

# 3



## Prevalence and predictors of covert bullying: Analysis of existing CHPRC covert bullying data

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“ Today, an estimated 200 million children and youth around the world are being abused by their peers. ”

(Kandersteg Declaration, Switzerland, June 10, 2007)<sup>[1]</sup>

## 3.1 Introduction

The Child Health Promotion Research Centre (CHPRC) has conducted school-based research since 1999. Since that time, five large longitudinal studies have been completed, with cohorts ranging from approximately 1200 to 3300 WA students. Within those studies, data have been collected related to covert bullying. Four of the most relevant of these projects have been used in this study to provide a historical context for the 2007 data described in Chapter 5. Based on these studies, this chapter describes the prevalence of students' exposure to and engagement in covert bullying behaviours, as well as associations between bullying behaviours and hypothesised predictors of such behaviours.

Three of the studies were cluster-randomised intervention trials, the interventions of two were aimed at reducing and managing bullying behaviours. Cross-sectional baseline or control school data from these studies were used where possible, to avoid any data contamination from the bullying interventions provided. The student outcomes were obtained from existing data sets which contained information on covert bullying behaviours for students in Years 4, 6, 7, 8 and 9.



## 3.2 Methodology

### 3.2.1 Research objectives

The research objectives addressed quantitatively during this phase of the Australian Covert Bullying Prevalence Study (ACBPS) are as follows.

- Improve our understanding of the nature and extent of covert bullying among students aged 8-14 years, and to assess the social, emotional, cognitive and behavioural impact it had on students who were bullied:
  - at what age does it begin, what form(s) does it take, when does it usually occur, is it associated with other forms of bullying, who is involved;
  - who are the students who are bullied, how do they feel, and how does it affect them (emotionally, socially, physically, behaviourally);
  - are specific forms of covert bullying more prevalent for girls than for boys? If so, are there age-related patterns in this gender pattern; and
  - how frequently young people witness covert bullying happening and how do they feel about it, and what has been their response.
- Increase our knowledge and understanding of the degree to which young people themselves have participated in, or been offenders of, covert bullying as well as the reasons for their involvement:
  - when, how often and why have they been involved; and
  - when does it happen, do they talk to anyone about it.

### 3.2.2 Data sources used for the secondary data analysis

This section describes data from four studies in which student outcome data were measured, the characteristics of the data sets from these studies, the measures of bullying behaviours used and the predictors of bullying behaviours assessed. In addition the statistical methods that were applied are described.

The following studies provided data for the covert bullying project:

- Friendly Schools Friendly Families (FSFF) Bullying Intervention Project (2002);
- Supportive Schools Project (SSP) (2005-2006);
- Extra-curricular (EC) Project (2004); and
- Marijuana Education Project (MEP) (2003).

The details of the data sets from the different studies are presented in Table 3.1.


**Table 3.1: Details of student outcomes data sets**

Study	Time data collected	Year level	Numbers of students and schools	School sector	Data Point
FSFF	Term 1, 2002	Year 4	1295 students 20 schools	Government schools	Pre-test
		Year 6	1257 students 20 schools	Government schools	Pre-test
SSP	Term 3, 2005	Year 7	2078 students 352* schools	All sectors	Pre-test
	Term 1, 2006	Year 8	3317 students 21 schools	Catholic schools	
EC	Term 2, 2004	Year 8	2698 students 18 schools	All sectors	Pre-test
MEP	Term 4, 2003	Year 9	2685 students 24 schools	Government schools	Post-test 2
Total			13330 students 103* schools		

\*Only small numbers of students attending feeder schools were selected from these 352 schools – not all schools were involved

These data sets provided the most complete and least likely to be biased data from a total of 13 330 students across years 4 to 9. Where possible, baseline data were used to eliminate testing effects and intervention effects. For the MEP study, data from the second post intervention data collection were used where the bullying questions were asked for the first time during this data collection. These were the most reliable data available for Year 9 students. The MEP study aimed to address marijuana use in young people and did not directly attempt to address bullying behaviour.

The four studies were conducted in 103 Perth metropolitan schools. The FSFF and MEP studies were conducted in Government schools while the SSP study was conducted in Catholic schools only. The EC study was the most representative of the wider student population as it was conducted in schools across all sectors and socio-economic levels and no intervention was provided to students.



The FSFF Year 4 and Year 6 and the SSP Year 8 students were surveyed in Term 1, so the reported prevalence of bullying behaviours may be lower than might be the case later in the year, especially for the Year 8 student group (being the first year of secondary school for these students). The SSP Year 7, EC Year 8 and the MEP Year 9 data were collected in Term 3, Term 2 and Term 4 of the respective year. Also the Year 4 and 6 data in the FSFF study were collected from two separate cohorts of students whereas a large number of the students surveyed in Year 7 in the SSP study were surveyed again in Year 8 and thus comprise a large percentage of the SSP Year 8 group. All the surveys were administered by trained staff and conducted in the classroom during a normal school period, apart from the survey of the Year 7 students in the SSP study which was mailed to the students' homes. This also resulted in a lower response rate to this particular survey, limiting the generalisability of the Year 7 data.

Each of the four studies is described below.

### **Friendly Schools Friendly Families (FSFF)**

The Friendly Schools Friendly Families Bullying Intervention Project (FSFF) aimed to reduce and effectively manage bullying in primary schools through the development, implementation and evaluation of a whole-school bullying intervention. The intervention was designed to increase understanding and awareness of bullying; increase communication about bullying; promote adaptive responses to bullying; promote peer and adult empathy and support for students who are bullied; and peer and adult discouragement of bullying behaviour. The FSFF intervention also aimed to enhance the impact of parenting and of whole-school factors that support and protect students from the effects of bullying.

The study was a longitudinal group-randomised controlled trial conducted from 2002 to 2004. Schools were stratified by socio-economic status (SES), randomly selected and randomly assigned to three study conditions. Data were collected from students at the start and end of the first, second and third years of the study using self-completion questionnaires administered by trained staff within the classrooms in 20 Government schools in metropolitan Perth. A total of 26 schools were approached to obtain the 20 schools that participated (77% response rate). Passive parental consent was received from 98% of the students in Years 4 and 6 in the participating schools. The FSFF Year 4 and 6 cohorts comprised 2552 students in 2002 (98% response rate) and these baseline data were used in the analysis for this report.

In the FSFF study, covert bullying was defined as repeated acts of any of the following behaviours: being ignored, not being allowed to join in, or being left out on purpose; having lies told about them and others trying to make other students not like them, and being made afraid that they would get hurt.



## **Supportive Schools Project (SSP)**

The Supportive Schools Project (SSP) was a three-year cluster randomised controlled trial conducted from 2005 to 2007. The project aimed to develop and implement whole-of-school strategies to reduce the prevalence of frequent bullying behaviour, as well as positively influence common mediators of bullying including: encouraging students' normative beliefs about non-acceptance of bullying behaviour; increasing students' feelings of support from school staff and peers if bullied; improving students' empathy and social competence; increasing students' reciprocated friendships and increased feelings of connectedness to school; and reducing problem behaviours, absenteeism and loneliness.

Twenty one randomly selected (stratified by SES and school size) secondary Catholic Education Office schools were recruited to the project (72% of the schools approached) and Year 7 students who were registered to attend the secondary schools in 2006 identified. These students attended some 350 primary schools. Self-completion surveys were mailed to the students in Term 3 of 2005. A total of 2034 completed questionnaires were returned (response rate of 60%). In Term 1 of 2006, the Year 8 students with parental consent in the participating schools were surveyed using self completion questionnaires administered by trained staff within the classrooms. An additional school was recruited to the study because one school randomised to the comparison condition indicated it would be implementing components of the intervention and was thus excluded from further analyses of intervention impact.

Of the total group of Year 8 students in the 21 schools, parental consent to participate was received from 93% of the parents and 98% of the students with consent responded to the survey. Almost all (97%) of the students surveyed in Year 7 went on to the participating secondary schools in 2006. Of the group who completed questionnaires in Year 8, 61% had also completed a questionnaire in Year 7 and 39% had not i.e. they were new to the study. The data collected from the students in Year 7 in 2005 and in Year 8 in 2006 were used in the analyses of covert bullying behaviours.


Using the SSP data set, covert bullying was defined as repeated acts of any of the following: being ignored, not being allowed to join in, or being left out on purpose; having lies told about them, others trying to make other students not like them and being made afraid that they would get hurt, being sent a mean and hurtful text message, and being sent a mean and hurtful message on the internet.

## **The Extra-curricular Project (EC)**

The Extra-curricular Project (EC) was an observational study that aimed to identify and monitor the potential benefits of participation in extra-curricular activities, via increases in school and family connectedness, in reducing cigarette smoking and a range of other health compromising behaviours.

This longitudinal study tracked, over three years, a cohort of Year 8 students from a stratified random sample of 18 metropolitan secondary schools. Schools from all sectors and socio-economic levels were included. Of the 30 schools approached, 18 agreed to participate (60%), eight refused (most citing other





priorities within the school or their involvement in other programs) with a further four schools undecided about their participation at the time of reaching the required numbers of schools. A consent rate of 94% resulted in a total of 2908 students in Year 8 being eligible for inclusion and completed questionnaires were received from 2700 (93%) of these students, forming a baseline in 2004. Analyses for this report were conducted on these baseline data collected from the students in Year 8.

The EC project defined covert bullying as including any of the following repeated actions: being ignored, not being allowed to join in, or being left out on purpose; having lies told about them and others trying to make other students not like them; and being made afraid they would get hurt.

### **Marijuana Education Project (MEP)**

The Marijuana Education Project (MEP) aimed to adapt a successful school-based cigarette smoking program underpinned by harm minimisation theory (including abstinence messages), in a school-based cluster randomised controlled intervention trial. The study was conducted in 24 Perth metropolitan Government secondary schools. The Health Promoting School intervention included strategies for: 'prevention/refusal' to assist students who have never used cannabis to remain that way or at least delay initiation; 'cessation' to help current users; 'reduction' to reduce use and harm to current users and prepare them for future cessation; and 'assistance' to provide peers with support for their cessation/reduction efforts. The classroom intervention was delivered through two Learning Areas (English and Health Education) and was reinforced by policy, school nurse, school chaplain and parental components.

In total 24 of the 35 randomly selected schools approached agreed to participate (69%) and were randomly assigned to an intervention or control condition. The two-year multi-component intervention was developed and implemented in the 12 schools randomly assigned to the intervention condition. Of the total Year 8 student group, 69% of students provided active parental consent to participate. A further 10% of parents refused consent and 21% did not respond. Data were collected over three years from students at baseline and at the end of the first, second and third years of the study using self-completion questionnaires. Baseline data were collected from nearly 3100 students (93% of those eligible), and 2685 (87%) of these students completed questionnaires in Year 9 at the end of the second year of intervention. Questions on bullying were included in the survey for the first time in the Year 9 data collection in 2003 and these data were used in the analyses for this report.

For the MEP, covert bullying was defined as any of the following occurring repeatedly: being ignored, not being allowed to join in, or being left out on purpose; having lies told about them and others trying to make other students not like them, and being made afraid that they would get hurt.



### 3.2.3 Identification of outcome measures

Students' exposure to and engagement in covert bullying behaviours were the primary outcome measures for this report. To determine students' exposure to bullying behaviours, they were asked how often each of a number of behaviours had occurred to them in the previous term, from a list of seven behaviours (nine in the SSP study). Whilst the term 'bullied' was not used within the question (except in the SSP study), some of the behaviours characterise covert bullying and some are forms of more overt bullying behaviours. Students were asked to report being bullied if they were repeatedly exposed to such behaviours and were unable to stop the behaviour from occurring. Thus, not all students who responded had experienced bullying behaviours, as the behaviour may not have been repeated and the student may not have felt powerless to prevent its recurrence. To determine the extent to which students were perpetrators of bullying behaviours they were asked how often during the previous school term they had treated another student or students in this way. Engagement in the behaviour did not constitute bullying unless the behaviour was repeated and the other student was unable to stop the behaviour from occurring. Given students are possibly less likely to report bullying others than they are to report being bullied, the results in this report relate to students' self-reported experiences of covert bullying behaviours and their experiences with such behaviours, and are not necessarily cases of being bullied or bullying others in all instances.

The listed behaviours which were classified as types of covert bullying behaviours were:

- being ignored, not allowed to join in, or left out on purpose;
- having lies told about them and tried to make other students not like them;
- being made afraid that they would get hurt;
- being sent mean and nasty text messages; and
- being sent mean and nasty messages on the internet.

The latter two types were only included in the SSP study. A composite measure of 'being exposed to covert bullying behaviours' was calculated. If the student had reported being exposed to any of the listed behaviours in the previous term they were coded as having been exposed to covert bullying behaviour. Similarly, an outcome measure of 'engaged in covert bullying behaviours' was calculated if the student reported they had engaged in any of the listed behaviours in the previous school term.

The outcome measures listed in Table 3.2 were obtained from the questionnaires used in the different studies and analysed. The wording of the listed behaviours was consistent between the studies but the wording of the response options was not. Consequently the behaviours were coded in binary form, i.e.: having or not having occurred, to minimise these differences.



**Table 3.2: Outcome measures**

Outcome measure	Details	Categories	Data sets
Exposed to covert bullying behaviours	FSFF, EC & MEP Exposed to at least one of 3 covert behaviours	Yes / No	FSFF Yr4 & Yr6 EC Yr8 MEP Yr 9
	SSP: Exposed to at least one of 5 covert behaviours	Yes / No	SSP Yr7 & Yr8
Engaged in covert bullying behaviours	FSFF, EC & MEP Engaged in at least one of 3 covert behaviours	Yes / No	FSFF Yr4 & Yr6 EC Yr8 MEP Yr 9
	SSP: Engaged in at least one of 5 covert behaviours	Yes / No	SSP Yr7 & Yr8
Was ignored, not allowed to join in, or left out on purpose		Yes / No	All data sets
Had lies told about them and others tried to make other students not like them	Term 1, 2006	Yes / No	All data sets
Were made afraid that they would get hurt	Term 2, 2004	Yes / No	All data sets
Being sent mean and nasty text messages	Term 4, 2003	Yes / No	SSP Yr7 & Yr8
Being sent mean and nasty messages on the internet		Yes / No	SSP Yr7 & Yr8

\*Significant at the 0.05 level of significance.



