were as follows: (1) *' Is it important for you to have a lot of friends?'* (2) *'Is it important for you to be nice to other children?'* (3) *'Is it important for you that other children like you?'* (4) *'Is it important for you to behave well for others?'* (5) *'Is it important for you to be popular?'* (6) *'Is it important for you to act how others want you to?'* Answers were given on a four point scale: *Very; A little; Not really; Not at all*. Factor analysis (with varimax rotation, 56.43% of variance explained) revealed two factors: *concern for popularity* (items 1, 5, and 6; loadings higher than .61; α=.53) and *concern for prosocial behaviour* (items 2, 3, and 4; loadings higher than .65; α=.41).

Scoring

Bullying questionnaire: With each nomination counted as one point, scores were obtained for physical bullying, relational bullying, physical victimisation, and relational victimisation. These scores were then standardised within class.

Social motivations task: Scores ranging between 0 and 2 were obtained for each of the response categories in each scenario type.

Scores for children's desire for popularity/prosocial behaviour were obtained by taking the mean of their responses on the three corresponding items. Children who did not answer all three items relating to each factor were not given a score on this measure.

Design and procedure

Children were seen by class by a male experimenter. The class first undertook the bullying questionnaire and the concern for popularity/prosocial behaviour items before moving on to the stories. The entire set of measures took 30 minutes to complete.

4.1.2   Results

First the descriptive statistics for bullying and victimisation and the socio-motivations are detailed. Next, the associations between bullying/victimisation, the scenario-specific socio-motivations and the desire for popularity and prosocial behaviour scores are discussed and models to predict bullying and victimisation put forward.

Bullying and victimisation scores

Mean raw scores for bullying and victimisation are displayed in Table 4.1. A mixed 2(sex) by 2(type: physical or relational) ANOVA was run for both bullying and victimisation. There were no significant main effects of either sex or type on bullying, but an interactive effect between sex and type was evident [$F(1,56)=4.51$, $p=.04$]. The descriptive statistics indicate that girls have a clear preference for relational bullying over physical bullying, but the two forms occurred at similar levels in boys. There was no effect of sex or type on victimisation, nor any interactive effect between sex and type.

Table 4.1: *Mean (SD) bullying and victimisation nominations by sex (bullying nominations ranged from 0-12 in boys and 0-21 in girls, and victimisation nominations ranged from 0-12 in boys and 0-15 in girls).*

	N	Bullying		Victimisation	
		Physical	Relational	Physical	Relational
Boys	25	1.44 (2.80)	2.04 (2.73)	1.32 (2.36)	2.04 (2.49)
Girls	35	0.77 (1.31)	2.97 (4.15)	0.57 (0.85)	1.86 (3.22)
Total	60	1.05 (2.07)	2.60 (3.66)	0.87 (1.67)	2.02 (3.02)

Socio-motivations

Mean scores for desire for popularity and prosocial behaviour, and for each of the socio-motivations are displayed in Table 4.2. To investigate whether there were sex differences in socio-motivation preference, or whether some socio-motivations were generally preferred to others (across story types), a mixed 2(sex) by 5(socio-motivation: self-gain, harm avoidance, concern for others' feelings, concern for the group's happiness, self-presentation) ANOVA was carried out. A significant effect of socio-motivation was found [$F(4,248)=44.11$; $p<.01$]. Pairwise comparisons revealed that children were *less* likely to choose the socio-motivation of self-gain than all the other socio-motivations [$ps<.01$], and that children were *more* likely to choose the socio-motivation of harm avoidance than all other socio-motivations [$ps<.05$]. Additionally, the socio-motivation of self-presentation was significantly preferred to the socio-motivation of a concern for others' feelings [$p<.01$]. The analysis found no sex differences in socio-motivation preference.

Table 4.2: *Mean (SD) scores for desire for popularity and prosociability and socio-motivations by sex and story type*

	N	Desire for		Socio-motivation				
		Popularity	Prosocial	Self-gain	Harm avoidance	Group's happiness	Others' feelings	Self-presentation
Boys	25	2.53 (0.50)	3.51 (0.36)	0.24 (0.44)	2.16 (0.85)	1.20 (0.76)	1.00 (0.76)	1.40 (0.82)
Girls	35	2.39 (0.58)	3.40 (0.36)	0.14 (0.36)	2.09 (1.07)	1.14 (0.73)	0.94 (0.76)	1.69 (0.90)
Total	60	2.45 (0.58)	3.42 (0.40)	0.18 (0.39)	2.10 (0.97)	1.17 (0.74)	0.97 (0.76)	1.58 (0.87)
Proficiency Scenarios				0.07 (0.25)	0.58 (0.59)	0.15 (0.36)	0.43 (0.56)	0.77 (0.67)
Cooperative Scenarios				0.05 (0.22)	0.28 (0.45)	0.97 (0.71)	0.38 (0.52)	0.32 (0.54)
Self-protective Scenarios				0.07 (0.25)	1.25 (0.70)	0.05 (0.22)	0.15 (0.40)	0.48 (0.57)

Next, it was considered whether certain socio-motivations were preferred in certain story types. A series of one-way repeated measures ANOVAs were run, one for each scenario types (proficiency, cooperative, or self-protective), with the scores for each of the five socio-motivations within the relevant scenario entered as the dependent variables. A main effect of socio-motivation was evident in proficiency scenarios [$F(4,248)=16.58$, $p<.01$]. Pairwise comparisons (Bonferonni) revealed that the socio-motivations of self-presentation and harm avoidance were significantly preferred to the self-gain and group happiness socio-motivations in proficiency scenarios [$ps<.05$]. A main effect of socio-motivation was also evident in cooperative scenarios [$F(4,248)=23.21$, $p<.01$], with a concern for the group's happiness preferred to all other socio-motivations [$ps<.01$]. There were also differences between socio-motivation preference in self-protective scenarios [$F(4,248)=61.13$, $p<.01$], with the socio-motivation for harm avoidance significantly preferred to all other socio-motivations [$ps<.01$].

In order to investigate for sex differences in scores of desire for popularity and prosocial behaviour, a one-way MANOVA was carried out with sex as the independent

variable and desire for popularity and prosocial behaviour as the dependent variables. The MANOVA revealed no sex difference in either measure.

Next, the associations between bullying/victimisation, scores for desire for popularity and prosocial behaviour, and the socio-motivations are discussed. Consistent with Studies 1 and 2, and validated by the sex differences in physical bullying and physical victimisation scores, this analysis has been split by gender. Table 4.3 displays the intercorrelations between all measures for boys, and Table 4.4 the intercorrelations for girls. In boys bullying was positively associated with a socio-motivation for harm avoidance in proficiency scenarios. Additionally, bullying was strongly associated with a socio-motivation for self-gain in self-protective scenarios and negatively associated with a socio-motivation for harm avoidance in the same scenarios. An association between relational bullying and a concern for others' feelings in cooperative scenarios neared significance. Also in boys, victimisation was associated with a concern for others' feelings but not for a concern with the groups' happiness in proficiency scenarios. Consistent with Studies 1 and 2, victimisation was inversely associated with the socio-motivation of self-presentation in these scenarios. Additionally, victimisation was associated with a socio-motivation for self-presentation in self-protective scenarios. There were no associations between bullying/victimisation and a desire for popularity or prosocial behaviour.

In girls, there were no associations between bullying and any of the scenario-specific socio-motivations. There was, however, an association between both physical and relational bullying and desire for popularity scores. There were associations between physical victimisation and a socio-motivation for self-gain in cooperative scenarios and a socio-motivation for others' feelings in self-protective scenarios. Consistent with Study 2, a

negative association between relational victimisation and a socio-motivation for self-presentation neared significance in cooperative scenarios. Finally, there was a strong negative correlation between relational victimisation and desire for prosocial behaviour.

There were relatively few correlations between the global and scenario-specific social goals. In boys, a global concern for popularity was positively associated with a concern for others' feelings in proficiency scenarios but negatively with a concern for others' feelings in cooperative scenarios. Interestingly, there were no significant associations between the global goal for prosocial behaviour and a concern for others' feelings implying that the concern for others' feelings that was reported to be associated with victimisation in boys (both in the present study and also in Study 1) is unlikely to represent a general concern to behave prosocially. There was also a significant negative association between a concern for behaving prosocially and self-presentation in proficiency scenarios. In girls, there were no associations between the global goal for popularity and any of the scenario-specific socio-motivations, but there were significant associations between the global goal to behave prosocially and a scenario-specific socio-motivation for self-presentation in proficiency scenarios (negative), concern for the group's happiness in cooperative scenarios (negative), and self-presentation in cooperative scenarios (positive).

Table 4.3:*Correlation matrix for bullying/victimisation scores and all other measures in boys*

		1	2	3	4	5	6
1	Physical Bullying	-					
2	Relational Bullying	.75**	-				
3	Physical Victimisation	.11	.21	-			
4	Relational Victimisation	-.10	-.09	.55**	-		
5	Concern for popularity	.04	-.10	-.04	.01	-	
6	Concern for prosocial	.06	.09	.22	.22	.08	-
Proficiency Scenarios							
	Self-gain	.07	.20	.04	-.18	-.32	-.28
	Harm avoidance	.43*	.40*	.09	-.07	-.22	.25
	Group's happiness	-.11	-.23	-.20	-.01	-.25	.09
	Others' feelings	-.19	-.13	.40*	.53**	.46*	.28
	Self-presentation	-.18	-.19	-.34†	-.33†	.03	-.40*
Cooperative Scenarios							
	Self-gain	-.03	.21	.03	.19	.33†	.28
	Harm avoidance	-.12	-.16	.23	.02	.15	-.05
	Group's happiness	-.05	-.08	-.17	-.06	.13	-.13
	Others' feelings	.32	.35†	.14	.14	-.43*	.19
	Self-presentation	-.23	-.30	-.20	-.24	.04	-.11
Self-Protective Scenarios							
	Self-gain	.74**	.59**	-.05	-.28	.10	-.18
	Harm avoidance	-.45*	-.35†	-.31	-.23	.22	-.15
	Group's happiness	n/a	n/a	n/a	n/a	n/a	n/a
	Others' feelings	-.15	-.14	-.10	.05	-.32	.05
	Self-presentation	.17	.13	.43*	.38†	-.11	.25

†$p<.10$; * $p<.05$; **$p<.01$
N=25

Table 4.4:*Correlation matrix for bullying/victimisation scores and all other measures in girls*

		1	2	3	4	5	6
1	Physical Bullying	-					
2	Relational Bullying	.39*	-				
3	Physical Victimisation	.03	.25	-			
4	Relational Victimisation	.09	.15	.31†	-		
5	Concern for popularity	.39*	.43*	.05	.16	-	
6	Concern for prosocial	-.14	-.03	.23	-.56**	.08	-
Proficiency Scenarios							
	Self-gain	-.15	-.17	-.06	-.06	-.15	-.01
	Harm avoidance	.01	.20	.10	-.12	.06	.25
	Group's happiness	.14	-.18	.01	-.15	.15	.18
	Others' feelings	.00	-.24	.01	.00	.13	.10
	Self-presentation	-.03	.17	-.08	.20	-.18	-.39*
Cooperative Scenarios							
	Self-gain	-.04	-.08	.67**	.03	-.09	.19
	Harm avoidance	-.12	-.05	-.01	-.07	-.16	.19
	Group's happiness	.02	-.19	-.20	.18	-.17	-.37*
	Others' feelings	.08	.22	.05	.16	.10	-.13
	Self-presentation	.01	.11	-.06	-.30†	.26	.31†
Self-Protective Scenarios							
	Self-gain	-.09	-.16	-.12	-.05	.17	.13
	Harm avoidance	-.06	.09	-.18	.12	-.14	-.21
	Group's happiness	-.03	-.10	.14	-.13	.14	.15
	Others' feelings	.02	.00	.45**	.05	-.03	.14
	Self-presentation	.11	-.03	-.16	-.13	.08	.05

†p<.10; * p<.05; **p<.01
N=35

Lastly, the best overall models for predicting physical and relational bullying and victimisation were determined. Physical bullying, relational bullying, physical victimisation and relational victimisation were regressed on all the scenario-specific socio-motivations along with the desire for popularity and prosocial behaviour scores. These were all entered in the same block using stepwise methodology to determine inclusion into the final model. Table 4.5 shows the results of this analysis in boys, and Table 4.6 the results for girls. It is important to note that the order of the dependent variables in these tables (from top to bottom) is *not* indicative of the order that they were entered into the final model.

In boys, both physical and relational forms of bullying were predicted by the instrumental socio-motivation of self-gain, but only in self-protective scenarios. Although physical bullying in boys was also predicted by a low socio-motivation for self-presentation in proficiency scenarios, consistent with Study 2, no associations remained between bullying and socio-motivations in cooperative scenarios. As expected, victimisation was predicted by a concern for hurting the others' feelings rather than a concern for the groups' happiness in proficiency scenarios. Victimisation was also predicted by low socio-motivation for self-presentation in cooperative scenarios but no association remained between victimisation and a motivation for self-presentation in proficiency scenarios. Physical (but not relational) victimisation was additionally inversely predicted by a socio-motivation for self-gain in cooperative scenarios but positively predicted by a socio-motivation for self-presentation in self-protective scenarios. Finally, relational (but not physical) victimisation in boys was predicted by a lack of motivation for self-presentation in cooperative scenarios, and by a low desire for popularity.

There were notably less scenario-specific socio-motivations in girls. As hypothesised, both physical and relational bullying were predicted by a desire for popularity, with relational bullying also predicted by a socio-motivation for harm avoidance in proficiency scenarios and a socio-motivation for others' feelings in cooperative scenarios. Physical victimisation was predicted by a socio-motivation for self-gain in cooperative scenarios alone, while relational victimisation was predicted both by a low desire for behaving prosocially and a desire for popularity.

Table 4.5: *Stepwise regression analysis for socio-motivations as predictors of bullying and victimisation scores in* boys (*N*=25)*.* Note: only significant predictors are shown.

Scenario Type		Physical Bullying	Relational Bullying	Physical Victimisation	Relational Victimisation
Proficiency Scenarios					
Others' feelings	β			.72**	.90**
Self-presentation	β	-.30*	-.29†		
Cooperative Scenarios					
Self-gain	β			-.42*	
Self-presentation	β			-.48*	-.54**
Self-Protective Scenarios					
Self-gain	β	.79**	.63**		
Self-presentation	β			.37*	
General goal scales					
Desire for popularity	β				-.39*
Final Model	R^2	.63	.43	.53	.61

†p<.10; * p<.05; **p<.01

Table 4.6: *Stepwise regression analysis for socio-motivations as predictors of bullying and victimisation scores in* girls (*N*=35). Note: only significant predictors are shown.

Scenario Type		Physical Bullying	Relational Bullying	Physical Victimisation	Relational Victimisation
Proficiency Scenarios					
Harm avoidance	β		.35*		
Cooperative Scenarios					
Self-gain	β			.71**	
Others' feelings	β		.33*		
General goal scales					
Desire for popularity	β	.38*	.37**		.34*
Desire for prosocial	β				-.59**
Final Model	R^2	.15	.44	.51	.43

†p<.10; * p<.05; **p<.01

4.1.3   Discussion

Research into the social goals that are held by bullies and victims has tended to either assess their general social goals, or focus specifically on what motivates their (often aggressive) behaviours in response to conflict situations. Both have contributed to the understanding of the social-cognitive processes and biases that bullies and victims experience, but there has been no attempt to consider whether the influence of situation-specific socio-motivations and general interpersonal goals contribute independently or collectively to behaviours associated with bullying and victimisation.

Previous studies that have utilised conflict settings have widely reported that socially maladjusted, aggressive and peer-rejected children favour instrumental, outcomes-focused

goals of self enhancement (Lochman et al., 1993; Erdley & Asher, 1999). While this association was echoed in boy bullies, in the previous studies detailed in this thesis as well as in the present study, it was not supported in girls. Bullying in boys was associated with a motivation for harm avoidance in proficiency scenarios and self-gain in self-protective scenarios. Bullies were hypothesised to favour responses of self-gain over harm avoidance in the proficiency stories, but two explanations may offer insight to this finding. Firstly, children very rarely opted for the self-gain category in any scenario-type, suggesting the lack of association here might have been influenced by the semantics of the response category, with few children finding 'wanting to have the most fun' a salient option. Secondly, the association between harm avoidance and bullying in boys may indicate that boy bullies are more concerned with not getting picked on by others than they are by benefiting from the situation. Being picked on may be particularly detrimental to their image of social dominance and physical superiority in the proficiency scenarios, hence they show particular concern regarding this outcome.

In the cooperative scenarios, bullying was unrelated to outcomes-focused goals. As such these results provide further support that the goals of boy bullies may be situation-specific. Certain social situations may offer more benefit to (or threaten) their social dominance within their peer group and lead them to endorse different goals according to the social context. These findings also provide justification that it is important to consider the social goals of bullies outside of conflict situations. As proactive aggressors themselves (Coie, et al., 1991), bullies are likely to be instigators of conflict situations themselves and may well hold a unique set of social goals in conflict scenarios.

In Studies 1 and 2 a negative association was reported between bullying and a socio-motivation for self-presentation (in the proficiency scenarios in boys and in the cooperative scenarios in girls). In the present study these associations were not significant. Additionally, in boys, bullying was not related to the desire for popularity measure. Although these findings fail to replicate Vaillancourt et al.'s (2003) estimation that bullies desire social status, they are not without previous empirical support. In contrast to the 14-15 year-olds, Sijtsema et al. (2009) reported that, in their sample of 10-11 year olds, boy bullies did not hold status goals and were not perceived as popular by their classmates. Although boy bullies may still be motivated by social dominance, the results indicate that they are not especially concerned with maintaining an image of popularity to achieve it, at least not at 9-10 years of age. Further, the desire for popularity measure was not related to a self-presentational concern in any of the scenario types. This would suggest that for boys, a self-presentational concern in a given scenario is not indicative of a global concern for popularity, and that they may be more concerned with their image of toughness than their perceived social status.

In terms of an overall model to predict bullying in boys, the regression results indicated physical and relational bullying to be predicted by a motivation for self-gain in harm avoidance scenarios and by a lack of self-presentational concern in proficiency scenarios. The association between bullying and self-protection in proficiency scenarios disappeared, most likely as it shared the variance in bullying scores explained by a socio-motivation for self-gain in harm avoidance scenarios. The negative association between self-presentation and bullying in proficiency scenarios serves to reinforce the theory outlined in the previous paragraph, specifically that boys of this age who engage in bullying behaviours, do not consider their social image per se in pursuing social dominance, and are instead focused on ensuring a beneficial (or non-costly) situational outcome. Finally, the regression

results offer further support to the importance of considering situation-specific socio-motivations in predicting bullying in boys.

A different pattern was evident for bullying in girls. While there were few associations with the scenario-specific socio-motivations, bullying was positively predicted by a desire for popularity. These findings are consistent with Sijtsema et al. (2009), who found 10-11 year old girl bullies maintained a perception of popularity amongst their peers, in contrast to their male counterparts. Girls tend to rely upon relational aggression to achieve dominance over their victims, hence it follows that they are specifically concerned with their perception of popularity. As a perception of popularity is likely to be obtained over a longer period of time than physical dominance (which can be contributed to in individual situations, such as winning a fight with a peer), it follows that the social goals of girl bullies are less influenced by individual situations.

In accordance with the above argument, there were no significant associations between the desire for popularity measure and any of the scenario-specific socio-motivations in girls. The largest correlation was with a socio-motivation for self-presentation in cooperative scenarios, which though non-significant, was in a positive direction. Girls tend to be more interpersonally orientated than boys (Crick & Dodge, 1994), with girls who are perceived as popular described as high in cooperative behaviours as well as in relational aggression by their peers (Puckett et al., 2008). It is therefore concluded that girls who have a desire to be popular most likely understand the need to be perceived as behaving cooperatively in the cooperative scenarios, hence the association nearing significance. Indeed, relationally aggressive girls who are also seen as demonstrating cooperative

behaviours and leadership qualities have been found to achieve a strong perception of social status among their peers (Puckett et al., 2008).

The scenario-specific socio-motivations associated with victimisation are in many ways contrasting to those associated with bullying. Analysis focused on victims who were not also aggressive and provided further evidence that male victims do not demonstrate outcomes-focused goals in any of the scenario types. As one of these goals specifically related to harm avoidance, this was a somewhat surprising finding. Indeed, previous research on the social goals of victims, points to victims as seeking to protect themselves from future harassment (Erdley & Asher, 1996; Veensta et al., 2007; Juvonen & Graham, 2001). Even in scenarios where the story character was in the presence of potential future harassers, victimisation was unrelated to the socio-motivation of harm avoidance, although they were concerned about the way they looked to others in these situations. It is highly plausible that victims directly seek harm avoidance only when confronted with conflict. Indeed, Crick and Dodge (1989) reported that peer rejected children do not rate themselves as being competent in dealing with conflict effectively, preferring instead to exact revenge (in the case of aggressive-rejected children; see also Camodeca & Goossens, 2005) or to withdraw from the provocation altogether (Erdley & Asher, 1996).

A body of research has also indicated that victims may be poor at social understanding, and this may also hold for social goals. Dodge et al. (1989) proposed that successful social engagement requires children to manage multiple goals dependent upon situation. Taylor and Gabriel (1989, cf Crick & Dodge, 1994) provided some empirical evidence of this, finding socially maladjusted boys to be unable to switch their goals to adapt to their circumstance. A similar pattern seems to be evident here. In the proficiency scenarios,

children opted for the socio-motivation of self-presentation more than any other socio-motivations, yet victimisation in boys was negatively associated with self-presentation. Similarly, in cooperative scenarios, a concern for the groups' happiness was preferred overall but was negatively related to victimisation (although not to significant levels), and likewise for the socio-motivation of harm avoidance in self-protection scenarios.

A subsidiary aim of the present study was to resolve the unexpected association between prosocial socio-motivations in proficiency scenarios and victimisation in boys reported in Study 1. Three possible explanations for this finding were put forward. Firstly, that victims' concern for others' feelings underlies a general concern for harm avoidance. Because victimisation was unrelated to harm avoidance in proficiency scenarios, this position can be rejected. Secondly, it was questioned whether victims were prosocially motivated for the well-being of the group, or whether they held a specific concern for others' problems. Again, victimisation was unrelated to a concern for the group's happiness so this position can also be rejected. Further, victimisation in boys was unrelated to a general desire to behave prosocially. Finally, it was posited that victims may experience an overactive empathic response to others' feelings. The present findings offer some support to this position, as a socio-motivation for others' feelings in proficiency scenarios significantly predicted victimisation in boys. Malti et al. (2010) reported that children who score higher in empathy report more emotional symptoms in concordance with another's emotional state, and Zahn-Waxler et al. (1991) explain that their increased empathy may create great concern for others' problems, promoting feelings of helplessness and anxieties. It is highly plausible that a pertinent concern for others' feelings could result in less assertive behaviour and cause them to restrain from the rough and tumble play more characteristic of social interaction in boys

(see Rose & Rudolph, 2006). Indeed, the lack of status goals that are likely to accompany withdrawn behaviours has been related to victimisation in boys (Sijtsema et al., 2009).

There was no association evident between relational victimisation and a concern for others' feelings in girls. Conversely, the results imply that girls who show little desire to behave prosocially experience more relational victimisation. While they did not specify any gender differences, Boivin et al. (1995) suggest that one's peer status may be detrimentally affected by engaging in behaviours that are non-normative for one's peer group. Because there are greater levels of cooperative play perceived in girls (Crick & Dodge, 1994), a low desire to behave prosocially may serve to isolate an individual from their classmates and invite relational aggression from bullies.

As was argued for bullying, the sex differences in the social goals best able to predict victimisation may be the consequence of differing contexts within which boys and girls develop an imbalance of power. In boys, victims seem to be inappropriately influenced by their concern for others' feelings which may lead them to withdraw from social interaction when they should be concerned with the image they give off to others. In certain situations, this may lead them to be perceived as weak by their peers and susceptible to harassment. In girls however, relational aggression requires the bully to carefully select a victim who is not well liked by their peer group. Individual situations may not hold much influence in developing such a reputation on their own, but rather peer rejection is likely to be built up over time, and may be contributed to by a general lack of concern with behaving prosocially.

By exploring children's explanations for display rules the socio-motivations held by bullies and victims in a variety of social settings have been investigated. The different

scenarios were found to evoke different patterns of socio-motivations, especially in boys, indicating the importance of situational characteristics in predicting the goals that bullies and victims might hold. However, in girls, bullying and victimisation was better predicted by more general goals of popularity and low affiliation with prosocial behaviour respectively. It has been argued that this is indicative of the differing imbalances of power between bully and victim across gender. However, it should be noted that the scales of desire for popularity and prosocial behaviour used were new and require further validation in larger samples (factor structure was robust but internal consistency was relatively low). Accordingly, the results of the present study should be taken with caution. Nevertheless, these findings offer sufficient justification to consider a validated range of general interpersonal goals that might be associated with bullying and victimisation in girls, and provide good foundation for the subsequent study.

4.2   **Study 4**

The results of Study 3 implied that there might be some interesting gender-specific patterns in the socio-motivations of bullies and victims. Specifically, in girls rather than boys, general interpersonal goals proved the better predictors of relational bullying and victimisation scores. It was argued that this could indicate that the imbalance of power between girl bullies and their victims takes a different form to that in boys. While boy bullies show a situation-dependent concern to protect their image of physical dominance, girl bullies need to maintain a perception of social status over their victims in order to facilitate their relational aggression. Because a perception of popularity is likely to be achieved over time, and is less likely to be influenced by the individual social situations such as those assessed in Study 3, the position was supported by findings that bullying in girls was better predicted by a general desire for popularity rather than scenario-specific socio-motivations. However, the reliability of these goal scales was not satisfactory, and further research is needed that considers better validated interpersonal goal scales. Moreover, it is unclear whether there are other general interpersonal goals might also contribute to models to predict bullying and victimisation in either sex.

While research into global social goals has been almost exclusively applied to adult populations, some attempts have been made to adapt the measures to be suitable for samples of children. The Interpersonal Goals Inventory for Children (IGI-C; see Ojanen et al., 2005) reflects such an attempt, using a two-dimensional circumplex model to explaining children's social goals. Essentially, the IGI-C suggests that children's interpersonal goals are organised around the dimensions of agency (A) and communality (C), and can be conceptualised along the following eight scales: Agentic (+A; appearing confident and reflecting authority),

Agentic and Communal (+A+C; expressing oneself openly, being heard), Communal (+C; feeling close to others and developing friendships), Submissive and Communal (-A+C; seeking others' approval and complying with their opinions), Submissive (-A; avoiding making others angry), Submissive and Separate (-A-C; avoiding social embarrassment), Separate (-C; appearing detached), and Agentic and Separate (+A-C; being in control, having no interest in others' opinions).

The IGI-C is still young and research into the associations between its eight subscales and children's social adjustment is limited. However, Ojanen et al. (2005) reported that in 11-13 year olds, strong associations existed between Communal, Submissive Communal, and Submissive goals and prosocial behaviour, that aggression was positively related to Agentic Separate goals, and that withdrawal was predicted by Submissive-Separate goals. The researchers found no direct associations between social status and goals. However, when the vector scores of agency and communality (calculated by weighting the individual goal scales and combining them to form two distinct social goal dimensions) were utilised instead of the eight sub-scales, Ojanen et al. (2007) reported that agentic goals were associated with peer-rejection, while communal goals were associated with peer-acceptance. This provides an interesting parallel with the instrumental/relational dimensions put forward by Crick and Dodge (1989) that finds socially maladjusted children to favour instrumental goals over relational ones.

At the time of writing, the author knows of only one study that has utilised the IGI-C alongside bullying/victimisation measures. Sijtsema et al. (2009) used the three items that constituted the Agentic scale of the IGI-C to assess status goals in a large sample of 10-11 and 14-15 year olds. Specifically, children were asked how important it was for them that

their peers respected and admired them, that they appeared self-confident and made an impression on their peers, and that their peers thought they were smart. Bullying was related to status goals but only in boys and only in the 14-15 year olds. Victimisation on the other hand was related to low status goals in 10-11 year old girls. This study only used one of the eight scales in the IGI-C however, and it is unclear whether any associations would be apparent between bullying/victimisation and the other scales.

The main aim of Study 4 was two-fold. Firstly, to run the IGI-C on a sample of 9 to 11-year-olds to determine which social goal scales can be reliably extracted from the responses of children of this age, and secondly, to consider whether these goal scales can be used to predict bullying/victimisation. Although it is hard to make specific predictions as to which goal scales will be validated in a sample of Primary school children, various hypotheses can be constructed based upon the individual items that make up the eight goal scales proposed by Ojanen et al. (2005). In line with Sijtsema et al. (2009), bullying in boys of this age is not expected to be associated with Agentic goals (+A), although boy bullies are unlikely to endorse Separate goals (-A). In accordance with the positive relationship between bullying and desire for popularity in girls reported in Study 3, it is inferred that girl bullies place great importance on their social status and therefore expect bullying to be associated with Agentic Communal goals (+A+C) here. In the previous study it was also suggested that victimised boys experience an inappropriate concern for others' feelings that might interfere with their social interactions. Therefore they are not expected to hold Submissive (-A) goals. Finally, given that victimisation was found to be associated with a low desire for prosocial behaviour in girls, relational victimisation is predicted to be *negatively* associated with communal goals (+C) in girls.

The second aim of this study was to provide further insight into the sex differences in the social goals associated with bullying and victimisation. In line with Studies 1 through 3, it is hypothesised that scenario-specific socio-motivations will be significant predictors of bullying and victimisation in boys. Specifically, bullying in boys is expected to be associated with socio-motivations of harm avoidance and self-gain in proficiency and self-protective scenarios, victimisation in boys is expected to be associated with the socio-motivation of others' feelings in proficiency scenarios. In girls, both bullying and victimisation are expected to be better predicted by the global social goal scales that make up the IGI-C. Essentially, bullying in girls is hypothesised to be associated with general goals for self-presentation and social status, and victimisation in girls to be negatively related to communal and prosocial goals.

4.2.1 Method

Participants

The sample consisted of 67 Primary school children from three classes, each consisting of both Year 5 and Year 6 children. The first class consisted of 11 boys and 12 girls, the second 7 boys and 13 girls, and the third 13 boys and 11 girls. Participants were aged between 9 years and 7 months and 11 years and 6 months (mean age = 10,5; *SD* = 7.36 months). The vast majority of children were Caucasian, and all were native English speakers. The school itself was located in a middle-class, relatively well-populated neighbourhood, but within generally rural surroundings. Consent for participation was obtained via a letter sent home to parents that informed them of the experimental procedure and gave them the option to opt their child out of the study. Data was collected in the spring term of 2009.

Measures

Three tasks were administered in the present study: a bullying questionnaire, a socio-motivation task (the display rule task), and a reduced form of the IGI-C. The bullying questionnaire was the same as that employed in Study 3. The scales utilised for physical bullying, relational bullying, physical victimisation and relational victimisation are consistent with Study 3, but it should be noted that the physical victimisation items loaded on to the physical bullying factor in both sexes of this sample, and the scales were therefore strongly related. The consequence this had on analysis is discussed later. Cronbach's alphas were .95, .55, .65, .57 respectively.

The socio-motivation task was amended slightly from that utilised in Study 3. The stories remained the same but Likert scale-like ratings were introduced for responding. Children were asked to rate how much they thought each socio-motivation explained why the story character had chosen to mask their true emotion. Responses were on a five-point scale ranging from *Not at all* to *A lot*. Because the socio-motivations are not mutually exclusive of each other, introducing the scales allowed for the degree to which each is related to bullying and victimisation to be assessed with more validity. The wording of the self-gain socio-motivation was also changed. In Study 3, the self-gain socio-motivation was chosen significantly less than all the other socio-motivations and it was suspected that this might be, to some extent, because the wording was less salient to the children than that of the other socio-motivations. In this study, the socio-motivation of self-gain was inferred from children 'wanting to carry on having fun'.

The IGI-C was adapted from the version used by Ojanen et al. (2005). Two items for each of the eight sub-scales were included: Agentic (+A; When you are with other children your age, how important is it for you that... you make an impression on the others, the others think that you are clever), Agentic and Communal (+A+C; you say exactly what you want, the others listen to your opinion), Communal (+C; everyone feels good, you can put the others in a good mood), Submissive and Communal (-A+C; you are invited to join in games, you let the others decide), Submissive (-A; you do not make the others angry, you do not annoy the others), Submissive and Separate (-A-C; your classmates do not laugh at you, you do not make a fool of yourself in front of the others), Separate (-C; you do not show your feelings in front of your classmates, you keep your thoughts to yourself), Agentic and Separate (+A-C; you get to decide what to play, the group does what you say). Responses were on a four-point Likert scale ranging from *not at all important* to *Very important*. Reliability of these eight scales was generally poor (αs=.15, .37, .54, .39, .66, .56, .62, .36 respectively) justifying exploratory factor analysis to determine more appropriate goal scales.

Factor analysis revealed four factors (with varimax rotation, 53.73% of variance explained): *agentic* (5 items: you get to decide what to play, the group does what you say, the others think you are clever, the others listen to your opinion, you say exactly what you want; loadings all exceeding .49; α=.61), *prosocial* (6 items: you can put the others in a good mood, you let the others decide, you do not make the others angry, you do not annoy the others, you are invited to join in games, everyone feels good; loadings all exceeding .53; α=.68), *self-presentation* (3 items: you do not make a fool of yourself in front of the others, your classmates do not laugh at you, and you make an impression on the others; loadings all exceeding .41; α=.67), *separate* (2 items: you do not show your feelings in front of your classmates, you keep your thoughts to yourself; all loadings exceeding .61; α=.62).

Scoring

Bullying questionnaire: With each nomination counted as one point, scores were obtained for physical bullying, relational bullying, physical victimisation and relational victimisation. These scores were then standardised within class. In this sample, *all* of the children that scored more than one standard deviation above the norm on physical bullying also scored more than one standard deviation above the norm on physical victimisation. Indeed, as can be seen by the intercorrelations matrix in Tables 4.9 and 4.10, physical bullying was closely related to physical victimisation in both boys ($r=.65$, $p<.01$) and girls ($r=.49$, $p<.01$). Excluding potential bully-victims from subsequent analysis (consistent with the previous studies) would essentially have resulted in removing all individuals who engaged scored more than one standard deviation higher than their peers in bullying scores. Therefore, as an alternative strategy to ensure that associations with bullying were not clouded by the inclusion of bully-victims,, the variance explained by both forms of victimisation was partialled out when determining models to predict physical and relational bullying and vice versa.

Socio-motivations task: Scores ranging between 1 and 5 were obtained for each socio-motivation (self-gain, harm avoidance, group's happiness, others' feelings, and self-presentation) for each story (two stories for each story type: proficiency, cooperative, and self-protective). The mean of the scores for each socio-motivation within each story type were then calculated with children required to have completed both stories to obtain a score.

