Developing a Questionnaire to Examine the Psychological Constructs Associated with being a Bullied Child.

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Overview

Part One: Review Paper

This review paper presents the current understanding of what causes childhood bullying. Studies that have attempted to provide insights into the causes of bullying are outlined, compared and critically appraised. The paper is divided into four main sections. The first section provides an introduction into the research area of childhood bullying. The second section provides background information that provides a context for interpretation of research in this area, such as evidence on the prevalence and consequences of bullying. The third section discusses the causes of bullying in terms of the personal characteristics of bullies and bullied children as well as the social variables that have been associated with bullying. Finally, conclusions are drawn and future directions for research are postulated.

Part Two: Empirical Paper

The empirical paper reports a study to develop a new questionnaire for the assessment of bullied children. The questionnaire was created by child clinical psychologists and was revised after four focus groups with bullied children took place. Testing of the questionnaire followed. A principal components analysis was performed on the questionnaire and the factor structure was interpreted. Tests of convergent and construct validity were applied.

Part Three: Critical Appraisal

The critical appraisal looks in more detail at aspects of the study's methodology and results. In particular, the critical appraisal discusses how items were chosen for the questionnaire and the positive influence of including focus groups at the stage of questionnaire construction. The difficulty of defining the construct bullying is discussed. The process of recruiting participants in schools is reviewed, as are the benefits and drawbacks of including a hospital sample. Finally, the implications for intervention into bullying are given.

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Acknowledgements

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Part One: Review Paper

The Causes of Childhood Bullying

Abstract

Bullying affects a large minority of school-age children. It can also lead to short and long-term poor psychosocial functioning, extending into adult life. Now that the prevalence and consequences of childhood bullying have been well-documented, many researchers are interested in its causes. Environmental, social and personal variables have all been implicated in the onset and maintenance of bullying. Aspects of the school environment affect the prevalence of bullying. Parenting styles are associated with being both a bully and bullied. Bullies and victims have also been shown to have distinct psychological profiles, including differences in cognitions, affect and behaviour. As more research has been carried out, it has become evident that there may be complex relationships between these variables that cannot be described using simple cause-effect explanations. A unifying model of bullying is now needed to draw research findings together and guide the development of effective interventions in bullying.

Introduction

There is a growing awareness of the pervasive and detrimental effects of childhood bullying. This is reflected in both the media and research, where many recent studies have documented the nature and consequences of the phenomenon. We now know that one in seven children is involved in bullying and that this is associated with short and long term psychological distress for both bullies and victims (Olweus, 1993).

Despite increased interest in childhood bullying, little is known about what causes it. Many studies have found important associations between bullying, social factors and personal characteristics of children. However, few studies have shown causal relationships between these factors and bullying. This paper is a review of what is currently understood about the causes of childhood bullying.

Researchers have adopted different levels of analysis to investigate the causes of bullying. Bullying can be conceptualised at an anthropological level and researchers have discussed bullying as normative in the sense that power relationships are ubiquitous in human groups (Smith & Brain, 2000). Other researchers have chosen to study the phenomenon at a societal level, looking at the effects of certain social variables on the prevalence of bullying. Most, however, have focused their research at the level of the individual. Although this paper will broadly review causes of childhood bullying across these different domains, my particular interest is in the intrapersonal characteristics determining

that certain children become bullies or bullied whilst others are uninvolved in bullying incidents. This interest stems from a discrepancy in the literature between what is already known about the discriminating characteristics of both bullies and victims, described below, and the indiscriminate interventions that have been developed to help them to date. Perry, Kusel and Perry (1988) suggest that by understanding the cognitive mechanisms underlying childhood bullying, more effective interventions can be developed. By reviewing what is known about the causes of bullying, indications for future directions of research may result.

The review begins with a definition of bullying, on which the utility and value of research in this area depends. The prevalence of bullying amongst children, as well as the consequences of it is given, providing a context for research on this topic. A description of research about the causes of bullying at an inter- and intra-personal level will include a review of the characteristics of bullies and bullied children. The social causes of bullying are then briefly reviewed.

My search strategy for obtaining relevant literature, involved using the "Web of Science" database, using the search terms "bullying" and "cause AND bullying" which yielded 975 results. Within this selection, articles were reviewed if they were relevant to this review on the causes of bullying amongst children.

Background

Defining Bullying

A definition of bullying widely used amongst researchers includes three essential components; negative actions on the part of one or more people with the intention to harm, these actions occur repeatedly over time, and finally these actions include an imbalance of power between the perpetrator and victim (Olweus, 1978). The inclusion of all three components may be important since each one helps to distinguish typical exchanges between peers from bullying incidents. For example, without an imbalance of power, the aggressive exchange may be interpreted as an argument or fight between equally matched children, without there necessarily being a victim. Furthermore, definitions that do not specify the repetitive nature of bullying encompass all negative exchanges, which almost all children have experienced at some point, even between friends.

The importance of using a shared definition of bullying across studies is evident in the literature, where discrepancies in findings may be attributable to the different definitions of bullying used. Even within a definition such as Olweus' (1978) described above, differences in the interpretation of single words have a potentially large impact on results. For example, the repetitive nature of bullying has been interpreted as bullying incidents occurring "now and then" (e.g. Ahmad & Smith, 1990) and "two or three times a month" (Solberg & Olweus, 2003). Solberg and Olweus found that children who admitted being bullied once or twice were significantly different on a variety of externalising and internalising

symptomatology than children who admitted being bullied two or three times a month.

Another example is that traditionally boys have been shown to be more likely to be both a bully and bullied, than girls (Olweus, 1993). However, more recent estimates do not show this to be the case (Espelage, Mebane & Adams, 2004; Theriot, Dulmus, Sowers & Johnson, 2005). This is thought to be associated with a definition of bullying that has previously emphasised physical and direct contact. More recent research has demonstrated that girls may bully and be bullied to the same extent, once relational and indirect bullying is included in the definition of bullying (Theriot et al., 2005). Relational bullying refers to a child's peer relationships being purposefully compromised by another child, for example, denigrating through gossip. Indirect bullying is similar in that it requires the use of a third person or more through which harm is done to another child, such as spreading rumours or exclusion from a social group.

Furthermore, the form that bullying takes may be evolving, requiring up-to-date definitions of bullying, that encompass these changes. For example more recently cyberbullying has emerged. This is the use of modern communication devices, such as mobile telephones and the internet, to bully, through sending harmful images and messages. One study found that as many as one in four children experience victimisation in this way (Li, 2006). Previous definitions emphasising discreet physical bullying incidents may not capture this new trend of indirect and ongoing bullying.

The Prevalence of Bullying

Olweus (1991) surveyed 150,000 school children in Norway and found that 15% of children were involved in bullying problems; 9% were victims who described being bullied "now and then" and 7% were bullies who described themselves as bullying others "now and then". Using a stricter criterion of "Once a week or more", these figures fell to 3% describing themselves as victims and 2% as bullies. In England, a similarly large-scale study estimated the prevalence of bullying at school to be higher, finding that 27% of children were victims of bullying "sometimes" and that 8-10% were bullies (Whitney & Smith, 1993). No explanation for this difference in prevalence has been given although Whitney and Smith's study was conducted in urban areas around Sheffield, whereas Olweus surveyed children in mainly rural areas. It is unclear to what extent this accounts for the discrepancy in prevalence estimates.

Whitney and Smith found no differences in gender for prevalence of bullied children. They did, however, find that boys were more frequently bullies. Estimates largely concur that the prevalence of bullying is inversely related to age over the course of childhood. Whitney and Smith (1993) found there was a steady decrease from 35% of pupils being bullied in year 3 (7 and 8 year olds) to 0% of pupils being bullied in years 12 and 13 (16 – 18 year olds). Whitney and Smith also found that whilst the number of victims decreased as age increased, the number of bullies remained stable throughout the school years. One explanation given for this finding is that children are more likely to get bullied by children older than themselves. Therefore, older children have less potential

bullies in their environment. In contrast, the older bullies become, the more children there are who are younger than themselves and are therefore potential victims. As such, the number of victims decrease with age but the number of bullies remains steady.

Methodological Complications with Research on Bullying

Complications arise when different methodologies are used to measure the prevalence of bullying. Self-report measures are commonly used to measure bullying in schools and communities. A large-scale study in Sheffield found self-report measures to be the best method for investigating prevalence, because they were more reliable than teacher ratings (Ahmad & Smith, 1990). Observer ratings such as teacher and parental estimates can be problematic, since adults frequently underestimate the extent of bullying problems (Borg, 1998). However, it has been noted that self-report measures are biased in that some children are reluctant to admit to being bullied or bullying others. Theriot et al. (2005) used a self-report measure to identify bullied children and found that in addition to the children who reported being bullied, a further 22% of children met the criteria for being bullied on the behaviourally-specific items but did not label themselves as being bullied. This result points towards potential discrepancies between observer ratings of bullying and self-report measures.

The fact that some children did not feel bullied despite experiencing bullying behaviour also highlights the subjective nature of bullying. To what extent the subjective experience of being bullied is a necessary component of being

defined as bullied is unclear and the issue has not been fully addressed in the literature. The potential importance of differences between objective and subjective measures of bullying goes beyond methodological consideration and may be an important variable in determining which children become distressed by bullying. For example, one hypothesis may be that children who describe themselves as bullied may show more distress than children who do not, although they meet the behavioural criteria for being bullied. If this was found to be so, treatment could be directed by the subjective experience of each bullied child.

Consequences of being Bullied

Consistent findings reveal that bullying leads to not only short term, but long-term negative outcomes. Longitudinal studies show that bullying is predictive of internalizing problems later on, including depression, anxiety, loneliness, and low self-esteem (Hanish & Guerra, 2002; Olweus, 1992). Negative long-term outcomes are not exclusive to victims of bullying alone and also occur for bullies themselves. For example, Pepler et al. (2006) found that bullies were at an increased risk of perpetrating relationship aggression in adult life. Farrington (1991) found that childhood aggression was associated with criminal convictions, unemployment, substance use, depression and physical abuse of partner in adulthood.

Consistent with these longitudinal studies retrospective studies have shown that adult mental health is associated with childhood bullying. For example,

Gladstone, Parker and Mahli (2006) found that 26% of adults attending a mood disorder unit for depression were severely bullied as children, and those adults reporting childhood bullying also had higher levels of depression, anxiety, agoraphobia and social phobia. Patients attending an anxiety disorder clinic reported an even higher rate of childhood bullying, with 85% of people with social anxiety reporting having been bullied (McCabe, Antony & Summerfeldt, 2003). Ledley et al. (2006) found that adults who recalled being teased were less comfortable with intimacy, attachment, and had lower self esteem.

Summary

Despite discrepancies in prevalence estimates, there is sufficient evidence to suggest that bullying occurs amongst a large minority of children. Furthermore, bullying leads to short and long-term poor psychosocial functioning. Research on bullying, however, is fraught with methodological and conceptual problems. The difference between self-report and observer ratings is not only a methodological concern but reflects a difficulty defining the extent to which bullying belongs in the objective or subjective domain. Until an agreed definition is used consistently across research in the area, conflicting or different results seem likely. A triangulation of different measures would be useful in order to offset the difficulties inherent in each type of methodology. Furthermore, this would allow researchers to compare and contrast differing methodologies in this area within the same study. For example, it would be interesting to compare self-report and observer ratings in a longitudinal study to see how well they relate to psychological outcome in bullied children. The conceptual difficulties

outlined in this section impact upon all research in the area of bullying and are not exclusive to prevalence estimates. The variety of definitions of bullying applied and the variety of measures used preclude all but a tentative comparison of research findings (Espelage & Swearer, 2003).

Causes of Childhood Bullying

Characteristics of Bullies

Cognitions

Research has shown that there may be differences between the cognitions of bullies and other children. For example, Jessor, van den Bos, Vanderryn, Costa and Turbin (1995) found that bullies have different moral cognitions, in that they think that aggression towards others is acceptable. Other researchers have also found that bullies demonstrate cognitive biases endorsing aggression as a legitimate way to obtain one's goals (Shwartz, Dodge, Coie, Hubbard & Cillessen, 1998; Toblin, Schwartz, Gorman & Abou-ezzeddine, 2005).

Other differences between bullies and other children have been found in social cognitions. For example, Sutton, Smith and Sweetenham (1999) found that bullies have a well-developed social understanding. This was defined as having an accurate understanding of what another person is thinking. However, other researchers reject the implication that bullies are socially skilled or competent. For example, Crick and Dodge (1999) postulate that social competence means achieving one's personal goals whilst also successfully maintaining positive relationships with others which bullies are unable to do. The cognitive biases

endorsing the use of aggression described by Jessor et al. (1995) may explain why, despite having an advanced understanding of the thoughts and feelings of others, bullies engage in antisocial behaviour. This research may also explain why bullies often lack the appropriate emotion to accompany their seemingly good understanding of how others think and feel (Olweus, 1993) and why they are unaffected by the negative effects of their action on others (Perry, Perry & Kennedy, 1992). Worryingly, bullies may even find the emotional distress of other children rewarding (Olweus, 1978).

Another cognitive characteristic of bullies that may be different from other children is self-esteem. The construct, self-esteem, includes evaluative cognitions about oneself. Some research using self-report, self-esteem inventories has indicated that bullies have a very robust self-esteem (e.g. Besag, 1989; Olweus, 1993). In fact, some have found that bullies have an unrealistic and idealised positive view of self (Hughes, Cavell & Grossman, 1997). It is possible that the cognitive biases described above, legitimising the use of aggression on others, protect bullies from having poor self esteem by allowing them to justify their actions to themselves and thus avoiding guilt. However, Andreou (2000) found a different result, that bullies have a low self-esteem. These differences may be due to the different measures of self-esteem used in each study. For example, Andreou used a 25-item self-esteem inventory, whilst Hughes et al. used a pictorial scale of social acceptance and competence. These measures may have emphasised different components of self-esteem. The pictorial scale emphasised peer relationships in their definition

of self-esteem whilst the inventory did not. Furthermore, Andreou's study took place in Greece and Hughes et al.'s study was conducted in America, The extent to which cultural differences influenced the results is unclear.

Another, potentially more interesting, explanation for discrepant findings on the self-esteem of bullies is that Andreou did not distinguish between bullies and those who both bully and are bullied. This group is commonly referred to as bully-victims and studies that have distinguished between these two groups have found that those who are bully-victims suffer from a very low self-esteem, whilst pure bullies (bullies who are not also victims of bullying) do not (Veenstra et al., 2005).

Bully-victims are conceptually similar to other sub-groups studied by different researchers, labeled reactive aggressors (e.g. Arsenio & Lemerise, 2001) and aggressive victims (e.g. Toblin et al., 2005). A reactive aggressor refers to a child who commonly reacts to negative interactions with peers in an aggressive manner. An aggressive victim refers to a child who is bullied and responds to this bullying in an aggressive way. It is not clear to what extent these groups are distinct or whether they have simply been labeled differently by different research groups. However, similar findings have been published on all three groups. For example, both aggressive victims and reactively aggressive children have been found to have social-cognitive biases at the level of attributions. These groups of children attribute hostile intent to their peers and react accordingly, with anger and irritability (Toblin et al., 2005). In contrast, pure

bullies have social cognitive biases as described earlier, endorsing aggression as a legitimate means by which to obtain one's goals.

In summary, research indicates that pure bullies use aggression proactively and instrumentally in accordance with cognitive biases legitimising the use of aggression. In contrast, bully-victims may demonstrate aggression in response to cognitive biases leading to perceived hostility from peers. Not subtyping between these groups may mask important differences between types of bully and lead to misleading results. Furthermore, if pure bullies and bully-victims have different psychological profiles, it is logical to hypothesise that they may require different interventions.

Behaviour

Related to the cognitive styles described above, bullies exhibit particular behavioural patterns, distinct from other children. Studies have shown that bullies have a need to dominate and be powerful amongst their peers (Ivarsson, Broberg, Arvidsson & Gillberg, 2005). Bullies exhibit externalising behaviours, poor behavioural conduct (Tani, Greenman, Schneider & Fregoso, 2003) and can also be hyperactive (Toblin et al., 2005). Olweus (1993) described bullies as impulsive and easily angered, and employing aggression regularly, even with adults. Bullies have also been shown to be less friendly to other children (Tani et al., 2003).

