

An Evaluation of an Anti-Bullying Intervention in a Second Level School

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ABSTRACT

This project aimed to evaluate the effectiveness of an anti-bullying intervention in a second level school located in North Dublin. The research instrument was a self-administered anonymous questionnaire completed at two time points, before and after the anti-bullying intervention. The intervention did not produce any significant decrease in bullying behaviours by self report in fact bullying, post intervention increased. Limitations of the current study and areas for further research are discussed.

INTRODUCTION

Bullying is usually defined as repeated acts of aggression, intimidation or coercion against a victim who is weaker than the perpetrator in terms of physical size, psychological/social power, or other factors that result in a notable power differential (Carney & Merrell, 2001; Smith & Ananiadou, 2003). Olweus (1999) and Smith and Sharp (1994) have commented that bullying has been conceptualised as a distinct type of aggression characterised by a repeated and systematic abuse of power. This power imbalance makes it difficult for victims to defend themselves. Episodes are intentionally repeated over time until they constitute a relational problem (Ortega & Mora-Merchan, 2000, 2008, cited in Ortega, Elipe, Mora-Merchán, Calmaestra, & Vega, 2009).

Olweus (1999), one of the most prolific researchers and writers in the area of bullying, has defined bullying as “a form of aggression that occurs when an individual or group intimidates, excludes, harasses, or mistreats, another or others, directly (physically or verbally) or indirectly (threats, insults, isolation, destruction, or theft of belongings, etc.)”(p.4). More recently, cyber-aggression (e.g., text messaging and emailing hurtful messages or images), constitutes a new venue for inflicting harm in an increasingly electronic youth culture (Williams & Guerra, 2007).

It is difficult to obtain an exact measurement of the extent of bullying and childhood aggression, but what we do know is that bullying is not an isolated problem unique to specific cultures but is prevalent worldwide, as evidenced by a large international research base (Carney & Merrill, 2001; Cook, Williams, Guerra & Kim, 2009; Elsea et al., 2004; Kanetsuna & Smith, 2002). Research indicates that between ten and thirty percent of children and youths are involved in bullying, although prevalence

rates vary significantly as a function of how bullying is measured (Nansal et al., 2001; Solberg & Olweus, 2003).

The majority of research on bullying has been conducted in Europe and Australia where the problem has been studied and addressed directly (Smith et al., 2004, Swearer & Espelage, 2004). The first widely disseminated and published research on school bullying interventions stemmed from the pioneering work of the Norwegian researcher Dan Olweus in the 1970s (e.g. Olweus, 1978). His anti-bullying prevention / intervention programme served as the prototype for most efforts and was developed during the 1980s and 1990s and still exerts great influence on contemporary intervention models and programmes and indeed is the genesis of the bullying intervention which this project attempts to assess.

In the United States only one large national study on bullying has been conducted (Nansal et al., 2001). In this study it was found that 29.9 percent of respondents reported moderate to frequent involvement in bullying with 13 percent self-identified as bullies, 10.6 percent identified as victims and 6.3 percent as both. Research by Crick and Grotpeter (1995) indicates that boys are more likely to be both the victim and the instigator of physical aggression and bullying, though in many schools girls are catching up with the rate of aggressive behaviours (Devoe et al., 2002).

Cross-sectional studies of bullying over time indicate that bullying increases between elementary and middle school and then again directly following the transition to high school (Nansal et al., 2001). This increase in bullying in adolescence is also accompanied by a shift of attitudes about the use of aggression. Aggression is viewed less negatively by peers during adolescence. In fact bullies become more popular as they get

older (Graham, Bellmore & Juvonen, 2003). On the other hand, victims of bullies are more rejected by peers and less likely to have friends than non-victimised classmates throughout the school years (Graham, Bellmore & Juvonen, 2003).

In Ireland, research commenced with empirical studies using relatively small samples. These studies yielded important, informative and indicative data and appeared in the late 1980s. These included Byrne's (1987) study of a single Dublin boys' school (Byrne, 1993), Mitchell and O'Moore's (1987) survey of twenty-four Dublin schools, and O'Moore and Hillery's (1989) study involving four Dublin primary schools. Byrne (1999) notes that until 1993 there was sporadic interest in the topic of bullying (p.115), but since then, there has been intense media interest in bullying (p.112).

Indeed, 1993 marked a turning point in bullying research in Ireland: the First National Conference on Bullying in Ireland was held (O'Donnell, 1993), and two major publications in the area appeared (Byrne's *'Coping with Bullying in Schools'* and the Irish Society for the Prevention of Cruelty to Children's *'Stop Bullying'*). At a national policy level too, the *'Guidelines on Countering Bullying Behaviour in Primary and Post Primary Schools'* (Department of Education and Science, 1993) were circulated to all schools. These guidelines were drawn up by a ministerial working group, consisting of a Department of Education Principal Officer, two school Inspectors (one primary and one post-primary), a Department of Education Psychologist, a parent representative, Professor Mona O'Moore, Co-ordinator of the Anti-Bullying Research and Resource Unit at Trinity College Dublin. In the guidelines bullying is defined as "repeated aggression, verbal, psychological or physical, conducted by an individual or group against others". The guidelines go on to refer to examples of different types of bullying, including physical

aggression, damage to property etc. These guidelines recommend the development of a whole school anti-bullying policy. Research has shown that levels of bullying in Irish secondary schools in the following ten years has not decreased and in some cases has increased (O'Moore & Minton, 2005).

O'Moore, Kirkham and Smith (1997) carried out the first nationwide study of bullying behaviour in Irish schools, which was funded by the Department of Education, during 1993-94. The results were released in 1996. This constituted the largest sample to date in Ireland and the United Kingdom. It is the only national study of bullying behaviour other than the Norwegian study by Olweus (1984). The results were presented to the *International Conference on Research into Bullying Behaviour in Schools*, which was held in October 1996, in the University of Dublin, Trinity College (O'Moore, Kirkham & Smith, 1997). The findings from this national study showed that bullying behaviour was prevalent in Irish primary and post-primary schools. One in fifty children in post primary schools were subjected to frequent and serious peer bullying.

Merrell, Gueldner, Ross, & Isava (2008) have noted that some of the more frequently stated descriptive findings include; bullies tend to have poorer academic skills and grades than the majority of their classmates; often lack the characteristic of empathy, and may have more cognitive distortions and social perception biases related to perceived threats in their environment with respect to how aggression is viewed as an effective way to solve problems. Bullies also tend to be at heightened risk for substance use and later criminal behaviour, are likely to become increasingly unpopular with peers as they get older, and tend to come from homes where there is poor parental role modelling in the

form of coercive and aggressive means of problem solving and a lack of consistent and effective discipline.

