

## Chapter 3

# Pupil engagement

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### Introduction

The concept of *pupil engagement* with school has been the subject of a large body of research, with much of that demonstrating its association with a range of social, behavioural, and academic outcomes. The term encompasses emotional, behavioural and cognitive elements (Fredericks, Blumenfeld, & Paris, 2004; Jimerson, Campos & Greif, 2003):

- affective/emotional engagement – positive or negative feelings towards the school, teachers, and peers.
- behavioural engagement – such as active participation in class, and completing homework.
- cognitive engagement – willingness to invest intellectual effort in, for example, understanding a new idea or mastering a skill.

Research with primary school-aged children shows that pupils who like their teachers and classmates, and whose teachers have high expectations for them, tend to be more motivated to put sustained effort into their schoolwork and are more likely to attend school regularly, come to class prepared, and complete their homework (Furrer & Skinner, 2003; Li, Lerner, & Lerner, 2010). These engaged pupils, who feel like they belong and are comfortable in the school, tend to show better academic performance than less engaged peers (Fredericks et al., 2004). Among older students, strong feelings of attachment to the school and involvement in school life are associated with greater self-esteem and lower levels of antisocial behaviour and substance abuse, as well as superior academic performance (Maddox & Prinz, 2003).

Disengagement from school – characterised by, for example, a weak or negative emotional attachment and/or lack of participation in school activities – is a gradual process. Poor relationships with peers and negative experiences in school have been associated with lower engagement several years later (Buhs, Ladd, & Herald, 2006; Jimerson, Egeland, Sroufe, & Carlson, 2000; Perdue, Manzeske, & Estell, 2009). Such disengagement is seen as the beginning of a progression that sometimes culminates in early school leaving (Finn, 1989; Furlong & Christenson, 2008). Early school leaving, in turn, is strongly associated with a host of further social, health-related, and economic costs (Alliance for Excellent Education, 2009; Byrne & Smyth, 2010; Cutler & Lleras-Muney, 2006; Joint Oireachtas Committee on Education and Skills, 2010; Kortering & Braziel, 2008; Levin, 2009).

In Ireland, approximately 14-15% of post-primary students leave school without completing the Leaving Certificate (Byrne & Smyth, 2010; Joint Oireachtas Committee on Education and Skills, 2010). Estimates of the number of children who leave primary school without entering post-primary education at all are less certain, largely due to the absence of a database that would allow pupils' progress from primary to second-level to be tracked. The proposed development of a primary pupil database may address this issue in the future (Quinn, 2013). However, the latest annual figures from the Department of Education and Skills' Statistical Report (2012) show that fewer than 400 pupils, excluding those known to have emigrated, left their primary school without going to another primary, post-primary, or

special school within the State. In addition, more than 1100 pupils left primary school with no further information available.

The Primary School Curriculum (DES/NCCA, 1999) is quite explicit in recognising the importance of good teacher-pupil relationships to pupils' engagement, happiness in school, and academic development, stating that:

the quality of the relationship that the teacher establishes with the child is of paramount importance in the learning process. The teacher's concern for the well-being and the successful development of the child is the basis for the creation of a supportive environment that can facilitate the child's learning. A relationship of trust between teacher and child creates an environment in which the child is happy in school and motivated to learn. (p. 20)

A study of early school leavers in Ireland (Eivers, Ryan & Brinkley, 2000) found that, when compared to a matched comparison group of students who remained in education, early school leavers were more likely to report that their favourite thing about school was that it was fun or had lots of activities. When asked to nominate their *least* favourite aspect of primary school, not liking some or all of the teachers, and not understanding things or not being good at schoolwork were identified by early school leavers. None of the matched comparison group mentioned any of these early signs of disengagement as a negative aspect of their primary school experience. Although the sample of young people interviewed was very small, it provides support, in an Irish setting, for the assertion that "inadequate relations with a teacher may lead to dislike and fear of school and over time may lead to feelings of alienation and disengagement" (Jennings & Greenberg, 2009, p. 501). This is particularly relevant in the context of formative experiences of schooling among younger pupils (Finn, 1989).

Although some primary level studies (e.g., National Assessments, Growing Up in Ireland) have collected information on the extent to which pupils enjoy their school experience, much of the literature on school engagement refers to post-primary students (McCoy, Smyth, & Banks, 2012). Thus, the data from PIRLS and TIMSS (PT 2011) presented in this chapter provide an opportunity to examine the attitudes of Irish primary pupils towards school generally, and alongside those of similar-aged pupils in other countries.

As well as comparisons between engagement among pupils in Ireland and those in other PT 2011 countries, Irish pupils' attitudes towards school will be examined with particular reference to some key demographic variables that have been shown by previous research to be related to engagement in school or to early school leaving. Particular attention is paid to two key variables – gender and socioeconomic status (SES). Higher rates of disengagement are consistently found among males and among pupils from low-SES backgrounds (Eivers et al., 2000; Jimerson et al., 2000; Joint Oireachtas Committee on Education and Skills, 2010; McCoy et al., 2012).

The remainder of this chapter is structured as follows: first, some characteristics relating to the participating pupils are presented. Next, Fourth class pupils' self-reported attitudes to school and to the assessed domains (reading, mathematics and science) are presented. Third, pupils' relationships with their classmates, in terms of experiencing bullying, are examined. Fourth, teachers' reports of some of the difficulties that they experience in engaging pupils in their classrooms are outlined. Finally, the issue of engagement in Irish schools is discussed more broadly, drawing on these data, and key findings are summarised. This chapter focuses on a subset of the data from PT 2011. Readers who would like more background information on PIRLS and TIMSS, or about Ireland's participation in the studies are referred to Chapter 1 of this volume (Eivers & Clerkin, 2013).

