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A randomised control trial to reduce bullying and other aggressive behaviours in secondary schools

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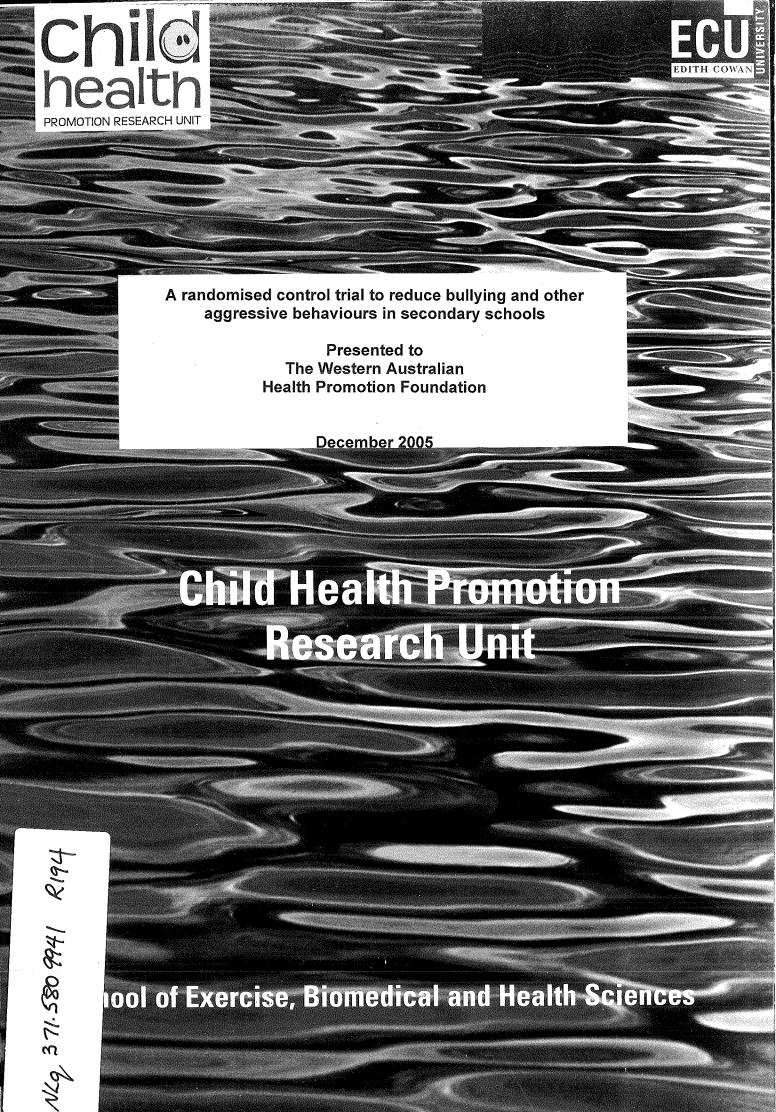
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A randomised control trial to reduce bullying and other aggressive behaviours in secondary schools

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The Western Australian
Health Promotion Foundation

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A randomised control trial to reduce bullying and other aggressive behaviours in secondary schools

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1. INTRODUCTION

In Australia bullying tends to peak twice in a school student's life – firstly at age 10 to 12 and then during the two years following their transition to secondary school (Rigby, 1994; Slee, 1995b) This transition to secondary school is considered a critical period to intervene on bullying (Farrington, 1993; Rigby, 1997, 1999; Sharp, 1995; Stevens, Bourdeaudhuij, & Van Oost, 2000; Whitney & Smith, 1993). It is suggested that compared with primary schools, the change in friendship structures that accompanies the move to secondary school, large student numbers and the less consistent contact and fewer close relationships between students and staff are factors contributing to the increase in bullying at this age (Stevens, Bourdeaudhuij et al., 2000; Patton, 2000).

The experiences of frequent bullying are slightly less prevalent in early secondary school (one in seven bullied at least once a week) (Slee, 1995a) compared to that experienced in primary schools (one in six at least once a week) (Rigby, 1997, 1998a). However the proportion of students bullying others appears to remain at similar high levels to that found in late primary school, where one in 20 report bullying others in the past six months (Whitney & Smith, 1993; Rigby, 1997; Zubrick, Silburn, & Gurrin, 1997). Approximately 35% of boys and 20% of girls attending secondary school report bully/victim problems (Rigby, 1998b). Slee and Rigby (Slee, 1995b; Slee & Rigby 1993a) found that while most episodes of bullying last a day or two, 17% last six months or more. Bullying in secondary school is more likely to be the more harmful 'relational bullying' (seeking to destroy an individual's connectedness to others), especially among girls, than other forms of bullying (Patton, 2000; Rigby, 1998b; Rigby 2003). Secondary students find being isolated from their peers through bullying to be significantly more stressful than younger students (Sharp, 1995).

Bullying in schools can seriously affect students' social, physical and psychological well being (Slee, 1995a; Sourander, Helstela, Helenius, & Piha,

2000) as well as their academic achievement (Zubrick et al., 1997). Students who are frequently bullied *and/or* who frequently bully others can be affected:

- Mentally Have a greater incidence of psychological disturbance in adolescence, including depression, anxiety and suicide ideation (Bjorkqvist, Ekman, & Lagerspetz, 1982; Craig, 1998; Kaltiala-Heino, Rimpela, Marttunen, Rimpela, & Rantanen, 1999; Olweus, 1992, 1993b; Rigby & Slee, 1999; Slee, 1995b, 1998; Slee, 1994; Sourander et al., 2000; Zubrick et al., 1997) and a lower self esteem (Bjorkqvist et al., 1982; Olweus, 1993a; Rigby, 1998b; Slee & Rigby 1993b).
- Physically Experience somatic complaints and poorer health (Rigby, 1997;
 Slee, 1995b; Williams, Chambers, Logan, & Robinson, 1996).
- Socially Feel lonely, (Kochenderfer & Ladd, 1996; Rigby, 1997), have fewer friends and feel rejected by their peers (Boulton & Underwood, 1992; Olweus, 1993a). They also tend to feel more socially ineffective, unpopular with their peers and have greater interpersonal difficulties (Craig, 1998; Forero, McLellan, Rissel, & Bauman, 1999; Kaltiala-Heino et al., 1999; Kochenderfer & Ladd, 1996; Kumpulainen et al., 1998).
- Academically Dislike school (Forero et al., 1999; Zubrick et al., 1997), are unhappy at school (Boulton & Underwood, 1992; Kochenderfer & Ladd, 1996; Rigby, 1997), fear going and feel unsafe at school (Olweus, 1993a), want to avoid school, have higher absenteeism (Kochenderfer & Ladd, 1996; Rigby, 1997; Zubrick et al., 1997) and have lower academic competence (Zubrick et al., 1997).

Students who bully others regularly are also more likely to be involved in other forms of delinquent behaviour such as truanting, graffiti use, trouble with police and shoplifting (Rigby & Cox, 1996). Bullying predicts subsequent anti-social and violent behaviour (Rigby 2003). Further, the frequent bullying of others has been found to be both intra- and inter-generational. That is, children who frequently bully others at age 14 are likely to continue this bullying, if not helped, at age 18 and 32 and these children also tend, at age 32, to have children who engage in bullying (Farrington, 1993). Persistent bullying or victimisation is also

predictive of substantial use of government support and health services by age 28 (Scott, Knapp, Henderson, & Maughan, 2001).