There has also been consistency in the research on victims of bullying. Typically victims of bullying tend to be physically smaller or weaker in some other way than the perpetrators, are more anxious, fearful, and insecure than students in general; they are often cautious, sensitive and quiet and are more likely to be depressed and have poor self esteem. In the course of Olweus' (1993) research, in-depth interviews with parents of victims indicate that male victims are characterised by a certain cautiousness and sensitivity from an early age. They are often lacking confidence among their peer group, tend to have poor self-assertive skills and tend to handle aggressive situations poorly and are more likely to show anxiety in social situations. Victims tend to have a negative view of themselves and their situations. They often look upon themselves as failures and feel stupid, ashamed and unattractive. Research has been conducted which shows that victims do score lower than average on measures of self-esteem. Victims tend to have a poor opinion of themselves. Rigby (2002) makes the point that "they do not stick up for themselves because they cannot stick up for themselves. One possibility is that they do not feel they are worth sticking up for" (p.242).

Egan & Perry's (1998) research, involving one hundred and eighty nine children of an average age of eleven, concluded that low self-regard was a key factor in predicting subsequent increases in victimisation. Children who were victimised more often than others suffered significant lowering in their self-regard compared with the same measure five months earlier. The self-regard that matters here is an indicator of perceived (and probably real) inadequacy in handling interpersonal difficulties that preceded peer

victimisation. Victims, however, can have very high levels of global self-esteem for example feeling good about oneself because of academic competence in a particular subject.

Victims of bullying tend to be lonely and abandoned at school. They do not have a single good friend in their class. They are not aggressive or teasing in their behaviour. These children often have a negative attitude towards violence and the use of violent means. Interestingly, Rigby's (1996) study identified victims of bullying as being significantly less cooperative than others. Given their negative experiences with peers this is hardly surprising. A high percentage of victims tend to engage in school avoidance behaviours, and many reported victims of bullying at school end up dropping out of the school system.

Bullying can impact on the physical, emotional and social health of children. Indeed, bullies, victims and those who are both bully and victim have shown significantly increased risk for depressive symptoms and suicidal ideation (Rigby, 1997). In general, victims are at increased risk of depression and lower self esteem in adulthood (Olweus, 1993). Victims of bullying can suffer significant long term psychological problems, including loneliness, diminishing self-esteem, psychosomatic complaints (including headaches, stomach aches, poor sleeping patterns, and bed wetting) and depression (Hawker & Boulton, 2000; Kaltiala-Hino, Rimpela, & Rantanen, 1999; Rigby & Slee, 1999). Victims also develop a fear of the bullying situation, resulting in them wanting to avoid school, as they often report feeling very unsafe (Berthold & Underwood, 1992). For bullies there is an increased risk of delinquency, crime and alcohol abuse (Nansel et al., 2001). Haynie et al., (2001) concluded that "bullying might allow children to achieve

their immediate goals without learning socially acceptable ways to negotiate with others, resulting in persistent maladaptive patterns” (p. 31).

Recognising that bullying and aggression result in negative academic, emotional and behavioural consequences, a number of programmes have been developed to address the problem of bullying and aggression in schools. The most widely known and extensively developed programme targeting the reduction of bullying and aggressive behaviours was developed by Olweus and his colleagues which showed large reductions in bullying and victimisation among Norwegian students (Olweus & Limber, 2002).

The most tragic outcome of victimisation is suicide. It was the suicide, within a short interval, of three boys in Norway that led, in 1983 to the first major anti-bullying intervention by schools at national level. Such was the public reaction to the deaths that the Norwegian government mandated that every student in the country would be exposed to a programme that combats bullying. The Olweus Bullying Prevention Program (Olweus, 1993), as it became known, was the first comprehensive, whole-school intervention implemented on a large scale and it was systematically evaluated. It has been described as a school-based anti-bullying intervention programme: it focuses directly on bully/victim problems and aims at reducing levels of peer aggression and victimisation (Schwartz et al., 2000).

The Olweus intervention programme is based on a set of three key principles, derived from research on the development and modification of the problem behaviours concerned. It is thus important (1) to try and create a school characterised by warmth, positive interest and involvement from adults, on the one hand and (2) to have firm limits

to unacceptable behaviour on the other. In the case of rule violations (3) non-hostile, non-physical sanctions should be consistently applied.

The Norwegian Study in Bergen (Olweus, 1991, 1993) involved a whole school approach with interventions at the school, the classroom and individual level. The intervention was designed to restructure the social environment by implementing clear rules against bullying and by actively involving teachers, peers and parents (Olweus 1993).

The Norway intervention was designed to increase awareness and knowledge about the problem of bullying, including dispelling myths actively involving teachers and parents in planning and implementation developing clear rules against bullying behaviour and providing support and protection for victims with an emphasis on eliminating their isolation from the peer group (Olweus, 1987). The programme comprised a systematic approach to reducing bullying with components at each of the school, parent, classroom/peer, and individual levels (Olweus, 1991; Roland, 1993). It combined primary and secondary prevention: all children in a school participate in activities to increase their understanding and to provide them with skills to deal with bullying. Individual children who experience victimisation are provided with additional guidance.

In 1983, all Norwegian schools were provided with a package of written materials on the background and management of bullying. Roland (1993) notes that the Norwegian campaign had been founded on ten years of efforts during which research fostered public and professional concern about bullying which was translated into wide media coverage and support for the intervention (Pepler, Craig, Ziegler & Charach, 1994).

A core component of the intervention at school level included a conference day for teaching and non-teaching staff, improved supervision at break and lunch times, regular staff meetings for continuing education and a monitoring programme within the school (Olweus, 1993). Olweus prepared a thirty-two-page booklet for teachers to inform them of the problems of bullying and strategies for addressing bullying incidents. At parental level, regular meetings were organised to inform parents of the problem of bullying. Olweus developed a four-page booklet for parents of school children, which was distributed throughout the country. A twenty-minute video depicting the everyday lives of two bullied children was shown to parents, children and teachers. The material was intentionally graphic with the intention of delivering a cogent message about bullying and its consequences. However the video was not part of the material sent to all schools - it had to be rented or bought.

Within the Norwegian intervention there were several components at the classroom level. Class rules were established in collaboration with the children and efforts were made to include isolated children. Regular class meetings were held to discuss these rules and to discuss fair sanctions for violations of the class rules and to encourage an awareness and concern for victims (Pepler et al., 1994). Another component included serious talks with bullies and victims, as well as with their parents.

Interestingly the curriculum content in the Olweus model was not devised in the form of a unit of lessons to be taught to pupils. Teachers were given broad guidelines about how to approach the subject. The classroom activities of the teachers were nevertheless focused on outcomes in pupils' learning and performance objectives so that anti-bullying practices would be encouraged. They included class rules against bullying, class meetings

and cooperative learning. A list of class rules was suggested for teachers to use, as a basis for the focus of discussion. These class rules included:

We should not bully other students.

We shall try to help students who are bullied.

We shall make a point to include students who become easily left out.

(Olweus, 1993)

Several suggestions were made about clarifying the kinds of behaviour to which the rules referred were made. Suggestions for using literature, as the focus for creating empathy were also mentioned. No specific examples were given but teachers were referred to a list of resources in Skinner (1992). Role-play was used to help students deal better with bullying, and to act positively as bystanders. However no specific examples were given. Olweus recommends using concrete situations from the classroom or from more general situations as a starting point.

