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Formative study of aggression prevention and reduction in junior primary school: final report presented to the Western Australian Health Promotion Foundation: book 1 of 2

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Formative Study of Aggression Prevention and Reduction in Junior Primary School

Final Report Presented to
The Western Australian Health Promotion Foundation

December 2004

Book 1 of 2

# Child Health Promotion Research Unit

School of Exercise, Biomedical and Health Sciences

# Formative Study of Aggression Prevention and Reduction in Junior Primary School

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The Western Australian Health Promotion Foundation

December 2004

Book 1 of 2







# Final Report to the Western Australian Health Promotion Foundation

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**Project Title:** 

Formative Study of Aggression Prevention and

**Reduction in Junior Primary School** 

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Association of Independent Schools

Catholic Education Office of WA

Curriculum Council of Western Australia

Department of Education and Training

Department of Health

Fremantle-Peel District Education Office

Parents & Friends' Federation of Western Australia

Swan District Education Office

Swan Social Psychological Educational Resource (SPER) Centre

Telethon Institute of Child Health Research

West Coast District Education Office

Western Australian Primary Principal's Association

#### **Schools**

Ashburton Drive Primary School

Balga Primary School

Banksia Grove Catholic Primary School

Belmont Primary School

Bentley Primary School

Calista Primary School

Carlisle Primary School

Carrawatha Primary School

Challis Early Childhood Education Centre

Clarkson Primary School

Currambine Catholic Primary School

Dryandra Primary School

Forest Crescent Primary School

Girrawheen Primary School

Good Shepherd School

Hampton Park Primary School

Mary MacKillop Catholic Community Primary School

Merriwa Primary School

Middle Swan Primary School

Montrose Primary School

Neerigen Brook Primary School

North East Metropolitan Language Development Centre

Nyindamurra Family School

Our Lady of Lourdes School

Perth Montessori School

Queens Park Primary School

South Thornlie Primary School

St Anthony's Catholic Primary School, Midland

St Anthony's Catholic Primary School, Wanneroo

St Joseph's School

St Mary's Catholic Primary School

St. Josephs College

Subjaco Primary School

Tranby Primary School

Weld Square Primary School

Westfield Park Primary School

Willandra Primary School

Wirrabirra Primary School

Yale Primary School

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# **EXECUTIVE SUMMARY**

This one year formative study aimed to conduct a feasibility trial of current evidence-based practice to reduce and prevent aggression among junior primary school age children. The project comprised three stages: assessing the types of direct and indirect aggression among junior primary school students and the current practices of teachers and schools to address this behaviour and linking successful current practices to evidence-based research to inform the development of a classroom teaching and behaviour management intervention.

Aggression is broadly defined as negative acts which are used intentionally to harm others, and may be classified as proactive, reactive or instrumental aggression. (Smith, Cowie, Olafsson, & Liefooghe, 2002). Whilst interventions to reduce aggression in junior primary school are limited, much research has described the risk and protective factors of aggression. Risk factors of aggressive behaviour include familial, school, and individual. Familial risk factors include: parents not providing clear rules, use of corporal punishment, setting poor examples, displaying conflict or violence and providing poor supervision. School risk factors comprise a lack of school structure and adult supervision, indifferent attitudes of school staff toward aggression; and few consequences of negative behaviours. Individual risk factors such as an impulsive and dominant personality, positive attitudes toward school violence and negative self concept also contribute to aggressive behaviours in young children.

Conversely, research has also identified protective factors that are likely to reduce a child's use of aggressive behaviours. These can also be classified as familial, school and individual factors and comprise: parental involvement, attitudes and beliefs not supportive of aggression, emotional and social support from teachers and peers at school; high self esteem; positive outlook and pro-social skills.

This study aimed to combine a thorough review of available literature with consultation with stakeholders and teachers to develop and test principles for best practice to reduce aggression and improve social skills. Outcomes of this study have

provided an insight into current practice in Western Australian schools as well as stakeholders opinions on this current practice and their ideas for future directions in this field.

Most importantly, this research has presented an evidence-based summary of best practice in reducing aggression and improving social skills of junior primary school children. Further, this model has been validated by experts and summarised according to the Health Promoting Schools model for ease of future implementation. This best practice model will be used in future research to inform the development of a large scale aggression reduction and social skill development intervention trial for Western Australian primary schools.

#### 1.0 INTRODUCTION

In response to a growing body of literature recommending behavioural interventions target children of junior primary school, the CHPRU received funding from Healthway to conduct a formative evaluation of aggression prevention and reduction (Tremblay, 2002). This research aimed to bridge the gap between evidence based research and effective practice in aggression prevention and reduction in young children. It comprised two phases: assessing the types of aggression prevalent in junior primary school students and current practices of teachers and schools to address these behaviours, and linking current practice to evidence-based research to inform the development of the classroom teaching and behaviour management intervention.

This report provides a summary of this research activity within these two phases. Firstly, the study's aim and objectives are described followed by a thorough description of the methodology of the study. Section four discusses the results of the study. This chapter summarises the literature reviewed and interview data collected from teachers and stakeholders. Section four concludes with a presentation of recommended practice principles derived as a result of this literature review and teacher and stakeholder consultation.

The final sections of this report provide a summary of the contribution of this research and funding on professional development of staff, implications for future research, community benefits of the research, publications and further dissemination. A series of appendices are also provided which document the processes used in this research.

#### 2.0 OBJECTIVES

The aim of the 'Social Skill Development and Aggression Reduction Formative Study' was to assess the current research and evidence-based practice used to reduce or prevent aggression among junior primary school age children.

The specific strategy objectives were to:

- Establish an advisory committee comprising researchers and experienced practitioners in the key areas of managing student behaviour, aggression and violence, bullying prevention and mental health education, to help determine evidence-based practice in this area;
- Review international aggression prevention interventions to determine the most appropriate content and design of a classroom and home intervention for children aged 4 to 6 years;
- Consult with experienced junior primary school teachers, allied health staff
  (especially school psychologists) and administrators, to collect and assess current
  practices in aggression prevention and behaviour management in children aged 4
  to 6 years;
- Continue to review the literature for empirical evidence to guide the development of the classroom and home intervention;
- Validate the findings of the evidence review with national and international experts in aggression prevention and reduction;
- Collate and trial a classroom and home intervention with children aged 4 to 6 years; and

 Explore the usefulness, validity and reliability of a pictorial evaluation instrument targeting 4 to 6 year old children to measure classroom social climate and antisocial behaviour.

#### 3.0 METHODOLOGY

3.1 Stage 1: Assessing the types of direct and indirect aggression among junior primary school students and the current practices of teachers and schools to address this behaviour.

#### 3.1.1 Literature Review

An ongoing review of current literature continued during this stage to identify best practice in social skill development and aggression reduction in the junior primary school around Australia and internationally. Kew words were developed to assist this literature search and included phrases such as: behaviour management, child behaviour, school policies, school violence, aggression and social skills. Electronic databases, such as Wiley Interscience, Swetsnet, Factiva, and Proquest 5000 were systematically searched for every key word or phrase.

Thousands of potential articles were identified through the literature search. Of these articles, only those relevant to the formative evaluation were retrieved. Articles available online and in full text were retrieved by printing the full reference from the database. Other relevant articles not available online were retrieved from Western Australian tertiary libraries.

Each retrieved article was read by the Project Coordinator and important information relevant to the study was summarised. Summary tables were also prepared for interventions in this area, and for instruments measuring aggression and social skill development in young children. A brief summary of the literature review can be found in Section four of this report and a full copy is provided in Appendix 1.

# 3.1.2 Consultation with Experts and Stakeholders

A number of experts in behaviour management, early childhood education, social skill development and aggression prevention/reduction were consulted during this initial stage of the project. This group included educators, public health professionals, psychologists, curriculum developers and other researchers. These experts identified current and proposed strategies provided by their organisation that aim to develop social skills and reduce aggression, as well as Western Australian schools implementing strategies in this area. The following organisations were approached:

- · Association of Independent Schools
- Catholic Education Office of WA
- Curriculum Council of Western Australia
- Department of Education and Training
- Department of Health
- Fremantle-Peel District Education Office
- Parents & Friends' Federation of Western Australia
- Swan District Education Office
- Swan Social Psychological Educational Resource (SPER) Centre
- Telethon Institute of Child Health Research
- · West Coast District Education Office
- Western Australian Primary Principal's Association

### Procedure

Key Stakeholders from these organisations were initially approached via fax, being sent an information letter, project description and consent form (Appendix 2). Each stakeholder was then contacted via phone call to discuss their participation in the study. Upon receipt of the completed consent form, the Project Coordinator contacted the stakeholder to schedule an interview appointment. Seventeen out of 28 stakeholders agreed to participate in a telephone interview.

#### Instrument

A semi-structured interview was developed to identify current and proposed policies, classroom, parent and other whole-school programs addressing social skill development and aggression reduction in junior primary school (Appendix 3). The interview also aimed to identify schools currently implementing successful strategies to encourage social skill development and reduce aggressive behaviour in the junior primary school.

#### Data Collection and Analyses

Telephone interviews were conducted with stakeholders who had provided their consent to participate in the program. One stakeholder was provided a copy of the instrument prior to the interview. The interviews were subsequently transcribed, and common themes and responses identified by two independent raters.

#### 3.1.3 Consultation with school staff

Stakeholders were asked to identify schools and particular teachers who were implementing successful policies, classroom or whole-school strategies to encourage social skill development or reduce aggressive behaviour, particularly in the junior primary school. Schools using the Promoting Alternative Thinking Strategies (PATHS) were identified by staff at the Canning District Education Office. Repeated attempts were made to access the names of schools using the Tribes program; however these schools were not made available until the middle of November 2004 and as such could not be incorporated into the present study. Further research into this program will continue after completion of this Healthway funding.

The purpose of the teacher interviews was to identify successful strategies to build social skills and reduce aggressive behaviour and to review their development, implementation and evaluation.

#### Procedure

The Principals of identified schools were initially approached via letter and follow-up telephone call and asked to provide permission for staff at their school

to participate in an interview to discuss successful classroom and whole-school strategies in social skill development and aggression reduction (Appendix 4). The Principal was then faxed a letter acknowledging his/her consent for staff participation and asking them to fax back a form with the names of teachers they believed would be appropriate to contact. Thirty-nine out of the 52 schools contacted consented to participate.

All staff members identified by the Principal were mailed an information letter and consent form to obtain consent to participate in a short telephone interview (Appendix 5). The staff member was asked to return the completed consent form via fax and to suggest two times at which they would be available to participate in the interview. The Project Coordinator confirmed the interview details via fax. Forty-seven out of 156 teachers agreed to participate from 25 of the schools that had consented.

#### Interview

A semi-structured interview was developed to obtain further information about successful whole-school and classroom policy and practices/programs from teachers to develop social skills and reduce aggression, particularly within the junior primary school (Appendix 6). The interview was designed to take approximately 15-20 minutes to implement.

#### Data Collection and Analyses

The short telephone interviews were conducted with school staff who had provided written consent to participate in the program. The interviews were subsequently transcribed, and common themes and responses identified by two independent raters.

3.1.4 Collation of Evidence and Practice in Social Skill Development and Aggression Reduction

Numerous educational resources addressing social skill development and aggression reduction were reviewed and were used to investigate best practice in this area. Using the literature, expert and stakeholder consultation and resource reviews, a number of best practice principles were developed and

disseminated to national and international experts via a modified Delphi process in Stage 2. A review of interventions targeting social skill development and aggression reduction has been included in the literature review in Appendix 1.

- 3.2 Stage 2: Linking successful current practices to evidence-based research to inform the development of the classroom teaching and behaviour management intervention.
- 3.2.1 Delphi Study of Successful Practice in Social Skill Development and Aggression Reduction in Junior Primary School Children

The Delphi technique is a means of achieving group consensus of opinion and priority concerning a particular issue or objective (Stahl & Stahl, 1991). The technique involves a multi-stage process, whereby an expert panel respond to a series of questionnaires, known as rounds, with each questionnaire building upon the responses to that which preceded it (Delbecq, Van de Ven, & Gustafon, 1986; Jones & Hunter, 1995; Miller, 1990; Stahl & Stahl, 1991; Sumison, 1998; P. Williams & Webb, 1994)

This technique allows group consensus of opinion between individuals who are anonymous to one another from diverse backgrounds and locations (Goodman, 1987; Miller, 1990; Stahl & Stahl, 1991; Sumison, 1998). This enabled state-wide collaboration and synthesis of opinion on the topic and facilitated active and equal participation from all members of the panel, overcoming factors that can distort face to face discussion (Miller, 1990; Stahl & Stahl, 1991; Sumison, 1998; P. Williams & Webb, 1994). This technique also enabled further exploration of this issue by drawing on the current knowledge of experts.

#### 3.2.2 Participants

It was decided to have input from both researchers in the area of social skill development and aggression reduction in schools and school-based practitioners with expertise in these areas. To select individuals within these two target groups, at least two of the following criteria needed to be met:

- 1. To have published widely in the area of social skill development or aggression reduction.
- 2. To have extensive practical experience in working with schools to address social skill development and aggression reduction.
- 3. To have demonstrated professional interest in addressing social skill development and aggression reduction within schools.
- 4. To have considerable experience in behaviour management.

A nomination process was conducted to select specific individuals to be invited to participate in the Delphi process (Delbecq et al., 1986). Nominations were made by the chief investigators and project coordinator. This nomination process resulted a list of 16 local individuals. A response rate of 56% provided an expert panel of nine local individuals.

Attrition rates are of particular importance as the loss of respondents from round to round may alter the range of opinion gathered (Williams & Webb, 1994). One panel member was not able to complete questionnaire 1 due to other commitments and two other members did not return their questionnaires. In total, four panel members completed both questionnaires (44%).