Interventions to counter bullying are considered a high priority in Australian schools today (Rigby 2002). However, examples of successful secondary school bullying interventions are limited. While many researchers have attempted to reduce bullying in secondary schools, most have failed to significantly reduce the number of students being bullied or bullying others, or change their attitudes about bullying (Naylor & Cowie, 1999; Peterson & Rigby, 1999; Stevens, Bourdeaudhuij et al., 2000; Stevens, Van Oost, & Bourdeaudhuij, 2000). These unsuccessful interventions report a failure to address the differences between primary and secondary school students' peer relationships and the changing dynamics of these relationships over time, in the design of the intervention (Stevens, Bourdeaudhuij et al., 2000). Adolescents tend to conform less to rules (Stevens, Bourdeaudhuij et al., 2000), place high importance on peer group acceptance and the need to conform (Salmivalli, 1999), hold more 'pro-bully' and less 'pro-victim' attitudes with increasing age (Rigby & Slee, 1991; Stevens, Van Oost et al., 2000), are less willing to talk with teachers about their bullying experiences (Glover, Gough, Johnson, & Cartwright, 2000; Peterson & Rigby, 1999; Rigby & Slee, 1991), and are more likely to react aggressively to being bullied rather than seeking help (Stevens, Van Oost et al., 2000), making many successful intervention strategies used in primary schools inappropriate for this age group (Stevens, Bourdeaudhuij et al., 2000; Stevens, Van Oost et al., 2000). Moreover, many are single focus interventions, such as peer support programs, which while important provide insufficient dose to ameliorate the effects of bullying (Naylor, Cowie, & del Rey, 2001; Naylor & Cowie, 1999).

Given the multi-causal nature of bullying, an intervention must be multi-focussed and targeted to meet the needs, concerns and strengths of secondary school students (Naylor & Cowie, 1999; Peterson & Rigby, 1999; Stevens, Bourdeaudhuij et al., 2000; Stevens, Van Oost et al., 2000). Most successful secondary interventions are developed using a comprehensive whole-of-school approach (Foster, Arora, & Thompson, 1990) tailored to the needs, strengths and concerns of students in lower secondary school, and the unique characteristics of

the school by providing individualised training (Stevens, Bourdeaudhuij et al., 2000; Rigby, 1999; Peterson & Rigby, 1999; Patton, 2000). Successful programs need to include capacity building to meet each school's organisational context; a consistent understanding of bullying (Glover et al., 2000); strategies to support and develop students' social relationships and peer support (Naylor & Cowie, 1999; Naylor et al., 2001; Patton, 2000); policy development and implementation (involving school community) (Glover et al., 2000; Patton, 2000); classroom curriculum (Patton, 2000); attention to school ethos or culture development (Whitney & Smith, 1993., Glover et al., 2000; Patton, 2000; Rigby, Cox, & Black, 1997); strategies to support student social and emotional development (Foster et al., 1990; Glover et al., 2000); positive behaviour management strategies, and less punitive-based solutions to bullying (Stevens, Bourdeaudhuij et al., 2000; Foster et al., 1990; Patton, 2000; Sharp, 1995); pastoral care initiatives (Foster et al., 1990; Patton, 2000); and school-homecommunity links (Foster et al., 1990; Glover et al., 2000; Patton, 2000; Slee, 1995a). Additionally the classroom component of these whole-school programs needs to focus on increasing pro-victim and reducing the pro-bully attitudes of secondary school students (Stevens, Van Oost et al., 2000); building the capacity of these students to cooperate (Rigby et al., 1997); empowering them to cope adaptively with bullying should it occur (Naylor et al., 2001); and helping to train them to react assertively and not aggressively to bullying, particularly those who are frequently bullied (Sharp, 1995; Stevens, Van Oost et al., 2000).

While interventions to counter bullying in schools are currently considered a high priority in Australia, examples of successful secondary school bullying interventions are limited. The Supportive Schools Project responds to the expressed needs of Australian secondary schools for evidence-based interventions to reduce bullying and other aggressive behaviour among their students. The project will provide evidence based training and support materials for secondary school staff and parents to help to prepare Year 7 students for the transition to secondary school, while maintaining peer support and other social competency building strategies through Year 8 and 9, to ameliorate the effects of bullying and other aggressive behaviours.

2. OBJECTIVES

The aim of the Supportive Schools Project is to enhance the capacity of secondary schools to implement a whole-of-school bullying reduction intervention (including strategies to enhance student transition to secondary school) and compare this intervention using a randomised (cluster) comparison trial to the standard behaviour management practices currently used in Western Australian secondary schools.

The specific primary outcome objective of the project is:

 To reduce the prevalence of frequent bullying behaviour (bullying and/or being bullied at least weekly) among secondary students receiving the whole-of-school intervention relative to those students receiving the standard WA behavioural management program.

The specific secondary outcome objectives of the project are: *Students*

- To increase intervention students' *perception of social norms* and *normative expectations* regarding the negative social outcomes of bullying others.
- To increase intervention students' perceptions of support from school staff and peers if they are involved in a bullying situation (e.g. opportunity to disclose hurt feelings).
- To increase intervention students' sense of social competence, number of friends, and reduce their feelings of loneliness at school.
- To increase intervention students' use of positive cognitive strategies and attributions if involved in a bullying situation.
- To reduce intervention student absenteeism associated with ongoing bullying behaviour and increase these and others students' feelings of safety, as well as feelings of happiness at and connectedness to the school.
- To reduce among intervention students who are bullying, their involvement in other problem behaviours (e.g. fighting, cigarette smoking, cannabis use).
- To decrease reported mental 'unwellness' (using the Strengths and Difficulties Questionnaire and the Depression Anxiety Stress Scales) among

those intervention students who either bully others and/or are bullied frequently.

School staff

- To enhance the self-efficacy of intervention school staff to provide strategies to enhance the social and physical environment of their school to reduce bullying and other aggressive behaviour.
- To assess the effectiveness of the capacity building strategies of this whole-of-school intervention, in terms of the level of: a) intervention implementation,
 b) intervention outcomes, and c) level of institutionalisation (maintenance and sustainability) of the intervention.
- To identify critical success factors for building secondary school capacity to reduce bullying among their students.
- To determine if a dose–response relationship exists between the implementation of the whole-of-school program implementation and bullying outcomes.

3. PROGRESS

3.1 Project Management

A strong management team is responsible for overseeing this project and are supported by an advisory committee comprised of experts in the fields of primary and secondary education, mental health and child health research. The Management Committee is responsible for the day to day administration of the project and comprises:

Dr Donna Cross

Ms Stacey Waters

Dr Margaret Hall

Dr Clare Roberts

Ms Erin Erceg

Dr Greg Hamilton

Ms Therese Shaw

Ms Tommy Cordin

Ms Melanie Epstein

The Project Advisory Committee's role is to contribute to the direction and progress of the project. Members come from organisations representing health and education across the government and non-government sectors. The Project Advisory Committee comprises:

Wayne Revitt, Association of Independent Schools

Cassandra Best, Canning District Education Office

Wilson MacNeil, Catholic Education Office of WA

Tim McDonald, Community Services, Education and Social Sciences, Edith

Cowan University

Joanne Taggart, Curriculum Council of WA

Grania McCudden, Department of Education and Training

Michele Roberts, Parents & Friends' Federation of WA

Eileen Kuruckchi, Swan District Education Office

Coosje Griffiths, Swan District Education Office

Jan Michell, The Australian Council for Health, Physical Education and Recreation, Western Australian Branch Inc

Colin Petit, Western Australian Primary Principal's Association

Rob Nairn, Western Australian Secondary School Executives Association

Dr Donna Cross, Child Health Promotion Research Unit

Ms Stacey Waters, Child Health Promotion Research Unit

Dr Margaret Hall, Child Health Promotion Research Unit

Dr Clare Roberts, Curtin University of Technology

Ms Erin Erceg, Child Health Promotion Research Unit

Ms Therese Shaw, Child Health Promotion Research Unit

Ms Tommy Cordin, Child Health Promotion Research Unit

Ms Melanie Epstein, Child Health Promotion Research Unit

3.2 Sample Selection

The selection criteria for schools to participate in this project were that schools:

- Must be Catholic Education Office of Western Australia schools;
- Must be located in the Perth Metropolitan area; and
- Must be a secondary school (secondary schools with onsite primary schools included).