IGI-C: The mean scores for each item (ranging between 1 and 4) on each of the four factors (agentic, prosocial, self-presentation and separate) were obtained for each child.

Children were required to have answered at least 2 items within each factor to obtain a score for that factor.

Design and procedure

Children were seen by class by a male experimenter. The class first undertook the bullying questionnaire. They then moved on to the socio-motivation stories before completing the IGI-C. The entire set of measures took two sessions of 30 minutes to complete.

4.2.2   Results

Following the same progression as Study 3, the descriptive statistics of bullying and victimisation, of the socio-motivations, and of the scales that were extracted from the reduced version of the IGI-C are detailed. Next, the associations between the scenario-specific socio-motivations and the goal scales of the IGI-C are discussed, before considering which should be included in models to predict bullying and victimisation scores.

Bullying and victimisation scores

Mean raw scores for bullying and victimisation are displayed in Table 4.7. In order to test for gender differences and to determine whether one mode of bullying/victimisation was more prevalent than the other, a mixed 2(sex) by 2(type: physical or relational) ANOVA was run for both bullying and victimisation. There was an effect of sex on bullying [$F(1,65)=4.41$, $p=.04$] and an interactive effect of sex by type on bullying [$F1,65)=6.21$, $p<.02$]. As can be seen from the descriptive statistics, boys bullied significantly more than girls, and this was especially evident for physical bullying. There was also an interactive effect of sex by type on

victimisation [$F_{(1,65)}=4.18$, $p<.05$]. The mean scores in Table 4.7 indicate that boys scored significantly higher on physical victimisation but there was no sex difference in scores of relational victimisation.

Table 4.7: *Mean (SD) bullying and victimisation nominations by sex (bullying nominations ranged from 0-34 in boys and 0-13 in girls, victimisation nominations ranged from 0-10 in boys and 0-12 in girls).*

	N	Bullying		Victimization	
		Physical	Relational	Physical	Relational
Boys	31	3.68 (7.73)	3.29 (4.79)	2.55 (2.62)	2.26 (2.16)
Girls	36	0.39 (1.20)	2.08 (3.07)	1.17 (1.52)	2.08 (2.38)
Total	67	1.91 (5.53)	2.64 (3.98)	1.81 (2.20)	2.16 (2.27)

Socio-motivations

Mean scores for the IGI-C scales (agency, prosocial, self-presentation, and separate), and for each of the five socio-motivations (self-gain, harm avoidance, concern for the groups' happiness, concern for others' feelings, and self-presentation) are displayed in Table 4.8. To investigate whether some socio-motivations were preferred to others across story types and whether there were sex differences in socio-motivation scores, a mixed 2(sex) by 5(socio-motivation) ANOVA was carried out. No sex differences were found but a significant effect of socio-motivation was evident [$F_{(4,240)}=28.63$; $p<.01$]. Pairwise comparisons revealed that the socio-motivation of harm avoidance and self-presentation scored significantly higher than the other three socio-motivations [$ps<.01$] although not higher than each other.

Next it was determined whether certain socio-motivations were preferred in certain story types. A series of one way repeated-measures ANOVAs were run, one for each story type (proficiency, co-operative, or self-protective), with the five socio-motivation scores for each story type as the dependent variables. Consistent with Study 3, there were main effects of socio-motivation preference in proficiency scenarios [$F(4,248)=24.39$, $p<.01$], cooperative scenarios [$F(4,248)=19.92$, $p<.01$], and self-protective scenarios [$F(4,248)=132.74$, $p<.01$]. Pairwise comparisons (Bonferonni) revealed that, in proficiency scenarios, the socio-motivation of self-presentation was significantly preferred to all other socio-motivations [$ps<.01$], with the exception of harm avoidance. In cooperative scenarios, a concern for the group's happiness was significantly preferred to all other socio-motivations, and in self-protective scenarios, the socio-motivation for harm avoidance was preferred to all other socio-motivations [$ps<.01$].

In order to investigate for sex differences in the IGI-C goal scales, and also to determine whether some goal scales on the IGI-C scored higher than others a 2(sex) by 4(IGI-C goal scales) mixed ANOVA was carried out. No sex differences were found but there was a significant difference between the goal scales [$F(3,195)=30.19$, $p<.01$]. Pairwise comparisons revealed that children scored significantly higher on the prosocial scale than on all the other scales [$p<.01$]. There were no other differences between goal scales.

Table 4.8: *Mean (SD) IGI goal scales and socio-motivations by sex and story type*

	N	IGI-C goal scales				Socio-motivations				
		Agentic	Prosocial	Self-presentation	Separate	Self-gain	Harm avoidance	Group's happiness	Others' feelings	Self-presentation
Boys	31	2.77 (0.45)	3.38 (0.56)	2.69 (0.82)	2.82 (0.79)	3.46 (0.84)	3.76 (0.59)	3.24 (0.52)	2.92 (0.70)	3.80 (0.76)
Girls	36	2.39 (0.47)	3.57 (0.27)	2.75 (0.69)	2.60 (0.80)	3.05 (0.92)	3.73 (0.58)	3.06 (0.56)	2.92 (0.70)	3.96 (0.59)
Total	67	2.57 (0.49)	3.48 (0.43)	2.72 (0.75)	2.70 (0.80)	3.23 (0.90)	3.74 (0.58)	3.14 (0.55)	2.92 (0.70)	3.88 (0.67)
Proficiency Scenarios						3.62 (1.08)	3.78 (1.02)	3.05 (0.96)	2.72 (1.17)	4.22 (0.87)
Cooperative Scenarios						3.77 (1.27)	2.90 (1.04)	4.34 (0.68)	3.70 (1.06)	3.06 (1.16)
Self-Protective Scenarios						2.23 (1.23)	4.65 (0.54)	2.10 (0.81)	2.43 (0.99)	4.25 (0.81)

Next, the associations between bullying/victimisation, the scenario specific socio-motivations, and the general interpersonal goal scales of agency, prosocial, self-presentation and separate are reviewed. Consistent with previous studies, this analysis has been split by sex. Table 4.8 displays the intercorrelations between all measures for boys, and Table 4.9, the intercorrelations for girls. It is important to note that physical bullying, relational bullying and physical victimisation were all strongly related to each other in boys. As outlined earlier, *all* the boys who scored more than one standard deviation above the norm in physical bullying also scored more than one standard deviation above the norm in physical victimisation. To prevent losing any meaningful data from the sample bully-victims were *not* removed from subsequent analysis in the present study, but any associations between any of the measures and physical bullying/ victimisation may reflect this.

Table 4.9: *Correlation matrix for bullying/victimisation scores and all other measures in boys*

		1	2	3	4	5	6	7	8
1	Physical Bullying	-							
2	Relational Bullying	.90**	-						
3	Physical Victimisation	.65**	.70**	-					
4	Relational Victimisation	.09	.10	.39*	-				
	IGI-C Goal Scales								
5	Agentic	-.14	-.13	-.05	.10	-			
6	Prosocial	-.29	-.26	-.10	-.17	.12	-		
7	Self-presentation	.29	.33†	.45*	-.03	-.06	.07	-	
8	Separate	-.34†	-.41*	-.22	-.24	.24	-.17	.07	-
	Proficiency Scenarios								
	Self-gain	-.30	-.24	-.17	-.03	.34†	.11	-.08	.03
	Harm avoidance	.28	.36*	.42*	.21	-.19	.05	.31†	-.12
	Group's happiness	-.11	-.06	-.08	.07	.17	.07	-.05	-.14
	Others' feelings	-.17	-.08	.23	.56**	.28	-.23	-.16	.16
	Self-presentation	.25	.09	-.11	-.57**	-.13	.02	.06	.06
	Cooperative Scenarios								
	Self-gain	-.33†	-.28	-.28	-.15	-.01	-.06	-.24	.06
	Harm avoidance	.02	.01	.32†	.42*	.20	-.08	-.09	.12
	Group's happiness	-.22	-.17	-.18	-.11	.14	.16	.07	.06
	Others' feelings	.10	.05	.23	.26	.46*	.24	.02	-.01
	Self-presentation	-.05	.07	.14	-.06	-.01	.03	.17	.05
	Self-Protective Scenarios								
	Self-gain	-.19	-.21	-.24	.14	.00	-.14	-.34†	.03
	Harm avoidance	-.19	-.28	-.33†	-.11	.37*	-.01	.01	.32†
	Group's happiness	.02	.06	.05	-.12	.04	.09	.24	-.05
	Others' feelings	-.06	-.18	-.12	.11	-.26	-.20	-.30	.04
	Self-presentation	-.10	-.14	-.03	.04	.08	.12	.37*	.20

†p<.10; * p<.05; **p<.01
N=31

Table 4.10: *Correlation matrix for bullying/victimisation scores and all other measures in girls*

		1	2	3	4	5	6	7	8
1	Physical Bullying	-							
2	Relational Bullying	.65**	-						
3	Physical Victimisation	.49**	.25	-					
4	Relational Victimisation	.01	.08	.26	-				
	IGI-C Goal Scales								
5	Agentic	.12	.20	-.25	-.15	-			
6	Prosocial	.00	-.06	.08	-.49**	.26	-		
7	Self-presentation	.29†	.39*	-.05	-.07	.63**	.05	-	
8	Separate	.15	.17	.03	.07	.05	.03	-.01	-
	Proficiency Scenarios								
	Self-gain	-.29†	-.18	-.18	.26	.09	-.01	-.09	-.14
	Harm avoidance	-.31†	-.05	-.20	.19	-.05	-.25	-.16	-.02
	Group's happiness	-.13	.01	.06	.23	-.09	.01	-.17	.08
	Others' feelings	-.11	-.21	.20	.35*	.05	-.07	.11	.08
	Self-presentation	.03	.08	-.20	-.36*	.12	-.03	.15	-.08
	Cooperative Scenarios								
	Self-gain	-.20	-.17	-.20	-.05	-.03	.09	-.14	.03
	Harm avoidance	.17	.15	.20	.30†	.30†	-.10	.31†	-.35*
	Group's happiness	-.23	-.28†	-.17	.00	-.24	-.06	-.31†	.11
	Others' feelings	.07	-.01	-.24	-.04	-.03	-.46**	.17	.17
	Self-presentation	-.02	-.19	.25	.21	.01	-.15	.07	-.25
	Self-Protective Scenarios								
	Self-gain	-.28	-.27	-.18	.03	.10	.00	-.14	.06
	Harm avoidance	-.18	-.18	-.30†	.10	-.05	-.19	-.06	-.06
	Group's happiness	-.10	.01	-.24	-.06	.15	-.14	.14	-.14
	Others' feelings	-.06	-.17	.14	.13	-.21	-.21	-.10	-.35*
	Self-presentation	-.20	-.09	-.04	-.17	-.11	.21	-.06	.08

†p<.10; * p<.05; **p<.01
N=36

In boys, physical bullying was negatively associated with a socio-motivation for self-gain in cooperative scenarios. The results did not replicate the associations reported in Study 3 between *physical* bullying and a socio-motivation for self-protection in proficiency scenarios and for self-gain in self-protective scenarios. However, consistent with Study 3, *relational* bullying was positively associated with harm avoidance in proficiency scenarios. A similar pattern was evident between physical and relational methods of victimisation. Although neither the positive association between *physical* victimisation and a socio-motivation for others' feelings in proficiency scenarios nor the negative association with self-presentation in the same scenarios were replicated, both were significantly related to *relational* victimisation. It is likely that the associations between socio-motivations and physical bullying/victimisation in boys that were previously reported were not replicated because of the close association between physical bullying and physical victimisation in the present study. Additionally, both forms of victimisation were positively related to a socio-motivation for harm avoidance in cooperative scenarios, and physical (but not relational) victimisation was positively associated with harm avoidance in proficiency scenarios, and inversely related to harm avoidance in self-protective scenarios. With regard to the goal scales of the IGI-C, both forms of bullying were negatively related to the goal scale of separation. Relational bullying and physical victimisation were also negatively associated with the goal scale of self-presentation.

In girls, as in Study 3, there were few meaningful associations between the scenario specific socio-motivations and bullying/victimisation. Physical bullying was negatively associated with a socio-motivation for self-gain and harm avoidance in proficiency scenarios and relational bullying was inversely related to a socio-motivation for the group's happiness in cooperative scenarios. Physical victimisation was negatively associated with a socio-

motivation for harm avoidance in self-protective scenarios. Relational victimisation was positively associated with a socio-motivation for others' feelings in proficiency scenarios and negatively associated with a socio-motivation for self-presentation in the same scenarios, and was positively associated with a socio-motivation for harm avoidance in cooperative scenarios. Again, it should be considered that scores for *physical* bullying and victimisation were very low in girls, so these associations are unlikely to prove meaningful in understanding the social goals of girl bullies and victims. With regard to the goal scales of the IGI-C, as predicted, relational (and physical) bullying was positively associated with the goal scale of self-presentation. Also as expected, relational victimisation was negatively associated with the prosocial goal scale.

Interestingly, associations between the situation-specific socio-motivations and the IGI-C goal scales varied between the sexes. In boys, the agentic goal scale was positively related to self-gain in proficiency scenarios, to others' feelings in cooperative scenarios and to harm avoidance in self-protective scenarios. The prosocial goal scale was not related to any situation specific socio-motivations. The self-presentation scale was related to self-presentation in both self-proficiency and self-protective scenarios and was also negatively related to self-gain in self-protective scenarios. The separate scale was positively associated with a socio-motivation for harm avoidance in self-protective scenarios. As in Study 3, in girls, associations between scenario-specific socio-motivations and general interpersonal goals were predominantly apparent in the cooperative scenarios. In cooperative scenarios, the agentic goal scale was positively associated with a socio-motivation for harm avoidance; the prosocial scale was negatively associated with a socio-motivation for others' feelings, the self-presentation scale was positively associated with a socio-motivation for harm avoidance

and negatively with a socio-motivation for the groups' happiness; and the separate goal scale was negatively associated with a socio-motivation for harm avoidance.

Lastly, it is important to assess which scenario-specific socio-motivations and global goal scales extracted from the IGI-C would be included in models to predict physical and relational bullying and victimisation. As in Study 3, physical bullying, relational bullying, physical victimisation and relational victimisation were regressed on all the scenario-specific socio-motivations along with the IGI-C goal scales. However, in order to allow for the strong relationships between physical victimisation and both physical and relational bullying, these were forced into the model first when necessary. Specifically, physical victimisation was entered into the first block of models to predict physical and relational bullying and both physical and relational bullying were entered into the first block of the model to predict physical victimisation. The scenario-specific socio-motivations and the IGI-C goal scales were then added into the second block using stepwise methodology to determine inclusion into the final model. Table 4.11 shows the finals models for boys, and Table 4.12 the models for girls. It is important to note that the order of the dependent variables in these tables (from top to bottom) does *not* represent the order of entry into the model.

In boys, physical bullying was predicted by a socio-motivation for harm avoidance and a low socio-motivation for others' feelings in proficiency scenarios as expected, but also by a socio-motivation for others' feelings in cooperative scenarios and by low scores in the prosocial and separate goal scales of the IGI-C. This echoes previous findings that boy bullies are specifically concerned with not getting picked on in proficiency scenarios, perhaps because they are concerned with the effect this would have on their image of toughness, and subsequently their physical dominance. Relational bullying was predicted by a low socio-

motivation for others' feelings in proficiency scenarios and by low scores in the prosocial and separate goal scales of the IGI-C. As expected, both physical and relational victimisation was predicted by a socio-motivation for others' feelings in proficiency scenarios. This provides further support that boy victims' social motivations may be influenced by an overactive concern for the problems of others. Physical victimisation was also predicted by the IGI-C scale of self-presentation and by a low socio-motivation for the group's happiness in proficiency scenarios. Finally, relational victimisation in boys was also predicted by a low socio-motivation for self-presentation in proficiency scenarios.

In girls, physical bullying was predicted by a low socio-motivation for harm avoidance and others' feelings in proficiency scenarios, by a socio-motivation for others' feelings in cooperative scenarios, and by the agentic IGI-C goal scale. Physical victimisation was predicted by a socio-motivation for others' feelings in proficiency scenarios, by a low socio-motivation for others' feelings in cooperative scenarios and by low scores in the agentic IGI-C goal scale. Again, it should be noted that the low levels of physical bullying and victimisation in girls in the present study means that these results may not be reflective of the true associations between social goals and bullying/victimisation in girls. The model for relational bullying in girls included the IGI-C goal scale of self-presentation, as expected, as well as being predicted by a low socio-motivation for self-presentation in cooperative scenarios. This implies that a general goal for self-presentation in relational bullies does not necessarily mean that they will be concerned with their self-presentation in cooperative scenarios. Relational victimisation was predicted by low scores in the prosocial goal scale as expected, and additionally by a socio-motivation for harm avoidance in cooperative scenarios and by a low socio-motivation for self-presentation in proficiency scenarios.

Table 4.11: *Stepwise regression analysis for all measures as predictors of bullying and victimisation scores in* boys (*N*=31). Note: only significant predictors are shown.

Scenario Type		Physical Bullying	Relational Bullying	Physical Victimisation	Relational Victimisation
Block 1 (Forced entry)	ΔR^2	**.42**	**.46**	**.48**	**n/a**
Physical bullying	β			-.06	
Relational bullying	β			.75*	
Physical victimisation	β	.65**	.68**		
Block 2 (Stepwise)	ΔR^2	.38	.27	.25	.54
Proficiency Scenarios					
Harm avoidance	β	.25*			
Group's happiness	β			-.21†	
Others' feelings	β	-.43**	-.36**	.43**	.38*
Self-presentation	β				-.51**
Cooperative Scenarios					
Others' feelings	β	.25*			
IGI-C goal scales					
Prosocial	β	-.36**	-.26*		
Self-presentation	β			.33*	
Separate	β	-.25*	-.33**		

†p<.10; * p<.05; **p<.01

Table 4.12: *Stepwise regression analysis for all measures as predictors of bullying and victimisation scores in* girls (*N*=36). Note: only significant predictors are shown.

Scenario Type		Physical Bullying	Relational Bullying	Physical Victimisation	Relational Victimisation
Block 1 (Forced entry)	ΔR^2	**.39**	**.18**	**.26**	**n/a**
Physical bullying	β			.45†	
Relational bullying	β			.08	
Physical victimisation	β	.63**	.43*		
Block 2 (Stepwise)	ΔR^2	.31	.24	.28	.37
Proficiency Scenarios					
Harm avoidance	β	-.34**			
Others' feelings	β	-.31**		.35*	
Self-presentation	β				-.42**
Cooperative Scenarios					
Harm avoidance	β				.29†
Others' feelings	β	.35**		-.31*	
Self-presentation	β		-.33*		
IGI-C goal scales					
Agentic	β	.35**		-.32*	
Prosocial	β				-.35*
Self-presentation	β		.40**		

†p<.10; * p<.05; **p<.01

4.2.3   Discussion

The introduction of the general interpersonal goal scales has provided further insight into the social goals held by bullies and victims. While there are distinct patterns in the social goals associated with bullying and victimisation in boys and girls, both scenario specific socio-motivations and general interpersonal goals were found to contribute to models predicting bullying and victimisation. A discussion is given here as to how the results of Studies 3 and 4 have developed understanding of the influence that social goals have to play in predicting bullying in schools.

The demographics of bullying and victimisation within this sample were notably different than in previous studies. With both physical and relational bullying strongly related to physical victimisation, it is likely that the bully-victims within this sample were clouding the associations between socio-motivations and bullying/victimisation, and this is discussed further in the following section (Section 4.3). Consequently, this discussion focused on the final models of bullying displayed in Tables 4.11 and 4.12.

The final models for bullying in boys again indicated that boy bullies are motivated by the outcomes-focused goal of harm avoidance in proficiency scenarios. It has been argued throughout this empirical work, that bullying in boys is associated with scenario-specific instrumental motivations, and the current results provide more support for this stance. However, the results also provided the first indication that bullying in boys is predicted by general interpersonal goals. Both physical and relational bullying were predicted by low scores in the prosocial and separate goal scales. These findings are very much consistent with previous research that finds proactive aggressors to hold relationship damaging goals (Crick

& Dodge, 1996), do not shy away from social interaction, and are often part of large social networks (Boulton, 1999; Rodkin et al., 2000). In the current sample of Primary school children, and in accordance with Sijtsema et al. (2009) with regard to boys of this age, bullying in boys was not associated with agentic goals of social status. This offers further support to to the evidence reported in the earlier empirical work that suggests that boy bullies of this age do not actively pursue goals of social status, but are more concerned with protecting their physical dominance over their peers in specific situations.

In girls, as hypothesised, relational bullying was predicted by a global goal of self-presentation in girls, suggesting that they hold an overall concern with their social image, and offering some validation for the association reported in Study 3 between relational bullying and a desire for popularity in girls. It is argued that girl bullies hold a general concern for their social image because of the impact that this has on their social status, allowing them to hold some degree of dominance over their peers. Again, this is supported in the existing literature that finds girl bullies to maintain a perception of popularity among their social groups (Puckett et al., 2008; Sijtsema et al., 2009). The lack of distinctive scenario-specific socio-motivations as predictors of relational bullying in girls (with the exception of a negative association between relational bullying and self-presentation in cooperative scenarios) reinforces the position outlined already in this empirical project, that girls achieve their social dominance with subtlety and over time. Once achieved, the nature of girl bullies' social dominance is likely to be fairly robust, and this might explain why relational aggression has been reported to be far more stable than physical aggression (Camodeca et al., 2002; Crick et al., 1999). Their dominance is consequently less influenced by individual situations. However, it should also be considered that, because the global goal scale of self-presentation was unrelated to the self-presentation socio-motivation in any of the scenarios in

girls, it may be the case that the scenarios used in the present study simply do not provide a context whereby girls are particularly concerned with their image.

The models for victimisation in boys again included the socio-motivation for others' feelings in proficiency scenarios that has consistently been identified as related to victimisation throughout this empirical work. Relational victimisation was also predicted by a low motivation for self-presentation in the same scenarios, again, in concordance with previous studies. This provides more support that boy victims hold an overactive concern for the problems of others that may leave them prone to harassment, perhaps because they do not hold any concern for their image of proficiency despite being in the presence of a peer audience.

In girls, relational victimisation was negatively related to the prosocial interpersonal goal scale, offering support to the model for relational bullying put forward in Study 3. It is posited that girls who do not place importance on behaving prosocially are particularly prone to victimisation because they are out of sync with their peer group. Girls have been reported to demonstrate more cooperative behaviours than boys (Rose & Rudolph, 2006), and scored high in the adapted prosocial goal scale of the IGI-C used in the present study (averaging 3.57 out of a possible 4.00). Girls with relatively low scores may therefore be rejected by their peers, providing the imbalance of power between bully and victim necessary for successful relational aggression.

Although the associations between social goals and bullying/victimisation may have been influenced by the inclusion of bully-victims in the present study, Study 4 has provided further indication that there may be sex differences in the social goals endorsed by bullies and

victims. It is argued that boy bullies hold particular concern with defending their dominance over their peers in certain situations, specifically in situations where their image of proficiency is at stake. Girl bullies on the other hand require an imbalance of power over their victims in the form of perceived social standing which is developed over time and is less dependent upon specific situations. Boy victims may leave themselves prone to victimisation because they hold inappropriate specific concern for the feelings of others, again in proficiency scenarios, whereas victimised girls generally lack prosocial concern, which may leave them prone to peer-rejection and subsequent relational victimisation.

4.3   **General Discussion**

The main aim of Studies 3 and 4 was to further investigate the sex differences in the socio-motivations associated with bullying/victimisation that were reported in Studies 1 and 2. In order to do this global interpersonal goals were included in potential models to predict physical and relational bullying and victimisation. Although the previous studies detailed in this thesis have shown that the proficiency scenarios provided a pertinent context whereby the socio-motivations of bullies and victims varied in boys, in Studies 3 and 4, bullying and victimisation in both sexes were reliably predicted by general interpersonal goals, as well as situation specific concerns. These findings are discussed in relation to the existing literature. While some interesting findings were reported in both studies, it is also important to consider that there was a degree of inconsistency between the associations reported in Study 3 and those reported in Study 4. Reasons are put forward for these discrepancies, and the general limitations of these studies are reviewed. Finally, the potential implications that this empirical work has on bullying intervention and prevention strategies is briefly discussed.

Research that has focused on conflict scenarios as a setting for assessing children's socio-motivations has suggested that bullies hold instrumental goals (Camodeca & Goossens, 2005; Crick & Dodge, 1996; Erdley & Asher, 1996). This empirical work has contributed to the area of research, finding that boy bullies also hold instrumental goals, specifically demonstrating a concern for 'not getting picked on by the others', in scenarios where their image of proficiency is at stake. Moreover, it was reported that this was not the case in scenarios that depicted cooperative behaviour. This is in line with the limited research that has considered group entry scenarios, which has failed to find instrumental goals in proactive aggressors (Crick & Dodge, 1996). It has also been demonstrated that the social goals associated with bullying in girls paint a very different picture. Girls were not found to hold instrumental goals in any of the specific scenarios, but reported placing importance on their social image, striving to achieve a perception of popularity and subsequently social dominance.

Furthermore, bullies and victims were again found to hold different sets of goals. The majority of evidence that suggested that peer rejected children are a homogenous group in terms of their goals comes from the aggression literature and failed to distinguish the goals of non-aggressive victims (e.g., Camodeca & Goossens, 2005; Crick & Dodge, 1996; Renshaw & Asher, 1983; Slaby & Guerra, 1988). The findings detailed in Study 1 were replicated - victimisation in boys was again found to be related to a concern for others' feelings in proficiency scenarios - and it is argued that this may be a consequence of an overactive empathy. Further, victimised boys seem unable to adapt their social goals to different situations in the same way that their peers do and may subsequently leave themselves prone to harassment. Victimisation in girls on the other hand was related to low goals for prosocial behaviour. With levels of cooperative behaviour higher in girls, low motivation for prosocial

behaviour is likely to result in isolation from one's peers. Boivin et al. (1995) provided evidence that children with low peer preference tended to be 'social misfits' in terms of their behaviours. The evidence here suggests that a similar pattern is evident in children's social goals, which may well prove to be the precursor to non-normative behaviours.

The existing literature on the social goals of victims finds them to be specifically concerned with harm avoidance. The present results uncovered little evidence of this in scenarios of proficiency, scenarios of cooperation, or even in scenarios that depicted a context wherein a concern about future harassment was appropriately placed. Many of the studies that have reported goals of harm avoidance in victims have utilised conflict scenarios (Erdley & Asher, 1999). It may well be the case that victims *only* become concerned with harm avoidance when they are specifically provoked. It has been put forward that victims might experience heightened emotional responses in social situations, and that they experience a specific concern for not upsetting their peers. Arguably, this arousal might leave them unconcerned with harm avoidance unless the situation explicitly demands it. One direction for future research is to consider whether victims continue to hold concern for others' feelings in scenarios of provocation, or whether these concerns are overridden by a desire to remove themselves from confrontation.

Moreover, victims' low concern for harm avoidance in situations where there is the potential for future harassment suggests that they may not be competent at identifying situations where it is a potential threat. Conversely, previous research has indicated that victims have a tendency to over-assess threat to themselves when faced with provocation that is ambiguous and not necessarily malicious (Camodeca & Goosens, 2005). Taken together, victims may suffer a double social-cognitive blow leaving them socially compromised. They

may struggle to ascertain the true nature and potential threat in certain social scenarios, and may allow their concern for others' feelings to influence their social goals and thus their subsequent behaviour (which is often submissive), even when their concern offers little to benefit their social group and consequently their social image. It is important to assess the variables of interpreted threat alongside social goals to test this position however, and this is returned to in Study 5.

It should be noted that while these studies have provided important insight into the specific goals that bullies and victims hold, given the absence of related studies in the background literature, they have been largely exploratory in nature. As such the sample sizes were fairly small, especially considering the number of predictor variables that could potentially be included in the regression analyses. Accordingly, the results of these analyses should be treated with caution as it is unclear whether the patterns of associations between bullying/victimisation and social goals found here will prove reliable. Indeed, many of the associations reported in Study 3 (see Tables 4.3 and 4.4) were not replicated in Study 4 (see Tables 4.9 and 4.10). While the discrepancy between the associations reported in these two studies may have been contributed to by the relatively low correlation sizes given the small samples of participants, there are other factors that are also likely to have contributed. These are discussed in turn.

Firstly, there were slight differences in the participant sample utilised in Study 4 compared to those used in the previous studies. The classes tested contained children in both Year 5 and Year 6. There are several potential influences here: the children were, on average, slightly older and may therefore have a slightly different social-cognitive profile; given the higher age range of children in each class, there was likely to be a slightly different social

dynamic in the class; and the children in these classes were the oldest in the school and this may affect the potential that aggressive acts could be used to achieve their social goals. Additionally, the school from which the participants in Study 4 were recruited was based in a more rural setting than the other studies. The school itself was in a fairly well-populated area however, and it is unclear why bullying and victimisation scores in school children from more rural neighbourhoods would have different associations with social goals than school children from urban neighbourhoods.

Secondly, the scenario-specific socio-motivation measure was slightly different in Study 4. The wording of the self-gain motivation category was revised so that it was a more salient response option. Also, participants were now required to respond on a 5-point scale rather than select a single response, hence children were able to rate socio-motivation scores giving non-favourite response options more weight. The consequence of these amendments was that the self-gain socio-motivation scored much higher in relation to the other socio-motivation categories than it had done in Study 3. However, there was also a very different pattern of associations between bullying/victimisation and the socio-motivation for self-gain across the two studies. The strong correlations reported in Study 3 between bullying in boys and the self-gain socio-motivation in self-protective scenarios and between physical victimisation in girls and the same motivation in cooperative scenarios were not replicated in Study 4. Further, but to a lesser extent, the introduction of the scale responding system is likely to have had some role in the reduced correlation sizes between victimisation in boys and a concern for others' feelings / self-presentation in proficiency scenarios, between bullying in boys and a socio-motivation for harm avoidance in the same scenarios, and between victimisation in girls and a concern for others' feelings in self-protective scenarios.

Thirdly, bullying and victimisation scores in Study 4 were strongly correlated with each other. This may have been, in part, due to the streamlined bullying questionnaire that was used in studies 3 and 4. Each of the bullying/victimisation scales was made up of just two items. Although they are still likely to have provided a reliable assessment of the children who engaged in bullying/victimisation behaviours, in Study 4 these items were unable to distinguish bullies from bully-victims suggesting that they might not have covered a sufficient array of bullying behaviours. Moreover, because it was not possible to distinguish bullies from bully-victims in this study, the bully-victims could not be excluded from subsequent analysis and are likely to have influenced the associations reported between bullying/victimisation and social goals. Alternatively, it is possible that, of the participant sample in Study 4, all those who scored high in measures of bullying were also victimised. But this is likely to have profound consequences on the social goals associated with bullying nonetheless, as bully-victims have been reported to have a significantly different social-cognitive profile to their non-victimised counterparts (Toblin et al., 2005).

Despite the limitations discussed above, some consistency is becoming evident through this empirical programme with regard to several key findings –bullying in boys is predicted by outcomes-focused socio-motivations of harm avoidance in proficiency scenarios; victimisation in boys is predicted by a concern for others' feelings in the same scenarios; bullying in girls is predicted by a general self-presentational concern for popularity; and victimisation in girls is predicted by a lack of concern for prosocial behaviour. Thus there is growing evidence that meaningful associations between bullying/victimisation and social goals do exist and can provide a solid basis for further empirical investigation.

Finally, the findings outlined in this chapter could have implications for programmes directed at intervening in and preventing bullying in schools. Because bullies do not seem to hold instrumental goals in cooperative scenarios, they might provide an ideal setting for schemes that aim to develop social interaction. As victims do not seem to experience any notable biases in their socio-motivations in these scenarios as well, it might be particularly pertinent in improving relationships between bullies and victims. With regard to victimisation, if boy victims suffer from an overactive empathic response, strategies that consider how they might manage their emotionality may prove effective. Similarly, strategies that help girls realise the importance of prosocial behaviour within their peer group may provide the victims with a route out of peer-rejection, and leave them less prone to chronic relational victimisation. The overall contributions that this research has to make on intervention strategies are reviewed in greater detail in Chapter 7.

Chapter 5: **The Role of Social Goals in Bullies' and Victims' Social Information**

Processing

The previous four studies have demonstrated that bullying and victimisation are associated with both situation-specific and global social goals, both among boys and among girls. In the following two studies social goals are specifically positioned in the context of SIP in order to determine fundamental connections between bullying and victimisation, social goals, and responses to peer conflict situations. Conflict situations (both when provocation is ambiguous and when the provocateur's intents are clearly hostile) are of particular interest for several reasons.

Firstly, such scenarios have been empirically derived to have particular relevance to social adaptation (Dodge, McClasky, & Feldman, 1985), with variance in children's goals for conflict situations related to differences in their social competence (Chung & Asher, 1996). Secondly, hypothetical scenarios of ambiguous provocation and interpersonal conflict have been the most intensively studied by both researchers interested in children's social goals and those interested in other aspects of their SIP (Crick & Dodge, 1994; Erdley & Asher, 1999). In order to place the present studies in the context of related research as defined in the second overall aim to this project of empirical work, there is some sense in following a similar methodology. Thirdly, conflict scenarios are likely to be especially important in investigating the SIP of bullies because of the aggressive behaviour inherent in bullying. As detailed in Chapter 2, aggressive children may develop a set of aggressive schemata when dealing with conflict situations. Among other biases, they report feeling more anger in response to conflict (Camodeca & Goossens, 2005), attribute hostile intentions to others (Coie et al., 1991), and evaluate aggressive responses more favourably (Zelli et al., 1999). Importantly, these biases

have been found to have specific effects on the social goals endorsed by these children (Erdley & Asher, 1996; Lemerise et al., 1998, cf Lemerise & Arsenio, 2000; Perry et al., 1986; Slaby & Guerra, 1988).

Research that has utilised conflict scenarios to assess children's SIP has typically reported highly situation-specific responses (see Crick & Dodge, 1994 for a review). While a similar situation-specificity in the socio-motivations associated with bullying and victimisation has been reported in the previous studies, it applied more strongly to boys rather than girls. Conversely, the literature that reports on children's SIP in response to conflict scenarios has rarely identified gender differences in SIP. It is likely that gender moderates the relationship between SIP and social adjustment through the establishment of gender-specific normative behaviours. However, differences may not be as apparent in response to conflict because the situation provides such a strong influence on the SIP of both boys and girls. With this in mind, the same gender differences in the social goals associated with bullying and victimisation are less likely in the following studies. Accordingly, focus instead lies on determining whether the associations between bullying and victimisation and the social goals reported in previous studies remain in conflict situations, and whether these associations exist independently of other SIP biases[3].