### 3.2.4 Predictors of bullying behaviours

A number of behavioural and attitudinal factors have been identified in the literature as predictors of covert bullying. The predictors commonly collected in these four studies include degree of social competence, amount of peer support, attitudes towards students who are bullied, attitudes towards students who bully, the expected outcomes for the student from bullying others and knowledge of what bullying is. These predictors were assessed in multivariable analyses to determine the strongest predictors of exposure to and engagement in covert bullying behaviours.

To determine which items on the questionnaires were most appropriate for each data set, questions or scales within each instrument were matched to the identified predictors. In this way, a list of potential predictor variables was compiled for each data set. For questions and scales that were the same or where it was possible to obtain the same information from the different studies, the relevant question or scale was included in the final list of predictor variables to be analysed for that data set. In addition, some predictors were only measured within particular data sets. Thus, it was only possible to assess knowledge of bullying behaviours in the FSFF data set, and social competence, pro-victim attitudes, pro-bully attitudes and outcome expectancies in the FSFF and the SSP data sets. None of the predictors were measured in the MEP study, hence these data were not analysed for predictors of bullying behaviours.

The predictors listed in Table 3.3 were selected from the data sets for analysis.

**Table 3.3: Student predictors of bullying behaviours**

Predictor	Details	Categories	Data sets
Social competence [2-4]	FSFF: How many good friends do you have at school?  SSP: Do you find it easy to make friends?	<b>Many good friends:</b> Those who feel they have many good friends. <b>Few good friends:</b> Those who have no friends, one good friend or 2-3 good friends. <b>Easy to make friends:</b> Those who find it easy to make friends most of the time. <b>Not easy to make friends:</b> Those who do not find it easy to make friends or sometimes find it easy to make friends.	FSFF  SSP
Knowledge [5, 6]	8 item scale* – percentage correct and percentage incorrect have been calculated.	<b>High knowledge:</b> At least 80% of questions correct. <b>Low knowledge:</b> Less than 80% of questions correct.	FSFF
Peer support [7]	13 item scale*	Mean response on 1-3 scale. Higher scores indicate greater peer support.	FSFF SSP EC
Pro victim attitudes [8]	8 item scale*	Mean response on 0-2 scale. Higher scores indicate greater pro victim attitudes.	FSFF SSP
Outcome expectancies [9]	11 item scale*	Mean response on 1-3 scale. Higher scores indicate greater negative effects from bullying.	FSFF SSP

\*For details of questions see Chapter 3, Appendix 1



### 3.2.5 Data analyses

Once the outcome variables were coded for each student year level, the data for each student year level for each data set was separated into six separate data sets, two for the FSFF study (Years 4 and 6), two for the SSP study (Years 7 and 8), one for the EC study (Year 8) and one for the MEP study (Year 9).

The analyses first aimed to explore and describe the prevalence of the students' experiences of and engagement in covert bullying behaviours. Gender differences were tested. The extent to which the students experienced only covert or only overt bullying behaviours or both types of behaviours, was also explored. These analyses were conducted in SPSS <sup>[10]</sup> on each of the six data sets.

Secondly, statistical models were fitted in the Stata 10 application <sup>[11]</sup> to determine which of the variables most strongly predicted covert bullying behaviours. Random coefficients binary logistic regression models were fitted to account for school-level clustering. Separate models were developed for each of the different outcome variables for the different year levels using five of the six separate data sets (none of the bullying-related mediators were measured in the MEP study). The mediators were firstly all included in a single model in order to assess their importance relative to each other and a backward process of elimination (with an alpha level of 0.05) was used to obtain a final list of significant predictors of the outcome variable. Thus the strongest predictors of the bullying behaviours, from the list of mediators, were determined. Note that, since these are multivariable models, it cannot be assumed that a particular predictor variable is not significantly associated with a specific outcome variable because it is not included in the model for that variable. It may simply not be as strong a predictor as the other variables included in the model.

It is important to control for other variables that may explain differences between students such as: socio-economic status; school size (total number of students in school) and gender. Accounting for these other predictor variables (known as confounders), eliminates their influence as an alternate explanation for the results that are obtained. Data on school size was calculated from a database for all Western Australian schools obtained from the Department of Education and Training. Socio-economic status was measured by linking each student's home postcode (substituted by the school postcode if unavailable) with the Australian Bureau of Statistics Index of Combined Social Advantage and Disadvantage. Although the limitations of such an approach to measuring socio-economic status are recognised, no alternate means of accounting for this variable was available. To control for potential confounding, the three demographic variables, namely school size, socio-economic status and the student's gender were included in all models.

## 3.3 Results

### 3.3.1 Demographic characteristics of students and schools

As mentioned previously, data from four studies have been used in this report, namely the FSFF, SSP, EC and MEP studies. Tables 3.4 to 3.6 describe the distribution of the students and schools in the different studies with regard to the demographic variables. Student numbers and percentages are presented for gender, socio-economic status and school numbers and percentages are presented for school size.

#### Gender

In all four data sets approximately one half of participating students were female (Table 3.4). A slightly higher proportion of female students were reported for the Year 8 group in the EC project (53%).

**Table 3.4: Number of students (and percentages) per gender by study and year level**

	<b>Boys</b>	<b>Girls</b>	<b>Total</b>
	<b>%(n)</b>	<b>%(n)</b>	<b>n</b>
FSFF Year 4	49(634)	51(659)	1293
FSFF Year 6	51(643)	49(614)	1257
SSP Year 7	48(1003)	52(1074)	2077
SSP Year 8	50(1653)	50(1626)	3279
EC Year 8	47(1159)	53(1327)	2486
MEP Year 9	50(1258)	50(1247)	2505

### 3.3.2 Socio-economic status

Values from the Australian Bureau of Statistics Index of Combined Social Advantage and Disadvantage were assigned to each student according to their home postcode (or school postcode if the home code was unknown) as a measure of the socio-economic status of the family. Students were then divided per data set into two groups representing below average (<1000) and above average (>1000) socio-economic status (SES).

Students were fairly evenly distributed between the two SES groups for the FSFF Year 4 and Year 6 and SSP Year 7 and Year 8 students. Higher SES students were over-represented in Year 8 of the EC data set and under-represented in the MEP Year 9 group.

**Table 3.5: Number of students (and percentages) per socio-economic status group by study and year level**

	<b>Lower</b>	<b>Higher</b>	<b>Total</b>
	<b>%(n)</b>	<b>%(n)</b>	<b>n</b>
FSFF Year 4	51(655)	49 (640)	1295
FSFF Year 6	48(607)	52(650)	1257
SSP Year 7	48(989)	52(1089)	2078
SSP Year 8	50(1603)	50(1600)	3203
EC Year 8	43(986)	57(1305)	2291
MEP Year 9	59(1523)	41(1056)	2579



### 3.3.3 School size

Schools were assigned to one of two categories (smaller and larger). This was achieved by dividing all the schools in the study into groups according to the size of the school, measured by the total number of students in the school. Different cut-off points were used for primary and secondary schools. The primary schools in the FSFF dataset were defined as a small school if they had less than 550 students and defined as a large school if they had 550 or more students. The schools in the SSP, EC and the MEP secondary datasets were defined as a small school if they had less than 800 students and defined as a large school if they had 800 or more students.

**Table 3.6: Number of schools (and percentages) per school size by study**

	<b>Smaller</b>	<b>Larger</b>	<b>Total</b>
	<b>%(n)</b>	<b>%(n)</b>	<b>n</b>
FSFF	55(11)	45(9)	20
SSP	65(13)	35(7)	20
EC	61(11)	39(7)	18
MEP	63(15)	37(9)	24



### 3.3.4 Prevalence by type of bullying behaviour and gender

To determine students' exposure to bullying behaviours, they were asked how often each of a number of behaviours had occurred to them in the previous term, using a list of seven behaviours. Whilst the term 'bullied' was not used within the question, three of the seven behaviours characterise covert bullying and the remaining four are forms of more overt bullying behaviours. Bullying was defined as being repeatedly exposed to these behaviours and unable to stop the behaviour from occurring. Consequently, not all students who responded had experienced these bullying behaviours, as the behaviour may not have been repeated and the student may not have been powerless to prevent its recurrence. Therefore the percentages presented in this section represent the extent to which the students sampled were exposed to bullying behaviours.

#### 3.3.4.1 Year 4

Utilising the FSFF data set, it was found that 60% (n=773) of the students in Year 4 reported, at least sometimes, experiencing behaviours considered to be forms of covert bullying: repeatedly being ignored, not allowed to join in, or left out on purpose; having lies told about them and others trying to make other students not like them, and being made afraid that they would get hurt (Table 3.7).

Students were also asked questions about whether they had experienced more overt bullying behaviours, namely being made fun of and teased; being called mean and hurtful names; being hit, kicked or pushed and having money or other things taken away or broken. The results showed that 65% (n=839) of Year 4 students reported experiencing such behaviours.

In Table 3.7 details of the numbers and percentages of students who experienced each of the different covert bullying behaviours are given. The most common behaviour reported was being excluded i.e. being ignored, not allowed to join in, or left out on purpose (40%, n=517), where 31% experienced being excluded sometimes and 9% experienced it often. Just over one third of the Year 4 students indicated that other students had told lies about them and tried to make other students not like them (36%, n=457) and 27% (n=352) reported they were made afraid they would get hurt. In Year 4, the prevalence of being exposed to the different types of covert bullying behaviours on a frequent basis (i.e. 'lots of times') was as follows: 9% (n=121) were ignored, not allowed to join in, or left out on purpose; 10% (n=125) had lies told about them and others trying to make other students not like them; and 7% (n=94) were made afraid that they would get hurt.

No statistically significant differences were found with regard to gender and students' experiences of covert bullying behaviours in Year 4. That is, girls and boys were equally as likely to experience each of the different types of covert bullying behaviours assessed.

**Table 3.7: Prevalence of experiencing covert bullying behaviours by gender (Year 4)**

Experienced in last term:	Boys	Girls	Total	Chi-square	
	%(n)	%(n)	%(n)	$\chi^2$	p
Being ignored, not allowed to join in, or left out on purpose	n=629	n=652	n=1281		
Experienced in last term					
Yes	42(266)	39(251)	40(517)		
Lots of times	9(56)	10(65)	9(121)	3.602	0.165
Sometimes	33(210)	29(186)	31(396)		
No	58(363)	62(401)	60(764)		
Having lies told about them and trying to make other students not like them	n=630	n=652	n=1282		
Experienced in last term					
Yes	33(208)	38(249)	36(457)		
Lots of times	9(58)	10(67)	10(125)	3.793	0.150
Sometimes	24(150)	28(182)	26(332)		
No	67(422)	62(403)	64(825)		
Being made afraid that they would get hurt	n=627	n=653	n=1280		
Experienced in last term					
Yes	24(160)	29(192)	27(352)		
Lots of times	8(48)	7(46)	7(94)	4.036	0.133
Sometimes	18(112)	22(146)	20(258)		
No	75(467)	71(461)	73(928)		
Experienced (at least one of the above) covert bullying behaviours	n=634	n=659	n=1293		
	60(378)	61(395)	60(773)	0.014	0.907
Experienced (at least one) overt bullying behaviour	n=634	n=659	n=1293		
	67(424)	63(415)	65(839)	2.160	0.142

\*Significant at the 0.05 level of significance.



### 3.3.4.2 Year 6

About half (52%, n=647) of the students in Year 6 indicated they had experienced at least one of the covert bullying behaviours in the previous school term (Table 3.8). In comparison, a higher percentage of the Year 6 students reported experiencing the more overt forms of bullying behaviours (63%, n=786).

One third of the Year 6 students, reported that they were excluded by being ignored, not allowed to join in, or left out on purpose (33%, n=407), that lies were told about them and others tried to make other students not like them (34%, n=419). A lower proportion of the students indicated they were made afraid they would get hurt (18%, n=229). Covert bullying behaviours experienced frequently by the Year 6 students included (in order of prevalence): having lies told about them and others trying to make other students not like them (9%, n=110); being ignored, not allowed to join in, or left out on purpose (6%, n=69); and being made afraid they would get hurt (4%, n=50).

For Year 6 students there were no statistically significant differences between girls and boys with regard to their reported experiences of the different types of covert bullying behaviours.

**Table 3.8: Prevalence of experiencing bullying behaviours by gender (Year 6)**

Experienced in last term:	Boys	Girls	Total	Chi-square	
	%(n)	%(n)	%(n)	$\chi^2$	p
Being ignored, not allowed to join in, or left out on purpose	n=641	n=610	n=1251		
Yes	42(32)	34(204)	33(407)		
Lots of times	9(5)	6(36)	6(69)	0.588	0.745
Sometimes	33(27)	28(168)	27(338)		
No	58(68)	67(406)	68(844)		
Having lies told about them and trying to make other students not like them	n=641	n=608	n=1249		
Yes	33(207)	35(212)	34(419)		
Lots of times	9(55)	9(55)	9(110)	0.949	0.622
Sometimes	24(152)	26(157)	25(309)		
No	68(434)	65(396)	67(830)		
Being made afraid that they would get hurt	n=639	n=607	n=1246		
Yes	17(109)	20(120)	18(229)		
Lots of times	3(22)	5(28)	4(50)	1.857	0.395
Sometimes	14(87)	15(92)	14(179)		
No	83(530)	80(487)	82(1017)		
Experienced (at least one of the above) covert bullying behaviours	n=643	n=614	n=1257		
	50(320)	53(327)	52(647)	1.532	0.216
Experienced (at least one) overt bullying behaviour	n=643	n=614	n=1257		
	65(415)	60(371)	63(786)	2.273	0.132

\*Significant at the 0.05 level of significance.