Catholic Education Office of Western Australia Secondary Schools were selected for the Supportive Schools Project because of the lower rate of transition attrition from Catholic Education Office primary to secondary schools. Catholic Education Office secondary schools also represent a range of SES backgrounds. These schools have also developed transition programs that are beneficial for the project

To assist in the sample selection process a list of All Catholic schools from the Perth Archdiocese was obtained from the Catholic Education Office of Western Australia. A total of 28 metropolitan Catholic Education Office secondary schools were eligible for inclusion in the project.

3.3 Recruitment

Prior to contacting schools the Project Director presented information about the project to secondary school staff from all Catholic Education Office secondary schools attending a 'Curriculum Leaders Meeting' (See Appendix 1). Staff of Catholic Education Office secondary schools were asked to return an "Expression of Interest Form" via fax to the Child Health Promotion Research Unit if they wanted to receive more information about participating in the Supportive Schools Project (See Appendix 2). Those schools who returned an 'Expression of Interest Form' were contacted by telephone by the Project Coordinator and invited to take part in the project. A letter was subsequently sent to each Secondary school Principal who had not returned an 'Expression of Interest' form. This letter outlined the Supportive Schools Project and invited them to participate in the project (see Appendix 3). Each Principal was then contacted by the Project Coordinator and invited to take part in the project.

Twenty Catholic Education Office secondary schools were required for this project to ensure suitable statistical power.

Of the 28 eligible Catholic Education Office secondary schools, 18 provided consent to participate, 1 agreed to participate only as a control school (citing existing demanding staff workloads) and 9 declined to participate citing other priorities within the school. An additional Catholic Education Office secondary school outside the Perth metropolitan area (Mandurah) was recruited to make up the 20 Catholic Education Office secondary schools.

After being recruited into the project, schools were stratified according to total population size of the school and the school's Socio-Economic Status (SES). The median school size of recruited schools was 811 students. Schools with 811 students or fewer were classed as small schools and schools with student numbers above 811 were classed as large schools. To accurately assess each school's SES, the Catholic Education Office of Western Australia provided the "SES Index Modified A" for each of the schools participating in the project. This index maps the addresses of each student enrolled in the school to an Australian Bureau of Statistics Census collector district (a group of 200 households). The school's resultant SES is the weighted average of the individual student profiles. Schools were then divided into high or low SES. The median SES Index Modified A of recruited schools was 100. Schools with an index of 100 or less were classed as low SES Index Modified A schools and schools with an index above 100 classed as high SES Index Modified A schools.

Four strata were created to reflect the combination of school size and SES (see Table 1). Two female only boarding schools from the same quadrant were randomly allocated to a control or intervention condition. Two male only schools from the same quadrant were also matched and randomly allocated to a control or intervention condition. The remaining schools within each quadrant of the stratification table were numbered. Using a list of random numbers, schools within each quadrant were allocated to either intervention or control condition (e.g. the first school was allocated to the intervention condition, second school to the control condition etc).

Table 1: Stratified Random Sampling Procedure

		Intervention		Control		Total
		Size		Size		
		<811	>811	<811	>811	
SES Index	<100	2	3	3	2	10
Modified A	>100	3	2	. 2	3	10
	Total	5	5	5	5	20

The Principal and Project Coordinator from each school were sent a letter informing them of the schools condition (See Appendices 4 and 5) and requesting they sign a Memorandum of Understanding. Schools allocated to the control condition will receive the intervention training and resources upon the completion of the project in 2007.

At each school, all 2006 incoming Year 8 students and a Project Team were recruited (as represented in Table 2 below). During interviews held with each school the total number of Year 8 students who were enrolled at the school for 2006 was obtained. These total numbers have been used to calculate an approximate number of 2006 incoming Year 8 students that could be recruited into the study. In Intervention schools the Project Team comprised school staff such as the principal, senior staff, counsellors and teachers. In Control schools the Project Team typically comprised the Principal and the Project Coordinator (such as a senior staff member, or counsellor).

Table 2: Summary of Recruitment

	Intervention	Control	Total
Schools	10	10	20
2006 Year 8 Students	1788	1929	3717
Project Team	58	20	78

3.4 Instruments

The incoming 2006 Year 8 students (currently in Year 7) from each of the 20 study schools were surveyed using a self complete questionnaire. This 39 item questionnaire was addressed to the parent/carer of each student. Each parent was asked to provide consent for their child to participate and to return the consent form with their child's completed survey by reply paid mail to the Child Health Promotion Research Unit.

The student survey assesses the mediating, contextual and dependent variables associated with bullying and the transition to secondary school (see Theoretical Model in Appendix 6) including students' understanding of bullying behaviour; involvement in bullying; if they feel safe at school and how they feel about their move to secondary school. As well as these measures developed by the project, two psychological measures have been utilised: the Strengths and Difficulties Questionnaire (SDQ) (Goodman, 1999) and the Depression Anxiety Stress Scales 21 (DASS 21) (Lovibond & Lovibond, 1995) for use with students. The SDQ measures five sub-scales of difficulties faced by children, including: emotional symptoms, conduct problems, hyperactivity, peer problems, pro-social behaviour and a total difficulties score. The DASS 21 is a shortened version of the original Depression Anxiety Stress Scales (DASS) and measures three subscales of depression, anxiety and stress in children.

A project team questionnaire was also developed to assess knowledge, attitudes and skills in bullying and issues associated with the student transition from primary to secondary school.

Therefore two instruments developed to date are:

- Student baseline questionnaire (Appendix 7)
- Project team baseline questionnaire (Appendix 8)

Piloting of Measures.

The student and teacher questionnaires were developed based on the instruments used in the previous Friendly Schools and Friendly Schools Friendly Families Projects. Each of these questionnaires had been pilot tested, however

as changes were made to these instruments for use in this project, further reliability and pilot testing was conducted on the student questionnaire.

The student baseline questionnaire underwent reliability testing in one Australian Independent Schools Association of Western Australia (AISWA) K-12 School. An AISWA school was chosen as it most closely represented the Catholic Education Office secondary schools participating in the Supportive Schools Project (See Appendix 9). A school with Kindergarten to Year 12 students was chosen so both the Year 7 and Year 8 questionnaire could be tested for reliability.

The student questionnaire was tested on 86 Year 7 students and 89 Year 8 students in the chosen school. The test-retest procedure resulted in some changes to the length and organisation of the questionnaire and wording of some items. In particular it was felt some words used in the questionnaire were inappropriate for Year 7 and 8 students and were therefore changed to convey the intended meaning to the target group.