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[3] Note that the decision not to split by gender is later justified through statistical analysis checking for moderation effects of gender

5.1   **Study 5**

The role of social cognition in bullying has come under increased scrutiny of late, not least as a consequence of the apparently discrepant viewpoints expressed by proponents of the SIP approach and researchers who have studied ToM abilities in bullies. Proponents of the SIP approach argue that various information-processing biases (e.g., interpreting malicious intent even when provocation is ambiguous) precede inappropriate aggressive behaviour (demonstrated in both peer rejected children and bullies). In contrast, ToM theorists identify bullies' competence in evaluating and manipulating social situations as serving to facilitate successfully implemented aggressive behaviour. Perhaps the key to unlocking this debate is to examine the social goals underlying their aggressive behaviour. In Studies 1 and 2 it was reported that social goals remained associated with bullying and victimisation, even after allowing for variance explained by ToM. However, because various SIP biases may influence children's tendencies to formulate certain goals (see Erdley & Asher, 1999 for a review), it is important to now consider whether children's goals contribute independently to bullying and victimisation scores after SIP biases have been taken into account. Specifically, this paper reports on research evaluating specific hypotheses about the social goals that predict bullying and victimisation, even after controlling for the appraisals and emotional responses that children form in relation to social scenarios of provocation.

As detailed in Chapter 2, SIP begins when the child attends to, encodes, and interprets social cues. The child must attend to features of the situation and encode signals (both verbal and nonverbal) from other people. He or she must then consider what has happened and why it happened, recognising possible threats and hostility from others where appropriate. The child must then formulate goals for the situation, which may include preserving positive

relations with other people, avoiding harm, or achieving particular instrumental outcomes. Possible responses to the situation are generated and evaluated in terms of the goals being sought, the anticipated outcomes, and his or her perceived self-efficacy for performing the response. Finally, the most positive evaluated response is selected and behaviourally enacted (Crick & Dodge, 1994).

Compared to the other stages in the SIP model, there has been relatively little research on social goals (Lemerise et al., 2006). When social goals are assessed in SIP research (e.g., Camodeca & Goossens, 2005; Crick & Dodge, 1996; Nelson & Crick, 1999), the most typical approach is to use hypothetical scenarios involving peer provocation to provide a context for assessment of preference for social relational goals (e.g., "how important is it for the other child to like you?") versus instrumental goals (e.g., "how important is it for you to get the swing?"). Well-liked prosocial children endorse social relational goals (Nelson & Crick, 1999), whereas aggressive children select both goals that damage the relationship (Crick & Dodge, 1999; Camodeca & Goossens, 2005) and goals that are self-focused (Rabiner & Gordon, 1992).

However, the instrumental/relational distinction has been widely recognised as being too simplistic (Sutton et al., 2001). The two are not mutually exclusive – children may successfully entertain multiple goals in conflict and cooperative scenarios (Rabiner & Gordon, 1992). Similarly, children may focus on instrumental goals to achieve a relational end (e.g., gain control over a prized toy in order to assert dominance within a peer group; Pellegrini & Bartini, 2001), or relational goals to achieve an instrumental end (e.g., gain peer-acceptance and popularity in order to attain tangible rewards; Chung & Asher, 1996). Additionally, the empirical evidence cited so far has largely revolved around the domain of

aggression and may not be directly applicable to bullies. While bullies are actively aggressive in their behaviour, Sutton et al. (1999a) point out that a single explanation for *all* aggressive children may well be insufficient. Indeed, Studies 1 through 4 provided evidence that the instrumental nature of the social goals associated with bullying varied across situations, and implied that bullies may be instrumentally motivated for self-gain in certain scenarios, but for self-protection in others. These studies also consistently found that markedly different social goals were associated with victimisation than were associated with bullying. In light of this, the present study aimed to consider a more comprehensive set of social goals than those put forward in the existing SIP literature in order to identify the specific social goals associated with bullying and victimisation.

A good indication as to what those goals might be comes from research on social motivation that has tended to consider a wider range of social goals across a variety of situations (for a review, see Erdley & Asher, 1999). Various relationships between social goals and social adjustment have been proposed. For example, the pursuit of dominance has been found to predict aggression in adolescents (Lochman et al., 1993), and bullies openly admit that they want to be dominant within their peer group (Boulton & Underwood, 1992; Kiefer & Ryan, 2008). Additionally, while the author is unaware of any research that has investigated the specific social goals held by non-aggressive victims, Erdley and Asher (1996) reported that withdrawn-rejected children (who represent a conceptually similar group to non-aggressive victims) preferred goals of self-protection and harm avoidance in response to both ambiguous provocation and hostile conflict situations. Aggressive-rejected children on the other hand, have been reported to endorse hostile goals for revenge on the provocateur (Erdley & Asher, 1996) and wished to retaliate more than their non-rejected peers (Camodeca & Goossens, 2005). The distinction of non-aggressive from aggressive-rejected children runs

in close parallel to the distinction between pure victims and bully-victims so social goals of harm avoidance and revenge were assessed in the present study, alongside a goal for social dominance indicative of non-victimised bullies. In line with the research outlined above, it was hypothesised that non-aggressive victims would hold goals for avoidance but not for revenge. On the other hand, bullying is expected to be associated with goals of assertion and dominance.

Additionally, the aggression literature has widely reported socially maladjusted children (defined as aggressive and/or peer-rejected) as placing relationship building and other prosocial goals in low regard (Crick & Dodge, 1989; Renshaw & Asher, 1983; Slaby & Guerra, 1988; Taylor & Asher, 1989, cf Crick & Dodge, 1994). The present study aimed to investigate whether the relationship remained for victims who do not engage in high levels of aggressive behaviour. It was hypothesised that bullying would follow the trend, but once any aggressive victims have been taken into account, victimisation would not. In fact, in Studies 1, 3, and 4, it was reported that victimisation was actually positively associated with a concern for others' feelings. Although it is unclear whether such a relationship will remain in conflict scenarios which carry strong situational influence, it is also important to investigate this eventuality in the present study. Specifically, it was assessed whether children would endorse goals that depicted a prosocial concern as well as a self-protective concern for others' feelings.

For SIP theorists, social goals play a key role in determining behaviour by their selective influence on the subsequent steps of response generation, evaluation and selection (Crick & Dodge, 1994; Lemerise & Arsenio, 2000). As such, they are likely to be critical in the formulation of aggressive, bullying behaviour. Likewise, a child's emotional response to

situational cues, as well as any attribution of hostility, may serve to shape the formulation of goals. According to Crick and Dodge (1994), emotions can act to energise particular goals. For example, being in an angry mood makes it more likely that a child will focus on instrumental goals (Lemerise et al., 1998, cf Lemerise & Arsenio, 2000). Similarly, children who are overwhelmed by their own emotions may choose avoidant or hostile goals to reduce their own arousal (Saarni, 1999). Further, children who make hostile attributions about their peers are more likely to pursue retaliation goals (Erdley & Asher, 1996; Slaby & Guerra, 1988), but conversely, may adopt goals that involve withdrawing from the confrontation (Erdley & Asher, 1999). If social goals are to play a critical role in predicting bullying or victimisation, it is important to consider whether they are able to do so even after the influence of emotionality and interpreted hostile intent have been taken into account.

Additionally, while children's emotionality and attribution of intent may hold some sway over the goals endorsed, they are in themselves influenced by the context of the conflict. In general, when provocation is ambiguous, children are less likely to attribute intent or to report feeling angry than when provocation is hostile. However, in such scenarios, aggressive and withdrawn children have been found to attribute more hostile intent than their peers, and formulate different goals accordingly (Erdley & Asher, 1996, 1999). In order to allow for any variance in SIP across modes of provocation, the present study also investigated whether any associations between social goals and bullying and victimisation are consistent across ambiguous and hostile provocation scenario types.

To review, the current study has two main aims. First, to investigate which social goals in response to peer provocation are able to predict peer-reported bullying and victimisation. By expanding the range of social goals evaluated, I hope to move away from

the traditional dichotomy of instrumental and relational goals and consequently provide a more complete understanding as to which social goals are associated with bullying and victimisation in conflict settings. It is expected that bullying will be associated with goals of social assertiveness and victimisation with goals of avoidance. It is also predicted that while bullying will be associated with low concern for relationship building and prosocial goals, this association would not be apparent in victimisation after removing aggressive victims from the participant sample. Second, the study aims to determine whether relationships between bullying/victimisation and social goals remained after controlling for emotionality and the attribution of hostile intent.

5.1.1 Method

Participants

The sample consisted of 181 children from three year groups: two Year 3 classes, two Year 4 classes, and two Year 5 classes. The number of [boys,girls] in each class were as follows: Year 3 classes: [14,16] and [16,15]; Year 4 classes: [15,15] and [15,15]; Year 5 classes: [13,17] and [17,13]. Participants were aged between 7 years and 7 months and 10 years and 7 months (mean age = 9,1; *SD* = 10.28 months). The vast majority of children were Caucasian, and all were native English speakers. Consent for participation was obtained via a letter sent home to parents that informed them of the experimental procedure and gave them the option to opt their child out of the study. Data was collected in the autumn term of 2009.

Measures

Two computerised measures were carried out in the present study: A bullying questionnaire, and a SIP measure depicting a series of conflict scenarios that considered the emotional responses, interpretation and social goals of participants.

In the bullying questionnaire, the children were asked to nominate classmates they had seen engaging in particular behaviours. Nominations were limited to three per question. Questions were designed to measure both physical and relational behaviours associated with bullying and being bullied. The questionnaire consisted of four physical bullying items (e.g., pushing or tripping another child on purpose), four relational bullying items (e.g., stopping another child joining in games), four physical victimisation items (e.g., being hit by other children), and four relational victimisation items (e.g., having rumours made up about them behind their backs), along with four filler questions. The order of the questions was initially randomised and then kept in a fixed order for each child. As well as being presented on the computer screen, each question was read by a male experimenter with clarification of any terms used that the child failed to understand given when necessary. Children entered nominations on the computer using code numbers that had been assigned to names on the class list.

In the SIP task, children heard eight conflict scenarios in gender-appropriate versions, four where the intention of the provocateur was ambiguous (adapted from Camodeca & Goossens, 2005), and four where the provocation was clearly hostile (adapted from Lösel, et al., 2007). All stories were of similar length and verbal complexity.

Participants were asked to imagine they were on the receiving end of the provocation depicted in the scenario and accordingly to respond to a series of questions that followed the story. The first two questions considered the participants' emotional responses: 'How angry/sad would you feel if this happened to you' (answers on a 4-point scale from *Not at all angry/sad* to *Really angry/sad*). The following four questions assessed attribution of intent: 'Do you think the other child is mean? Do you think he (she) did it on purpose? Do you think he (she) was happy with what he (she) had done? Do you think he (she) should be blamed for doing it?' (*No, I do not know, Yes*). In order to assess children's social goals, they were asked: 'Do you think it is important... 1) To tell the other child that he (she) can't borrow your bike again? (assertiveness); 2) To get your own back for what he (she) did? (revenge); 3) To avoid the other child? (avoid provocateur); 4) To avoid getting into trouble with the teacher by not causing a fuss? (avoid punishment); 5) That you get along with the other child? (relation building); 6) That the boy (girl) does not feel upset about what happened? (prosocial concern for others' feelings); 7) That the boy (girl) does not feel angry with you? (self-protective concern about others' feelings)' Answers were on a 4-point scale ranging from *Not at all important for me* to *Very important for me*.

Scoring

Bullying questionnaire: With each nomination counted as one point, scores were obtained for physical bullying, relational bullying, physical victimisation, and relational victimisation. These scores were then standardised by class. Factor analysis supported a four-factor model explaining 75.63% of variance [αs =.97, .90, .75, .76 respectively], with loadings of items onto the expected factors exceeding .58 in all cases.

SIP task: For each of the scores detailed below, participants had to have completed every question for at least two of the four stories within scenario subtype. Those that hadn't were excluded from subsequent analysis.

Scores for feeling angry and sad ranged from 1 (Not at all angry) to 4 (Really angry) in each scenario. The mean scores were calculated within scenario type. Hence each child had scores that ranged between 1 and 4 for feeling angry in ambiguous scenarios, feeling sad in ambiguous scenarios, feeling angry in hostile scenarios, and feeling sad in hostile scenarios.

Attribution of intent scores were obtained for each scenario by counting the number of '*Yes*' responses in over the four questions. Scores were tallied over the four scenarios within each scenario type. Consequently, each child then had scores ranging from 0 to 16 for perceived threat in ambiguous scenarios, and for perceived threat in hostile scenarios.

Scores for social goals were obtained by taking a mean of the scores within scenario type for each socio-motivation. Fourteen scores (ranging from 1 to 4) were therefore obtained in total, one for each social goal for both ambiguous and hostile scenarios.

Design and Procedure

Children were seen, by class, in their school's IT suite. They accessed each questionnaire on-line under the supervision of a male experimenter. For each of the measures, the experimenter read out the questions in order and children were encouraged to wait for him to have done so before responding. On demand, any terms used in the questionnaires that caused confusion were explained to participants. Additionally, two teaching assistants were on hand to assist children with low reading ability. The bullying survey was administered

first, and was completed within a 30 minute session. The SIP task took place over two 30 minute sessions, with four stories in each session. The stories were delivered in a random order for each class.

5.1.2 Results

Bullying and Victimisation Scores

Mean raw scores for bullying and victimisation are displayed in Table 5.1. Mixed 2(sex) x 3(year) x 2(type) ANOVAs were carried out to determine whether there were any gender or year group effects on bullying or victimisation. The ANOVAs revealed a main effect of sex on bullying [$F(1,175)=7.73$, $p<.01$], as well as an interactive effect of sex by type of bullying [$F(1,175)=18.27$, $p<.01$]. Specifically, physical bullying but not relational bullying scores were higher in boys than in girls. Girls scored higher in relational bullying than in physical bullying, whereas both forms were evident to a similar level in boys. These findings are in line with the aggression literature that distinguishes physical from relational forms of aggression (Crick & Bigbee, 1998; Crick & Grotpeter, 1995). There were no sex differences in victimisation scores but an interaction effect existed between gender and type [$F(1,175)=13.73$, $p<.01$]. While girls tended to be victimised by relational rather than physical methods, boys were victimised evenly in both forms. There were no effects of year group on bullying or victimisation scores.

Table 5.1: *Mean (SD) bullying and victimisation nominations by sex (bullying nominations ranged from 0-56 in boys and 0-37 in girls; and victimisation nominations ranged from 0-30 in boys and from 0-26 in girls), and year group*

	N	Bullying		Victimization	
		Physical	Relational	Physical	Relational
Boys	90	7.09 (12.13)	6.11 (8.78)	5.03 (5.23)	5.08 (5.63)
Girls	91	1.56 (4.45)	4.54 (7.11)	2.89 (2.81)	5.15 (4.47)
Year 3	61	4.61 (9.94)	4.92 (7.82)	4.39 (5.22)	4.72 (4.84)
Year 4	60	4.53 (9.14)	6.20 (7.92)	4.13 (3.25)	6.02 (3.91)
Year 5	60	3.78 (9.56)	4.85 (8.33)	3.33 (4.24)	4.62 (6.16)
Total	181	4.31 (9.51)	5.32 (8.00)	3.96 (4.32)	5.12 (5.07)

Previous research has suggested that a sub-group of 'bully-victims' may demonstrate unique social-cognitive attributes (e.g., Toblin et al., 2005) and could potentially mask distinctive patterns of associations between social goals and bullying versus victimisation scores in the correlational analysis. In order to categorise this sub-group, overall bullying nominations were tallied (physical + relational nominations) and then standardised within class (in case of different patterns within individual classes) *and* sex (as initial analysis indicated sex differences in scores of physical versus relational bullying and victimisation). Children who scored more than one standard deviation above the mean score in bullying were classified as bullies and likewise for victimisation and classification as victims. Scores more than one standard deviation above the mean score in bullying *and* more than one standard deviation above the mean score in victimisation resulted in categorisation as bully-victims, and all others were categorised as 'comparison'. The numbers of children in each of the subgroups, and their mean scores for bullying and victimisation, are displayed in Table 5.2. The analysis showed that 11 of the children were classified as bully-victims.

Table 5.2: *Mean (SD) bullying and victimisation nominations by bullying sub-group*

	N	Bullying		Victimization	
		Physical	Relational	Physical	Relational
Comparison	139	2.09 (4.09)	3.00 (3.83)	2.86 (2.89)	3.63 (3.04)
Bullies	11	19.91 (20.24)	19.00 (13.73)	2.73 (2.10)	4.55 (2.84)
Victims	20	2.20 (3.93)	4.75 (4.58)	8.35 (5.08)	11.35 (6.67)
Bully-victims	11	20.55 (17.97)	22.00 (11.61)	11.00 (7.40)	13.18 (7.83)
Total	181	4.31 (9.51)	5.32 (8.00)	3.96 (4.32)	5.12 (5.07)

Story Responses

The potential range and the mean scores for children's responses to each component of the SIP measure are displayed in Table 5.3. In order to test for differences in dependent variables between gender and story type, a series of mixed 2(sex) x 2(story type: ambiguous or hostile) ANOVAs were carried out for each variable. In accordance with the existing literature, the ANOVAs indicated no sex differences in any of the dependent variables. As expected, children attributed significantly more hostile intent in the hostile scenarios $[F(1,179)=254.77, p<.01]$. Children were also significantly more likely to be motivated by being assertive $[F(1,179)=83.32, p<.01]$, avoiding the provocateur $[F(1,179)=82.40, p<.01]$, and less likely to be concerned with getting on with the provocateur $[F(1,179)=12.38, p<.01]$ and not upsetting them $[F(1,179)=13.75, p<.01]$ in hostile stories. Additionally, the ANOVAs indicated an interaction between sex and story type for both the 'stay out of trouble' social goal $[F(1,155)=5.40; p=.021]$ and the 'not anger the provocateur' social goal $[F(1,154)=10.37; p=.002]$. In scenarios of ambiguous provocation only, boys showed less concern than girls not to anger the provocateur but more concern for staying out of trouble.

Next, the goals preferred in each scenario type were determined. Two one-way repeated-measures ANOVAs were run with the social goals in ambiguous scenarios as the dependent variables in the first and the social goals in hostile scenarios as the dependent variables in the second. The ANOVAs revealed a significant effect of goals in ambiguous provocation scenarios [$F(6,984)=27.71$, $p<.01$] with post-hoc tests indicating that children preferred goals of assertiveness, and not upsetting or angering the provocateur [all ps <.01]. Children endorsed goals of revenge less than any other goals in these scenarios. A main effect of goals was also evident in hostile provocation scenarios [$F(6,960)=48.45$, $p<.01$], with children preferring goals of assertiveness, and scoring lower in goals of revenge and getting along with the provocateur than all other goals [all ps<.01].

Relations between responses to social scenarios and bullying/victimisation

The main analysis focused on the associations between social goals and the bullying/victimisation scores, after taking into account any links with emotional responses and hostile attributions. First it was considered whether the small group of bully-victims could potentially cloud the picture regarding predictors of bullying and victimisation. A one-way ANOVA was carried out with the bullying subgroup as the independent variable and the SIP scores as dependent variables. In fact, the group of bully-victims did display distinctive patterns of responses to the social scenarios (see Table 5.3). Specifically, the ANOVA revealed differences between the bullying subgroups in scores of feeling angry [$F(3,166)=3.27$, $p=.02$], and the social goals of staying out of trouble [$F(3,166)=3.00$, $p=.03$], getting on with the provocateur [$F(3,166)=3.04$, $p=.03$], and not angering the provocateur [$F(3,166)=2.32$, $p=.08$]. The descriptive statistics in Table 5.3 indicate that bully-victims shared bullies' emotional response of anger and their lack of concern for getting on with the provocateur, but they were less concerned with staying out of trouble or angering the

provocateur. Mean scores also indicate that, consistent with the existing literature on aggressive-rejected children, bully-victims endorse social goals for revenge and are less concerned with upsetting the provocateur (especially in comparison to victims), although the small sample sizes of the individual groups do not give enough power to verify these effects statistically. In light of this, and consistent with Studies 1 though 4, the small group of bully-victims were removed from the dataset for the remaining analyses in order to maximise opportunities to determine distinctive sets of social goals associated with bullying and victimisation.

Table 5.4 shows the intercorrelations among all measures in both scenario types. These show some evidence for the expected associations between bullying and victimisation on the one hand, and emotional responses, attributions of hostile intent, and social goals on the other. However, they also show that some social goals are associated with emotional responses and hostile attributions. Thus, the extent to which social goals could predict bullying and victimisation characteristics over and above any significant effects of emotional responses and hostile intent attributions was evaluated. Each bullying and victimisation score (physical bullying, relational bullying, physical victimisation, and relational victimisation) was regressed on the other measures, which were entered in three blocks. The first block evaluated the predictive value of angry and sad emotion scores, the second block included the hostile attribution score, and the third block concerned the seven social goal scores (added using stepwise entry).

Table 5.3: *Mean scores for each SIP item by sex, story type, and bullying subgroup*

	N	Emotionality		Intent			Social Goals				
		Feel angry	Feel sad		Assertive	Revenge	Avoid provocateur	Stay out of trouble with teacher	Get on with provocateur	Not upset the provocateur	Not anger the provocateur
Possible Range		1-4	1-4	0-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4
Boys	91	3.48	3.39	2.21	3.35	2.26	2.67	2.86	2.59	2.80	2.98
Girls	90	3.41	3.51	1.99	3.38	2.19	2.78	2.84	2.72	2.95	3.15
Ambiguous stories		3.43	3.44	1.41	3.07	2.21	2.44	2.83	2.76	3.01	3.06
Hostile stories		3.46	3.46	2.78	3.65	2.27	3.00	2.87	2.54	2.74	3.05
Comparison	139	3.42	3.42	2.06	3.34	2.21	2.65	2.76	2.71	2.87	3.01
Bullies	11	3.82	3.64	2.02	3.63	2.33	2.92	3.28	2.08	2.71	3.33
Victims	20	3.29	3.50	2.20	3.44	2.15	2.95	3.28	2.81	3.16	3.37
Bully-victims	11	3.73	3.53	2.43	3.24	2.69	3.00	2.80	2.17	2.55	2.73
Total	181	3.45	3.45	2.10	3.37	2.23	2.72	2.85	2.65	2.87	3.06

Table 5.4: *Correlation matrix for bullying/victimisation scores and all measures of the hostile provocation stories above and ambiguous provocation stories below the diagonal*

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Physical Bullying	-	.71**	.11	.02	.21**	-.19*	-.01	.07	-.04	-.03	-.03	-.20*	-.16*	-.06
2	Relational Bullying	.71**	-	.21**	.16*	.23**	.00	-.01	.07	-.01	-.01	.07	-.11	-.15†	-.02
3	Physical Victimisation	.11	.21**	-	.60**	.03	.05	.13†	.07	-.01	.08	.18*	-.05	.03	.04
4	Relational Victimisation	.02	.16*	.60**	-	-.17*	.11	.12	.13	-.08	.08	.20*	-.04	-.02	.09
5	Feel angry	.15†	.21**	-.01	-.07	-	.28**	.24**	.15†	.28**	.17*	.19*	-.13	.02	.10
6	Feel sad	.09	.15†	-.06	.06	.62**	-	.09	.27**	-.03	.29**	.21**	.12	.25**	.30**
7	Interpreted hostile intent	.02	.05	.11	.12	.50**	.40**	-	.30**	.28**	.47**	.33**	-.33**	-.19*	.00
	Social goal to…														
8	Be assertive	.11	.14†	.12	.04	.54**	.52**	.58**	-	.02	.12	.21**	.06	.18*	.24**
9	Get revenge on provocateur	.05	.07	.02	-.03	.45**	.32**	.58**	.49**	-	.36**	.24**	-.22**	-.09	-.06
10	Avoid the provocateur	-.02	.00	.15†	.11	.46**	.44**	.69**	.63**	.57**	-	.40**	-.23**	-.10	-.04
11	Stay out of trouble with teacher	.08	.08	.14†	.20*	.21**	.24**	.34**	.33**	.30**	.35**	-	-.06	.13	.21**
12	Get on with the provocateur	-.24**	-.20*	-.04	-.07	-.32**	-.23**	-.39**	-.28**	-.31**	-.36**	-.06	-	.55**	.43**
13	Not upset the provocateur	-.20*	-.09	.04	.01	-.01	.08	-.13	-.04	-.07	-.06	.27**	.42**	-	.60**
14	Not anger the provocateur	-.16*	.01	.05	.15†	.08	.13†	.09	.05	.08	.12	.43**	.31**	.65**	-

†p<.10; * p<.05; **p<.01

Note that bully-victims were excluded from the sample for correlational analysis. Thus, N=170.

Table 5.5 shows the results of these analyses for the ambiguous provocation scenarios, and Table 5.6 shows the results of these analyses for the hostile provocation scenarios. As predicted, and consistent with Studies 1 through 4, the social goals associated with bullying differed from those associated with victimisation. As expected, in the ambiguous provocation scenarios, both physical and relational bullying remained inversely related to a concern for getting along with the provocateur after allowing for emotionality responses and attributed hostile intent, and both forms of bullying were also inversely related to goals to avoid the provocateur. In the same scenarios, physical victimisation was predicted by goals of avoiding the provocateur and relational victimisation by a concern for staying out of trouble with the teacher.

Interestingly, there was a slightly different pattern in the social goals associated with bullying and victimisation in scenarios of hostile provocation. In hostile provocation scenarios, physical bullying was again negatively predicted by a concern for getting along with the provocateur, but was also associated with goals for being assertive and inversely related to goals for revenge. Relational bullying on the other hand was only predicted by a lack of concern for upsetting the provocateur after emotionality and attributed hostile intent had been partialled out. Victimisation was again predicted by goals of harm avoidance as expected, with both physical and relational victimisation related to goals for staying out of trouble with the teacher.

A final set of regressions evaluated potential moderation of social goal effects by gender. The four bullying and victimisation scores were regressed on social goal scores, gender, and terms for the interaction between gender and each social goal score. No effects of moderation by gender were apparent (for all interaction terms, ps>.10).

Table 5.5: *Hierarchical regression analysis for* ambiguous provocation *measures as predictors of bullying/victimisation scores[4]*. Note: only significant predictors are shown in block 3.

		Physical Bullying	Relational Bullying	Physical Victimisation	Relational Victimisation
Block 1	**ΔR²**	**.02**	**.04**	**.00**	**.02**
Feel angry	β	.13	.20†	-.02	-.23*
Feel sad	β	.02	.04	-.12	.11
Block 2	**ΔR²**	**.00**	**.00**	**.01**	**.02**
Interpreted hostile intent	β	.06	.07	-.02	.11
Block 3 (social goals)	**ΔR²**	**.07**	**.05**	**.03**	**.03**
Avoid the provocateur	β	-.25†	-.25*	.23*	
Stay out of trouble with teacher	β				.19*
Get on with the provocateur	β	-.22**	-.19*		

†p<.10; * p<.05; **p<.01

Table 5.6: *Hierarchical regression analysis for* hostile provocation *measures as predictors of bullying/victimisation scores[4]*. Note: only significant predictors are shown in block 3.

		Physical Bullying	Relational Bullying	Physical Victimisation	Relational Victimisation
Block 1	**ΔR²**	.11	.06	.00	.06
Feel angry	β	.32**	.26**	.00	-.26**
Feel sad	β	-.29**	-.01	.00	.13
Block 2	**ΔR²**	.01	.00	.00	.01
Interpreted hostile intent	β	-.15†	-.11	.00	.06
Block 3 (social goals)	**ΔR²**	.07	.03	.03	.03
Be assertive	β	.16*			
Get revenge on provocateur	β	-.15†			
Stay out of trouble with teacher	β			.19*	.20*
Get on with the provocateur	β	-.22**			
Not upset the provocateur	β		-.17*		

†p<.10; * p<.05; **p<.01

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[4] *Note that bully-victims were excluded from the sample for regression modelling. Thus, for both the above models, N=170*

5.1.3 Discussion

The present study had two main aims: to investigate which social goals are associated with bullying and victimisation in ambiguous and hostile conflict situations, and to determine whether associations between social goals and bullying/victimisation remain after allowing for variance explained by emotionality and attribution of hostile intent. Evidence has been provided for social goals as contributing to bullying and victimisation scores, even after controlling for anticipated feelings of anger and sadness, and interpretation of hostile intent. The social goals of bullies, victims and bully-victims are discussed before explanations for the social goals associated with bullying and victimisation in the context of the scenario types are put forward. Finally, the role social goals have to play as predictors of social behaviour is considered, and some suggestions for further research outlined.

Previous research that has considered the social goals of bullies reliably reports them to place great importance on social dominance (Arsenio & Lemerise, 2001; Hawley, 2003; LaFontana & Cillessen, 2002; Rodkin et al., 2000; Veenstra et al., 2007) and to hold relationship damaging goals in scenarios of conflict (Crick & Dodge, 1999; Camodeca & Goossens, 2005; Rabiner & Gordon, 1992; Lochman et al., 1993). In support of the background literature, the subgroup of bullies in the present sample were more assertive than their peers, and endorsed lower goals for building a relationship with the provocateur, holding little concern for upsetting them. The subgroup of bullies identified in the analysis was small (N=11), hence caution should be taken when generalising these findings. However, these group differences were echoed in the

correlational data as well as in the existing literature, so the validity of the conclusions can be accepted with a degree of confidence.

The subgroup of victims, on the other hand, showed more concern with getting on with the provocateur (than bullies and bully-victims), and with not upsetting (than all groups) or angering them (than comparisons and bully-victims). The previous research in the current empirical project (Studies 1, 3 and 4) found victimisation in boys to be associated with a specific concern for others' feelings in non-conflict settings which was argued to indicate victims' inability to select goals appropriate to the situation due, in part, to an overactive empathic response to social stimuli (see also Malti et al., 2010). The victim sub-group scores in the present study offer some support to this position. The correlational data on the other hand implied that victimisation is more closely related to goals of harm avoidance, which sits in line with the existing literature (Erdley & Asher, 1999; Veenstra et al., 2007).

A growing body of research has indicated the need to consider the subcategory of bully-victims in any bullying research (Austin & Joseph. 1996; Espelage & Swearer, 2003; Haynie et al., 2001; Schwartz, 2000). Like their non-victimised counterparts bully-victims are aggressive but usually reactively rather than proactively (Salmivalli & Nieminen, 2002), and are considered to function more poorly than both 'pure' bullies and 'pure' victims (Hanish & Guerra, 2004). As expected, distinct SIP scores were evident in bully-victims. Bully-victims interpreted hostile intent even in ambiguous scenarios, and were subsequently motivated by revenge, and unconcerned with relationship building or with upsetting or angering the provocateur. The subgroup of bully-victims was relatively small (N=11) which may have contributed to an inability to validate these differences

with any statistical significance, although they are supported in the background literature (Erdley & Asher, 1996; Camodeca & Goossens, 2005). Regardless, further research with larger sample sizes is needed to offer further insight into how the social goals of bully-victims might differ from their peers.

Next, the associations between bullying/victimisation and social goals are discussed in the context of children's SIP processing. As outlined earlier, children's social goals are likely to be influenced by both their anticipated emotionality and whether they attribute hostile intent behind the provocation. In accordance with similar studies (e.g., Camodeca & Goossens, 2005), the present study found bullying to be positively related to self-reported feelings of anger. Heightened emotionality, and in particular anger, could serve to energise certain goals (such as for retaliation; see Arsenio & Lemerise, 2000; Lemerise et al., 1998, cf Lemerise & Arsenio, 2000) and to devalue other goals (such as for getting along with the provocateur). Additionally, the attribution of hostile intent has been reported to have a similar influence over goals (Erdley & Asher, 1996; Slaby & Guerra, 1988). However, even after controlling for emotionality and attributed hostile intent, a low concern with getting on with the provocateur predicted both physical and relational bullying in ambiguous conflict scenarios, and physical bullying in hostile scenarios. While this goal was not included in a model to predict relational bullying, low concern for upsetting the other was, and with the two being strongly correlated it is possible that they reflect the same underlying issue.

Bullying was also negatively predicted by the goal of avoiding the provocateur in ambiguous provocation scenarios. This indicates that bullies do not want to shy away from ambiguous provocation, perhaps with the desire to maintain their social dominance

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over their peer group (see Veenstra et al., 2007). This was also inferred in hostile scenarios where bullies preferred to be assertive over their aggressors, rather than react with hot-headed goals for revenge (Erdley & Asher, 1996; Toblin et al., 2005).

In relation to previous studies, the results here again implied that bullies' hold goals for dominance, but that they may be situation-specific, with bullying associated with goals for assertiveness but only in hostile scenarios where assertive goals could be considered more appropriate. This builds on the findings in Studies 1 to 4 that reported scenario-specific socio-motivations to be the better predictors of bullying in boys and suggests that boy bullies are able to effectively adapt their goals according to the situation they find themselves in.

Next, the models for predicting victimisation are discussed. In line with previous studies (e.g., Camodeca & Goossens, 2005), victimisation was associated with the attribution of hostile intent. Erdley and Asher (1999) posited that the attribution of intent may lead withdrawn children to hold goals for avoiding the provocateur and this is supported by the strong associations reported in the present study between perceived intent and goals for avoiding the provocateur in both hostile and ambiguous scenarios. Moreover, after accounting for variance in victimisation scores explained by attributed hostile intent, the goal for avoiding the provocateur only predicted physical victimisation, and only in ambiguous provocation scenarios, where it is arguably misplaced. Taylor and Gabriel (1989, cf Crick & Dodge, 1994), and more recently Ojanen et al. (2007), have suggested that victims have specific difficulties adapting their goals to the situation, often endorsing inappropriately submissive goals. Studies 1 through 4 offered some support to this position in non-conflict scenarios, and the present study provides further weight that

victims may hold inappropriate goals for the situation and potentially leave themselves prone to victimisation because of it. Regardless, the models put forward in the current study imply that the goal for harm avoidance reported in victims in the existing literature (e.g., Erdley & Asher, 1996) complements the attribution of hostile intent to the provocateur.

However, it should be noted that the models for physical and relational victimisation in hostile scenarios, and for relational victimisation in ambiguous provocation scenarios, did include the social goal 'to avoid getting into trouble with the teacher by not causing a fuss'. On face value this finding is disturbing – non-aggressive victims should not be concerned with getting into trouble with the teacher. Further, the association is stronger in both scenario types for relational victimisation which fits with the more subtle nature of relational aggression (Crick & Grotpeter, 1995). However, because the item also refers to 'not causing a fuss', the associations reported here might be more indicative of submissive goals of withdrawal in victims. Experiences of harassment may leave victims with feelings of hopelessness and anxiety when dealing with conflict (Burgess, Wojslawowicz, Rubin, Rose-Krasnor, & Booth-Laforce, 2006). Moreover, Ojanen et al. (2007) and Sijtsema et al. (2009) reported that victims lacked status goals, especially in victimisation scenarios. In short, it is argued, not only that the goal of harm avoidance reported in victims (Erdley & Asher, 1996; Juvonen & Graham, 2001; Perry, Williard, & Perry, 1990) is strongly influenced by whether they attribute intent behind the provocation, but also that an overall goal for submissive behaviour among peers remains and provides an independent predictor for victimisation.