### 3.3.4.3 Year 7

Two additional items were included in the SSP survey which measured self-reported covert bullying behaviours using technology. The items asked if students had been sent a mean and hurtful text message, and if they had been sent a mean and hurtful message on the internet. These additional items were included when determining whether the sample of Year 7 students from the SSP study had been exposed to covert bullying behaviours. On the basis of the five items, 48% (n=995) of the students in Year 7 indicated that they had experienced covert bullying behaviours. As shown in Table 3.9, a larger percentage, 60% (n=1247) of the students reported being the target of overt bullying behaviours.

Unlike the Year 4 and Year 6 students, statistically significant differences were found between girls and boys with respect to exposure to covert bullying behaviours among the Year 7 students (Table 3.9). In particular, Year 7 girls (50%) were more likely than Year 7 boys (45%) to report exposure to covert bullying behaviours. When considering overt bullying behaviours, Year 7 boys (62%) were significantly more likely to report being targets of such behaviours than were Year 7 girls (58%).

Among the students in Year 7, the two most common forms of covert bullying behaviours occurring (either sometimes or lots of times) were: having lies told about them and trying to make other students not like them (33%, n=677) and being ignored, not allowed to join in, or left out on purpose (29%, n=595). Fewer students reported being made afraid they would get hurt (11%, n=217). Ten percent of students (n=190) reported being sent a mean and hurtful message on the internet, and 3% (n=62) were bullied by being sent a mean and hurtful text message. Ten percent or less of the Year 7 students experienced covert bullying behaviours frequently, with 10% frequently having lies told about them and others trying to make other students not like them (n=202); 9% frequently being ignored, not allowed to join in, or left out on purpose (n=184); and 4% frequently being made afraid that they would get hurt (n=83). Only 2% of the Year 7 students (n=32) reported that they were frequently sent a mean and hurtful message on the internet, and less than 1% (n=8) were frequently sent a mean and hurtful text message.

Statistically significant gender differences were evident for several of the types of covert bullying behaviours analysed. A significantly higher proportion of girls than boys had lies told about them and had others trying to make other students not like them (36% compared with 30%). Girls were also more likely than boys to be sent mean and hurtful messages on the internet (12% compared with 6%). In contrast, Year 7 boys were significantly more likely than Year 7 girls to be made afraid that they would get hurt (14% compared with 8%) and, in particular, a higher percentage of boys were frequently made afraid they would get hurt (6% compared with 2% of girls).



**Table 3.9: Prevalence of experiencing bullying behaviours by gender (Year 7)**

Experienced in last term:	Boys	Girls	Total	Chi-square	
	%(n)	%(n)	%(n)	$\chi^2$	p
Being ignored, not allowed to join in, or left out on purpose	n=985	n=1058	n=2043		
Yes	28(274)	31(321)	29(595)		
Lots of times	9(90)	9(94)	9(184)	2.447	0.294
Sometimes	19(184)	22(227)	20(411)		
No	72(711)	70(737)	71(1448)		
Having lies told about them and trying to make other students not like them*	n=985	n=1055	n=2040		
Yes	30(298)	36(379)	33(677)		
Lots of times	10(99)	10(103)	10(202)	10.260	0.006
Sometimes	20(199)	26(276)	23(475)		
No	70(687)	64(676)	67(1363)		
Being made afraid that they would get hurt*	n=983	n=1056	n=2039		
Yes	14(134)	8(83)	11(217)		
Lots of times	6(59)	2(24)	4(83)	22.524	<0.001
Sometimes	8(75)	6(59)	7(134)		
No	86(849)	92(973)	89(1822)		
Sent a mean and hurtful text message	n=981	n=1057	n=2038		
Yes	2(16)	5(46)	3(62)		
Lots of times	0(1)	1(7)	0(8)	-	-
Sometimes	2(15)	4(39)	3(54)		
No	98(965)	96(1011)	97(1976)		
Sent a mean and hurtful message on the internet*	n=983	n=1056	n=2039		
Yes	6(60)	12(130)	10(190)		
Lots of times	1(10)	2(22)	2(32)	23.212	<0.001
Sometimes	5(50)	10(108)	8(158)		
No	94(923)	88(926)	91(1849)		

Experienced in last term:	Boys	Girls	Total	Chi-square	
	%(n)	%(n)	%(n)	$\chi^2$	p
Experienced (at least one of the above) covert bullying behaviours*	n=1003 45(454)	n=1074 50(541)	n=2077 48(995)	5.423	0.020
Experienced (at least one) overt bullying behaviour*	n=1003 62(625)	n=1074 58(622)	n=2077 60(1247)	4.183	0.041

\*Significant at the 0.05 level of significance.



### 3.3.4.4 Year 8

Two data sources were available for Year 8 students, the SSP study with data from Catholic schools and the EC study data from a cross-section of schools. Note that the Year 8 SSP data included many of the same students as had completed SSP surveys in Year 7.

#### SSP Study

As for the Year 7 data, using the SSP dataset for Year 8 students, five different forms of covert bullying behaviours were defined. Combining responses to these items, 41% (n=1355) of the students in Year 8 in the SSP study indicated they had ever been targets of covert bullying behaviours. By comparison, about half of the Year 8 students (53%, n=1757) reported being exposed to overt bullying behaviours (Table 3.10).

Twenty four percent of the Year 8 students reported being excluded by being ignored, not allowed to join in, or left out on purpose (n=792), whilst 24% (n=789) reported having lies told about them and others trying to make other students not like them, and 9% (n=302) were made afraid they would get hurt. Four percent of the students (n=112) were sent mean and hurtful text messages and 7% (n=223) were sent a mean and hurtful message over the internet.

As was the case in Year 7, less than 10% of the Year 8 students reported they were frequently exposed to covert bullying behaviours; by being ignored, not allowed to join in, or left out on purpose (6%, n=189); by having lies told about them and others trying to make other students not like them (7%, n=240); and by being made afraid they would get hurt (3%, n=93). Small numbers of the students reported they were frequently sent a mean and hurtful message on the internet (2%, n=52), and 1% (n=28) were frequently sent a mean and hurtful text message.

Although no gender differences were found with respect to the overall likelihood of experiencing covert bullying behaviours ( $p=0.531$ ), a significantly higher proportion of boys (12%,  $n=198$ ) compared with girls (6%,  $n=104$ ) indicated they had been made afraid that they would get hurt. The test for gender differences for being sent mean and hurtful messages on the internet was significant ( $p=0.007$ ). The girls were slightly more likely to receive mean and hurtful messages on the internet (8% vs 6%).

Girls and boys differed significantly with respect to their exposure to overt bullying behaviours, with a higher percentage of boys (61%,  $n=1029$ ) than girls (44%,  $n=728$ ) reporting exposure to the more direct forms of bullying behaviours.

**Table 3.10: Prevalence of experiencing bullying behaviours by gender (Year 8, SSP study)**

Experienced in last term:	Boys	Girls	Total	Chi-square	
	%(n)	%(n)	%(n)	$\chi^2$	p
Being ignored, not allowed to join in, or left out on purpose*	n=1660	n=1629	n=3289		
Yes	24(402)	25(390)	24(792)		
Lots of times	7(116)	5(73)	6(189)	11.230	0.004
Sometimes	17(286)	20(317)	18(603)		
No	76(1258)	76(1239)	76(2497)		
Having lies told about them and trying to make other students not like them*	n=1651	n=1622	n=3273		
Yes	24(385)	25(404)	24(789)		
Lots of times	9(142)	6(98)	7(240)	15.968	0.001
Sometimes	15(243)	19(306)	17(549)		
No	77(1266)	75(1218)	76(2484)		
Being made afraid that they would get hurt*	n=1653	n=1625	n=3278		
Yes	12(198)	6(104)	9(302)		
Lots of times	4(73)	1(20)	3(93)	39.475	<0.001
Sometimes	8(125)	5(84)	6(209)		
No	88(1455)	94(1521)	91(2976)		
Sent mean and hurtful text messages	n=1658	n=1630	n=3288		
Yes	3(50)	4(62)	4(112)		
Lots of times	1(15)	1(13)	1(28)	2.742	0.254
Sometimes	2(35)	3(49)	3(84)		
No	97(1608)	96(1568)	96(3176)		

Experienced in last term:	Boys	Girls	Total	Chi-square	
	%(n)	%(n)	%(n)	$\chi^2$	p
Sent mean and hurtful messages on the internet*	n=1656	n=1628	n=3284		
Yes	6(97)	8(126)	7(223)		
Lots of times	2(30)	2(22)	2(52)	10.060	0.007
Sometimes	4(67)	6(104)	5(171)		
No	94(1559)	92(1502)	93(3061)		
Experienced (at least one of the above) covert bullying behaviours	n=1675	n=1639	n=3314		
	40(676)	41(679)	41(1355)	0.392	0.531
Experienced (at least one) overt bullying behaviour*	n=1675	n=1639	n=3314		
	61(1029)	44(728)	53(1757)	96.289	<0.001

\*Significant at the 0.05 level of significance.



## EC Study

Amongst the Year 8 students in the EC study, 44% (n=1088) reported being targets of covert bullying behaviours in the previous term and about half (51%, n=1258) reported being exposed to overt bullying behaviours (Table 6).

The most common forms of covert bullying behaviours experienced by the Year 8 EC students were exclusion, i.e. being ignored, not allowed to join in, or left out on purpose (36%, n=772) and having lies told about them and others trying to make other students not like them (34%, n=758). Relatively fewer of the students were made afraid they would get hurt (17%, n=370).

Small numbers of the Year 8 EC students were exposed to these behaviours on a frequent basis, with 5% frequently having lies told about them and others trying to make other students not like them (n=101), 6% frequently being ignored, not allowed to join in, or left out on purpose (n=135) and 3% frequently being made afraid that they would get hurt (n=66).

There were no gender differences with regard to the covert bullying behaviours, either overall or for the individual items, apart from a significantly higher proportion of boys in Year 8 (20%) being made afraid that they would get hurt than girls (14%). As was the case for the Year 8 SSP data, boys were also more likely to experience overt forms of bullying than girls (54% of boys vs 48% of girls).



**Table 3.11: Prevalence of experiencing bullying behaviours by gender (Year 8, EC study)**

Experienced in last term:	Boys	Girls	Total	Chi-square	
	%(n)	%(n)	%(n)	$\chi^2$	p
Being ignored, not allowed to join in, or left out on purpose	n=1023	n=1180	n=2203		
Yes	34(352)	36(420)	36(772)		
Lots of times	4(44)	5(57)	5(101)	0.767	0.531
Sometimes	30(308)	31(363)	31(671)		
No	66(671)	64(760)	65(1431)		
Having lies told about them and trying to make other students not like them	n=1019	n=1176	n=2195		
Yes	33(338)	36(425)	34(758)		
Lots of times	6(56)	7(79)	6(135)	3.228	0.193
Sometimes	27(277)	29(346)	28(623)		
No	67(686)	64(751)	66(1437)		
Being made afraid that they would get hurt*	n=1021	n=1172	n=2193		
Yes	20(207)	14(163)	17(370)		
Lots of times	3(36)	3(30)	3(66)	15.832	<0.001
Sometimes	17(171)	11(133)	14(304)		
No	80(814)	86(1009)	83(1823)		
Experienced (at least one of the above) covert bullying behaviours	n=1158	n=1327	n=2485		
	42(484)	46(604)	44(1088)	3.477	0.062
Experienced (at least one) overt bullying behaviour*	n=1158	n=1327	n=2485		
	54(621)	48(637)	51(1258)	7.825	0.005

\*Significant at the 0.05 level of significance.



### 3.3.4.5 Year 9

The Year 9 data were collected from students in Government schools who participated in the MEP study.

Overall, about one third of the Year 9 students ever experienced at least one of the three covert bullying behaviours (35%, n=880): being ignored, not allowed to join in, or left out on purpose; having lies told about them and others trying to make other students not like them and being made afraid that they would get hurt (Table 3.12). A higher percentage indicated they had been exposed to more overt forms of bullying behaviours (48%, n=1199).

In terms of the particular behaviours, 25% (n=585) of the Year 9 students had lies told about them and others trying to make other students not like them, and 22% (n=548) were ignored, not allowed to join in or left out on purpose. Being made afraid of getting hurt was reported by 12% (n=297) of the students.

As was found for the other year groups, relatively few of the Year 9 students reported being frequent targets of covert bullying behaviours, with 4% (n=105) reporting they were frequently ignored, not allowed to join in, or left out on purpose; 5% (n=111) frequently having lies told about them and others trying to make other students not like them; and 2% (n=58) frequently being made afraid they would get hurt.

Whilst there were no statistically significant gender differences for the individual covert behaviours, the girls in Year 9 were significantly more likely to experience covert forms of bullying behaviours than the boys (38% vs 33%). No differences were found for overt bullying behaviours.

**Table 3.12: Prevalence of experiencing bullying behaviours by gender (Year 9)**

Experienced in last term:	Boys	Girls	Total	Chi-square	
	%(n)	%(n)	%(n)	$\chi^2$	p
Being ignored, not allowed to join in, or left out on purpose	n=1202	n=1212	n=2414		
Yes	21(262)	23(286)	22(548)		
Lots of times	4(53)	4(52)	4(105)	1.484	0.476
Sometimes	17(209)	19(234)	18(443)		
No	78(940)	76(926)	73(1866)		
Having lies told about them and trying to make other students not like them	n=1203	n=1215	n=2418		
Yes	23(279)	25(306)	25(585)		
Lots of times	5(59)	4(52)	5(111)	2.944	0.230
Sometimes	18(220)	21(254)	20(474)		
No	77(924)	75(909)	76(1833)		
Being made afraid that they would get hurt	n=1204	n=1216	n=2420		
Yes	13(157)	12(140)	12(297)		
Lots of times	3(38)	2(20)	2(58)	5.927	0.052
Sometimes	10(119)	10(120)	10(239)		
No	87(1047)	89(1076)	88(2123)		
Experienced (at least one of the above) covert bullying behaviours*	n=1258	n=1247	n=2505		
	33(412)	38(468)	35(880)	6.278	0.012
Experienced (at least one) overt bullying behaviour	n=1258	n=1247	n=2505		
	49(618)	47(581)	48(1199)	1.611	0.204

\*Significant at the 0.05 level of significance.