Olweus recommended class meetings on a weekly basis to achieve more lasting results (Olweus, 1993). The purposes of these were to discuss bullying-related matters as topics present themselves. Group work and other co-operative learning methods were used to encourage students to develop more positive attitudes towards one another. This is viewed “from the more limited perspective of preventing and countering bully/victim problems” (Olweus, 1993, p. 42).

No explicit learning or change objectives were formulated in the Bergen model (Stevens, de Bourdeaudhuij, & Van Oost, 2001). This was an oversight, which was

repeated in many adaptations of the model. In addition, learning objectives for the teachers, as an element of the intervention, were not described.

Olweus studied the impact of the intervention in forty-two primary and secondary schools with students aged eleven to fourteen years. According to Olweus, the Norwegian programme resulted in a decline in bullying incidents by 50% over two years, with no displacement of bullying from the school yard to unsupervised locations (Olweus, 1993). Other positive effects of the programme included a reduction in vandalism, theft and truancy as well as an increase in the students' satisfaction with school (Olweus, 1991). The Olweus model has been very influential internationally, chiefly because of the reported fifty percent reduction in bullying achieved by the intervention. However Roland's replication of the study in the neighbouring county of Rogoland in 1986 met with considerably less success (Roland, 1989). Similar anti-bullying programmes undertaken in Germany, Belgium and Southern Carolina also met with little or no improvement (McGrath & Noble, 2007). Roland (1993) cautions that the most successful effects were in schools with a strong commitment to implementing the programme.

Smith and Sharp (1994) observed that schools appealing for external help from the research group, obtained larger improvements in bullying and victimisation. In line with this, Olweus provided extensive support for schools that participated in the study, while Roland, whose attempt to replicate the study, did not yield any positive results, did not (Roland & Munthe, 1989). Based on these findings, Smith and Sharp suggested that this assistance may have resulted in positive programme findings and that absence of it could explain the zero outcomes. The success of the Olweus program may be related in part to its historical context, perhaps making it a unique and unreplicable case. The

programme was introduced into schools on a national scale, in the wake of several highly publicised suicides that were linked publicly to bullying (Olweus, 1993). It seems plausible that this could have increased the seriousness and urgency with which school officials and students invested themselves in the initiative.

Whitted and Dupper (2005) indicate that the most successful primary interventions address (in some form or another) the following: (1) the interventions are designed to positively impact school climate, (2) the interventions are designed to positively impact the teachers ability to intervene in bully victim dyads (also known as teacher efficacy), and (3) the interventions are designed to positively impact the bullies and victims themselves. Thus the best practice for preventing or reducing bullying behaviours in schools involve a multilevel and comprehensive approach that impacts the school and classroom climate, the teachers, and the students.

However Frey, Hirschstein, Edstrom, and Snell (2009) have noted that most recent evaluations of bullying have been somewhat disappointing, for example Jenson and Dietrich, 2007. Indeed Smith, Schneider, Smith and Ananiadou (2004) have concluded that ‘the majority of programmes evaluated to date have yielded no significant outcomes on bullying measures of self-reported victimisation and bullying’ (p.547).

The present study examines the efficacy of an anti-bullying intervention programme conducted among first year students in a mixed second level school located in a middle class town in north county Dublin. The programme, known as the Cool School programme was developed by the Child Psychiatric Services of the former North Eastern Health Board.

The intervention takes a whole school approach to the management of bullying and aims to provide training and support at school, class and individual level. There are a number of elements to the programme, which include teacher training, the formation of a focused care committee, parent education, student education and resource material development.

The general aims of the programme are to:

- Sensitise teachers to the issue of bullying in school;
- Encourage the professional development of teachers in relation to bullying by focusing on best practice and practical strategies for school communities;
- Impart knowledge about salient aspects of behaviours relating to bullying;
- Encourage teacher involvement in prevention of bullying in schools;
- Encourage teacher intervention in bullying incidents;
- Provide teaching materials including lesson plans for students, video material and a series of advice books;
- Support school communities to develop effective policies and strategies to prevent and resolve bullying, which are consistent with the Department of Education and Science Guidelines on countering Bullying (1993);
- Support the implementation and evaluation of an anti-bullying policy;
- Increase student, teacher and parents' knowledge and awareness of the extent, effects and dynamics of bullying;
- Promote early disclosure i.e. telling in schools;
- Encourage bystanders to intervene in positive ways;
- Support those vulnerable to, or involved in, bullying;

(Cool School Policy Document, 2007)

Key elements of the programme include a day-long staff seminar to inform all school staff about bullying and the completion of an anti-bullying policy which is also congruent with Department of Education and Science Guidelines on Countering Bullying (1993), coupled with the delivery of a 'Friendship Week' during which five lessons are taught across the year group. The curriculum is designed to be developmental with each lesson building on knowledge and attitudes gained from the previous one. Each of the five lessons has a clear objective, a clear set of outcomes, a description of materials needed, detailed methodology notes for teachers including suggestions for introducing and processing the work and resources which can be photocopied. Cross-curricular references are made to lessons from the Social, Personal and Health Education programme (2000).

The aims of the curriculum are to prevent bullying by empowering young people with knowledge, skills and attitudes to help them cope and deal with bullying if it occurs and to facilitate self-development in a safe learning environment. The lessons are used to provide basic knowledge and skills to young people and are meant to be used in a preventive context (Cool School Policy Document, 2007). Additional teacher training is provided to two nominated teachers per school, to enable them to investigate and resolve bullying and to facilitate prosocial skills groups for children perceived as being at risk from bullying. Finally, a seminar is offered to parents on bullying.

Smith and Sharp (1993) have argued that large scale survey data is needed in order to make reliable generalisations about the extent of bullying in general and the

effectiveness of interventions. An anonymous self-reporting questionnaire seems the most reliable and valid method.

It is expected that the administration of this anti-bullying programme will result in a measureable reduction in bullying problems. Specifically, it is hypothesised that scores on the Olweus Bullying Questionnaire (see Appendix A) gathered after the anti-bullying intervention will be significantly lower than scores gathered prior to the intervention. It is also hypothesised that the execution of the intervention will result in a reduction of anxiety as measured by Spence Children's Anxiety Scale (see Appendix B).

The study had a number of secondary aims, i.e. to investigate what types of bullying were taking place, where bullying was happening, what effect teachers were having on bullying behaviour, whether Upper-Band and Lower-Band students had a different experience of bullying.

METHODOLOGY

Design

The present study attempted to determine the efficacy of an anti-bullying intervention conducted in a mixed second level school in north county Dublin. The bullying intervention was delivered to students during their first year in the school. For ethical reasons the researcher (who is employed as a Guidance Counsellor) did not gather the data himself, this was done by the other Guidance Counsellor who was responsible for the first year students.