To summarise, the present study aimed to determine which social goals are able to predict bullying and victimisation after controlling for the social-cognitive contributors of anticipated emotionality and the attribution of hostile intent behind provocation. As predicted, bullies, who are often the instigators of aggression within their peer group (Coie et al., 1991), were found to be less likely to pursue relationship building goals and more likely to hold goals targeted at achieving/maintaining social dominance (by being assertive). Victims, on the other hand, hold submissive goals focused on avoiding trouble. The next step is to determine the specific effects these goals have on their subsequent behaviour in conflict settings. Specifically, do relationship damaging goals or goals for social dominance in conflict settings predict responses for confrontation, avoidance, or problem solving? And do submissive goals in victims have a direct influence on their response to provocation? Further research is needed that considers the social-cognitive factors investigated here, as well as considering the responses children favour in reaction to provocation.

This study suggests potential directions for intervention strategies. If bullies' motivation for social dominance is calculated rather than emotional, it may be worth demonstrating prosocial techniques to achieve positive social status, subsequently achieving popularity without relying on aggressive behaviours (which often results in peer-rejection in the long term, see Rigby & Slee, 1993). In fact, various peer-mentoring intervention strategies have selected protagonists to become their mentors and have met with success in reducing bullying accordingly (see Farrington & Ttofi, 2009).

With regard to victims, this study has found victims of bullying to entertain goals of submission. This is unsurprising given that they have most likely experienced

harassment over a period of time putting them at risk for emotional problems such as depressive symptoms, lower self worth, and social anxiety (Boivin et al., 1995; Craig, 1998; Graham, Bellmore, & Mize, 2006). However, dealing with provocation is important in the route out of provocation. Programmes that develop the social skills of victims, and empower them not just to deal with conflict but also to engage with others positively in ambiguous situations, are therefore likely to meet with success (again, see Farrington & Ttofi, 2009, for a systematic review of social skills training schemes).

Chapter 6: Social goals as Mediators of the Relationships between Bullying and Victimisation and Associated Behaviours

6.1 **Study 6**

In the previous study, I provided evidence that social goals remain predictive of bullying and victimisation, even after the variance explained by emotionality and attribution of hostile intent behind provocation had been taken into account. However, this empirical project has not, as yet, provided any indication that social goals have a direct influence on the behaviours that are associated with bullying and victimisation (see below, and also Chapter 1 for a review). The present study builds upon the findings of Study 5 and specifically investigates whether social goals act as mediators between bullying/victimisation and aggressive, prosocial, and withdrawn behaviours.

Researchers interested in bullying in schools have consistently identified bullies and their victims to be at risk of long term behavioural and psychological maladjustment. Bullies report more conduct problems in later life (Wolke et al., 2000), namely, delinquency, crime, and alcohol abuse (Nansel et al. 2004); and victims suffer more immediate emotional problems, such as depression, loneliness, social anxiety, and low self worth (Hawker & Boulton, 2000; Graham & Juvonen, 1998; Juvonen et al., 2000). Over the past twenty years, research has made important inroads into understanding the antisocial behaviours of bullies and victims, and has given particular consideration to the social-cognitive biases that give rise to their behavioural profiles. The present study extends the existing work by investigating how the social goals of bullies and victims may contribute to their antisocial behaviour. First, the behaviours that have been associated with bullying and victimisation are reviewed, and

then focus turns to the literature that has identified various social-cognitive contributors to these behaviours. Next, following on from the previous studies, the role of social goals is considered, before putting forward theoretically plausible mediation models to explain the role social goals have to play in mediating the relationship between bullying/victimisation and their associated behaviours.

Bullying in itself is externalised in nature, so it is unsurprising to find support for distinct behavioural profiles in bullies and victims. Children who bully are consistently reported to display more aggressive behaviours than their peers (Pellegrini & Bartini, 2000). Their aggression is often proactive in nature (goal-directed and deliberate; Crick & Dodge, 1999), and bullies hold efficacy beliefs that their aggression will be successful in achieving its intended ends (e.g., Toblin et al., 2005). Accordingly, Craig and Pepler (2007) reported that bullies use their aggression to control others, and to achieve social status. However, sustained aggression is unlikely to be effective in achieving social status by itself. In fact, aggression is strongly linked to high peer-rejection (for a review, see Bierman, 2004), and is therefore likely to alienate peers in the long run, suggesting that bullies are likely to need more than just physical dominance to achieve the social status they desire.

Additionally, some aggressive acts require social connections to be carried out effectively. Relational aggressors use their peer group to exert influence over their victims, something that is difficult to achieve without an image of peer-acceptance (Xie et al., 2002; Salmivalli et al., 2000). For that reason, some researchers have argued that bullies may intertwine their aggressive behaviour with prosocial cooperative behaviours, especially in the presence of a peer audience (Puckett et al., 2008). Through a mix of prosocial and socially dominant traits, the bully may achieve a perception of popularity (Rodkin et al., 2000), which

can provide the basis for effective aggression, especially when that aggression is relational (Veenstra et al., 2007). Thus, bullies may engage in cooperative as well as aggressive behaviours, although it is unlikely that they do so for a prosocial end.

While Coie et al. (1991) claim that aggression must be proactive to be classified as bullying, bullies have also been reported to engage in more reactive aggression (a defensive response to provocation) than their non-involved counterparts (Pellegrini et al., 1999; Camodeca et al., 2002). Reactive aggression is more emotionally driven than proactive aggression, with aggressors seeking to get revenge on their provocateurs rather than holding any long-term aspirations for self-gain (Crick & Dodge, 1999). In any account of the behavioural correlates of bullies, it is important to distinguish aggression that results from a hot headed reaction to provocation from aggression that is cool, calculated and callous. Bullies may well engage in both forms of aggression, but the two are likely to be the consequence of very different sets of social goals.

The behavioural profile of victims is somewhat less clear. The aggression literature has found peer-rejected children to be more aggressive than their peers, especially reactively (Crick & Dodge, 1996), and similar associations have been reported with victimisation (Camodeca et al., 2002; Schwartz et al., 1998). However, not all victims are aggressive, and researchers have called for the distinction of those that are from those that are not (e.g., Schwartz, 2000). Non-aggressive victims demonstrate submissive behaviours, especially in response to provocation (Erath, Flanagan, & Bierman, 2007; Schwartz et al., 1998). It is unclear whether their submissive behaviour results from previous experiences of peer harassment, but in support of this position, in Study 5 (see also Erdley &Asher, 1996), it was

reported that victims are specifically concerned with avoiding harm when confronted, even when the intent behind the provocation is ambiguous.

Alternatively, victims may experience more anxiety in social situations in general and subsequently shy away from social interactions in order to relieve their heightened emotionality. Accordingly, Graham and Juvonen (1998) found victims to score significantly higher than their peers on measures of social anxiety. One relatively untested theory suggests that victims may actually have an acute knowledge of the emotional states of provoking peers (Garner & Lemerise, 2007), and become especially concerned with other people's problems, leading to their heightened feelings of anxiety (Zahn-Waxler et al., 1991). Indeed, victimisation has been associated with high affective empathy scores, especially around the onset of their harassment (Malti et al., 2010), and this link has been supported by the findings from Studies 1, 3, and 4 which found victimisation to be associated with a concern for others' feelings. It may be that children with an overactive affective empathy withdraw from social interactions because of their heightened feelings of anxiety, but in doing so they contribute to a reputation as an easy target (Olweus, 1978).

The behaviours associated with bullying and victimisation are at odds with their peers (Nansel et al., 2004). These behaviours may have been modelled from the family environment (see Dodge, 1991), but their repeated enactment is likely to be dependent upon biases in their cognitive processing. There are relatively few studies that have specifically considered the social-cognitive biases experienced by bullies and victims, but those that have have reported that bullies attribute more hostile interpret intent behind even ambiguous provocation (although this association was not replicated in the previous study), feel more angry than their peers in response to conflict, and endorse self-enhancing goals of dominance

over goals of relationship building (Camodeca & Goossens, 2005; Camodeca et al., 2003; Veenstra et al., 2007 and see also Study 5). They consequently generate more aggressive responses, and hold high outcome expectancies for their aggressive behaviour (Toblin, et al., 2005). The same studies have found victims to feel sad in response to ambiguous provocation, to attribute more hostility in the provocateur, and subsequently to hold goals for harm avoidance (again, consistent with the findings of Study 5). Although some studies also report that victims feel angry and generate hostile responses to the provocation (Camodeca & Goossens, 2005), this may be specific to aggressive victims. Indeed, those studies that have considered a subgroup of non-aggressive victims suggest that they do not experience the same biases (Toblin et al., 2005).

There seems little doubt that bullies and victims suffer various biases in their cognitive processing, and these biases are likely to add to their non-normative social behaviour, and the contribution that the individual steps of Crick and Dodge's (1994) model have in developing an understanding of the behaviours associated with bullying and victimisation is acknowledged. However, of particular interest in the present study are the influences of children's social goals. Indeed, the previous study found that the social goals endorsed by children in response to provocation are able to predict both bullying and victimisation, even after the variance explained by emotionality and attribution of intent behind provocation had been accounted for.

More importantly, social goals are likely to be crucial in understanding why bullies and victims exhibit maladaptive behaviours in response to social tasks as they are closely related to their self-efficacy perceptions and outcome expectations (Crick & Ladd, 1990; Erdley & Asher, 1996; Perry et al., 1986). Despite possessing an acute ability to understand

the mental states of others (Gini, 2006; Monks et al., 2005; Sutton et al., 1999b), ringleader bullies often behave antisocially, in contrast to their similarly able peers who achieve peer-acceptance predominantly through their prosocial behaviour. The social goals and values of bullies are likely to prove critical in understanding why they persist in their aggressive behaviour. Additionally, concerning victimised children, intervention strategies that have attempted to encourage prosocial behaviour by developing their social skills have met with varied success, and researchers have argued that this may be because the social goals of these children remained consistently maladaptive (Erdley & Asher, 1999; and for a meta-analysis of social skills interventions for children with emotional and behavioural problems, see Quinn, Kavale, Mathur, Rutherford, & Forness, 1999). Thus, social goals are likely to have an important influence on the relationships between bullying/victimisation and their associated behaviours.

In order to provide a context to assess children's social goals, researchers have usually utilised conflict scenarios whereby children are asked to imagine themselves to be a hypothetical character that is provoked by a peer, and to rate how important certain goals would be for them in that situation. Of particular interest to researchers interested in children's behavioural problems, are conflict situations where the provocation was *ambiguous*, because an aggressive response is arguably a less adaptive and less accepted response to dealing with such a scenario than when the provocation is overtly hostile. In comparison to their peer group, aggressive and submissive children tend to interpret intent and hostility behind the provocation and react accordingly (Camodeca & Goossens, 2005; Erdley & Asher, 1996). Additionally, Study 5 reported slightly different sets of goals to be predictive of bullying and victimisation in ambiguous scenarios to those in hostile scenarios. Because of this, the present study focuses on children's responses to ambiguous provocation,

as it is expected that such scenarios will provide a pertinent setting to consider whether the non-normative behaviour of bullies and victims is mediated by their social goals.

Before the mediation models are put forward, it is important to consider the social goals held by bullies and victims, and how they might serve to influence their behaviours. On the basis of the aggression literature, it can be assumed that bullies, who are often aggressive, hold relationship damaging goals of retaliation and revenge, and this has been supported empirically (Camodeca & Goossens, 2005). However, Crick and Dodge (1999) argue that this association might be specific to *reactive* aggression. Reactive aggressors tend to interpret more threat in ambiguous provocation (Crick & Dodge, 1999; Camodeca & Goossens, 2005), and are therefore motivated to retaliate. Reactive aggression is more attributable to bullies who are also victimised, and accordingly Camodeca et al. (2003) reported that bully-victims ascribed more blame to the perpetrators of ambiguous provocation, and were more motivated for retaliation than bullies, victims, or non-involved children, a finding echoed in the previous study. However, although 'pure' bullies may use aggression in a cool, calculated, proactive manner to gain dominance (Hawley, 2003; LaFontana & Cillessen, 2002; Rodkin et al., 2000), they have also been found to aggress reactively (Camodeca & Goossens, 2005; Camodeca et al., 2002; Salmivalli & Nieminen, 2002). Because of this, bullying is expected to be associated with goals for revenge (and negatively associated to goals for relationship building), but *only* if hostility is attributed to the provocateur. Behaviours fuelled by a desire for revenge are likely to be relationship damaging and aggressive. Accordingly, it is hypothesised that interpretation of intent and subsequently goals for revenge (and low goals for relationship building) will mediate the association between bullying and relationship damaging and aggressive responses.

In contrast to the research that finds bullies to hold relationship damaging goals, bullies have also been reported to hold specific goals for social acceptance (Olthof & Goossens, 2008), although this does not necessarily translate to a prosocial intent. Bullies have been widely reported to endorse goals to be dominant within their peer group (Arsenio & Lemerise, 2001; Boulton & Underwood, 1992; Kiefer & Ryan, 2008; Veenstra et al., 2007 and supported by associations between bullying and social goals for assertiveness in the previous study), and may strive for social approval to maintain an image of popularity to provide them with power over their peers (Vaillancourt et al., 2003, and echoed by the findings of Studies 1 to 4 that found bullying to be associated with a concern about getting picked on by others in front of a peer audience). Accordingly, if bullies see social acceptance as a means to an end, it is likely that both their assertive and cooperative behaviour will be mediated by goals of dominance.

On the basis of the research outlined above, and on the results of the previous studies, following model is proposed (Figure 6.1) to explain the role social goals have in mediating the associations between bullying and confrontational behaviours (such as retaliation or assertion), and prosocial behaviours (such as cooperation or befriending).

Specifically, it is hypoithesised the goal of dominance will mediate bullies' cooperative (compromise) and assertive behaviours, while goals for retaliation and low goals for relationship building are expected to be influenced by the interpretation of intent from the provocateur, and to mediate bullies' aggressive (push or hit) and relationship damaging (non-befriending) behaviours.
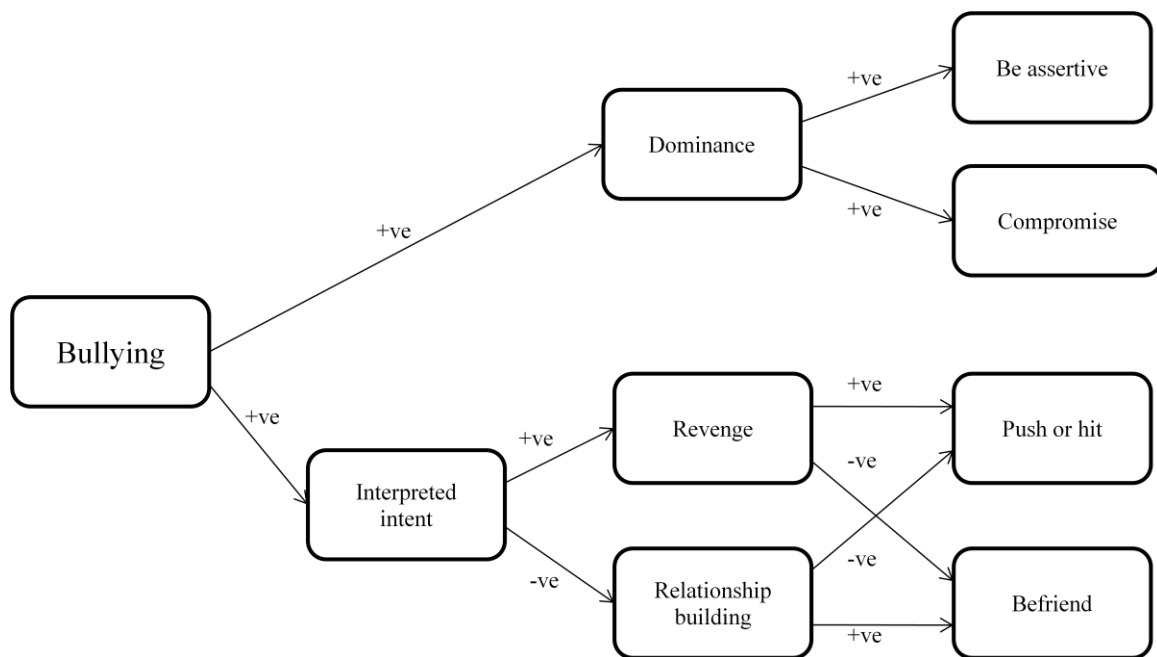
Figure 6.1: *Social goals as mediators between* bullying *and associated behaviours*

Next, attention switches to the social goals that have been associated with victimisation. Although some studies have reported that victims also hold goals for revenge, the association is likely to be specific to aggressive victims, who may also bully. In the present study, bully-victims are excluded from the sample so that the social goals that may mediate the association between victimisation and the submissive behaviours evident in non-aggressive victims can be focused on. The social goals of victims have not been studied extensively, but the literature that is available finds victims to endorse goals of avoidance (Erdley & Asher, 1996; Veenstra et al., 2007). Additionally, in Study 5 goals for harm avoidance (by avoiding the provocateur) and submissive behaviour (by not causing a fuss) were found to be associated with victimisation, even after allowing for emotionality and attribution of intent. While these goals may well result from previous experiences of harassment, it was argued that they may also stem from overactive concern for others' feelings. The previous empirical work has consistently supported this position. In Studies 1, 3, and 4, and in the bullying subgroup analysis in Study 5, victimisation in boys was

associated with a concern for "hurting the others' feelings". Indeed, children with a great concern not to upset others have been reported to experience feelings of helplessness and anxiety (Zahn-Waxler et al., 1991), and may therefore wish to remove themselves from social interaction. In specific relation to victimisation, Garner and Lemerise (2007) reported that victimisation was positively associated with knowledge of the emotional state of their peers. Because of this, it is hypothesised that the associations between victimisation and submissive behaviours (staying out of the provocateur's way, and trying not to make a big deal out of the provocation) will be mediated by the social goals of harm avoidance, and a concern not to upset the other (see Figure 6.2).

The present study aims to test these mediation models by first assessing which responses to ambiguous provocation are associated with bullying and victimisation, and then considering the extent to which these associations are mediated by social goals by way of structural equation modelling.
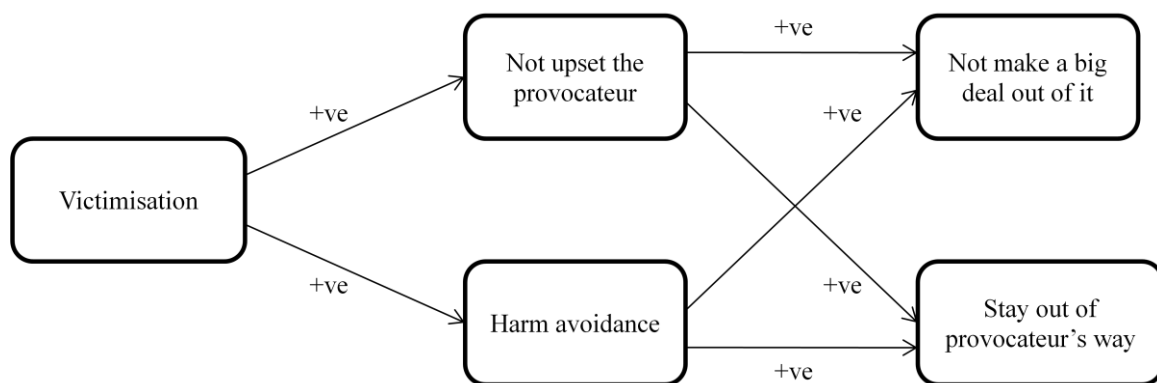
Figure 6.2: *Social goals as mediators between* victimisation *and associated behaviours*

Participants

The sample consisted of 171 children from three year groups (two Year 3 classes, two Year 4 classes, and two Year 5 classes) of a Primary school in a middle-class urban neighbourhood. The number of [boys,girls] in each class were as follows: Year 3 classes: [17,12] and [12,16]; Year 4 classes: [16,13] and [14,13]; Year 5 classes: [13,15] and [16,14]. Participants were aged between 7 years and 6 months and 10 years and 5 months (mean age = 9,0; *SD* = 10.25 months). The vast majority of children were Caucasian, and all were native English speakers. Consent for participation was obtained via a letter sent home to parents that informed them of the experimental procedure and gave them the option to opt their child out of the study. Data was collected in the spring term of 2010.

Measures

Two computerised measures were carried out in the present study: A bullying questionnaire; and a social information processing (SIP) measure depicting a series of ambiguous provocation scenarios that considered participants' interpretation of intent in the provocateur, the social goals that they might hold in response to provocation, and ratings for how they might respond to the provocation.

The bullying questionnaire was consistent with that used in Study 5. Children were asked to nominate classmates they had seen engaging in particular behaviours. Nominations were limited to three per question. Questions were designed to measure both physical and relational behaviours associated with bullying and being bullied. The questionnaire consisted of four physical bullying items (e.g., pushing or tripping another child on purpose), four

relational bullying items (e.g., stopping another child joining in games), four physical victimisation items (e.g., being hit by other children), and four relational victimisation items (e.g., having rumours made up about them behind their backs), along with four filler questions. The order of the questions was fixed for each child. As well as being presented on the computer screen, each question was read by a male experimenter. The children were encouraged to request clarification for any terminology that they did not understand, and were asked to wait for the experimenter before continuing to the next question. Children entered nominations on the computer using code numbers that had been assigned to names on the class list, and they were reassured that, because of the code number system, their answers would remain anonymous.

The SIP task consisted of four ambiguous provocation scenarios, of similar length and verbal complexity. Each scenario depicted some form of provocation, but it was not clear whether the provocateur had intended harm. For example:

Imagine you're on a school trip to a big adventure country park. You have built a really great den using branches from the woods. It is bigger than any you've ever built before and you're really happy with it. Someone from your class sees what a good job you've done and comes to have a better look. You are building a new roof so that the den will be a dry and safe place, even when it rains. But then the child from your class puts a really heavy branch on top and the whole den collapses under the weight!

Participants were asked to imagine they were on the receiving end of the provocation depicted in the scenario and to respond to a series of questions that followed the story. The first four questions assessed attribution of intent: 'Do you think the other child is mean? Do

you think he (she) did it on purpose? Do you think he (she) was happy with what he (she) had done? Do you think he (she) should be blamed for doing it?' (*No, I do not know, Yes*).

Children were then asked what social goals they might hold in response to the provocation. They were asked to rate social goals of dominance: *'Do you think it is important... that you make sure they do not do it again'*; revenge: *'to get your own back for what they just did'*; avoidance: *'to avoid the other child'*; relation building: *'to get along with the provocateur'*; and prosocial concern for others' feelings: *'not to upset the provocateur'*. Answers were on a 4-point scale ranging from *Not at all important for me* to *Very important for me*.

Next, children were asked how they would respond to the provocation. Children were asked if they would...hit out: *'push or shout at the other child';* be assertive: *'tell the other child not to do it again';* stay away: *'try to avoid the other child';* hush up: *'try not to make a big deal out of what happened';* compromise: *'tell the other child that you do not mind as long as [beneficial outcome for self]';* befriend: *'tell the other child that it is ok and that you can still be friends'*. Answers were on a 4-point scale ranging from *I definitely would not* to *I definitely would*.

Scoring

Bullying Questionnaire: With each nomination counted as one point, scores were obtained for physical bullying, relational bullying, physical victimisation, and relational victimisation. However, reliability analysis suggested that one item from the scale of physical bullying, physical victimisation, and relational victimisation should be excluded. After these items were removed, the reliability of the four scales was good [αs = .80, .87, .71, .66, for

physical bullying, relational bullying, physical victimisation, and relational victimisation respectively].

Because one physical bullying, physical victimisation, and relational victimisation item were removed, it was necessary to calculate mean scores for bullying and victimisation by dividing the raw tallied scores by the number of items that were used to obtain the scores. For example, physical bullying scores were obtained from three items, so the total physical bullying score was divided by three; relational bullying scores were obtained from four items, and thus the total relational bullying score was divided by four.

SIP Task: Attribution of intent scores were obtained for each scenario by counting the number of '*Yes*' responses in each of the four questions. The mean scores across the four scenarios were then calculated. Consequently, each child then had scores ranging from 0 to 4 for perceived threat. Scores for social goals and reactions were obtained by taking a mean of the scores across the four scenarios. Five social goal scores (one for each social goal - ranging from 1 to 4) were therefore obtained in total, as were six reaction scores.

Some children responded to all questions on the SIP measure with an identical rating, and this data was considered invalid and excluded from the analysis. Participants also had to have completed every question for at least two of the four stories to achieve an overall score for the SIP variables. Due to the above criteria, 15 children were excluded from the main analysis.

Design and Procedure

Children were seen, half a class at a time, in their school's IT suite. They accessed each questionnaire on-line under the supervision of a male experimenter. For each of the measures, the experimenter read out the questions in order and children were encouraged to wait for him to have done so before responding. On demand, any terms used in the questionnaires that caused confusion were explained to participants. Additionally, two teaching assistants were on hand to assist children with low reading ability. Data was collected over two 30 minute testing sessions. Children always completed the bullying survey in the first session, and the SIP task in the second.

6.1.2   Results

The descriptive statistics and effects of gender and year group for each measure are reviewed first, before turning to the associations between bullying/victimisation and the SIP variables (interpreted threat, social goals, and response scores). Finally, the mediation analysis is detailed and the role each social goal has in mediating the associations between bullying/victimisation and response scores is discussed.

Bullying and Victimisation Scores

Mean raw scores for bullying and victimisation are displayed in Table 6.1. A mixed 2(sex) x 2(type: physical vs. relational) ANOVA was carried out for both bullying and victimisation to determine whether there was a difference in the type of bullying preferred between the sexes. For bullying, the ANOVA revealed a significant effect of type *and* an interaction between type and sex [$F_s(1, 169)=12.64, 9.97$ respectively, both $ps<.01$]. The descriptive statistics (see Table 6.1) indicated that while bullying in girls was more likely to

take a relational form, both forms occurred to similar levels in boys. The ANOVA for victimisation also revealed a significant effect of type and an interaction between type and sex [Fs$(1, 169)$=16.97, 18.06 respectively, both ps<.01]. Again the descriptive statistics indicated that girls were victimised through relational aggression more than they were through physical aggression, but that boys experienced both forms to similar levels.

Next, a subgroup of children who both bully and are bullied was identified. Background literature (and the previous empirical work) suggest these 'bully-victims' may demonstrate unique social-cognitive attributes and can consequently be expected to influence the associations between bullying/victimisation scores and the SIP variables. In order to categorise this sub-group, overall bullying and victimisation nominations (i.e., physical + relational scores) were tallied and then standardised within class (in case of different patterns within individual classes) *and* sex (as initial analysis indicated sex differences in the type of bullying/victimisation preferred). Children who scored more than one standard deviation above the mean score in bullying were classified as bullies and likewise for victimisation and classification as victims. Scores more than one standard deviation above the mean score in bullying *and* more than one standard deviation above the mean score in victimisation resulted in categorisation as bully-victims, and all others were categorised as 'comparison'. The numbers of children in each of the subgroups, and their mean scores for bullying and victimisation, are displayed in Table 6.2. The analysis showed that 8 of the children were classified as bully-victims and consistent with previous studies, these children were excluded from subsequent analysis.

Table 6.1: *Mean, SD, and range of bullying and victimisation nominations by sex and year group*

	N	Bullying		Victimisation	
		Physical	Relational	Physical	Relational
Boys	88	1.22 (2.42)	1.26 (2.10)	0.73 (1.08)	0.72 (0.99)
Girls	83	0.23 (0.45)	0.78 (0.89)	0.41 (0.49)	0.90 (0.82)
Year 3	57	0.58 (1.07)	0.97 (1.18)	0.50 (0.56)	0.69 (0.71)
Year 4	57	0.77 (1.69)	0.95 (1.26)	0.59 (0.63)	0.71 (0.67)
Year 5	58	0.87 (2.46)	1.14 (2.26)	0.63 (1.23)	1.01 (1.22)
Total	171	0.74 (1.83)	1.02 (1.64)	0.57 (0.86)	0.81 (0.91)

Table 6.2: *Mean, SD, and range of bullying and victimisation nominations by bullying sub-group*

	N	Bullying		Victimisation	
		Physical	Relational	Physical	Relational
Comparison	133	0.38 (0.65)	0.65 (0.72)	0.36 (0.45)	0.55 (0.58)
Bullies	12	3.56 (4.42)	4.00 (3.82)	0.50 (0.46)	0.72 (0.57)
Victims	18	0.26 (0.53)	0.44 (0.40)	1.91 (1.78)	1.96 (1.35)
Bully-victims	8	3.67 (3.90)	4.00 (1.85)	1.29 (0.45)	2.63 (0.63)
Total	171	0.74 (1.83)	1.02 (1.64)	0.57 (0.86)	0.81 (0.91)

Table 6.3: *Possible range of SIP scores and mean scores by sex*

		Possible range	Boys	Girls	Total
Attribution of hostile intent		0-4	1.43	1.01	1.23
Social goals	Dominance	1-4	2.97	2.68	2.83
	Revenge	1-4	1.91	1.86	1.89
	Avoidance	1-4	2.16	2.02	2.09
	Relation building	1-4	2.78	2.85	2.81
	Concern for others' feelings	1-4	2.78	2.82	2.8
Reaction to provocation	Push or hit	1-4	1.77	1.48	1.63
	Be assertive	1-4	3.13	2.97	3.05
	Stay away	1-4	2.02	1.95	1.98
	Hush up	1-4	2.62	2.48	2.55
	Compromise	1-4	3.04	3.04	3.04
	Befriend	1-4	3.05	3.23	3.14

Note that bully-victims were excluded from the sample before the descriptive statistics above were calculated. Thus, N=163.

Story Responses

The potential range and the mean scores for children's responses to each component of the SIP measure are displayed in Table 6.3. In order to test for gender differences in each of the SIP scores, a series of independent t-tests were carried out, with the SIP scores (interpreted intent, each of the five social goals and each of the six response scores) as the dependent variables. The ANOVA revealed several sex differences in SIP scores. Boys interpreted significantly more intent on the behalf of the provocateur, held stronger goals for dominance, and reported themselves as more likely to push or hit the provocateur in comparison to girls [ps all <.05].

Relations between responses to social scenarios and bullying/victimisation

The associations between bullying and victimisation and the individual SIP scores are discussed next. Note that the bullying/victimisation scores reported in the remaining analysis have been standardised within class.

Table 6.4 shows the intercorrelations among all measures. As expected, these show evidence for associations between bullying and victimisation scores and social goals. Both forms of bullying were positively related to goals to be dominant, and physical victimisation was related to goals for avoidance and for not upsetting the provocateur. An unexpected association between bullying and the social goal of avoidance was also found. Importantly, there were significant associations between bullying/victimisation and response scores. Bullying was associated with the responses of pushing/hitting the provocateur, trying to avoid the provocateur, and negatively related to befriending the provocateur. Physical victimisation was related to the responses of assertiveness, trying to stay away from the provocateur, and trying not to make a big deal out of what happened. The associations between bullying/victimisation, social goals, and response scores, provide justification for the mediation models outlined in Section 6.2.4 below.

Table 6.4: *Correlation matrix for bullying/victimisation scores and all SIP measures*[5]

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Physical Bullying	-															
2	Relational Bullying	.68**	-														
3	Physical Victimisation	.02	-.01	-													
4	Relational Victimisation	-.02	.05	.39**	-												
5	Interpreted intent	.27**	.10	.11	-.05	-											
	Social Goals																
6	Be dominant	.28**	.15†	.12	.04	.67**	-										
7	Get revenge	.10	.06	.06	.06	.66**	.54**	-									
8	Avoid	.28**	.19*	.14†	.11	.61**	.55**	.60**	-								
9	Get on with	-.03	-.11	.09	-.06	-.33**	-.34**	-.47**	-.49**	-							
10	Not upset	.04	-.10	.19*	.06	-.09	-.10	-.09	-.09	.48**	-						
	Response Scores																
11	Push or hit	.27**	.20*	.04	.07	.55**	.46**	.67**	.45**	-.45**	-.18*	-					
12	Be assertive	.11	.08	.16*	.05	.49**	.54**	.36**	.39**	-.19*	.07	.34**	-				
13	Stay away	.29**	.21**	.14†	.11	.52**	.52**	.53**	.80**	-.44**	-.10	.40**	.44**	-			
14	Hush up	.03	-.06	.15†	.04	-.09	-.08	-.13	-.16†	.31**	.29**	-.14†	-.01	-.07	-		
15	Compromise	-.06	-.08	.12	.01	.11	.39**	.10	.03	.05	.14†	.01	.42**	.14†	.18*	-	
16	Befriend	-.27**	-.22**	-.07	-.01	-.48**	-.38**	-.55**	-.51**	.62**	.26**	-.52**	-.25**	-.48**	.27**	.15†	-

†p<.10; * p<.05; **p<.01

[5] Note that bully-victims were excluded from correlational analysis. Thus, *N*=163.

It is important to assess whether the relationships between bullying/victimisation and social goals/response scores were moderated by gender. In order to test for moderation effects of gender on associations with social goals, a series of hierarchical regressions were run whereby the four bullying and victimisation scores were regressed on social goal scores and gender (forced entry), and then by terms for the interaction between gender and each social goal score (stepwise entry). No effects of moderation by gender were apparent for bullying (for all interaction terms, $ps > .10$), but there was a moderation effect of gender on the association between physical victimisation and a social goal for revenge. Correlational analysis split by gender revealed that while physical victimisation is positively associated with a social goal for revenge in boys ($r = .23$, $p = .04$), the corresponding association in girls was negative and non-significant ($r = -.18$, $p > .10$).

A similar set of regressions were run to test for gender moderation effects on associations between bullying/victimisation and response scores, but with response scores substituted for social goal scores. Gender was found to moderate the associations between the response of pushing or hitting the provocateur and both physical ($p = .01$) and relational bullying ($p = .04$). Correlational analysis split by gender revealed that while physical and relational bullying are strongly positively associated with the push and hit response in boys ($rs = .39$ and $.35$ respectively; $ps < .01$) the associations, although in the same direction, were weaker in girls ($rs = .23$ and $.11$ respectively). There was also an effect of gender on the association between physical victimisation and the response of 'not making a big deal of what happened'. While the association only approached significance in both genders, in boys it was positive ($r = .20$, $p = .07$), whereas in girls it was negative ($r = -.21$, $p = .08$).

Despite the various moderating effects of gender that have been identified above, the mediation models detailed below were not split by gender. This was to ensure the maximum statistical power to identify significant pathways between variables in each model. However, it is important to consider these moderation effects when interpreting each mediational model, especially physical victimisation which is positively associated (ps<.07) with a social goal for revenge and the 'not making a big deal out of it' response in boys, but negatively associated with the same variables in girls.