Woods and White (2005) provide a possible explanation for the impulsive and antisocial behaviour of bullies at a biological level. They showed that bullies had the lowest levels of arousal compared with victims and bystanders. Arousal in this study was measured using a self-report scale found to correspond to physiological tests of autonomic arousal. Low arousal was associated with extraversion, sensation-seeking and antisocial behaviour. In order for bullies to obtain a rewarding level of arousal, they may resort to bullying behaviours. In contrast, these authors found that victims of bullying have high arousal compared to other children. High arousal is associated with anxiety and shyness.

Once again, differences have been found in the behaviour of pure bullies and bully-victims. Bully-victims have been found to be more impulsive, hyperactive and angry than pure bullies (Toblin et al., 2005). They have been shown to be more physical in their bullying of other children, whereas pure bullies employ more verbal bullying (Unnever, 2005). Schwartz (2000) found that aggressive victims are more behaviourally dysregulated and are highly disliked by their peers. In the same study, pure bullies were not found to be behaviourally dysregulated.

Emotions and Mental Health

There is evidence that both pure bullies and bully-victims suffer from mental health disturbances. For example, Attention Deficit Hyperactivity Disorder (ADHD) and Oppositional Defiant Disorder are common diagnoses amongst

bullies (Kumpulainen, Rasanen & Puura, 2001; Shwartz, 2000). In the latter study, bullies were the most disturbed group of children, even when compared with victims of bullying. Other research has found that bullies are emotionally dysregulated, unstable (Camodeca & Goossens, 2005; Olweus 1995; Shwartz, 2000; Tani et al., 2003) and anxious (Salmon, James & Smith, 1998).

However, these findings seem at odds with other studies showing that bullies are calm and calculating (Sutton et al., 1999) and show unusually low anxiety (Craig, 1998). Once more, literature on sub groups of bullies may explain this difference. Schwartz (2000) found aggressive victims self-reported depression and anxiety, whilst pure bullies did not report any psychological disturbance. Furthermore, Kumpulainen et al. (2001) found that bully-victims had high levels of psychiatric disturbance. The most common diagnoses for this group were Oppositional/Conduct Disorder, Depression and Attention Deficit Disorder. They seem to be the most "at risk" groups in terms of psychological functioning (Schwartz, 2000). As such, the bully-victim appears to be more likely to exhibit psychological dysfunction than pure bullies and even pure victims.

Summary

According to the literature, bullies may have a psychological profile that is distinct from other children. Studies have shown that bullies may have particular cognitions, such as aggression-permitting beliefs (Jessor et al., 1995). The impact of these cognitive differences on other areas of bullies' psychological functioning such as behaviour and emotion is not yet clear. However, it has

been shown that bullies are more dominating and powerful (Ivarsson et al., 2005). This behaviour is likely to be associated with cognitive biases justifying the use of aggressive behaviour, in order to obtain one's goals. Furthermore, bullies may be more emotionally dysregulated and therefore exhibit aggression more readily than other children (Schwartz, 2000). However, the research on bullies is discrepant and this may relate to a lack of distinction between different types of bullies. Studies that have begun to distinguish between different sub-groups of bullies indicate that broadly studying bullies as one group may not be sensitive enough to pick up on differences within this group. For example, bully-victims have been found to have distinct cognitive biases, attributing hostile intent to peers and behave in a more reactively aggressive and impulsive way.

The nature of the inter-relationships between cognitions, behaviour and affect in bullies has not yet been thoroughly described. One hypothesis, according to a cognitive, behavioural model (Beck, 1976), would be that cognitive biases are causally linked to the onset of bullying behaviour and psychological disturbance. How these cognitive biases develop is unclear, although familial and social influences described later may be vulnerability factors.

Characteristics of Bullied Children

Although bullying is a common phenomenon amongst school-age children, the vast majority of children go through childhood without having been subjected to bullying (Olweus, 1991). Studies focused on individual characteristics of bullied children have tried to explain what causes some children, in particular, to

become victims of bullying. Many studies have shown that children who are bullied consistently endorse certain characteristics, such as particular personality traits, behaviours, cognitions and emotions. Therefore, understanding the psychological profile of bullied children may explain what causes some children to be continually bullied over the course of their childhood.

Personality

Studies have shown that bullied children may display certain personality characteristics. Bullied children commonly score highly on measures of neuroticism and low in extraversion (Slee & Rigby, 1993) and also low on a measure of friendliness (Tani et al., 2003). According to these authors, these findings suggest that certain personality traits may equate to a psychological vulnerability to being a victim of bullying and also to rejection from peers in some children. These authors suggest that high neuroticism may mean that a child reacts to bullying by displaying emotional instability, and that this in turn makes it more likely that bullying will occur in the future, since bullies may find displays of emotion rewarding (Olweus, 1993). Furthermore, low agreeableness may make it more likely that a child will be disliked by their peers and be at risk from victimisation. It is unclear from the correlational design of these studies, however, whether the personality traits measured pre-date the bullying or are a result of it. Although personality traits are traditionally thought of as being stable over time, in the studies mentioned above, self-report questionnaires were used to measure personality. This method may not have reliably distinguished state

dependent responses from personality traits that are stable across time. It is therefore not possible to conclude whether the personality traits measured were present prior to the onset of bullying.

Cognitions

Camodeca and Goossens (2005) found that victims of bullying have a particular style of information processing that is different from other children. They found that victims show a bias of attributing hostile intent to peers. Once again, it is unclear from this research design whether this bias existed a priori or whether it is an outcome of being continually bullied. Interestingly, in one study, bullied children were found to have pro-bullying attitudes (Andreou et al., 2005). This was measured by a pro-bully scale consisting of items such as "Students who bully others just do it for fun" and "Students who are bullied gain in strength". This seems counter-intuitive at first glance. However, it is possible that children who are bullied feel that they somehow deserve to be bullied, or have learnt that bullying is a useful way to manage peer relationships in that they have seen that the bullies often gain from their bullying behaviour.

The research that has been done on the appraisals of bullied children has found that they often have an external locus of control (Hunter et al., 2004). Lazarus and Folkman (1984) suggest a person's ability to cope with situations involves both an appraisal of the seriousness of situation for well-being and also an assessment of one's own ability to change it (control). These perceptions of control are also referred to as self-efficacy beliefs. Andreou et al. (2005) found

that low self-efficacy for assertion and intervention in bullying scenarios was associated with higher scores on a scale of victimisation. A bullied child's lack of belief in their ability to cope with being bullied and to stand up for themselves is attractive for a bully who knows they will not be challenged (Olweus, 1978). However, although this study discusses causal relationships, it was only able to demonstrate a cross-sectional association between low self-efficacy and being bullied.

Behaviour

Some research has suggested that children who are bullied are different from other children in their social behaviour. This may be linked to the finding that victims tend to be rejected by their peers (Perry et al., 1988), and both peers and teachers view victims as less skilled at interacting with others (Olweus, 1993). Having a friend or friends is thought to be one of the most important protective factors against being bullied (Hodges, Malone & Perry, 1997) and so the absence of friendships may be an important catalyst to becoming a bullied child.

In addition, research shows that bullied children tend to be submissive and withdrawn (Olweus, 1978). Crucially, withdrawn and submissive behaviour in victims of bullying is one of the only factors in the research so far, shown to predate the onset of bullying and therefore may be positively causally related to it. Schwartz, Dodge and Coie (1993) showed that submissive behaviour during early encounters with unfamiliar peers, can help to predict who will emerge as

victims later on. Similarly Boivin, Hymel and Bukowski (1995) found that withdrawn behaviour predicts victimisation in their study.

Kochenderfer and Ladd's (1996) research may explain the process by which these behaviours influence the onset of bullying. They found that although children are indiscriminately targeted by bullies at first, it is children's reactions to being victimised that then lead them into a long-term pattern of being bullied. Much research has shown that bullied children tend to react passively to their bullies. For example, Sharp (1995) found that passive strategies, such as ignoring, are most common amongst victims, followed by assertive and then aggressive strategies. This is likely to be related to the characteristics described earlier such as a low self-efficacy and an external locus of control as well as low self-esteem. Some victims however, have been shown to react in an angry and aggressive way to being bullied and these may be a sub-group of children described earlier as aggressive victims (Toblin et al. 2005). Camodeca and Goossens (2005) found that cognitions may moderate victims' reactions to their peers. For example, children making hostile attributions about peers, lead to angry behaviour. It is possible that the aggression-permitting beliefs found in some victims may prevent them from retaliating or asserting themselves against the bully, although this hypothesis has not been tested.

Camodeca and Goossens (2005) looked at children's opinions of the most effective strategies to cope with bullying. They found that the strategy most favoured by all children, when taking the perspective of the victim, was

assertiveness, for example asking the bully why they are doing what they are doing or asking them to stop. The assertive strategy was favoured above either the angry retaliation (often displayed by aggressive victims) or passivity, defined as doing nothing (often displayed by pure-victims). Andreou et al. (2005) support these findings as they show that high self-efficacy for assertion and intervention in bullying scenarios is associated with lower scores on victimisation. Assertion is distinguished in this study from aggressive or angry retaliation. Whilst assertion was found to be the most effective coping strategy in this study, victims who reacted to bullying with retaliation were at the most risk of being bullied again. This may be because bullies find it rewarding to provoke a victim (Schwartz et al., 1998).

Emotions and Mental Health

Some studies have shown that emotional regulation in children has an influence on whether bullying continues over time. For example Cicchetti, Ackerman and Izard (1995) postulated that victims may lack skills in emotional regulation. This means that these children are less able to cope with bullying incidents than other children and cannot lessen the stress of the associated negative emotions. This may then result in an overt display of emotion in front of the bullying. For example, Olweus (1994) showed that victims tend to be prone to crying, lacking in humour and anxious and that these emotional displays reward the bully, and ensure the continuation of bullying incidents.

Many studies have consistently shown that being bullied is correlated with poor mental health in childhood. For example, victims of bullying score high on measures of depression, such as the Short Depression Inventory for Children (Hawker & Boulton, 2000; Kaltiala-Heino, Rimpela, Rantanen & Rimpela, 2000; Roland, 2002; Van der Wal, de Wit & Hirasing, 2003), suicidality using simple self-report items such as "Lately I have been thinking: I am going to kill myself" (Ivarsson et al., 2005; Prewitt, 1988; Van der Wal et al., 2003). Being bullied has also been associated with anxiety (Hawker & Boulton, 2000; Kaltiala-Heino et al., 2000; Kumpulainen et al., 2001; Salmon et al., 1998; Woods & White, 2005;), low self esteem (Andreou, 2000; Hawker & Boulton, 2000) and loneliness (Hawker & Boulton, 2000). Victimisation has also been related to externalizing problems, for example, aggression, attentional problems and delinquency (Hanish & Guerra, 2002).

There is some evidence to suggest that these mental health difficulties are present prior to victimisation and may therefore be causally related to the onset of bullying. Fekkes, Pijpers, Fredicks, Vogels and Verloove-Vanhorick (2006) found that children who were depressed and anxious or reported poor appetite at the beginning of year were at higher risk of being bullied by the end. They also, however, found the reverse temporal order, that children who were bullied at the beginning of the school year were more likely to have developed these psychological difficulties by the end of the school year. Others have found though, that whilst victimisation is predictive of emotional problems such as anxiety and depression, emotional problems are not predictive of bullying (Bond,

Carlin, Thomas, Rubin & Patton, 2001). The differences in results may be related to the different definitions of bullying used. Whereas Fekkes et al. (2006) defined victims using a strict criteria of being bullied "a few times a month or more often", Bond et al., (2001) defined victims as any child who answered "yes" to being teased, physically threatened or excluded, with no specification as to the frequency of these events. This difference in criterion for inclusion as a victim means that it is difficult to compare the two results. Bond et al.'s definition included all children experiencing negative interactions with peers and arguably this is not sensitive to the repetitive and ongoing nature of bullying.

Physical Characteristics

There is some evidence that besides the internal characteristics of bullied children, certain aspects of appearance can make certain children more at risk from being bullied. Research with paediatric populations has shown that children with visual differences report a higher frequency of bullying. For example Sandberg and Michael (1998) found 59% children with short stature were bullied. Neumark-Sztainer, Falkner and Story (2002) found overweight children experience more bullying than children who were not overweight. Broder, Smith and Strauss (2001) found children with craniofacial anomalies were teased more often than other children. However, Olweus (1993) found no correlation between appearance deviation from the norm and being bullied. He postulated that a bully may pick on external deviations for use in verbal bullying, but that this should not be mistaken as the reason that the bully targeted the victim in the first place. Furthermore, Olweus argued that when adults are trying to discern why

someone is being bullied, appearance is the first thing they notice and they subsequently attribute the bullying to appearance. There may, however, be a difference between the severity of the visual differences in certain paediatric populations studied above, and the more common variations in appearance Olweus discussed, explaining this discrepancy.

Summary

There is some consistency in the literature regarding the characteristics of bullied children. Studies have shown that bullied children tend to be high on neuroticism and low on agreeableness. These traits may manifest themselves in socially incompetent behaviour, such that bullied children often lack friends. A lack of friends may then be an important risk factor for being targeted by bullies. They may also reward the bully with displays of emotion. Furthermore, some bullied children have been found to have particular cognitive styles, such as a tendency to attribute hostile intent to peers, making it more likely they attribute benign actions as victimisation. They may also have an external locus of control meaning that they do not feel they can assert themselves against the bully, which results in future bullying incidents. Finally, bullied children have poor mental health, and studies have shown this is both present prior to the onset of bullying and can be a result of it. Although these studies imply causal pathways and lead to hypotheses about why certain children are bullied, few studies have formally tested these hypotheses with longitudinal designs.

The Process of being Bullied

The studies described so far go some way to explaining why some children are bullied and some are not. However, few studies have made an attempt to draw findings together from across studies, into a framework or model for understanding the process of bullying. Models not only draw on previous research but also provide testable hypotheses for future research to test. One such study has attempted to identify which factors mediate and moderate between being bullied and the consequences such as emotional distress, described in the introduction. Dill, Vernberg, Fonagy, Twemlow and Gamm (2004) recognised the need to examine the directionality of associations as well as the mediators involved in childhood bullying. In their model, they predict that shyness and withdrawal at Time One would predict negative affect at Time Two (a year later). This relationship was crucially predicted to be mediated by peer rejection and victimisation as well as a cognitive mechanism. This cognitive mechanism was thought to be an attitude towards aggression such as "I must have done something wrong to be bullied". The results of their study supported this model, and also showed that bullying was a vicious cycle such that being bullied makes it more likely that a child will become more withdrawn and shy, making it in turn more likely that they will be picked on again by bullies.

This study shows that understanding the process of being bullied could provide invaluable insights and ideas for intervention. These authors, for example, recommended that interventions should be designed specifically for shy and withdrawn children, since they showed this to be a vulnerability factor for being

bullied. They also suggested taking a firm stance in schools that aggression is unacceptable, as this may prevent children from developing attributional styles that aggression against them is permissible and deserved. Another study has also shown that internal processes mediate between being victimised and developing internalising difficulties. Graham and Juvonen (1998) found that self-blaming attributions mediated the relationship between victimisation and internalising difficulties. Those bullied children who attributed the reason for their victimisation to something internal to themselves, such as a personal characteristic, developed internalising difficulties.

Summary

Few studies have drawn findings together to postulate a holistic model of bullying. Dill et al., (2001) have attempted to describe the process of being bullied. They found that shyness predicted negative affect a year later and that this relationship was mediated by bullying. This study shows that the relationships between variables involved in bullying may be complex rather than simple. Despite this, many cross-sectional studies have only measured simple associations between variables that lack the power and sensitivity to capture the more complicated picture that is emerging. To move forward from identification of factors involved in bullying, to understanding the causes of bullying, further analysis of the process of being bullied is necessary, using longitudinal studies that can show the causal order of events involved in bullying.

Social Factors

Social factors may provide the context in which to understand the development of the cognitive, behavioural and affective differences in bullies and victims. The most influential environment in terms of bullying is the school environment since this is where the majority of bullying occurs (Olweus, 1993). The important role the school environment plays is reflected by the fact that school bullying is now specifically legislated against in the UK. All schools must have an anti-bullying policy by law and take any incidence of bullying seriously. Smith and Brain (2000) state that bullying is ubiquitous amongst children and that any school can anticipate bullying within it. One hypothesis for this is that the need to establish power relationships and differentiate oneself from others in an evaluative way is inherent to humans (Smith & Brain, 2000).