Following a thorough review of the literature it was decided to use a pre-test / post-test design comprising of self-administered anonymous questionnaires at two time points. The first time point was before the intervention occurred and the second questionnaire was administered several weeks afterwards.

Sharp and Smith (1993) have argued that to make reliable generalisations about the extent of bullying in general and the effectiveness of interventions beyond those on a very localised scale, large survey data is needed. Here, an anonymous self-report questionnaire seems the most reliable and valid method. This approach was first pioneered by Olweus (1978, 1991) in Norway. His methodology has been adapted for use in many other countries including Spain, the Netherlands, and Canada (Stevens, De Bourdeaudhuij & Van Oost, 2000; Ortega & Lera, 2000) However some researchers have argued that using questionnaires in school settings, on matters such as bullying, is unethical. Serious bullying can come to light but because the questionnaires are anonymous, one cannot do anything about it. This is indeed true and cannot be refuted,

but under non-anonymity situations, such information would never come to light at all (Rigby, 1994).

Participants

One hundred and twenty participants completed the pre-intervention questionnaire, of whom seventy five were male and 45 female. One hundred and thirteen participants took the post-intervention questionnaire, seventy-one of whom were male and forty-two female. Participant ages ranged from 12 years to 14 years both pre- and post-intervention. The sample comprised of all students within the first year cohort, comprising six classes. Each class was categorised as either Upper-Band (higher academic ability) or Lower-Band (lower academic ability).

Materials

The present study used the Olweus Bullying Questionnaire (OBQ). The OBQ was chosen since it is a well established and widely used self-report questionnaire. Examples of studies that have used the OBQ include Nansel et al. 2001; Olweus, 1993; O'Moore et al., 1997; Pellegrini et al. 1999; Smith and Sharp, 1994; Smith et al. 1999b; Whitney and Smith, 1993. The OBQ is a forty item questionnaire for the measurement of bully/victim problems such as; exposure to various physical, verbal, indirect, racial, or sexual forms of bullying/harassment, various forms of bullying other students, where the bullying occurs, pro-bully and pro-victim attitudes and the extent to which the social environment (teachers, peers, parents) is informed about, and reacts to the bullying. It is considered by researchers as a 'gold standard' research instrument in the field of research into bullying. Previous analyses of the psychometric properties of the OBQ, based on classical test

theory, illustrate the measure's strong psychometric properties, with internal consistency reliabilities (Cronbach's alpha) for summary scales of bullying others typically in the .75-.94 range, for example.

In conjunction with the OBQ, the Spence Children's Anxiety Scale (SCAS) was used to measure anxiety. It is a forty five item questionnaire. It generates a global anxiety score along with a number of subscales in regard to different sources of anxiety (separation anxiety, physical injury etc). It was chosen due to the fact that the internal consistency of the total scale is extremely high (Cronbach's alpha = .93) confirming that the items of the scale are clearly measuring the same construct. The internal consistency co-efficients for the subscale scores were also adequate, being 0.74 for separation anxiety, 0.74 for social phobia, 0.76 for obsessive compulsive, .82 for panic/agoraphobia, and 0.77 for Generalized Anxiety. The internal consistency was lower for the Physical Injury Fears (Cronbach's alpha = .60) reflecting greater variation in children's responses on this dimension. The internal reliability of the SCAS total scale and subscales has also been examined separately for each age group and gender, to check that the results were equivalent. Test re-retest reliability was examined and reported by Spence (1998) for a sample of 344 children aged 8-12 years from a community sample. Children were assessed on two occasions over a 6-month period. The analyses showed a 6-month test retest reliability co-efficient of 0.60 for the total score on the SCAS. This suggests reasonably high reliability over a 6-month period for the total score. Similar test-retest results were found for 12-14 year olds by Spence, Barrett et al (2003) for 362 adolescents who were reassessed 12-weeks after the initial data collection. A 12-week test-retest reliability co-efficient of 0.63 was found for the total score on the SCAS.

Procedure

Permission to engage in this research project was sought from the school's Board of Management and then from each of the parents or guardians of every student within the first year cohort. Permission letters were sent to each child's parent or guardian. The letter explained the purpose of the research, an assurance of confidentiality, a pledge that the questionnaires were solely about the child's experience of bullying and their level of anxiety and no other information was to be gathered. The letter ended with the clear statement that the parents, or guardian, or indeed the student themselves, had the right not to participate in the research study. Copies of the letter to the School's Board of Management, requesting their permission to engage in the research and the letter sent to parents, requesting their consent, can be found in the appendix.

Every effort was made to convey to the students and their parents and guardians that they had the right not to participate in the research. Of the full first year cohort two students did not participate, one did not wish to participate and the parents of another student did not wish her to participate. The researcher was conscious that, as an adult carrying out research involving young people, he might well hold some power over them, however unintentional. The writer considered the idea of informed consent and voluntarism crucial.

At both time points, the students' Guidance Counsellor, under exam conditions, administered the questionnaires. With prior arrangement with the Principal, all first year students were gathered in the schools 'study centre' and the questionnaire was administered. It was explained to the pupils that the questionnaire was about bullying and some other conditions at the school in order to make the school environment as positive

and as safe as possible, that it was important to answer the questions honestly as they could and that no one would know what they had written. Every effort was made to emphasise the anonymity of the questionnaire. The definition of bullying was presented to the group and time was given to take possible questions that needed clarification. Examples of how to answer each question were given and read out to the group to ensure that they understood. Each individual question was read out and a pause was given, to give the children sufficient time to formulate their response. After completion, with no time limit imposed, the questionnaires were placed in an envelope and sealed. Administration of the second questionnaire occurred under the exact same conditions.

RESULTS

Preliminary Data Analysis

Exploration of the data revealed that skewness and kurtosis for all of the sub-scales of the Spence Child Anxiety Scale (SCAS) were in acceptable ranges with the exception of the Agoraphobia sub-scale. Kolmogorov-Smirnov tests were significant for all subscales however. The Olweus Bullying Questionnaire does not produce interval or ratio data. Given that neither scale satisfied parametric assumptions, non-parametric statistical analyses were used throughout.

Pre- and post-intervention analysis of bullying prevalence

Table 1 shows the frequency and the percentage values for levels of bullying pre- and post-intervention. Following Olweus' own methodology (1993), a 'Victim' was defined as any student who scored three or higher on Question 4 ("How often have you been bullied at school in the past couple of months?") and a 'Bully' was defined as any student who scored three or higher on Question 24 ("How often have you taken part in bullying another student(s) at school in the past couple of months?"). A 'Bully-Victim' (i.e. a student who has bullied and who has also engaged in bullying others) was defined as any student who scored 3 or higher on both Question 4 and Question 24. A 'Not Involved' student was one who scored below 3 on both questions, indicating that they had neither been bullied themselves, nor engaged in bullying others.