Mediation models

The main analysis of the present study considers the role social goals have in mediating the associations between bullying/victimisation and response scores. Structural equation models of the relationships between bullying/victimisation and response scores were evaluated, with interpreted intent and each of the social goals included as mediators. For each form of bullying (physical and relational), analysis began with a fully saturated model where bullying predicted interpreted intent, each of the social goals, and each of the response scores. Interpreted intent predicted each of the social goals and each of the response scores, and the social goals predicted each response score. Next, any non-significant pathways were removed. Models were created in the same way for physical and relational victimisation. The final models for physical bullying, relational bullying, physical victimisation, and relational victimisation are shown in Figures 6.3, 6.4, 6.5, and 6.6 respectively, and the fit indices for the models are shown in Table 6.5.

In order to consider how interpreted intent and social goals mediated the associations between bullying/victimisation scores and response scores, bootstrapping (1000 samples) was

conducted to evaluate the significance of all remaining *indirect* pathways between

bullying/victimisation and the response scores. Direct paths were always included in the

model when estimating the indirect paths. The mediation analyses for each model are

discussed in turn. Note that all pathways in each of the models are standardised estimates

significant at a level of p<.05 unless otherwise stated.

Physical bullying

The final model for physical bullying, depicted in Figure 6.3, suggests that the

associations between physical bullying and each of the response scores might be mediated by

interpretation of intent and social goals. It is now considered whether the various pathways

between bullying and the associated behaviours are mediated by social goals as predicted in

the hypothesised model (Figure 6.1). The direct and indirect pathways are discussed in order,

proceeding from the top to the bottom of the hypothesised model. Finally any pathways that

may exist between physically bullying and the stay away and hush up responses are

reviewed.

There was a direct path between physical bullying and the compromise response.

However, indirect pathway coefficients suggested that this path is partially mediated by

interpreted intent and the social goal of dominance (z=.114, p<.01). In fact, although the

direct pathway between physical bullying and the compromise response and the indirect

pathway through interpreted intent were negative, the indirect pathway through social

dominance was *positive*, suggesting that bullies are only likely to try and compromise with

the provocateur if they believe that it will help them achieve dominance, and partially

supporting the hypothesised model for bullying. The social goal of dominance also provided

an indirect pathway (via interpreted threat) between physical bullying and the assertive

response (z=.164, p<.01). This implies that if bullies interpret intent behind provocation, and if they hold goals for dominance, they are more likely to 'tell them not to do it again'. Again, this partially supports the hypothesised model and suggests that physical bullies may mix their behaviours (be assertive or compromise) in order to achieve their social goal of dominance.

Secondly, attention switches to the pathways between physical bullying and the 'push or hit' and 'befriend' responses. There was a direct path between physical bullying and both the 'push or hit' response (positive), and the 'befriend' response (negative), but these paths were both partially mediated by interpreted intent and the social goals of revenge and not wanting to get on with the provocateur (z=.101, p<.01 between bullying and 'push or hit'; and z=-.083, p<.01 between bullying and 'befriend'). This implies that if the bully interprets intent behind provocation, they are more likely to be motivated by getting revenge and less likely to be motivated by getting on with the provocateur, and are therefore more likely to push or hit the provocateur, and less likely to try to befriend them. Again, this partially supports the hypothesised model. Because the magnitude of the association between physical bullying and the 'push or hit' response was found to be moderated by gender in the preceding analysis, the data was split by gender, and the pathway checked to see if it should only be included in a model for physical bullying in boys. However, pathway analysis supported the inclusion of this pathway in models for both genders (ps<.05 in both models).

There were also significant indirect pathways between physical bullying and the hush up response by way of interpreted intent and the social goal of wanting to get on with the provocateur (z=-.017, p<.01), and between physical bullying and the 'avoid the provocateur' response (z=0.220, p<.01) by way of interpreted intent and the social goal of avoidance.

Relational bullying

In the final model for relational bullying (Figure 6.4), the pathway between relational bullying and the social goal of dominance only neared significance (p=.09) but was kept in the model so that the hypothesis that dominance would mediate the associations between bullying and the compromise and be assertive responses could be tested. This hypothesis was once again partially supported. Although there was a negative direct pathway between relational bullying and the compromise response, there was also a *positive* indirect pathway that neared significance between relational bullying and compromise, via the social goal of dominance (z=.063, p=.10). This suggests that bullies may cooperate if they think they can achieve dominance through it. With regard to the response to be assertive, there was no direct pathway from relational bullying, but there was an indirect pathway by way of the goal of social dominance (z=.039, p=.10). In line with the hypothesised model, this suggests that bullies that are motivated by dominance are more likely to be assertive in response to provocation.

The model also indicates direct paths between relational bullying and the 'push or hit' (positive), and 'befriend' (negative) responses, but unlike the model for physical bullying, these associations were not mediated by interpreted threat, or by the goals of revenge and getting along with the provocateur. Finally, path analysis revealed an indirect path that neared significance between relational bullying and the staying away response, via the social goal for avoidance (z=.092, p=.09). As with the model for physical bullying, the data was split by gender, and the pathway between relational bullying and the 'push or hit' response was checked to see if it should remain in models for both genders. However, path analysis supported the inclusion of this pathway *only* in models for boys (p=.04).

Physical victimisation

The final model for physical victimisation (Figure 6.5) did not include any direct paths between physical victimisation and the responses. Also, physical victimisation was not associated with hostile intent scores. However, as predicted, there was an indirect path between physical victimisation and 'not making a big deal out of what happened' although the pathway only neared significance (z=.027, p=.08). This implies that physical victims who are concerned about whether they might upset the provocateur are more likely to respond submissively by trying not to make a big deal out of the situation.

The preceding analysis identified moderation effects of gender on the association between physical victimisation and both the social goal for revenge and the response of 'not making a big deal about what happened'. Consequently, the data was split by gender and the pathways of the model in Figure 6.5 were re-analysed. While the pathway between physical victimisation and 'not making a big deal about what happened' remained in the model in boys (p=.05), the pathway between physical victimisation and the social goal for revenge did not. The final model for girls found no significant pathways between physical victimisation and any of the variables. Subsequently, the model depicted in Figure 6.5 is representative of boys alone.

Relational Victimisation

The final model for relational victimisation (Figure 6.6) also did not include any direct paths to the any of the responses scores. However, there was an indirect pathway between relational victimisation and the stay away response that neared significance

(z=0.091, p=.07). This suggests that relational victims who are motivated by harm avoidance are more likely to try and stay out of the provocateurs way.

Table 6.5: *Fit indices for models showing paths from bullying and victimisation to associated behaviours*[6]

	df	CFI	RMSEA	RMR	χ^2	p
Physical Bullying	49	.976	.054	.074	70.18	.025
Relational Bullying	50	.984	.044	.083	64.25	.085
Physical Victimisation	50	.946	.079	.084	95.97	.000
Relational Victimisation	54	.983	.043	.067	68.56	.088

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[6] Note that in all models, after excluding bully-victims and allowing for missing data, *N*=148
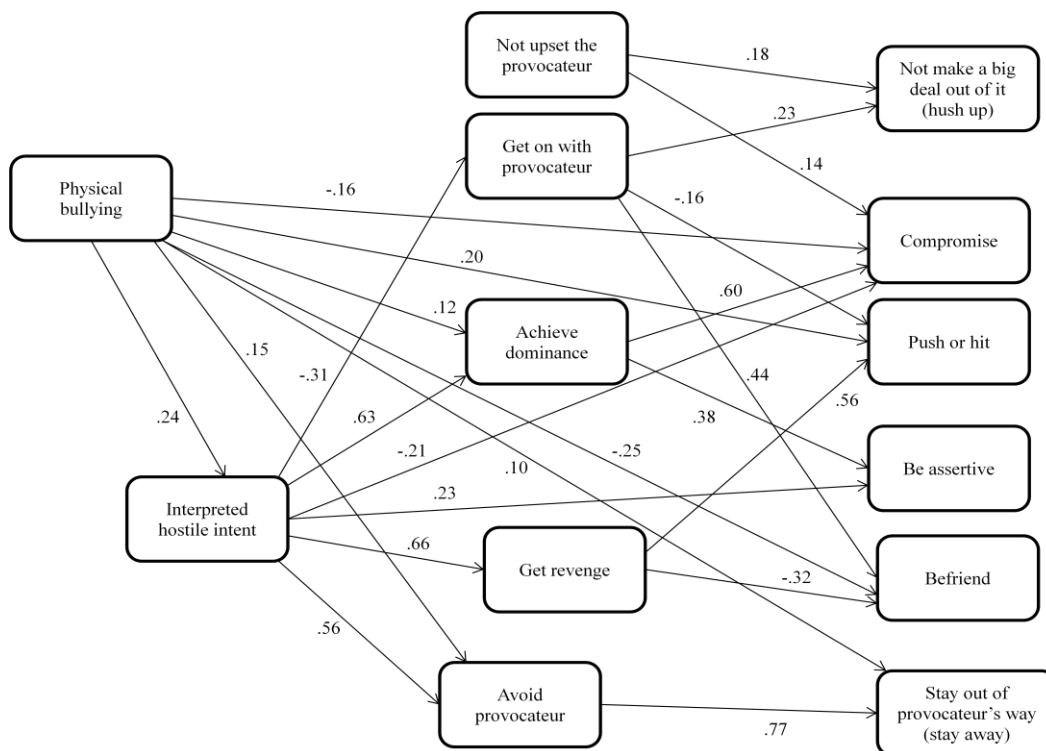
Figure 6.3: *Final model for physical bullying.*
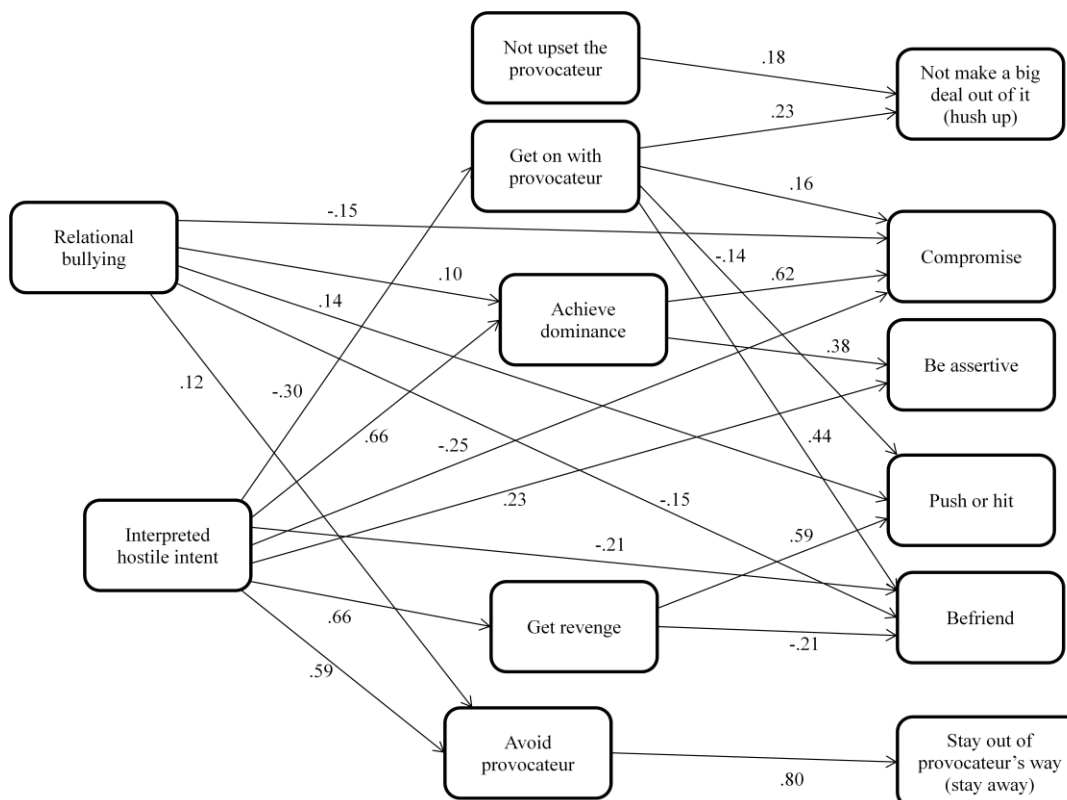
Figure 6.4: *Final model for relational bullying. The pathway between relational bullying and dominance was significant at the p<.10 level, but all other pathways significant to p<.05*
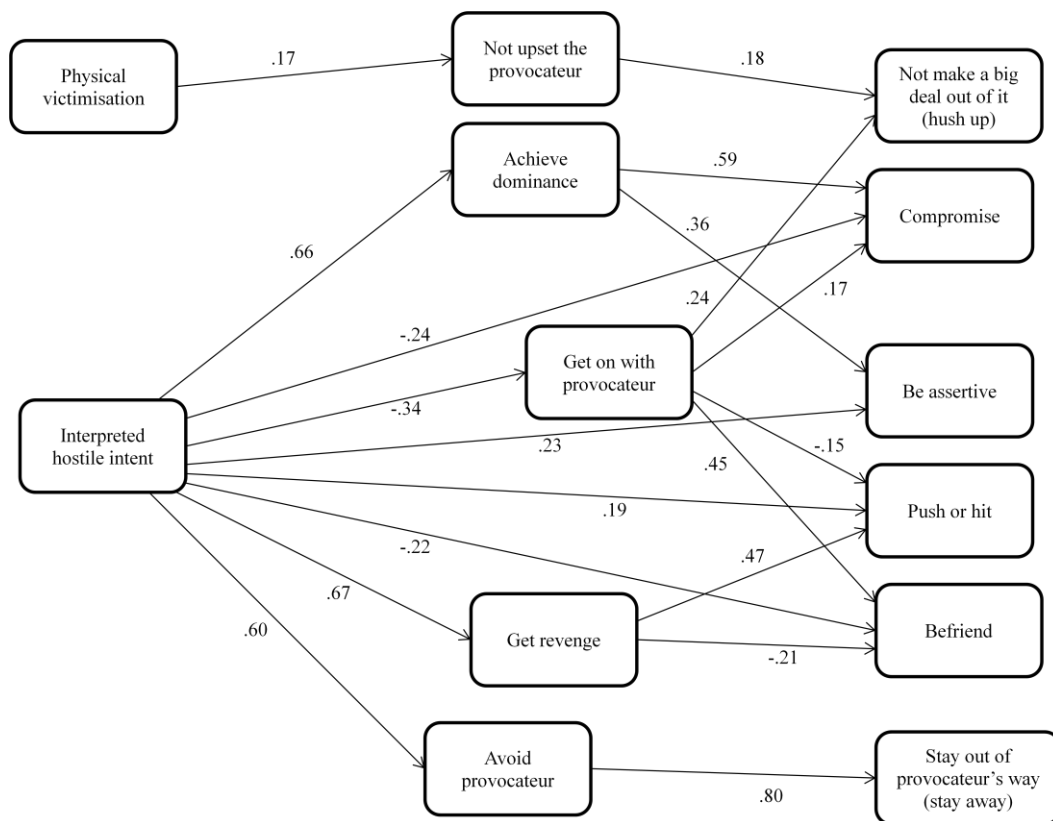
Figure 6.5: *Final model for physical victimisation*
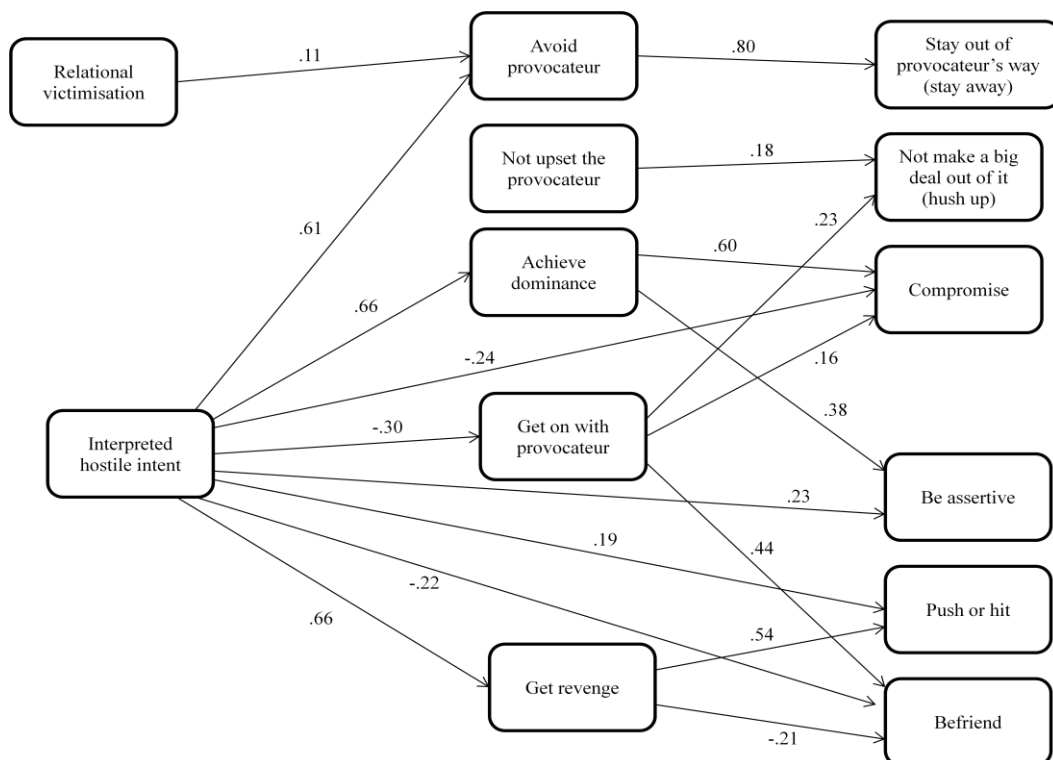
Figure 6.6: *Final model for relational victimisation. The pathway between relational victimisation and avoidance was significant at the p<.10 level, but all other pathways significant to p<.05.*

The present study put forward hypothetical models to explain how the relationships between bullying and victimisation on one hand, and their associated behaviour when faced with ambiguous provocation on the other, might be mediated by the attribution of intent in the provocateur, and by the social goals they employ in response to the provocation. The hypothetical models were both partially supported. Next, the role each of the social goals has to play in mediating the relationships between bullying/victimisation and associated behaviours is discussed, both in terms of the empirical findings and in relation to the background literature.

The final models for physical and relational bullying both suggested that the social goal to achieve dominance over the provocateur mediated the associations between bullying and the responses of compromising and being assertive. Both forms of bullying were negatively related to compromising and were not related to being assertive. However the indirect pathways between bullying and compromising/being assertive that passed via the social goal of dominance were both positive and highly significant. This implies that bullies may react to ambiguous provocation by compromising or by 'telling the provocateur not to do it again' but only if they are doing so to achieve dominance over the provocateur. Although both responses are directed at making sure the provocateur does not do it again, the models suggest that the bully utilises both cooperative (compromise) and controlling (be assertive) behaviours to achieve this.

Related literature has often reported that aggressive children and bullies (especially boys) are likely to endorse goals of dominance (Arsenio & Lemerise, 2001; Boulton &

Underwood, 1992; Lochman et al., 1993; Veenstra et al., 2007), and recently researchers have argued that they may adapt their behaviour to achieve these goals, engaging in a mix of prosocial and assertive/aggressive behaviours (Vaillancourt et al., 2003). It may be the case that aggression has longer lasting benefits when coupled with cooperative behaviours, because they protect the aggressor from becoming peer-rejected. Indeed, Puckett et al. (2008) found that relationally aggressive adolescents, who were described as demonstrating leadership and cooperation skills, were higher in peer status and perceived popularity than their peers.

Puckett et al. (2008) argued that relational aggression requires a degree of social intelligence (see also Archer, 2001; Bosacki, 2003; Sutton et al., 1999c), as well as an image of positive social status to carry out (Salmivalli et al., 2000), and thus it can be implied that relational bullies are more likely than physical bullies to understand the importance of prosocial behaviour in ensuring that their aggression is effective in achieving dominance. However, as Sutton et al. (2001) point out, physical bullies also need to be able to understand how others perceive their aggression, especially if it is to be effective in the long run. The current results support the latter position, finding both relational *and* physical bullying to be associated with both compromising and being assertive with the provocateur when they are motivated to achieve dominance.

In the bottom half of the hypothetical model, it was predicted that bullying would be positively associated with pushing and hitting the provocateur and negatively with befriending the provocateur, but that these relationships would be partially mediated, firstly by whether intent was interpreted by the provocateur, and subsequently by the social goals of revenge and (not) wanting to get on with the provocateur. Although this mediation was

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supported in the final model for physical bullying, it was not for relational bullying, because relational bullying was not related to interpreted intent. Specifically, while both physical and relational bullying were both directly associated with the responses of hitting out at the provocateur (positively) and befriending the provocateur (negatively), for physical bullying this association was partially mediated by a significant indirect pathway through interpreted threat and the social goals of revenge and (not) getting on with the provocateur. It should also be considered that the relationship between bullying and the 'push or hit' response was considerably weaker in the model for physical bullying in girls, and was not evident in the model for relational bullying (also in girls). This is unsurprising given that aggression is deemed to be a more acceptable response in boys (Rose & Rudolph, 2006). Nevertheless, the models for physical bullying in both sexes supported the mediational effect of interpreted intent on the pathway between physical bullying and the 'push or hit' response.

Although there is plenty of evidence that bullies, among other aggressive children, are more likely to interpret intent behind ambiguous provocation (Camodeca et al., 2003; Camodeca & Goossens, 2005; and see also Crick & Dodge, 1994, for a review on the interpretation biases of aggressive children) and that they hold high social goals for retaliation and low goals for getting along with the provocateur (Camodeca & Goosens, 2005; Erdley & Asher, 1996; and see Erdley & Asher, 1999 for a review), few studies have considered how these biases may be related to each other. The models proposed here indicate that the association between physical bullying and the goals of revenge (and to a lesser extent (not) wanting to get along with the provocateur) was heavily mediated by the interpretation of threat. Additionally, interpreted intent was only associated with hitting or pushing the provocateur, and with (not) befriending the provocateur, through the social goals of revenge and (not) wanting to get on with the provocateur. This suggests that bullies' antisocial goals

for revenge and not getting along with the provocateur are charged by the interpretation of intent on the behalf of the provocateur and contribute to their aggressive and non-prosocial response repertoire.

The previous studies have consistently implied that bullies are able to adjust their goals to the situation. In studies 1 through 4 bullying was only associated with a concern for not getting picked on by their peers when their image of proficiency was at stake, and in the previous study, it was reported that bullies are only concerned with being assertive to their provocateur when the conflict was overtly hostile, as opposed to when the intent behind the provocation was ambiguous. The models from the present study offer further support to this position. Firstly, there was a significant indirect pathway between both physical and relational bullying and the assertive and 'push or hit' response strategies via interpreted intent indicating that bullies are more likely to be assertive when they have interpreted intent behind the provocation. Secondly, both physical and relational bullying were *directly* associated with goals for avoidance, indicating that, consistent with studies 1 to 4, some bullies may prefer to remove themselves from situations where they are on the receiving end of conflict, rather than risk detrimental effects to their image of dominance by confronting the provocateur. Thirdly, the models suggest that bullies adapt their response strategies depending upon the social goals endorsed, implying that bullies not only adapt their social goals according to the situation but are similarly likely to select their responses dependent upon the goals selected.

The distinction between goals for dominance, and goals for revenge and (not) to get along with the provocateur, closely parallels the distinction between proactive and reactive aggression. Proactive aggression is considered to be cool, calculated and callous, and is usually employed to achieve an instrumental end, such as social dominance. Reactive

aggression is emotionally charged and linked to antisocial goals for revenge and retaliation (Crick & Dodge, 1996; Dodge, 1991; Dodge & Coie, 1987). Bullies have been found to engage in both forms of aggression (Camodeca et al., 2002; Camodeca & Goossens, 2005; Salmivalli & Nieminen, 2002), and this has been reflected in the final model for physical bullying. Interestingly, the same did not apply to the final model for relational bullying, which suggested that relational bullies are not as likely as physical bullies to interpret intent to ambiguous provocation and are therefore less likely to endorse the goals for revenge commonly associated with reactive aggression. This may reflect the level of social understanding that some researchers have argued to be required to carry out effective relational aggression (Archer, 2001; Puckett et al., 2008; Sutton et al., 1999c).

The models for physical and relational victimisation differed notably. Further, before the final model for physical victimisation is discussed, it is important to note that this model was only supported in boys, and that no meaningful associations were evident between physical victimisation in girls and any of the variables. In boys, the final model for physical victimisation identified only one (indirect) pathway between physical victimisation and any of the responses. This was between physical victimisation and the response of 'not making a big deal out of it' and was mediated by the social goal of not upsetting the provocateur. This implies that victims of physical aggression engage in submissive behaviours out of some sort of emotional concern for the provocateur. Furthermore, the model indicated that physical victims were not especially concerned with avoiding the provocateur, suggesting that these children are not particularly focused on removing themselves from the danger of recurrent physical aggression.

Although this finding may seem surprising, it is very much in line with my previous empirical work. In Studies 1, 3 and 4, associations were reported between victimisation in boys and a concern for 'not hurting the others' feelings'. Further, in Study 5, it was reported that victimisation was associated with the submissive social goal of '...not wanting to cause a fuss' in scenarios depicting ambiguous provocation. Taken together, these findings paint a picture of victims as holding an overactive empathic concern for others and consequently acting submissively. There is also some support for this position in the existing literature. Victims have been found to demonstrate high levels of empathy (measured by their emotional responsiveness to the emotional state of their peers), especially close to the onset of their victimisation (Malti et al., 2010), and Zahn-Waxler et al. (1991) reported that children with an overactive affective empathy may become overly concerned with others' problems and withdraw from interaction to relieve their feelings of anxiety. Indeed, victims' overactive empathy could also contribute to their internalised problems of depression, social anxiety, and low self worth (Zahn-Waxler et al., 1991; Perren, Stadelmann, von Wyl, & von Klitzing, 2007). Moreover, if led to withdraw from social interaction because they are overwhelmed by their emotionality, these children are likely to identify themselves to bullies as being easy targets for aggression, both because they provide the bully with some indication that they are upset (through their emotional response), and also because the bully knows that they are unlikely to face confrontation as a consequence of their aggression (Olweus, 1978).

The model for relational victimisation also identified only one (indirect) pathway between relational victimisation and the responses, namely, between relational victimisation and the response to try and avoid the provocateur, mediated by the social goal for avoiding the provocateur. The existing literature has identified victims as seeking goals for harm avoidance (e.g., Veenstra et al., 2007) so the association between relational victimisation and

the goal of avoidance was not unexpected. However, it is interesting to consider that the goal for avoidance only contributed to the response of trying to avoid the provocateur, and not also to 'not making a big deal out it'. This implies that goals for harm avoidance are likely to lead to response strategies that revolve around staying out of the provocateur's way, but may not be indicative of submissive behaviours in general.

Relational victimisation was not directly associated with 'trying to avoid the provocateur' which suggests that this response is better predicted by children who hold the goal of avoidance than by relational victims in general. However, it should be noted that the association between the social goal of 'avoiding the provocateur' and the response 'try to avoid the provocateur' was very strong. Semantically, these items were very similar, and the association between the goal and response is therefore likely to be exaggerated. Although relational victims do appear to hold goals for avoiding the provocateur, the indirect pathway between relational victimisation and 'trying to avoid the provocateur' is thus unlikely to extend understanding as to why victims demonstrate submissive behaviours. Future related research might be better served by explicitly rating the goal of harm avoidance – 'how important would it be for you to avoid being hurt or harmed' and response strategies of 'staying out of the way of the provocateur'.

Nevertheless, there appear to be distinct models for physical and relational victimisation. It is argued that physical victims experience heightened anxiety in social situations because they hold great concern with not upsetting others, and therefore behave submissively and become easy targets for subsequent victimisation. Relational victims on the other hand are more concerned with avoiding the provocateur. Because relational aggression uses other people to cause harm, and aims to exclude the victim from their peer group,

avoidant responses are likely to prove particularly ineffective and leave the victim prone to further relational harassment.

The final models for bullying and victimisation have provided important insight into the relationships between bullying/victimisation, social goals, and subsequent behaviour. Social goals have been demonstrated to play an important mediating role in the relationships between bullying/victimisation and their associated behaviours, and may thus prove to be crucial in predicting whether a child is at risk of continued bullying or harassment. However, the present study also leaves many stones unturned, and future research is needed to provide a more comprehensive understanding as to how social goals may shape bullies' and victims' behaviour.

Although bullying was found to be associated with the social goal of dominance, the relationship was not very strong, especially for relational bullying. This was a little unexpected as the need for social status is likely to be greater for relational aggressors than for physical aggressors (Puckett et al., 2008). Moreover, the background literature has generally reported that the association between bullying and goals for dominance increases with age, and is most notable in adolescents (Sijtsema et al., 2009), by which age relational aggression is usually preferred over physical aggression (Galen & Underwood, 1997; Österman et al., 1998). An important direction for further research would be to run a similar study on secondary school children (with suitable measures for this age group). If aggressive adolescents' cooperative behaviour is again mediated by goals for social dominance, understanding this may prove fruitful in preventing subsequent aggressive interactions. If it is not, then it suggests that there might have been some sort of developmental change. The most likely cause for dominance seeking individuals to cease behaving cooperatively, would be if

they no longer held any beliefs that this behaviour would bring them reward. A developmental study, from late Primary school to early secondary school, that assessed children's social goals, their response strategies, *and* the efficacy beliefs they hold about their responses, would have much to offer in understanding how a bully's goals may shape their aggressive and/or cooperative behaviour.

Very little research has considered the social goals of victims. However, the present study has identified specific goals that may be integral in their social-cognitive processing that leads to their misplaced submissive behaviours. Most notably, the association between physical victimisation and the submissive behaviour of 'not making a big deal out of it' was mediated by a concern for not upsetting the others. The previous empirical work detailed in this thesis has consistently identified victims (especially boys) to have an overactive concern for the feelings of others, and often in inappropriate situations such as the ambiguous provocation scenarios utilised in the present study. Here, it is argued that this may be the consequence of an overactive empathic and emotional responsiveness in certain children, and that this may leave them prone to and not protected from victimisation. Clearly, further research is needed to put weight behind these claims. Firstly, it would be interesting to see if affective empathy has any influence on victims' social goals and their preferred responses to provocation. The existing literature has suggested that recent onset victims may be more concerned with the emotional states of others, but related research is minimal and the author knows of none that has considered affective empathy alongside SIP measures. A second line of research would be to consider how these associations vary as victimisation continues. Malti et al. (2010) implied that continual harassment can lead children to 'switch off' from their empathy, as they find the experience too traumatic. Arguably, by doing this, they might protect themselves from developing emotional adjustment problems to some extent (see also

Arsenio & Lemerise, 2001; Findlay, Girardi, & Coplan, 2006; Grills & Ollendick, 2002). If this is the case, it would be interesting to see whether their social goals and their response preferences vary as this occurs.

Finally, this research may offer insight into the formulation of intervention and prevention strategies. The present study found bullies to use both assertive and cooperative behaviours in an attempt to achieve social dominance. Although the motivation behind their cooperative behaviour is likely to be instrumental, the responses themselves are less harmful to their peer group than those employed by bullies who are fuelled by revenge. Social goals for revenge were largely mediated by the interpretation of intent in the provocateur, so aiding the bully to accurately identify intent (or to give the provocateur the benefit of the doubt) could lead them away from pushing and hitting in retaliation and towards cooperative behaviours instead. Similarly, victims who experience a lot of emotionality in response to social interaction (and are therefore inappropriately concerned with upsetting the provocateur) might benefit from learning how to manage their emotions of anxiety, and this might enable them to deal with social situations more competently. Relational victims on the other hand might benefit from learning how to deal with their harassment, rather than avoiding its source. Indeed, some intervention strategies focused on training children to deal with conflict situations competently have met with some success (e.g., the ViSC Training Program, Germany; see Atria & Spiel, 2007). The existing intervention strategies are reviewed in more detail in the following chapter and consideration given to how the collective findings of this empirical project can add value to such schemes (Section 7.5).

Chapter 7:   General Discussion

This programme of empirical work was designed to extend our understanding of the role played by social goals in bullying and victimisation. In Chapter 2, three overall aims were specified to achieve this goal:

1. To develop an understanding of the social goals that are related to bullying and victimisation in Primary school children, and to investigate whether associations remain across a variety of social settings, across forms of bullying (physical and relational), and across gender.

2. To determine whether these social goals are able to predict bullying and victimisation even after variance explained by SIP biases and ToM has been taken into account.

3. To investigate the role social goals have to play in mediating the relationships between bullying/victimisation and the behavioural responses to social conflict that have characterised bullies and victims in the existing literature.

In this chapter, the progression of the empirical work detailed in this thesis is discussed, and the findings summarised across the empirical work. The contribution this research has to make to the existing literature is reviewed with appreciation of its limitations. Finally, in light of this discussion, suggestions for future investigation are put forward, and I reflect on how these findings might serve to direct bullying prevention and intervention strategies.

7.1   Social goals as predictors of bullying and victimisation

The vast majority of research that has considered the social goals of children has utilised conflict scenarios to provide a hypothetical social context to assess them (see Erdley & Asher, 1999). However, because bullying is more closely associated with proactive aggression (Coie et al., 1991), it was posited that bullies are likely to be the instigators rather than the recipients of social conflict and therefore that an examination of conflict scenarios may not be sufficient for assessing their social goals. Children face a variety of social challenges in their interactions with peers, and it is conceivable that certain situations may lead bullies and victims to endorse particular social goals. It has been argued that, because bullies need to maintain an image of dominance to facilitate their aggressive behaviour, scenarios where their social image is at stake may prove useful in distinguishing the goals of bullies and victims from their peers. Correspondingly, in Studies 1 through 4 a variety of scenarios where children's social image was at stake to were utilised to provide a context from which to assess children's social goals. By means of the display rule task, five socio-motivations were identified: self-gain, harm avoidance, self-presentation, concern for the group's happiness, and a concern for not upsetting the others.

The socio-motivations associated with bullying and victimisation varied across these four studies. In particular there were distinct patterns for bullies and victims, which in turn varied across both gender and scenario type. However, various trends became apparent. Firstly, in Studies 1 through 4, bullying in boys was predicted by the outcomes-focused socio-motivation for harm avoidance, but only in scenarios where they were at risk of seeming scared, stupid, or wimpy by their peer audience (proficiency scenarios). The association between outcomes-focused goals and bullying was also evident across gender in

scenarios depicting ambiguous provocation in Studies 5 and 6. Secondly, also only in proficiency scenarios and with the exception of Study 2, victimisation in boys was predicted by a concern for not upsetting the others (not wanting to hurt their feelings), and was usually accompanied with a lack of self-presentational concern. Thirdly, while there were few meaningful scenario-specific socio-motivations associated with bullying and victimisation in girls, in Studies 3 and 4, bullying in girls was related to a general desire for popularity and self-presentation, and victimisation in girls was negatively associated with motivation to behave prosocially. Taken together these findings constitute evidence for distinct sets of goals between bullies and victims, and between boys and girls. These are discussed in turn. The associations between bullying/victimisation and social goals in conflict scenarios reported in Studies 5 and 6 are also considered here, although it should be noted that the conflict scenarios arguably hold a stronger situational influence over social goals, and comparison across the story types may not always be validated.