#### 3.2.3 Instruments

Expert Panel Questionnaire One

From the literature review a draft set of successful practice principles were compiled and reviewed by the chief investigator and project coordinator. Questionnaire I (see Appendix 8) presented the draft successful practice principles organised within the Health Promoting Schools (HPS) framework. An information sheet accompanied the questionnaire which briefly outlined the development of the principles, the HPS model within which the principles were framed and how the principles would be used.

The expert panel was asked to review each principle and associated criteria, add comment expressing agreement, disagreement or the need for clarification. The panel were also asked to suggest additional principles and criteria.

# **Expert Panel Questionnaire Two**

Questionnaire Two (see Appendix 9) presented the modified successful practice principles, with modifications in bold text. The comments made to Questionnaire One were summarised and presented, thus opening a form of dialogue among panel members. The purpose of feeding the group's responses back to the participants was to facilitate consideration of initial comments in relation to the responses of other group members.

Panel members were asked to review each of the principles and criteria and comment on changes made and the group's comments.

#### 3.2.4 Procedure

Participants were recruited by facsimile and follow up phone call (see Appendix 7). Questionnaire 1 was emailed to each expert panel member. Respondents were provided with seven days to complete the questionnaire between the day of receiving the questionnaire and the day of its return. Respondents returned the completed questionnaire by facsimile or email. Respondents received acknowledgement upon the project coordinator's receipt of the completed questionnaire. Questionnaire Two was disseminated according to the same procedure used for Questionnaire One.

3.3 Stage 3: Pilot testing the acceptability of the classroom and home intervention including behaviour management approaches to address aggression with junior primary school students.

The successful practice principles developed during the Delphi study were compiled using the Health Promoting Schools framework. These principles form the basis for an intervention for social skill development and aggression reduction with junior primary school students and their families. These principles were not pilot tested within this study.

From the literature review instruments measuring aggressive behaviours in junior primary school were identified. A brief summary of the literature review can be found in Appendix 1. Of these instruments the Life in School Checklist by Arora (1992; 1994) was identified as the most promising measure of aggression in the junior primary years.

#### 3.3.1 Procedure

Questionnaires were sent to a convenience sample of parents of children in junior primary. An information letter was provided to each parent requesting they ask each question to their child which related to events that occurred in the last week. Parents were asked to record any difficulties their child experienced completing the questionnaire. Parents were provided with reply paid envelopes to return the questionnaires. Of the 15 questionnaires distributed, five were returned.

#### 3.3.2 Instrument

The Life in Schools' checklist may be modified to suit the target audience (Arora, 1994). Arora (1994) states, "For age groups younger below 10 they may like a shorter version and simplify some of the language" (p.13). Minor modifications were made to the language used in the checklist and one positive and negative item were removed as they were considered inappropriate. The questionnaire was also reworded so it could be administered by the parent rather than being self-administered (Appendix 10).

#### 4.0 RESULTS

#### 4.1 Literature Review

# What is aggression?

Smith and colleagues (Smith et al., 2002) describe aggressive behaviour as negative acts carried out intentionally to harm another. Crick and Dodge (Camodeca, Goossens, Terwogt, & Schuengel, 2002) and Roland and Idsoe (Roland & Idsoe, 2001) describe aggression in terms of proactive and reactive aggression. Proactive aggression is defined as the tendency to attack someone to achieve some material or social reward (Camodeca et al., 2002; Roland & Idsoe, 2001). Thus proactive aggression is usually goal oriented and deliberate. Monks and colleagues (Monks, Ortego Ruiz, & Torrado Val, 2002) continue to describe proactive aggression as unjustified behaviour involving a child or group of children who insult, hit, socially exclude or threaten others without motive.

Reactive aggression, however, is described as a defensive response to provocation or trouble, accompanied by anger (Camodeca et al., 2002; Roland & Idsoe, 2001). The main components of this form of aggression are frustration, anger and attack (Roland & Idsoe, 2001).

Crick and Dodge (Camodeca et al., 2002) also describe a third form of aggression, similar to the proactive aggression described above. Instrumental aggression, whilst possessing the same characteristics as proactive aggression, is object-oriented. That is, the aggressive behaviour is directed at an object or privilege, rather than at another person (Camodeca et al., 2002).

Aggressive behaviour provides short- and long-term effects for both the child being aggressive and the child being aggressed against. Rigby (2003) identified four categories of negative health outcomes which may be experienced by either party: 1) Low psychological wellbeing, including general unhappiness, low self-esteem and feelings of anger and sadness; 2) Poor social adjustment, including dislike of one's social environment, which may manifest as loneliness, isolation and absenteeism; 3)

Psychological distress, considered to be more serious than the first two categories and includes high anxiety levels, depression and suicidal ideation; and 4) Physical unwellness, including clear signs of a physical disorder and possibly psychosomatic complaints.

# Risk factors for aggressive behaviour

Interpersonal violence shares many common risk factors regardless of the race, age or gender of the people involved (World Health Organization, 2002). Risk factors for aggressive behaviour can be categorised as *familial*, *school or environmental* and *individual*, as described below.

#### Familial:

Young children need clear rules to follow (Limber, 2003). Parents who do not provide clear rules to guide children's behaviour or who use corporal punishment methods of behaviour management (Limber, 2003), set poor behavioural examples (Simons-Morton & Crump, 2003), display parental conflict (Borum, 2000; Fields & McNamara, 2003) or familial violence (Borum, 2000; English, Marshall, & Stewart, 2003) and who provide poor supervision of their children (Fisher & Kettl, 2003; Limber, 2003; Vazsonyi & Pickering, 2003) increase the risk of their child using aggressive behaviour as a means of getting what they want, or to express frustrations.

A lack of parental warmth and positive adult role models (Limber, 2003) together with family separation or divorce, family relocation or bereavement (Dickinson, Coggan, & Bennett, 2003) further increases the risk of children communicating their frustration and/or anger through aggressive acts.

Children born to young parents (Fields & McNamara, 2003) may also experience increased risk of aggressive behaviour. This is also true for children who live in lower socio-economic areas, compared with children from higher socio-economic areas (Fields & McNamara, 2003).

#### School/environmental:

The school/environmental risk factors associated with aggressive behaviour are similar to those which are categorised as familial. The school environment provides support for students to develop positive interactions with their peers, teachers and

other whole-school staff members. However lack of school structure (Fisher & Kettl, 2003; Simons-Morton & Crump, 2003), lack of adult supervision (Limber, 2003), indifferent attitudes of school staff toward aggression and bullying (Limber, 2003) and few or no negative consequences from parents, teachers or peers resulting from an aggressive act (Stevens, De Bourdeaudhuij, & Van Oost, 2001) are risk factors for the onset or increase of aggressive behaviour. School transition is an important time period when there may be an increased risk of aggressive behaviour as children make the transition from one school to another (Pellegrini & Long, 2002).

Children's overt aggressive play increases when there is an adult present who does not intervene or restrain the aggressive behaviours, compared to when there is an adult present who is exercising such restraint, or when there is no adult present at all (Gribbin, 1979).

Children who live in an environment that does not tolerate physical aggression and rewards prosocial behaviour are more likely to develop skills to use means other than physical aggression to obtain what they want, or for expressing frustrations (Tremblay, 2002).

Tremblay (Tremblay, 2002) indicated that other environmental issues, such as lead content and cigarette smoke levels may increase the risk of aggressive behaviour exhibited by children.

#### Individual

The impact for young people who have to cope with several change, loss and transition events at one time can be a pathway to emotional distress, behavioural and academic difficulties and mental health issues, such as anxiety and depression (Dickinson et al., 2003).

An impulsive, dominant personality (Heinrichs, 2003; Limber, 2003), positive attitudes toward violent behaviour (Borum, 2000; Limber, 2003), negative self-concept (Crick, Casas, & Mosher, 1997; Kaukiainen et al., 2002), low self-esteem (Dukes & Stein, 2001), lack of empathy (Limber, 2003), lack of social competence (Kaukiainen et al., 2002), and lack of emotional closeness (Borum, 2000; Vazsonyi & Pickering, 2003) contribute to a child's increased risk of engaging in aggressive acts.

Hyperactive (Pulkkinen and Tremblay, 1992, in Tremblay, 2002), defiant (Heinrichs, 2003), oppositional (Heinrichs, 2003; Tremblay, 2002), lonely (Crick et al., 1997), and easily frustrated (Heinrichs, 2003) children may be more likely to engage in aggressive behaviour than children without these characteristic traits.

The gender of a child plays a role in their aggressive and/or non-aggressive behaviour (Espelage, Holt, & Henkel, 2003; Natvig, Albrektsen, & Qvarnstrom, 2001; Salmivalli, Kaukiainen, & Lagerspetz, 2000; Simons-Morton & Crump, 2003; Tremblay, 2002). In a study conducted by Espelage and colleagues (2003), male children self-reported engaging in more bullying and fighting than females, and were also more likely to be nominated by their peers as being bullies. Some research has found that female children use more indirect aggressive behaviour than do male children (Salmivalli et al., 2000; Tremblay, 2002), while male children tend to use more physical and verbal aggressive behaviour than female children (Salmivalli et al., 2000). These results may occur due to girls' earlier maturation and development than boys (Simons-Morton & Crump, 2003).

Frequent use of physical means of aggression by children appears to peak at between 2 and 3 years of age (Tremblay, 2002). Longitudinal studies of small samples of preschool children have found the most physically aggressive toddlers tend to remain the most physically aggressive preschoolers (Cummings, Iannotti, & Zahn-Waxler, 1989; Keenan & Shaw, 1997; Tremblay, 2002). As children further develop, most learn alternatives to aggressive behaviour (Tremblay, 2002), thus younger children are more frequently aggressive and tend to resort to less and less physical aggression as they grow older (Cairns, Cairns, Neckerman, Ferguson, & Gariepy, 1989; Loeber & Stouthamer-Loeber, 1998). However, this pattern is completely reversed in terms of indirect aggression (Tremblay, 2002).

As part of the developmental theory of aggression (Bjorkqvist, Osterman and Kaukianen 1992a, in Ireland, 2002), children of younger age groups are more likely to report higher levels of physical and psychological or verbal bullying behaviour and lower levels of indirect bullying behaviour than older age groups (Ireland, 2002).

Children who have difficulty understanding emotions (Denham et al., 2002), or learning difficulties in general (Kaukiainen et al., 2002; Knox & Conti-Ramsden, 2003) tend to have problems in their social relations, are rejected and unlikely to be popular compared to children without learning difficulties. These students are also more likely to have fewer friends, and may be more aggressive than children without learning difficulties (Kaukiainen et al., 2002).

Children who are rejected by their peers (Crick et al., 1997; Farmer, Farmer, & Gut, 1999; Kaltiala-Heino, Rimpela, Marttunen, Rimpela, & Rantanen, 1999; Monks et al., 2002; Salmivalli et al., 2000), alienated (Borum, 2000; Fields & McNamara, 2003; Natvig et al., 2001), experience friendship/relationship break-ups (Sebanc, 2003) are bullied (Dickinson et al., 2003), neglected or abused (Borum, 2000; Dickinson et al., 2003; Field, 2002), or who are non-social in their play interactions (Natvig et al., 2001) are at a greater risk of expressing aggressive behaviour. Research has shown, that children who engage in aggressive acts are likely to affiliate with other children who engage in aggressive acts of approximately the same frequency (Borum, 2000; Dukes & Stein, 2001; Espelage et al., 2003; Farmer et al., 1999).

Negative attitudes about school (Simons-Morton & Crump, 2003), indifferent attitudes about bullying (Limber, 2003), school adjustment problems (Denham et al., 2003), low levels of cooperativeness (Natvig et al., 2001), lack of problem solving skills, poor psychological adjustment (Heinrichs, 2003), low intellect (Fields & McNamara, 2003) and low academic achievement (Borum, 2000; Fields & McNamara, 2003) also increase the risk of students' participation in aggressive behaviour.

Perry, Perry and Boldizar (1990 in Kochenderfer & Ladd, 1996b) have contended that as children enter new peer groups, for example, entering kindergarten or moving from pre-school to Year 1, aggressive children direct negative behaviours toward a variety of targets. As children exhibiting aggressive acts learn the reactions they receive from their peers, the number of children being aggressed upon becomes increasingly smaller (Kochenderfer & Ladd, 1996b).

Risk factors for engaging in aggressive behaviour may also include biological characteristics, such as elevated testosterone and serotonin levels (Tremblay, 2002), body mass index (Tremblay, 2002), depression (Crick et al., 1997), anxiety (Olweus

1997, in Natvig et al., 2001), and presence of Attention Deficit Hyperactivity Disorder (ADHD) (Unnever & Cornell, 2003).

# Protective factors for aggressive behaviour

The risk factors for aggressive behaviour appear to have been studied in much more depth than the protective factors for aggressive behaviour, with somewhat more risks having been identified than protective factors. Protective factors can also be categorised as *familial*, *school/environmental* or *individual* factors which are discussed below.

#### Familial

The presence of more adults, particularly parents, in children's everyday life has shown to be the most successful deterrent to children engaging in school violence, according to Principals (Crouch & Williams, 1995). Parents who closely monitor their children's behaviour out of concern for their wellbeing provide their children with an overall sense of greater investment in them which translates into improved educational performance and reduced problematic behaviour (McNeal, 1999). Parents' involvement in their child's schooling (eg, participation in school activities, forming networks with the parents of their child's friends, and who hold parent-child discussions about school) creates additional sources of social constraint to enable parents to influence their child's behaviour (McNeal, 1999). However, parental involvement in general, may also reduce incidents of problematic behaviour (McNeal, 1999).