Wilcoxon signed-rank tests were used to examine whether the differences in frequencies pre- and post-intervention for the four bullying behaviour categories already described (i.e. Victim, Bully, Bully-Victim, or Not Involved) were significant. For the Victim category, tests revealed that the difference was not significant ($Z = -1.22, p > .05$, 2-tailed). Similarly, for the Bully category, tests revealed that the difference from pre- to post-intervention was not significant ($Z = -1.42, p > .05$, 2-tailed). Again, for the Not-Involved category the difference was not significant ($Z = -1.74, p > .05$, 2-tailed). As

shown in Table 1, no students fell into the category of Bully-Victim either pre- or post-intervention.

Table 1

Pre- and post- intervention frequencies for the 4 bullying behaviour categories

	<u>Pre-Intervention</u>		<u>Post-Intervention</u>	
	<u>Frequency</u>	<u>Percentage</u>	<u>Frequency</u>	<u>Percentage</u>
Bully	1	0.8%	4	3.3%
Victim	10	8.3%	15	13.3%
Bully-Victim	0	0.0%	0	0.0%
Non-Involved	109	90.8%	94	83.2%

Pre- and Post-Intervention Analysis of Anxiety levels

Descriptive statistics for the SCAS sub-scales and SCAS Total Anxiety Scores are presented below in Table 2.

Table 2

SCAS Sub-Scale Scores and Total Anxiety Scores Pre- and Post-Intervention

	<u>Pre-Intervention</u>		<u>Post-Intervention</u>	
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
Separation Anxiety	2.55	2.42	2.67	2.61
Social Phobia	5.4	3.16	5.18	3.47
Obsessive-Compulsive	4.04	3.56	3.92	3.74
Panic/Agoraphobia	2.97	3.63	2.62	3.99
Physical Injury	2.84	2.60	2.74	2.57
Generalised Anxiety	5.47	3.46	4.87	3.74
Total Anxiety Score	23.28	15.30	22.05	16.28

The Wilcoxon signed-rank test was used to examine whether there were any significant differences between pre- and post-intervention levels of anxiety for any of the subscales on the SCAS. For the Separation Anxiety sub-scale the differences were not significant ($Z = -0.11, p > .05, 2\text{-tailed}$). For the Social Phobia sub-scale the differences were not significant ($Z = -.78, p > .05, 2\text{-tailed}$). For the Obsessive-Compulsive sub-scale the differences were not significant ($Z = -.51, p > .05, 2\text{-tailed}$). For the Panic/Agoraphobia sub-scale the differences were not significant ($Z = -1.53, p > .05, 2\text{-tailed}$). For the Physical Injury Fear sub-scale the differences were not significant ($Z = -.34, p > .05, 2\text{-tailed}$). For the Generalised Anxiety sub-scale the differences were not significant ($Z = -1.72, p > .05, 2\text{-tailed}$). For the SCAS Total Anxiety Score the differences were not significant ($Z = -1.00, p > .05, 2\text{-tailed}$). Chi Square analyses revealed that there was no significant difference in bullying rates between Upper-Band and Lower-Band students.

Students' Perception of Teachers' Impact on Bullying Behaviour in Schools

Three questions from the Olweus Bullying Questionnaire give an insight into how students perceive the impact that teachers have on bullying behaviour in school: Question 20 (“How often do the teachers or other adults at school try to put a stop to it when a student is being bullied at school?”), Question 34 (“Has your class (home room) teacher or any other teacher talked with you about bullying other students at school in the past couple of months?”) and Question 39 (“Overall how much do you think your class (home room) teacher has done to counteract bullying in the past couple of months?”). Results for Question 20 are shown in Table 3.

Table 3

Students' responses to Question 20: “How often do the teachers or other adults at school try to put a stop to it when a student is being bullied at school?”

	<u>Pre-Intervention</u>		<u>Post-Intervention</u>	
	<u>Frequency</u>	<u>Percent</u>	<u>Frequency</u>	<u>Percent</u>
Almost Never	15	12.5%	14	12.4%
Once in a While	5	4.2%	12	10.6%

Sometimes	18	15.0%	13	11.5%
Often	25	20.8%	24	21.2%
Almost Always	51	42.5%	46	40.7%

As shown above in Table 3 the majority of students (63.3%) believed that teachers often or almost always would try to put a stop to bullying. Results pre- and post-intervention were similar. Analysis showed that the mean response pre-intervention ($M = 3.81$, $SD = 1.39$) was not significantly different from the mean response post-intervention ($M = 3.69$, $SD = 1.44$), $Z = -.52$, $p > .05$, 2-tailed. Results for Question 34 are shown below in Table 4.

Table 4

Students' responses to Question 34: Has your class (home room) teacher or any other teacher talked with you about bullying other students at school in the past couple of months?

	<u>Pre-Intervention</u>		<u>Post-Intervention</u>	
	<u>Frequency</u>	<u>Percent</u>	<u>Frequency</u>	<u>Percent</u>
I haven't bullied other students at school in the past couple of months	107	89.2	92	81.4
No, they haven't talked with me about it	7	5.8	8	7.1
Yes, they have talked with me about it once	3	2.5	7	6.2
Yes, they have talked with me about it several times	2	1.7	5	4.4

As shown above in Table 4 the great majority of students both pre- and post-intervention claimed that their teacher had never talked to them about bullying other students in

school as they themselves had not engaged in bullying (which begs the question), and the pattern of responses did not change from pre- to post-intervention. Analysis showed that the mean response pre-intervention ($M = 1.16$, $SD = .54$) was not significantly different from the mean response post-intervention ($M = 1.33$, $SD = .78$), $Z = -1.77$, $p > .05$, 2-tailed.

Finally, results for Question 39 are shown below in Table 5. Pre-intervention the *minority* of students felt that their teacher had done a ‘good deal’ or ‘much’ to counteract bullying. However, post-intervention the trend had reversed and the *majority* of students felt their teacher had ‘done a good deal’ or ‘much’ to counteract bullying. Analysis showed that pre-intervention responses ($M = 2.57$, $SD = 1.39$) were significantly different from post-intervention responses ($M = 3.5$, $SD = 1.21$), $Z = -5.15$, $p < .05$, 2-tailed.

Table 5

Students' responses to Question 39: Overall how much do you think your class (home room) teacher has done to counteract bullying in the past couple of months?

	<u>Pre-Intervention</u>		<u>Post-Intervention</u>	
	<u>Frequency</u>	<u>Percent</u>	<u>Frequency</u>	<u>Percent</u>
Little or nothing	39	32.5%	11	9.7%
Fairly little	20	16.7%	13	11.5%
Somewhat	24	20.0%	17	15.0%
A good deal	23	19.2%	50	44.2%
Much	12	10.1%	21	18.6%

Analysis of the Spence Child Anxiety Scales Scores by Academic Banding

Table 6 below shows the SCAS total scores pre- and post-intervention for Upper-Band students, Lower-Band students, and for all students combined (both Upper- and Lower-Band). Analyses revealed that there were no significant differences between pre- and post-intervention SCAS Total Anxiety scores for Upper-Band Students, Lower-Band Students, or All Students. Similarly there were no significant differences between pre- and post-intervention SCAS sub-scale scores, no matter whether the students were grouped into Upper-Band, Lower-Band or All Students, indicating that the intervention did not have an effect on anxiety levels.