3.5 Intervention Development

The Supportive Schools Project intervention comprises three components: parent, student and whole school. The parent intervention aims to increase parents' understanding of the issues associated with the transition to primary to secondary school, bullying and the importance of friendships for this age group. The student intervention aims to provide students with information and strategies to manage the transition from primary school, improve social skills and enhance social responsibility to reduce and cope adaptively with bullying.

Schools in the intervention condition each received a Friendly Schools and Families "Whole-School Pack". The Friendly Schools and Families resources were developed based on 6 years of bullying research by staff from the Child Health Promotion Research Unit (CHPRU). The whole-school resource comprises strategies to help review and implement a whole-school bullying policy, effective mechanisms for managing student behaviour (especially bullying), ideas to modify the physical environment to reduce bullying and to

promote a positive whole-school ethos. All strategies are linked and help schools to satisfy requirements of the Commonwealth Government's National Safe Schools Framework.

The materials developed to support the Supportive Schools Project intervention include:

• School Action Journal (Appendix 10)

Each school received a School Action Journal designed to assist Project Teams with the planning and implementation of whole-school strategies to reduce and manage bullying in secondary schools, using the Friendly Schools and Families whole-school manual. The School Action Journal assists schools with the stages of preparing, reviewing, planning, implementing and reflecting on strategies to reduce and manage bullying. For each stage, the School Action Journal provides references to relevant sections of the Friendly Schools and Families whole-school pack which describe strategies for action in more detail. Each school's Action Journal contains tailored information reflecting the previous actions the school had undertaken to address behaviour management and bullying.

Supportive Schools Project Parents' Guide Edition One - Friendships and High School and Supportive Schools Project Parents' Edition Two – Getting Ready for High School (Appendices 11-14)

Two editions of the Supportive Schools Project Parents' Guides provide information and strategies to assist parents to understand specific organisational and academic changes in secondary school, help their son or daughter to prepare for these changes and understand how to help their son or daughter maintain friendships and make new friends. Each school also provided information about their school's organisation and support staff that could be included on one page of the booklet. Each parent therefore receives a booklet that contains general information as well as information specific to their son or daughter's school. The first edition of the Supportive Schools Project Parents' Guide will be sent to parents on the 19th December 2005. The second edition of

the Supportive Schools Project Parents' Guide will be sent on the 23rd January 2006.

"Buzz" Magazine Edition One – Friendships and Edition Two – Transition (Appendices 15-18)

Two editions of "Buzz" Magazine provide information and strategies to encourage adolescents to explore organisational and academic changes from primary to secondary school and provide strategies for keeping primary school friends and meeting new friends at secondary school. These magazines will be sent with the Supportive Schools Project Parents' Guides.

• Project Team Training (Appendix 19)

All intervention schools were encouraged to form a Project Team and invite up to six representatives from their school to a full day workshop hosted by the CHPRU. This workshop provided a rationale and overview for the Supportive Schools Project, skill development in a whole-school approach to the prevention and reduction of bullying and an opportunity for schools to begin planning Supportive Schools Project activities for 2005 and 2006.

• Parent and Staff Presentations (Appendix 20-22)

In order to maximise the number of parents who provide consent for their son or daughter to participate in this project each study school was asked to present a 10 minute overview of the Supportive Schools Project to the parents of their incoming 2006 Year 8 students during parent information evenings. Similarly, to aid the implementation of the Supportive Schools Project each school was asked to briefly present project information to all staff. All schools agreed to present information about the project using a script and Power Point presentation prepared by the Supportive Schools Project staff.

3.6 Data Collection

Baseline

Baseline testing was conducted with Year 7 students and school project teams in Terms 3 and 4 of 2005. All Year 7 students enrolled in the 20 recruited secondary schools for Year 8, 2006 were invited to participate in the Supportive Schools Project.

A combination of active and passive consent was sought from parents of the Year 7 students enrolled in the 20 recruited secondary schools in Terms 3 and 4 of 2005. Parental consent for their Year 7 child to participate was sought by mailing to parents a letter describing the study, requesting their active consent for their Year 7 child to participate, as well as providing a contact telephone number for parents to call should they have any questions (Appendix 23). A student questionnaire was included in this package which provided instructions on how to complete the questionnaire, a contact phone number of a staff member at the Child Health Promotion Research Unit if they would like to complete the questionnaire via telephone as well as a reply paid envelope for them to return their questionnaire once completed.

After three weeks parents who had not responded were sent a follow up information letter and consent form again requesting active consent for their child to participate in the study (Appendix 24). A student questionnaire and reply paid envelope to return the questionnaire once completed was also included in this package. Four weeks after this second mail out (seven weeks from the original mail out), parents who had not responded were sent a final follow-up letter (Appendix 25) requesting passive consent for their child to participate in the study and a reply paid envelope to return the competed consent form (Appendix 26). The following procedures were adopted when mailing out information to parents:

 Twelve study schools provided mailing labels to the CHPRU to mail directly to the parents of to their incoming Year 8 students. Eight schools mailed the information to the parents of their incoming students.
 The CHPRU provided these school's with sufficient consent and questionnaire packs for the number of students enrolled at the school.

School administration staff contacted the CHPRU when new enrolments occurred or students left the school. All newly enrolled students were sent a questionnaire and consent form to complete.

All "Return to Sender" packages were recorded and school's notified. Where possible each school provided an alternative address which was used to resend the package.

Project team questionnaires were distributed and collected at each school via the Project Coordinator. In Intervention schools, questionnaires were given to the school's Principal and Project Team members (senior staff, counsellors and teachers). In Control schools the Project Coordinator and Principal were given a questionnaire. The Project Coordinator of the Intervention schools returned the completed questionnaires to the CHPRU on the Project Team training day. The Project Coordinator of the Control Schools returned the completed questionnaires in a reply paid envelope.

Response Rates

During interviews held with each school in Term 2, 2005, school staff were asked to provide the number of Year 8 students who would be enrolled in their school for 2006. For many schools these were approximate numbers as actual enrolments fluctuate. These total numbers have been used to calculate the response rates for the student baseline questionnaires. Tables 3 to 5 present the response rates to the student and Project Team baseline questionnaires using these estimated enrolment numbers and actual completed questionnaires.

Table 3: Student Questionnaire Response Rates

*	Year 7 s	tudents
	<i>j.</i> N	%
Total sample (estimated enrolment numbers)	3717	100
No Consent	281	7.6
Total with active and passive consent	3436	92.4
Completed questionnaire	2021	58.8
Did not complete questionnaire (Active consent returned)	27	0.8
Did not return questionnaire (Active consent returned)	11	0.3
Returned questionnaires (Completed and not completed)	2048	59.6

Table 4: Student Questionnaire Response Rates by Intervention Condition

	Control		Intervention		Overall Total	
	n	%	n	%	n	%
Total sample	1929	51.9	1788	48.1	3717	100
No Consent	147	7.6	134	7.5	281	7.6
Total with active and passive consent	1782	92.4	1654	92.5	3436	92.4
Completed	1040	58.4	981	59.3	2021	58.8
Did not complete (Active consent returned)	11	0.6	16	1.0	27	0.8
Did not return (Active consent returned)	3	0.2	8	0.5	.11	0.3
Returned (completed and not completed)	1051	59.0	997	60.0	2048	59.6

Table 5: Project Team Questionnaire Response Rates

	Project Team Staff		
	n	%	
Total sample	78	100	
Completed	75	96.2	
Did not complete	0	0	

4. RESULTS

Baseline data has been collected for students and Project Team representatives. Preliminary data only is reported. Further analyses of the data are currently being conducted (please do not cite or circulate).