Despite the seeming inevitability of bullying in schools, there is evidence that school interventions have a large impact on the prevalence of bullying incidents amongst children. For example, Olweus (1993) found that schools in Norway that implemented a firm approach to bullying reduced bullying incidents by up to 50%. Although replications of this intervention in the UK have not had the same success, bullying has still decreased significantly in participating schools (Smith & Sharp, 1994). The same research indicates that bullying can be significantly reduced by changing school policy toward it. For example, constant supervision at break times can reduce the frequency of bullying incidents, as this is where the majority of bullying incidents occur (Olweus, 1991). Explicit class rules against bullying upheld by regular class meetings, as well as talks with the

bullies, victims, and their parents, are also beneficial. Another approach schools take is to foster positive relationships between peers early on rather than focus on coping with bullying once it has occurred. Research has shown that bullying is more likely to occur with children who are friendless (Olweus, 1993). Instilling school values of equality and prosocial behaviour early on may help to prevent the onset of bullying by ensuring all children feel some positive connection with their peers (Andreou, Vlachou & Didaskalou, 2005).

The approach of the school is partly determined by the attitude of the individuals who work at the school. Although there is a widening consciousness in society about the negative impact of bullying on children, there is still a minority of people who view bullying as character forming and a rite of passage into adult life (Smith & Brain, 2000). Worryingly, research suggests that some teachers share this attitude and regularly turn a blind eye to bullying amongst their pupils (Farrugia, 1996). Consequently, many children believe that telling a teacher about bullying will have no effect or indeed a negative one (Hunter, Boyle & Warden, 2004). Rigby and Slee (1999) found that 80% of bullying incidents are not reported by children to a member of staff.

Other situational factors have been associated with being a bullied child. For example, a low socio-economic status (SES) has been associated with higher rates of bullying (Wolke, Woods, Stanford & Shulz, 2001). Research has not yet indicated why this is the case although it is likely that there are numerous factors associated with low SES, which may mediate between this variable and bullying

such as parental characteristics. Baldry and Farrington (1998) found that having authoritarian and over-supportive parents predicted being bullied. These authors postulated that authoritarian parents may contribute to a bullied child's lack of confidence, by not giving them the autonomy to make decisions. Furthermore, an aggressive parenting style may contribute to aggression-permitting beliefs that have also been associated with both bullies and victims (Camodeca & Goossens, 2005). In a victim, such beliefs may mean that they perceive the aggression against them is justified and legitimate, meaning that they are less likely to stand up for themselves or seek help. Interestingly, authoritarian parents were found to be predictive of becoming a bully as well, in the same study. This may be explicable in terms of a child's social learning (Olweus, 1978). Further evidence supporting the important role parents play in bullying, is that bullying can be intergenerational. Farrington (1993) found that males who bullied at 14 years old, as adults, had offspring who were also bullies.

Some situational factors commonly thought to contribute to bullying, however, have not been shown to be related to bullying. For example, it is often assumed that city schools are more prone to frequent bullying incidents than are rural schools. Research has shown that bullying is just as likely to occur in rural schools as urban schools (Olweus, 1993). Also, it is often assumed that large class sizes are associated with more bullying. However, this has not been shown to be the case (Ahmad & Smith, 1990; Olweus, 1993). Ethnicity is not related to bullying according to a large-scale study in Sheffield (Ahmad & Smith, 1990). Individual differences between schools, related to staff attitudes to

bullying and interventions in place, rather than demographics of the school, seem to determine which schools have the highest prevalence of bullying (Olweus, 1993).

Summary

Social factors are linked to childhood bullying. In particular, the school environment has an impact on the prevalence of bullying and schools taking an active approach against bullying can reduce its occurrence by 50% (Olweus, 1993). Explicit strategies to deal with bullying as well as approaches fostering positive relationships between children have been found to be effective (Andreou et al., 2005). Other situational variables include socio-economic status and parenting style (Wolke et al., 2001). Some environmental factors have not been found to be related to bullying, such as whether a child's school is in an urban or rural area and the size of a child's class (Olweus, 1993).

The variables that moderate and mediate between these broad social factors and bullying in individual children have not yet been well described. This is despite the evidence outlined above, that bullying is associated with differences in personal characteristics in children. The influence of family and school factors at a cognitive and behavioural level for both bullies and bullied children may help to explain how these characteristics develop in some children. For example, in school's actively intervening in bullying, one possibility is that at school children learn to be less tolerant of aggression amongst peers and more assertive when it occurs to themselves or others. This may occur through a process of social

learning and modeling by staff. Another plausible hypothesis is that in such a school, bullies may learn that they cannot bully others without being punished. A third hypothesis is that school interventions may encourage positive relations between peers, so that fewer children develop into bullies in the first instance. Studies that break down the components of successful school interventions would be useful, to show what exactly drives a positive change.

Conclusions

This paper has reviewed what is currently known about the causes of childhood bullying. Differences in certain personal characteristics of children have been implicated in the development of children into both bullies and victims of bullying. These differences can be organised into cognitive, behavioural and affective domains.

In summary, bullies have been shown to have cognitive biases legitimising the use of aggression in order to obtain their goals. They exhibit dominant and aggressive behaviour towards peers. Bullies also have increased levels of psychopathology. Studies that have separated out bully-victims, referring to children who are both bullies and victims of bullying, have shown that this may be a distinct sub-group of bullies with a unique psychological profile. Bully-victims have different cognitive biases, attributing hostile intent to peers and behaving in an impulsive and aggressive way. They have the highest levels of psychopathology, compared to pure victims or pure bullies.

Victims also have different cognitions, such as an external locus of control and low self-esteem such that they may believe they are to blame for the bullying and that they are unable to change it. They tend to behave in a withdrawn and submissive manner and often react to bullies with overt emotional displays, which maintain bullying incidents. Victims tend to lack friends, an important protective factor against being bullied. Victims also have emotional difficulties such as depression and anxiety and some studies have shown that this is both a consequence of being bullied and present before its onset.

These personal characteristics are likely to be influenced by broader social variables that are now known to be associated with bullying. The school environment is a crucial aspect of bullying. Schools with an active intervention scheme can reduce the prevalence of bullying by up to 50%. Family factors are also important, such as socio-economic circumstance and parenting style. Authoritarian parents have been associated with both bullies and victims. The fact that bullying has been shown to be inter-generational points towards the importance of the family culture in the development of bullying amongst children.

A few studies have begun to look at the interrelations between this large collection of personal and social variables known to be involved in bullying. For example, one study showed that emotional distress caused by bullying was mediated by self-blaming cognitions. Another study showed that shyness led to negative affect, was mediated by being bullied. These studies point towards

complex relationships between variables rather than the simple associations that have been explored so far.

Research in this area is confounded by methodological and conceptual issues that have yet to be resolved. Different definitions of bullying are still being used, preventing any useful interpretation of findings across studies. Until one definition is consistently used across studies, the comparison and integration of research findings will remain difficult (Espelage & Swearer, 2003). Furthermore, the extent to which bullying can be measured objectively by observers such as peers or adults, or should be self-reported, is unclear.

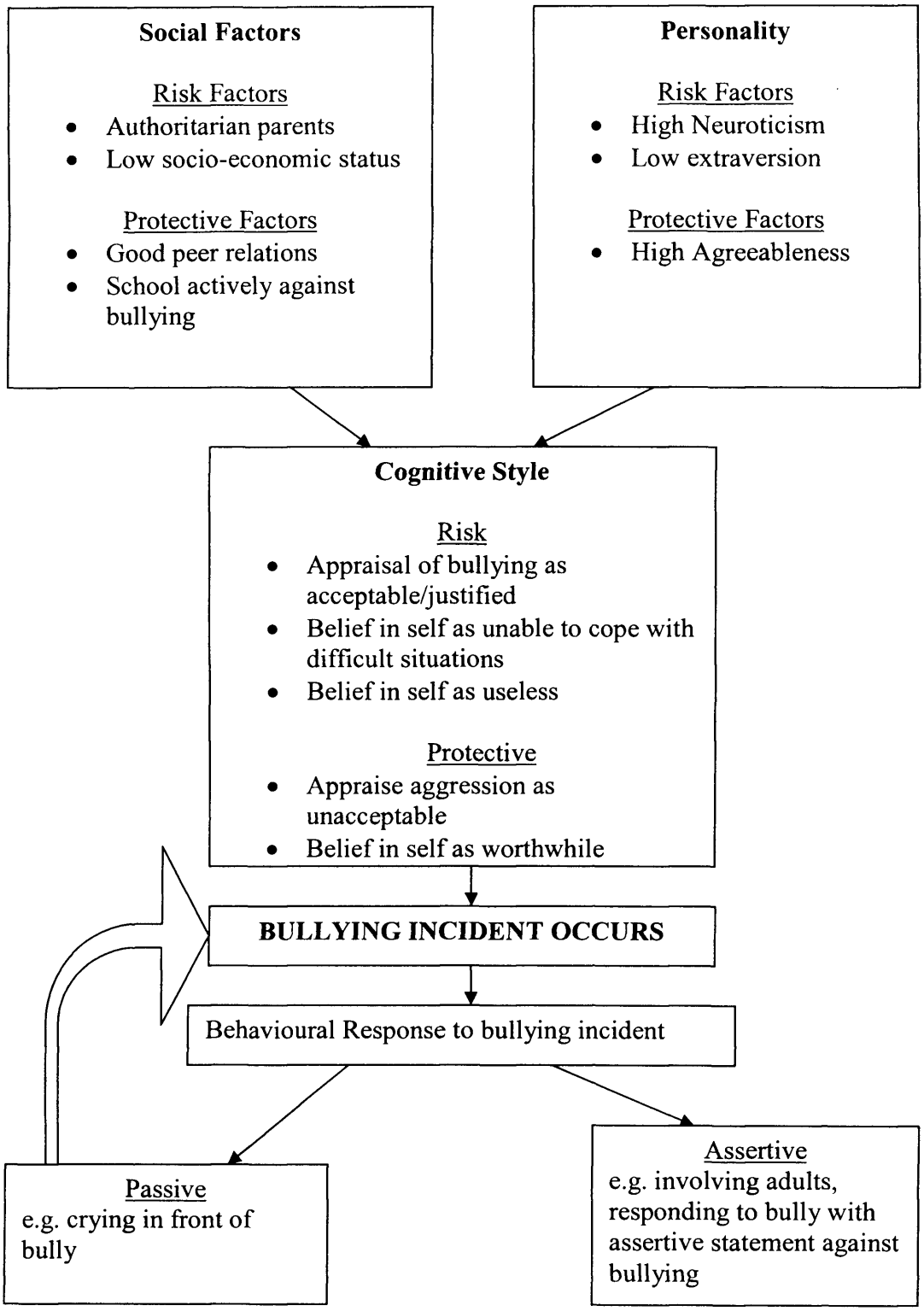
Future Directions for Research

The literature indicates that there are many different levels of influence operating simultaneously, from anthropological theories about human interaction, to broad societal trends, environmental factors and inter- and intra-personal processes. More longitudinal studies would help to clarify the temporal chain of events that lead to bullying and the inter-relations between these different levels of influence. Experimental designs can best demonstrate the casual pathways involved in bullying. However, such designs are not possible in this area of research since it would be unethical to manipulate the occurrence of bullying incidents. Therefore, testing models is restricted to quasi-experimental and longitudinal designs.

A tentative vulnerability model of bullying is offered now as the result of this review of the literature (and is demonstrated diagrammatically in Figure 1, below). Social factors such as an authoritarian parenting style and low socio-economic status may best be thought of as risk factors for becoming a bully or victim. Protective factors may be other social factors such as good peer relationships and a school that takes an active stance against bullying. Furthermore, children may be protected from developing into both bullies and victims, by certain personality characteristics, such as low neuroticism and high agreeableness.

Together these factors may make it more or less probable that children will develop certain cognitive styles, which as described above may be associated with becoming either a bully or a victim. Bullying incidents may then be interpreted differently by children according to these cognitive styles. Some children for example, may think that bullying is unacceptable and believe that they can cope, maintaining a robust self-esteem. Others may interpret a bullying incident as confirmation of their worthlessness and inability to control events. Different behavioural reactions may be the consequence of these different interpretations of a bullying incident. For example crying may result from thoughts of worthlessness and self-blame, which may then maintain the bullying incidents because it rewards the bully. Those children who think they can cope and have anti-bullying attitudes, may instead successfully assert themselves against the bully ensuring the quick cessation of bullying. This model describes many causal relationships that have not yet been tested. Testing such models

Figure 1: A diagram of a proposed model of vulnerability to being bullied



would help to develop the next level of understanding of bullying, bridging between the simple associations that have already been identified to understanding more complex relationships between variables.

Summary

Future research into childhood bullying needs to be less exploratory. Instead specific hypothesis testing of tightly defined conceptual models is now needed. Arguably, enough is now known about the phenomenon to postulate sensible models of the causal pathways involved in childhood bullying. These can be tested using longitudinal and quasi-experimental designs.

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Part Two: Empirical Paper

Developing a Questionnaire to Examine the Psychological Constructs Associated with being a Bullied Child.

Abstract

There is a growing awareness of the pervasive and detrimental effects of childhood bullying. Despite this, few studies have identified the psychological constructs associated with being a bullied child. A questionnaire was constructed to aid the psychological assessment of bullied children. The present study aimed to develop this new measure by exploring the internal structure of the questionnaire as well as performing preliminary tests of validation. Firstly, four focus groups with school-aged children were conducted as a measure of face validity and revisions to the questionnaire were made accordingly. Secondly, the revised questionnaire was completed by 477 children. A principal components analysis performed on the questionnaire yielded a meaningful five factor solution. The five factors were labeled; Negative Affect, Low Self Worth, Positive Coping, Appearance and Social Isolation. The factor structure was then used to apply tests of validity. The questionnaire demonstrated convergent validity when it was compared to a standardised measure of psychological functioning in children. Furthermore, preliminary tests of construct validity showed that the questionnaire was successfully able to discriminate between bullied and non-bullied children. This study justifies the use of a new questionnaire to assess the psychological correlates of being bullied. The clinical implications of the findings are discussed.

Introduction

There is mounting evidence that bullying is both highly prevalent and damaging amongst school-aged children. In England, a large-scale study estimated that 27% of children were victims of bullying (Whitney & Smith, 1993). Olweus (1991) surveyed 150,000 school children in Norway finding that 15% of children were involved in bullying incidents. Of these, 9% were victims of bullying, 7% were bullies and 1% was both bullies and victims of bullying. Despite differences in exact prevalence estimates, studies concur that bullying occurs in a significant minority of children. Furthermore, there are consistent findings that childhood bullying has enduring detrimental effects throughout childhood and adult life. Retrospective studies have shown that adult mental health can be compromised by childhood bullying and is associated with depression, anxiety, agoraphobia, social phobia, poor attachment and low self-esteem (e.g. Gladstone, Parker & Mahli, 2006; Ledley et al., 2006; McCabe, Antony & Summerfeldt, 2003). Longitudinal studies go further to show that childhood bullying predicts depression, anxiety, loneliness and low self esteem in adult life (Hanish & Guerra, 2002; Olweus, 1992).

Within this context of growing awareness of the serious nature of bullying, research interest has now turned to the characteristics that distinguish bullied children from their non-bullied peers. Research that has studied the personal characteristics of bullied children has shown consistent differences between bullied and non-bullied children. Children who are bullied consistently exhibit certain personality traits, behaviours, cognitions and emotions. For example,

bullied children tend to score highly on measures of neuroticism and low on agreeableness (Slee & Rigby, 1993; Tani, Greenman, Schneider & Fregoso, 2003). Perhaps as a consequence of these traits, bullied children tend to be less socially competent than their peers and both peers and teachers view victims as less skilled at interacting with others (Olweus, 1993). Also, bullied children tend to be submissive and withdrawn (Olweus, 1978). Furthermore, bullied children often lack friends and become easy targets for their bullying peers (Olweus, 1993). Bullying can be subsequently maintained because bullied children often reward the bully with overt displays of emotion due to poor emotional regulation (Cicchetti, Ackerman & Izard, 1995).

Perhaps underlying or related to these behavioural and emotional differences, bullied children have been found to have particular cognitive styles, such as a tendency to attribute hostile intent to peers, making it more likely they feel bullied and respond as such (Camodeca & Goossens, 2005). They also have a perception of control as external to themselves meaning that they do not think they can assert themselves successfully against the bully (Hunter, Boyle & Warden, 2004). A bullied child's lack of belief in their ability to cope with being bullied and to stand up for themselves is attractive for a bully who knows they will not be challenged (Olweus, 1978). Furthermore, bullied children often endorse self-blaming attributions and feel the bullying is deserved.