Table 6

Total Scores on the SCAS for Upper-Band, Lower-Band and All Students

	<u>Pre-Intervention</u>		<u>Post-Intervention</u>	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Upper Band Students	18.31	10.77	17.34	13.30
Lower Band Students	32.50	18.09	27.68	17.80
All Students	23.26	15.30	22.05	16.28

Despite the lack of differences in scores on the SCAS pre- and post-intervention, a significant difference *was* apparent between Upper-Band and Lower-Band students both pre-intervention ($Z = -4.23, p < .05, 2$ -tailed) and post-intervention ($Z = -3.17, p < .05, 2$ -tailed). Similar significant difference were observed for all of the SCAS sub-scales. Both pre- and post-intervention, Lower-Band students reported significantly higher scores on all the SCAS sub-scales and significantly higher SCAS Total Anxiety Scores, when compared to Higher-Band students.

There were insufficient numbers of students in the various categories (Victim, Bully, Bully-Victim and Not-Involved) to allow an ANOVA to be run in order to see if there were differences in anxiety between those groups.

Analysis of Location of Bullying Behaviour

The chart below in Figure 1 indicates the location of bullying behaviour (e.g. gym, bathroom, hallways). There were 66 reported locations of bullying behaviour pre-intervention and 85 post-intervention (Note: the number of reports is higher than might be expected from the number of 'Victims' in the data set because some students who indicated that they were not being bullied still specified a location where bullying had occurred in the past, and some students specified multiple locations). The data would imply that teachers were generally not present when bullying occurred as "Classroom (Teacher Present)" accounted for only 7% of reported locations pre-intervention and less than 6% post-intervention. Students who indicated that they had been bullied 'Somewhere Else' had the opportunity to specify another location. 7 students pre-intervention and 7 students post-intervention chose to do so. While no single other location stood out, the locations specified would all indicate that a teacher was not immediately present and the students felt they were unobserved by staff members (e.g. hallways, lockers, the library). One student explicitly stated the reason that bullying took place at his locker was that this location was not under surveillance ("at my locker he chose it because there is no cramras [sic]").

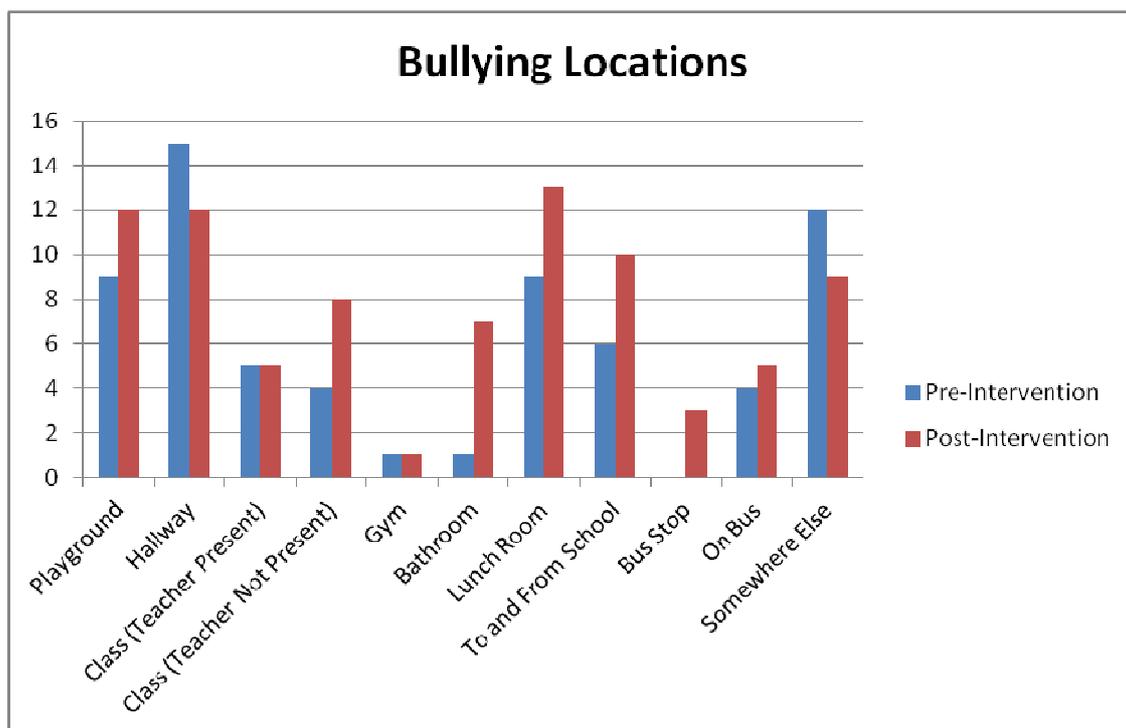


Figure 1

Location of Bullying Behaviour

Analysis of Reporting of Bullying Behaviour

In the Olweus Bullying Questionnaire, Question 19 allows students to indicate whether they had divulged to a confidant that they were being bullied (“Have you told anyone that you have been bullied in the past couple of months?”). Figure 2 below shows the pattern of confidants identified by the students both pre- and post-intervention (Note: there are more reports of divulging to a confidant than might be expected from the number of ‘Victims’ in the data set as some students who reported they were not being bullied still identified a confidant, and some students identified multiple confidants). Parents/Guardians and friends were the most common confidant types, each accounting for 31% of confidant types pre-intervention and 30% of confidant types post-intervention.

However, tutors were not a common confidant, accounting for only 4% pre-intervention and 10% post-intervention, indicating that students were turning to parents/guardians, friend and even siblings before tutors/teachers when seeking a confidant.

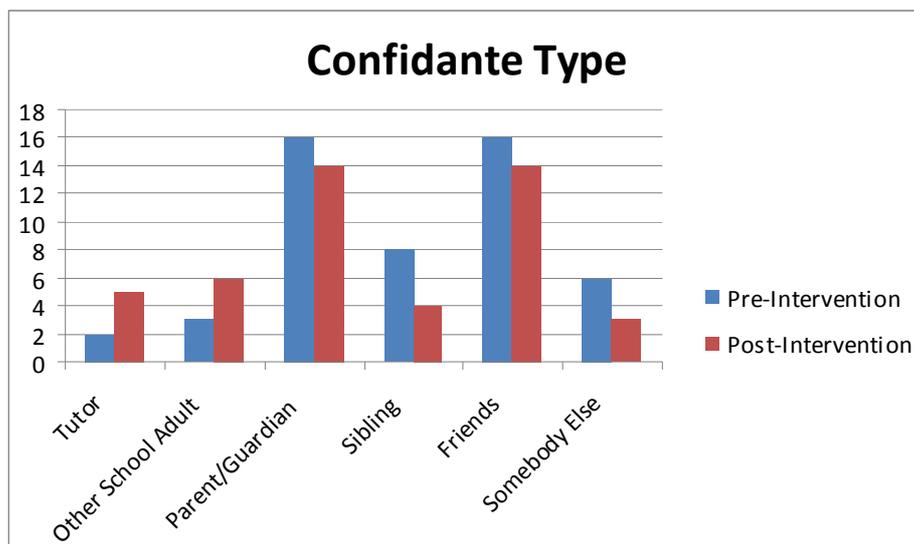


Figure 2 *Confidant Types Identified by Students*

Students who indicated they had confided in ‘Somebody Else’ were given the opportunity to identify that person, but few students did and no clear pattern of responses emerged.