The following pages present a summary of baseline data collected from students from all participating study schools.

Table 6: Demographics of Year 7 Student Respondents

	n	%
Male	990	48.5
Female	1052	51.5

4.1 Attitudes

Students were asked to identify how often they felt safe at school. When students feel safe at school, they are more likely to feel connected to the school and typically display better academic performance, attendance, have better self esteem and an improved health status. Tables 7 and 8 presents students perceptions of how safe they feel at school and how they feel about their school.

Table 7: Student Responses to "Do you feel safe at school?"

	n	%
Yes, all or most of the time	1681	82.4
Yes, some of the time	345	16.9
No, I never feel safe at school	13	0.6

Nearly all of the students reported feeling safe at school (99%) with 82% of students feeling safe all or most of the time.

Table 8: Student Responses to "How do you feel about your school?"

*	Always %	Usually %	Sometimes %	Never %
I feel close to people at this school	52.5	33.7	12.2	1.5
I feel like I am part of this school	67.3	21.8	9.5	1.4
I am happy to be at this school	63.6	23.4	11.1	1.9
The teachers at this school treat students fairly	41.5	36.8	18.9	2.7

Most of Year 7 students surveyed responded they 'Always' feel close to people at their school (53%); feel like they are a part of the school (67%) and are happy to be at their school (63%). The majority of students feel that teachers 'Always' or 'Usually' treat students fairly (78%).

Students' expectancies of the outcomes associated with bullying other students are an important measure of their intent to bully other students. To measure this intent, students were given a series of statements and asked whether they thought these things would happen to them if they bullied other students next term. Their responses to this question are provided over the page in Table 9.

Table 9: Student Responses to "If you bullied another student or students NEXT TERM in Term 4, what do you think would happen?"

	Yes %	Maybe %	No %
Other students would be scared of me	18.9	45.9	35.2
Other students would like me	5.7	20.8	73.4
My parents would find out and talk to me about it	71.6	22.4	6.0
I would feel bad about myself	80.0	17.1	2.9
Other students would think I was tough	13.8	41.3	44.9
I would get into trouble	81.8	15.9	2.3
I would feel bad for the student I bullied	75.4	20.3	4.3
Other students would not want to be my friend	51.8	37.4	10.8
My parents would be unhappy with me	89.0	9.3	1.7
I would feel good about myself	1.3	7.8	90.8
Other students wouldn't bully me	17.4	55.3	27.4

Total sample size ranged from 1964 to 1982 due to missing responses for individual questions.

The majority of students reported if they bullied someone in the next term their parents would be unhappy with them (89%); they would get into trouble (82%); feel bad about themselves (80%) and they would feel bad for the student they bullied (75%).

To find out about students' perceptions of the school's response to bullying, students were asked how seriously bullying is taken by all staff at your school. Table 10 presents their responses.

Table 10: Student Responses to "How seriously is bullying taken by most staff at your school this year?

n	%
267	13.4
117	5.9
382	19.1
682	34.2
549	27.5
	267 117 382 682

Over 60% of students believed bullying was being taken 'Very' or 'Extremely' seriously by most staff at their school. Only 6% of students reported that bullying was taken "Not at all seriously" by school staff.

4.2 Reported Behaviour

Before answering questions relating to their experiences of bullying, students were provided with a written and illustrated definition of bullying. The definition provided specific examples of bullying behaviours, including physical, verbal and social forms. Fighting and friendly teasing were discussed as behaviours that were not bullying. This was included to increase the validity of bullying behaviour questions.

Students were initially asked to report how often they experienced particular bullying behaviours without specific reference to bullying in the question. This approach was used to try to minimise the under/over reporting of bullying. The results of this question can be found in Table 11.

Table 11: Student Responses to "This Term (Term 3), how often were you bullied in the following ways?"

	Lots of A few times		Never	
	%	%	%	
I was made fun of and teased in a hurtful way	12.9	34.5	52.6	
I was called mean and hurtful names	13.7	31.4	54.9	
Students ignored me, didn't let me join in, or left me out on purpose	9.0	20.0	71.0	
I was hit, kicked or pushed around	5.3	13.0	81.7	
Students told lies about me and tried to make other students not like me	9.9	23.3	66.8	
I had money or other things broken or taken away from me	14	8.9	89.6	
I was made afraid that I would get hurt	4.1	6.5	89.4	
I was sent a mean and hurtful text (SMS) message	0.4	2.7	96.9	
l was sent a mean and hurtful message on the internet	1.5	7.8	90.6	
I was bullied in another way	5.9	6.1	88.0	

To determine the extent of bullying, we collapsed the columns "Most days", "About once a week" and "Every few weeks" into the category "Lots of times". While the majority of students were not bullied, the most common forms of bullying occurring "A few times" were being made fun of and teased in a hurtful way (34%), being called mean and hurtful names (31%), having lies told about them (23%) and being ignored or left out on purpose (20%). Very few students reported being sent mean and hurtful messages on the internet (9%) or via SMS message (3%).

Students were then asked how often another student or group of students bullied them in Terms 1 to 3.

Table 12: Student Responses to "THIS YEAR in Term 1,2,3 how often did another student or group of students bully you?"

	Term 1 (n=2010) %	Term 2 (n=2011) %	Term 3 (n=2011) %
I was bullied most days	2.6	2.0	3.4
I was bullied about once a week	2.3	3.1	3.1
I was bullied every few weeks	6.3	6.1	5.8
I was bullied only once or twice	24.9	26.0	28.9
I was not bullied	63.8	62.8	58.8

Overall, when asked how often they were bullied, the majority of students reported they were not bullied in Term 1 (64%), Term 2 (63%) or Term 3 (59%). Of those who were bullied, the vast majority of students were bullied only once or twice (69% Term 1, 70% Term 2, 70% Term 3). A greater proportion of students were bullied in Term 3.

Similarly, students were asked to report whether they, on their own or in a group, had bullied other students in Term 3. Once again, students were firstly asked how often they had engaged in certain behaviours towards others, then how many times they had actually bullied others this Term. The results of these responses can be found in Tables 13 and 14 respectively.

Table 13: Student Responses to "This Term (Term 3), how often have you on your own or in a group, done these things to another student or students?"

	Lots of times %	Only once or twice %	Never
	70	. 70	70
I made fun of and teased another student or students in a hurtful way	2.7	26.7	70.6
I called another student or students mean and hurtful names	3.5	26.3	70.2
I ignored another student or students, didn't let them join in, or left them out of things on purpose	2.0	20.4	77.6
I hit, kicked or pushed another student or students around	0.8	9.1	90.1
I told lies or spread nasty stories about another student or students and tried to make other students not like them	0.2	5.8	94.0
I broke someone's things deliberately or took money or other things away from another student or students	0.1	1.1	98.8
I made another student or students afraid they would get hurt	0.3	4.2	95.5
I sent another student or students a mean and hurtful text (SMS) message	0.0	1.0	99.0
I sent another student or students a mean and hurtful message on the internet	0.3	3.1	96.6
I bullied another student or students at school in another way	1.0	3.7	95.3

To determine the extent of bullying, we collapsed the columns "Most days", "About once a week" and "Every few weeks" into the category "Lots of times". While the majority of students did not bully others, the most common forms of bullying were calling another student or students mean and hurtful names (30%) making fun of and teasing other students in a hurtful way (29%) and ignoring other students and leaving them out on purpose (22%).