### 3.3.5 Prevalence of exposure to combinations of covert and overt bullying behaviours

In this section the extent to which the students experienced only covert or only overt bullying behaviours or both types of behaviours is explored. Students were asked how often each of a number of behaviours had occurred to them in the previous term, using a list of seven behaviours (representing covert and overt forms of bullying). Their responses to the listed items were combined and the students were categorised into groups according to whether they had experienced:

1. covert bullying behaviours only;
2. overt bullying behaviours only;
3. both covert and overt behaviours; or
4. not involved in bullying behaviours.

Percentages of students in each of these groups are presented for each year level/data set.

In a separate general question within each survey, students were asked how frequently they had been bullied by another student or a group of students in the last term. The responses to this general question and the bullying behaviours items were compared with gain some insight into students' perceptions of being bullied. To this end, the responses of the students to the general question on the frequency of being bullied were obtained for each of the groups described above, to determine whether students exposed to bullying behaviours perceived themselves as having been bullied.

#### 3.3.5.1 Year 4

As shown in Table 3.13, out of the total number of Year 4 students surveyed, one half of the students indicated they had experienced both forms of bullying behaviours (50%, n=641). Much lower proportions reported experiencing only one form of bullying behaviour, with 15% or 198 students being targets of more overt behaviours only and 10% or 132 being targets of covert forms only. One quarter of the Year 4 students (25%, n=322) reported that none of the things listed had happened to them at all.

Boys and girls were equally likely to experience the different forms of bullying behaviours on their own or in combination, as no statistically significant gender differences were found.

**Table 3.13: Prevalence of being exposed to combinations of behaviours by gender (Year 4)**

Experienced in last term:	Boys	Girls	Total	Chi-square	
	%(n)	%(n)	%(n)	$\chi^2$	p
	n=634	n=659	n=1293		
Exposed to covert bullying behaviours only	9(54)	12(78)	10(132)	4.289	0.232
Exposed to overt bullying behaviours only	16(100)	15(98)	15(198)		
Exposed to both covert and overt bullying behaviours	51(324)	48(317)	50(641)		
Not exposed to bullying behaviours	25(156)	25(166)	25(322)		

It was of interest to determine whether students who experienced bullying behaviours considered themselves to be bullied. Responses were obtained from three groups of students who had experienced bullying behaviours to a general question on the frequency of being bullied. As can be seen in Table 3.14, the responses to the two types of questions did not always correspond.

Of the 10% of Year 4 students who indicated that they experienced covert but not overt bullying behaviours, just over one third (33%, n=43) indicated in the general question they had been bullied in the last term (either lots of times or sometimes) and two-thirds (67%, n=88) considered themselves not to have been bullied. Thus, the majority of these students exposed to covert bullying behaviours only, did not regard themselves as having been bullied. In contrast to this, of the Year 4 students whose responses indicated they had experienced overt forms of bullying behaviours, about half (48%, n=94) indicated they had been bullied and about half reported they had not (52%, n=103) (Table 3.14). So students exposed to overt, more direct bullying behaviours only were more likely to report having been bullied than those exposed to only covert forms of bullying behaviours. By comparison, those students who were exposed to both kinds of bullying behaviours were most likely to perceive themselves as having been bullied. About two-thirds (66%, n=420) of these students believed that they had been bullied in the previous term compared with only 34% (n=217) who said they were not (Table 3.14).

To further explore students' perceptions and the levels of correspondence between the two questions (i.e. the general question on whether the student was bullied and students' reported exposure to bullying behaviours), the Year 4 students in the different covertly and/or overtly bullying behaviours groups were compared with regard to whether they indicated that they had been bullied on a frequent basis (i.e. every few weeks or more often) or not. As expected, those students who were exposed to both covert and overt bullying behaviours were more likely to report being bullied frequently in the last term (27%, n=173) than those only exposed to covert bullying behaviours (5%, n=6) and only overt bullying behaviours (7%, n=14). These data are not shown in the tables.

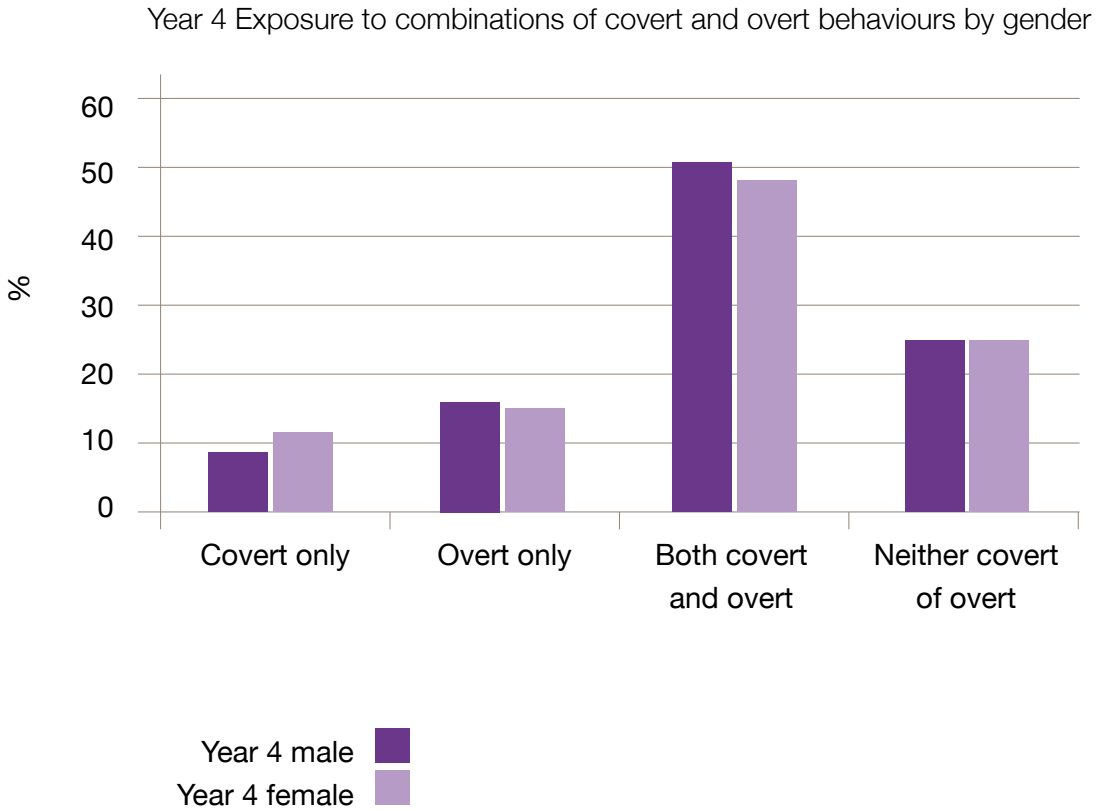
No significant associations were found within any of the three exposure groups between gender and the frequency of being bullied.

**Table 3.14: Frequency of being bullied for exposure groups by gender (Year 4)**

Experienced in last term:	Boys	Girls	Total	Chi-square	
	%(n)	%(n)	%(n)	$\chi^2$	p
Exposed to covert bullying behaviours only group	n=53	n=78	n=131		
Yes	28(15)	36(28)	33(43)		
Lots of times	2(1)	6(5)	5(6)	1.786	0.409
Sometimes	26(14)	30(23)	28(37)		
No	72(38)	64(50)	67(88)		
Exposed to overt bullying behaviours only group	n=99	n=98	n=197		
Yes	44(44)	51(50)	48(94)		
Lots of times	6(6)	8(8)	7(14)	0.956	0.620
Sometimes	38(38)	43(42)	41(80)		
No	56(55)	49(48)	52(103)		
Exposed to both covert and overt bullying behaviours group	n=323	n=314	n=637		
Yes	68(218)	64(202)	66(420)		
Lots of times	28(90)	26(83)	27(173)	0.710	0.701
Sometimes	40(128)	38(119)	39(247)		
No	33(105)	36(112)	34(217)		

As shown in Figure 3.1, generally Year 4 boys and girls are bullied overtly only at similar levels to each other, with girls slightly more likely to report being covertly bullied only than boys, and boys slightly more likely to report being both overtly and covertly bullied than girls.

**Figure 3.1: Exposure to combinations of covert and overt behaviours by gender for Year 4 students**



### 3.3.5.2 Year 6

Of the total group of Year 6 students, it was most common for students' responses to indicate they had been exposed to both covert and overt bullying behaviours (43%, n=540) (Table 3.15). By comparison, 20% (n=246) were exposed to overt behaviours only and 9% (n=107) to covert behaviours only. About three in ten of the Year 6 students (29%, n=364) indicated that they were not exposed to either form of bullying behaviour.

As for the Year 4 students, there was no statistically significant association found with regard to gender, and the students' experiences of covert/overt bullying behaviours were similar regardless of gender.

**Table 3.15: Prevalence of being exposed to combinations of behaviours by gender (Year 6)**

Experienced in last term:	Boys	Girls	Total	Chi-square	
	%(n)	%(n)	%(n)	$\chi^2$	p
	n=643	n=614	n=1257		
Exposed to covert bullying behaviours only	7(44)	10(63)	9(107)	7.182	0.066
Exposed to overt bullying behaviours only	22(139)	17(107)	20(246)		
Exposed to both covert and overt bullying behaviours	43(276)	43(264)	43(540)		
Not exposed to bullying behaviours	29(184)	29(180)	29(364)		

Comparing Table 3.14 with Table 3.16, higher percentages of the Year 6 students exposed to different bullying behaviours reported they had been bullied in the previous term, than was the case for the Year 4 students, particularly for those exposed to overt behaviours only (only 50% of the Year 4 students exposed to these behaviours felt they had been bullied, whilst 61% of the corresponding group of Year 6 students felt this).

As for the Year 4 students, most of the students in Year 6 who had been targets of both covert and overt bullying behaviours considered themselves to have been bullied (74%, n=397), whilst only about one third of those exposed to covert behaviours only reported they had been bullied (35%, n=37). More than half of those exposed to only overt behaviours felt they had been bullied (61%, n=149) (Table 3.16).

The students who experienced both forms of bullying behaviours were also more likely to report they were frequently bullied in the previous term (35%, n=187) than those who experienced only one form of bullying behaviour (3% or 3 students in the covert only group and 7% or 17 in the overt only group).

Girls and boys reported the same frequency of being bullied within each of the exposure groups (Figure 3.2).

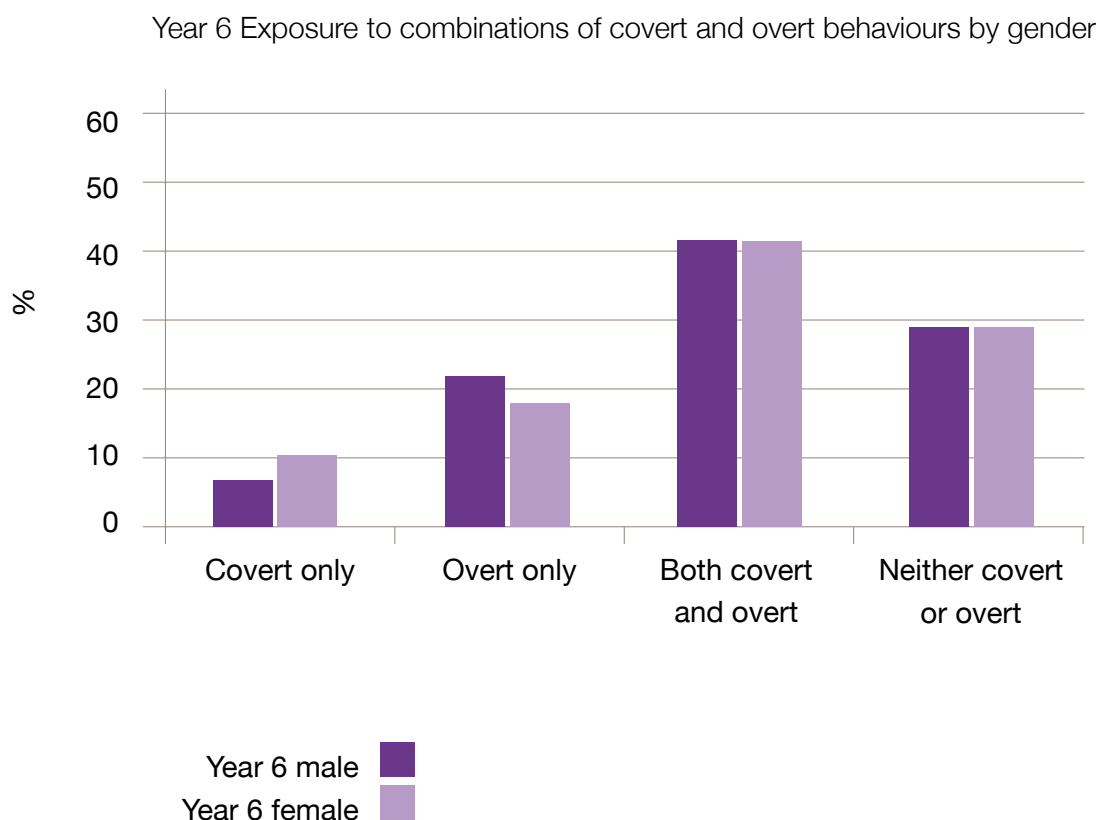


**Table 3.16: Frequency of being bullied for exposure groups by gender (Year 6)**

Experienced in last term:	Boys	Girls	Total	Chi-square	
	%(n)	%(n)	%(n)	$\chi^2$	p
Exposed to covert bullying behaviours only group	n=44	n=62	n=106		
Yes	34(15)	35(22)	35(37)		
Lots of times	2(1)	3(2)	3(3)	0.092	0.955
Sometimes	32(14)	32(20)	32(34)		
No	66(29)	65(40)	65(69)		
Exposed to overt bullying behaviours only group	n=139	n=107	n=246		
Yes	57(80)	65(69)	61(149)		
Lots of times	9(13)	4(4)	7(17)	5.268	0.072
Sometimes	48(67)	61(65)	54(132)		
No	42(59)	36(38)	39(97)		
Exposed to both covert and overt bullying behaviours group	n=275	n=264	n=539		
Yes	70(192)	78(205)	74(397)		
Lots of times	34(92)	36(95)	35(187)	4.358	0.113
Sometimes	36(100)	42(110)	39(210)		
No	30(83)	22(59)	26(142)		

It can be seen that both boys and girls in Year 8 report similar levels of being bullied both overtly and covertly. Like other year groups, however, there appear to be slight differences between boys and girls and their experiences with overt only and covert only bullying. Slightly more girls report being covertly bullied in Year 6 than do boys, and slightly more boys report being overtly bullied only than do girls.