Analysis of Type of Bullying Behaviour

Questions 5 to 13 of the Olweus Bullying Questionnaire allow students to specify the type of bullying behaviour they have been subjected to (e.g. “I was hit, kicked, pushed, shoved around, or locked-indoors”). Each question was scored on a Likert scale ranging from 1 (“It hasn’t happened to me in the past couple of months”) to 5 (“Several times a week”). A score of 3 (“2 or 3 times a month”) or higher was interpreted as meaning that the student was actively experiencing that type of bullying. Types of bullying reported can be seen below in Figure 3.

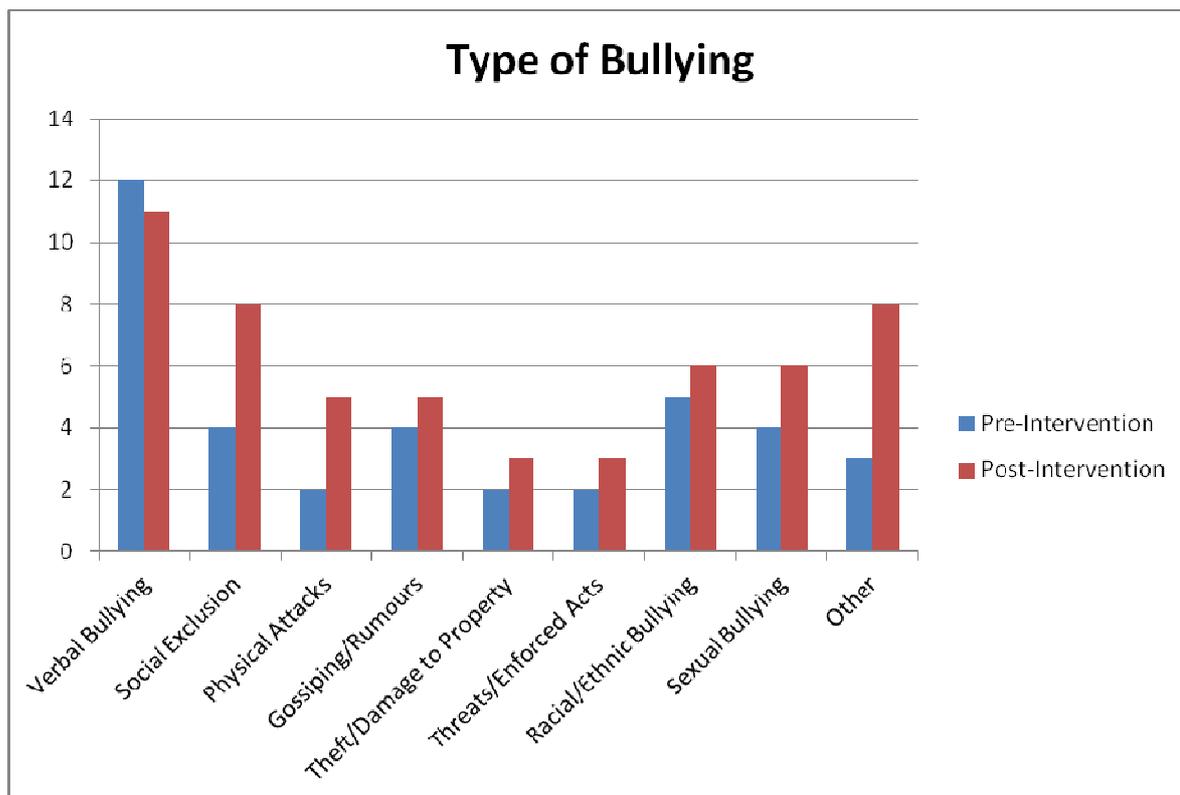


Figure 3 *Types of Bullying Reported*

Verbal bullying was the most common form of bullying experienced, accounting for 32% of reported bullying types pre-intervention and 20% post-intervention. The least common types of bullying were theft/damage to property (5% pre- and 5% post-intervention) and threats/enforced acts (5% pre- and 5% post-intervention).

DISCUSSION

A considerable body of research has examined the efficacy of various types of bullying reduction and prevention programmes. Despite this body of literature, many questions remain as to what is the most appropriate primary intervention for a school system to employ. Thus this research project sought to examine the efficacy of an anti-bullying intervention operating in a secondary school in north Dublin.

It was hypothesised that the delivery of this anti-bullying intervention would result in a measureable reduction in bullying problems. Specifically, it was hypothesised that scores on the Olweus Bullying Questionnaire gathered after the anti-bullying intervention would be significantly lower than scores gathered prior to the intervention. It was also hypothesised that the delivery of the intervention would result in a reduction of anxiety as measured by Spence Children's Anxiety Scale.

Effect of the Anti-Bullying Intervention on Bullying Prevalence

The first hypothesis was not supported; the curriculum intervention did not decrease bullying behaviour as measured by the Olweus Bullying Questionnaire. This result is supported by previous research (e.g.; Roland, 1989; & Smith & Ananiadou, 2004) which states that the majority of anti-bullying intervention programmes evaluated to date have yielded "no significant outcomes on bullying measures of self reported victimisation and bullying" (Smith & Ananiadou, 2004, p 547).

However it must be acknowledged that a significant flaw in the research methodology was that the wording of the questionnaire specified a timeframe of months, this research project may not have captured any change in behaviour as the post-test questionnaires were administered too soon after the intervention. The use of an amended OBQ would have been advisable.

Perhaps any reduction in actual bullying might have been balanced by an increased awareness of bullying which would have effectively made detection of the actual reduction impossible. Roland (2000) amongst others has suggested that a

heightened awareness of bullying behaviour among pupils may lead to an elevation in levels of reporting.

Effect of the Anti-Bullying Intervention on Anxiety Levels

In relation to the Spence Child Anxiety Scale (SCAS) sub-scale scores and Total Anxiety scores pre- and post-intervention the hypothesis was rejected. There was no significant difference between pre- and post-intervention SCAS Total Anxiety scores. It is of note that students located in lower-band classes were significantly more anxious than students located in upper-band classes, but were not more likely to be affected by bullying. Therefore, the difference in anxiety levels between academic bands must be due to another factor or factors not measured in this study. Merrell, Gueldner, Ross and Isava (2008) have noted that those who bully tend to have poorer academic abilities. An inference could be that students in lower-band classes may be more likely to be victims also, since they are more likely to share a classroom with an actual or potential bully. Perhaps students in the lower-band classes are bullied more but the methodological limitations of the current study precluded finding evidence for this.