Parental attitudes, beliefs and knowledge about the competence level of their child, the importance of peer relations and the development of socialisation strategies to support and adjust their child's peer interactions (Guralnick, 1999) have been found to be protective of engaging in, or experiencing, aggressive behaviour.

Authoritative parenting styles comprising of high levels of demandingness and responsiveness appears to reduce the likelihood of children's engagement in problem behaviour, including aggressive acts, and promotes the development of social competence (Simons-Morton & Crump, 2003).

#### School/environmental

Successful and independent interaction with other children of the same age is a strong predictor of later mental health and wellbeing during preschool, and continuing during primary school, when friendships solidify (Denham et al., 2003). A lack of positive and protective peer relationships increases children's vulnerability to experiencing aggressive behaviour (Knox & Conti-Ramsden, 2003). Additional to increased support from peers (Dukes & Stein, 2001; Farmer et al., 1999; Natvig et al., 2001), emotional support from teachers (Bru, Stephens, & Torsheim, 2002) and positive teacher-student relationships (Meehan, Hughes, & Cavell, 2003) decrease the risk of children engaging in aggressive behaviour.

#### Individual

Learning delayed gratification (learning to wait for something you want) and the language to use to request others to satisfy your needs may be the most important protective factors against severe aggressive behaviour in children (Tremblay, 2002). Moffitt (1993 in Salend & Rohena, 2003) and Stattin (1993 in Salend & Rohena, 2003) suggest there is a negative correlation between verbal skills with impulsivity and criminal behaviour.

Children with high self-esteem, a positive outlook and developed social skills (Dukes & Stein, 2001), as well as having friends (Pellegrini & Long, 2002), participating in 'conventional activities' (eg, extra-curricular activities, sports and clubs) and holding positive responses toward authority (Dukes & Stein, 2001) are less likely to engage in or experience aggressive behaviour.

Field (Field, 2002) noted adolescents' intimacy with parents and friends as a protective factor for engaging in aggressive behaviour, with those who tell an adult or seek help after experiencing or witnessing an aggressive act being less likely to experience aggressive behaviours (Monks et al., 2002). Increased attachment to school and academic achievement are also believed to relate to reduced levels of engagement in, or experience of, aggressive behaviour (Vazsonyi & Pickering, 2003).

#### Effects of victimisation

Short-term effects associated with being aggressed against include lower selfesteem, higher levels of depression and negative appraisal of interpersonal competence, which may lead to an increased risk of social withdrawal (Camodeca et al., 2002), poorer perceived health and mental disorders, including depression, in adulthood (Kaltiala-Heino et al., 1999).

Children who experience aggressive behaviour by other children are likely to experience feelings of loneliness (Kochenderfer & Ladd, 1996a, 1996b; Schafer, Werner, & Crick, 2002; Unnever & Cornell, 2003), anxiety (Kaltiala-Heino et al., 1999; Kochenderfer & Ladd, 1996b; Roland, 2002; Unnever & Cornell, 2003; Wolke, Woods, Bloomfield, & Karstadt, 2000), depression (Kaltiala-Heino et al., 1999; Kochenderfer & Ladd, 1996b; Roland, 2002; Schafer et al., 2002; Unnever & Cornell, 2003; Wolke et al., 2000), low self-esteem (Kaltiala-Heino et al., 1999; Kochenderfer & Ladd, 1996b; Roland, 2002; Schafer et al., 2002; Unnever & Cornell, 2003; Wolke et al., 2000) and suicidal ideation (Roland, 2002; Unnever & Cornell, 2003), particularly for girls (Roland, 2002).

Psycho-somatic complaints, such as stomach aches and sleeping problems, may be experienced by children who are aggressed against (Kaltiala-Heino et al., 1999; Wolke et al., 2000). These children are also at risk for behavioural and psychiatric problems (Wolke et al., 2000) and poor psychological adjustment (Heinrichs, 2003).

Children who experience aggression are usually less happy in school (Kaltiala-Heino et al., 1999; Kochenderfer & Ladd, 1996b), like school less (Kochenderfer & Ladd, 1996b) and have higher levels of school avoidance (Kochenderfer & Ladd, 1996b; Unnever & Cornell, 2003) than children who do not experience aggressive behaviours. Peer rejection may occur (Kaltiala-Heino et al., 1999; Monks et al., 2002; Schafer et al., 2002; Unnever & Cornell, 2003), as may retaliatory fighting (Monks et al., 2002) with continued targeting. Continued targeting may also result in school failure (Schafer et al., 2002), an increased likelihood in developing Attention Deficit Hyperactivity Disorder (ADHD) (Unnever & Cornell, 2003) and feelings of physical weakness (Monks et al., 2002).

Some children who have special needs are noticeably different to their peers, in terms of speech impediments, physical incapabilities and for other reasons.

Regardless of the nature of the difference, this is a factor that increases the likelihood

of experiencing aggressive behaviour from other children (Knox & Conti-Ramsden, 2003).

# Reactions to aggressive behaviour

Research has shown differences in the retaliatory behaviour of children who experience aggression. Kochenderfer and Ladd (1997 in, Naylor, Cowie, & del Rey, 2001) suggest male children tend to fight back more often than do female children. Other research indicates that male children are more likely to say they 'felt angry', where as female children were more likely to say they 'felt sad and miserable' when asked about their feelings after experiencing aggressive behaviour (Rigby, 1997). However Rigby continues to state that female children are more likely to report 'feeling angry' about experiencing aggression as they get older (Rigby, 1997). Male children may also be more likely to deny being affected by aggressive acts (Rigby, 1997). Children who experience aggressive behaviour tend to become more lonely and avoid school more after they have been aggressed upon, with loneliness possibly lingering even after the aggression has reduced or ceased (Kochenderfer & Ladd, 1996b).

# Why focus on the early years?

While most studies of aggression have been conducted with adolescent children, aged 12 to 18 years, violent behaviour does not suddenly appear in adolescence (Rosenblatt, 2000). A large study of 20,000 children found that while children started to regulate physical aggression from 2 to 11 years, the frequency of indirect aggression increases from the ages 4 to 11 years (Tremblay, Boulerice, Harden, & al., 1996). Thus children appear to learn to use indirect means of aggression rather than physical aggression (Cairns et al., 1989; Loeber & Stouthamer-Loeber, 1998; Tremblay, 2002).

However, when addressing aggression in young children, researchers should consider the childrens' brief attention spans, lack of fine motor skills and limited understanding of language (Wiley & Hendricks, 1998).

# **Program Recommendations**

Interventions that aim to reduce aggressive behaviour in junior primary school should address the risk and protective factors relating to the whole-school, classroom and family.

#### School environment

School based interventions must include the need for parents, teachers and students to acknowledge that they are models of acceptable behaviour and that their attitudes toward aggression affect children's' attitudes towards that behaviour (Stevens et al., 2001; Unnever & Cornell, 2004). Interventions targeting the school environment also require improved playground supervision (Stevens et al., 2001) and monitoring "hot spots" in school (Flannery et al., 2003).

# Classroom environment

Children's social skills must be enhanced (Farmer et al., 1999; Stevens et al., 2001) by teaching children how to join in games, make new friends, encouraging children who bully to make amends for their aggressive acts by doing something in favour of the child they bullied (Stevens et al., 2001). Children should be trained to solve bullying-related conflicts and raise adult's awareness of bullying problems (Stevens et al., 2001). Assertiveness training or support should be offered to children who are bullied (Skiba et al., ; Stevens et al., 2001), with training such as self-control strategies, being provided to students who bully others (Stevens et al., 2001).

Children should be taught emotional understanding (Denham et al., 2002; Kwon & Yawkey, 2000) to ensure they are aware that everyone has and shows emotional actions and reactions, emotions arise because of different situations, emotions can be used as a basis of communication between individual's and other's feelings, that there are different forms of emotional expressions, emotions vary among people and that emotions are changeable (Kwon & Yawkey, 2000). Menna and Landy (2001) suggest the best way to encourage children to talk about and understand their emotions, and the emotions of other people, is to provide pictures of faces identifying certain feelings, and asking children to identify why children may feel that way and what might happen to cause this feeling.

#### Parent

General parent meetings should be held that contain messages about aggressive behaviour to the whole-class parent group, with specific discussion groups being held for parents of children involved in aggressive or bullying incidents (Stevens et al., 2001). Parents should be taught strategies to reinforce positive and prosocial behaviour, but also to ignore negative or antisocial behaviour (Menna & Landy, 2001).

Parents should be provided resources and skills to teach their children how to take turns, and how to provide and understand social cues and communication through parent-child interactions so children may learn to replicate this in other interactions in their daily experiences (Guralnick, 1999). Parents' active engagement in the fostering of these social skills is critical to the development and future success of children's peer-related social competence (Guralnick, 1999).

Careful planning of parent-related interventions is required to ensure negative outcomes, such as high rates of premature dropout, failure of parents to participate in the prepared intervention, and failure of the parent and/or child to maintain positive changes made during the intervention phase at follow-up, do not occur (Assemany & McIntosh, 2002).

Two interventions, Tribes and Promoting Alternative Thinking Strategies (PATHS), were identified in the literature review and were currently in use in schools in Western Australia. PATHS focuses on five areas, self control, emotional understanding, building self esteem, relationships and interpersonal problems solving skills to reduce aggression and build children's social competence (Kam, Greeenberg, & Walls, 2003). Tribes aims to develop a positive learning environment through a group "process" (Gibbs, 2001, p. 21). Gibbs (2001, p. 21) describes a process as "a sequence of events that lead to the achievement of an outcome". Students learn about "collaborative skills, and to reflect both on the interaction and the learning that is taking place" (Gibbs, 2001, p. 21). The PATHS program was further investigated via the teacher interviews to examine its classroom and home intervention components rather than collating a trialling a new intervention in this area.

#### 4.2 Stakeholder Interviews

Structured interviews were conducted with 17 stakeholders from a variety of agencies providing support for schools in reducing aggression and improving social skills. For a summary of these interviews see Appendix 11. These stakeholders were involved in the following areas of social skill development in schools: supervision of teaching staff; supervision of training programs; knowledge of developmental pathways; development of school curriculum; research into child health; policy development; strategy implementation; and providing consultation and support services to schools. The roles of those stakeholders involved in the junior primary school years included curriculum development; policy development and the coordination, implementation and monitoring of support services in schools.

### **Policy**

Seventy-six percent (n=13) of the stakeholders interviewed felt policies were very important or important to develop children's social skills and reduce aggressive behaviour. Policies were reported to be important for the sustainability of an intervention and to ensure stakeholder involvement and ownership. However, some stakeholders reported teachers would already feel responsible for managing a child's aggressive behaviour so policy was not necessary to ensure involvement in this area. Others felt policies may be more useful for aggression reduction than social skill development, however a policy may lend support for social skill development in schools.

While all government schools were required to implement DET policies, stakeholders reported consideration should be given other factors that increase the likelihood of schools implementing policies to encourage social skill development and/or reduce aggression. Stakeholders reported policies should be evidence based and relate to learning outcomes. Schools must be provided with professional learning opportunities to ensure ongoing policy implementation, provide case examples from other schools and inform staff about current research based programs which complement the policy. Support of the school community, including teachers and parents and communication between members of this community was considered important for effective policy implementation.

Effective policies to encourage social skill development and reduce aggression in junior primary schools reportedly included those that incorporate community consultation and whole school strategies linked to the Curriculum Framework. Whole school policies to improve social skills and reduce aggression should connect with Curriculum Framework outcomes, highlight the importance of relationships and respect and provide resources that help schools match policy to practice. Existing policies that were reported to be effective in this area include the Curriculum Assessment and Reporting Policy; Behaviour Management in Schools; Students at Educational Risk; and Anti-bullying policies.

Nine policies were identified for their role in addressing social skill development or reducing aggression in junior primary schools. Five Department of Education and Training (DET) policies, namely Behaviour Management in Schools; Child Protection Policy; Curriculum Assessment and Reporting K-10: Policy and Guidelines; Curriculum Framework; Students at Educational Risk (SAER) were discussed. Four Catholic Education Office (CEO) of Western Australia policies were also discussed, including Dealing with Bullying & Harassment (Students); Child Abuse; Exclusion of Students for Disciplinary Reasons; Social Justice and Equity.

The Department of Education and Training's (DET) Behaviour Management in Schools' policy sets out the procedures schools should follow when developing a whole school behaviour management plan. This plan was designed to encourage pro-social behaviour and manage breaches of school discipline. The policy also documented procedures for developing individual behaviour management plans and required the development of appropriate and clear rules in the classroom so students could learn right from wrong. The Behaviour Management in Schools policy was developed in 1998 and was reviewed in 2001 to reflect the changes to the new Education Act.

The Child Protection Policy (DET) states that "everyone working in a school is responsible for the care and protection of the students" (Department of Education Western Australia, 1994, p.3) and was developed in 1994 to meet schools' duty of care requirements and was currently under review. This policy provided strategies for schools to manage child protection incidents and ensured appropriate duty of care

was offered to all students. The implementation of this policy was monitored through the district review process and utilised a train the trainer approach.

The Curriculum Framework (DET) was identified by stakeholders as fundamental in addressing social skill development in the junior primary years. Social skills were incorporated into three of the overarching statements of the Curriculum Framework and there were additional sections on values in the Health and Physical Education learning areas. The framework was developed through evidence-based research and extensive review and consultation. Suggested improvements to the framework included making it more contemporary, user friendly and easily interpreted as well as a need for addressing feedback from staff that the self-management area needs to reflect current thinking and research.