For ease of reference, tables were constructed to display the correlations between bullying and victimisation scores, and the social goals assessed across all six studies. Individual tables were created for boys and for girls, and for bullying and for victimisation. Each table was constructed by first inputting all the possible correlations between bullying/victimisation and the different social goals. The possible social goals are as follows: in Studies 1 to 4 (not necessarily inclusively), socio-motivations for self-gain, harm avoidance, wanting everyone to play together happily, not upsetting the others and self-presentation for each of the three scenario types (proficiency, cooperative and self-protective scenarios); in Studies 3 and 4, agentic, separate, prosocial and self-presentational (desire for popularity in Study 3) global goals; and in Studies 5 and 6, social goals for assertiveness/dominance, revenge, avoiding the provocateur, getting on with the provocateur,

and not upsetting the provocateur in response to ambiguous provocation. Next, any rows where there were *no significant correlations across all applicable studies* were removed from the table. The final tables for bullying and victimisation in boys are displayed in Tables 7.1 and 7.2, and for girls in Tables 7.3 and 7.4.

Because measures were not identical across studies, it is important to appreciate the following considerations when interpreting these tables. First, in Studies 1 and 2, socio-motivations for self-gain and harm avoidance were analysed collectively as an 'outcomes' socio-motivation. Similarly, socio-motivations for wanting the others to play together happily and a concern for upsetting the others were analysed collectively as a 'prosocial' category. Second, the measures for the 'desire for popularity' and 'desire for prosocial behaviour' goal scales in Study 3 were different from the IGI-C scales of 'self-presentation' and 'prosocial' scales used in Study 4, but are considered to be conceptually similar enough for cross-study comparison. Similarly, the social goal for assertiveness in Study 5 has been coupled with the goal for dominance in Study 6. Third, the associations reported in the hostile scenarios utilised in Study 5, and between bullying/victimisation and the response scores in Study 6 are not included in these tables. This is because these measures were only employed in a single study eliminating the need to make cross-study comparisons. Finally, while the correlations in Studies 1 through 4 are gender-specific, correlations in Studies 5 and 6 are not.

As can be seen in the tables, associations between bullying/victimisation scores and the social goals measures are not always replicated across all studies. When this has occurred, reasons for these inconsistencies are put forward in the relevant discussion (see Sections 7.1.1, 7.1.2, and 7.1.3 below). However, on several occasions a significant association is reported in one study that is not replicated in *any* of the others. For example, in Table 7.3,

victimisation in girls was negatively associated with a concern for self-presentation in cooperative scenarios in Study 2, but was not in Studies 3 or 4. These associations are not dealt with individually, but various more general explanations can be offered for such occurrences. Firstly, as detailed in an earlier discussion on the school and societal influences to bullying in schools (see Section 1.4), because data was collected from several different schools, across a five year time period, the different samples are likely to have experienced variation in potential influences on levels of bullying in schools, as well as variation in the social dynamics experienced at school in general. School climate, teacher behaviour, media effects, neighbourhood and societal effects, and intervention programmes may all have had some impact on the associations found between bullying/victimisation scores and social goals. Secondly, the method for categorising and scoring scenario specific socio-motivations varied across Studies 2 to 4, and thus variation in associations across studies may have been influenced by methodological considerations. Thirdly, strong correlations were reported between bullying and physical victimisation in Study 4. As was discussed in the general discussion of Chapter 4 (Section 4.3), the dynamic of bullying episodes in this sample is thus likely to vary from the samples of the other studies. This should be taken into account when comparing associations reported in Study 4 with the other studies.

Table 7.1: *Correlations between bullying in boys and all social goal measures utilised across Studies 1 to 6*

Form of bullying (physical vs. relational)	Study 1 (N=27)		Study 2 (N=27)		Study 3 (N=25)		Study 4 (N=31)		Study 5 (N=170)		Study 6 (N=163)	
	Phy.	Rel.	Phy.	Rel.	Phy.	Rel.	Phy.	Rel.	Phy.	Rel.	Phy.	Rel.
Proficiency scenarios												
Self-gain (outcomes-focused)	.51**	.56**	.65**	.66**	.07	.20	-.30	-.24				
Harm avoidance (outcomes-focused)					$.43^*$	$.40^*$	.28	$.36^*$				
Self-presentation	-.10	-.21	-.40*	-.37†	-.18	-.19	.25	.09				
Self-protective scenarios												
Self-gain (outcomes-focused)	n/a	n/a	n/a	n/a	$.74^{**}$	$.59^{**}$	-.19	-.21				
Harm avoidance (outcomes-focused)					$-.45^*$	-.35†	-.19	-.28				
Global goals												
Separate	n/a	n/a	n/a	n/a	n/a	n/a	-.34†	-.41*				
Ambiguous conflict scenarios (not gender-specific)												
Be assertive / dominance									.11	.14†	.28**	.15†
Avoid the provocateur									-.02	.00	.28**	.19*
Get on with the provocateur									-.24**	-.20*	-.03	-.11
Not upset the provocateur									-.20*	-.09	.04	-.10

†p<.10; * p<.05; **p<.01

7.1.1   Bullying in boys, and the importance of specific situations in maintaining dominance

The correlations between bullying in boys and all social goals measures across all six studies are displayed in Table 7.1. The key consistent finding evident here is that boy bullies are motivated by situational outcomes in proficiency scenarios. This fits in closely with the existing literature that has utilised provocation vignettes. Aggressive children have been reported to hold instrumental goals (see Crick & Dodge, 1994 for a review), and bullies in particular are likely to be concerned with maintaining dominance within the peer group (Kiefer & Ryan, 2008). In the case of the proficiency scenarios utilised in Studies 1 through 4, it has been argued that bullies have a concern about compromising their image of dominance in front of a peer audience by getting picked on. However, bullying was not positively related to self-presentational socio-motivations in these scenarios, which indicates that boy bullies do not hold a general concern for how they appear to their peers (for example, they are not especially worried about looking stupid for not getting a joke), provided the dominance they are perceived to have over their peers is not compromised.

The associations between socio-motivations and bullying in boys varied across scenario types. While bullying in boys was associated with an outcomes-focused socio-motivation for harm avoidance in proficiency scenarios, there were no meaningful associations in the cooperative scenarios throughout Studies 2 to 4. This demonstrates the important role situation has to play in understanding the social goals of boy bullies. Whilst they may place general importance in goals for dominance, they only seek to attain (and maintain) their dominance in certain social scenarios. In particular, the evidence in this thesis has suggested that boy bullies are wary about being seen to get picked on by others for being scared, stupid, or wimpish. Furthermore, because associations between bullying and scenario-

specific socio-motivations were stronger than between bullying and global interpersonal goals, it suggests that certain situations provide a powerful context within which to achieve/maintain dominance over the peer group. It should be considered that bullying *was* negatively associated with the global goal scale representing a motivation for separation from one's peers in Study 4, implying that boy bullies are unlikely to shy away from social interaction in general. However, this finding is highly compatible with the position that bullies utilise certain situations to achieve dominance outlined above.

Additionally, it should be noted that, in the self-protective scenarios introduced in Study 3, bullying in boys was positively associated with a socio-motivation for self-gain (having fun) and negatively associated with a socio-motivation for harm avoidance. This implies that, in the presence of harassers boy bullies want to 'have the most fun', potentially by joining in. Again, this association is compatible with the position put forward in the previous paragraph. However, it is important to note that this association was not replicated in Study 4. The lack of consistency in this association likely stems from the methodological changes made for Study 4. The response option in Study 3 of 'wanting to have the most fun' was not considered a salient response option for most children (it was *only* selected by children who scored more than one standard deviation above the mean on the bullying measure scores), and was amended to 'wanting to carry on having fun' in Study 4. A fairer representation of the sample in Study 4 rated this response favourably, but the association between self-gain and bullying in self-protective scenarios was lost.

Studies 5 and 6 assessed children's social goals in response to provocation and found further support that boy bullies hold social goals in specific situations to achieve/maintain a perception of dominance over their peers. In Study 5, it was reported that, in response to

hostile provocation, bullying was associated with goals for assertiveness. Study 6 specifically considered the social goal of dominance and as expected found it to be positively related to bullying. Additionally, in Study 5 significant negative associations were reported between bullying and the social goal for (not) 'wanting to get on with the provocateur' in both ambiguous and hostile conflict scenarios. This implies that bullies' motivation for dominance may be at the cost of prosocial goals. Indeed, throughout this empirical work, while associations between bullying and prosocial goals (prosocial socio-motivation category in Studies 1 and 2; wanting everyone to play together happily in Studies 3 and 4; and wanting to get on with the provocateur in Studies 5 and 6) were not significant (with the exception of Study 5), they were always negative. Although by themselves, these associations do not provide sufficient basis for generalisable conclusions, they do sit nicely with the existing literature. For example, while Crick and Dodge (1996) reported proactively aggressive children to prefer instrumental goals to relation building goals in conflict scenarios, significant differences in prosocial goals between bullies and their peers is not always verified significantly (e.g., Camodeca & Goossens, 2005). Nevertheless, there is a degree of consensus that bullies generally lack relation building goals, preferring instead to attain and maintain dominance within the context of the situation.

Thus, this empirical work has made a significant contribution to the understanding of the social goals associated with bullying in boys. Specifically, it has been demonstrated that bullying in boys is related to having instrumental goals, not only in conflict scenarios, but also on occasions where one's image of proficiency is at stake. Moreover, the goals endorsed by boy bullies vary across scenario types, suggesting that boy bullies are capable of switching their goals dependent upon situation (in accordance with the findings of Crick & Dodge, 1996, who reported that proactive aggressors did not hold instrumental goals in group entry

scenarios). Indeed, children face a variety of social tasks when interacting with their peers, and it is therefore surprising that so little research has considered what goals children may hold outside of conflict settings up to this point.

7.1.2   *Victimisation in boys and a concern for others' feelings*

The correlations between victimisation in boys and all social goals measures across all six studies are displayed in Table 7.2. Throughout the empirical work, victimisation in boys was consistently found to be associated with a concern for not upsetting (or hurting the feelings of) others in both proficiency scenarios, and also in scenarios depicting ambiguous provocation (significant associations were reported in Studies 1, 3, 4, and 6, and bullying subgroup differences were evident in Study 5). A negative association was also evident between victimisation in boys and a socio-motivation for self-presentation in proficiency scenarios in Studies 1 through 4. Two explanations for these associations were put forward. Firstly, boy victims may be unable to switch their social goals according to situation; and secondly, victimised boys may be particularly sensitive to the perceived problems of others. These are discussed in turn.

Table 7.2: *Correlations between victimisation in boys and all social goal measures utilised across Studies 1 to 6*

	Study 1 (N=27)		Study 2 (N=27)		Study 3 (N=25)		Study 4 (N=31)		Study 5 (N=170)		Study 6 (N=163)	
Form of victimisation (physical vs. relational)	Phy.	Rel.	Phy.	Rel.	Phy.	Rel.	Phy.	Rel.	Phy.	Rel.	Phy.	Rel.
Proficiency scenarios												
Self-gain (outcomes-focused)	-.12	-.21	.33†	.11	.04	-.18	-.17	-.03				
Harm avoidance (outcomes-focused)					.09	-.07	.42*	.21				
Group's happiness (prosocial)	.70**	.62**	.22	.26	-.20	-.01	-.08	.07				
Others' feelings (prosocial)					.40*	.53**	.23	.56**				
Self-presentation	-.45*	-.45*	-.49**	-.32†	-.34†	-.33†	-.11	-.57**				
Cooperative scenarios												
Self-gain (outcomes-focused)	n/a	n/a	-.12	-.11	.03	.19	-.28	-.15				
Harm avoidance (outcomes-focused)					.23	.02	.32†	.42*				
Self-presentation	n/a	n/a	-.41*	-.21	-.20	-.24	.14	-.06				
Self-protective scenarios												
Self-presentation	n/a	n/a	n/a	n/a	.43*	.38†	-.03	.04				
Global goals												
Self-presentation / desire for popularity	n/a	n/a	n/a	n/a	-.04	.01	.45*	-.03				
Ambiguous conflict scenarios (not gender-specific)												
Not upset the provocateur									.04	.01	.19*	.06

†p<.10; * p<.05; **p<.01

There has been markedly little research on children's social goals outside of conflict settings, but what exists indicates that victims may hold inappropriate goals for certain settings. In a game playing context, Schuster (2001) reported that victims held cooperative aims, even in a competitive context, and even when others were directly competitive with them. Boy victims also seem to have difficulty switching between cooperative and competitive goals in response to the demands of the game (Taylor & Gabriel, 1989, cf Crick & Dodge, 1994). Accordingly, while boy victims were not found to hold goals at odds with their peer group in scenarios that depicted cooperative behaviour, in proficiency scenarios, victimisation in boys was associated with a non-normative concern about others' problems, arguably at the cost of a more adaptive concern for their own social image. This position is further supported by the inverse associations between victimisation in boys and socio-motivations for self-presentation in the same scenarios. In light of these findings, there seems to be growing support that boy victims struggle to select goals that are appropriate for the situation, at the cost of their social image.

The second explanation for these findings is that victimised boys may experience a particularly engaging emotional affiliation with their peers, and subsequently have a potentially misplaced concern for the feelings of others in situations where such a concern offers little to the peer group. There is some evidence that, at the onset of victimisation, boy victims score higher than their peers on measures of affective empathy (Malti et al., 2010). Their overactive concern about the problems of others may induce anxiety and lead them to remove themselves from social interaction (Zahn-Waxler et al., 1991), resulting in them becoming socially isolated. On face value, one might expect children with empathic ability to be prosocially inclined and therefore more likely to be accepted by their peers. However, this may only be the case for girls. Warden and Mackinnon (2003) reported that boys do not

always use empathy for prosocial ends, and that peer-rated prosocial behaviour in boys was more strongly related to factors other than empathic awareness, such as problem solving. Accordingly, Banerjee, Rieffe, Meerum Terwogt, Gerlein, and Voutsina (2006) reported that, while popular girls offered comfort to needy peers, popular boys offered advice. Conversely, peer-rejected boy victims, who hold various social-cognitive biases and frequently interpret others as untrustworthy (Salmivalli & Isaacs, 2005), may lack the social skills necessary to utilise their empathic responsiveness to support peers who are in real need, and subsequently gain little social status from their potentially prosocial concerns. Indeed, in Studies 2 and 3, victimisation in boys was associated (though not always significantly) with a lack of self-presentational concern in scenarios depicting a story character behaving prosocially, implying that boy victims are unable to understand the potential benefits of being seen to behave cooperatively.

As it stands, the empirical work presented here does not favour either of these two positions, and is important to note that they are not necessarily exclusive of each other. However, Study 6 suggested that a concern for not upsetting others mediated the relationship between victimisation and the response strategy to provocation of 'not making a big deal out if the situation'. This implies that victims' emotional responsiveness specifically contributes to their submissive behaviour and thus may be particularly important in understanding why they become victimised.

Very little research has considered the social goals of victims, but this research effort has provided good indication that this is an avenue worthy of further exploration. The evidence accrued is, as yet, far from comprehensive, and would benefit from further research that considers the process by which selecting inappropriate goals may leave boys prone to

victimisation. Do victims' goals cause them to behave inappropriately and lead them to be peer-rejected and thus unprotected from harassment? Or do they provide the bully with situation relevant information that the victim may prove an easy target for aggression (and subsequently a means with which to achieve an image of dominance over their peers)? Further, longitudinal work that considers how the relationships between victimisation, social goals, and empathy develop in the years that follow the onset of victimisation could provide important insight into social-cognitive preconditions to the submissive behaviour that leave some children prone to chronic victimisation (Olweus, 1978). The present findings also offer direction for potential intervention strategies, and these are discussed later (in Section 7.5).

7.1.3   Social goals, bullying and victimisation in girls

The correlations between bullying and victimisation in girls, and all social goals measures across all six studies are displayed in Tables 7.3 and 7.4 respectively. Although Studies 1 to 4 found evidence for situation-specific socio-motivations in bullying boys outside of conflict settings, there were no clear cut patterns in girls, even in scenarios depicting cooperative behaviour (which was hoped to provide a more salient context for girls). However, Studies 3 and 4 indicated that girl bullies hold a general self-presentational concern for achieving popularity. Recently, researchers have begun to speculate that the relational aggression preferred by girl bullies, when skilfully applied, can be used to achieve a perception of popularity, which in turn delivers the social status necessary to facilitate subsequent effective relational aggression (Puckett et al., 2008). The correlations presented here support this position, and indicate that girl bullies demonstrate a specific intent to achieve the perception of popularity necessary to achieve social dominance.

Table 7.3: *Correlations between bullying in girls and all social goals measures utilised across Studies 1 to 6*

Form of bullying (physical vs. relational)	Study 1 (N=26)		Study 2 (N=26)		Study 3 (N=35)		Study 4 (N=36)		Study 5 (N=170)		Study 6 (N=163)	
	Phy.	Rel.	Phy.	Rel.	Phy.	Rel.	Phy.	Rel.	Phy.	Rel.	Phy.	Rel.
Proficiency scenarios												
Self-gain (outcomes-focused)	.44*	.02	.39†	.16	-.15	-.17	-.29†	-.18				
Harm avoidance (outcomes-focused)					.01	.20	-.31†	-.05				
Cooperative scenarios												
Self-presentation	n/a	n/a	-.41*	-.27	.01	.11	-.02	-.19				
Global goals												
Self-presentation / desire for popularity	n/a	n/a	n/a	n/a	.39*	.43*	.29†	.39*				
Ambiguous conflict scenarios (not gender-specific)												
Be assertive / dominance									.11	.14†	.28**	.15†
Avoid the provocateur									-.02	.00	.28**	.19*
Get on with the provocateur									-.24**	-.20*	-.03	-.11
Not upset the provocateur									-.20*	-.09	.04	-.10

†p<.10; * p<.05; **p<.01

Table 7.4: *Correlations between victimisation in girls and all social goal measures utilised across Studies 1 to 6*

Form of victimisation (physical vs. relational)	Study 1 (N=26)		Study 2 (N=26)		Study 3 (N=35)		Study 4 (N=36)		Study 5 (N=170)		Study 6 (N=163)	
	Phy.	Rel.	Phy.	Rel.	Phy.	Rel.	Phy.	Rel.	Phy.	Rel.	Phy.	Rel.
Proficiency scenarios												
Group's happiness (prosocial)	-.34	.01	-.12	-.12	.01	-.15	.06	.23				
Others' feelings (prosocial)					.01	.00	.20	.35*				
Self-presentation	-.01	-.02	-.23	-.23	-.08	.20	-.20	-.36*				
Cooperative scenarios												
Self-gain (outcomes-focused)	n/a	n/a	.05	.14	.67**	.03	-.20	-.05				
Harm avoidance (outcomes-focused)					-.01	-.07	.20	.30†				
Residual responses	n/a	n/a	.44*	.36†	n/a	n/a	n/a	n/a				
Self-protective scenarios												
Others' feelings	n/a	n/a	n/a	n/a	.45**	.05	.14	.13				
Global goals												
Prosocial / desire to behave prosocially	n/a	n/a	n/a	n/a	.23	-.56**	.08	-.49**				
Ambiguous conflict scenarios (not gender-specific)												
Not upset the provocateur									.04	.01	.19*	.06

†p<.10; * p<.05; **p<.01

Various sex differences have been reported in the patterns of scenario-specific and general social goals that were associated with bullying outside of conflict scenarios. These may stem from differences in the methods girl and boy bullies use to achieve an imbalance of power over their victims. In order to maintain an image of physical dominance, there may be more need to react to the certain situations – if you are seen getting picked on, it is likely to have negative consequences on your image of dominance. However, the processes involved in achieving dominance through relational aggression are much more subtle. Relational aggression requires social connections and a degree of social skill to be carried out effectively (Bosacki, 2003; Salmivalli et al., 2000; Xie et al., 2002). Because aggressive behaviour is viewed negatively by one's peers (Perry et al., 1988; Schwartz, 2000), relational bullies need to be careful that they also demonstrate leadership qualities, cooperative behaviours, and peer sociability in order to protect their social status (Puckett et al., 2008), thus enabling the continued use of relational aggression to achieve social dominance. Because of this, it is argued that reacting to situations where one may come across as scared or wimpish is often less important for girl bullies, who need to slowly develop their position of social power through a reputation contributed to by everyday interactions with their peers. Once their position of social power is achieved, it is likely to be easily maintained by their reputation. Indeed, while aggressive popular girls are less peer-accepted than non-aggressive popular girls, they are perceived to be more popular by their peer group (Parkhurst & Hopmeyer, 1998; Lease et al., 2002). This might also explain why relational aggression is far more stable over time than physical aggression (Camodeca et al., 2002; Crick et al., 1999).

The 'drip drip' method of gaining social reputation does not necessarily mean that individual situations are not influential in its development. Indeed, in Studies 5 and 6, conflict scenarios provided a sufficiently strong situation that the social goals associated with bullying

were not distinguishable across gender. However, the findings outlined in this thesis do imply that the situations from which socio-motivations were assessed in Studies 1 to 4 may not have been contextually appropriate to have an impact on the social goals of girl bullies. That said, there may yet be situations that were not considered in this empirical work that are specifically important in developing a positive self-image, and thus hold particular importance to bullying girls. One of the prominent ways in which children are socially evaluated comes in the form of gossip (Gottman & Mettetal, 1986), especially in girls (Leaper & Holliday, 1995). Gossip can serve as a mechanism for social comparison and, by favourably comparing oneself with others, can be used as a powerful reputation enhancer and mode of social control (Eckert, 1990; Foster, 2004; Wert & Salovey, 2004). Gossip can also help to shape what is considered to be normative within a social group and can be used to stigmatise non-normative behaviour (Fine, 1977). Importantly, because gossip provides a context to victimise others (Crick et al., 2001), it can be assumed that relational bullies understand the consequences of being negatively evaluated through gossip, and gossip may consequently provide a strong situational influence on the social goals employed by girl bullies (who tend to gossip more than their male counterparts; McDonald, Putallaz, Grimes, Kupersmidt, & Coie, 2007). Therefore it is argued that, before the importance of situational influence on the social goals of girl bullies outside of conflict settings is rejected, the social goals they hold in response to scenarios depicting some form of gossip should be investigated.

It is worth briefly mentioning that there were a few significant correlations reported between *physical* bullying in girls and socio-motivations in the proficiency and cooperative scenarios. These associations were not replicated across studies and are unlikely to add anything meaningful to our understanding of the social goals endorsed by girl bullies. Indeed,

because scores for physical bullying in girls were so low, these associations arguably hold very little power for generalisability whatsoever.

In summary, while very few scenario-specific socio-motivations were reported in girls, the associations that were evident imply that girl bullies, like their male counterparts, are able to adapt their goals to the situation. Their ability to do this, coupled with the general goal they hold for self-presentation, serves to protect their social reputation and facilitates the use of relational aggression in order to influence their place within the social group.

With regard to victimisation in girls, this empirical work again revealed few meaningful associations with scenario-specific socio-motivations. However, Studies 3 and 4 both demonstrated that relational victimisation in girls was related to a general lack of prosocial interpersonal goals. It has been argued that, because prosocial behaviour is more prevalent among girls than among boys (Rose & Rudolph, 2006), a lack of concern for behaving prosocially may isolate girls from their peer group. Indeed, Boivin et al. (1995) provided evidence that children with low peer preference tended to be 'social misfits' in terms of their behaviours. Accordingly, in Study 2, victimisation in girls was associated with residual explanations for cooperative display rules, implying that girl victims of this age are unable to construct a meaningful explanation for cooperative behaviour. Because relational bullying in girls is facilitated by an imbalance of power in social status, low peer preference is likely to be a critical precursor to chronic victimisation in girls, potentially manifested through malicious gossip. This argument has clear implications for victimisation prevention strategies, and these are discussed later.

Finally, it should be considered that there were different patterns in the social goals related to physical victimisation in girls than there were related to relational victimisation. Because physical bullying is predominantly carried out by boys, the patterns of associations may be determined, in part, by the gender of the child who is doing the victimising. There was little consistency across studies in the social goals associated with physical victimisation however, perhaps because of the lack of statistical power available in the relatively small sample sizes in Studies 1 to 4. As a result, there is little generalisability that can be applied to these associations, and they are therefore not discussed in depth.

7.2 Social goals as independent contributors to bullying and victimisation

In Chapter 2, this thesis outlined a contemporary debate as to whether bullies should be considered as experiencing biases throughout their social-cognitive processing (as proposed by Crick & Dodge, 1994, 1999), or contrastingly whether bullies in fact have superior mental-state reasoning ability (theory of mind; Sutton et al., 1999b, 1999c). Both positions posit that bullies' social goals may be important in influencing their aggressive behaviour, and the second aim of this empirical work revolved around testing this assumption. Specifically, it was determined whether social goals were able to predict bullying and victimisation even after mental-state reasoning and SIP biases had been taken into account.

In Studies 1 and 2, the faux-pas task was included to assess children's ToM. Consistent with the background literature, bullying was positively related to ToM scores (significantly so in Study 1, and in Study 2, most children classified as 'bullies' scored perfectly on the task), but *only* in boys. This was somewhat surprising as previous research

had suggested that relational aggression may require particularly sophisticated mental-state reasoning to carry out effectively (Andreou, 2004). However, as Sutton et al. (1999a, 1999b) point out, physical aggression is also likely to need a degree of ToM on the part of the bully so as to allow them to identify an appropriate peer-rejected victim, select an appropriate location out of the teacher's gaze, and to get the appropriate 'reinforcers' on board. Additionally, because relational aggression is fairly new to children of this age range (7 to 9 year-olds; Björkqvist et al., 1992) it may be that the girls who exhibit relational aggression are not yet limited to those able to apply it effectively. In other words, many girls may attempt to use relational aggression (which tends to be perceived as comparably more acceptable than physical aggression in schools) to achieve popularity, but only the successful ones carry it over to adolescence. Indeed, as Puckett et al. (2008) explain, the association between relational aggression and high social status is far stronger in samples of adolescents. Further research that considers the relationships between perceived popularity and social status, ToM, and relational aggression over a large range of age samples might shed light on this theory.

Importantly, the associations between bullying and victimisation in boys and the social goals that were reviewed in Section 7.1 remained even after allowing for variance in mental-state reasoning ability. It can thus be assumed that the social goals held by bullies are not simply a by-product of an advanced ToM, and that social goals may indeed be a critical precondition to bullies' antisocial behaviour. Because ToM was not related to bullying in girls of this age, it is unclear whether the same applies for both genders. Victimisation in boys was similarly unrelated to faux-pas scores, and faux-pas scores were not associated with the socio-motivation for others' feelings in proficiency scenarios, implying that ToM has little influence in the social goals endorsed by boy victims. In girls, associations between mental-

state reasoning were not significant, but were negative, and stronger for physical victimisation. Interestingly, faux-pas scores were negatively associated with residual responses to cooperative scenarios, which was in turn associated with victimisation. This implies that while mental-state understanding doesn't directly predict victimisation in girls, it may have some influence on whether girls are able to comprehend and therefore select appropriate goals in situations where their image of cooperativeness (and arguably their social reputation) is at stake.

In Studies 5 and 6, a SIP task was included amongst the measures. Children were assessed on their emotionality, and attribution of intent in response to ambiguous and hostile provocation. Consistent with the background literature (e.g., Camodeca & Goossens, 2005), bullying was associated with feelings of anger (Study 5) and interpretation of intent (Study 6). Inconsistent with previous research however, victimisation was not found to be associated with interpreted threat. This may be because any aggressive-victims were removed from the sample, and the attribution of intent bias is not as evident in withdrawn children (Erdley & Asher, 1996). Regardless, in line with Erdley and Asher's (1999) account of how children's social goals related to other social-cognitive processes, the results of Studies 5 and 6 demonstrated that children who interpret hostile intent behind provocation are more likely to endorse goals of retaliation and are less likely to be concerned about enhancing their relationship with the provocateur (see also Slaby & Guerra, 1988). It was therefore particularly important to assess whether social goals contributed to bullying after any attribution bias had been accounted for.

The results of Studies 5 and 6 implied that associations between social goals and bullying did, in fact, remain even after allowing for attribution bias. Bullying was associated

with the social goals of assertiveness (Study 5), dominance (Study 6) and a lack of concern for getting on with the provocateur (Study 5), while victimisation was associated with the social goals of harm avoidance (Studies 5 and 6), not upsetting the provocateur (Study 6), and not getting into trouble with the teacher (Study 5). Evidence was thus provided that children's social goals relate to bullying/victimisation scores independently of SIP biases in emotionality and attribution of intent.

7.3 **Social goals as mediators of aggressive, cooperative, and submissive response strategies**

The third and final overall aim of this programme of empirical work was to investigate the role social goals have to play in mediating the relationships between bullying/victimisation, and the behavioural responses to social conflict that have been associated with bullying and victimisation in previous research. In Study 6, it was reported that the associations between bullying and aggressive behaviours were mediated by social goals for revenge and a lack of concern for getting on with the provocateur, the associations between bullying and assertive and compromising behaviours were mediated by the social goal of dominance, and the associations between victimisation and submissive behaviours were mediated by social goals of avoidance, and a concern for upsetting the provocateur.

Taken with the rest of this thesis' findings, the mediational models implied that social goals not only contribute to bullying and victimisation behaviours as rated by one's peers over a period of time, but also serve to influence more immediate behavioural responses in reaction to provocation. Interestingly, these behavioural responses were not always aggressive in nature. Although bullying was negatively related to compromising with the

provocateur overall, when mediated by a social goal of dominance, bullying was actually positively associated with compromising. This suggests that the goal of dominance in particular may be of notable importance in predicting how a bully will behave, and may serve to shape intervention strategies (discussed later in Section 7.5). However, further research is needed to assess whether the relationship between social goals and behavioural enactment is influenced by their self-efficacy perceptions and outcome expectations. Indeed, the background literature has provided some evidence that children's social goals may be influenced by both self-efficacy perceptions (Bandura, 1981) and outcome expectations (Crick & Ladd, 1990). It is thus conceivable that bullies may only hold goals for dominance if they believe that they will be successful in achieving their goals, and that it will provide beneficial outcomes.

7.4   **Limitations and directions for further research**

Although this empirical work has added significantly to the existing literature on the social goals associated with bullying and victimisation, there were various limitations that merit discussion. In this section, the impact these limitations have on the overall empirical contribution is discussed and directions for further research put forward. Specifically, this section details the methodological issues encountered, concerns about the generalisability of findings, and the need for subsequent causal analysis including longitudinal work.

7.4.1   Methodological issues

7.4.1.1   Bullying questionnaire

In Chapter 2, the reasons for opting for a measure of bullying assessed by peer nominations of different kinds of bullying behaviour were outlined. In short, arguments were presented for using a peer-nomination procedure and for nominating classmates as engaging in aggressive behaviours, rather than directly asking children to identify bullies and victims within their class. While the measure used had several advantages, it is also important to detail the limitations that were inherent in the survey.

Firstly, although bullying is manifested by the enactment of one or more aggressive behaviours, aggressive behaviour does not always constitute bullying. Children may be aggressive because they are upset or scared, because they believe they are standing up for themselves, or even because their immediate peer group engages in a lot of rough and tumble play. Coie et al. (1991) argued that aggressive behaviour needs to be proactive to be described as bullying, and should be targeted at achieving interpersonal dominance. However, it is possible that some children received high bullying scores in the various studies of this empirical project, primarily because of high levels of reactive aggression. The items for relational bullying could be assumed to depict proactive intent however, as 'spreading nasty stories about another child' and 'ganging up with a group of children to get someone left out' requires an element of premeditated planning, and can also be held to imply an ambition for interpersonal dominance. It should also be noted that in boys, physical bullying and relational bullying were closely related in each of the six studies, which offers some support to the validity of the physical bullying measure.

A second limitation of this measure revolves around the conception of bullying as occurring along a continuous scale. Bullying requires an imbalance of power over a victim (Whitney & Smith, 1993), and is carried out in an ambition for dominance (Coie et al., 1991). It is likely that comparatively few members of any given class are able to achieve these ends, as the peer group can only support a limited number of dominant individuals. Consequently, associations between bullying and the social goals measures may have been muddied somewhat by children who scored moderately on the measures of bullying but would not necessarily be identified as bullies. Because the studies detailed in this thesis did not have the sample sizes to consider differences between the subgroups of children involved in bullying, and also because attention was focused on the *relationships* between bullying and social goals, it was necessary to create a continuous variable for bullying and victimisation. However, a clear direction for further research is to distinguish ringleader bullies from their peers, and determine whether they hold the social goals that this empirical work reported to be associated with bullying. Salmivalli et al. (1996) utilised the Participant Role Scale (PRS) to identify bullies, and reported the procedure to be particularly suited to 7 to 10-year-olds (see also Sutton & Smith, 1999; Sutton et al., 1999b), indicating that it might prove a useful substitute to the bullying measure employed here.

One final limitation of the bullying measure is levelled at the procedure used to identify bully-victims. Any children who scored more than one standard deviation above the mean in scores of both bullying and victimisation were considered to be bully-victims and removed them from the sample for subsequent analysis (with the exception of Study 4). However, as Salmivalli and Nieminen (2002) point out, victims who were not also identified as being bullies scored higher on measures of reactive aggression than their peers. Although

this is likely to be contributed to by the regularity that victims are provoked by their peers (especially by bullies), this finding serves to demonstrate that the procedure utilised in this empirical project may have removed some aggressive victims from participant samples who were not really bully-victims. Either way, both bully-victims and aggressive victims have been shown to demonstrate a unique social-cognitive profile (Haynie et al., 2001; Toblin et al., 2005), and thus the procedure is likely to have been effective in revealing distinctive relationships between social goals and non-aggressive victimisation.

7.4.1.2   Social goals measures

Several different methods were employed to assess children's social goals, and while each had strengths, it also had limitations. In Studies 1 and 2, children were allowed to respond in an open-ended fashion to display rule scenarios so that the range of social goals that children might hold over a variety of situations could be explored. However, children's explanations may have been influenced by their verbal ability, contributing to a more general problem in categorising which social goals children could be inferred to hold through their explanations of display rules. Consequently, in Study 3, children were presented with a selection of relevant social goals to choose from, but this procedure did not allow for social goals as being non-exclusive from each other. In Studies 4 through 6, children were asked to rate each of these goals individually. Because different variations were used to assess children's social goals, it was possible that the associations between bullying/victimisation and social goals would not carry across studies, contributing to a type II error. However, several general trends were found across studies, so it can be assumed that this was not the case.