However, research has shown that not all victims may share the personal characteristics outlined above. Recent research has identified a subgroup of

victims, referred to as bully-victims, who are both victims of bullying and also bullies. Studies have shown that this group of victims may have a psychological profile that is distinct from that of other victims of bullying. For example, bully-victims have been found to be more impulsive, hyperactive and angry (Toblin et al., 2005). Schwartz (2000) found that bully-victims were more behaviourally dysregulated and were most disliked by their peers. Furthermore, Kumpulainen et al (2001) found that bully-victims had high levels of psychiatric disturbance and seemed to be the most "at risk" groups in terms of psychological functioning (Schwartz, 2000).

Another sub-group of victims that have been separately studied are children with ill-health. Evidence suggests that the prevalence of bullying amongst paediatric populations is higher (e.g. Broder, Smith & Strauss, 2001). This has been found to be particularly so for children with unusual or altered appearance as a consequence of their medical condition. For example, children with craniofacial abnormalities are more likely to be bullied (Broder et al., 2001). Little research to date has explored whether bullying for this population is qualitatively different, and also whether these children have a profile that is distinct from other bullied children.

The potential importance of individual differences amongst bullied children is beginning to emerge. For example, evidence suggests that bullying-related distress is mediated by cognitive appraisals of bullying incidents and is not an inevitable consequence of being bullied (e.g. Graham & Juvonen, 1998). These

authors showed that children who blamed themselves for being bullied became distressed, whilst those bullied children who did not blame themselves were less distressed by being bullied. Another study indicates that some children, who meet the objective criteria for being bullied, do not interpret their experiences as being bullied (Theriot, Dulmus, Sowers & Johnson, 2005). It is unclear from this study what the consequences of this difference in appraisal of bullying incidents are. However, it seems likely that this group may be less distressed by their experiences than children who think of themselves as being bullied.

These studies indicated that it may not be the bullying incidents themselves, but the interpretation of these experiences by individual children, that causes bullying-related distress. This points towards the importance of incorporating intra-personal variables and subjective experiences in trying to understand what causes, maintains and determines the consequences of childhood bullying. Furthermore, it is unclear at present how the various personal characteristics of bullied children inter-relate, as studies of simple associations rather than complex relationships have dominated the literature to date. Studies that look at inter-relations between these personal characteristics will allow further insight into the nature of bullying.

Established models of psychological functioning may provide a useful framework through which to draw together these seemingly disparate research findings about the characteristics of bullied children and what predictions they make about emotional and behavioural dysfunction. For example, cognitive

behavioural therapy (CBT) suggests that distress is maintained by interactions between thoughts, feelings and behaviours. In this study, a new questionnaire measure was developed to assess the personal characteristics of bullied children in a more systematic way, using a broadly CBT framework. A CBT model was used loosely in the sense that items from the new questionnaire were divided into sections on thoughts, feelings and behaviours. This provided a useful way of organising items and was also to reflect the current trend to use a CBT approach to therapy in the National Health Service, thereby increasing the utility of the questionnaire as an assessment tool for people working within this model.

Aims

The overall aim of the study was to develop a new questionnaire for assessing bullied children and begin to validate it as a tool for professionals working with children. In order to do this, the present study explores the internal structure of the questionnaire using factor analytic techniques. Tests of validity are applied to the questionnaires including a measure of the convergent validity of the questionnaire through comparison with a well-developed, standardised measure of related constructs. Also, the study tests for differences between bullied and non-bullied children on the questionnaire, as a measure of construct validity.

A secondary aim of the study was to compare an ill group of children with a healthy group of children. Inclusion of this extra dimension to the study was both pragmatic as well as evidence-based. The questionnaire was developed in a

paediatric setting and there were interesting questions that the study allowed exploration of such as whether bullied children from within a hospital sample, differed in their psychological profile to other bullied children. As outlined above, evidence suggests that there is a higher prevalence of bullying amongst the paediatric population, and the clinical experience of professionals working in the paediatric setting where the questionnaire was developed was convergent with this. It is unclear whether these children differ in their psychological profile and this study will help to explore this question further.

Hypotheses

1. The new questionnaire for bullied children (being developed and validated in this study as described above in Aims) will be significantly correlated with the Beck Youth Inventories – Second Edition (BYI-II) on scales measuring self-concept, depression and anxiety.
2. There will be a significant difference between the responses of bullied and non-bullied children on the new questionnaire for bullied children and the BYI-II, such that bullied children will score higher on scales of negative affect and lower on scales of self-concept.
3. There will be a significant difference between the responses of children with ill-health and healthy children on the new questionnaire for bullied children and the BYI-II, such that ill children will score higher than healthy children in scales of negative affect and lower in scales of self-concept.

Methods

Ethics

Full ethical approval was obtained for this study (see appendices for documentation). An application was made through Central Office of Research Ethics Committees (COREC) and the application was reviewed by a central London hospital ethics committee. The researcher attended the meeting to discuss the application and following minor changes, ethical approval was obtained.

Design

The study primarily aimed to enable further development of the new questionnaire for bullied children through explorative analysis of its internal structure using principal components analysis. In addition, however, the study had two independent variables, allowing specific hypothesis testing to further validate the new questionnaire. These variables were Bullied Status and Health Status and each had two levels. The variable Bullied Status was divided into bullied and non-bullied children. Being bullied was defined using a widely accepted definition from Olweus (1978) who described being bullied as:

- Negative actions on the part of one or more other people
- A power imbalance between the perpetrator and victim
- The bullying incidents occur at a frequency of two or three times a month or more often.

This variable allowed the researcher to test whether the new questionnaire was able to distinguish bullied from non-bullied children on the basis of its items alone, thus demonstrating construct validity. The other independent variable, Health, divided into a hospital and school setting. As explained in the aims, inclusion of this variable allowed an extra dimension to the study, comparing ill children to healthy children on the psychological constructs accessed by the measures used. This study was necessarily a quasi-experimental design, since it was not practically or ethically possible to randomly assign children to a bullied or non-bullied condition, or a hospital or school setting.

Participants

In total 477 participants were recruited in this study. 219 (46%) of these were male and 255 (54%) were female (three did not complete the gender identification item of the questionnaire). Participants were included in the study if they were between 8-14 years. This age range covers the years when childhood bullying is most prevalent. The age of children participating in the study were as follows: 12% aged 8; 17% aged 9; 19% aged 10; 16% aged 11; 22% aged 12; 10% aged 13; 4% aged 14. Potential participants were excluded if they were not fluent in English language, as the study required a basic reading and comprehension ability in order to complete the measures described below and included in the appendices.

School Participants

Of the total 477 participants, 401 were recruited from the school setting. A primary and secondary school were involved in the study and agreed to provide participants for this setting. The schools were both secular, community schools of mixed gender and were both set in demographically diverse areas. The primary school was south of London and had 378 pupils. It served a mixed catchment area of private housing and local authority homes. Nonetheless, the number of children entitled to free school meals was below the national average. Ethnicity is of limited diversity and most pupils were of white British origin. 21 pupils were on the register of special educational needs and the number of pupils with a statement of special educational needs was at the national average. The secondary school was in a northern borough of Greater London and had 1224 pupils. This school served a mixed area in terms of both socio-economic status and ethnicity. The number of pupils receiving free school meals was above the national average as was the number of children with learning disabilities. Almost half the students were from a minority ethnic heritage. Attainment was slightly below the national average upon entry into the school. Both schools already took an active stance against bullying but recognised that it still occurred and were therefore keen to participate in new research on the topic.

Hospital Participants

The hospital was a central London children's hospital. Five paediatric specialties were involved in recruitment of participants: Ear, Nose and Throat; Dermatology;

Cranio-Facial; Orthopaedics; Cleft Lip and Palate Services. These specialties included a broad range of physical conditions, many associated with altered and unusual appearance. Because the hospital accepted patients from across the UK, the demographics of the patients are varied in terms of culture, race, ethnicity and socio-economic status.

A power calculation performed prior to data collection indicated that in order to obtain 80% power for a medium effect size, using an alpha level of 0.05, a sample of 35 was required for every level of each factor entered into the analysis, equaling a total of 140. The final sample size of 477 broke down into 401 (school), 76 (hospital). 87 of the total 477 participants met the criteria for being bullied and 390 were not bullied. This sample therefore fulfilled the requirements of the power calculation. Previous studies could not be used to perform a more accurate power calculation since to the author's knowledge no similar measure was available with which to compare the new measure being developed in this study.

Procedure

Focus Groups

Prior to data collection, the questionnaire was considered in four separate focus groups with bullied children between 8 – 14 years old. The focus groups were divided by age and setting as follows; 8 – 11 years old in a primary school, 12 – 14 years old in a secondary school, 8 – 11 years old in a hospital setting, 12 – 14 years old in a hospital setting. The size of these focus groups was 6, 3, 12

and 10 respectively. The settings were the same as used for data collection described above under "Participants". In the hospital, children were put forward for the group if bullying had been identified as a problem during a hospital visit in one of the five specialties involved in the study. In the schools, teaching staff identified bullied children using registers of bullying incidents. Parents and children were contacted and information sheets were sent two weeks prior to the group and parental and child consent was obtained on the day of the group (see appendices for example documents). The purpose of the focus groups was to determine the face validity of the new bullying questionnaire and the extent to which the thoughts, feelings and behaviours described in the questionnaire captured a bullied child's experiences.

The focus groups took the form of semi-structured interviews, with specific prompts given by the group facilitators. There were two facilitators for every group. The groups lasted between one-hour to one and a half hours. Firstly, a warm-up task was completed to relax the children. Next, the purpose of the group was explained and ground rules about the importance of multi-perspectives and confidentiality were given. After this, a brainstorming session was initiated about what bullying was and what came to mind when one thinks of being bullied. Next, the questionnaire was distributed to each member of the group and the children were given 5-10 minutes to read through, fill in or mark as they wished. After this, feedback on the questionnaire was encouraged. Specific prompts were given moving from the more general "are there any thoughts or ideas you have about the questionnaire" to the more specific, such

as "are there any particular questions that are hard to read or understand?". The groups were concluded with a debrief and wind-down task. The protocol for the focus groups is included in the appendices.

The groups were audio recorded and a thematic analysis was completed for each one. The questionnaire was revised accordingly when there was consensus of opinion about particular items, the layout of the items and ideas that had not been represented in the questionnaire. In general, the feedback was very positive on the measure.

A consultation with a group of six Child Clinical Psychologists from within the hospital setting followed. The psychologists all had experience in working therapeutically with bullied children. Each psychologist received a copy of the questionnaire two weeks prior to the consultation. Further suggestions about the questionnaire were made and the questionnaire was revised accordingly.

Questionnaire Testing

The revised questionnaire was distributed to children within the same hospital and school settings. The Beck Youth Inventories – Second edition (BYI-II) (Beck, Beck, Jolly & Steer, 2005) was given alongside the new questionnaire for comparison. In the school setting, consent was obtained by class teachers and information sheets were also provided for both parents and children. The questionnaires were completed in silence during form-time in both schools. The questionnaires were distributed in the hospital setting to children attending

outpatient clinics in the specialties described earlier. All potential participants were sent an invitation to participate, as well as parent and children information sheet, two weeks prior to their outpatient appointments. Consent was obtained in the waiting room of the clinic and if obtained, participants completed the measures in the waiting room or in a private area, as preferred.

Measures

Bullying Questionnaire

The participants completed the bullying questionnaire undergoing development and preliminary validation in this study. The questionnaire grew out of an initial brainstorm by Child Clinical Psychologists, who identified possible items based on extensive clinical experience of working with bullied children, as well as a review of the bullying literature. A manual on the development of health measurement scales was used to guide the construction of the questionnaire (Streiner & Norman, 2003). Once an initial questionnaire was formed, it was piloted on two children, who found they could fill in the questionnaire independently and that it related closely to their own experiences of being bullied.

The questionnaire contained three broad categories of items; thoughts, feelings and behaviours. The items were thought to be related to bullying according to research, the clinical judgement of child psychologists and bullied children themselves (involved in the focus groups). However, most of the items were not exclusive to the experience of bullied children alone. Therefore, in order to

ascertain if the pattern of responses differed between bullied and non-bullied children, there were 42 items to be completed by bullied children (Section A) and 53 items to be completed by all children regardless of bullied status that made no specific reference to bullying but were thought to be associated with being bullied (Section B). This crucially tested whether the questionnaire distinguished between bullied children and non-bullied children on the basis of its items alone, measuring construct validity. Responses to most items required checking one box from a selection of three responses (yes, no and sometimes) relating to the extent to which a child agreed with each item. The questionnaire is included in the appendices.

Beck Youth Inventories – Second edition (BYI-II)

The BYI-II consists of five self-report scales that can be used separately or together to assess a child's experience of depression, anxiety, anger, disruptive behaviour and self-concept. They are for 7 – 18 year olds. Each scale consists of 20 items including thoughts, feelings and behaviours and requires a response using a 4 point scale of varying frequencies. Children respond by choosing the frequency that best describes how often (if at all) they experience each statement to be true of them, ranging from 0 (never) to 3 (always). Higher scores on the self concept inventory represents more positive self concept. Higher scores on the remaining four inventories, represents greater emotional and behavioural difficulties. The scale has been shown to be highly reliable with Cronbach's alpha coefficients ranging from 0.86 – 0.92 on the five inventories

for 7 – 14 year olds. The scale has also been validated using several other equivalent measures and criterion groups (Beck et al., 2005).

Results

Descriptive Statistics

In total, 87 (18%) of children in the study met the criteria for being bullied (experienced bullying incidents two or three times a month or more often). When divided by gender, 20% of boys met the criteria for being bullied and 17% of girls. This difference was not significant (X^2 (1, N=477) = 0.45, p = 0.55). When divided by age, 19% of 8 – 11 year olds were bullied and 17% of 12 – 14 year olds were bullied. Once again, this difference was not significant (X^2 (1, N=477) = 0.52, p = 0.54). The type of bullying reported by participants in the study was 57% physical bullying, and 43% verbal bullying. 91% of these bullying incidents occurred in school, and 14% of children reported that they bullied others. Of these, 10% reported that they were also victims of bullying (a sub-group known as bully-victims).

Principal Components Analysis

Section A

Items from Section A (entitled "thoughts about being bullied") of the questionnaire were submitted to a preliminary principal components analysis with varimax rotation. A Principal components analysis is one of the simplest methods for describing the correlation matrix of the items, useful for the initial stage of test construction. Even though principal components analysis does not

include the error variance, evidence suggests that with an adequate sample size principal components analysis and factor analysis produce virtually identical results (Harman, 1976). Since the sample size in this study met the recommended sample size (five participants per item), a principal components analysis was used.

The items from Section A were completed by bullied children only, meaning that the sample size was reduced. However, the convention of at least five participants per item entered into the principal component analysis was met (ie 5 x 15 = 75). Listwise deletion was used for missing data and 87 participants remained in the analysis.

The eigenvalue greater than one criterion indicated the presence of 5 factors. However, according to the scree plot, two main factors were present, explaining 26% variance (see Figure 2 below). The rotated factor solution as well as the correlation matrix for the items can be seen in Tables 1 and 2. The two factors were both interpretable. The first factor was labeled "Helplessness" since items with the highest loadings onto this factor included items such as "anything adults suggest to help, won't work" and "my parents can't do anything to stop me being bullied". The second factor was labeled "Hopelessness" as items loading highest onto this factor included ones such as "I will always be bullied".