Students' Perceptions of Teachers' Impact on Bullying Behaviour

Three questions from the Olweus Bullying Questionnaire give an insight into how students perceive the impact that teachers have on bullying behaviour in school: Question 20 ("How often do the teachers or other adults at school try to put a stop to it when a student is being bullied at school?"), Question 34 ("Has your class (home room) teacher or any other teacher talked with you about bullying other students at school in the past

couple of months?") and Question 39 ("Overall how much do you think your class (home room) teacher has done to counteract bullying in the past couple of months?").

In relation to Question 20 it is heartening that in both pre- and post-intervention the majority of students believed that teachers 'often' or 'almost always' would try to put a stop to bullying. Results pre- and post-intervention were similar. It can be inferred that the students believe teachers are effective at stopping bullying when they become aware of it. Clearly teachers are an important factor in the campaign against bullying.

In relation to Question 34 it is of concern that seven students stated a teacher had never talked to them about their bullying behaviour. This raises the question as to why not? Clearly only a small minority of students have been spoken to directly about bullying by their teacher- perhaps indicating that students are not being engaged in a one-to-one manner by teachers about bullying. This issue could best be addressed by a review of school policy.

Question 39 indicated that post-intervention the majority of students felt their teacher had 'done a good deal' or 'much' to counteract bullying. This change was significant implying that the intervention increased belief among the students that teachers could and would competently deal with bullying. This change in students' perceptions alone could justify the use of this anti-bullying intervention. If students become more confident in their teachers ability to deal with bullying, they might turn to them more in the future for help. This perception change may well discourage potential bullies from engaging in bullying if they believe their teachers are actively working to combat bullying behaviour. This result conflicts with a number of studies which suggest

that students are in fact skeptical about teachers' abilities to manage bullying (e.g., Pepler Ziegler & Charach 1995).

Location of Bullying Behaviour

Question 18 looked at the location of bullying and provided a wide variety of responses. The responses confirm the belief that teachers were not present when most bullying occurred. Students, moreover, may have limited bullying to times and locations where it could not be observed by teachers. This confirms research that stated that most bullying takes place at times and places where supervision is minimal (Egan & Perry, 1998). Farrington & Ttofi's (2009) meta-analyses confirmed that improved supervision is associated with greater reductions in bullying and victimization. Therefore supervision needs to be increased within the school. All areas of the school building need to be covered by the CCTV system. Students should be taught to move to a supervised area if they are being threatened.

In the OBQ, Question 19 allowed students to indicate whether they had divulged to a confidante that they were being bullied ("Have you told anyone that you have been bullied in the past couple of months?"). Parents/Guardians and friends were the most common confidante types, both pre- and post-intervention. However, tutors were not a common confidante. This is reflected in the literature which confirms that students are skeptical about their teachers' ability to identify or respond appropriately to bullying (Charach, Pepler & Zierler, 1995). International research has shown that few of those bullied confide in teachers. Boulton and Underwood (1992) note that older children and boys in particular were less likely to tell teachers. Victims may prefer to tell a parent, friend or no one at all. This reluctance to tell a teacher is perhaps unsurprising given their

skepticism of the teachers' ability to deal with bullying effectively. In light of the present findings which suggest reluctance on the part of victims to report their victimization to teachers, there is a need for further research to better understand the reasons for non-reporting. One possibility is that teachers are not providing opportunities for students to approach them about bullying problems. Talking to a teacher about bullying requires some privacy perhaps students are not afforded that privacy. Teachers are very mindful of child protection issues and are conscious not to be alone with students.

Limitations and Suggestions for Future Research

Several methodological improvements can be suggested, using the experience gained through this study. Pre- and post-intervention questionnaires were not matched and hence paired t-tests could not be performed. Because of this, there were increased threats to internal and external validity; statistical tests were limited to Wilcoxon signed-rank tests, as opposed to the more robust ANOVA. This methodology may have precluded finding significant changes in both bullying and anxiety levels pre- and post-intervention as paired-sample analyses are more sensitive than independent sample analyses since with paired-sample analyses between group variance is eliminated. However the researcher deliberately chose to make the questionnaires totally anonymous in order to elicit more honest responses from the students especially since the promise of anonymity may not mean much to a young secondary school student. The researcher had promised the students anonymity and this promise was kept.

Another limitation is the use of self-report data for bully and victim status. Bullies and victims often under-report the problem of bullying. Although the anonymity of the questionnaire and the fact that it did not take place within the classroom setting may have

improved reporting, interpretation of findings should take into account the use of self-report. A possible way to assess the intervention in the future would be to obtain more objective and reliable data by obtaining measurements from other sources, such as peers, teachers and parents. This is important, in the light of findings on the divergence of perceptions, among those who witness bullying (Pellegrini, 2001).

The sample was also limited to one school, with only 120 respondents, which limits the generalizability of findings. The results of this research should be replicated with larger samples and can be used to guide future research. The sample was very much homogenous both in terms of socio-economic status and in terms of age. The results may not be generalizable to either older or younger students or to students from rural or inner-city schools. If the research was to be replicated it is recommended that a number of schools be utilised. Thus the efficacy of the intervention could be tested by comparing pre-test and post-test data of students who received the intervention, (experimental) with those who did not (controls). A number of schools would help account for between-school variation.

A significant flaw in the methodology was that the wording of the questionnaire specified a timeframe of months. This research project may not have captured any change in behaviour as the post-test questionnaires were administered too soon after the intervention. With hindsight a modified version of the questionnaire should have been used which provided for a timeframe of weeks.

A critical question in intervention work, for the future, may be how to convert the anti-bullying attitudes into actual anti-bullying behaviour in bullying situations. According to Elsea & Smith (1998), most programmes seem to only work during the

short term because they often take place during a limited period of time and are not followed up. It is plausible that they are effective mainly in increasing awareness and changing attitude towards bullying. Changing behaviour is a more difficult task and requires more extensive research.

Notwithstanding the limitations, this study adds to the literature that suggests that changes in bullying behaviours are difficult to achieve with educational approaches alone. The brief educational component did little to impact attitudes towards bullying or actual bullying behaviour. Hence the findings are consistent with previous research that indicates that school-based educational approaches do not have a reliable and significant effect on rates of bullying. Although anti-bullying interventions appear to be useful in increasing awareness, knowledge, and self perceived competency in dealing with bullying, it should not be expected that these interventions will dramatically influence the incidences of actual bullying and victimisation behaviours, or that they will positively influence even a majority of the targeted outcomes (Merrell, Ross & Isava, 2008).

This study illustrates that there are no easy solutions in dealing with the problem of bullying in schools. “Despite the limited empirical support for the effectiveness of anti-bullying programmes, there is not sufficient evidence to conclude that such programmes be abandoned...the overarching message is that interventions can succeed, but not enough is known to indicate exactly how and when” (Smith & Sharp, 1994, p.558).

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