A range of social scenarios were considered when assessing children's social goals, and it was reported that the goals associated with bullying and victimisation varied across scenario types. However, a second limitation of these measures may be that the context of the scenarios used in Studies 1 to 4 may have proven far more salient to boys than to girls. Indeed, little consistent evidence was found for scenario-specific socio-motivations in girls. It was argued that this was because, in girls, the imbalance of power between bully and victim is developed over time rather than in individual situations. However, the lack of associations may have been indicative that the social scenarios utilised did not provide an appropriate context with which to distinguish the social goals of girl bullies and victims, perhaps because they had no immediate implications for girls' social status. Before it is assumed that girl bullies and victims do not hold scenario-specific socio-motivations outside of conflict settings, further research needs to be conducted that utilises scenarios whereby their social status (or their image of popularity) is at stake. As discussed earlier, there is evidence that gossip is especially important for girls to attain social standing within their peer group (Foster, 2004; Gottman & Mettetal, 1986; Leaper & Holliday, 1995; Wert & Salovey, 2004), and scenarios where story characters need to formulate goals upon finding themselves to be the subject of gossip might provide a pertinent context from which to identify situation-specific goals in girl bullies and victims.

Throughout this thesis, several references were made to a social goal for dominance as being associated with bullying in both genders. While the existing literature has demonstrated that adolescent bullies hold motivations for social status and peer dominance (Sijtsema et al., 2009; Veenstra et al., 2007), very little has done so in Primary school samples. However, the methodology for inferring goals of dominance in each of the studies conducted had various limitations. In Studies 3 and 4, it was assumed that boy bullies who

showed a concern for not getting picked on for looking like a wimp (etc.), and a desire to 'carry on having fun' in the presence of children speaking negatively about a peer, were demonstrating a general goal for attaining and/or preserving a perception of dominance over their peers. Similarly, in Studies 5 and 6, it was assumed that boy bullies who, in response to conflict scenarios, endorsed social goals for 'telling [the provocateur] not to do it again' and 'making sure [the provocateur] doesn't do it again' were showing a preference for being dominant over the provocateur. In each of these studies, results provided meaningful support that bullies hold goals for dominance, but these responses only reflected particular concerns in certain situations and cannot be held to evidence an encompassing need to be dominant in all aspects of social interaction.

Secondly, from Study 3 onwards children were asked to select from, or to rate a set of social goals presented to them. In each of these cases, the goal for social dominance was operationalised within the context of the scenario by means of a single statement (e.g., 'making sure that [the provocateur] doesn't do it again'). These statements are relatively simplistic and clearly cannot represent everything that is meant by a striving for interpersonal dominance over one's peers. Dominance is likely to be multi-faceted, and there are several different reasons why an individual might desire it – for self-enhancement, or out of a desire to lead and protect the group. The social goal measures utilised here did not offer much insight as to the different aspects of dominance that are emphasised by bullies, nor the nature of their motives for achieving it.

7.4.2   Participant sampling

It has already been stated that the participant samples in Studies 1 to 4 were fairly small and therefore provided little power with which to uncover the social goals associated with bullying and victimisation. This was particularly problematic in Studies 3 and 4, where several measures were utilised to assess social goals and were therefore numerous predictor variables. It was consequently harder to reliably unpack which social goals were predictive of bullying/victimisation, and the low sample size may have contributed to type II error. In spite of this, trends were reported across these studies. However, as discussed above, a larger sample would enable the use of the Participant Role Scale to answer specific hypotheses as to the social goals endorsed by subgroups of bullies, victims, and potentially bully-victims, and might provide a more comprehensive understanding as to the social goals involved in bullying in schools.

There may also have been a recruitment bias in participant samples. Each of the schools that took part was from an area of at least moderate socio-economic status. The socio-economic status of a school may be particularly relevant in studies of bullying. The general ethos in schools from deprived areas has been reported to be more accepting of physically aggressive behaviour (Farrington, 1991; Patterson, Kupersmidt, & Vaden, 1990; Dodge et al., 1994), and thus the samples utilised in the empirical work detailed in this thesis may not have provided a sufficiently broad basis from which to determine the social goals specifically associated with physical bullying. Similarly, the samples consisted predominantly of English, Caucasian children and did not provide a generalisable representation of culture and ethnicity.

Furthermore, as detailed in the framework for this empirical programme (see Section 2.4.1), each of the studies was carried out in a different school from a different town (with the exception of Studies 2 and 3). Data was collected over a five year period during which time various pressures have been put on schools to combat bullying issues. Consequently, schools varied slightly with respect to the bullying prevention schemes underway at time of testing, as well as in their general school ethos on identifying and dealing with bullying incidences. The sampling procedure may thus have resulted in cross-study variation in the school influences on the bullying dynamics among participants. Little could have been done to avoid this occurrence, but the associations reported in some of the studies conducted should be deliberated in light of such considerations, especially when the associations were not consistent across studies.

Finally, the empirical work only considered children from Primary school, aged between 7 and 10 years. Very few studies have reported on the social goals of children of this age and it was thus important to consider any relationships between social goals and bullying/victimisation in this age range. However, the bullying dynamic may take on very different forms in Secondary schools and amongst older children. Secondary schools are generally far larger, and children are more likely to mix with same-year peers outside of their form class. Further, as children progress through secondary school, they are likely to experience less physical aggression, but relational aggression increases (Galen & Underwood, 1997; Österman et al., 1998). Accordingly, the existing literature reports that associations between bullying and social goals for status and dominance are stronger in adolescence (Puckett et al., 2008; Sijtsema et al., 2009; Veenstra et al., 2007). Taken together, these findings indicate the importance for the associations between social goals and bullying/victimisation reported here to be replicated in adolescent samples. Even more

important however, is the need for longitudinal research that considers how Primary school children's social goals may shape their behaviours, beliefs, and later social goals in adolescence.

7.4.3   *The lack of causality attributions*

The final limitation of the current empirical work that will be discussed here relates to its lack of ability to identify causal directions for the associations between social goals and bullying/victimisation. Study 6 provided evidence that children's social goals may shape their behaviour. In fact, the social goal of dominance was reported to predict compromising behaviours, even though these behaviours were generally negatively associated with bullying. However, for the large part, results focused on the relationships between variables, and thus causal relationships cannot be validly attributed. Because of this, and as iterated above, there is clear need for further research of a longitudinal design which considers how children's social goals influence their behaviour and intrapsychic traits.

It has already been suggested that longitudinal research could shed light on how the relationships between victimisation, social goals, and empathy develop in the years that follow the onset of victimisation (and potentially leave the victim prone to chronic harassment). Indeed, the excellent work conducted by Veenstra and his colleagues has provided important contributions in terms of understanding how the dyadic relationship between bully and victim develops (Veenstra et al., 2007), how social network position of bullies and victims impacts victims' adjustment (Huitsing, Veenstra, Sainio, & Salmivalli, in press), and how bullying behaviour of popular children relates to peer-acceptance (Dijkstra, Lindenberg, & Veenstra, 2008; Veenstra, Lindenberg, Munniksma, & Dijkstra, 2010).

While there has been some investigation into how bullies' status goals vary from childhood to adolescence (e.g., Sijtsema et al., 2009), there is scope for far more extensive testing into the area. Longitudinal research could be utilised to establish how social goals of dominance influence bullies' aggressive behaviour, especially in the wake of their developing ToM. Such investigation may help determine whether bullies maintain a goal for dominance throughout childhood and adolescence, and whether this goal for dominance is manifested more in physical aggression in young boys, but in striving for perceived social status in young girls and in adolescent samples. Further, longitudinal research could help assess whether bullies' goals are associated with aggressive behaviours even as the levels of aggressive behaviour accepted by their peer group fluctuate. For example, do adolescent bullies understand that their physical aggression is no longer able to deliver social dominance and thus switch to more subtle relational methods (or stop bullying altogether)? It could also serve to explain at which point the bully utilises aggression to achieve their ends, and provide important insight into how intervention strategies might effectively stem the aggressive behaviours enacted by bullies in schools.

Finally, the findings detailed throughout this thesis offer some insight into the development of intervention strategies targeted at manipulating the social goals held by bullies and victims with the aim for reducing subsequent antisocial/maladaptive behaviour. These are discussed below (Section 7.5) but it should be considered that intervention work could also provide some understanding as to the causal links between social goals and bullying and victimisation. If such strategies proved effective both in challenging the goals endorsed by bullies and victims and also in reducing bullying and victimisation accordingly, they would provide evidence that social goals may, to some extent, cause some children to

bully, and others to be prone to victimisation. Similarly, examples where the intervention was unsuccessful might offer insight as to why the intervention works for some children, but not others, and thus contribute to our understanding of the relationships between social goals and bullying/victimisation.

7.4.4   *Overall theoretical contributions of this work in light of limitations*

Although several potential limitations of the empirical work have been cited, it has nonetheless provided a significant contribution to the research in this area. I have demonstrated that social goals are crucial in predicting behaviours associated with bullying and victimisation even before children reach adolescence, and that their influence is not merely the product of ToM or other SIP biases. Some early evidence has also been provided that the social goals associated with bullying/victimisation may be particularly charged in certain situations and are likely to vary across gender. As such, any further research in the area should consider that the scenarios from which children's social goals are assessed are likely to have a pertinent effect in determining the social goals that are associated with any form of proactive aggression, because proactive aggressors are likely to adapt their goals according to the context of the situation.

More importantly, this programme of empirical work has made significant contributions to a social goal perspective to understanding bullying in schools. In Chapter 2, the literature that has found bullies and victims to hold biases in their social processing was reviewed, as well as studies that have reported bullies to enjoy a well-developed ToM. Researchers from both positions cited the need for further research that considers the role social goals have to play in influencing bullying/victimisation. Indeed, I have argued that

bullies/victims' social goals can serve to bring the seemingly contrasting positions together. In Chapter 1, various distal influences to children becoming bullies and/or victims were identified (such as familial factors, e.g., Spriggs et al., 2007; and personality factors such as a Machiavellian attitude, e.g., Andreou 2004), and these same influences are likely to shape various aspects of their SIP, namely their emotionality (primarily influenced by temperamental characteristics, Dodge et al., 1997; Vitaro et al., 2002) and interpretation of cues (primarily influenced by the home environment, Dodge 1991; Poulin & Boivin, 2000). However, while it was argued that both distal influences and attribution biases are likely to contribute to the formulation of specific types of social goals, ToM plays a central role in determining whether these goals will continue to be endorsed throughout childhood and adolescence. It is posited that bullies with an advanced ToM will be better able to fulfil a general goal for dominance and will adapt their immediate goals in certain situations to achieve social standing. They would also be more likely to evaluate their behaviour in previous social interaction more accurately, resulting in the ability to formulate effective and achievable goals in the future. It should be noted, however, that although the results of the empirical work conducted here have offered some support for such a model, further investigation that considers how children's SIP, ToM and social goals develop through childhood and adolescence is clearly needed to specifically test it.

Further, this research has provided a foundation from which to base longitudinal investigation to determine the causal role that social goals have to play in maladaptive behaviours. I have suggested that bullies' desire for dominance can influence their cooperative as well as their aggressive behaviours. It has also been implied that victims' social goals might instigate their submissive and low levels of prosocial behaviour, and thus play a causal role in leaving them susceptible to victimisation. It is important to assess how

these relationships develop into adolescence, not only from a researcher's point of view, but also as such investigations could provide influential information regarding the areas for which bullying prevention work might find an effective focus.

7.5   Implications for intervention strategies

Finally, the potential contributions this programme of empirical work could make to the design of intervention strategies is considered. In recent years, a growing body of literature has reported on the effect of intervention strategies on rates of victimisation in schools across several countries (Smith, 2004). Although these intervention programmes were not identical, they often shared a similar structure (Smith, Pepler, & Rigby, 2004). Essentially, the schemes involved education of the school staff about bullying, involvement of the wider community (especially parents and other students), the inclusion of content relevant to bullying in the curriculum, increased monitoring of student behaviour, encouraging students to seek help if bullied, and a plan to deal with cases of bullying.

Success rates varied across studies, but the average reduction in victimisation was around 15% (Smith et al., 2004). Although Smith (2004) rightly points out the importance for schools to take ownership of the anti-bullying work, and also for a sustained period of intervention, the nature of the intervention itself is likely to play a critical role in the effectiveness of these schemes. As an alternative to Olweus' (1991) programme (which has enjoyed notable, but inconsistent success rates, see Smith, Ananiadou, & Cowie, 2003), programmes emphasising problem solving strategies have also met with some degree of effectiveness in the UK (such as the DES Sheffield Bullying Project, Sharp & Smith, 1991). These programmes imply that children who are trained to develop social skills, such as

learning how to be assertive and not aggressive, and developing greater empathy and anger control, are arguably better equipped to deal with harassment.

I concur that these methods are likely to prove particularly useful in developing the skill sets of aggressive-victims, whom the background literature has found to experience more anger, attribute hostile intent easily, endorse goals for retaliation, and hold low efficacy for problem solving responses to provocation such as assertive behaviour (Camodeca & Goosens, 2005; Crick & Dodge, 1994, 1996; Toblin et al., 2005). However, the current empirical work supports the importance of additionally developing other aspects of children's social-cognitive processing. In Studies 1, 3, 4, and 6, it was reported that (non-aggressive) victimisation in boys was consistently associated with a concern for the feelings of others, and it was argued that this might be the consequence of an overactive empathy, leading to overpowering feelings of anxiety. Accordingly, rather than developing their empathy, it is suggested that these children need to learn to deal with their feelings of anxiety, and to utilise their empathy in situations whereby it might provide a social advantage, such as in supporting a needy peer.

With regard to bullying, in Study 6, bullying was found to be associated with aggressive responses to provocation, but only when mediated by interpreted intent, and goals for revenge and not wanting to get on with the provocateur. Accordingly, these results imply that, in order to prevent aggressive behaviour, it is important to consider whether the intervention strategies have actually changed the goals of the aggressors. As Erdley and Asher (1999) explain, even if children have been recently trained to resolve problems peacefully, they are still likely to behave aggressively if they are primarily concerned with goals of retaliation. However, it is important to recognise that changing children's social

goals may be particularly difficult. Children's social goals may be strongly influenced by familial factors (Pettit et al., 1988; Wehby, Symons, & Hollo, 1997) which may be out of the reach of school-based interventions. Although school environment is also likely to shape children's goals to some extent, any change is likely to be slow. This might explain why Smith et al. (2004) reported that programmes which enjoyed a sustained period of intervention reported higher success rates. Further, by adolescence, years of social experience cause an individual's social goals to become particularly solidified (Crick & Dodge, 1994). This exemplifies the importance of intervening with younger children (see also Olweus & Enresen, 1998).

Because children are most likely to endorse goals that they are confident in being able to attain (Bandura, 1981), the need for strategies that train children to use assertive rather than aggressive social strategies in adapting their social goals is recognised. Further, it is worth considering which aspects of children's social-cognitive processing contribute individually to their social goals (such as the attribution bias identified as contributing to goals for revenge in Study 6), and developing social skills training targeted at resolving these biases. Indeed, Fraser et al. (2005) reported that Primary school aged children who had undertaken SIP skills training held less aggressive goals than they had done prior to the intervention (although it is unclear whether children simply learned how they were 'supposed' to complete the SIP measure). However, with support growing that 'pure' bullies may actually be socially intelligent (Andreou, 2004; Sutton et al., 1999b, Sutton & Keogh, 2000) and do not experience the same social-cognitive biases as other aggressive children (e.g., Toblin et al., 2005), it is unlikely that social skills training will prove effective in encouraging bullies to be less aggressive. In fact, there is some reason to believe that bullies'

aggression may stem from a psychopathic personality (Slee & Rigby, 1993), and they may simply apply any social skills that they develop to improve the efficiency of their aggression.

In Studies 1 to 4, bullying in boys was reported to be associated with certain goals but only in specific situations. It was argued that boy bullies hold an overall goal for dominance, but that some situations provided a stronger basis from which to assert their dominance. Accordingly, bullies may only engage in aggression in certain situations where they believe that they can exert dominance over another. Indeed, boy bullies' goals for dominance do not always lead to antisocial behaviours. Indeed, in Study 6 social goals of dominance were found to be associated with a response to provocation that was centred on compromising. Intervention strategies could benefit from considering which situations in particular elicit aggressive strategies to exerting/maintaining dominance over peers. For example, Eslea and Smith (1998) reported that playground work in one school that "reduced the dominance of stereotypically 'boyish' games in favour of quiet areas and gardens" (p. 216) had proved particularly beneficial for reducing victimisation in boys.

In a review of the recent developments to bullying research, Smith (2004) suggested that more attention needs to be paid to bullying among girls. Indeed, intervention strategies have been reported to be far less effective at reducing victimisation rates in girls (Eslea & Smith, 1998). Arguably, this could be because the subtle methods used to bully are less easily picked up on (and dealt with) by teachers, but it is also conceivable that the social skills training undertaken in these intervention strategies does not influence the dyadic relationship between bully and victim in girls. In Studies 3 and 4, it was reported that girls may become prone to victimisation if they lacked the goals for prosocial behaviour that is normative among their peer group. These individuals are unlikely to change their behaviour in light of

social skills training. Instead, interventions might benefit from demonstrating the practical benefits in behaving prosocially to victimised girls. Even if the intent behind prosocial behaviour is self-focused, it is still likely to contribute positively to their peer status and leave them less prone to chronic victimisation. Similarly, Studies 3 and 4 suggested that girl bullies rely upon a perception of social status to maintain their social dominance over their victims. Intervention strategies that focus on challenging children's *perceptions* of popularity might break the imbalance of power necessary for relational bullying to be carried out effectively.

Finally, assessing children's social goals might provide an effective means with which to identify children at-risk of becoming bullies/victims. Children concerned with being dominant within their peer group could be monitored closely to prevent the development of aggressive strategies with which to achieve their aim. Similarly, social goals assessment could identify boys who are inappropriately concerned with the feelings of others and girls who hold little concern for prosocial behaviour. Although it is ethically questionable to select these children for specific intervention work prior to experiencing harassment, they could still be monitored closely to prevent the sort of chronic victimisation that is closely associated to a range of emotional difficulties.

7.6   **Conclusions**

Bullying has become the subject of increasingly intense investigation over the past few decades. However, despite the important progress made during this time, the social-cognitive contributors to bullying and victimisation are still not comprehensively understood. This programme of empirical work began with the hypothesis that children's social goals may be particularly important in understanding why some children bully and/or are victimised.

The current research identified several social goals, both generalised and scenario-specific, that were related to bullying and victimisation in Primary school children. By analysing these social goals alongside other social-processing aspects that the existing literature has associated with bullying and victimisation, I was able to provide reliable evidence that children's social goals, while related to these social-cognitive aspects, contribute *independently* to bullying and victimisation. Future research is therefore recommended to determine how these associations develop throughout childhood and adolescence.

Results also highlighted the role that social goals have to play in mediating the relationships between bullying/victimisation and associated behaviours. These findings have particular importance for the development of bullying intervention and prevention strategies, implying that understanding and manipulating the social goals of bullies and victims could be critical for the success of these schemes.

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Appendices

A1: Bullying questionnaire from Studies 1, 2, 5, and 6

My code number: _____   **Today's date:** _____

Class: _____   **I am a:**   **boy**   **girl**

These questions are about your classmates. REMEMBER, all your answers will be kept secret so don't worry about getting into trouble for what you write. Just try to be as honest as possible.

You don't have to fill in all the boxes. If you can only think of 1 answer you only need to fill in the first line. If you can't think of any you don't have to put any answers at all.

We will be reading through the questions together so don't rush ahead. If you have any questions, put your hand up and an adult will come and help you.

Please look carefully at the class list. **Using code numbers only**, please indicate up to three children you have often seen…

1. Pushing or tripping another child on purpose: _____   _____   _____

2. Breaking another child's things to upset them: _____   _____   _____

3. Stopping another child joining in games: _____   _____   _____

4. Doing really clever things: _____   _____   _____

5. Being hit by other children: _____   _____   _____

6. Ganging up with a group of children to get someone left out of things: _____ _____ _____

7. Playing football: _____ _____ _____

8. Having their feelings hurt by other children: _____ _____ _____

9. Hitting or kicking another child: _____ _____ _____

10. Threatening to hurt another child if they don't do something: _____ _____ _____

11. Having lots of fun: _____ _____ _____

12. Getting picked on by bullies: _____ _____ _____

13. Spreading nasty stories about another child: _____ _____ _____

14. Having rumours made up about them behind their backs: _____ _____ _____

15. Calling another child names or making fun of them to upset them: _____ _____ _____

16. Getting called nasty names by other children: _____ _____ _____

17. Getting beaten-up by other children: _____ _____ _____

18. Getting left out of things even when they want to play: _____ _____ _____

19. Drawing really good pictures: _____ _____ _____

20. Getting really shouted at by other children: _____ _____ _____
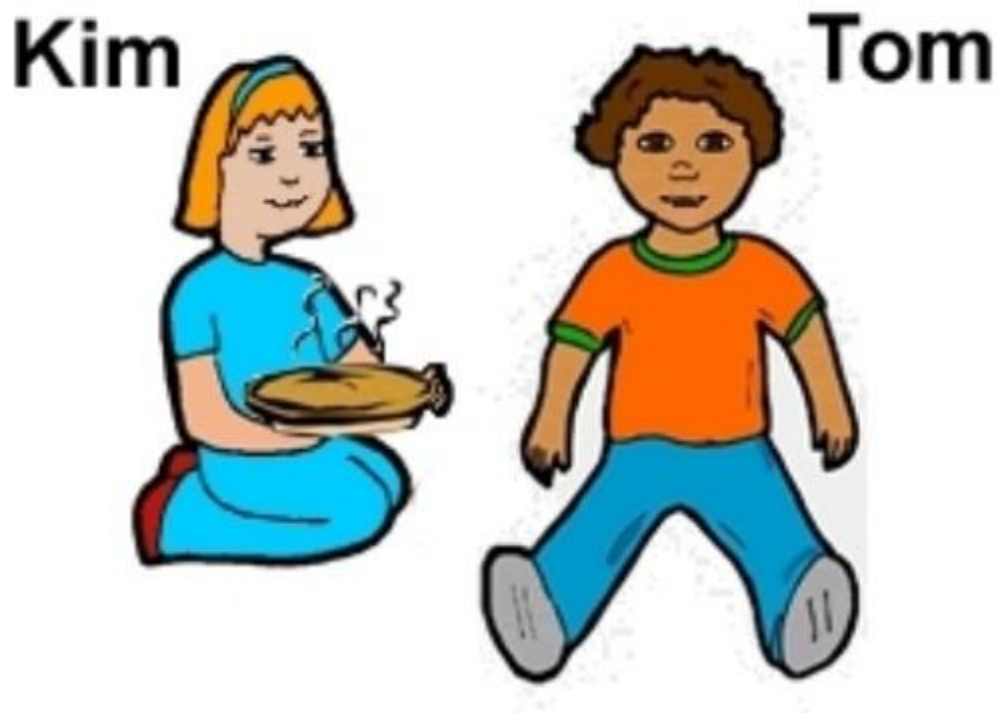
Kim helped to make a big apple pie for her cousin Tom when he came to visit. She's proud about making the pie, and she really hopes that her cousin Tom will like it. She carried it out of the kitchen. "I made this pie specially for you," said Kim. "Mmm," replied her cousin Tom. "That looks lovely. I love pies, except I hate apple pie, of course."

1. In the story, did someone say something they should not have said? *Yes or No*
2. What was said that should not have been said? *Cousin Tom said, "I hate apple pie" OR Kim said, "I made this specially for you"*
3. How does Kim feel now? *Happy or Upset*
4. Did cousin Tom want to make Kim upset? *Yes or No*
5. What kind of pie had Kim made? *Apple or Plum*
6. Did cousin Tom know that Kim had made an apple pie? *Yes or No*

Lisa   Jill

Jill has just moved into a new house. She went shopping with her Mum and
bought some new curtains. When Jill had just put them up, her best friend
Lisa came round to see the house and said, "Oh, those curtains are horrible.
I hope you're going to get some new ones." Jill said, "Let's go outside."

1. In the story, did someone say something they should not have said? *Yes or No*
2. What was said that should not have been said? *Lisa said, "Those curtains are horrible" OR Jill said, "Let's go outside"*
3. How does Jill feel now? *Sad or Happy*
4. Did Lisa want to upset Jill? *Yes or No*
5. What had Jill just bought for her house? *Cushions or Curtains*
6. Did Lisa know that the curtains were new? *Yes or No*
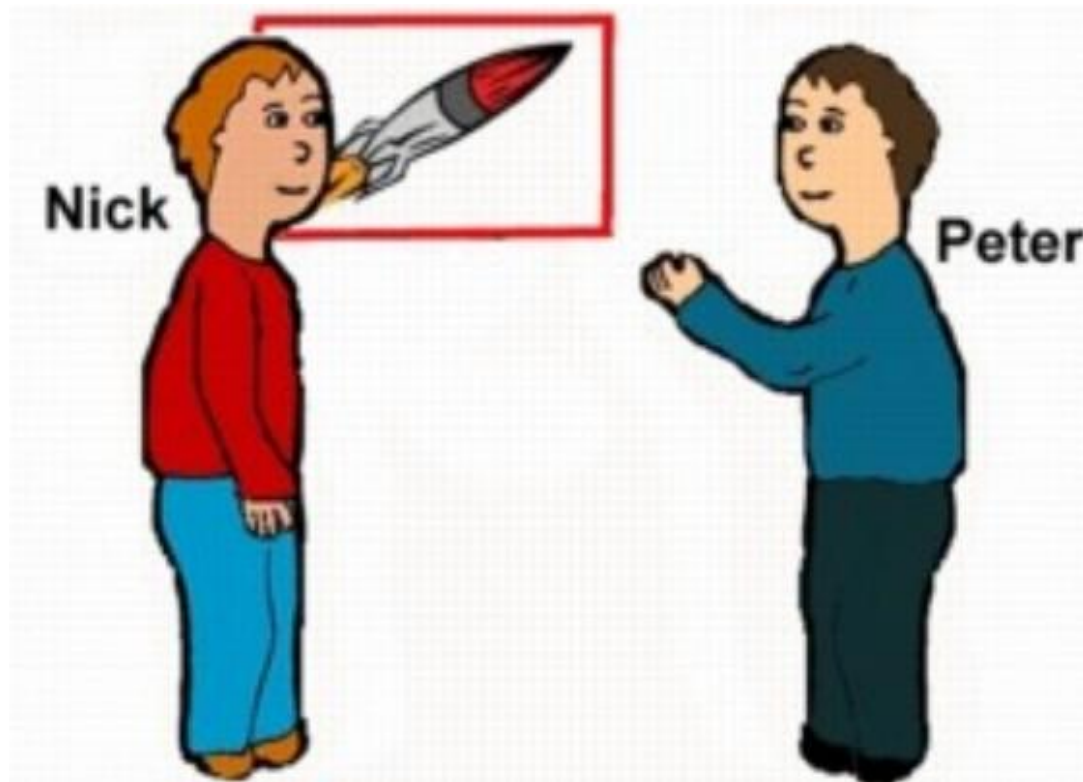
Nick has painted a picture of a rocket for a class exhibition. Nick's friend,
Peter, is in another class, but he comes to see the exhibition after school.
Peter points to Nick's picture and says, "The rest of the paintings are quite
nice, but this rocket picture is dreadful, isn't it?" Nick says, "Oh, I
need to go home now."

1. In the story, did someone say something they should not have said*? Yes or No*
2. What was said that should not have been said? *Nick said, "I need to go home now" OR*
   Peter said, "This rocket picture is dreadful"
3. How does Nick feel now? *Sad or Pleased*
4. Did Peter want to make Nick upset? *Yes or No*
5. Who painted the rocket picture? *Nick painted it OR Someone else painted it*
6. Did Peter know that Nick had painted the rocket picture? *Yes or No*

Robert has just started violin lessons. He really enjoys the lessons and loves playing the violin, but he hasn't had the chance to tell any of his friends about it yet. He is walking back from school with one of his friends, Alex. Robert says to Alex, "Have you heard about the violin lessons at school?" Alex says, "Yes. How boring. Yuck! I hate the violin".

1. In the story, did someone say something they should not have said? *Yes or No*
2. What was said that should not have been said? *Robert said, "Have you heard about the violin lessons at school?" OR Alex said, "Yuck! I hate the violin!"*
3. How does Robert feel now? *Happy or Upset*
4. Did Alex want to make Robert upset? *Yes or No*
5. What kind of lessons has Robert just started? *Piano or Violin*
6. Did Alex know that Robert had just started violin lessons? *Yes or No*

A3a: Display rule task: proficiency scenarios
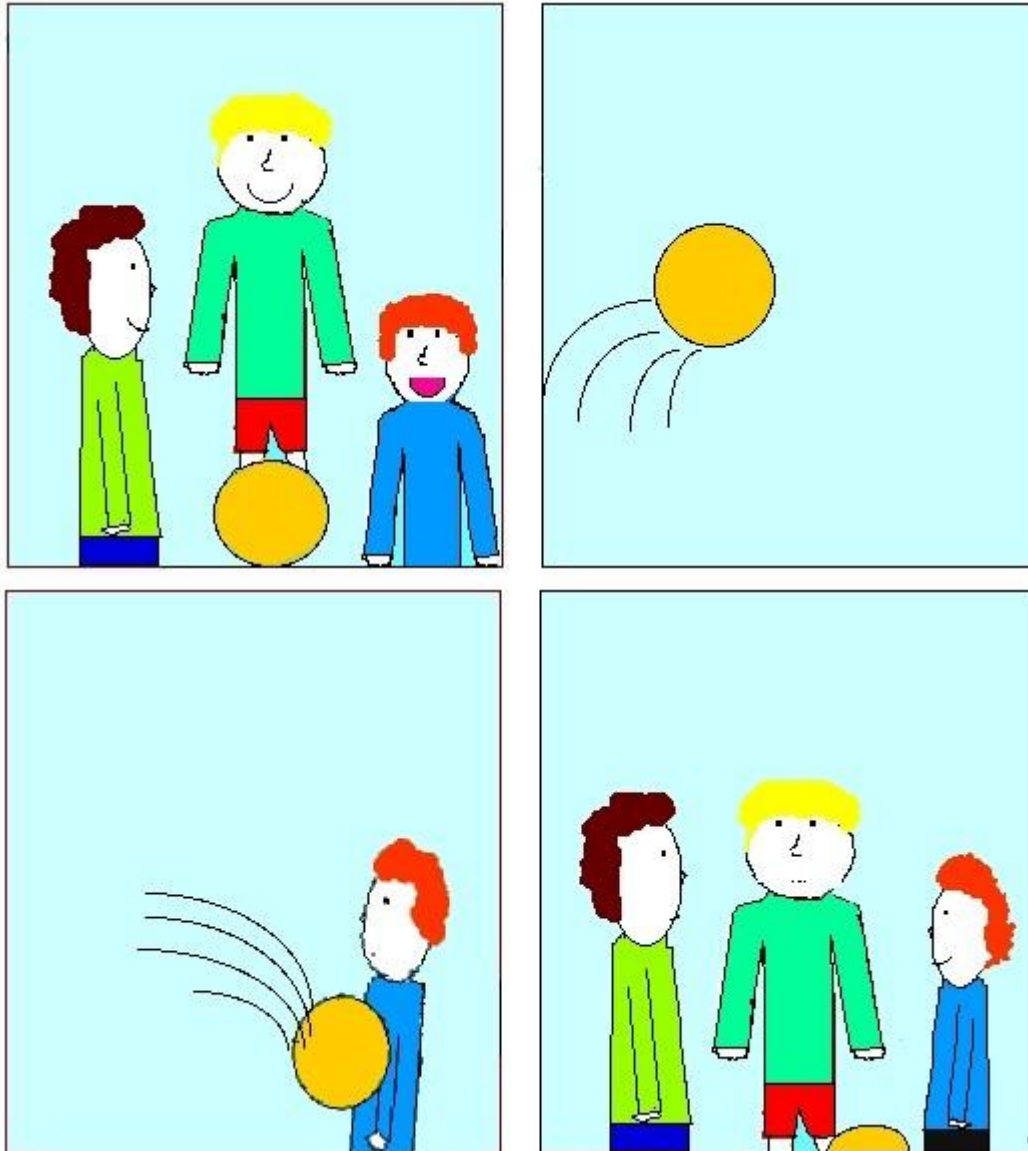
Simon/Sally is in the playground. Some big children are playing ball and they let S join their game. They're all playing together happily when one of the children kicks the ball right up in the air, and when it lands it hits S on the arm. It really hurts. But when one of the big children says, 'Are you all right?', S smiles and says, 'Of course I am. That didn't hurt at all.'

Why does S say to the big children that it didn't hurt?

Beth/Bob is in the classroom. The teacher tells a joke to the class and all the other children start to laugh because they think the joke is funny. But B doesn't understand the joke at all. She's very sad because she doesn't see why the joke is funny. Then the other children turn to look at her, and B starts laughing and says, 'I think that's a really funny joke!'