Figure 2: Scree plot for Section A of the new questionnaire for bullied children

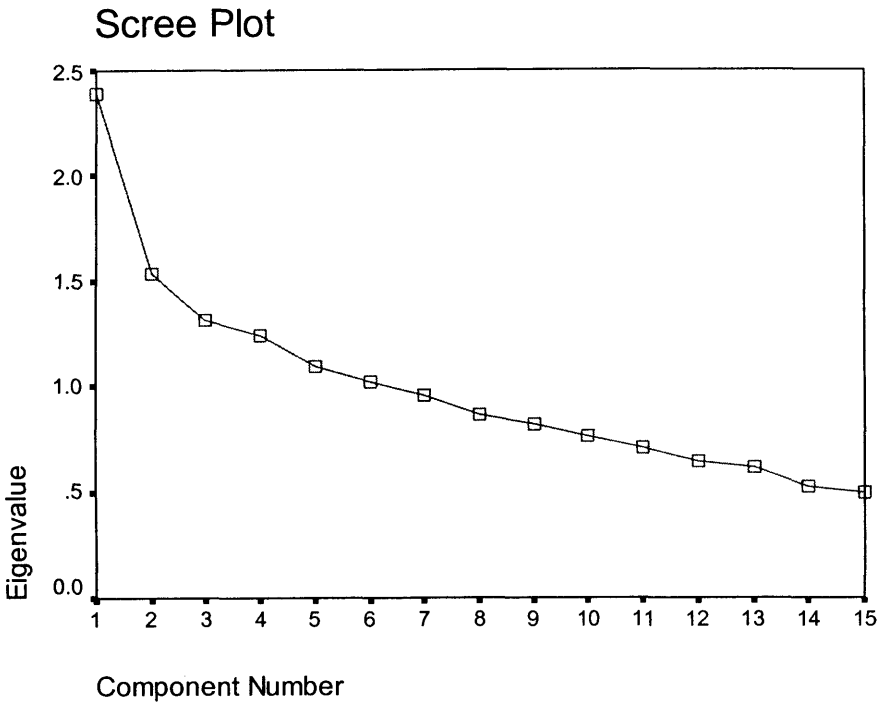

Table 1: Correlation matrix for Section A items

Items	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. I am the only person being picked on	1.00	.13	.35	.18	.13	.24	.09	.15	-.10	.02	.38	-.04	-.09	.05	.07
2. it's not fair that I am picked on	.13	1.00	.06	.04	.19	-.03	.00	.07	-.00	-.07	.07	-.02	-.03	.11	.09
3. I can't do anything to stop being bullied	.35	.06	1.00	.38	.25	.18	.13	.18	-.02	.15	.32	-.14	.02	.22	.01
4. anything adults suggest won't work	.18	.04	.33	1.00	.17	.36	.30	.19	-.03	-.05	.12	.02	-.13	.02	.07
5. If I tell someone it will make things worse	.13	.19	.25	.17	1.00	.23	.08	.15	-.05	-.00	.03	.08	-.03	.02	.12
6. my parents can't do anything to stop me being bullied	.24	-.03	.18	.36	.23	1.00	.38	.12	-.04	.06	.24	.01	-.00	.03	-.05
7. my school can't do anything to stop me being bullied	.09	.00	.13	.30	.08	.38	1.00	.05	.06	.05	.15	.01	-.17	.02	.01
8. it's my fault that I am bullied	.15	.07	.19	.19	.15	.12	.05	1.0	-.11	.12	.10	.00	.07	.14	.11
9. its the bullies who have the problem not me	-.10	-.01	-.02	-.03	-.05	-.04	.06	-.11	1.00	.14	-.05	.16	-.01	.13	-.08
10. my family could do more to help stop the bullying	.02	-.07	.15	-.05	-.00	.10	.05	.12	.14	1.00	.13	-.05	.15	.19	-.03
11. I will always be bullied	.37	.07	.32	.12	.03	.24	.15	.10	-.05	.13	1.00	-.07	-.02	.14	.01
12. It's ok to hit bullies back	-.04	-.02	-.14	.02	.08	.01	.01	.00	.16	-.05	-.07	1.00	-.29	-.18	-.07
13. Ignoring is the best way to deal with the bullying	-.10	-.03	.02	-.13	-.03	-.01	-.17	.07	-.01	.15	-.02	-.29	1.00	.11	.01
14. I should just go along with the bullying	.05	.11	.22	.02	.02	.03	.02	.14	.128	.196	.14	-.18	.11	1.00	.13
15. bullies are popular	.07	.10	.01	.07	.12	-.05	.01	.11	-.08	-.03	.01	-.07	.01	.13	1.00

Table 2: Rotated factor solution for Section A

Item	Factor	
	Helplessness	**Hopelessness**
My school can't do anything to stop me being bullied	**.774**	-.019
My parents can't do anything to stop me being bullied	**.652**	.240
I think that anything adults suggest won't work	**.627**	.158
I think that I am the only person being picked on	.050	**.792**
I think I will always be bullied	.102	**.744**
I think that I can't do anything to stop being bullied	.191	**.567**
My family could do more to help stop the bullying	-.008	.083
I should just go along with the bullying	.043	.186
It's ok to hit bullies back	-.006	-.035
Ignoring is the best way to deal with the bullying	-.137	-.045
I think that it's not fair that I am picked on	-.045	.017
If I tell someone it will make things worse	**.336**	.072
It's my fault that I am bullied	.223	-7.211E-05
Its the bullies who have the problem not me	-.079	-.047
Bullies are popular	-.187	.108

N.B. Factor loadings of 0.3 and greater are in bold

Section B

Items from Section B of the questionnaire were also submitted to a principal components analysis with varimax rotation. Section B encompassed the majority of items in the questionnaire and was filled out by all children regardless of bullying status, allowing bullied children to be compared to non-bullied children on the factor solution below. After listwise deletion, 284 participants remained and were used in the analysis. The eigenvalue greater than one criterion indicated the presence of 16 factors. However, the scree plot analysis suggested a five factor solution (see Figure 3). Items ultimately included in the rotated factor solution had factor loadings greater than or equal to 0.3, recommended as a minimum (Kline, 1994). As 24 items had loadings of less than 0.3 on all five factors, these items were removed from the final factor solution (excluded items are highlighted on the questionnaire in the appendix). The data was then reentered into a principal components analysis using varimax rotation, specifying 5 factors. The five factors explained 45% of the overall variance and Table 3 shows the rotated factor solution, ordered by size. The correlation matrix for items from Section B of the questionnaire is included in the appendix due to the size of the table.

Items with the highest loadings onto the first factor related to negative affect and included items such as "sad" and "frightened". This factor was labeled "Negative Affect". Items with the highest loadings onto the second factor were related to low self-worth and hopelessness and included items such as "I think I am worthless and no good" and "people think I am stupid". This item was labeled

Figure 3: Scree plot for Section B of the new questionnaire for bullied children

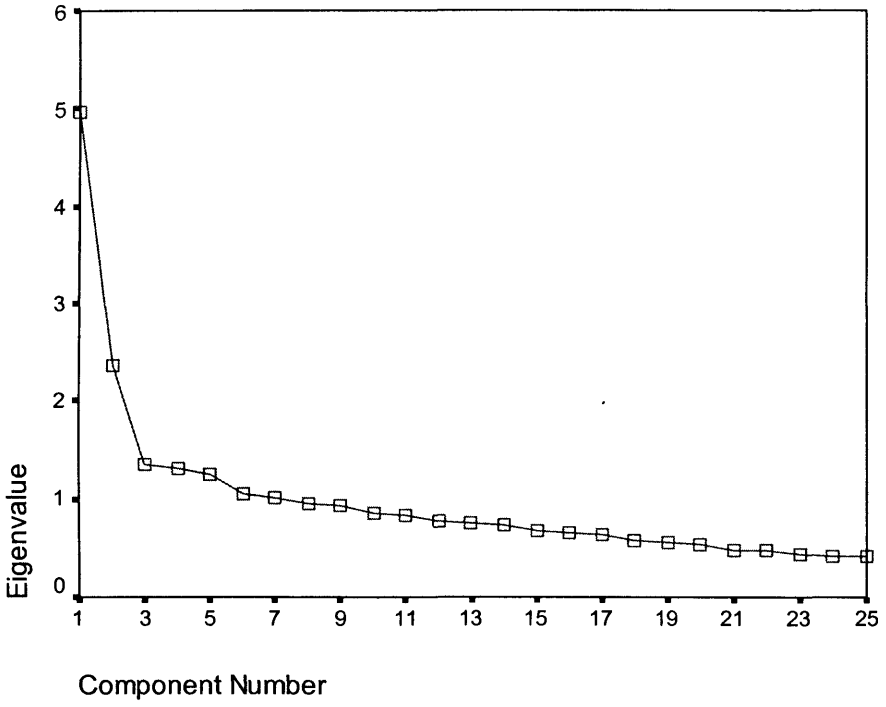

Table 3: Final factor solution for remaining items

Item	Negative affect	Low Self Worth	Positive Coping	Appearance	Social Isolation
Sad	**.696**	.047	-.043	-.039	.169
Frightened	**.671**	.023	.032	.345	-.023
Happy	**-.614**	-.156	.060	.064	-.167
Lonely	**.580**	.195	.035	.026	**.370**
Nervous	**.543**	.021	.040	**.301**	-.298
Ashamed	**.508**	.233	-.059	.139	-.129
I am happy with the way I am	-.091	**-.618**	.227	.049	.107
My parents look out for me	.110	**-.563**	.299	.183	.007
I think I am worthless and no good	.297	**.562**	-.044	.180	.191
There's something wrong with me	**.337**	**.515**	.024	.224	-.018
Things will never change for me	-.005	**.500**	.074	.130	.231
Things will get worse as I get older	.211	**.472**	.118	.156	.110
People think I am stupid	**.400**	**.434**	-.017	.214	.224
I tell a teacher	-.054	.005	**.760**	-.119	-.057
My teachers look out for me	.081	.008	**.662**	.025	-.061
I tell my parents	.065	-.114	**.635**	-.017	-.168
I think happy thoughts	-.213	-.072	**.593**	.018	-.100
If I sounded different I would have more friends	.031	.265	.148	**.671**	.128
The way I look will become more important as I get older	.028	-.037	-.082	**.631**	-.117
People don't like the way I sound when I talk	.199	.125	-.050	**.564**	.194
If I looked different I would have more friends	.276	**.363**	-.151	**.416**	.054
My friends look out for me	.007	-.086	**.308**	-.003	**-.636**
I tell my friends	-.014	-.057	.170	.109	**-.596**
If I were in a different school, things would be better	.115	.003	-.051	.300	**.513**
No one understands how I feel	**.342**	.296	.058	.174	**.513**

N.B. factor loadings of 0.3 or greater are in bold

"Low Self Worth". Items with the highest loadings onto the third factor were related to assertiveness and positive coping strategies, including items such as "I tell a teacher" and "I think happy thoughts". This factor was therefore labeled "Positive Coping". Items with the highest loadings onto the fourth factor were about physical characteristics such as appearance and voice and included items such as "If I looked different I would have more friends" and "people don't like the way I sound when I talk". This factor was labeled "Appearance". Items with the highest loadings onto the fifth factor were related to isolation from peers and loneliness and included items such as "no one understands how I feel" and negative loadings of items such as "my friends look out for me". This factor was therefore labeled "Social Isolation".

Comparing Section A and B

To see how Section A and B of the questionnaire related together, the two factors from Section A were correlated with the five factors from Section B. Helplessness from Section A was significantly positively correlated with Low Self Worth and negatively correlated with Positive Coping from Section B ($r(187) = 0.30$, $p = 0.00$; $r(187) = -0.28$, $p = 0.00$, respectively). The second factor Hopelessness from Section A was significantly positively correlated with Negative Affect, Low Self Worth and Social Isolation from Section B ($r(187) = 0.34$, $p = 0.00$; $r(187) = 0.26$, $p = 0.00$; $r(187) = 0.16$, $p = 0.03$, respectively).

Descriptive Statistics: Factors

Gender

The mean factor scores for Section A and B of the questionnaire were compared by gender and there was a significant difference between boys and girls on "Negative Affect" ($F(1,174) = 7.89$, $p = 0.01$). Girls score higher on this factor. There were no other significant differences on the factors according to gender.

Age

The mean factor scores for Section A and B of the questionnaire were then compared by age. Age was divided into 8 – 11 year olds and 12 – 14 year olds as this mirrors the primary and secondary school age groups involved in the study. Analysis revealed that there was a significant difference between 8 – 11 and 12 – 14 year olds on the factors Low Self Worth and Positive Coping ($F(1,174) = 4.8$, $p = 0.03$; $F(1,174) = 19.96$, $p = 0.00$ respectively). Specifically, 8 – 11 year olds scored higher on both of these scales, meaning that they reported greater Low Self Worth but also more Positive Coping. There were no other significant differences between these two age groups on the factors.

Convergent Validity

To measure the convergent validity of the factor structure from the questionnaire, the factors were then correlated with the five scales of the BYI-II. As described above, the BYI-II consists of subscales that measure depression, anxiety, anger, disruptive behaviour and self-concept. The correlations are shown on Table 4. The table shows that the seven factors described above,

Table 4: Correlations between BYI-II and questionnaire factors

	BYI-II					New questionnaire for bullied children – Factors						
	Self Concept	Anxiety	Depression	Anger	Disruptive Behaviour	Negative Affect	Low Self Worth	Positive Coping	Appearance	Social Isolation	Helplessness	Hopelessness
Self Concept	1	-.33**	-.48**	-.35**	-.26**	-.33**	-.28**	.34**	-.11	-.06	-.14*	-.18**
Anxiety	-.33**	1	.80**	.70**	.27**	.52**	.26**	.09	.23**	.15*	.17*	.43**
Depression	-.48**	.80**	1	.80**	.45**	.55**	.40**	-.05	.21**	.25**	.22**	.42**
Anger	-.35**	.70**	.80**	1	.56**	.48**	.32**	-.09	.14*	.28**	.25**	.34**
Disruptive Behaviour	-.26**	.27**	.45**	.56**	1	.17**	.29**	-.14*	.12*	.05	.17*	.16*
Negative Affect	-.33**	.52**	.55**	.48**	.18**	1	.00	.00	.00	.00	.02	.34**
Low Self Worth	-.28**	.26**	.39**	.32**	.29**	.00	1	.00	.00	.00	.30**	.26**
Positive Coping	.34**	.09	-.05	-.09	-.14*	.00	.00	1	.00	.00	-.28**	.05
Appearance	-.11	.23**	.21**	.14*	.12*	.00	.00	.00	1	.00	.01	.08
Social Isolation	-.06	.15*	.25**	.28**	.05	.00	.00	.00	.00	1	.11	.12*
Helplessness	-.14*	.17*	.22**	.25**	.17*	.02	.30**	-.28**	.01	.11	1	.00
Hopelessness	-.18**	.43**	.42**	.34**	.16*	.34**	.26**	.054	.08	.16*	.00	1

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

from the new questionnaires for bullied children, were each significantly correlated with at least one scale of the BYI-II. Furthermore, these were in the expected directions. However, due to the large sample size, the statistical significance does not necessarily imply clinical significance as many of the correlations are small; therefore this result can only be cautiously interpreted as evidence of convergent validity.

Construct Validity

The five factors from Section B of the questionnaire, as well as the five BYI-II subscales were entered into a 2x2 multivariate analysis of variance (MANOVA), with the factors Bullied Status (Bullied and Not Bullied) and Health (School and Hospital). The MANOVA was performed in order to further investigate the validity of the questionnaire by exploring whether the factors distinguished between bullied and non-bullied children. Table 5 shows the outcome of the analysis. There was a significant effect of Bullied Status on the factor Negative Affect ($F(1,284) = 14.34$, $p = 0.00$). Analysis of the means showed that Bullied children scored higher on Negative Affect than Not Bullied children (see Table 5 for means and standard deviations). There was a significant effect of Health on the factor "Social Isolation" ($F(1,284) = 11.60$, $p = .00$). Analysis of the means revealed that school children scored higher on the "Social Isolation" factor than hospital children. There were no significant interactions between the factors Bullied Status and Health.

Table 5: MANOVA outcome

	Variable	Main effect of Bullied Status (p value)	Mean (SD)		Main effect of Health (p value)	Mean (SD)	
			Bullied	Not Bullied		School	Hospital
Factors	**Negative Affect**	.000**	.62(.94)	-.1(.1)	.677	.28(.08)	.19(.21)
	Low Self Worth	.359	.24(1.16)	-.01(.99)	.683	013(.09)	.32(.22)
	Positive Coping	.751	-.09(1.03)	.03(.99)	.585	-0.5(.08)	.08(.22)
	Appearance	.888	-.083(.86)	.02(1.04)	.262	-.07(.09)	.2(.2)
	Social Isolation	.245	.41(1.31)	-.1(.87)	.001**	.26(.08)	-.49(.21)
BYI-II	**Self-concept**	.365	36.49 (8.86)	37.72(9.54)	.645	36.912(.8)	37.93(2.05)
	Anxiety	.001**	22.67(12.64)	16.14(11.15)	.926	19.5(.96)	19.72(2.48)
	Depression	.042*	18.67(10.99)	12.82(11.22)	.112	16.37(.94)	12.23(2.42)
	Anger	.000**	23.57(11.16)	14.56(10.88)	.178	19.62(.92)	16.20(2.36)
	Disruptive Behaviour	.615	8.06(5.12)	6.94(6.62)	.292	7.73(.54)	6.16(1.39)

* indicates statistical significance at the 0.05 level (two-tailed)
** indicates statistical significance at the 0.01 level (two-tailed)

On the BYI there was a significant effect of Bullied Status on the Anxiety, Depression and Anger inventories scales ($F(1,284) = 11.12$, $p = 0.01$; $F(1,284) = 4.16$, $p = 0.04$ and $F(1,284) = 13.76$, $p = 0.00$, respectively). Analysis of the means revealed that Bullied children scored higher than Not Bullied children on all three of these scales. There was no interaction between Health and Bullied Status on the BYI-II.