The Curriculum Assessment and Reporting K-10: Draft Policy and Guidelines (DET) was developed in 1998 and required that all government schools used the Outcomes Standard Framework and implemented processes to assist teachers in their judgements, assessment and reporting of student achievement. The implementation of this mandatory policy was monitored by the district review process to ensure assessment and reporting procedures are established in schools. Stakeholders suggested improvements to this policy could include empowering parents, developing shared educational goals incorporating social/emotional aspects and moving the policy away from only informing schools.

The Students at Educational Risk (SAER) policy (DET) ensured that schools implemented procedures to identify students who were at risk of not achieving the outcomes in the Curriculum Framework and develop procedures to assist these students. Research associated with this policy occurred 1996-98 and the policy was effective from 2001.

The Catholic Education Office (CEO) of Western Australia had four policies that related to the development of social skills or reduction of aggression, these were: Dealing With Bullying & Harassment; Child Abuse; Exclusion of Students for Disciplinary Reasons and Social Justice and Equity. While these policies do not specifically address social skills, the underlying principles aim to develop children's social skills. Catholic Education Office policies were developed in response to the

needs of the schools. The CEO recommended schools have policies/programs in this area, but the office did not tell schools how to carry out these programs. There was a three yearly review process for all CEO policies, and a long or short consultation process was utilised for these reviews.

When asked if their organisation was currently developing or planning to develop any policies to address social skill development or reduce aggression in junior primary schools, almost all stakeholders reported they were not. Stakeholders reported existing policies covered this age group and that any further policy development would not be junior school specific. The focus instead was on providing support and practices to support schools in this area.

The Association of Independent Schools in WA (AISWA) was currently developing a policy to address social skill development and reduce aggression in junior primary schools. AISWA was liaising with the Child Health Promotion Research Unit at Edith Cowan University regarding the National Safe Schools Framework and was providing professional development to schools related to health promoting schools and was purchasing the Friendly Schools and Families resource. The new policy will address bullying, harassment, behaviour management and child protection. Development of the policy had included the establishment of a working party with representatives from non government schools, School Psychology Service, Independent School Psychologist Association, AISWA and the School Drug Education Project.

#### **Classroom Practices**

Stakeholders were asked to identify classroom practices their organisation currently recommended or was developing to improve social skills and reduce aggression in junior primary children.

The Curriculum Framework (DET) guided teachers' decision making by putting principles related to learning, teaching and assessment in place. However it was the responsibility of teachers to develop programs or strategies to achieve student outcomes. Social skills were incorporated in the Society and the Environment section of the Curriculum Framework. Teaching staff were required to implement the framework as it represented best practice and was in line with the principles of

inclusivity. The Framework may be improved by identifying which principles teachers focus on and were the most useful to them.

Pathways to Health and Well-being in Schools and Pathways to Social and Emotional Development (DET) were resources associated with the SAER policy. Pathways to Health and Wellbeing (2001) was a focus paper containing social skill elements for students at risk. Pathways to Social and Emotional Development was a program or resource package that valued social and emotional development as a critical part of childhood development. The Pathways to Social and Emotional Development were developed over four years in collaboration with DET, the Department of Health and the Institute for Child Health Research and was released this year. There were no requirements for schools to implement this resource, although implementation was broadly monitored. It was recommended for use in schools as it was consistent with the organisation's strategic plan, provided insight to teachers for use with the curriculum and contained appropriate developmental information.

Many of the organisations supported schools by recommending programs that included collaborative processes, encouraged interactions with all children, valued children and extended, pursued and changed social skills. These organisations preferred to purchase programs that had already been evaluated. Programs recommended by stakeholders to schools include Friendly Kids Friendly Schools; Aussie Optimism; Stop, Think, Do; Roots of Empathy; Home Schools Link; Promoting Alternative Thinking Strategies (PATHS); Stitches; Bounce Back; Families and Schools Together (FAST); Tribes and Sheidow Park Social Problem Solving.

Government schools may access the Social Psychological Educational Resource (SPER) Centre to provide case management for children with social difficulties. SPER developed outreach resources and provided assistance with individual behaviour management plans for these students that were closely monitored and adjusted. Training for teachers associated with Individual Behaviour Management Plans for Students with Challenging Behaviour was offered twice a term for teachers and provided information about the goals of behaviour and techniques for observing and responding to behaviour. Staff who attend this training were offered reviews of their individual behaviour management plans, support and a workbook and manual.

Government schools also had access to social trainers or education assistants for children with extreme behaviour.

## **Development of Classroom Practices**

Twelve of the seventeen stakeholders interviewed felt it was very important to have a classroom education component in an intervention to develop children's social skills and reduce aggressive behaviour and two reported this to be 'important'. Most stakeholders reported classroom programs were a critical and effective component of an intervention to improve social skills however programs in this area should have a whole school focus. The behaviour management processes employed by teachers to manage students' behaviour was also important. Stakeholders recommend an intervention in this area should be integrated across the curriculum and whole school and should incorporate skill and knowledge components. Training for teachers and in teaching institutions for the implementation of the program would be valuable.

Factors such as the cost, features, support, school community involvement and professional training opportunities were identified as important for the implementation of social skill development and aggression reduction practises and programs. Programs that were inexpensive, user friendly, allowed for integration with existing policies and programs, provided evidence that the school was making effective changes and were research based were favoured. Support from the DET and school administration staff was also an important factor in program implementation. Teachers should be provided with paid, professional learning opportunities within school hours and have the opportunity for discussion and reflection in this area with other staff.

Stakeholder opinion on specific strategies to teach social skills (e.g. teaching children how to join in games and make new friends); manage aggression (e.g. raising an adult's awareness of aggressive incidents) and increase emotional understanding (e.g. using pictures of faces to demonstrate and discuss emotions) was sought. All stakeholders supported these strategies as opportunities to describe and manage emotion and discuss appropriate and inappropriate behavioural responses to these emotions. Examples cited of successful practice in this area included the use of emotions charts; explicit teaching of the difference between telling and dobbing; components within the Curriculum Framework that teach students how to take turns

and join in games and programs such as Roots of Empathy; Friendly Schools Friendly Classrooms; Goldstein pro-social skills; the Dolphin Program; and the Resilient Kids computer package. The need for strategies to be taught within an integrated early education setting was also discussed.

The DET were currently developing a Professional Learning Program with a focus on leadership within the Curriculum, Assessment and Reporting Policy and the consistent judgment of children. The program was just starting to be developed and was based on social constructionist theory which viewed a child within a context.

Fremantle Peel District Education Office was developing a program to reduce violence in schools which would be pilot tested in Term 4, 2004. This program was developed in response to school needs that could not be met by existing programs. A member of staff researched and wrote the program and schools were recruited for pilot testing. The program will be evaluated using teacher and student feedback and be made available in 2005.

# Parent/Family Practices

All of the stakeholders interviewed reported that it was at least important to have a parent education component in an intervention to develop children's social skills and reduce aggressive behaviour. It was reported that research into parent focused and child focused interventions were most effective. The need to engage parents as partners in an intervention to ensure the sustainability of outcomes and to make the connection between home and school was noted. This was believed to be particularly important with young children as parents are important to them.

Stakeholders identified administration support, attitudes of school staff, the format of a program and parent involvement as factors that would increase the likelihood of schools implementing parent-related programs to encourage social skill development and reduce aggression. It was reported that schools need to provide support for programs by allocating time for implementation and training, program leadership, money and extra staffing. The attitudes, awareness and concerns of school staff in relation to emotional regulation was felt to influence program implementation. The features of a program, for example the ease of implementation, use of guest presenters and provision of best practice examples would affect program

implementation. Stakeholders reported the need to involve parents in programs upon entry to school, run the program at convenient times so all parents can be involved and encourage communication between staff and parents.

Stakeholder opinion on the success of parent meetings to reduce aggression in junior primary schools was sought in the interviews. The stakeholders reported that parent meetings were used for this purpose in many schools at present and were reported to be successful in decreasing anti-social behaviour. Twenty-four percent (n=4) of the stakeholders felt these meetings were a useful way to give parents' strategies because the format allowed parents to discuss practises, share information and improved the parents' own social skills. The weaknesses included increasing the responsibility of teachers, deciding upon the best method to teach the parents and getting parents to attend.

Stakeholders were asked to discuss the parent/family practices their organisation currently recommends or was developing to improve social skills and reduce aggression in junior primary school children. The Positive Parenting Program (Triple P), Families and Schools Together (FAST), Exploring Together and Promoting Alternative Thinking Strategies (PATHS) were recommended by stakeholders in this area. The PATHS program was not discussed in detail in these interviews.

The Positive Parenting Program (Triple P) enhanced children's social skills and provided strategies for parents to manage behaviour and improve their child's social skills. The program was reviewed using a concurrent prospective study examining parent factors, family functioning and child behaviour. The results from this review indicated a 37% reduction in behaviour problems for the three year follow-up. Triple P was recommended to schools based on need because it was evidence based, effective; sustainable, resource and cost effective, used existing infrastructure and a trained workforce.

Families and Schools Together was recommended to schools because it had been found to be successful due to its philosophy that parents were important role models in a child's life. The program however was reported to be expensive and staff intensive. Providing resources for teachers to be paid for their time out of school

hours was highlighted as a way to improve the program. Schools had reported that teachers valued the outcomes of the program but that the program was exhausting.

The Parents and Friends Federation of WA and the Institute for Child Health Research (ICHR) were both independently developing a family/parent-related program that addressed social skill development and reduced aggression in junior primary schools. The Parents and Friends Federation received federal funding to develop and present parent workshops to address parent's lack of skills in promoting young children's resilience and managing behaviour. These workshops addressed areas such as building resiliency, literacy and increasing parents' awareness of the learning environment. The workshops had been developed based on programs such as the Friendly Schools and Families Program.

The Institute for Child Health Research had also developed a research proposal for Aboriginal families with young children in response to the preliminary results of the Aboriginal Child Health Survey. The study will investigate family/child interaction patterns; strengthening culture; celebrating strengths and fostering identity and self efficacy. The study will follow the same model utilised for research into the Triple P program, namely solid research components that can contribute to a successful program. The findings of the Aboriginal Child Health Survey will inform the targets for intervention and will be evaluated as a randomised control trial.

#### **Whole School Practices**

Twelve of the seventeen stakeholders reported it was very important or important to have a whole-school component in an intervention to develop children's social skills and reduce aggressive behaviour. The stakeholders reported a whole school component assisted in the sustainability, consistency, modelling of appropriate behaviour and success of the program. The support of the Principal and administration staff was also considered an important factor. It was reported that specific phases of development may need to be targeted for particular skills and there was also a need to build on students' ability rather than focusing on their deficits. One stakeholder reported that a whole school component was not as important as individual class instruction.

Stakeholders were asked to identify factors that would increase the likelihood of schools implementing whole-school programs to encourage social skill development and reduce aggression. It was reported that whole school program implementation would be affected if the DET prioritised these areas, implemented programs throughout districts and provided funding and infrastructure for the program. Stakeholders also identified the need for whole school planning; program leadership, support and commitment from school staff and parents; and access to professional and collaborative learning opportunities. The ease of use of program resources and the provision good practice principles were also important.

The stakeholders were asked to comment on research that recommended behaviour management policies that specify the school's procedures for dealing with aggressive behaviour. As part of the Behaviour Management in Schools (DET) policy, a set of consequences was put in place if a student breached the school's code of conduct, taking into account the developmental level of the child, the context of the behaviour and ensuring the process was procedurally fair. Stakeholders also noted the importance of clear guidelines and limits, students understanding the positive and negative outcomes of their behaviour and the need to include prevention in a whole school intervention. Playground supervision was reported to be an effective strategy in reducing aggression and was also important for other learning opportunities, e.g. social skill development. It was reported that schools must ensure a certain number of teachers are on duty at any one time, dependent on the size of the school grounds. However it was noted that playground supervision was difficult at times due to playground set up and may require more funding to ensure adequate supervision.

Stakeholders were asked to discuss any whole-school practices their organisation currently recommends or was developing to improve social skills and reduce aggression in junior primary school children.

Three of the seventeen stakeholders reported that while it was recommended that schools implement whole-school strategies, they did not specify which programs or practises to employ but indicated their organisations provided support for schools to decide what programs were appropriate. Five stakeholders recommended programs including PATHS; Friendly Schools and Families; Aussie Optimism; a social skills program developed at the North East Metropolitan Language Development Centre

and programs to target problem solving. Support services such as Education Support Schools; the Centre for Inclusive Schooling (Autism team) and SPER were recommended to schools.

The Association for Independent Schools was developing a whole-school program that addressed health promoting schools issues. This program was being developed in response to a growing awareness in this area within schools and in conjunction with the Child Health Promotion Research Unit at Edith Cowan University. The Fremantle Peel District Education Office was also reviewing behaviour management as a whole school systemic approach.

#### 4.3 Teacher Interviews

Forty-five teachers from Western Australian government and non-government metropolitan and country schools participated in these interviews. The sample included 13 Kindergarten teachers, 15 Pre-primary teachers, 16 Year One teachers, 14 Year Two teachers, one Years 3-7 teacher, one Year 6/7 teacher, one Acting Principal, two Deputy Principals and one Literacy Support teacher. Some of the teachers taught multi-age classes.

Teachers were asked to identify current strategies employed by their schools that aimed to develop social skills or reduce aggression in junior primary school children. These are summarised as policies, programs, and classroom teaching practices.

# Policy/Procedures for dealing with aggressive student behaviour

When asked if their school had a policy or procedure for managing aggressive student behaviour, all teachers described at least one policy or procedure. These procedures consisted of a number of consequences that were to be followed depending on the severity or frequency of the behaviour. These procedures broadly consisted of the following consequences: discussion (individual, class, whole school); warnings (verbal, written or visual); time-out; recording or monitoring of behaviour; removal of privileges; administration/pastoral care involvement; parent involvement and individual behaviour management plans. Some schools reportedly had policies or procedures specific to bullying; behaviour in playgrounds; behaviour on school

buses and for Pre-primary students. Positive reinforcement of pro-social behaviour was a feature of some school policies/procedures. A summary of these consequences can be found in Appendix 12.