**Figure 3.2: Exposure to combinations of covert and overt behaviours by gender for Year 6 students**



### 3.3.5.3 Year 7

Of the total number of Year 7 students, 40% experienced both covert and overt bullying behaviours (n=825), half of this percentage reported experiencing only direct overt forms of bullying behaviours (20%, n=422) and less than half again, only covert bullying behaviours (8%, n=170). As shown in Table 3.17, about one third reported no exposure to any bullying behaviours (32%, n=660).

A significant gender difference was found with regard to the different types of bullying behaviours that occurred among the Year 7 students. Specifically, a higher proportion of the Year 7 boys (24%, n=241) were exposed to overt forms of behaviours than girls (17%, n=181).

**Table 3.17: Prevalence of being exposed to combinations of behaviours by gender (Year 7)**

Experienced in last term:	Boys	Girls	Total	Chi-square	
	%(n)	%(n)	%(n)	$\chi^2$	p
	n=1003	n=1074	n=2077		
Exposed to covert bullying behaviours only	7(70)	9(100)	8(170)	18.291*	<0.001
Exposed to overt bullying behaviours only	24(241)	17(181)	20(422)		
Exposed to both covert and overt bullying behaviours	38(384)	41(441)	40(825)		
Not exposed to bullying behaviours	31(308)	33(352)	32(660)		

\*Significant at the 0.05 level of significance.

The numbers and percentages of Year 7 students within each of the exposure groups who reported being bullied and being bullied frequently are given in Table 3.18. Relatively few of the students in Year 7 who were exposed to only covert bullying behaviours considered themselves to have been bullied (19%, n=32). In contrast, one third of those who were targets of overt behaviours only (33%, n=137) and 64% (n=529) of those who were targets of both forms of bullying behaviours reported they had been bullied in the previous term.

Similarly, few of the Year 7 students exposed to only one form of bullying behaviour reported being bullied frequently, namely 2% (n=4) of the covert only group and 5% (n=20) of the overt only group. However, one quarter of those exposed to both forms reported being bullied frequently (24%, n=198). Significant gender differences were found in this group targeted by both forms of bullying behaviours, with more of the boys (29%, n=110) than girls (20%, n=88) reported being bullied frequently.

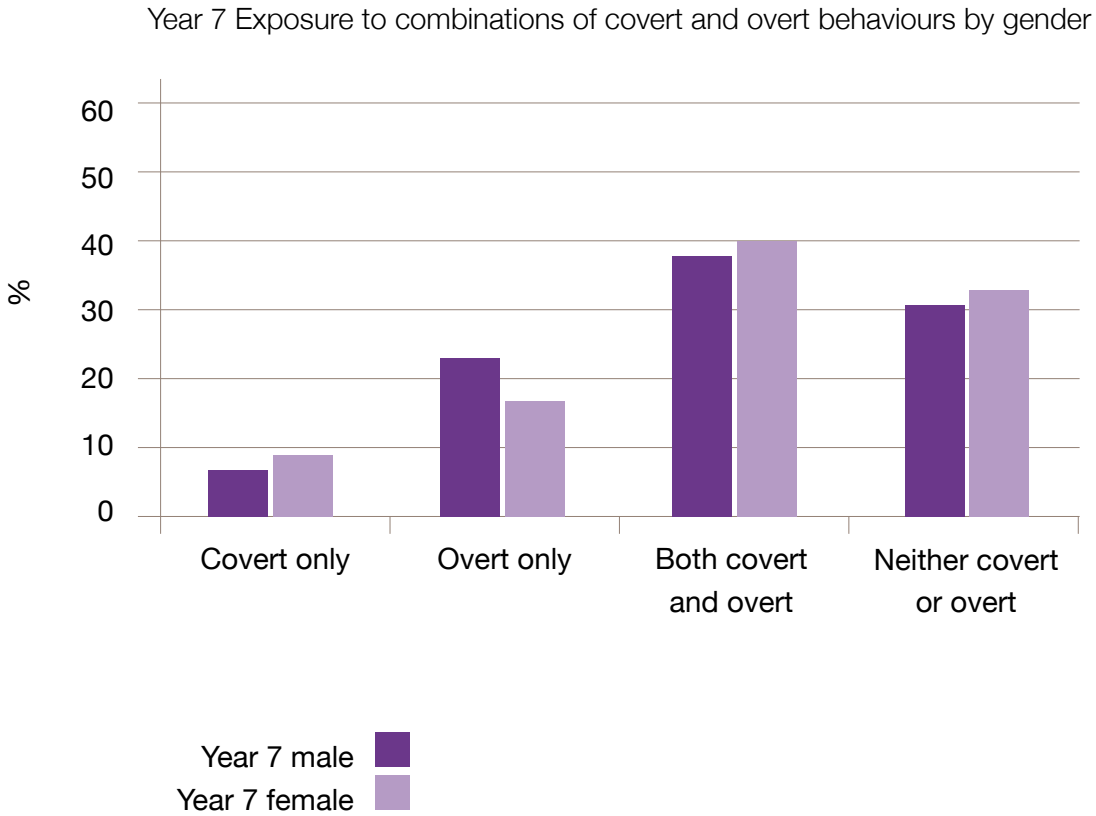
**Table 3.18: Frequency of being bullied for exposure groups by gender (Year 7)**

Experienced in last term:	Boys	Girls	Total	Chi-square	
	%(n)	%(n)	%(n)	$\chi^2$	p
Exposed to covert bullying behaviours only group	n=70	n=99	n=169		
Yes	13(9)	23(23)	19(32)		
Lots of times	0(0)	4(4)	2(4)	4.366	0.113
Sometimes	13(9)	19(19)	17(28)		
No	87(61)	77(76)	71(137)		
Exposed to overt bullying behaviours only group	n=239	n=179	n=418		
Yes	36(84)	30(53)	33(137)		
Lots of times	5(11)	5(9)	5(20)	1.560	0.458
Sometimes	31(73)	25(44)	28(117)		
No	65(155)	70(126)	67(281)		
Exposed to both covert and overt bullying behaviours group*	n=382	n=440	n=822		
Yes	68(258)	62(271)	64(529)		
Lots of times	29(110)	20(88)	24(198)	9.368	0.009
Sometimes	39(148)	42(183)	40(331)		
No	33(124)	38(169)	36(293)		

\*Significant at the 0.05 level of significance.

Figure 3.3 shows the percentage of Year 7 students who report being bullied in overt ways only, covert ways only, both covert and overt ways and those students who report they were not bullied in any form. While both Year 7 boys and Year 7 girls report similar levels of being bullied both covertly and overtly, differences between sexes can be seen among students who report being bullied in only covert ways and only overt ways. Girls appear to report more often being covertly bullied, while boys are more likely than girls to report being overtly bullied.

**Figure 3.3: Exposure to combinations of covert and overt behaviours by gender for Year 7 students**



### 3.3.5.4 Year 8

#### SSP Study

Of the Year 8 students in SSP, it was most common for students to report they had not experienced bullying behaviours (38%, n=1250). One third were found to have been targets of both covert and overt bullying behaviours (32%, n=1047). Fewer Year 8 students reported being exposed to overt types of bullying only (21%, n=688) and much fewer covert only (9%, n=294) (Table 3.19).

The forms of bullying behaviour experienced were influenced by gender. Specifically, a significantly higher proportion of the girls than boys were targets of covert but not overt behaviours (12% compared with 6%). Conversely, the boys were more likely than the girls to be targets of only overt behaviours (27% compared with 15%).

**Table 3.19: Prevalence of being exposed to combinations of behaviours by gender (Year 8, SSP study)**

Experienced in last term:	Boys	Girls	Total	Chi-square	
	%(n)	%(n)	%(n)	$\chi^2$	p
	n=1653	n=1074	n=2077		
Exposed to covert bullying behaviours only	6(98)	12(196)	9(294)	124.818*	<0.001
Exposed to overt bullying behaviours only	27(447)	15(241)	21(688)		
Exposed to both covert and overt bullying behaviours	34(568)	29(479)	32(1047)		
Not exposed to bullying behaviours	33(540)	44(710)	38(1250)		

\*Significant at the 0.05 level of significance.

The Year 8 students' report of the frequency which they were bullied is given for each of the covert/overt exposure groups in Table 3.20. Similar percentages of the students reported being bullied within each exposure group as was the case for the Year 7 SSP data. The majority of the students in Year 8 who were exposed to only covert bullying behaviours considered themselves not to have been bullied, with only 19% reporting that they had been (n=56). One third of those exposed to only overt forms reported being bullied (33%, n=226) whilst almost two-thirds of those exposed to both forms of behaviours felt they had been bullied in the previous term (64%, n=664).

Nineteen percent (n=196) of the Year 8 students who experienced both covert and overt bullying behaviours reported they were bullied frequently. In contrast, few of the students who experienced only one form of behaviour reported being bullied frequently, that is, 1% (n=4) of the covert only group and 4% (n=26) of the overt only group.

Also, as for the Year 7 data, significant gender differences were found with regard to reports of being bullied for the group exposed to both forms of bullying behaviours. Again, relatively more of the boys in this high exposure group reported being bullied frequently (23% vs 14%) whereas relatively more of the girls reported not being bullied (41% vs. 32%)

**Table 3.20: Frequency of being bullied for exposure groups by gender (Year 8, SSP study)**

Experienced in last term:	Boys	Girls	Total	Chi-square	
	%(n)	%(n)	%(n)	$\chi^2$	p
Exposed to covert bullying behaviours only group	n=96	n=195	n=291		
Yes	13(13)	22(43)	19(56)		
Lots of times	1(1)	2(3)	1(4)	3.004	0.223
Sometimes	12(12)	20(40)	18(52)		
No	87(83)	78(152)	81(235)		
Exposed to overt bullying behaviours only group	n=447	n=240	n=687		
Yes	34(152)	30(74)	33(226)		
Lots of times	4(18)	3(8)	4(26)	0.762	0.683
Sometimes	30(134)	27(66)	29(200)		
No	66(295)	70(166)	67(461)		
Exposed to both covert and overt bullying behaviours group*	n=563	n=478	n=1041		
Yes	68(384)	59(280)	64(664)		
Lots of times	23(129)	14(67)	19(196)	17.515	<0.001
Sometimes	45(255)	45(213)	45(468)		
No	32(179)	41(198)	36(377)		

\*Significant at the 0.05 level of significance.

## EC Study

As is evident in Table 3.21, a large proportion of the Year 8 students in the EC dataset reported no exposure to bullying behaviours (44%, n=1176). A further 35% (n=930) experienced both covert and overt behaviours. It was less likely for the students to indicate they had experienced overt behaviours only (14%, n=366), and even less likely, only covert behaviours (7%, n=190).

As for the Year 8 SSP students, gender was shown to be significantly associated with exposure group. Again, a significantly higher proportion of girls than boys were targets of covert bullying behaviours only (10% compared with 4%) whereas relatively more boys were targets of overt behaviours (16% compared with 12%) than girls. Similar percentages of each gender were exposed to both forms and not exposed at all.