Table 14: Student Responses to "This term (Term 3), how often did you on your own or in a group, bully another student or students?"

	n	%
I bullied someone most days in Term 3	7	0.3
I bullied someone about once a week in Term 3	7.174.2 13. 22.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.	0.60 j
I bullied someone every few weeks in Term 3	45	2.2
I bullied someone only once or twice in Term 3	528	26.3
I did not bully anyone at all in Term 3	1413	70.4

The majority of students did not bully another student at all in Term 3 (70%). Of those who bullied another student, the majority bullied only 'Once or twice' in Term 3 (89%).

If students reported being bullied in Term 3, they were asked to identify by whom (group or individual) they were bullied and where they were bullied. Tables 15 to 17 summarise students' responses.

Table 15: Students Responses to "This year, how often did another student or group of students from this year level bully you?"

	Lots of times		A few times		I was not bullied	
	n	%	n.	%	n	%
Younger than Year 7	18	0.9	160	8.4	1726	90.7
Year 7	129	6.4	745	37.0	1139	
Older than Year 7	18	1.0	170	9.0	1693	90.0

After combining the categories of 'lots of times' and 'a few times', of those students bullied, most reported being bullied by students in their year level (43%) than by students older than Year 7 (10%) or younger than Year 7 (9%).

Table 16: Students Responses to "This year, were you bullied by:"

	Lots of times		A few times		I was not bullied	
	n	%	n	%	n	%
Mainly one male?	78	4.0	480	24.6	1390	71.4
A group of males?	59	3.0	305	15.7	1581	81.3
Mainly one female?	56	2.9	332	17.2	1545	79.9
A group of females?	50	2.6	235	12.2	1649	85.3
Both males and females?	26	1.3	221	11.4	1700	87.3

After combining the categories of 'lots of times' and 'a few times', most Year 7 students report they were bullied by mainly one male (29%), mainly one female (20%) or a group of males (19%).

Table 17: Student Responses to "This year, were you bullied by students from your school?"

	Lots of times		A few times		I was not bullied	
	n	%	n	%	n	%
In the classroom	68	3.5	480	24.5	1412	72.0
At break times	- 136	6.8	705	35.1	1165	58.1
On the way to school	4	0.2	40	2.1	1896	97.7
On the way home from school	12	0.6	102	5.3	1828	94.1

After combining the categories of 'lots of times' and 'a few times', of those students who report being bullied, the majority said they were bullied mainly during break times (42%), while others were bullied in the classroom (28%). Very few students reported they were bullied on the way to school (2%).

Those students who reported being bullied, were asked whether they had told someone about the bullying and, if so, did things get better. Tables 18-20 contain students' responses.

Table 18: Student Responses to "The last time you were bullied at school this year, did you ask for help?

	n	%
I was not bullied this year	1014	50.3
I was bullied this year but I did not ask for help because I did not need it	552	27.4
I was bullied this year but I did not ask for help	132	6.5
I was bullied this year and I did ask for help	318	15.8

Of the 1002 students who reported they were bullied in this question, the majority did not ask for help as they did not think they needed it (55%, n=552). Almost 32% (n=318) of students who were bullied did ask for help.

Table 19: Student Responses to "The last time you were bullied at school this year, who did you ask for help?

	n	%
Parents	182	57.6
Friends	151	47.8
Teachers / School staff member	204	64.6
Other family members (Grandparents, Aunt, Uncle, Sister or Brother etc).	23	7.3
I did not ask for help from anyone	4	1.3
Other	14	4.4

If a student was bullied they were most likely to ask their teachers (65%), parents (48%) and friends (48%) for help.

Table 20: Student Responses to "The last time you were bullied at school this year, did things get better after you asked for help?"

	j.	n	%
I was bullied but I didn't ask anyone for help		3	1.0
I asked for help – and the bullying got worse		17	5.5
I asked for help – and things stayed the same		63	20.5
I asked for help – and things got better straight away		95	30.8
I asked for help – and things got better after a while		130	42.2

Of those Year 7 students who were bullied, 42% reported things got better for them "after a while" and 31% reported things got better for them "straight away" when they asked for help. Only 6% of Year 7 students reported telling someone about being bullied and the bullying "got worse".

To better understand the response of bystanders to incidents of bullying, students were asked what they did when they saw a student of their own year being bullied. Their responses are provided in Tables 21 and 22.

Table 21: Student Responses to "The last time you saw a student from year 7 being bullied this year, what did you do?"

	n	%
I didn't see a student being bullied this year	582	29.9
I joined in the bullying	12	0.6
I watched what was going on	197	10.1
I walked away	276	14.2
I tried to help	877	45.1

Of the students who saw another student from their year being bullied, 64% tried to help while 20% walked away.

Table 22: Student Responses to "The last time you saw a student from year 7 being bullied this year, what did you think?"

	n	%
I thought the bullying was okay	14	1.0
I thought it was none of my business	313	23.0
I didn't know what to do	214	15.8
I thought I should help the student being bullied	780	57.7
Other	144	10.7

A large proportion of students reported they thought they should hep the student being bullied (58%) whereas 23% of students who had seen a student being bullied this year believed it was none of their business.

The relationship between being bullied and absenteeism was investigated by asking students whether they had stayed away from school because of bullying. Their responses are provided in Table 23.

Table 23: Student Responses to "Have you stayed away from school this year because of bullying?"

	n	%
No, I have never been bullied	950	46.5
No, I have never stayed away	799	39.1
No, but I've wanted to stay away	228	11.2
Yes, I have stayed away once or twice	51	2.5
Yes, I have stayed away more than twice	14	0.7

Of the students who have been bullied, 94% have never stayed away from school, however 21% of these students reported they wanted to stay away.

4.3 Transition to secondary school

Year 7 Students were asked to report how they were feeling about the move to high school. Their responses are provided in Tables 24 and 25.

Table 24: Student Responses to "What things about moving to high school are you looking forward to or are happy about?"

	n	%
Being in a larger school	780	57.0
More freedom	908	66.3
More students	853	62.4
Being able to choose some classes	1265	93.1
Changing classes	846	62.8
Older students	486	35.1
Making new friends	1283	93.9
Having new teachers	1012	74.9
Participating in sports, clubs etc.	1160	85.4
Having lockers	1059	77.0
Getting good grades	1071	78.5
More school activities	1182	87.2
More choices at lunch	986	72.2
Attending more school events (e.g. football games, social events)	1191	87.2
Other	288	21.4

Students moving to high school are most looking forward to making new friends (94%), choosing new classes (93%), attending more school events (87%) and activities (87%) and participating in sports (85%). Students are least looking forward to being in a larger school (57%), more students (62%) and changing classes (62%).

The Year 7 students were then asked to report things that caused them concern about the move to high school.

Table 25: Student Responses to "What things are causing you to be concerned or worried about moving on to high school?"

	n	%
Finding my way around or getting lost	984	73.7
Getting along with other students	557	39.6
Pressure to do well	697	49.2
Safety or being hurt by other students	398	28.0
Being bullied	565	39.2
Fitting in or making friends	628	44.7
New and more students	367	27.4
Hard or unfriendly teachers	859	63.1
Hard classes	980	72.9
New rules and expectations	725	54.4
How much homework I would have	1123	83.9
Feeling pressure to do things I don't want to do	563	40.6
Being made fun of	472	32.8
Using a locker	135	11.0
Riding the bus	313	22.4
Getting to class on time	722	54.6
Older students	397	27.7
Getting good grades	571	41.4
Other	106	7.9

Students moving on to high school are most concerned about the amount of homework they will have (84%), finding their way around or getting lost (74%) and hard classes (73%). Students are least concerned about using a locker (11%), riding the bus (22%), older students (28%) and new and more students (27%).