Most teachers reported their school's policy/procedure had been effective. Others reported reasonable success or that the policy/procedure required improvement. Teachers reported the strengths in these policies/procedures were that they provided practical strategies for teachers and resulted in consistent behaviour management across the school. Further strengths of these policies included important skills students developed for regulating their own behaviour; the provision of clear expectations and consequences for behaviour; the links to the Curriculum Framework; and the involvement of parents, school administration, pastoral care and support services.

Weaknesses associated with each school's policy/procedure included the inconsistent implementation by teaching, administration and pastoral care staff. Similarly, variability between parent and school behaviour management was a reported difficulty associated with the school based procedures. Many of the policy/procedures were reported to be time consuming and exhausting for teachers to implement. The teachers also reported difficulties when new students came to the school and were not familiar with the schools' procedures; students for whom the consequences were ineffective; and students whose education was disrupted as a result of these consequences. Some teachers highlighted the need for changes to be made to school policy/procedures, namely including positive and negative consequences; definitions of roles of the teaching staff, bullying behaviour and the needs of specific students at the school to be included. Some of the teachers interviewed could not identify any weakness with their school's policy/procedures.

Teachers reported procedures of their schools could be improved by regularly reviewing and evaluating policy and collaboratively developing new strategies with the whole school staff. The policies/procedures should be displayed in classrooms and include the roles and responsibilities of school staff, and provide positive consequences of student behaviour. Further, a focus on problem solving, resiliency and the needs of specific student groups into these policies/procedures was noted. Teachers reported the need for staff to respond quickly and consistently to

aggressive behaviour and for the procedure to be modified for students with severe disruptive behaviour. Teachers reported that parents should be informed of the school's policies/procedures and should provide more support to the school in this area.

Teachers reported that mostly positive feedback had been received from parents regarding their schools' policies/procedures. Negative feedback typically arose from consequences associated with disruptive behaviour.

The teachers interviewed reported their schools did not employ specific policies to manage aggressive behaviour in sub-populations within their school. It was noted that these schools either did not have specific sub-populations of students or that all students were treated the same. Support services for students belonging to specific sub-populations included support staff (e.g. chaplains; Indigenous support staff; psychologists; social workers; and teachers' aids) and professional learning opportunities.

### Programs to develop social skills and/or reduce aggressive behaviour

The following programs were identified by teachers to develop social skills and/or reduce aggressive behaviour in young children: PATHS; Values/Virtues program; De Bono's Six Thinking Hats; You Can Do It; Stop Think Do; Aussie Optimism; and Achieve. Other programs that were discussed but did not provide sufficient detail for reporting can be found in Appendix 12.

The PATHS program was used to teach students emotional understanding and regulation strategies. The program taught students the language to: describe emotions; understand how emotions affect behaviour; manage their emotions; and use problem solving strategies. The program included a "PATHS person of the day" who received compliments from the rest of the class and had special duties to complete. Some teachers reported having a 'PATHS person of the week' and also allowed the PATHS person to discuss any problems they were experiencing. Resources such as a turtle, control signals poster, emotion cards and feelings faces were used in the classroom and playground to teach students strategies to manage their emotions. While the program reportedly targeted students in pre primary and

above, one Kindergarten teacher reported using the terminology resources in her class.

The amount of time that teachers set aside for PATHS varied between one to seven times per week. This time was either dedicated to lessons specific to the program, incidental learning opportunities or by integrating the program into other subject areas. Most of the teachers interviewed found the program to be successful. Others experienced variable levels of success with the program or found it difficult to judge the success of the program. Parents had provided positive feedback about the PATHS program and had used the resources at home. Teachers reported parents often provide anecdotes about how their child had used the program's strategies at home.

The teachers involved parents in the PATHS program by sending home activities to be completed by parents and students, encouraging parents to add to their child's compliments list and providing parents with a diary for them to record their child's positive and negative behaviour. Resources such as the control signal poster and the turtle story were also sent home by some teachers for parents to use at home. Parent meetings, information sessions, newsletters and handouts were used to provide information about the program and its uses at home. The program included letters that could be sent to parents describing activities related to the activities completed in the classroom. Some teachers reported modifying these letters to suit their own writing styles. It was reported that not all parents wanted to be involved in the program.

The strengths identified in the PATHS program included the emotional awareness and understanding of students, positive reinforcement; strategies and resources employed by the program to encourage problem solving, emotional understanding and emotional regulation and structure the program provides for teachers in this area. Weaknesses reported for the program included the American content; the difficulty students had in generalising skills to other settings; the poor involvement of some parents; the length, repetitiveness and reliance on reading out material in the lessons. Other weaknesses included the inappropriateness of some strategies for very young or older children; difficulties in teaching the turtle concept; problems associated with students misusing the turtle to avoid doing work; finding time to

complete the lessons or talk about PATHS; and financial limits which meant they could not send home all the PATHS letters. One teacher reported there were no weaknesses of the program.

The teachers identified a number of ways in which the PATHS program may be improved. These included varying the format of the program by making it less repetitive and less scripted; and integrating the program into other learning areas. Suggested improvements to the content of the program included making it culturally relevant for Australia; including social skills activities adapting the program to suit individual needs; and focusing on the assessment and reporting of the program. Teachers discussed the need to provide staff with professional learning opportunities; appropriate resources to support PATHS activities and to ensure the program was being consistently used in the school.

The Values and Virtues program was a whole school program taught either through individual lessons, class discussions, discussions at assembly or integrated into the curriculum. Students were taught different virtues (e.g. honesty, kindness, forgiveness) and were rewarded for displaying these virtues. Teachers who had used the program reported it had been successful in their school. The strengths of the program were that it provided a structure for teaching the virtues, allowed teachers to cater to the class's needs and promoted and rewarded pro-social skills. The weaknesses associated with the program included the time constraints the program placed on teaching and administration staff. It was reported that the program was not always appropriate for junior primary students due to the need to analyse the virtues in discussion. The improvements suggested for this program included offering professional learning opportunities, providing information that all students could understand; integrating the virtues into other lessons and including virtues such as resiliency. Teachers reported positive parent feedback to the program.

De Bono's 6 Thinking Hats provided students with problem solving strategies. The program used colours to represent different ways of thinking, e.g. White equals 'what are the facts?'; Red was emotions; Blue was 'what to do next'; Green was thinking of new ideas; Yellow was 'what was good about the issue'; and Black was 'what was bad about the issue'. The program was reported to be successful and students had demonstrated the strategies when solving problems independently. The teacher

using this program suggested the program could be improved by integrating it into a whole school approach. Parent feedback had been positive for this program.

'You Can Do It' focused on four key areas (organisation; persistence; confidence; and getting along) and was based on the assumption that emotional resiliency results in happiness and success. 'You Can Do It' was a whole school program that could be adapted for different ability levels. The teachers that used this program reported it had been successful in their schools. This program provided resources for teachers to use; involved the whole school; included parents; and could be adapted for different ability levels of students. Teachers reported this program could be time consuming and could be boring at times. Suggested improvements to the program included making the content more interactive and providing access to resources to supplement the program. The teachers reported receiving positive feedback from parents related to this program.

'Stop Think Do' was a whole school program to teach students to understand situations and encourage understanding of others. The program was modified by one Kindergarten teacher who used only the 'Stop' component of program and modelling for the 'think and do' components. The teachers reported the program had been successful in their schools, however was not particularly useful for Kindergarten to Year One students. The strengths of the program relate to staff collaboration in lesson planning; equality and fairness in the school; common language used across the school; and the provision of clear rules and lessons for teachers. Weaknesses reported for this program included the time consuming nature of including these lessons in the daily timetable; the need for a whole school commitment; lack of appropriate resources to support the program and inappropriate outcome expectations for each age range. The provision of more resources and professional learning opportunities were cited by the teachers as ways the program could be improved. Parents had reportedly provided positive feedback regarding this program.

Aussie Optimism was a program for older primary students. The program focused on issues associated with mental health, for example dealing with feelings and emotions and identifying these. Students received booklets and notes were also sent home to parents. Parents could also consent to testing, the results of which were given to the parents but not the classroom teacher. A teacher who had used the program reported

that it had worked 'fine' in her classroom. One teacher reported there were only strengths for the program, however weaknesses such as having too much to attend to and the poor lay out of the teacher guide and student guides were reported by others.

The Achieve program included resource materials for teaching strategies associated with getting along, organisation, persistence and confidence. The program was reportedly successful or progressing well within the schools that had adopted it. The strengths associated with this program include the common language that was used; the guidelines and rules followed by all teachers and teacher resources. Teachers reported they did not have enough time to cover all the information presented in the program. It was suggested that the school tests different activities to see which are more effective in developing the students' skills in these areas. Positive comments have been provided by parents regarding this program.

One teacher reported using a whole school strategy involving collaborative group work to discuss values and complete activities. The reported strengths of the program included the communication and socialisation between all students, as well as the activities and resources associated with the program. The weaknesses of the program included the size of the groups of children, inappropriateness of the program for certain age groups and the need for consistent implementation. It was suggested the program could be improved by making the groups of students smaller and including parents in the program. Some parents raised concerns of their pre-primary children being grouped with older students

#### Programs for specific sub-populations

Teachers identified Individual Behaviour Management Plans, Rainbows and The Way We Learn as programs adopted by their school to address aggressive behaviour and/or develop social skills in specific sub-populations, for example Indigenous students, ethnic groups, gifted students, challenged students, children with conduct disorders or children with disabilities. Other strategies were also discussed such as support staff involvement and the use of clubs and groups run at the schools.

Individual behaviour management plans were used for children with developmental disabilities or with aggressive or disruptive behaviour. These plans were developed in

collaboration with the teacher, child and school psychologist and were designed to modify the child's behaviour. The plans were reviewed and meetings held to discuss the child's progress. Teachers who had used these plans reported they were successful, improved the student's behaviour; provided a useful teacher resource, protected the rest of the class and set clear expectations of behaviour for the child. One weakness that was identified for these plans was the home environment remained the same. Teachers reported parents could initially be resistant in the development of a plan, however the school supports the parent in this process. Other teachers reported that parent support had been varied, from willing involvement to no involvement.

The Rainbows program was used in some schools for students experiencing loss, separation, grief, trauma or emotional problems. The program was run either by teachers or social workers and provided counselling for these students. Teachers reported the program had been successful for children and parents who were involved. The strengths of this program were that the children were able to share their stories in a non-threatening environment. One weakness associated with the program was that if parents did not provide consent, their child could not participate.

The Way We Work provided specific teaching ideas for Indigenous students and was reported to be 'pretty successful' by one teacher. Parents were given information about this program by the Indigenous Officer from the CEO, were encouraged to raise concerns with the liaison teacher and were included in discussions about the program. A strength identified for this program was that it linked agencies in this area together, however this program had yet to be added to the Curriculum Framework.

Other strategies employed for these students include the use of support staff and groups to encourage social skills. Support staff were utilised to provide counselling for students. It was reported that this was a useful strategy for allowing the children to discuss any problems they were experiencing. Parents could also access these support staff to discuss their concerns and are included in discussions regarding their child. The use of support staff was reported to work well and was beneficial to have a staff member who knows the students and the structure of the school. A weakness with this strategy was when a professional counsellor was required to manage issues outside of the school's capabilities which could be awkward for parents. The teachers

reported that this strategy could be improved by providing professional learning opportunities for teachers related to social issues and in identifying serious problems.

Home work classes were run for Indigenous students at one school. These classes were found to be highly successful and a useful means to teach children about their culture, school policies as well as literacy and numeracy skills. Parents were involved in these classes as volunteer helpers. One teacher reported these classes brought all the Aboriginal children together and provided an opportunity for them to show strengths they would not otherwise display in their regular classes. One weakness associated with these classes was that it could only be offered twice a week for one hour, which was not long enough for some students. It was suggested that the number of classes be increased as a way of improving the current strategy.

Boys or Girls Clubs were run in some schools for students with disruptive behaviour. These students were removed from class and were given alternative activities to complete or taken on outings. This was reported to be an extremely successful strategy and had resulted in improved behaviour for those students involved. The clubs were a good way to find out what these children found interesting and rewarding. Weaknesses associated with these clubs included the money, time and resources it took to run the club and explaining to the other children with good behaviour who miss out on these opportunities.

Breakfast Clubs were also run in some schools and were used to encourage children's social skills with the support of a teacher. The Breakfast Clubs provided breakfast for children who would otherwise miss this meal and encouraged the students to take responsibility for food preparation. Teachers reported these clubs reduced aggression by giving children space between conflicts at home and the classroom; provided an opportunity for children to work together outside the classroom and taught strategies such as problem solving when guest speakers presented. It was reported that not all those who attended the Breakfast Club needed to attend and that some that teachers felt it was not their responsibility to provide breakfast for the students. Parents were reportedly encouraged to be involved in the program and to take responsibility for the provision of food for their children.

#### **Parent Programs**

Programs implemented at schools to engage parents in developing social skills or reducing aggression in children included Families and School's Together (FAST), Triple P and Parent Meetings. Teachers reported strategies such as access to school support services and use of newsletters and parent groups to encourage communication between the school and parents. One teacher referred parents to "Kid Link" which was a parenting help centre in the Kwinana area.

FAST provided parents with information regarding cooking, budgeting, playing with and entertaining their children at home, the need to spend time with their children and social skill development. Families were identified by school staff and were encouraged to attend meetings run once a week for eight weeks. Weaknesses identified with the program included the time and commitment from the same members of staff; an inability to reach all the parents who required support, commitment from parents and the cultural inappropriateness of some aspects of the program. It was reported that greater staff and parent involvement, increased opportunities to attend the program and adaptation of some of the activities would improve the program.