Bully-Victims

Since bully-victims have been found in the literature to be a distinct sub-group of children with differences in psychological constructs, the means for bully-victims and victims on the factors were compared. There were no significant differences between bully-victims and bullied children on the factors from Section B ($F(1,50) = 1.40$, $p = 0.23$). However, when the bully-victims were removed from the MANOVA described above, more factors became significantly different between bullied and non-bullied children. Using only bullied children who are not also bullies (pure victims), there was a significant difference between Bullied children and Non Bullied children on Negative Affect, Low Self Worth and Social Isolation ($F(1,296) = 14.79$, $p = 0.00$; $F(1,296) = 6.23$, $p = 0.01$; $F(1,296) = 15.20$, $p = 0.00$ respectively). In summary, when only pure-victims were included in the Bullied group, there were significant differences between Bullied and Not Bullied children on three of the five factors. This is in contrast to a significant difference on only one of the factors (Negative Affect) when bully-victims were included in the Bullied group.

Redefining Bullied Status

In the above MANOVA, being bullied was defined as bullying incidents occurring two or three times a month or more often, using Olweus' (1978) definition. However, a broader definition including all children who described themselves as bullied (by responding "yes" to the item "have you ever been bullied?") was also used to compare Bullied and Not Bullied groups. This definition encompassed all children who subjectively feel bullied, regardless of the type and frequency of bullying incidents. Including these children in the Bullied group led to an increase in significant differences between Bullied and Not Bullied groups. There were significant differences on the factors Negative Affect, Low Self Worth and Social Isolation ($F(1,322) = 21.59$, $p = 0.00$; $F(1,322) = 4.40$, $p = 0.01$; $F(1,322) = 5.01$, $p = 0.01$ respectively). Once again, changing the criteria of who was included in the Bullied group meant that three of the five factors distinguished between the Bullied and Not Bullied groups.

Discussion

The preliminary data from this study support the attempt to develop a reliable and valid instrument to assess bullied children. The principal component analysis yielded a meaningful internal structure comprised of 7 factors; Helplessness, Hopelessness, Negative Affect, Low Self Worth, Positive Coping, Appearance and Social Isolation. These factors are consonant with empirical literature on the personal characteristics of bullied children, as described below. Finally, a series of analyses demonstrated the convergent and construct validity of the questionnaire for bullied children. That is, the questionnaire was able to

distinguish between bullied and non-bullied children and therefore capture the unique variance in children who self-report being bullied in a sample of children ranging from 8 to 14 years of age.

The Internal Structure of the Questionnaire

In accordance with the aims of the study, the internal structure of the new questionnaire to assess bullied children was explored. Analysis of the first section (Section A) of the questionnaire, including items completed only by bullied children, resulted in two factors labeled Helplessness and Hopelessness. Analysis of Section B of the questionnaire, including items completed by all children (regardless of bullied status), resulted in a further five factors labeled; Negative Affect, Low Self Worth, Positive Coping, Appearance and Social Isolation. Factors from these two sections of the questionnaire were significantly correlated to one another, indicating that although items in Section B are not directly about bullying, they are associated with items from Section A of the questionnaire that do directly relate to bullying. This supports the use of these items in the bullying questionnaire, although they do not directly refer to bullying, in that they appear to measure thoughts, feelings and behaviours that are associated with, but not exclusive too, children who are bullied.

The factors derived from the questionnaire were meaningful and furthermore, were consistent with constructs already found to be associated with bullying. For example, negative affect and low self worth have been previously found to be associated with bullied children (Olweus, 1994). Coping strategies such as

assertiveness have been found to be important variables in the cessation of bullying incidents (Camodeca & Goossens, 2005). Appearance-related differences have been found to be associated with a greater likelihood of being bullied (Broder, Smith & Strauss, 2001). Finally, isolation has been found to be not only associated with being a bullied child but also with adults who were bullied as children (Hanish & Guerra, 2002).

Convergent Validity

The questionnaire was compared with a standardised measure of psychological functioning in children (BYI-II), in order to test convergent validity. The results revealed that the factors from the new measure were significantly related to psychological constructs as measured by the BYI-II. The BYI-II was chosen as a useful comparison measure since it is a well-known standardised tool for measuring emotional and behavioural difficulties in children and encompassed the age range targeted by the questionnaire (8 – 14 years). Furthermore, the five constructs measured by the five inventories of the BYI-II (self concept, depression, anxiety, disruptive behaviour and anger) have been implicated in bullied children previously (e.g. Gladstone, Parker & Mahli, 2006). Each of the factors from the new questionnaire was related to at least one inventory from the BYI-II. Furthermore, the directions of these relationships were as expected. For example, Negative Affect was related to inventories measuring depression, anxiety, disruptive behaviour, anger and self concept. These results show that the new questionnaire accesses similar constructs as have already been shown

to be implicated in bullied children and is interpreted by the author as evidence of convergent validity.

The fact that some of the factors from the new questionnaire correlated with several of the BYI-II scales indicated that these factors may derive from several related constructs. For example, anxiety, depression and anger are all aspects of negative affect and so it is unsurprising that this factor was related to all of these inventories. Interestingly, the factor analysis used to develop the BYI-II also resulted in a main factor labeled Negative Affect that encompassing items from more than one inventory (Beck et al., 2005).

Comparing Bullied and Non-Bullied Children

Comparisons between bullied children to non-bullied children revealed that bullied children and non-bullied children differ in negative affect. Bullied children exhibit greater negative affect than non-bullied children. Furthermore, bullied children differed significantly from non-bullied children on several of the BYI-II scales measuring emotional difficulties in children: anxiety, depression and anger. Bullied children were significantly more anxious, depressed and angry than non-bullied children. These three scales also measure aspects of negative affect and so there is some consistency with which bullied children differ from non-bullied children on both the new questionnaire and the BYI-II.

However, the correlation between the questionnaire and BYI-II may have been affected by shared method variance. This occurs when the same method is

used across two measures, such as using two self-report measures consecutively in this study. This firstly may have meant that there was some item overlap leading to over-interpretation of significant correlations between the two measures. Furthermore, both measures may have been similarly affected by confounding factors such as the current mood of the child, who if feeling negative, for example, may endorse distress or problems across domains. Future studies in this area may benefit from using observer ratings as well as self-report measures to control for this issue. In addition, a test of test-retest reliability such as giving the measures on two occasions separated by a fortnight, would allow researchers to determine the reliability of the measures across time and situational factors such as current mood.

The fact that bullied children were only differentiated from non-bullied children in terms of their affective state, as measured by the new questionnaire, was unexpected and suggests that there may not be significant differences between these groups in terms of cognitions and behaviours, as hypothesised. If accurate, this interpretation of the results would bring into question the need for a new measure for bullied children, if other standardised measures of negative affect, such as the BYI-II already exist. However, further analyses that excluded bully-victims suggest this conclusion would be premature; demonstrating that analysing the questionnaire data without adequately distinguishing between the main subgroups of bullied children may have confounded the results. That is, excluding bully-victims from the analysis resulted in significant differences between bullied and non-bullied children on three factors, Negative Affect, Low

Self Worth and Social Isolation. This indicates that bully-victims may show different relationships to these variables compared to other bullied children. This is consistent with research outlined in the introduction that bully-victims are a distinct group of children requiring separate attention from researchers. A comparison between bullied and non bullied children, without consideration of important subgroups such as bully-victims, seems to have masked important differences between these two groups, leading to misleading non-significant differences.

Interpretation of the results is further complicated by consideration of the measurement of bullying used in this study. Olweus' (1978) definition was adopted in this study and is a concise behavioural description used widely amongst researchers and employed in this study. Olweus recommends the criteria for being bullied as experiencing bullying incidents two or three times a month or more often. Including all children who described themselves as bullied rather than meeting the arguably arbitrary frequency requirements, led to more significant differences. When all children who rated themselves as bullied were included in the bullied group, bullied children show significantly more negative affect, low self worth and social isolation, than non-bullied children. Interestingly, although only 87 children rated themselves as bullied once or twice a month or more often, 244 of the total 477 children rated themselves as being bullied. Using the broader criterion of any child who thinks they are bullied may therefore be more meaningful.

Theriot et al.'s (2005) research supports this by showing that bullying cannot be simply operationalised as a set of behaviours but necessitates a subjective experience of the victim as well. These authors showed that many children feel bullied even if no observed bullying incident takes place. The interpretation of events by children, not the events themselves, leads them to describe themselves as bullied or not. This is consistent with the CBT model that informed development of the questionnaire, such that it is one's appraisal of an event that determines outcome, rather than the event itself.

Using Olweus' definition may also have made it difficult for children who cannot break their bullying experience down into discreet bullying incidents. Bullying in some children may be defined more usefully as an ongoing relationship between the bully and victim, and attempting to identify individual events that constitute bullying may be difficult. For example, relational bullying (e.g. spreading rumours or denigrating through gossip) is unlikely to occur as isolated events, whilst physical bullying may do. This also has implications for how bullying is identified and intervened with in schools and other settings. At present there is an emphasis on observable and discreet bullying incidents. This may mean that other forms of bullying are going unidentified or at worst dismissed.

Finally, the results may have been confounded by demographic factors, not controlled for, such as age and gender. Analyses of these variables indicated that some of the factors were more associated with the younger age group (8 – 11 year olds), such as Negative Affect and Positive Coping. In short, negative

affect was greater amongst the younger age group as was the employment of positive coping strategies. The results also show that females show greater levels of negative affect than males. It is not clear the extent to which these demographic differences impacted upon the findings, since they were not controlled for in this study.

Comparing Ill Children to Healthy Children

Since the questionnaire was constructed by professionals working within a hospital setting, hospital participants were recruited alongside the community sample out of interest, to see whether these children differ from others in their psychological profile. Children with physical conditions in the hospital setting were significantly different from the community sample of children in a school setting on the factor Social Isolation. Specifically, children with chronic physical conditions were less socially isolated than children without health conditions. Children within this setting also score significantly higher on the depression inventory of the BYI-II. One hypothesis for why children with physical conditions were less isolated than other children is that children with ill health tend to have an established support network of adults and other children with their condition, in order to cope with their health condition, whereas children without ill health are more vulnerable to being isolated amongst their peers.

Methodological Considerations

Aspects of the methodology in this study should qualify interpretation of the results. The sample size was adequate in order to perform the analyses in this

study. However, more participants are ultimately required for it to be fully validated for use as a professional tool. Some of the effects may not have been detected by this study, and a larger sample size would have made the study more powerful to detect them. Furthermore, as mentioned, the school participants were from two schools only. Despite attempts to ensure that the schools chosen were representative and demographically diverse, they were also pragmatically determined. Future studies on the questionnaire will need to select a number of schools at random to confirm if the results can be replicated elsewhere. Furthermore, due to time and practical constraints, no formal tests of reliability were applied to the questionnaire. The questionnaire can not be shown to be valid until it is found to be reliable over time.

Summary

The results of this study reflect promisingly on the new questionnaire to assess bullied children. The initial stages of development and validation of the questionnaire were completed. Using factor analytic techniques, the questionnaire was found to have a meaningful internal factor structure. Convergent validity was demonstrated when the questionnaire was compared with the BYI-II. Perhaps most importantly, the questionnaire also showed construct validity, when interesting differences between bullied and non-bullied children were found. Although initially bullied children only differed from non-bullied children on the factor Negative Affect, when bully-victims were controlled for, they also differed on the factors Low Self Worth and Social Isolation. These results support the development of a new measure targeted at bullied children,

to assess their psychological profile. The results point towards the need for more consideration of the individual characteristics of bullied children in the assessment and treatment of bullied children.

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Part Three: Critical Appraisal

Introduction

This was a lengthy, but ultimately rewarding, piece of research, which is the first stage of the development of what will hopefully become a useful clinical tool. In the course of conducting this project, several interesting conceptual and procedural issues emerged relating to both the process of constructing a standardised measure and to the construct of bullying itself. In this critical appraisal, I discuss the way in which items were chosen for inclusion in the new questionnaire and the advantages of including focus groups in an otherwise quantitative study at the stage of questionnaire construction. I also consider the difficulties operationalising the construct bullying, and the extent to which using a frequency criterion for the occurrence of discreet bullying incidents was useful in identifying bullied children. Next, the way in which participants were identified for the study is examined, particularly the inclusion of the hospital sample in a study primarily aimed at validating the questionnaire. Finally, some implications of the study for future research are given.

Constructing a New Questionnaire

Choosing Items

The process of constructing a new measure was unfamiliar to me prior to this study and with hindsight the way that items were chosen for the questionnaire could have had limitations. Child clinical psychologists working in a London children's hospital made the initial decisions about what items should go in the questionnaire. The psychologists had extensive experience of working with bullied children and the items grew out of a practice-driven brainstorm rather

than an evidence-based review of the bullying literature. This meant that the extent to which the items were consistent with bullying research was unclear. Also, the items may have been affected by the biases of the psychologists, such as an over-emphasis on one aspect of bullying, at the expense of others. For example, if a psychologist had recently worked with a bullied child, they may have unknowingly used that child's idiosyncratic cognitions, behaviours and feelings as the basis for some items, rather than maintaining a meta-perspective on all bullied children they have encountered.

Furthermore, the fact that the questionnaire items were constructed by professionals working with a chronic illness population of children is likely to have biased the items included in the measure. For example, in the paediatric population, altered and unusual appearances are more prevalent and form the content of a high proportion of reported verbal bullying. The questionnaire arguably reflects this and includes items on physical characteristics such as appearance and speech. It is unclear the extent to which bullied children in the paediatric population are representative of all bullied children. The professionals who constructed the questionnaire recognised the advantages of having the questionnaire validated by a community sample of children and its potential use in all child settings; however, the items may still reflect this paediatric bias.

In order to attempt to counter any biases in the way that items were initially chosen, the literature on bullying was reviewed extensively including what was already known about the personal characteristics of bullied children. To a large

extent, the literature agreed with the items in the questionnaire. For example, self esteem, depression and anxiety were all represented in the items, and also found to be associated with bullied children in research findings. However, this post-hoc method of matching items to the literature may not have been enough to ensure that the items were evidence-driven. On reflection, it would have been preferable to coordinate a review of the literature alongside using clinical judgement to brainstorm items, at the time of construction of the questionnaire.

Focus Groups

The inclusion of the focus groups went some way to offset the problems described above with item construction and greatly improved the study. Although items had been constructed, the questionnaire was still being altered and revised and so asking the opinions of groups of bullied children allowed qualification of existing items and the inclusion of new items. This meant that bullied children had a direct influence on items included in the questionnaire as well as practical details such as the appearance of the questionnaire and the wording used, allowing a service user-led dimension to the questionnaire. For example, as a result of the focus groups, the item "I retaliate" was added, since the children consistently raised this as one common method of coping with being bullied and felt that it was not represented in the questionnaire. During the focus groups I gained invaluable insights into participants' views and attitudes on bullying. Ultimately, the questionnaire was intended to facilitate communication between bullied children and adult professionals. As such, the response of bullied children to the questionnaire is important as it will partly determine how a

child will use the questionnaire to talk about and describe their individual experiences of being bullied.

The focus groups brought certain aspects of being bullied into sharp focus. In particular, the importance of multiple perspectives became immediately apparent. Although all the children joining the groups were united by being bullied, the wide variety of experiences and personalities included in the groups meant that the differences between the children were more apparent than the similarities. As such, it was evident during the rest of the study that although the goal was to identify broad similarities between bullied children and to attempt to outline a psychological profile for bullied children, assessment of the unique experience of each child, facilitated by the questionnaire, was possibly a more important outcome of the questionnaire development. Another advantage of the focus groups was an insight into the language used by children when they talked about bullying. The children commented on some of the language used in the items that made little sense to them and offered alternative child-friendly descriptions.