5. EFFECT OF RESEARCH ON PROFESSIONAL DEVELOPMENT

This project has and will continue to provide training opportunities for a significant number of students at Edith Cowan and Curtin Universities.

One Masters student is involved in the project. She has assisted in the development of the Baseline questionnaire, data collection and the development of student and parent intervention materials. She has acquired valuable skills in research administration and data management skills as well as questionnaire development.

More than 10 under-graduate and graduate health promotion and psychology students from Edith Cowan and Curtin Universities completed volunteer work on the project by labelling and packing of questionnaires; preparation of questionnaires for data entry; and general administration tasks. In addition three Edith Cowan University students completed 30 and 60 hour practicum placements in the CHPRU working on the Supportive Schools Project. All volunteers work towards receiving accreditation with the Child Health Promotion Research Unit's Volunteer Competency Program.

6. IMPLICATIONS FOR HEALTH PROMOTION / LINKING RESEARCH TO HEALTH OUTCOMES

Bullying is associated with a number of physical and mental health factors, including somatic complaints (Rigby, 1997; Slee, 1995b; Williams et al., 1996).; poor self-esteem (Bjorkqvist et al., 1982; Olweus, 1993a; Rigby, 1998b; Slee & Rigby 1993b) depression, anxiety and suicide ideation (Bjorkqvist et al., 1982; Craig, 1998; Kaltiala-Heino et al., 1999; Olweus, 1992, 1993b; Rigby & Slee, 1999; Slee, 1995b, 1998; Slee, 1994; Sourander et al., 2000; Zubrick et al., 1997). Furthermore, students who are bullied feel a sense of alienation from school, disliking school (Forero et al., 1999; Zubrick et al., 1997), want to avoid school, have higher absenteeism (Kochenderfer & Ladd, 1996; Rigby, 1997; Zubrick et al., 1997) and view school as an unsafe place (Olweus, 1993a), These students are therefore at risk both in terms of their health and academic achievement.

The Supportive Schools Project has the potential to significantly impact on these factors in a positive way by:

- Determining, developing and evaluating strategies which develop in students' behaviours and attitudes that support students who are bullied;
- Determining, developing and evaluating strategies which develop in students' behaviours and attitudes that discourage bullying behaviours;
- Determining, developing and evaluating strategies which develop in students' the skills required to respond adaptively to bullying;
- Determining, developing and evaluating strategies which enable schools to implement a whole-school response to bullying;
- Determining, developing and evaluating strategies which assist schools in reviewing and writing bullying related policies to reduce and properly manage bullying in schools;
- Determining, developing and evaluating strategies which enable schools to effectively engage parents in strategies to reduce and manage bullying;
- Determining, developing and evaluating strategies which develop in students'
 the skills required to respond adaptively to the transition to secondary school;

- Determining, developing and evaluating strategies which enable schools to implement strategies to assist students with the transition to secondary school; and
- Determining, developing and evaluating strategies which enable schools to effectively engage parents in strategies assist students with the transition to secondary school.

7. COMMUNITY BENEFITS FROM THE RESEARCH

This study will be one of the first to test the effects of the transition to secondary school on bullying behaviours and will enable researchers to further understand the impact of bullying on secondary school students. This study will also test the effects of an intervention designed to increase social responsibility and will allow testing of the Friendly Schools and Families Whole School Intervention in a secondary environment.

Additional benefits of this research include the development of an intervention that fits a variety of whole-of-school strategies designed to fit within secondary school organisational teaching and non-teaching structure; can be easily integrated into the classroom curriculum and whole-school environments; and meets Department of Education and Training WA Student Outcome Statements for the Health and Physical Education Learning Area. In the school environment, this study will provide a means of empowering teachers, parents and students to play an active role in the prevention and reduction of bullying through user friendly materials and accessible and effective professional development for the prevention and reduction of bullying.

Future benefits include:

- Improving schools' and the community's knowledge of bullying intervention program planning, dissemination, implementation and evaluation;
- Improving schools' capacity to implement health promotion programs that address bullying at a whole-school level;
- Improve parents' ability to communicate effectively with their adolescent's about bullying issues; and
- Ultimately, the improvement and maintenance of the academic (e.g. improved attendance), mental, social and physical health of young people.

8. DISSEMINATION

A systematic plan for dissemination of this project's findings will be developed in association with key collaborators in Catholic Education Office of Western Australia as well as non-government, commercial and professional organisations such as the Australian Council for Health Physical Education and Recreation (ACHPER). The successful components of this project can be incorporated into the already commercially successful Friendly Schools and Families program to strengthen and adapt its use in secondary schools. The results of the study will be disseminated nationally to all participating and other interested schools, as well as via public forums, local media, conference presentations, project reports and research papers in peer-review journals.

9. REFERENCES

- Bjorkqvist, K., Ekman, K., & Lagerspetz, K. (1982). Bullies and victims: Their ego picture, ideal ego picture and normative ego picture. *Scandinavian Journal of Psychology*, *23*, 307-313.
- Boulton, M. J., & Underwood, K. (1992). Bully/victim problems among middle school children. *British Journal of Educational Psychology*, *62*, 73-87.
- Craig, W. M. (1998). The relationship among bullying, victimisation, depression, anxiety and aggression in elementary school children. *Personality and Individual Differences*, *24*(1), 123-130.
- Farrington, D. P. (1993). Understanding and preventing bullying. In M. Tonny & N. Morris (Eds.), *Crime and Justice* (Vol. 17). Chicago: University of Chicago Press.
- Forero, R., McLellan, L., Rissel, C., & Bauman, A. (1999). Bullying behaviour and psychological health among school students in New South Wales, Australia: Cross sectional survey. *British Medical Journal*, *319*(7206).
- Foster, P., Arora, T., & Thompson, D. (1990). A whole-school approach to bullying. *Pastoral Care in Education*, *8*(3), 13-17.
- Glover, D., Gough, G., Johnson, M., & Cartwright, N. (2000). Bullying in 25 secondary schools: Incidence, impact and intervention. *Educational Research*, 42(2), 141-156.
- Goodman, R. M. (1999). The extended version of the Strengths and Difficulties Questionnaire as a guide to child psychiatric caseness and consequent burden. *Journal of Child Psychology and Psychiatry, 40,* 791-801.
- Kaltiala-Heino, R., Rimpela, M., Marttunen, M., Rimpela, A., & Rantanen, P. (1999). Bullying, depression, and suicidal ideation in Finnish adolescents: school survey. *British Medical Journal*, *319*, 348-351.
- Kochenderfer, B. J., & Ladd, G. W. (1996). Peer Victimization: Cause or Consequence of School Maladjustment? *Child Development, 67*, 1305-1317.
- Kumpulainen, K., Rasanen, E., Henttonen, I., Almqvist, F., Kresanov, K., Linna, S. L., et al. (1998). Bullying and psychiatric symptoms among elementary school-age children. *Child Abuse and Neglect*, *22*(7), 705-717.
- Lovibond, S. H., & Lovibond, P. F. (1995). DASS21
- Naylor, P., & Cowie, H. (1999). The effectiveness of peer support systems in challenging school bullying: the perspectives and experiences of teachers and pupils. *Journal of Adolescence*, 22, 467-479.
- Naylor, P., Cowie, H., & del Rey, R. (2001). Coping Strategies of Secondary School Children in Response to Being Bullied. *Child Psychology and Psychiatry Review, 6*(3), 114-120.
- Olweus, D. (1992). Bullying among schoolchildren: Intervention and prevention. In R. D. Peters, R. J. McMahon & V. L. Quincy (Eds.), *Aggression and violence throughout the life span*. Newbury Park, CA: Sage.
- Olweus, D. (1993a). Bullies on the playground: The role of victimisation. In C. Hart (Ed.), *Children on Playgrounds*: SUNY Press.
- Olweus, D. (1993b). Victimization by peers: Antecedents and long-term outcomes. In K. H. Rubin & Asendorf (Eds.), *Social withdrawal, inhibition and shyness in children*. Hillsdale, NJ: Erlbaum.