Triple P was also provided at schools and parents were encouraged to attend. The program was reported to be successful, however it was felt that some of the parents that needed to attend, did not. Teachers reported strengths of the program included the provision of strategies and opportunities for parents to create networks with staff and other parents. Teachers reported receiving positive feedback from parents and they appreciated practical strategies and skills they had developed. Weaknesses of the program included the difficulty in getting some parents to attend due to the program being full, parental time constraints or lack of parental commitment. The need for support services for parents after the program was completed was also noted.

Parent meetings were used to build relationships with parents, provide parenting strategies or strategies to support their child's development and to provide information about programs or initiatives running in the school. Teachers reported the meetings had been useful for parents and they had received positive feedback and requests for the school to organise more meetings. The reported strengths of these

meetings included the provision of childcare so parents could attend, the links created between parents and the school and the strategies it provided for parents. While some teachers reported there were no weaknesses with these meetings, others reported the lack of opportunity to provide follow-up support for parents and the disappointing parent attendance as limitations of the meetings. The meetings could be improved by altering the content and format of the meetings to suit parent needs and by increasing parent attendance. Positive feedback had been received for these meetings and parental requests for the school to organise more meetings were reported in some schools.

### **Classroom Teaching Practices**

### Behaviour Management

Teachers were asked to identify the teaching strategies they employed to reduce aggressive behaviour and address risk and protective factors. Most commonly, teachers used positive and negative reinforcement as consequences for student behaviour. Positive reinforcement, such as individual and whole class rewards and praise was used to reinforce pro-social behaviour. Negative consequences for disruptive behaviour included warnings, time-out, loss of privileges, separation from class members and ignoring the behaviour. Teachers also reported using individualised or group management plans, parent involvement and consultation with school support services to manage behaviour in their classrooms. Techniques such as teaching students strategies (e.g. social problem solving, giving compliments, resiliency and emotional understanding and regulation); continuing with the same Kindergarten, Pre-primary and Year One class over three years; developing class rules in collaboration with students and personalised teaching strategies were reportedly also used to manage behaviour in the classroom. Teachers reported varying levels of success with each of the strategies and it was noted that the success of the strategies depended on the class or individual student.

The strengths associated with these strategies included the teacher continuity associated with remaining in the same Kindergarten, Pre-primary and Year One class; developing clear rules and expectations; the involvement of parents; the relationships that develop between the teacher and class; positive, consistent and

immediate consequences; modelling pro-social behaviour; providing the student strategies and utilising personal teacher strategies. Two of the forty-five teachers reported that there were no weaknesses with their strategies. The remaining teachers reported weaknesses such as limited resources; students' difficulty adopting strategies; inappropriate or ineffective consequences; teacher inconsistency and the backgrounds of students. Some teachers reported their strategies could be improved through the provision of professional learning opportunities; consistent teaching methods; modification of the student strategies; and increased parent involvement.

#### Social Skills

Teachers reported they personally developed social skills lessons; integrated existing programs with their own lessons or used existing programs to teach social skills to their classes. The existing programs that were used to teach social skills included PATHS; Bounce Back; Childlow; Values and Virtues; De Bono's 6 Thinking Hats; The Health Education K-10 Syllabus; Friendly Kids Friendly Classrooms; Self Program; Barry Bennett Cooperative Learning; You Can Do It; and Achieve.

Teachers addressed social skills such as: manners; friendships; cooperation; asking questions; and giving compliments. To teach these skills, teachers used role plays; focusing on one concept for the school term; role modelling; developing resources to reinforce concepts; incidental teaching opportunities and dedicated lessons or activities; class or whole school discussion; discussions during play times and encouraging parents to discuss their child's school day.

Most teachers reported they did not involve parents in delivering social skill lessons. In cases where parents were involved, they were invited to assemblies; rostered for classroom involvement; recording their child's positive behaviour so the child could come to school and talk about it; and were provided with examples of their child's positive behaviour to discuss at home.

Teachers reported varying degrees of success with these lessons. The number of lessons about each social skill that was required for children to develop each skill varied considerably, from one week to one year. Most teachers reported they revisited and reinforced social skills lessons throughout the year.

The strengths associated with these lessons included the ongoing focus on social skills in class; the collaboration and involvement of students; strategies such as role playing and role modelling; focussing on the needs of the students; linking social skills to the curriculum, and the acquisition and generalisation of skills. Teachers reported weaknesses such as problems with student collaboration; the need for alternative strategies or methods of teaching; getting the whole class involved; and variable levels of achieving outcomes. Some teachers indicated these lessons could be improved by dedicating more resources to this area; refining teaching strategies; focusing on the needs of individual students; developing whole class activities; and involving parents in the delivery of lessons.

Most teachers had received positive feedback from parents regarding these lessons and occasional examples of incidents where children had used these skills at home. Teachers provided examples of methods they employ to communicate with parents such as newsletters, after school discussions, learning journeys, and posters around the classroom.

One teacher reported their school had a specific social skills program which focused on four categories: cooperation; conflict resolution; conversation skills and friendship and self esteem. The program consisted of weekly formal social skills lessons; role-play; game playing to practise the social skill; free play; and teacher reinforcement the social skills during recess, lunch and during sport and sport focusing on the social aspects of playing and not just winning. Social skills were also role-played in front of the school every two weeks at school assembly and the children were encouraged to behave like the characters that were in the role play. An award was given to one student each week if these behaviours were demonstrated. A daily communication book was used to inform parents of any inappropriate behaviour. The strengths of this program were that it was easily presented and the skills taught were wideranging and provided the children with strategies to deal with aggressiveness, read and understand different points of view, eye contact, body language and friendship. Parents appreciated the school's awareness of children who had difficulties with social skills.

Teachers reported they intended to encourage/teach their class to develop the following social skills during the remainder of this year:

- Compassion
- Being caring
- Courtesy
- Cooperation
- Empathy
- Citizenship
- Manners
- Acceptance of others
- Tolerance
- Responsibility
- Independence
- Playing
- Not using aggressive behaviour
- Taking turns
- Respect for each other and others belongings
- Collectiveness
- Self confidence
- Collaboration
- Listening skills
- Friendship
- Continuing with programs such as Virtues; You Can Do It; and PATHS

# 4.4 Successful Practice Principles

The draft successful practice principles were drawn from the literature review and were presented according to the Health Promoting Schools (HPS) framework. The HPS framework was considered appropriate for the presentation of the successful practice principles, lending itself to a structured approach to social skill development and aggression reduction in junior primary school children.

The Health Promoting Schools model states that schools should aim to enhance the health and wellbeing of the entire school community. The model is based on the principles of equity of access to education; empowerment of students through knowledge and skill development; and inclusiveness of the whole school community and implementation of school action (Booth & Samdal, 1997).

The three key domains of health promoting schools have been identified as the curriculum, teaching and learning; organisation, ethos and environment; and partnerships and community links (Booth & Samdal, 1997; Bushell, 1999; Nutbeam, 1992; Parker & Cameron, 1995). These domains are not mutually exclusive, rather, in practice they need to be thoroughly integrated and coordinated for health

promotion activities to be effective. In framing the principles of social skill development and aggression reduction we have followed Booth and Samdal's (1997). Separation of the three key domains into policy and practice; curriculum; school ethos; school-home-community link; school health services; physical environment; evaluation; and organisation.

Written comment from each member of the nine person expert panel was sought in response to the successful practice principles. These comments were used to assess agreement with each principle and with the comments of other panel members. Modifications to the principles were made to accommodate the comments made by the expert panel. These modifications included addition of new principles; positive reframing of principles and the addition of clarifying information. Two rounds of review were completed.

It was not possible to gain consensus on eight of these criteria. It is recommended that the document containing the comments from the expert panel be consulted when using the successful practice principles. This document provides a rich source of background information as to how the principles were developed. The following is a summary of the resultant Successful Practice Principles organised within the eight domains:

### 1. The Policies and Practices of the School

A whole school behaviour management plan with clear rules and procedures needs to be established to assist efforts in building school wide social competence, and to increase their pro-social behaviours to counter aggressive student behaviour.

The process of developing a whole school behaviour management plan needs to include consultation with teachers, administrators, parents/care-givers, students and professionals with expertise. This process needs to be informed by research and evidence-based practices.

The content of the whole school behaviour management plan needs to include:

- A clear outline of the expected behaviours relevant to the age of the student
- An acknowledgement that all members of the school community have the right to a safe, supportive and inclusive learning environment

- The development of research-based systems for early identification and ways of responding to students at risk of disruptive behaviour
- Links between school rules and expectations to values and areas of the Curriculum Framework, and the laws within the community
- Clear outcomes of the behaviour management plan that are to be achieved
- Links to the whole school plan
- A clear procedure for responding to bullying, harassment and violence
- A clear procedure for developing individual behaviour management plans and risk management plans for the students most at risk of disruptive behaviour.
- The opportunity for positive learning and modelling experiences and a clear outline of the positive and negative consequences for behaviour at a whole school level
- An understanding and practice which takes into account the individual students' needs and results in differential response plans
- Specific strategies to manage incidents of aggression that:
  - Include a strong and consistent system of teaching and positively recognising expected academic and pro-social behaviours that involves all school staff
  - Include developmentally appropriate consequences
  - Include the capacity for individualised interventions for students with chronic problem behaviours
  - Includes early identification and intervention for students who require more targeted short and long term supports for behaviour development and the situations in which they require support. This includes identification both in years of schooling (e.g. Kindergarten to Year 2) and early in the display of problematic behaviour
  - The responsibilities of all school staff, parents and students include:
    - Acknowledgement by parents, staff and students that they need to be models of acceptable behaviour and action, including inclusivity, collaboration, positive relationships and respect, listening to and valuing others
    - Acknowledgement that staff, parents' and students' attitudes toward aggression will affect students' attitudes towards that behaviour
    - Taking responsibility for providing a safe, supportive and inclusive learning environment

Respecting the confidentiality of students and families when discussing issues and/or students

Schools need to commit appropriate resources to the implementation of the behaviour management plan by:

- Committing time and resources for implementation, monitoring, review and evaluation through the School Development Plan
- Communicating policy and expectations to the community
- Providing professional learning opportunities in behaviour management strategies and social skills development on an ongoing basis to develop a positive school culture, teaching and learning environment

# 2. Classroom Management and Curriculum

# Administrators and Principals

School administrators need to provide leadership and support for policy and whole school or classroom-based social skills development and effective aggression reduction program implementation by:

- · Collaboratively setting whole of school priorities
- Allocating resources according to the identified priorities
- Communicating the need to embrace the program with staff
- Allocating time in staff meetings and encouraging and leading professional discussions with staff
- Ensuring that there is consultation with the wider school community in setting school priorities, including parents, school staff, and students where appropriate
- Ensuring that programs and the targets are communicated to students and parents
- Resourcing professional learning and support for all staff and in particular staff with challenging students
- Monitoring the achievement of the priorities against the set goals through a process of review and reflection and resetting goals as required

#### Classroom Curriculum

Classroom curriculum that develops students' social skills and reduce aggression needs to include:

- A clear rationale, goals and outcomes that are linked to the Curriculum Framework
- Developmentally appropriate activities

- Resources that are developmentally appropriate, engaging for students and are user friendly for staff
- Interventions that are able to be integrated into the curriculum
- Curriculum and intervention strategies that take into account the needs of the student population
- Rich learning activities that incorporate peer-modelling, role playing and cooperative learning to demonstrate and practice pro-social behaviour

Social skills development and aggression reduction strategies are most successful if they include:

- Strategies that increase students' abilities to use pro-social problem solving strategies. The intervention needs to teach students to:
  - Generate multiple possible pro-social solutions
  - Increase their understanding of the possible emotions, intentions and motivations of others
  - Understand and accept individual differences
  - Develop effective communication skills, including appropriate speaking and listening skills for a variety of settings and purposes, and verbal assertiveness skills
  - Develop cooperative behaviours and skills
  - Develop help-seeking behaviours to obtain support for themselves and others when needed
  - Develop awareness of bullying behaviours and how to respond effectively, appropriate to the developmental level of the students, eg strategies for junior primary vs. senior primary students.
  - How to stay safe
  - Develop strategies for managing and resolving conflict when it arises
- Strategies that increase students' ability to self regulate behaviour. The intervention needs to teach students to:
  - Manage impulsive reactions and strong emotions
  - Be aware of own emotions
  - Develop an appropriate sense of self-responsibility for their choices and behaviours
  - Understand how their behaviour may affect others
  - Respect and care for others

- Develop pro-social skills to manage anger and develop alternative responses to anger provoking situations
- Develop self respect
- Set behavioural and personal goals
- Understand the roles within bullying, including the role of the bystanders, the students who bully and the students who are bullied
- Develop vocabulary to express feelings and emotions
- Develop understanding of feelings and emotions
- Be aware that communication involves both verbal and non-verbal expression
- Strategies that increase students' social skills. The intervention needs to teach students developmentally appropriate ways to:
  - Make friendly contact and build friendships
  - Use pro-social strategies in play, for example entering and maintaining play
  - Understand social roles, social rules and expectations that regulate social behaviour
  - Develop social skills to assist in responding to situations where high levels of conflict or aggression could arise
  - Further develop social skills such as turn taking; sharing and trading; asking good questions, making suggestions; restoring relationships; joining in a group; and giving and receiving compliments

# Classroom Management

Classroom management strategies that assist in the development of students' social skills and the reduction of aggression are most effective if they include:

- The provision of clear instructions and expectations about classroom rules and procedures
- Whole class participation in the process of rule setting where age appropriate
- Development of consequences for rules that are broken and for unacceptable behaviour
- Visual reminders of the classroom rules and expectations
- Students being provided with a clear understanding of how to earn positive consequences for appropriate behaviours
- Targeting the development of desired behaviours through frequent encouragement and specific feedback

- Consistent, fair and firm application of the negative and positive consequences
- The promotion of internalising rewards for pro-social behaviour, so that these behaviours become self rewarding and reinforcing
- Specific feedback or "encouragers" about what was good about the students' behaviours, (e.g. "I like the way you were taking turns in that game!") and to parents/caregivers about their child's behaviour
- Behaviour management linked to the values in the Curriculum Framework and school community and promotes the development of empathy
- Class discussions about how classroom and playground incidents may impact on the whole classroom climate and to generate class solutions to these issues
- Recognition, acknowledgement and encouragement of students' attempts to behave in a more pro-social ways
- Whole class or team positives
- Individual behaviour management plans for students needing specific support for behaviour development
- Engaging student understanding, empathy and support with strategies that will improve the behaviour of a student with challenging behaviour
- Ensuring a student with challenging behaviour has opportunities to develop relationships/friendships

## **Teacher Professional Learning**

School Principals need to ensure that their staff are provided with professional learning opportunities to develop the knowledge, skills and sense of ownership required to implement effective classroom curriculum and management strategies. This is achieved by:

- Establishing an effective process to train and support school personnel in implementing agreed programs
- Providing retraining as required to ensure continued staff involvement and commitment to the maintenance and integrity of the school's programs
- Providing opportunities for teachers to establish networks with teachers and other professionals

## 3. School Culture and Ethos (The Social Environment)

Schools need to create a safe and supportive learning environment. This is achieved by:

- Connecting students with supportive staff and appropriate adults in their communities.
- The consistent implementation of positive consequences for pro-social behaviour
- Effective responses to aggressive acts, such as risk and individual behaviour management plans for at risk students and the implementation of the school's behaviour management policy
- The acknowledgement by parents, staff and students that they are models of acceptable behaviour
- The acknowledgement that parent and staff attitudes toward aggression affect the students' attitudes towards that behaviour
- Strategic peer involvement by including pro-social skilled classmates as role models in any social skills training programs for students experiencing social skill problems
- Schools having an effective customer focus, including opportunities for parents to be appropriately involved in school activities and procedures for resolving grievances

# 4. School-Home-Community Interaction

# Cooperation between parents and school staff

Schools and parents work collaboratively to contribute to a student's early social skill development and management of aggression. Success in this relationship will encourage parent connectedness to, and partnerships within the school.

Effective communication between the school and parent community needs to be facilitated by:

- · General parent meetings or discussion groups with school staff
- Newsletters sent home to inform parents about the school's academic and nonacademic programs
- School staff positively promoting the school's programs among parents and the larger community
- Regular communication between the class teacher and parents

## **Parent Training**

Social skill development and aggression reduction interventions need to involve parents. These interventions are more effective when parents receive training that

supports the training received by teachers in this area. Parent training opportunities need to include:

- Strategies to manage their child's behaviour. Specific components need to include:
  - Effective monitoring and supervision of their children's behaviour
  - Behaviour management linked to values and areas of the Curriculum
     Framework and the laws within the community
  - Using appropriate strategies including consistent positive and negative consequences that meet the needs of their child and changes their behaviour
  - Being specific in their feedback about what was good about their child's behaviour
  - Effectively setting age appropriate limits
  - Strategies that encourage the development of internalised positives for prosocial behaviour, so that behaviours are sustained through self-rewards, rather than due to the approval of others
  - Giving effective instructions
  - Developing an understanding of the needs of children at different developmental stages.
- General parenting strategies. Specific components need to include:
  - Committing time to and involving children in activities as a whole family
  - Reinforcing age appropriate family roles for their children
  - Developing working relationships with their children's school
  - Developing a range of developmentally appropriate and effective strategies for communicating with their children
  - Engaging in child and adult directed play with their child
  - Using stress management skills for stressful disciplinary interactions and repairing relationships after behaviour management interventions involving negative consequences
  - Encouraging parents with children with challenging behaviours to seek ongoing support and respite if required.
- Strategies to develop their child's social competencies and pro-social behaviour.
   Specific components need to include:
  - Emphasising the importance of positive peer relations
  - Emphasising the importance of children developing good social skills to assist children to reach their potential academically and socially.
  - Helping parents to build their child's understanding and acceptance of diversity

- Helping parents to encourage their child's positive involvement in sporting and other group activities outside the home
- Helping parents to monitor and control TV/computer/video games access appropriate to their child's developmental level
- Increasing parents' awareness of and how to help their child manage conflict in friendships
- Strategies to develop their child's understanding of positive and negative feelings.
   Specific components need to include
  - Encouraging children's appropriate expression of feelings
  - Providing a role model for positive emotional expressions
  - Focusing on developing positive self-esteem and self-expression
  - Encouraging children's awareness of the feelings of others
  - Encouraging the development of children's empathy for others'
  - · Focusing on developing children's listening skills
- Strategies to support parents to provide their child(ren) with a warm, loving parent/family/child relationships through:
  - Understanding the importance of acknowledgement
  - Physical warmth and unconditional love
  - Accepting individual differences
  - Understanding the importance of the relationship between parents
  - Understanding the effects of domestic violence, negativity and a cold, authoritarian parenting style

## 5. School Support Services

Support services to schools (social workers, school psychologists, and school nurses), can assist schools to develop and deliver strategies and programs that enhance the health and wellbeing of the whole school community. School staff and parents need to be aware of the roles that they could play in collaborating with school support service staff. School Support Services should provide:

- Ongoing quality professional learning, support, case management intervention and development of Individualised Behaviour Management Plans (IBMP) for students with very challenging behaviours
- The assessment of appropriate resources, e.g. psychological aide, and services to support students with challenging behaviour
- Support for the identification and development of whole school management plans

- · Access to evidence based social skill development programs
- Resources to support the management of students with the most challenging behaviours
- A coordinated approach to the resourcing and management of students with challenging behaviours

# 6. The Physical Environment

### Supervision

When students are in the care of the school, there must be adequate monitoring at all times. This involves:

- Adequate level of mobile and vigilant adult monitoring throughout the school
- Adults talking with students about everyday conflicts and interactions between students in the playground
- Awareness of "hot spots" in the school
- Adults recognising pro-social behaviour
- Awareness of which students and student groups require greater levels of supervision
- Complying with the school's Duty of Care requirements

#### Classroom/School Lay Out

School staff need to ensure that classroom layout and school grounds provide a safe and stimulating environment for students. This involves for example:

- The right positioning of classroom furniture to provide support for young students and promotes helping relationships with peers
- The use of visual reminders around the school to encourage proactive behaviour and remind to students of the school rules, e.g. posters
- The introduction of sufficient play equipment with special attention to equipment that can be used for bad weather days
- Involving students in school and classroom layout planning where possible
- Removal of graffiti and the maintenance of the gardens and buildings

#### 7. Evaluation

Evaluation of the policy and programs in place to develop social skills and reduce aggressive behaviour needs to include:

- Evaluation related to the program objectives. This may include scientific evaluation; seeking student ideas for evaluation or qualitative case studies.
- Presenting information on student behaviour to school staff and students to guide ongoing improvement
- · Process evaluations to monitor how well a program is being implemented
- Identification of the characteristics/essential elements that increase or decrease the success of the program
- Involvement of the school council

### 8. Organisational Structures

A coordinated group of school staff is the most effective in promoting change in the school community. This group needs to:

- Have a project coordinator responsible for promoting and organising an aggression reduction program and resolve daily problems
- Be cohesive
- · Have a relatively stable membership over time
- Be committed to a common vision/goal
- Encourage others to participate, particularly on a task-by-task basis
- Be supportive of each other
- Have access to the necessary resources to dedicate to the program operations
- Be confident to consult with the broader school community
- Be able to communicate and implement the vision and program across the whole school

## 4.5 Aggression Instrument

Parents involved in the pilot test of the Life in Schools Checklist reported the checklist was easy to use and were able to complete the checklists with their children; however a number of issues arose during the administration. Some children had difficulties with the language used in the questionnaire, e.g. "During the week did another student gang up on you?" which indicated that the questionnaire would require further modification for this age group.

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Parents noted their children made up elaborate stories in response to some items, which parents did not believe actually occurred. One parent reported the incidents their child cited were minor and did not reflect a true bullying situation. One parent noted that when his/her child was questioned further about an incident of teasing, the child responded that it was "not mean teasing".

Children had difficulty referring to incidents that happened in the last week and would typically report incidents that happened in the past year or 'a long time ago'. One parent used "since the weekend" to help their child understand the concept of time. It was noted that this may limit the number of days the child can refer to and as such may be best completed at the end of the week. The length of the questionnaire was also problematic for some children who appeared tired and were losing concentration towards the end of the checklist.

## 4.6 Summary

This section outlined the results of the three stages of this study, namely the literature review, stakeholder and teacher interviews; development of successful practice principles in social skill development and aggression reduction in junior primary school children; and evaluation of the use of the 'Life in Schools Checklist' (Arora, 1994) to measure classroom social climate and anti-social behaviour. The protective and risk factors associated with aggressive behaviour were examined in the literature review and the need for interventions to address these factors was highlighted.

Interviews with stakeholders and teachers highlighted the need for policy and programs to address social skill development and aggression reduction. Existing policies, programs and strategies were identified and evaluated during this interview process. The successful practice principles in social skill development and aggression reduction in junior primary school children, developed during the Delphi process, is a valuable resource that can be used to develop an intervention in this area. These principles were established using the Health Promoting School's model and comprise action areas such as: policies and practices, classroom management and curriculum, school ethos, school-home-community interaction, school support services, physical environment, evaluation and organisational structure.

Further, parent pilot test information from the 'Life in Schools Checklist' (Arora, 1994) highlighted the need for further instrument development to measure classroom social climate and anti-social behaviour with junior primary school children.

#### 5.0 EFFECT OF RESEARCH ON PROFESSIONAL DEVELOPMENT

This project has provided training opportunities on two levels: development of research staff, and opportunities to develop research skills for students at Edith Cowan University. Undergraduate students from the School of Nursing and Public Health completed volunteer work on the project learning valuable qualitative data collection and management skills. Students predominantly transcribed interview data and assisted with the literature review. Volunteer work completed by students provided opportunities to develop and demonstrate important research competencies, and contributed to their accreditation within the Child Health Promotion Research Unit's (CHPRU) Competency Program. The competencies gained by these students complement their formal tertiary education in the Bachelor of Health Science undergraduate degree.

The project has also provided opportunities for further development for the two project coordinators. Under management from the Chief Investigators and the Management Committee, they have developed key skills coordinating a multi-stage qualitative project.

The project also provided an opportunity for research staff at the CHPRU and the Western Australian Department of Education and Training to work collaboratively on a priority issue in both health and education.

# 6.0 IMPLICATIONS FOR HEALTH PROMOTION/LINKING RESEARCH TO HEALTH OUTCOMES

This research describes qualitative data from stakeholders and school staff about current social skill development and aggression reduction policies and programs/practices for junior primary school aged children.

The qualitative information from stakeholder and teacher interviews will be used to inform the development of a larger empirical trial that will measure the effect of a social skill development intervention on aggressive behaviour in a cohort of Kindergarten aged children.

Aggression and bullying is associated with a number of physical and mental health factors, including somatic complaints (Forero, McLellan, Rissel, & Bauman, 1999; Rigby 1998; Slee, 1995a; K. Williams, Chambers, Logan, & Robinson, 1996); poor self esteem (Rigby & Slee, 1991; Slee & Rigby 1993); depression (Austin & Joseph, 1996; Craig, 1998; Kaltiala-Heino et al., 1999; Slee, 1995a, 1995b); anxiety (Slee, 1998); and suicidal ideation (Kaltiala-Heino et al., 1999; Rigby, 1998). Furthermore, students who are bullied feel a sense of alienation from school, disliking school (Forero et al., 1999); wanting to avoid school (Kochenderfer & Ladd, 1996b; Rigby, 1997) and viewing school as an unsafe place (Rigby, 1997; Slee & Rigby 1993). These students are therefore at risk both in terms of their health and academic achievement. This research may have significant health benefits, both in the short and long-term, with reduced aggressive behaviour being protective of mental, social and physical health problems later in life.

The Principles of Successful Practice in Social Skill Development and Aggression Reduction in Junior Primary School Children have the potential to significantly impact on aggression and social skill development by:

- Determining, developing and evaluating strategies which enable schools to implement a whole school response to aggressive behaviour;
- Determining, developing and evaluating strategies which assist schools in reviewing and writing behaviour management policies to reduce and properly manage aggression in schools;

- Determining, developing and evaluating strategies which develop students' skills to reduce aggression and further develop social skills;
- Determining, developing and evaluating strategies which enable schools to effectively engage parents in strategies to reduce aggression and develop social skills;
- Improving understanding of the relative contribution of parent-based interventions to reduce aggression and develop social skills in junior primary students.

## 7.0 COMMUNITY BENEFITS FROM THE RESEARCH

The research undertaken in this formative study has added to current knowledge of issues surrounding aggression reduction in junior primary schools. In this project, information was sought from a wide variety of people with interest or involvement in managing student behaviour, aggression and violence, bullying prevention and mental health education to help determine evidence-based practice in this area. Stakeholders and teachers were consulted to identify current and proposed policies and practices/programs to develop social skills and reduce aggression. Using information collected form current literature, stakeholders and researchers working in this area, this study has developed and validated principles of best practice for improving social skills and reducing aggression among Western Australian primary school children.

In particular, this project has formed links with important partners for future research in the area, and has raised the awareness of this issue across health and education sectors.