**Table 3.21: Prevalence of being exposed to combinations of behaviours by gender (Year 8, EC study)**

Experienced in last term:	Boys	Girls	Total	Chi-square	
	%(n)	%(n)	%(n)	$\chi^2$	p
	n=1269	n=1393	n=2622		
Exposed to covert bullying behaviours only	4(54)	10(136)	7(190)	34.487*	<0.001
Exposed to overt bullying behaviours only	16(197)	12(169)	14(366)		
Exposed to both covert and overt bullying behaviours	35(443)	35(487)	35(930)		
Not exposed to bullying behaviours	45(575)	43(601)	44(1176)		

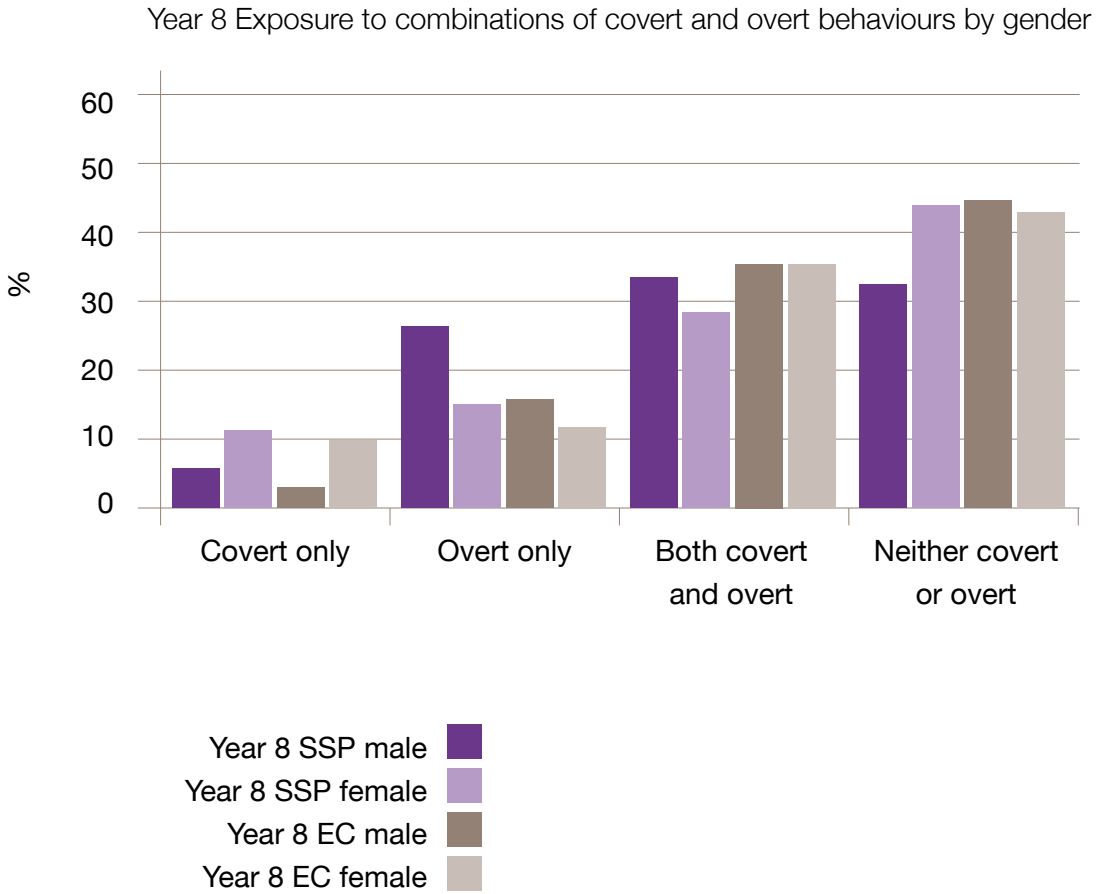
\*Significant at the 0.05 level of significance.

The general question asking how often the student had been bullied in the previous term was not asked in the EC survey and so the numbers and percentages of students who perceived themselves as having been bullied and bullied frequently within each of the exposure groups cannot be determined for the Year 8 EC data.

Figure 3.4 shows the proportion of Year 8 students from both the Supportive Schools Project (SSP) and the Extra-curricular Project (EC) who reported being bullied in covert ways only, overt ways only, both overtly and covertly and those who reported not experiencing either of these bullying behaviours. Consistently, across both studies, Year 8 girls reported higher levels of covert only bullying than did boys. In contrast to EC data, data from the SSP study suggests Year 8 boys reported being only overtly bullied at higher rates than did girls. Of those students who experience both overt and covert bullying, both sexes reported being bullied at relatively similar rates.



**Figure 3.4: Exposure to combinations of covert and overt behaviours by gender for Year 8 students**



### 3.3.5.5 Year 9

Consistent with the results for the other data sets, where 10% or less of the students experienced covert bullying behaviours only, 7% of the Year 9 students (n=170) from the MEP study reported experiencing these behaviours (Table 3.22). Higher percentages reported being exposed to overt behaviours only (20%, n=489) and to both covert and overt behaviours (28%, n=710), while 45% (n=1136) felt that they had not been targeted by any bullying behaviours.

The genders were found to differ significantly with regard to their exposure to the different forms of bullying behaviours. While equal percentages of girls and boys were exposed to both forms of bullying behaviours and equal percentages to neither form, girls were slightly more likely to report experiencing covert behaviours only (9% compared with 5%) and boys more likely to experience overt or more direct forms only (21% compared with 18%).

**Table 3.22: Prevalence of being exposed to combinations of behaviours by gender (Year 9)**

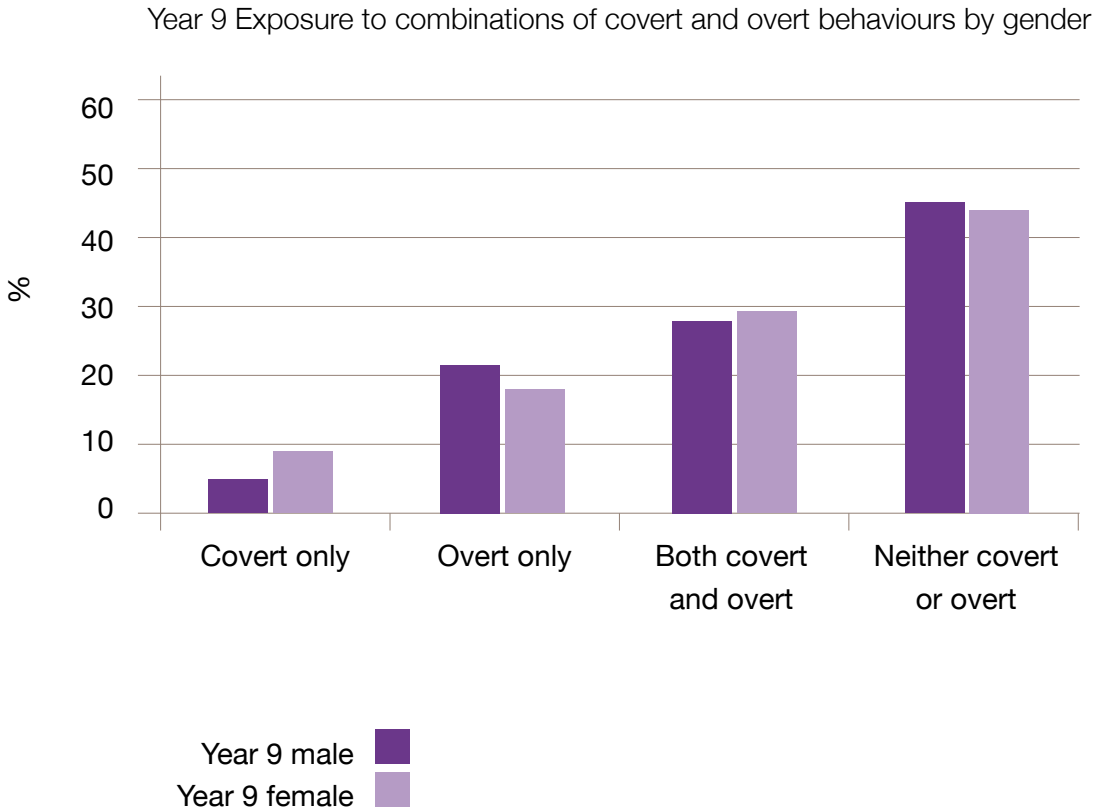
Experienced in last term:	Boys	Girls	Total	Chi-square	
	%(n) n=1258	%(n) n=1247	%(n) n=2505	$\chi^2$	p
Exposed to covert bullying behaviours only	5(63)	9(107)	7(170)	16.738*	<0.001
Exposed to overt bullying behaviours only	21(269)	18(220)	20(489)		
Exposed to both covert and overt bullying behaviours	28(349)	29(361)	28(710)		
Not exposed to bullying behaviours	46(577)	45(559)	45(1136)		

\*Significant at the 0.05 level of significance.

The general question on the frequency of being bullied was also not included in the MEP survey and thus no breakdown of this variable can be presented.

Figure 3.5 shows the proportion of Year 9 male and female students who reported being only covertly bullied, only overtly bullied, and both overtly and covertly bullied and those who were not bullied either overtly or covertly. While relatively similar levels of prevalence can be seen across these forms of bullying a slightly higher proportion of girls than boys reported being covertly bullied only. In contrast slightly more Year 9 boys than girls reported being only overtly bullied.

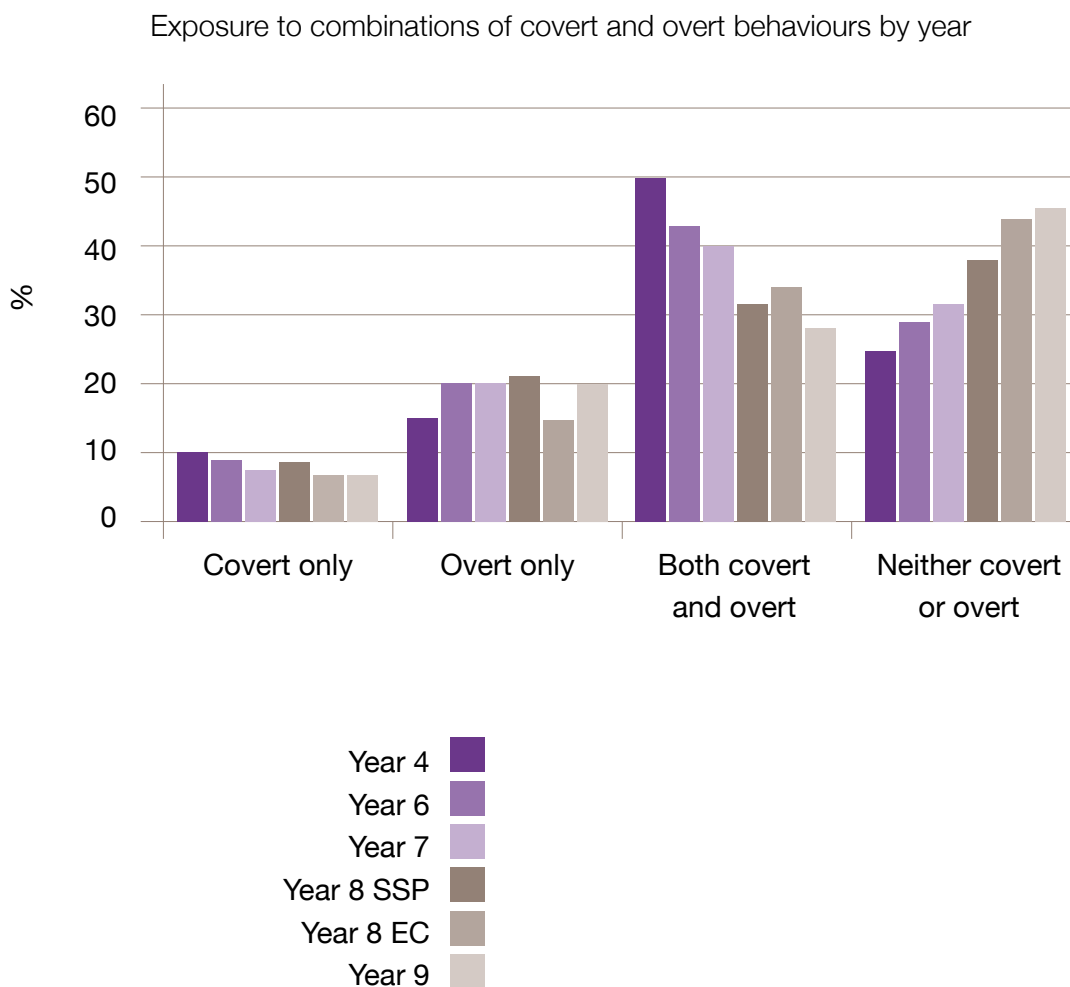
**Figure 3.5: Exposure to combinations of covert and overt behaviours by gender for Year 9 students**



### 3.3.5.6 Summary of the prevalence of exposure to combinations of covert and overt bullying behaviours

Figure 3.6 represents the proportion of Year 4, 6, 7, 8 and 9 students who were bullied by other students covertly only, overtly only, both covertly and overtly as well as those students who reported they have not experienced overt or covert bullying. It is clear from these that while being bullied both overtly and covertly declines significantly with age from Year 4 to Year 9 the prevalence of overt only and covert only remains relatively stable from Years 4 to 9.

**Figure 3.6: Summary of the prevalence of and exposure to combinations of covert and overt bullying behaviours by year group**





### 3.3.6 Prevalence of engaging in bullying behaviours

In addition to students' exposure to bullying behaviours, they were asked about their own engagement in such behaviours. Bullying of another student was defined as repeated perpetration of such behaviours against another student who was unable to stop the behaviour. Thus, not all students who engaged in the listed behaviours necessarily perceived that they were bullying other students. Alternatively, students are possibly less likely to report they have bullied others than they are to report being bullied.

#### 3.3.6.1 Year 4

Once again the FSFF data were analysed, in this instance to determine the prevalence of Year 4 students bullying others. Most of the Year 4 students indicated they did not bully (74%, n=956). As shown in Table 3.23, 10% of the students in Year 4 (n=131) indicated that they had bullied others in overt ways, 7% (n=89) in covert ways and 9% (n=117) using both covert and overt bullying behaviours.

In the same way as was examined for being bullied, gender differences were examined by comparing the distribution of the gender groups across the four covert/overt behaviours groups, namely bullying others covertly only or overtly only, both overtly and covertly, or not bullying at all. Significant gender differences were found with regard to the prevalence of bullying others among Year 4 students. Relatively more boys (12%, n=74 and 76) than girls (8%, n=55 and 7%, n=43) reported being perpetrators of overt bullying behaviours and both overt and covert bullying behaviours, while 79% of the girls compared with 69% of the boys reported not bullying others. Boys and girls bullied others in covert ways at similar levels (7%).

Analyses were also conducted to determine how common it was for students who experienced bullying behaviours themselves to be perpetrators of such behaviours. Of those Year 4 students who were exposed to covert bullying behaviours, in total 21% (n=163) reported they had also been perpetrators of covert bullying behaviours.