Another feature of the groups that struck me was the qualitative difference between the age groups. The 8 – 11 year olds described forms of bullying such as being ignored or pushed, whilst the older age group talked of more ongoing, subtle forms of mental bullying such as the use of gossip consonant with the concept relational aggression, described by Theriot, Dulmus, Sowers and Johnson (2005). The older age group also described more serious forms of

physical bullying such as involving violence and serious threat. As such, it was apparent that the older age group included in the focus groups experienced more potentially damaging and entrenched forms of bullying. Furthermore, they were less likely to do anything about it, since they consistently reported that it was not credible to involve adults at this age. The older children were much more aware of the others in the group and seemed reluctant to say anything that made them appear weak and vulnerable. I am uncertain whether this was simply a consequence of being teenagers, a consequence of being bullied teenagers, or an interaction of the two.

The focus groups had potential limitations. In the younger age group there was a tendency to acquiesce with the group facilitators whereby the participants tended to agree with the items in the questionnaire. With the older age group there was a tendency to acquiesce, not with the group facilitator, but with the most dominant member of the group of peers, so that some children seemed reluctant to speak up. Due to these processes, it is unlikely that I captured all the perspectives in the room. Ideally, the focus groups would have allowed some time for each child to speak on their own. However, time constraints prevented this taking place in this study.

For me, the most convincing justification for the questionnaire, came not from the statistical analyses performed later, but from these early focus groups with bullied children. The children in the groups invariably commented that they thought a questionnaire on thoughts, feelings and behaviours was a good idea

and responded to the questionnaire in an enthusiastic and positive manner, often commenting on the lack of support they get from teachers and other adults. I was struck by the seemingly positive effect on children, from reading items that resonated with their own experience of being bullied.

Testing the Questionnaire

Operationalising Bullying

Perhaps one of the most important foundations of a good questionnaire measure is a clear and coherent construct underlying its items. Surprisingly, the further the study progressed, the less sure I became about what exactly constituted bullying. When I started to work on the questionnaire, I had an understanding of bullying as an observable, behavioural phenomenon. This is consistent with Olweus' (1978) definition used in this study, that bullying is the frequent occurrence of negative actions by one or more children to another child, who is less powerful. When I started the study, this definition seemed to enable a straightforward and uncontroversial identification of bullied children. However, as I met bullied children in the focus groups and reviewed the literature, I began to realise that defining and measuring bullying was perhaps more complicated than purely behavioural descriptions allowed.

In the focus groups, the bullying described by the children was often of an ongoing relational type that could not be described as discreet events in time, for example, ongoing rejection from a group of peers. The frequency of the bullying was therefore not as relevant for these children. Furthermore, it became

apparent that the severity of the bullying offset the importance of the frequency with which bullying occurred. Particularly in the older age group (12 – 14 year-olds) the children described single violent acts of bullying, the immediate effect of which could be more devastating than some less severe but more regular incidents of bullying, more commonly described by the younger age group (8 – 11 years old). To summarise, through meeting bullied children, using the frequency and severity of bullying incidents to define bullying seemed less useful. The importance of the personal meaning of bullying incidents to individual children seemed more relevant than the frequency criterion for defining a bullied child.

For example, a child may experience a one-off violent act of bullying and think of themselves as bullied, but not reach the criteria in this study of being bullied once or twice a month or more often. If this definition is not a meaningful way of identifying bullied children, the analysis will have been confounded by a poor discrimination of bullied from non-bullied children. This contention was supported by the results showing that bullied children differed significantly from non-bullied children only on the factor Negative Affect. But when all children were included in the bullied group who rated themselves as bullied, rather than who met the frequency criteria recommended by Olweus, two more factors became significantly different (Social Isolation and Low Self Worth).

Furthermore, the identification of bullied children may have been confounded by a lack of consideration of previously bullied children who no longer are being

bullied. To my knowledge, no research has taken into account this group of children despite evidence that the personal characteristics associated with being a bullied child, such as poor mental health and low self esteem, continue sometimes into adulthood. In this study, only children being currently bullied were included in the bullied group and so all previously bullied children, by default, were considered in the non-bullied group in the analysis. This lack of control over this group of previously bullied children may have meant that less significant differences were found between bullied and non-bullied children.

Participants

Resistance in Schools

One interesting aspect of data collection was my interactions with schools whilst trying to recruit them into the study. I was surprised to meet some resistance to considering the problem of bullying within some schools. In my quest to find a primary and secondary school to become involved in the study I approached numerous schools. One headmaster commented that he thought there was an unhealthy tendency to over-identify bullying amongst children, when it was natural for children to interact in this way. This headmaster, unsurprisingly, said that bullying was not a problem in his school. This left me wondering how pervasive this worrying attitude of accepting bullying as permissible and normal was. Approaching other schools, I did not get the same overt denial that bullying was a problem that required intervention, but instead met with a reluctance to become involved in the research and a lack of interest in the questionnaire. The two schools that eventually became involved in the study were exceptions to this

trend. Both schools already took an active stance against bullying in their schools and were open and honest that it still occurred but that they were trying to tackle it. Members of staff were interested and keen to be involved in this research as they saw the potential long-term benefits of research into bullying. Worryingly, it seemed to me that the schools that were most resistant about discussing bullying probably had the worst problems with bullying in their schools and were least likely to do anything to help it. This really highlighted for me the importance of a school's attitude to bullying. Furthermore, it led me to wondering what impact these different attitudes had on both bullied children and bullies within the schools.

The variation in attitudes to bullying in schools also means that those included in research are self selecting and research on bullying in schools, is likely to be biased to including only schools that are willing to consider their bullying problem. This may have had the effect, for example, of including a sample of children who had more positive cognitions about bullying or more coping strategies due to their school's active stance against it. It also made me wonder whether prevalence rates and the negative impact of some school environments have been underestimated to date, as some schools avoid research in this area. This was certainly a limitation for this study. The schools chosen were both actively involved in reducing the incidence of bullying and therefore were not representative of the whole community. Only two schools were included in the study and for the questionnaire to be further validated a larger collection of schools will be necessary.

Including Hospital Participants

The initial rationale for the development of the questionnaire was to help assess the consequences of bullying on children with chronic illness. This was because of the high rate of referral of this problem to the hospital clinical psychology team, who were involved in constructing the questionnaire. The process of validating a questionnaire, however, required use of a community sample of children, so the school sample was obtained. This had to be weighed against the original interest in the effects of bullying on a sick population. As such, extra comparisons were made to determine if the sick population were similar or different to the community sample. Not only did the study begin to validate the questionnaire, but it also tested the hypothesis that unwell children who were bullied had a psychological profile that was different to other bullied children. However, on reflection, the hospital sample possibly complicated the aims of the questionnaire, which was primarily to develop the measure, before testing it on different groups of bullied children. As the research developed, there was a shift away from emphasis on bullying amongst ill children and towards bullying amongst all children, in order that the questionnaire was relevant to all bullied children.

Implications of the Findings

Significance of Sub Groups

The finding that might be of particular significance from the study is that there are different sub-groups of bullied children that are not routinely differentiated in

studies. The inclusion of the sub-group of children who are bullied but also bullies (bully-victims), in the bullied children group, confounded the results. When this group was controlled for, two more factors became significantly different between bulled and non-bullied children. There may also be other subgroups that warrant individual attention, indicated by the results from the study. For example, looking at the group of children who rated themselves as bullied even though they did not reach the criteria of being bullied in terms of frequency of bullying incidents, may have a different profile to those children who rate themselves as bullied and reach the frequency criterion. Another group may be a small group of children who do not rate themselves as bullied but are objectively rated by others as being so. Exploring what difference this interpretation as not being bullied, makes to the psychological profile of these children would be interesting. Finally, another group may be those children who are not currently bullied but have been bullied in the past. It would be interesting to see whether these children still have a profile that is distinct from children who have never been bullied. Now that a more complex picture of bullying is emerging, it is important for studies to be more detailed and sensitive to differences within the broad and possibly meaningless umbrella terms "bullied" and bully".

Intervention

Although it goes beyond the scope of the current project, it is interesting to consider how a detailed assessment of the psychological constructs associated with being a bullied child can inform interventions for these children. According

to psychological models of therapy, assessment is a crucial stage in formulating and developing a targeted and effective intervention for the presenting problem. In this study the questionnaire was being validated as an assessment tool and made no comment on the potential links between the constructs it assessed and how this knowledge could be transformed into intervention. As the study progressed, I became more interested in how the psychological constructs accessed by the questionnaire's items moderated and mediated the relationship between bullying and psychological distress. Possible hypotheses emerged from my interactions with bullied children and also from my review of the literature on bullying.

In terms of a cognitive behavioural formulation of bullying, early experiences may determine children's beliefs about aggression and their own ability to cope with, and respond to, aggression directed towards them. A bullying incident could act as a triggering event for a vicious cycle of negative thoughts related to their beliefs of being unable to cope, deserving to be bullied or being worthless, causing them to feel sad and anxious. They may then react to the bully with overt displays of emotion but without the use of positive coping strategies such as telling adults or asserting themselves. This in turn may maintain the bullying incidents and reinforce their negative thoughts about themselves. From such a formulation, an intervention to challenge a child's beliefs of aggression as permissible, of being unable to assert themselves against the bully and of being to blame for being bullied would arrest the vicious cycle of bullying incidents. A

study looking at the effectiveness of an intervention, using a child's scores on the items on the questionnaire as a basis, would be interesting.

Summary

In summary, this study allowed significant progression in the development of a new questionnaire for bullied children. However, the study was limited by conceptual and methodological difficulties. These spanned from the stage of early item construction through to the final stages of test validation. In particular, difficulties with the way in which being bullied was defined may have had implications for interpretation of the findings. Despite these difficulties, the inclusion of focus groups meant that the study was grounded in the real experiences of bullied children and the study indicated that the new questionnaire will help to identify the individual characteristics of children associated with being bullied. In the future, this may lead to the development of more targeted and effective interventions for these children, which are so lacking to date.

References

Olweus, D. (1978) *Aggression in the schools. Bullies and whipping boys.* Washington, D.C.: Hemisphere Press (Wiley).

Theriot M. T., Dulmus, C. N., Sowers, K. M. & Johnson T. K. (2005). Factors relating to self-identification among bullying victims. *Children and Youth Services Review, 27, 979-994.*

Appendices

Appendix One: Confirmation of Ethical Approval

The Joint UCL/UCLH Committees on the Ethics of Human Research
(Committee Alpha)

Our Ref: 06AL 048

Miss Fiona Leigh
Trainee Clinical Psychologist
University College London

Dear Miss Leigh

Full title of study: **How valid and reliable is the new questionnaire on the experience of being bullied?**
REC reference number: **06/Q0502/15**

Thank you for your letter of 28 March 2006, responding to the Committee's request for further information on the above research [and submitting revised documentation].

The further information has been considered on behalf of the Committee by the Chair.

Confirmation of ethical opinion
On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation [as revised].

Conditions of approval
The favourable opinion is given provided that you comply with the conditions set out in the attached document. You are advised to study the conditions carefully.

Approved documents
The final list of documents reviewed and approved by the Committee is as follows:

Document	*Version*	*Date*
Application	5	07 February 2006
Investigator CV	Fiona Leigh	11 November 2005
Protocol	1	13 December 2005
Covering Letter	Fiona Leigh	07 February 2006
Questionnaire	2	29 March 2006
Questionnaire	1	24 January 2006
Letter of invitation to participant	Stage 1	13 December 2005
Letter of invitation to participant	Stage 1	13 December 2005
Letter of invitation to participant	Stage 2	13 December 2005
Letter of invitation to participant	Stage 2	13 December 2005

Participant Information Sheet	Stage 1	17 January 2006
Participant Information Sheet	Stage 2	27 March 2006
Participant Consent Form	Stage 1	17 January 2006
Participant Consent Form	Stage 2	13 December 2005
Response to Request for Further Information	1	28 March 2006
Childrens Information Sheet	Stage 1	27 March 2006
Childrens Information Sheet	Stage 2	27 March 2006
Supervisor CV	Ms Kristina Soon	
Synopsis of Protocol	1	13 December 2005
Child's Consent Form	Stage 1	
Child's Consent Form	Stage 2	13 December 2005
Research proposal rview form		08 November 2005
Stage One Focus Group Prompts		24 January 2006

Research governance approval
The study should not commence at any NHS site until the local Principal Investigator has obtained final research governance approval from the R&D Department for the relevant NHS care organisation.

Statement of compliance
The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

06/Q0502/15	**Please quote this number on all correspondence**

With the Committee's best wishes for the success of this project

Yours sincerely

Chair

Email:

Copy to: R&D Department for NHS care organisation at lead site

Appendix Two: Example Invitation to Participate

19th October 2006

Invitation to participate.

Dear Parent,

I would like to invite your child..... to participate in a study taking place at [redacted]. If you consent to your child taking part and your child also agrees, we would like your child to complete a questionnaire whilst attending the next outpatients clinic they are due to attend on the ..... at [redacted]. As there are often periods of waiting during clinics, your child's participation should not take up any extra time. The questionnaire may be filled in whilst you are in the waiting room.

The study will help to develop an important questionnaire about being bullied. We are asking *all* children to fill in the questionnaire, regardless of whether they have been bullied or not. Please take your time to read the information sheet explaining the more about the study. Also enclosed is an information sheet for your child to read. The researchers will obtain formal consent from you and your child at the time of the clinic if you do wish to participate.

Yours Faithfully,

Fiona Leigh
Principal Researcher

Appendix Three: Example Child Information Sheet

Children's Information Sheet

Testing a new questionnaire

I am inviting you to take part in a study. It is important you understand why I am doing the study. I also want you to know why I have asked you to help me. Please read this letter and talk to other people about it if you want. Take time to decide if you want to take part.

What is the study for?

A study is a careful experiment to find out the answer to an important question.

In this study, I want to find out about bullying and also how children think about themselves and others.

I have made a list of questions to help children describe how they get on with other children. I am asking lots of children to try out the questions.

Do I have to take part?

It is up to you whether or not you take part. If you decide you will take part, you can stop at any time, without giving a reason. No one will be cross with you.

What will happen to me if I take part?

We would like you to try out the questions we have made by filling them in.

What are the possible good and bad parts of joining in?

We think that you will find the study fun. You might find thinking about children being picked on upsetting. If you do, there will be adults to talk to.

The study will help other children in the future who have been picked on.

Will you tell anyone I am taking part?

We won't tell anyone what you write, unless it would help for someone else to know. Your name won't be used in the study.

Contact

If you have any questions, you can contact me:

Fiona Leigh
[redacted]

Thank you very much!

Fiona Leigh

Appendix Four: Example Parent Information Sheet

Information Sheet

Testing a new measure on the experience of being bullied

Your child is being invited to take part in a research study. It is important for you to understand why the research is being done and what it will involve. Please take time to read the following information and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish your child to take part.

Thank you for reading this.

What is the purpose of the study?

This study is interested in developing a questionnaire, which will be able to elicit children's experiences of being bullied. Clinicians working with children have noticed that this bullying is a common problem in children and think that it would be useful to develop a new measure that can efficiently and accurately access the thoughts and feelings that such a problem can bring up in children.

We believe that this study is important, as it will show us whether the questionnaire is useful and accesses children's experiences of being bullied.

Your child's participation in this study will help us to explore this topic and eventually improve the way clinicians respond to children who are distressed by bullying incidents.

Does my child have to take part?

It is up to you to decide whether or not your child takes part. If you decide that your child can take part you will be given this information sheet to keep and a consent form to sign. If you decide your child can take part they are still free to withdraw at any time and without giving a reason. A decision to withdraw at any time, or a decision not to take part, will not affect the standard of care you or your child receives.

What will happen to my child if they take part?

We would like to give your child our new questionnaire to fill in so that we can explore how useful the measure is. The questionnaire will be given with one other short questionnaire which is about related topics including self-concept and esteem.

What are the possible advantages and disadvantages of taking part?

We think that overall children will find filling in the questionnaires enjoyable. If any children find thinking about bullying upsetting, the researchers, who are either trained or training in psychology, are well placed to deal with this situation.

Will my child's taking part in this study be kept confidential?

All information collected during the course of the study will be kept strictly confidential, except if there is a reason for concern, in which case information may be passed on to relevant authorities. All information in the report will be completely anonymised.