## 8.0 PUBLICATIONS

One manuscript is planned from this research grant. It will summarise current evidence for best practice in the area of social skill development and aggression reduction in junior primary schools.

## 9.0 FURTHER DISSEMINATION

Project results will be disseminated to all 17 stakeholders involved in the consultative stage of the project in the form of a brief report. Key stakeholders represented organisations such as the Association of Independent Schools; Catholic Education Office of WA; Curriculum Council of Western Australia; Department of Education and Training; Department of Health; Fremantle-Peel District Education Office; Parents & Friends' Federation of Western Australia; Swan District Education Office; Swan Social Psychological Educational Resource (SPER) Centre; Telethon Institute of Child Health Research; West Coast District Education Office; and the Western Australian Primary Principal's Association. Stakeholders are encouraged to circulate this brief report amongst colleagues so that the findings and recommendations can be incorporated into programs in which they are involved.

#### 10.0 REFERENCES

- Arora, T. (1994). Measuring bullying with the 'Life in School' Checklist. *Pastoral Care, September*, 11-15.
- Assemany, A., & McIntosh, D. (2002). Negative treatment outcomes of behavioral parent training programs. *Psychology in the Schools*, 39(2), 209-219.
- Austin, S., & Joseph, S. (1996). Assessment of bully/victim problems in 8 to 11 year-olds. *British Journal of Educational Psychology*, 66, 447-456.
- Booth, M., & Samdal, O. (1997). Health-promoting schools in Australia: models and measurement. *Australian and New Zealand Journal of Public Health*, 21(4), 365-370.
- Borum, R. (2000). Assessing violence risk among youth. *Journal of Clinical Psychology*, *56*(10), 1263-1288.
- Bru, E., Stephens, P., & Torsheim, T. (2002). Students' perceptions of class management and reports of their own misbehaviour. *Journal of School Psychology*, *40*(4), 287-307.
- Bushell, N. (1999). Health promoting schools work. Health in Schools, 6(2), 7-8.
- Cairns, R., Cairns, B., Neckerman, H., Ferguson, L., & Gariepy, J. (1989). Growth and aggression: 1. Childhood to early adolescence. *Developmental Psychology*, *25*(2), 320-330.
- Camodeca, M., Goossens, F., Terwogt, M., & Schuengel, C. (2002). Bullying and victimization among school-age children stability and links to proactive and reactive aggression. *Social Development*, *11*(3), 332-345.
- 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.
- Crick, N., Casas, J., & Mosher, M. (1997). Relational and overt aggression in preschool. *Developmental Psychology*, 33(4), 579-588.
- Crouch, E., & Williams, D. (1995). What cities are doing to protect kids. *Educational Leadership*, *52*(5), 60.
- Cummings, E., Iannotti, R., & Zahn-Waxler, C. (1989). Aggression between peers in early childhood: individual continuity and developmental change. *Child Development*, *60*, 887-895.

- Delbecq, A., Van de Ven, A., & Gustafon, D. (1986). *Group techniques for program planning: a guide to nominal group and delphi processes*. Middleton: Green Briar Press.
- Denham, S., Blair, K., DeMulder, E., Levitas, J., Sawyer, K., Auerbach-Major, S., et al. (2003). Preschool emotional competence: pathway to social competence? *Child Development*, 74(1), 238-256.
- Denham, S., Caverly, S., Schmidt, M., Blair, K., DeMulder, E., Caal, S., et al. (2002). Preschool understanding of emotions: contributions to classroom anger and aggression. *Journal of Child Psychology and Psychiatry*, 43(7), 901-916.
- Department of Education Western Australia. (1994). *Child Protection Policy*. Perth: Department of Education.
- Dickinson, P., Coggan, C., & Bennett, S. (2003). TRAVELLERS: a school-based early intervention programme helping young people manage and process change, loss and transition. Pilot phase findings. *Australian and New Zealand Journal of Psychiatry*, 37, 299-306.
- Dukes, R., & Stein, J. (2001). Effects of assets and deficits on the social control of atrisk behaviour among youth: a structural equations approach. *Youth and Society*, 32(3), 337-359.
- English, D., Marshall, D., & Stewart, A. (2003). Effects of family violence on child behavior and health during early childhood. *Journal of Family Violence*, *18*(1), 43-57.
- Espelage, D., Holt, M., & Henkel, R. (2003). Examination of peer-group contextual effects on aggression during early adolescence. *Child Development*, 74(1), 205-220.
- Farmer, T., Farmer, E., & Gut, D. (1999). Implications of social development research for school-based interventions for aggressive youth with EBD. *Journal of Emotional and Behavioral Disorders*, 7(3), 130.
- Field, T. (2002). Violence and touch deprivation in adolescents. *Adolescence*, 37(148), 735.
- Fields, S., & McNamara, J. (2003). The prevention of child and adolescent violence: a review. *Aggression and Violent Behaviour, 8*, 61-91.
- Fisher, K., & Kettl, P. (2003). Teachers' Perceptions of School Violence. *Journal of Pediatric Health Care, 17*(2), 79-83.
- Flannery, D. J., Vazsonyi, A. T., Alexander, T., Liau, A. K., Guo, S., Powell, K., et al. (2003). Initial behaviour outcomes for the peacebuilders universal school-based violence prevention program. *Developmental Psychology*, 39(2), 292-308.
- 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).

- Gibbs, J. (2001). *Tribes: A New Way of Learning and Being Together*. Windsor, California: CenterSource Systems.
- Goodman, C. (1987). The Delphi technique: a critique. *Journal of Advanced Nursing*, 12, 729-734.
- Gribbin, M. (1979). Granny knows best. New Scientist, 350-351.
- Guralnick, M. (1999). Family and child influences on the peer-related social competence of young children with developmental delays. *Mental Retardation and Developmental Disabilities Research Reviews*, *5*, 21-29.
- Heinrichs, R. (2003). A whole-school approach to bullying: special considerations for children with exceptionalities. *Intervention in School and Clinic*, 38(4), 195.
- Ireland, J. (2002). Do juveniles bully more than young offenders? *Journal of Adolescence*, 25, 155-168.
- Jones, J., & Hunter, D. (1995). Consensus methods for medical and health services research. *British Medical Journal*, *311*, 376-380.
- 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(7206), 348-351.
- Kam, C., Greeenberg, M. T., & Walls, C. T. (2003). Examining the role of implementation quality in school-based prevention using the PATHS curriculum. *Prevention Science*, *4*(1), 55-63.
- Kaukiainen, A., Salmivalli, C., Lagerspetz, K., Tamminen, M., Vauras, M., Maki, H., et al. (2002). Learning difficulties, social intelligence, and self-concept: connections to bully-victim problems. *Scandinavian Journal of Psychology, 43*, 269-278.
- Keenan, K., & Shaw, D. (1997). Developmental and social influences on young girls' early problem behavior. *Psychological Bulletin*, *121*(1), 95-113.
- Knox, E., & Conti-Ramsden, G. (2003). Bullying risks of 11-year old children with specific language impairment (SLI): does school placement matter? *International Journal of Language Comm. Dis.*, 38(1), 1-12.
- Kochenderfer, B., & Ladd, G. (1996a). Peer victimisation: cause or consequence of school maladjustment. *Child Development*, *67*, 1305-1317.
- Kochenderfer, B., & Ladd, G. (1996b). Peer victimization: manifestations and relations to school adjustment in kindergarten. *Journal of School Psychology*, 34(3), 267-283.
- Kwon, J., & Yawkey, T. (2000). Principles of emotional development and children's pretend play. *International Journal of Early Childhood, 32*(1), 9-13.
- Limber, S. (2003). Efforts to Address Bullying in US Schools. *American Journal of Health Education*, *34*(5), S23-S29.

- Loeber, R., & Stouthamer-Loeber, M. (1998). Development of juvenile aggression and violence: some common misconceptions and controversies. *American Psychologist*, *53*, 242-259.
- McNeal, R. (1999). Parental involvement as social capital: differential effectiveness on science achievement, truancy and dropping out. *Social Forces*, 78(1), 117-144.
- Meehan, B., Hughes, J., & Cavell, T. (2003). Teacher-student relationships as compensatory resources for aggressive children. *Child Development, 74*(4), 1145-1157.
- Menna, R., & Landy, S. (2001). Working with parents of aggressive preschoolers: an integrative approach to treatment. *Journal of Clinical Psychology*, *57*(2), 257-269.
- Miller, D. (1990). Research through the Delphi technique. NIRSA Journal, 15(1), 39-40.
- Monks, C., Ortego Ruiz, R., & Torrado Val, E. (2002). Unjustified Aggression in preschool. *Aggressive Behaviour*, 28, 458-476.
- Natvig, G., Albrektsen, G., & Qvarnstrom, U. (2001). School-related stress experience as a risk factor for bullying behavior. *Journal of Youth and Adolescence*, 30(5), 561.
- 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.
- Nutbeam, D. (1992). The health promoting school: closing the gap between theory and practice. *Health Promotion International*, 7(3), 151-153.
- Parker, L., & Cameron, I. (1995). What is a health promoting school. Perth, WA: School Health Coalition of Western Australia.
- Pellegrini, A., & Long, J. (2002). A longitudinal study of bullying, dominance, and victimisation during the transition from primary school through secondary school. *British Journal of Developmental Psychology*, 20, 259-280.
- Rigby, K. (1997). What children tell us about bullying in schools. *Children Australia*, 22(2), 28-34.
- Rigby, K. (1998). The relationship between reported health and involvement in bully/victim problems among male and female secondary schoolchildren. *Journal of Health Psychology, 3*(4), 465-476.
- Rigby, K. (1998). Suicidal ideation and bullying among Australian secondary school students. *Australian Educational and Developmental Psychologist*, *15*(1), 45-61.
- Rigby, K. (2003). Consequences of bullying in schools. *Canadian Journal of Psychiatry*, 48(9), 583-590.

- 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.
- Roland, E. (2002). Bullying, depressive symptoms and suicidal thoughts. *Educational Research*, *44*(1), 55-67.
- Roland, E., & Idsoe, T. (2001). Aggression and Bullying. *Aggressive Behaviour, 27*, 446-462.
- Rosenblatt, R. (2000). The killing of Kayla. *Time Magazine*, 16-19.
- Salend, S., & Rohena, E. (2003). Students with Attention Deficit Disorders: an overview. *Intervention in School and Clinic*, 38(5), 259-266.
- Salmivalli, C., Kaukiainen, A., & Lagerspetz, K. (2000). Aggression and sociometric status among peers: Do gender and type of aggression matter? *Scandinavian Journal of Psychology*, *41*, 17-24.
- Schafer, M., Werner, N., & Crick, N. (2002). A comparison of two approaches to the study of negative peer treatment: general victimization and bully/victim problems among German schoolchildren. *British Journal of Developmental Psychology*, 20, 281-306.
- Sebanc, A. M. (2003). The friendship features of preschool children: links with prosocial behavior and aggression. *Social Development*, *12*(2), 249-268.
- Simons-Morton, B., & Crump, A. (2003). Association of Parental Involvement and Social Competence with School Adjustment and Engagement Among Sixth Graders. *Journal of School Health*, 73(3), 121-126.
- Skiba, R., Boone, K., Fontanini, A., Wu, T., Strussell, A., & Peterson, R. *A Practical Guide to Comprehensive Planning: Safe and Responsive Schools*. Indiana: Indiana Education Policy Center.
- 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. (1993). 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.
- Smith, P., Cowie, H., Olafsson, R., & Liefooghe, A. (2002). Definitions of bullying: a comparison of terms used, and age and gender differences, in a fourteencountry international comparison. *Child Development, 73*(4), 1119-1133.

- Stahl, N., & Stahl, R. (1991). We can agree after all! Achieving consensus for a critical thinking component of a gifted program using the Delphi technique. *Roeper Review*, *61*(4), 79-88.
- Stevens, V., De Bourdeaudhuij, I., & Van Oost, P. (2001). Anti-bullying interventions at school: aspects of programme adaptation and critical issues for further programme development. *Health Promotion International*, *16*(2), 155-167.
- Sumison, T. (1998). The Delphi technique: an adaptive research tool. *British Journal of Occupational Therapy, 61*(4), 153-156.
- Tremblay, R. (2002). Prevention of injury by early socialization of aggressive behavior. *Injury Prevention, 8*(Supplement IV), iv17-iv21.
- Tremblay, R., Boulerice, B., Harden, P., & al., e. (1996). Do children in Canada become more aggressive as they approach adolescence? In: Human Resources Development Canada, eds. Growing Up in Canada: National Longitudinal Survey of Children and Youth. Ottawa: Statistics Canada.
- Unnever, J., & Cornell, D. (2003). Bullying, self-control and ADHD. *Journal of Interpersonal Violence*, *18*(2), 129-147.
- Unnever, J., & Cornell, D. (2004). Middle school victims of bullying: who reports being bullied? *Aggressive Behavior, 30*, 373-388.
- Vazsonyi, A., & Pickering, L. (2003). The importance of family and school domains in adolescent deviance: African American and Caucasian youth. *Journal of Youth and Adolescence*, 32(2), 115-128.
- Wiley, D., & Hendricks, C. (1998). Using Picture Identification for Research with Preschool Children. *Journal of School Health*, 68(6), 227-230.
- 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.
- Williams, P., & Webb, C. (1994). The Delphi technique: a methological discussion. Journal of Advanced Nursing, 19, 180-186.
- Wolke, D., Woods, S., Bloomfield, L., & Karstadt, L. (2000). The association between direct and relational bullying and behaviour problems among primary school children. *Journal of Child Psychology and Psychiatry*, *41*(8), 989-1002.
- World Health Organization. (2002). *World report on violence and health*. Geneva: World Health Organization.

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