The results revealed a significant gender difference. In particular, 72% of the girls (n=283) and, by comparison, only 60% of the boys (n=228) who were targets of covert bullying did not bully others. Of these bullied students, relatively equal percentages of boys and girls (9%-10%) were perpetrators of covert behaviours only, whereas relatively more boys than girls engaged in overt and covert forms of bullying (15% of boys vs 9% of girls) and in overt bullying behaviours only (15% of boys vs 11% of girls).

**Table 3.23: Prevalence of bullying others by gender (Year 4)**

Experienced in last term:	Boys	Girls	Total	Chi-square	
	%(n)	%(n)	%(n)	$\chi^2$	p
Total Students	n=634	n=659	n=1293		
Bullied others in covert ways	19(119)	14(87)	16(206)		
Bullied others in covert ways only	7(45)	7(44)	7(89)	17.479	0.001
Bullied others in both covert and overt ways	12(74)	7(43)	9(117)		
Bullied others in overt ways only	12(76)	8(55)	10(131)		
Did not bully others	69(439)	79(517)	74(956)		
Students who were bullied in covert ways	n=378	n=395	n=773		
Bullied others in covert ways	25(95)	18(68)	21(163)		
Bullied others in covert ways only	10(38)	9(34)	9(72)	12.810	0.005
Bullied others in both covert and overt ways	15(57)	9(34)	12(91)		
Bullied others in overt ways only	15(55)	11(44)	13(99)		
Did not bully others	60(228)	72(283)	66(511)		

### 3.3.6.2 Year 6

It was most common for the students in Year 6 to indicate that they did not bully others (57%, n=710). A significantly lower proportion of students reported being perpetrators of overt bullying only (19%, n=235), of covert behaviours only (10%, n=122) and of both overt and covert bullying behaviours 15% (n=190) (Table 3.24).

Among Year 6 students, gender was found to be a significant predictor of the likelihood of bullying others. A considerably higher proportion of the boys (50%) reported bullying others, compared with girls (37%) and to be perpetrators of overt bullying only (22% compared with 16%).

Of those Year 6 students who were covertly bullied, in total 30% (n=191) also covertly bullied others, with 19% (n=122) engaging in both overt and covert bullying behaviours. Half of these students (50%, n=323) indicated that they did not bully others.

Girls who were covertly bullied were significantly less likely to report bullying others (54%, n=176) compared with boys (46%, n=147). This suggests that gender is associated with a Year 6 student engaging in bullying behaviours if he or she has been bullied in covert ways.

**Table 3.24: Prevalence of bullying others by gender (Year 6)**

Experienced in last term:	Boys	Girls	Total	Chi-square	
	%(n)	%(n)	%(n)	$\chi^2$	p
Total Students	n=643	n=614	n=1257		
Bullied others in covert ways	28(183)	21(129)	25(312)		
Bullied others in covert ways only	8(53)	11(69)	10(122)	41.622	<0.001
Bullied others in both covert and overt ways	20(130)	10(60)	15(190)		
Bullied others in overt ways only	22(139)	16(96)	19(235)		
Did not bully others	50(321)	63(389)	57(710)		
Students who were bullied in covert ways	n=320	n=327	n=647		
Bullied others in covert ways	31(104)	26(87)	30(191)		
Bullied others in covert ways only	9(29)	12(40)	11(69)	10.897	0.012
Bullied others in both covert and overt ways	23(75)	14(47)	19(122)		
Bullied others in overt ways only	22(69)	20(64)	21(133)		
Did not bully others	46(147)	54(176)	50(323)		

### 3.3.6.3 Year 7

As shown in Table 3.25, about one half of the Year 7 students reported they did not bully other students (49%, n=1027). However, similar percentages reported bullying others in covert (28%, n=591) and both overt and covert forms of bullying (19%, n=403).

Gender was found to be significantly associated with the prevalence of bullying others in overt ways. As for the Year 6 students, a higher proportion of the girls reported not bullying others, compared with the boys (53% and 46% respectively), while the boys were more likely than the girls to report being perpetrators of overt behaviours only (25% and 19%).

Only 35% (n=351) of those Year 7 students who were bullied in covert ways also reported not bullying others and 39% (n=388) reported behaving in these ways, either as covert behaviours only or in combination with more overt bullying behaviours.

Similar to previous year groups, of those who were bullied, a significantly higher proportion of boys (60%) reported bullying in overt, or both covert and overt ways than girls (50%). The girls were slightly more likely to not engage in any bullying behaviour (39% for girls and 31% for boys).

**Table 3.25: Prevalence of bullying others by gender (Year 7)**

Experienced in last term:	Boys	Girls	Total	Chi-square	
	%(n)	%(n)	%(n)	$\chi^2$	p
Total Students	n=1003	n=1074	n=2077		
Bullied others in covert ways	29(289)	28(302)	28(591)		
Bullied others in covert ways only	8(76)	10(112)	9(188)	19.763	<0.001
Bullied others in both covert and overt ways	21(213)	18(190)	19(403)		
Bullied others in overt ways only	25(251)	19(208)	22(459)		
Did not bully others	46(463)	53(564)	49(1027)		
Students who were bullied in covert ways	n=454	n=541	n=995		
Bullied others in covert ways	42(189)	37(199)	39(388)		
Bullied others in covert ways only	10(44)	11(58)	10(102)	8.941	0.030
Bullied others in both covert and overt ways	32(145)	26(141)	29(286)		
Bullied others in overt ways only	28(125)	24(131)	26(256)		
Did not bully others	31(140)	39(211)	35(351)		



### 3.3.6.4 Year 8

#### SSP Study

The majority of the Year 8 SSP students reported not bullying others (59%, n=1917), with 18% of students reporting that they bullied others in overt ways only (18%, n=589) and 16% (n=515) in both overt and covert ways. Less than 10% of students (8%, n=258) reported they bullied others in covert ways only (Table 3.26).

The prevalence of Year 8 students bullying others was related to gender, with differences between the genders the same as those found in the Year 7 group.

Slightly more of those Year 8 students who were bullied in covert ways (42%, n=557) did not bully others when compared with the same group of students in Year 7 (35%). About one quarter of these bullied students were perpetrators of overt bullying behaviours only (23%, n=308) and of behaviours defined as both covert and overt (25%, n=339).

The boys who were bullied in covert ways were significantly more likely than the bullied girls to also bully others in overt (27% compared with 19%) or both covert and overt ways (30% compared with 21%), whereas the girls were more likely to report bullying others in covert ways (13% compared with 8%).

**Table 3.26: Prevalence of bullying others by gender (Year 8, SSP study)**

Experienced in last term:	Boys	Girls	Total	Chi-square	
	%(n)	%(n)	%(n)	$\chi^2$	p
Total Students	n=1653	n=1626	n=3279		
Bullied others in covert ways	26(428)	21(347)	24(773)		
Bullied others in covert ways only	7(112)	9(146)	8(258)	79.510	<0.001
Bullied others in both covert and overt ways	19(316)	12(199)	16(515)		
Bullied others in overt ways only	22(361)	14(228)	18(589)		
Did not bully others	53(864)	65(1053)	59(1917)		
Students who were bullied in covert ways	n=666	n=675	n=1341		
Bullied others in covert ways	38(249)	34(227)	35(476)		
Bullied others in covert ways only	8(51)	13(86)	10(137)	42.029	<0.001
Bullied others in both covert and overt ways	30(198)	21(141)	25(339)		
Bullied others in overt ways only	27(182)	19(126)	23(308)		
Did not bully others	35(235)	48(322)	42(557)		

## EC Study

While one half of the Year 8 students in the EC study reported they did not bully others (51%, n=1260), 31% (n=779) reported bullying others in covert ways, with 25% (n=623) reporting they did so in combination with overt bullying behaviours (Table 3.27).

Similar to other year levels, gender was found to be a significant predictor of bullying behaviour. A significantly higher proportion of girls (55%, n=728) reported they did not bully others compared with boys (46%, n=532). Compared with girls, boys were more likely to report they bullied others in both overt and covert ways (29% and 22% respectively) and in overt ways only (21% and 15%); whereas girls were slightly more likely to report bullying others in more covert ways than boys (8% and 5%).

Of the Year 8 students who were bullied covertly, 32% (n=349) reported not bullying others whereas 45% (n=488) reported that they also bullied others in covert ways. Just under one quarter engaged in only overt bullying behaviours (23%, n=251).

**Table 3.27: Prevalence of bullying others by gender (Year 8, EC study)**

Experienced in last term:	Boys	Girls	Total	Chi-square	
	%(n)	%(n)	%(n)	$\chi^2$	p
Total Students	n=1158	n=1327	n=2485		
Bullied others in covert ways	34(384)	30(395)	31(779)		
Bullied others in covert ways only	5(52)	8(104)	6(156)	42.461	<0.001
Bullied others in both covert and overt ways	29(332)	22(291)	25(623)		
Bullied others in overt ways only	21(242)	15(204)	18(446)		
Did not bully others	46(532)	55(728)	51(1260)		
Students who were bullied in covert ways	n=484	n=604	n=1088		
Bullied others in covert ways	47(229)	43(259)	45(488)		
Bullied others in covert ways only	6(30)	10(63)	9(93)	34.789	<0.001
Bullied others in both covert and overt ways	41(199)	33(196)	36(395)		
Bullied others in overt ways only	25(122)	21(129)	23(251)		
Did not bully others	28(133)	36(216)	32(349)		

### 3.3.6.5 Year 9

In total 739 (29%) of the Year 9 students indicated they had bullied others in covert ways, with 24% (n=604) reporting they bullied others in both covert and overt ways. Just less than one half (45%, n=1119) reported they had not bullied others (Table 3.28). Significant differences between boys and girls, similar to those noted in relation to previous year levels, were present.

Of those Year 9 students who reported they had been bullied in covert ways, almost half (47%, n=413) had also bullied other students using such behaviours themselves. Only 29% (n=252) of this group had not also bullied others. Boys who were bullied were more likely to report than girls that they bullied others in both overt and covert ways (48% and 31%) whereas bullied girls were more likely than boys to report bullying others in covert ways only.

**Table 3.28: Prevalence of bullying others by gender (Year 9)**

Experienced in last term:	Boys	Girls	Total	Chi-square	
	%(n)	%(n)	%(n)	$\chi^2$	p
Total Students	n=1258	n=1247	n=2505		
Bullied others in covert ways	30(375)	29(364)	29(739)		
Bullied others in covert ways only	4(45)	7(90)	5(135)	50.199	<0.001
Bullied others in both covert and overt ways	26(330)	22(274)	24(604)		
Bullied others in overt ways only	30(379)	22(268)	26(647)		
Did not bully others	40(504)	49(615)	45(1119)		
Students who were bullied in covert ways	n=412	n=468	n=880		
Bullied others in covert ways	54(217)	42(196)	47(413)		
Bullied others in covert ways only	4(18)	11(49)	8(67)	42.916	<0.001
Bullied others in both covert and overt ways	48(199)	31(147)	39(346)		
Bullied others in overt ways only	26(108)	23(107)	24(215)		
Did not bully others	21(87)	35(165)	29(252)		



### 3.3.7 Predictors of covert bullying

Associations between the hypothesised predictors of covert bullying (listed in the Methodology section 3.2.4) and covert bullying behaviours were assessed. The outcome measures of being bullied in covert ways, being bullied by different types of covert bullying behaviours, and bullying others in covert ways, were all modelled separately. Gender, school size and socio-economic status were included in all models, thus the associations between the predictors and the bullying behaviours were estimated, adjusting for any differences that may have been present between the students on these basis of the confounding variables.

As described in the methodology, multivariable logistic regression analyses were conducted to determine the strongest predictors of exposure to and engagement in bullying behaviours. The results of the analyses are summarised in Table 3.29 and discussed thereafter by each year level.