- Patton, G. C., Glover, S., Bond, L., Butler, H., Godfrey, C., Di Pietro, G., Bowes, G. (2000). The Gatehouse Project: a systematic approach to mental health promotion in secondary schools. *Australian and New Zealand Journal of Psychiatry, 34*, 586-593.
- Peterson, L., & Rigby, K. (1999). Countering bullying at an Australian secondary school with students as helpers. *Journal of Adolescence*, *22*, 481-492.
- Rigby, K. (1994). Psychosocial functioning in families of Australian adolescent schoolchildren involved in bully/victim problems. *Journal of Family Therapy, 16*, 173-187.
- Rigby, K. (1997). What children tell us about bullying in schools. *Children Australia*, 22(2), 28-34.
- Rigby, K. (1998a). *The Peer Relations Questionnaire*. Point Lonsdale, VIC: The Professional Reading Guide for Educational Administrators.
- Rigby, K. (1998b). Suicidal ideation and bullying among Australian secondary school students. *Australian Educational and Developmental Psychologist*, 15(1), 45-61.
- Rigby, K. (1999). Peer victimisation at school and the health of secondary school students. *British Journal of Educational Psychology*, 69, 95-104.
- Rigby , K. (2002). A meta-evaluation of methods and approaches to reducing bullying in pre-schools and in early primary school in Australia. Canberra: Crime Prevention Branch, Commonwealth Attorney-General's Department.
- Rigby , K. (2003). Consequences of Bullying in Schools. *Canadian Journal of Psychiatry*, 48(9), 583-590.
- Rigby, K., & Cox, I. (1996). The contribution of bullying at school and low selfesteem to acts of delinquency among Australian teenagers. *Personality* and *Individual Differences*, 21(4), 609-612.
- Rigby, K., Cox, I., & Black, G. (1997). Cooperativeness and bully/victim problems among Australian schoolchildren. *Journal of Social Psychology, 137*(3), 357-368.
- Rigby, K., & Slee, P. (1999). Suicidal ideation among adolescent school children, involvement in bully-victim problems, and perceived social support. Suicide and Life Threatening Behavior, 29(2), 119-130.
- Rigby, K., & Slee, P. T. (1991). Bullying among Australian school children: Reported behavior and attitudes toward victims. *The Journal of Social Psychology*, *131*(5), 615-627.
- Salmivalli, C. (1999). Participant role approach to school bullying: Implications for interventions. *Journal of Adolescence*, 22, 453-459.
- Scott, S., Knapp, M., Henderson, J., & Maughan, B. (2001). Financial cost of social exclusion: follow-up study of antisocial children into adulthood. *BMJ*, 323(7306), 191-194.
- Sharp, S. (1995). How much does bullying hurt? The effects of bullying on the personal wellbeing and educational progress of secondary aged students. *Educational and Child Psychology*, *12*(2), 81-88.
- Slee, P. (1995a). Bullying: Health concerns of Australian secondary school students. *International Journal of Adolescent and Youth, 5*, 215-224.
- Slee, P. (1995b). Peer victimization and its relationship to depression among Australian primary school students. *Personality and Individual Differences*, 18(1), 57-62.

- Slee, P. (1998). Situational and Interpersonal Correlates of anxiety associated with peer victimisation. *Child Psychiatry and Human Development*, 85.
- Slee, P., & Rigby, K. (1993a). Australian school children's self appraisal of interpersonal relations: The bullying experience. *Child Psychiatry and Human Development, 23*(4), 273-281.
- Slee, P., & Rigby, K. (1993b). The relationship of Eysenck's personality factors and self esteem to bully-victim behaviour in Australian schoolboys. *Personality and Individual Differences*, *14*(2), 371-373.
- Slee, P. T. (1994). Life at school used to be good. *Youth Studies Australia, Summer*, 20-23.
- Sourander, A., Helstela, L., Helenius, H., & Piha, J. (2000). Persistence of bullying from childhood to adolescence-a longitudinal 8-year follow-up study. *Child Abuse and Neglect*, *24*(7), 873-881.
- Stevens, V., Bourdeaudhuij, I. D., & Van Oost, P. (2000). Bullying in Flemish schools: An evaluation of anti-bullying intervention in primary and secondary schools. *British Journal of Educational Psychology*, 70, 195-210.
- Stevens, V., Van Oost, P., & Bourdeaudhuij, I. D. (2000). The effects of an antibullying intervention programme on peers' attitudes and behaviour. *Journal of Adolescence*, 23, 21-34.
- Whitney, I., & Smith, P. K. (1993). A survey of the nature and extent of bullying in junior/middle and secondary schools. *Educational Research*, *35*(1), 3-25.
- Williams, K., Chambers, M., Logan, S., & Robinson, D. (1996). Association of common health symptoms with bullying in primary school children. *British medical Journal*, *313*, 17-19.
- Zubrick, S. R., Silburn, S. R., & Gurrin, L. (1997). Western Australian Child Health Survey: Education, Health and Competence. Perth, WA: ABS.

10. APPENDICES

Catholic Education Office Curriculum Leaders Meeting: Presentation

Catholic Education Office Curriculum Leaders Meeting: Information Sheet and Expression of Interest Form

School Recruitment Letter

Letter to School Informing of Study Condition and Information Sheet: Control Schools

Letter to School Informing of Study Condition and Information Sheet: Intervention Schools

Student Questionnaire Theoretical Model

Student Baseline Questionnaire

Staff Baseline Questionnaire

Recruitment Letter for Pilot Testing

School Action Journal

Supportive Schools Project Parents' Guide One Edition One: "Forward" Friendships and High School: Co-educational Schools' Version

Supportive Schools Project Parents' Guide One Edition One: "Forward" Friendships and High School: Male Schools' Version

Supportive Schools Project Parents' Guide One Edition One: "Forward" Friendships and High School: Female Schools' Version

Supportive Schools Project Parents' Guide One Edition Two: "Integrate" Getting Ready for High School: Co-educational Schools' Version (Draft)

Supportive Schools Project Student Magazine "Buzz" Edition One: Friendships: Co-educational Schools' Version

Supportive Schools Project Student Magazine "Buzz" Edition One: Friendships: Male Schools' Version

Supportive Schools Project Student Magazine "Buzz" Edition One: Friendships: Female Schools' Version

Supportive Schools Project Student Magazine "Buzz" Edition Two: Transition: Co-educational Schools' Version (Draft)

Supportive Schools Project Team Training: Agenda and Presentation

School Presentation to Parents

School Presentation to Staff: Control Schools

School Presentation to Staff: Intervention Schools

Active Parent Consent Information Letter

First Follow-up Reminder Letter

Second Follow-up Reminder Letter

Passive Parent Consent Information Letter