Why does B say to the other children that she thinks it's funny?
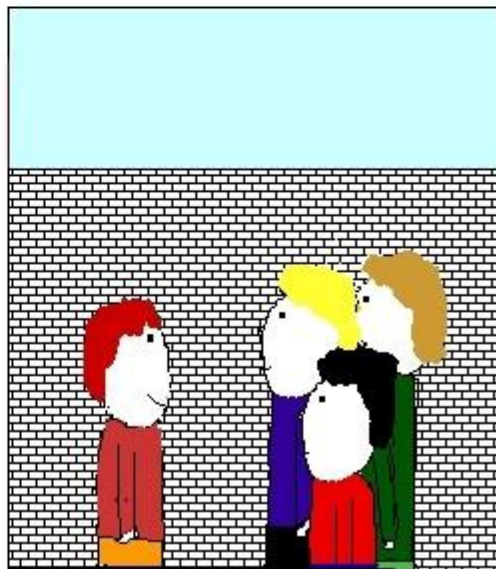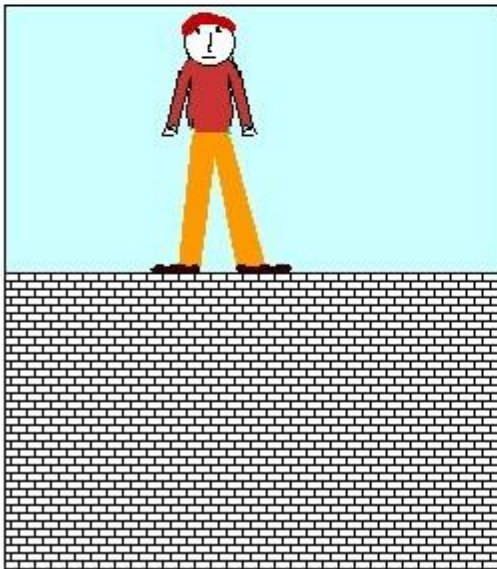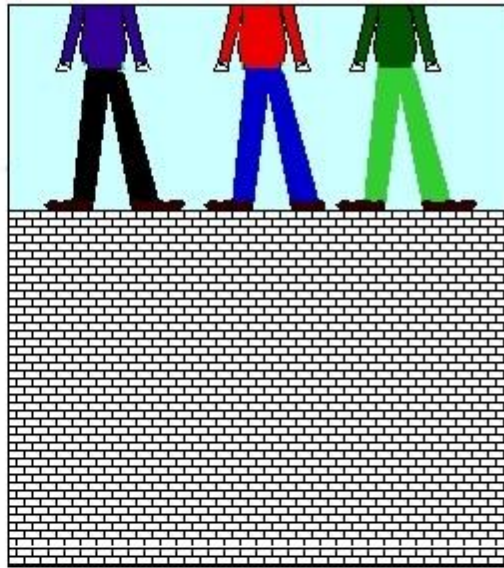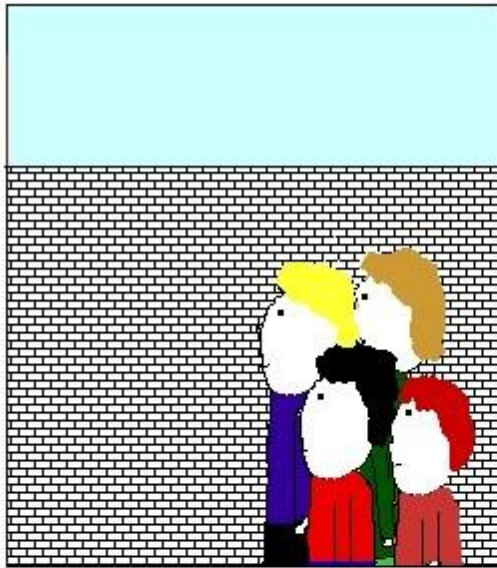
John/Julie is playing with his/her friends next to a very high wall. They all climb up on top of the wall. J climbs on the wall as well. J is very scared about being on the wall because (s)he's frightened of falling off and hurting himself. But when they all get down and the other children say, 'Did you enjoy climbing on the wall?', J says, 'Yes, I loved climbing on the wall.'

Why does J say to the other children that (s)he loved climbing on the wall?
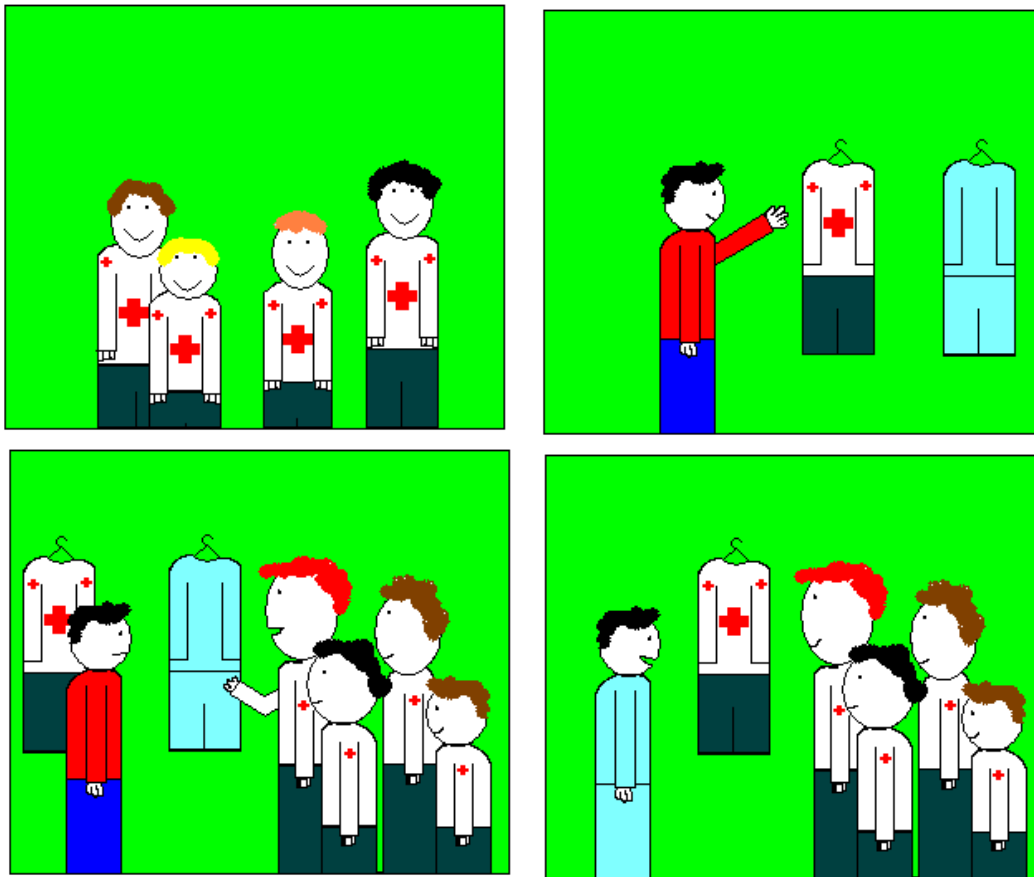
Andrew/Andrea is playing dressing-up with his/her friends. All of A's friends have dressed-up as doctors/nurses, and A wants to play doctor/nurse too. He/she is about to put on the outfit when her friends say 'We need someone to play the patient. Do you want to play the patient, A?' A is upset because s/he really hates playing patient and wants to play doctor/nurse. But A smiles and says 'Sure, I like playing the patient anyway.'

Why does A say that he/she likes to play the patient?
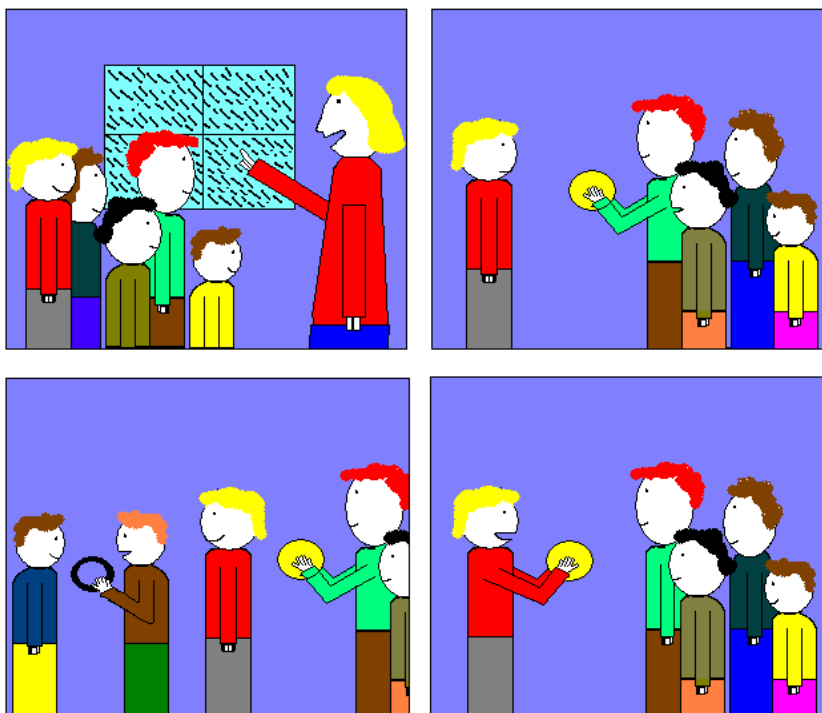
Michael/Michelle's class is doing PE today but it's raining outside, so they have to play in the sports hall. The teacher tells the class that they can play either with the ball or with the rings. Some of M's friends are talking about which they'd like to play and say to M 'We think it would be most fun to play with the ball. What do you want to do?' M loves playing with the rings much more than the ball, but s/he grins and says 'Yes I want to play with the ball too.'

Why does M say that he/she wants to play with the ball?
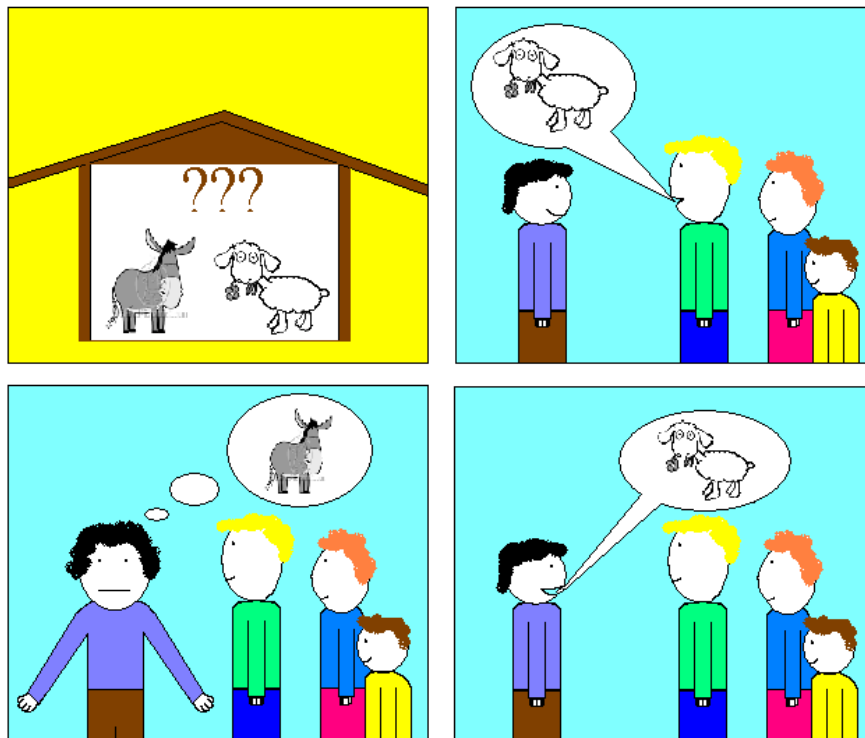
Kevin/Katie's class has been split into groups to work on a special project. They have to design a nativity scene for a Christmas display. Each group can either have donkeys or sheep in the scene. All the other children in K's group say 'We really want to have sheep in our nativity scene, what do you think?' K is disappointed because s/he wanted donkeys, but s/he nods and says 'Yes, I think sheep would be best.'

Why does K say that she thinks sheep would be best in the nativity scene?
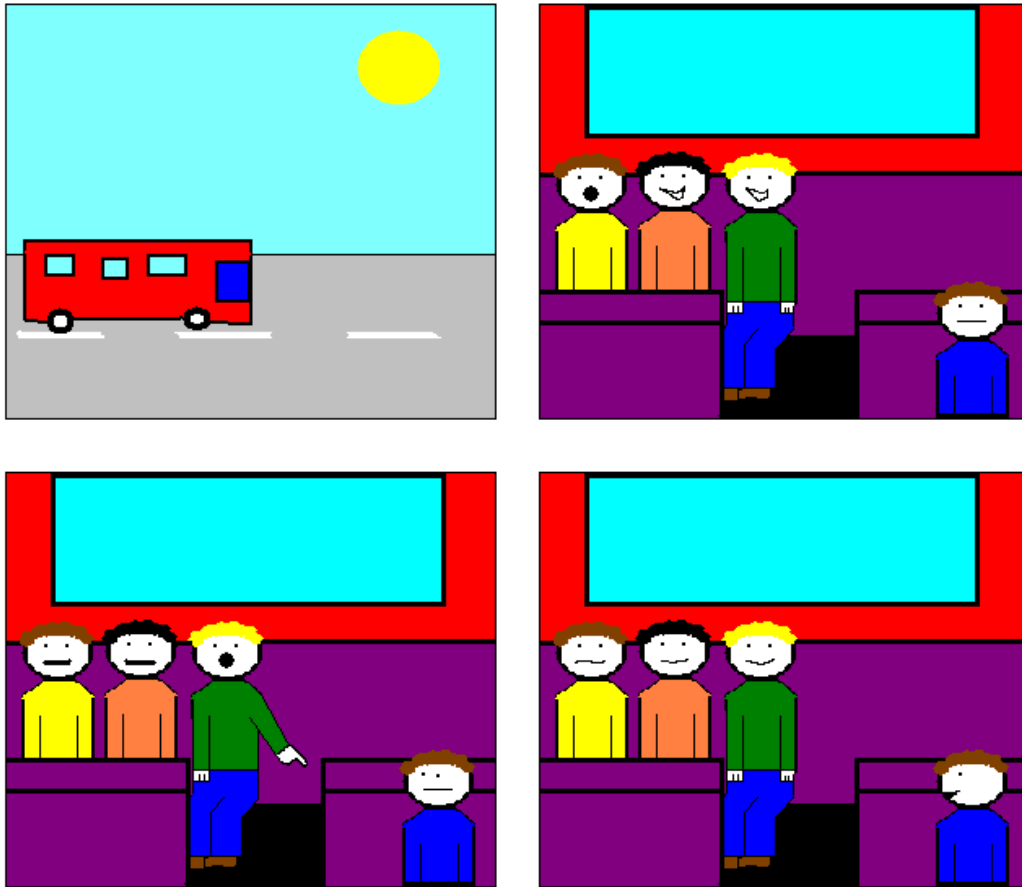
Steve is on the bus coming home from school. He hears some children at the back of the bus talking about his friend, Michael. 'I hate Michael' one of the children says, 'he's really annoying and he smells!' Then he points to Steve and says, 'I've seen you playing with Michael, you're not his friend are you?' Steve does really like Michael, but says 'No, I don't like Michael at all.'

Why does Steve say he doesn't like Michael?
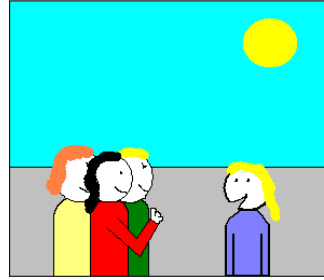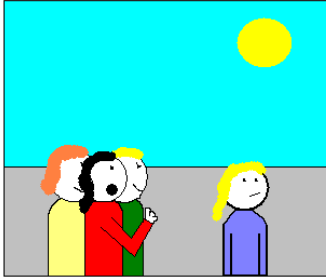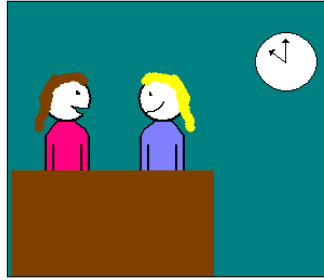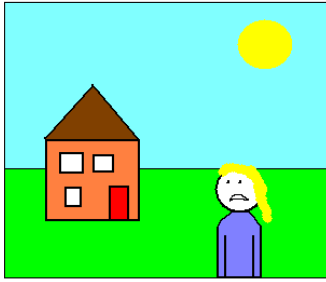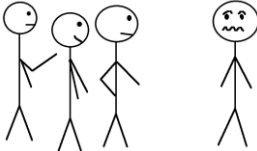
Eleanor has just started at a new school and is very nervous. In class a girl called Amy is sitting next to Eleanor and is really nice to her. At breaktime, Eleanor is looking for Amy. But then some of the big children in her class come up to her and say 'You're not going to play with Amy are you? She's weird! Come and play with us instead!' Eleanor doesn't think she likes the big children much, but she says, 'Okay then, that sounds fun!'

Why does Eleanor decide to play with the other children?

A
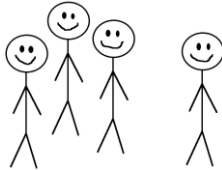
Because he was worried how he would look to the others?

B Because he was scared the others would pick on him?

C Because he wanted everyone to play together happily?
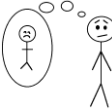
D Because he didn't want to hurt the others' feelings?

E Because he wanted to have the most fun?

Why does Steve say that he doesn't like Michael?

Why does Steve say that he doesn't like Michael?

A	Because he was worried how he would look to the others?	**Not at all**	**Not really**	**Not sure**	**A little**	**A lot**
B	Because he was scared the others would pick on him?	**Not at all**	**Not really**	**Not sure**	**A little**	**A lot**
C	Because he wanted everyone to play together happily?	**Not at all**	**Not really**	**Not sure**	**A little**	**A lot**
D	Because he didn't want to hurt the others' feelings?	**Not at all**	**Not really**	**Not sure**	**A little**	**A lot**
E	Because he wanted to carry on having fun?	**Not at all**	**Not really**	**Not sure**	**A little**	**A lot**

A4: Reduced bullying questionnaire from Studies 3 and 4, with the desire for popularity/prosocial behaviour items assessed in Study 3

My code number: _____   **Today's date:** _____

Class: _____   **I am a:**   **boy**   **girl**

These questions are about your classmates. REMEMBER, all your answers will be kept secret so don't worry about getting into trouble for what you write. Just try to be as honest as possible.

You don't have to fill in all the boxes. If you can only think of 1 answer you only need to fill in the first line. If you can't think of any you don't have to put any answers at all.

We will be reading through the questions together so don't rush ahead. If you have any questions, put your hand up and an adult will come and help you.

Please look carefully at the class list. **Using code numbers only**, please indicate up to three children you have often seen…

1. Spreading nasty stories about another child: _____   _____   _____

2. Threatening to hurt another child if they don't do something: _____   _____   _____

3. Stopping another child joining in games: _____   _____   _____

4. Getting really shouted at by other children: _____   _____   _____

5. Getting left out of things when someone is mad at them: _____   _____   _____

6. Hitting or kicking another child: _____   _____   _____

7. Being hit by other children: _____ _____ _____

8. Getting called nasty names by other children: _____ _____ _____

These questions are about how important things are to you.

1. Is it important for you to have a lot of friends?
    Very   A little   Not really   Not at all

2. Is it important for you to be nice to other children?
    Very   A little   Not really   Not at all

3. Is it important for you that other children like you?
    Very   A little   Not really   Not at all

4. Is it important for you to behave well for others?
    Very   A little   Not really   Not at all

5. Is it important for you to be popular?
    Very   A little   Not really   Not at all

6. Is it important for you to act how others want you to?
    Very   A little   Not really   Not at all

A5: IGI-C measure from Study 4

When you are with other children your age, how important is it for you that….

1. You get to decide what to play?	Very	A little	Not really	Not at all
2. You can put the others in a good mood?	Very	A little	Not really	Not at all
3. The group does what you say?	Very	A little	Not really	Not at all
4. You do not make a fool of yourself in front of the others?	Very	A little	Not really	Not at all
5. The others don't laugh at you?	Very	A little	Not really	Not at all
6. You let the others decide?	Very	A little	Not really	Not at all
7. You do not show your feelings in front of them?	Very	A little	Not really	Not at all
8. The others think you are clever?	Very	A little	Not really	Not at all
9. You make an impression on the others?	Very	A little	Not really	Not at all
10. The others listen to your opinion?	Very	A little	Not really	Not at all
11. You keep your thoughts to yourself?	Very	A little	Not really	Not at all
12. You do not make the others angry?	Very	A little	Not really	Not at all
13. You say exactly what you want?	Very	A little	Not really	Not at all
14. You do not annoy the others?	Very	A little	Not really	Not at all
15. You are invited to join in games?	Very	A little	Not really	Not at all
16. Everyone feels good?	Very	A little	Not really	Not at all

A6: SIP task utilised in Studies 5 and 6

A6a: SIP task: hostile provocation scenarios from Study 5

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Carl

Imagine that you are playing in the playground with some friends from your class. You've been playing tag all break time and you're having lots of fun. You haven't even been tagged once so you're doing really well. Suddenly, a boy from your class called Carl shouts your name and starts walking over. Carl is sometimes nasty to you, but you go to find out what he wants. You ask Carl if he wants to play too but he pushes you and shouts, "You are going to get it today!"

Imagine you are the person in the story...

6. How angry would you feel if this happened to you? *(Optional)*

◯ Not at all angry ◯ A little angry ◯ Quite angry ◯ Very angry

7. How sad would you feel if this happened to you? *(Optional)*

◯ Not at all sad ◯ A little sad ◯ Quite sad ◯ Very sad

Think about the other child...

8.	No	Don't know	Yes
a. Do you think that Carl is mean?	◯	◯	◯
b. Do you think Carl pushed you on purpose?	◯	◯	◯
c. Do you think Carl enjoyed pushing you?	◯	◯	◯
d. Should Carl be blamed for pushing you?	◯	◯	◯

9.

	Not at all important	A little important	Quite important	Very important
a. Do you think it is important to tell Carl not to do it again?	○	○	○	○
b. Do you think it is important to get your own back for what Carl did?	○	○	○	○
c. Do you think it is important to avoid Carl?	○	○	○	○
d. Do you think it is important to avoid getting into trouble with the teacher by not causing a fuss?	○	○	○	○
e. Do you think it is important that you get along with Carl?	○	○	○	○
f. Do you think it is important that Carl doesn't feel upset about what happened?	○	○	○	○
g. Do you think it is important that Carl doesn't feel angry with you?	○	○	○	○

Continue >   Check Answers & Continue >

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Nasty Names

Imagine you're in the playground. You are playing catch with some friends from your class. One of your friends throws the ball over your head. It's gone a long way past you so you start walking up the playground to fetch it. On your way to pick up the ball you walk past some boys from your class. One of the boys, Kevin, starts shouting a nasty nickname at you and the rest join in. You don't like the name at all and wish they would stop.

Imagine you are the person in the story...

6. How angry would you feel if this happened to you? *(Optional)*

○ Not at all angry   ○ A little angry   ○ Quite angry   ○ Very angry

7. How sad would you feel if this happened to you? *(Optional)*

○ Not at all sad   ○ A little sad   ○ Quite sad   ○ Very sad

Think about the other child...

8.

	No	Don't know	Yes
a. Do you think that Kevin is mean?	○	○	○
b. Do you think Kevin called you names on purpose?	○	○	○
c. Do you think Kevin enjoyed calling you names?	○	○	○
d. Should Kevin be blamed for calling you names?	○	○	○

If this had happened, what would be important for you?

9.

	Not at all important	A little important	Quite important	Very important
a. Do you think it is important to do something to Kevin to make sure he isn't nasty to you again?	○	○	○	○
b. Do you think it is important to get your own back for what Kevin did?	○	○	○	○
c. Do you think it is important to avoid Kevin?	○	○	○	○
d. Do you think it is important to avoid getting into trouble with the teacher by not causing a fuss?	○	○	○	○
e. Do you think it is important that you get along with Kevin?	○	○	○	○
f. Do you think it is important that Kevin doesn't feel angry with you?	○	○	○	○
g. Do you think it is important that Kevin doesn't feel upset about what happened?	○	○	○	○

Continue >   Check Answers & Continue >

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Nasty Stories

Imagine you've been away on summer holiday and had a really nice time. You're really looking forward to seeing all your friends at school again. You arrive at school and go to class but none of your classmates are talking to you. Your best friend comes up to you and tells you that Claudine, one of the girls in your class, has been making up stories about you. She's been telling them to the whole class. You wished she hadn't because the stories aren't very nice and they're not even true.

Imagine you are the person in the story...

6. How angry would you feel if this happened to you? *(Optional)*

   ○ Not at all angry   ○ A little angry   ○ Quite angry   ○ Very angry

7. How sad would you feel if this happened to you? *(Optional)*

   ○ Not at all sad   ○ A little sad   ○ Quite sad   ○ Very sad

Think about the other child...

8.

	No	Don't know	Yes
a. Do you think that Claudine is mean?	○	○	○
b. Do you think Claudine made up the stories on purpose?	○	○	○
c. Do you think Claudine enjoyed making up stories about you?	○	○	○
d. Should Claudine be blamed for making up the stories?	○	○	○

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If this had happened, what would be important for you?

9.

	Not at all important	A little important	Quite important	Very important
a. Do you think it is important to do something to Claudine to make sure she isn't nasty to you again?	○	○	○	○
b. Do you think it is important to get your own back for what Claudine did?	○	○	○	○
c. Do you think it is important to avoid Claudine?	○	○	○	○
d. Do you think it is important to avoid getting into trouble with the teacher by not causing a fuss?	○	○	○	○
e. Do you think it is important that you get along with Claudine?	○	○	○	○
f. Do you think it is important that Claudine doesn't feel angry with you?	○	○	○	○
g. Do you think it is important that Claudine doesn't feel upset about what happened?	○	○	○	○

Continue >   Check Answers & Continue >

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Queue Jumper

Imagine you are at school one day, and it's break time. You are lining up with your class to go out onto the playground. You're only allowed to go out in small groups so that everyone doesn't rush at once. It's really sunny outside and you can't wait to go and play. You've been waiting in line for ages, but just as it's about to be your turn, Jasmine, a girl in your class you've always had trouble with says "I want this spot!" and cuts in front of you. Now you don't get to go out until the next group.

Imagine you are the person in the story...

6. How angry would you feel if this happened to you? *(Optional)*

○ Not at all angry   ○ A little angry   ○ Quite angry   ○ Very angry

7. How sad would you feel if this happened to you? *(Optional)*

○ Not at all sad   ○ A little sad   ○ Quite sad   ○ Very sad

Think about the other child...

8.

	No	Don't know	Yes
a. Do you think that Jasmine is mean?	○	○	○
b. Do you think Jasmine pushed in front of you on purpose?	○	○	○
c. Do you think Jasmine was happy that you missed your turn to go outside?	○	○	○
d. Should Jasmine be blamed for you missing your turn?	○	○	○
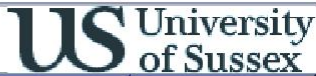
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If this had happened, what would be important for you?

9.

	Not at all important	A little important	Quite important	Very important
a. Do you think it is important to do something to Jasmine to make sure she isn't nasty to you again?	○	○	○	○
b. Do you think it is important to get your own back for what Jasmine did?	○	○	○	○
c. Do you think it is important to avoid Jasmine?	○	○	○	○
d. Do you think it is important to avoid getting into trouble with the teacher by not causing a fuss?	○	○	○	○
e. Do you think it is important that you get along with Jasmine?	○	○	○	○
f. Do you think it is important that Jasmine doesn't feel angry with you?	○	○	○	○
g. Do you think it is important that Jasmine doesn't feel upset about what happened?	○	○	○	○

[Continue >] [Check Answers & Continue >]

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Note that the measure below was used in Study 6 only. The same stories were used for both studies, but in Study 5, question 9 included two additional items: 'Do you think it is important to avoid getting into trouble with the teacher by not causing a fuss' and 'Do you think it is important that the other child doesn't feel angry with you'. Also, question 10 was not present in the measure for Study 5.

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The Den

Imagine you're on a school trip to a big adventure country park. You have built a really great den using branches from the woods. It's bigger than any you've ever built before and you're really happy with it. Someone from your class sees what a good job you've done and comes to have a better look. You are building a new roof so that the den will be a dry and safe place, even when it rains. But then the child from your class puts a really heavy a branch on top and the whole den collapses under the weight!

Imagine you are the person in the story...

6. How angry would you feel if this happened to you? *(Optional)*

◯ Not at all angry   ◯ A little angry   ◯ Quite angry   ◯ Really angry

7. How sad would you feel if this happened to you? *(Optional)*

◯ Not at all sad   ◯ A little sad   ◯ Quite sad   ◯ Very sad

Think about the other child...

8.

	No	Don't know	Yes
a. Do you think that the other child is mean?	◯	◯	◯
b. Do you think the other child messed up your den on purpose?	◯	◯	◯
c. Do you think the other child enjoyed damaging your den?	◯	◯	◯
d. Should the other child be blamed for the damage to your den?	◯	◯	◯

9.

	Not at all important	A little important	Quite important	Very important
a. Do you think it is important to make the other child fix your den?	○	○	○	○
b. Do you think it is important to get your own back for what they just did?	○	○	○	○
c. Do you think it is important to avoid the other child?	○	○	○	○
d. Do you think it is important that you get along with the other child?	○	○	○	○
e. Do you think it is important that the other child doesn't feel upset about what happened?	○	○	○	○

If this had happened, what would you do about it?

10. Would you...

	Definitely not	I might do	I probably would	I definitely would
a. Push or shout at the other child?	○	○	○	○
b. Tell the other child not to do it again?	○	○	○	○
c. Try to avoid the other child?	○	○	○	○
d. Try not to make a big deal out of what happened?	○	○	○	○
e. Tell the other child that you don't mind as long as they help you re-build your den?	○	○	○	○
f. Tell the other child that it's ok as it was an accident and that you can still be friends?	○	○	○	○

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Tasty Hamburger

Imagine it is sports day at school. Your class is playing sports all day. There is also a stall which serves hamburgers. Everybody has got a ticket for a hamburger. You have been trying really hard at sports all morning, and now you feel very hungry. So you decide to go and cue up for a hamburger. When it is your turn, they serve you a really nice big hamburger. Just as you are about to take your first bite, somebody from behind bumps into you and you drop your hamburger to the floor.
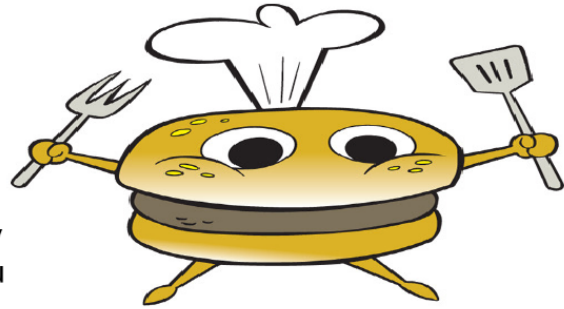
Imagine you are the person in the story...

6. How angry would you feel if this happened to you? *(Optional)*

○ Not at all angry   ○ A little angry   ○ Quite angry   ○ Very angry

7. How sad would you feel if that happened to you? *(Optional)*

○ Not at all sad   ○ A little sad   ○ Quite sad   ○ Very sad

Think about the other child...

8.

	No	Don't know	Yes
a. Do you think that the other child is mean?	○	○	○
b. Do you think the other child bumped into you on purpose?	○	○	○
c. Do you think the other child was happy that you dropped your hamburger?	○	○	○
d. Should the other child be blamed for you dropping your hamburger?	○	○	○

If this had happened, what would be important for you?

9.

	Not at all important	A little important	Quite important	Very important
a. Do you think it is important to make the other child get you a new hamburger?	○	○	○	○
b. Do you think it is important to get your own back for what the other child did?	○	○	○	○
c. Do you think it is important to avoid the other child?	○	○	○	○
d. Do you think it is important that you get along with the other child?	○	○	○	○
e. Do you think it is important that the other child doesn't feel upset about what happened?	○	○	○	○

If this had happened, what would you do about it?

10. Would you...

	Definitely not	I might do	I probably would	I definitely would
a. Push or shout at the other child?	○	○	○	○
b. Tell the other child not to do it again?	○	○	○	○
c. Try to avoid the other child?	○	○	○	○
d. Try not to make a big deal out of what happened?	○	○	○	○
e. Tell the other child that you don't mind as long as they help you get another hamburger?	○	○	○	○
f. Tell the other child that it's ok as it was an accident and that you can still be friends?	○	○	○	○

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Computer Game

Imagine you are taking turns on a computer game with a classmate. When one is finished it's the others' turn. Now it's your turn and you're doing well. You have already reached the highest level, but you only have one life left. You have never got as far as this, so you're really doing your best.
Your classmate is looking over your shoulder. They see how far you have got and say: "Watch out! You have to be quick!" and push a button. But it was the wrong one, and now you're dead!

Imagine you are the person in the story...

6. How angry would you feel if this happened to you? *(Optional)*

○ Not at all angry   ○ A little angry   ○ Quite angry   ○ Really angry

7. How sad would you feel if this happened to you? *(Optional)*

○ Not at all sad   ○ A little sad   ○ Quite sad   ○ Very sad

Think about the other child...

8.

	No	Don't know	Yes
a. Do you think that the other child is mean?	○	○	○
b. Do you think the other child pressed the wrong button on purpose?	○	○	○
c. Do you think the other child was happy that you lost on the computer game?	○	○	○
d. Should the other child be blamed for messing up your turn on the computer game?	○	○	○

If this had happened, what would be important for you?

9.

	Not at all important	A little important	Quite important	Very important
a. Do you think it is important to make the other child let you have another turn?	○	○	○	○
b. Do you think it is important to get your own back for what he just did?	○	○	○	○
c. Do you think it is important to avoid the other child?	○	○	○	○
d. Do you think it is important that you get along with the other child?	○	○	○	○
e. Do you think it is important that the other child doesn't feel upset about what happened?	○	○	○	○

If this had happened, what would you do about it?

10. Would you...

	Definitely not	I might do	I probably would	I definitely would
a. Push or shout at the other child?	○	○	○	○
b. Tell the other child not to do it again?	○	○	○	○
c. Try to avoid the other child?	○	○	○	○
d. Try not to make a big deal out of what happened?	○	○	○	○
e. Tell the other child that you don't mind as long as they let you have another turn?	○	○	○	○
f. Tell the other child that it's ok as it was an accident and that you can still be friends?	○	○	○	○

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New Bike

Imagine it's your birthday and you have been given a brand new bike. You are very pleased and decide to cycle to school to show the bike to everyone. At the school yard all your classmates come up to you and stand around admiring the bike. Someone from your class asks whether they can borrow the bike for a while to go riding it. That is okay with you. They cycle away excitedly, but when they return 10 minutes later, they are walking next to the bike and there is a great big bend in the front wheel.

Imagine you are the person in the story...

6. How angry would you feel if this happened to you? *(Optional)*

○ Not at all angry   ○ A little angry   ○ Quite angry   ○ Really angry

7. How sad would you feel if this happened to you? *(Optional)*

○ Not at all sad   ○ A little sad   ○ Quite sad   ○ Really sad

Think about the other child...

8.

	No	Don't know	Yes
a. Do you think that the other child is mean?	○	○	○
b. Do you think the other child dropped your bike on purpose?	○	○	○
c. Do you think the other child enjoyed damaging your bike?	○	○	○
d. Should the other child be blamed for the damage to your bike?	○	○	○

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If this had happened, what would be important for you?

9.

	Not at all important	A little important	Quite important	Very important
a. Do you think it is important to make sure the other child tries to get your bike mended?	○	○	○	○
b. Do you think it is important to get your own back for what he just did?	○	○	○	○
c. Do you think it is important to avoid the other child?	○	○	○	○
d. Do you think it is important that you get along with the other child?	○	○	○	○
e. Do you think it is important that the other child doesn't feel upset about what happened?	○	○	○	○

If this had happened, what would you do about it?

10. Would you...

	Definitely not	I might do	I probably would	I definitely would
a. Push or shout at the other child?	○	○	○	○
b. Tell the other child not to do it again?	○	○	○	○
c. Try to avoid the other child?	○	○	○	○
d. Try not to make a big deal out of what happened?	○	○	○	○
e. Tell the other child that you don't mind as long as they help you get your bike mended?	○	○	○	○
f. Tell the other child that it's ok as it was an accident and that you can still be friends?	○	○	○	○

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