**Table 3.29: Summary of results from multivariate models**

Predictor variables		Outcome measures				
Year 4 FSFF		Being bullied in covert ways	Bullying others in overt ways	Being ignored, not allowed to join in, or left out on purpose	Having lies told about them and others trying to make other students not like them	Being made afraid that they would get hurt
Many good friends				0.76 (0.59 ; 0.97)		0.58 (0.45 ; 0.75)
Peer support		0.51 (0.37 ; 0.68)	0.68 (0.46 ; 1.00)	0.53 (0.39 ; 0.71)	0.60 (0.44 ; 0.81)	
Knowledge <sup>†</sup>						
Pro victim attitudes <sup>†</sup>						
Pro bully attitudes			1.37 (1.01 ; 1.86)			
Outcome expectancies			0.52 (0.31 ; 0.88)		0.64 (0.43 ; 0.96)	0.61 (0.40 ; 0.92)
Year 6 FSFF		Being bullied in covert ways	Bullying others in overt ways	Being ignored, not allowed to join in, or left out on purpose	Having lies told about them and others trying to make other students not like them	Being made afraid that they would get hurt
Many good friends				0.42 (0.31 ; 0.56)	0.52 (0.39 ; 0.70)	0.48 (0.34 ; 0.67)
Peer support		0.44 (0.32 ; 0.60)		0.41 (0.29 ; 0.57)	0.52 (0.38 ; 0.72)	0.35 (0.24 ; 0.51)
Knowledge <sup>†</sup>						
Pro victim attitudes		2.27 (1.49 ; 3.45)	0.57 (0.36 ; 0.90)	2.01 (1.22 ; 3.30)	1.91 (1.22 ; 3.00)	2.13 (1.20 ; 3.78)
Pro bully attitudes			1.39 (1.04 ; 1.87)			
Outcome expectancies			0.41 (0.27 ; 0.62)	1.85 (1.19 ; 2.87)		

**Table 3.29: Summary of results from multivariate models (continued)**

Predictor variables		Outcome measures						
Year 7 SSP	Being bullied in covert ways	Being bullied in overt ways	Being ignored, not allowed to join in, or left out on purpose	Having lies told about them and others trying to make other students not like them	Being made afraid that they would get hurt	Being sent mean and nasty text messages	Being sent mean and nasty messages on the internet	
Makes friends easily	0.58 (0.45 ; 0.74)	0.47 (0.36 ; 0.60)	0.66 (0.52 ; 0.84)	0.51 (0.36 ; 0.72)				
Peer support	0.12 (0.08 ; 0.17)	0.07 (0.05 ; 0.10)	0.20 (0.15 ; 0.28)	0.12 (0.07 ; 0.18)			0.52 (0.33 ; 0.81)	
Pro victim attitudes	0.38 (0.24 ; 0.61)		1.85 (1.14 ; 2.99)	2.16 (1.04 ; 4.49)	0.33 (0.12 ; 0.92)		0.42 (0.22 ; 0.82)	
Pro bully attitudes	1.57 (1.16 ; 2.12)		1.40 (1.04 ; 1.88)				1.56 (1.01 ; 2.40)	
Outcome expectancies	0.41 (0.27 ; 0.62)							
Year 8 SSP	Being bullied in covert ways	Bullying others in overt ways	Being ignored, not allowed to join in, or left out on purpose	Having lies told about them and others trying to make other students not like them	Being made afraid that they would get hurt			
Makes friends easily	0.56 (0.46 ; 0.68)	0.45 (0.36 ; 0.55)	0.44 (0.33 ; 0.60)					
Peer support	0.21 (0.16 ; 0.27)	0.61 (0.47 ; 0.79)	0.32 (0.25 ; 0.42)	0.25 (0.17 ; 0.37)	0.43 (0.25 ; 0.73)		0.43 (0.29 ; 0.63)	
Pro victim attitudes	0.54 (0.39 ; 0.76)		1.87 (1.12 ; 3.11)					
Pro bully attitudes	1.90 (1.50 ; 2.41)		1.56 (1.11 ; 2.19)	2.19 (1.40 ; 3.44)			1.51 (1.07 ; 2.13)	
Outcome expectancies	0.36 (0.26 ; 0.49)							

**Table 3.29: Summary of results from multivariate models (continued)**

Predictor variables	Outcome measures				
Year 8 EC	Being bullied in covert ways	Bullying others in overt ways	Being ignored, not allowed to join in, or left out on purpose	Having lies told about them and others trying to make other students not like them	Being made afraid that they would get hurt
Peer support	0.28 (0.22 ; 0.34)	0.79 (0.64 ; 0.98)	0.15 (0.12 ; 0.19)	0.41 (0.33 ; 0.51)	0.39 (0.30 ; 0.51)

Odds ratios and 95% significance levels shown in relation to each variable, having a significant association at the p=0.05 level.

† Not a significant predictor for any of the outcome measures within the given year level after accounting for other mediators.



### 3.3.7.1 Year 4 students

Using data from the FSFF study and after adjusting for other factors, the strongest predictors of whether the Year 4 students were exposed to or engaged in covert bullying behaviours (Table 3.29) are summarised below.

Level of peer support was a significant predictor of exposure to covert bullying behaviours. Students' expectations of the outcomes from bullying others and whether they had many good friends also played a role for certain types of exposures. Level of peer support and outcome expectancies from bullying others also predicted whether a student bullied others in covert ways or not, as did students' attitudes to bullying.

The Year 4 students who had greater peer support were also less likely to be bullied covertly. These students, as well as those who had many good friends, were also less likely to be excluded by being ignored, not allowed to join in, or left out on purpose. The students with greater levels of peer support and those who perceived greater negative outcomes for themselves as a result of bullying others were less likely to have others try to exclude them socially by telling lies about them and trying to make other students not like them. Having many good friends and higher expectations of negative outcomes from bullying others were also associated with lower odds of being threatened or made afraid that they would get hurt.

Students were less likely to covertly bully others if they had more support from peers, and higher perceptions of negative outcomes if they were to bully others. Meanwhile those students who reported bullying others were more likely to have positive attitudes towards bullying behaviours.

### 3.3.7.2 Year 6 students

Using data from the FSFF study and after adjusting for the demographic variables, many of the variables were found to be predictors of whether the Year 6 students were covertly bullied or covertly bullied others.

As for the Year 4 students, peer support was a strong predictor of, and was associated with, not being bullied covertly in general, as well as for each of the three types of covert behaviours. In addition, the likelihood of experiencing at least one of or each of the different types of covert behaviours was lower among those Year 6 students who had many good friends, and higher for those students with more positive attitudes to the students who are bullied. If students perceived more negative effects from bullying others, they were at increased odds of being excluded through being ignored, not allowed to join in, or left out on purpose.

Bullying others in covert ways was associated with outcome expectancies from bullying and bullying attitudes. That is, those who had more positive attitudes to students who were bullied and perceived greater negative effects from bullying others were less likely to covertly bully others. In contrast, those who had more positive attitudes to bullying were more likely to bully others in covert ways.





### 3.3.7.3 Year 7 students

The same variables as were used in the Year 4 and 6 analyses of the FSFF study data were also tested for inclusion in the models for the Year 7 and 8 SSP study data, with two exceptions. Social competence was measured differently in the SSP study (i.e. as the students' ability to easily make friends). As the knowledge index was not asked in the SSP survey, this construct could not be included in the analyses. Two additional covert bullying behaviours related to bullying by means of technology were included in the SSP survey and associations between these two outcomes and the mediators were also assessed.

As for the other year levels, levels of peer support and social competence were significant predictors of being bullied in covert ways amongst the Year 7 students. Those who found it easy to make friends and had greater peer support were less likely to be covertly bullied and, in particular, being excluded by being ignored, not allowed to join in, or left out on purpose.

Having lies told about them and having others trying to make other students not like them, was less prevalent amongst those who made friends easily and had support from peers. Those students with more positive pro-victim attitudes as well as those with more positive pro-bully attitudes were more likely to report having been targets of such behaviours.

Similarly, the ability to make friends easily and having greater levels of support from peers were associated with students feeling less afraid that they would get hurt. More positive attitudes to students who were bullied were associated with higher odds of being made to feel afraid.

While more positive attitudes to bullied students were associated with higher odds of the latter two types of covert behaviours (being made afraid and experiencing having lies told about them and others trying to make other students not like them), these students with pro-victim attitudes had lower odds of reporting having been sent mean and nasty messages, either text messages or over the internet. As for the other types of covert behaviours, students with greater support from peers were less likely and those with more positive attitudes to bullying behaviours more likely to report having been sent mean and nasty messages on the internet.

Those who were more positive about students who bully others were also more likely to bully others in covert ways. Lower odds of engagement in such behaviours were found among the students who had greater peer support, more positive pro-victim attitudes and perceived greater negative effects were they to bully others.



### 3.3.7.4 Year 8 students

Assessment of a range of predictors of covert bullying behaviours was possible for Year 8 students utilising data from the SSP and EC studies. Predictors examined using the SSP data were described in the above section for Year 7 students. The only variable included in the EC survey and that could be examined was level of peer support. The results are summarised in Table 3.29.

#### SSP study

Similar associations were found for the Year 8 students in the SSP study as was the case for the students in Year 7. In general, higher levels of peer support and greater social competence reduced the likelihood students would be covertly bullied, while more positive attitudes to bullying were associated with higher odds of exposure.

The Year 8 students who found it easy to make friends and had greater support from their peers were less likely to be covertly bullied, and in particular to be ignored, not allowed to join in, or left out on purpose.

Greater levels of peer support and the ability to make friends easily were associated with lower odds of being made afraid they would get hurt, and more positive pro-victim and pro-bully attitudes associated with greater reporting of such an experience.

Being sent mean and hurtful text messages, either by SMS or via the internet, was found to be less likely among the students in Year 8 with more support from their peers and more likely for those with more positive pro-bully attitudes.

Attitudes to students who bully and students who are bullied as well as positive outcomes expected from bullying others were strong predictors of engagement in bullying behaviours. The likelihood of perpetrating covert bullying behaviours was reduced among those Year 8 students who had more positive pro-victim attitudes, more peer support and greater expectations of negative effects from bullying others. More pro-bully attitudes were associated with higher odds of perpetration of covert bullying behaviours.

#### EC study

Only one of the predictors was available for analysis in the EC study, namely peer support. As was the case in all the other data sets, higher levels of peer support were associated with lower odds of being bullied covertly or bullying others in covert ways.



## 3.4 Limitations

These findings are tempered by several limitations, namely the methodology used for analyses of these four studies (related to each study's design), when the data were collected, and instrumentation.

- Differences are noted between the studies in terms of the types of schools included, the year in which the students were surveyed, the time of year the surveys were conducted, the consent and response rates for some of the studies and, to some extent, differences between the instruments and questions used to measure the outcomes. These limit the capacity to compare the results from the different studies. It is unclear, where there are differences in results from the different data sets, what may be the source of those differences. Some consistencies in results from the different studies are, however, informative and may be indicative of broader trends.
- All data were obtained using self-report questionnaires. The limitations of such data are well known and bullying behaviours may be under- as well as over-reported depending on the nature of the behaviour concerned.
- Exposure to bullying behaviours and engagement in bullying behaviours do not necessarily equate to being bullied or bullying others, unless the behaviour is repeated and there is a power imbalance in the relationship between the person being bullied and the person bullying others.
- The cross-sectional nature of the data precludes conclusions from being drawn on the causal nature of the relationships between the bullying behaviours and the mediators, thus it is unclear whether the mediators have led to or been caused by the bullying behaviours.
- Non-significance of mediators in the multivariable models does not imply that these mediators are not significantly associated with the bullying behaviour. If each mediator is tested in an analysis excluding all other mediators, they may be found to significantly predict the specific bullying behaviour.



## 3.5 Summary of findings

The differences between the samples of students within each study and the years in which the students were surveyed make comparisons between the year levels and the identification of trends across year levels problematic. Nevertheless, certain consistencies in the results obtained from the different year levels are informative and can be interpreted as general trends.

### Prevalence of covert bullying

- According to the students' self-report, being bullied in covert ways decreased from 60% in the Year 4 group to 35% in the Year 9 group. Similarly, being overtly bullied was reported at its highest among the Year 4 students (65%) and declined to 48% among the Year 9 students surveyed. Thus the students' self-report of their experiences of bullying behaviours generally decreased from Year 4 to Year 9.
- When looking at exposure to covert and overt bullying behaviours in combination, 10% or less of the students reported being targets of covert bullying only, 20% or less of overt bullying only and between 50% (in Year 4) and 28% (in Year 9) reported being targets of both covert and overt bullying behaviours.
- Of those students who had ever experienced being bullied in ways traditionally considered to be covert, more reported being ignored, not being allowed to join in or being left out on purpose (between 40% in Year 4 and 22% in Year 9) than being made afraid they would get hurt (between 27% in Year 4 and 12% in Year 9).
- Across all age groups, 10% or less of the students reported they had frequently been exposed to specific types of covert bullying behaviours in the previous term.
- Not all students exposed to bullying behaviours considered themselves to have been bullied. Of those exposed to only covert forms of bullying behaviours, between 19% and 35% (dependent on the year level) reported they had been bullied. By comparison, between 33% and 61% of those exposed to only overt (more direct) forms of bullying behaviours indicated they had been bullied. The majority of those who experienced both forms of bullying behaviours reported they were bullied (between 64% and 74%).
- Students were also asked to report whether they had been perpetrators of any of the covert and overt bullying behaviours listed and the responses were combined. The lowest prevalence for bullying others (26%) was found in Year 4 and the highest (55%) in Year 9. Across all year levels, relatively few (10% or less) of the students reported only covertly bullying others whilst between about 10% and one quarter indicated they had bullied other students using both forms of bullying behaviours.
- The percentages of the students who had been both bullied and who bullied others in covert ways increased from 21% in Year 4 to almost half (47%) in Year 9.



## Prevalence of cyber bullying

- Where information was available from data previously collected by the CHPRC on bullying behaviours using technology, 10% or less of students reported experiencing these behaviours.

## Covert bullying and gender of students

- No significant differences were found between the experiences of covert bullying behaviours for the boys and girls in the Year 4 and 6 groups in data previously collected by the CHPRC. Nevertheless, a significantly higher percentage of the girls than the boys in the Year 7 group felt that others had tried to have them socially excluded by telling lies about them and trying to make other students not like them. Girls were also more likely to have been sent mean and hurtful messages over the internet. Boys in Year 7 and Year 8 reported experiencing higher levels of threatening behaviour by being made afraid that they would be hurt. While no statistically significant gender differences were found for specific covert bullying behaviours in Year 9, girls were significantly more likely to report experiencing covert forms of bullying behaviours than boys.
- Gender was a significant predictor of bullying others in every year level. Whilst the girls were less likely to report being perpetrators of bullying behaviours, their engagement in covert behaviours only was slightly higher than for boys. In contrast, the prevalence of overt bullying behaviours was higher amongst boys, as was their use of both covert and overt forms of bullying behaviours.

## Factors associated with covert bullying

- Peer support was significantly associated with almost every outcome. Higher peer support reduced the odds of students being covertly bullied.
- Social competence reduced the odds of being covertly bullied, but was not associated with other bullying behaviours.
- Data from previous CHPRC research found that attitudes in support of bullying were associated with being covertly bullied and bullying others. Students who had more positive attitudes to those who bullied others (pro-bully attitudes) were more likely to report being bullied (apart from exposure through technology amongst the Year 7 group) but less likely to bully others.
- Previous CHPRC data found that those with greater expectations of negative outcomes from bullying were also less likely to report bullying others. In contrast, however, the Year 6 students who perceived more negative outcomes from bullying were more likely to be excluded (ignored etc), whilst the Year 4 students with positive outcome expectancies were less likely to report being made afraid they would get hurt or that lies were told about them and that students tried to make others not like them.



## 3.6 References

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