What will happen to the results of the research study?

Written feedback can be given to you on request. This is likely to occur in June 2007. The results will be fed back internally to professionals working with children. All reports will be completely anonymised and it will not be possible to identify any individual from what is written.

Contact for Further Information

If you have any questions either before you decide whether to take part or not, or after you have taken part, please contact me using the details below:

Fiona Leigh
[redacted]

Yours Faithfully,

Fiona Leigh

Appendix Five: Example Child Consent Form

CHILD CONSENT FORM

Title of Project: Testing a new measure of the experience of being bullied.

Name of Researcher: Fiona Leigh

Please initial box

1. I have read and understand the information sheet ☐

   for the above study and have asked all the questions I can think of.

2. I understand that I can choose whether I join in or not and that I can stop at any time without giving any reason. ☐

3. I understand that my medical notes may be looked at by responsible individuals from [redacted] or other authorities if needed. I give permission for these individuals to have access to my records. ☐

4. I agree to take part in the above study. ☐

Name of Child	Date	Signature
Name of Person taking consent (if different from researcher)	Date	Signature
Researcher	Date	Signature

Appendix Six: Example Parent Consent Form

CONSENT FORM

Title of Project: Testing a new measure of the experience of being bullied.

Name of Researchers: Fiona Leigh

Please initial box

1. I confirm that I have read and understand the information sheet dated 17th January 2006 (version 1) for the above study and have had the opportunity to ask questions. ☐

2. I understand that my child's participation is voluntary and that he/she is free to withdraw at any time without giving any reason, without their medical care or legal rights being affected. ☐

3. I understand that sections of any of my child's medical notes may be looked at by responsible individuals from [redacted] or from regulatory authorities where it is relevant to my taking part in research. I give permission for these individuals to have access to my records. ☐

4. I agree to my child taking part in the above study. ☐

Name of Adult	Date	Signature
Name of Person taking consent (if different from researcher)	Date	Signature
Researcher	Date	Signature

Appendix Seven: Focus Group Schedule

FOCUS GROUP

- Introductions by group leaders

- Names of children whilst passing around a ball (write down names) and say one thing about yourself eg pets/brothers/sisters/where you live/what you like doing.

- Explain purpose of group – "We know that lots of children get bullied by other children both inside and outside of school, therefore we have made up a questionnaire so that grown ups like teachers and parents can know about bullying when it happens and help. Today we would really like you to look at our questionnaire and tell us what you think of it, which questions describe what it might feel like to be bullied and which don't make so much sense."

- Ground rules – one person speaks at a time, by putting up their hands. Everyone's comments are useful, there is no right or wrong answer. Nothing discussed ion the group must be shared outside the group.

- Warm-up: What is bullying?
  Which feelings and thoughts come to mind first when thinking about bullying.

- Hand out questionnaires

- Give children 5-10minutes to look at questionnaire and mark any questions they have something to say about ie are particularly good or not very good. Group leaders will go round and help children who are finding it difficult to read.

- Focus group prompts:
  - Having looked at the questionnaire, are there any thoughts or ideas you have about it?
  - In general, what do you think about the length
  - Are the questions set out in a way that is easy to understand
  - Overall, does the question capture what it might be like to be bullied
  - Is there anything the questionnaire missed out?
  - Are there any questions that are hard to understand or read?
  - Did you mark any other questions and why?
  - Coping: Are there any other ways you can think of that children mught cope with being bullied?
  - Any other comments/questions?

- Stand up wiggle your arms and legs.

- Round in a circle: one thing you are doing in the summer holidays or one thing you love about summer.

Appendix Eight: Questionnaire for Bullied Children

Questionnaire

This questionnaire is about the important topic of bullying. It is also about what you think of yourself and other children. This questionnaire will help us work out how to help children who are bullied. We would like you to know that you will not get into trouble for what you write, and no one else will. Your name will not go on the questionnaire. If you would like someone to know what you wrote, because it upsets you, please tell the adult who collects the questionnaire from you.

Gender (please tick) ☐ Male ☐ Female

Age (in years) _____ years old

***We say a child is being bullied when another child, or several other children*;**

- Say hurtful things or make fun of him or her

- Completely ignore or exclude him or her from their group of friends

- Hit, kick, push, shove or threaten him or her

- Tell lies or spread false rumours about him or her

- Do other hurtful things like this

It is bullying if these things happen again and again. We don't call it bullying if the teasing is done in a friendly way or when two children of equal strength argue or fight.

	Yes	No	Maybe
Have you ever bullied anyone? (Please tick)	☐	☐	☐
Have you ever been bullied? (Please tick)	☐	☐	☐

IF YOU ANSWERED "NO" TO THIS QUESTION, PLEASE GO TO SECTION B ON PAGE 5.

IF YOU ANSWERED "YES" OR "MAYBE", PLEASE CONTINUE TO SECTION A BELOW.

SECTION A

	Never	Only once or twice	2 or 3 times a month	About once a week	Several times a week
How often are you bullied? (please tick)	☐	☐	☐	☐	☐

If you aren't being bullied any more, when did the bullying happen?

_____

_____

What type of bullying have you experienced?

Please tick any of the following that you have experienced recently:

Pushing/Shoving	☐	Kicked	☐
Name-calling	☐	Had nasty MSN messages/texts	☐
Had things thrown at me	☐	Punched	☐
Being ignored/left out	☐	Teasing	☐

Other types (please write down any other bullying you have experienced):

_____

_____

_____

Where have you been bullied?

Please tick any of the following places you have been bullied:

In school	☐	In the street	☐
On my way to school	☐	In the park	☐
On my way home from school	☐	At home	☐

Other places (please write down anywhere else you have been bullied):

_____

Who has bullied you? (you can tick more than one)

Class-mates	☐	Adults	☐
Older children	☐	Brother/sister	☐
Younger children	☐		

Other (please write down anyone else who is bullying you):

_____

How much does the bullying upset you? (Circle the number that fits best)

_____

0 1 2 3 4 5 6 7 8 9 10

Not at all Very much


What I think.....

Thoughts about why I am bullied

Many children wonder why they are bullied. For example, "I think I am bullied because of the way I look".

I think that I am bullied because of...

	Yes	No	Sometimes
The way I look	☐	☐	☐
The way I sound	☐	☐	☐
What I do	☐	☐	☐
How I behave	☐	☐	☐
What I wear	☐	☐	☐

Other reasons (please write down any other thoughts about why you are bullied):

_____

_____

_____

Thoughts about being bullied

	Yes	No	Sometimes
I think that I am the only person being picked on	☐	☐	☐
I think that it's not fair that I'm picked on	☐	☐	☐
I think that I can't do anything to stop being bullied	☐	☐	☐
I think that anything adults suggest to stop the bullying, won't work	☐	☐	☐
I think that if I tell someone I'm bullied it will make things worse	☐	☐	☐
I think that my parents can't do anything to stop me being bullied	☐	☐	☐
I think that my school can't do anything to stop me being bullied	☐	☐	☐
I think that it's my fault I'm bullied	☐	☐	☐
I think that it's the bullies who have got a problem not me	☐	☐	☐
I think that my family could do more to help stop the bullying	☐	☐	☐
I think I will always be bullied	☐	☐	☐
I think it's okay to hit bullies back	☐	☐	☐
I think ignoring is the best way to deal with bullying	☐	☐	☐
I think I should just go along with the bullying	☐	☐	☐
I think that bullies are popular	☐	☐	☐

SECTION B

Everyone should fill in this section.
Even if you have not been bullied, we are still interested in what you think.

I believe children are bullied because;

	Yes	No	Maybe
They are different	☐	☐	☐
They have something wrong with them	☐	☐	☐
They are special	☐	☐	☐
They are weak	☐	☐	☐
They are unpopular	☐	☐	☐
Bullies will pick on anyone	☐	☐	☐
Bullies are stupid	☐	☐	☐

Below are thoughts that many children have. Please read each one and tick the box that best describes you.

	Yes	No	Sometimes
I think that I am different from other children	☐	☐	☐
I think that things will never change for me	☐	☐	☐
I think things will get worse as I get older	☐	☐	☐
I think my friends look out for me	☐	☐	☐
I think that people will accept me more as I get older	☐	☐	☐
I think I am in control	☐	☐	☐
I think that people don't like the way I sound when I talk	☐	☐	☐
I think that people think I am stupid	☐	☐	☐
I think that if I looked different I would have more friends	☐	☐	☐
I think that if I were in a different school, things would be better	☐	☐	☐
I think that no one understands how I feel	☐	☐	☐
I think that I am the same as other children	☐	☐	☐
I think that I am happy with the way I am	☐	☐	☐
I think that the way I look will be more important as I get older	☐	☐	☐
I think my teachers look out for me	☐	☐	☐
I think that if I sounded different I would have more friends	☐	☐	☐
I think my parents look out for me	☐	☐	☐
I think things will get better as I get older	☐	☐	☐
I think I am worthless and no good	☐	☐	☐
I think there's something wrong with me	☐	☐	☐
I think that I worry too much	☐	☐	☐

How I feel.....

Please tick the boxes that best describe your feelings:

	Always	Never	Sometimes
Happy	☐	☐	☐
Sad	☐	☐	☐
Lonely	☐	☐	☐
Angry	☐	☐	☐
Nervous	☐	☐	☐
Ashamed	☐	☐	☐
Frightened	☐	☐	☐

Other (please write down any other feelings you have had):

_____

_____

What I do....

Below are different things children do when difficult situations with other children happen.

Please tick the boxes that best describe what you do in difficult situations with other children;

	Yes	No	Sometimes
I try to ignore it	☐	☐	☐
I try more than one thing to stop it	☐	☐	☐
I retaliate	☐	☐	☐
I tell a teacher	☐	☐	☐
I tell my friends	☐	☐	☐
I tell my parents	☐	☐	☐
I say something	☐	☐	☐
I say nothing	☐	☐	☐
I hit out	☐	☐	☐
I pretend I don't care	☐	☐	☐
I try to hide	☐	☐	☐
I keep to myself	☐	☐	☐
I avoid going out	☐	☐	☐
I think happy thoughts	☐	☐	☐

Other (please write down anything else you do to cope):

_____

Thank you for filling in the questionnaire!

(N.B. Items in bold were removed as a result of the prinicipal components analysis. See page 76)

Appendix Nine: Correlation Matrix for Principal Components Analysis of Section B of the New Questionnaire for Bullied Children

Key to item numbers on following table:

1. Things will never change for me
2. Things will get worse as I get older
3. My friends look out for me
4. People don't like the way I sound when I talk
5. People think I am stupid
6. If I looked different I would have more friends
7. If I were in a different school, things would be better
8. No one understands how I feel
9. I am happy with the way I am
10. The way I look will become more important as I get older
11. My teachers look out for me
12. If I sounded different I would have more friends
13. My parents look out for me
14. I think I am worthless and no good
15. There's something wrong with me
16. Happy
17. Sad
18. Lonely
19. Nervous
20. Ashamed
21. Frightened
22. I tell a teacher
23. I tell my friends
24. I tell my parents
25. I think happy thoughts

Table : Correlations for items from Section B of the new questionnaire for bullied children

Items	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1	1.00	.22	-.18	.07	.24	.16	.17	.26	-.19	.07	.04	.18	-.11	.26	.19	-.1	.12	.14	.11	.11	.09	-.05	-.04	-.07	-.07
2	.22	1.00	-.04	.20	.31	.22	.14	.29	-.20	.09	.01	.18	-.09	.26	.31	-.2	.23	.19	.15	.10	.21	.00	-.05	.03	-.08
3	-.18	-.04	1.0	-.11	-.2	-.13	-.2	-.21	.11	.03	.23	-.06	.09	-.15	-,04	.08	-.10	-.19	.14	-.08	-.02	.19	.31	.21	.25
4	.07	.20	-.11	1.0	.26	.25	.19	.25	-.10	.13	.02	.39	-.02	.21	.32	-.24	.16	.19	.15	.16	.27	-.08	-.08	-.08	-.13
5	.24	.31	-.20	.26	1.0	.37	.16	.39	-.16	.12	.12	.03	.21	-.14	.42	.35	-.26	.24	.34	.23	.34	-.01	-.14	-.05	-.16
6	.16	.22	-.13	.25	.37	1.0	.13	.28	-.23	.20	-.06	.29	-.08	.34	.33	-.20	.25	.24	.18	.27	.29	-.13	-.11	-.10	-.12
7	.17	.14	-.20	.19	.15	.13	1.0	.29	-.07	.10	-.16	.15	-.05	.19	.10	-.16	.13	.19	.07	.07	.20	-.07	-.16	-.04	-.07
8	.2.6	.28	-.21	.25	.39	.28	.29	1.0	-.14	.10	-.02	.24	-.12	.35	.21	-.32	.30	.40	.09	.19	.27	-.08	-.16	-.09	-.06
9	-.19	-.20	.11	-.10	-.16	-.23	-.10	-.14	1.0	-.06	.13	-.08	.26	-.25	-.25	.14	-.11	-.15	-.07	-.16	-.10	-.11	.09	.06	.19
10	.07	.09	.03	.13	.12	.20	.10	.09	-.06	1.0	.05	.18	.08	.11	.08	.00	.07	.06	.19	.06	.13	-.07	.06	.00	-.06
11	.04	.01	.23	.02	.03	-.06	-.2	-.02	.13	.05	1.0	.08	.17	.01	.04	.00	.03	.03	.10	-.02	.05	.34	.03	.26	.21
12	.18	.18	-.06	.39	.21	.29	.15	.24	-.07	.18	.09	1.0	-.05	.27	.26	-.09	.07	.21	.18	.17	.28	.03	-.00	-.03	.05
13	-.11	-.09	.09	-.02	-.14	-.08	-.1	-.12	.25	.08	.17	-.05	1.0	-.19	-.07	.05	-.00	-.08	.01	-.03	.04	.13	.09	.27	.12
14	.26	.26	-.15	.21	.42	.34	.19	.36	-.25	.11	.01	.27	-.19	1.0	.34	-.27	.24	.37	.14	.27	.23	-.14	-.10	-.09	-.14
15	.19	.30	-.04	.32	.35	.33	.10	.21	-.25	.08	.04	.26	-.07	.34	1.0	-.29	.20	.29	.18	.30	.23	-.01	-.06	-.05	-.13
16	-.10	-.19	.08	-.24	-.26	-.19	-.2	-.32	.14	.00	.00	-.09	.05	-.27	-.29	1.0	-.33	-.32	-.18	-.27	-.28	.09	.09	.04	.18
17	.12	.23	-.10	.16	.24	.25	.13	.30	-.11	.07	.03	.07	-.01	.24	.20	-.33	1.0	.43	.27	.21	.34	-.04	-.07	-.08	-.16
18	.14	.19	-.19	.19	.34	.24	.19	.40	-.15	.06	.03	.21	-.08	.37	.29	-.32	.43	1.0	.19	.22	.36	-.06	-.17	-.07	-.11
19	.11	.15	.14	.15	.23	.18	.07	.09	-.07	.19	.10	.18	.01	.13	.18	-.18	.27	.19	1.0	.23	.42	-.01	.07	.08	-.02
20	.11	.10	-.08	.16	.29	.27	.07	.19	-.16	.06	-.02	.17	-.04	.28	.30	-.27	.21	.22	.24	1,0	.38	-.04	.01	-.04	-.02
21	.09	.21	-.02	.27	.34	.29	.20	.27	-.11	.13	.05	.28	.04	.23	.23	-.28	.34	.36	.42	.38	1.0	-.03	.03	.07	-.09
22	-.05	.00	.19	-.08	-.10	-.13	-.1	-.08	.11	-.07	.38	.03	.13	-.14	-.01	.08	-.04	-.06	-.01	-.42	-.03	1.0	.14	.40	.34
23	-.04	-.05	.31	-.08	.14	-.11	-.2	-.16	.09	.06	.03	-.00	.08	-.09	-.06	.09	-.07	-.17	.07	.01	.03	.14	1.0	.21	.17
24	-.07	.03	.21	-.08	-.05	-.1	-0	-.09	.06	.00	.26	-.03	.27	-.09	-.05	.04	-.08	-.07	.08	-.04	.07	.40	.20	1.0	.25
25	-.07	-.08	.25	-.13	-.16	-.12	-.1	-.06	.19	.06	.21	.05	.15	-.14	-.13	.18	-.16	-.11	-.02	-.02	-.10	.34	.17	.25	1.0