## The pupils in PT 2011

Table 3.1 summarises some basic general characteristics of the pupils who took part in PT 2011. Participating pupils were relatively evenly split by gender, both in Ireland and internationally. Irish Fourth class pupils were just over 10 years old on average, very similar to the PIRLS (10.2 years) and TIMSS (10.3 years) averages. More than four-fifths (84%) of Fourth class pupils in Ireland *always* spoke English at home, with about 2% of pupils reporting that they *never* spoke English at home. By comparison, a lower percentage of pupils internationally (72-73%) *always* spoke the language of the PIRLS or TIMSS tests at home, and 5-6% of pupils *never* spoke the language of the test at home.

Table 3.1: Summary characteristics of pupils who took part in PT 2011, Ireland, PIRLS and TIMSS

		Ireland	PIRLS	TIMSS
Gender (%)	Girl	49	49	49
	Boy	51	51	51
Age (years)	Mean	10.3	10.2	10.3
	Range	8-12	8-13	8-13
Frequency of speaking language of test at home (%)	Always	84	73	72
	Sometimes	13	22	22
	Never	2	5	6

As outlined in Chapter 2 (Lewis & Archer, 2013), Irish pupils were more likely than the average to be enrolled in small schools, or to attend schools in rural areas. Mean school size in Ireland was 279 pupils, roughly half the school average size across PIRLS and TIMSS, and 36% of Irish pupils, but only 19% internationally, lived in areas with a population of 3,000 people or fewer.

Specific to Ireland, 81% of pupils were in non-DEIS schools. Of those pupils in DEIS schools, 8% of the overall sample attended Urban Band 1 schools, and 7% are in Urban Band 2 schools. Slightly less than 5% of pupils attended DEIS schools in rural areas. Just under three-quarters (73%) of the PT 2011 pupils attended mixed-gender schools, while 14% were in all-girls schools and 12% were in all-boys schools.

## Pupils' attitudes to school and subjects

This section is divided into two parts. The first describes pupils' affective engagement with school. The second part reports pupils' attitudes to the subject domains examined in PT 2011 – reading, mathematics and science – and their cognitive engagement in reading, mathematics and science lessons at school. Findings are first presented with reference to our comparison countries and the PIRLS and TIMSS international averages, and then followed by further detail on differences between pupils' attitudes within Ireland (e.g., by pupil gender).

### Attitudes to school

Three-quarters (74%) of Irish pupils *agreed a lot* or *a little* that they liked being in school, a lower percentage than the international averages (Table 3.2). Among our selected comparison countries, almost 90% of pupils in Singapore and the Russian Federation like being in school, and all except Hong Kong and Northern Ireland had greater percentages of pupils giving positive responses to the statement than in Ireland. Although not shown in Table 3.2 because the *a lot* and *a little* response options are combined, of particular note is the high percentage of Irish pupils (13%) who *disagreed a lot* with the statement "I like being in

school<sup>1</sup>. This is double the corresponding international average (6% among TIMSS countries, and 7% among PIRLS countries). Only Croatia (15%) and Northern Ireland (14%) had higher percentages of pupils *disagreeing a lot* that they like school.

In a similar fashion, relatively fewer Irish pupils reported a strong sense of belonging at their school. Across all countries, about 88% of pupils *agreed* that they belong at their school, compared to 82% in Ireland. The 18% of pupils in Ireland who *disagreed (a lot or a little)* that they felt they belonged in their school is similar to the percentages in England, Australia, and Singapore, but markedly higher than in the Russian Federation and Finland (Table 3.2).

Table 3.2: Percentages of pupils who agreed/disagreed they liked or belonged in school, Ireland, comparison countries and study averages

	I like being in school		I feel like I belong at this school	
	Agree (a lot or a little)	Disagree (a lot or a little)	Agree (a lot or a little)	Disagree (a lot or a little)
Australia	81	19	82	18
England	80	20	82	18
Finland	79	21	90	10
Hong Kong SAR	74	26	78	22
Ireland	74	26	82	18
Korea, Rep.	86	14	86	14
New Zealand	86	14	84	16
Northern Ireland	73	27	85	15
Russian Fed.	89	11	96	4
Singapore	90	10	83	17
United States	79	21	81	19
PIRLS	85	15	88	12
TIMSS	86	14	87	13

More positively, 91% of Fourth class pupils said that they feel safe when at school, higher than in Hong Kong, Korea, Singapore, the Russian Federation and the US (Table 3.3). Among our key comparison countries, only Northern Ireland has a marginally higher percentage (92%) of pupils who feel safe at school. Pupils' relative perceptions of safety broadly correspond with principals' reports of school discipline and safety. The 83% of pupils in Ireland (and 85% in Northern Ireland) who attended schools described by principals as having *hardly any* [discipline] *problems*, was much higher than the corresponding PIRLS (58%) and TIMSS (61%) averages.<sup>1</sup>

Among the comparison countries shown in Table 3.3, only Hong Kong had greater percentages of pupils in schools with hardly any problems. By contrast, Sweden, Austria and Germany (not shown here) were among 16 countries taking part in one or both studies where fewer than half of the Fourth grade pupils were in schools with *hardly any problems*.

<sup>1</sup> The *School Discipline and Safety* scale was based on principal responses to frequency with which 10 behaviours were a problem among Fourth grade pupils in their school: vandalism; theft; physical fights among pupils; arriving late at school; absenteeism; classroom disturbance; cheating; profanity; intimidation or verbal abuse among pupils (including texting, emailing, etc.); and intimidation or verbal abuse of teachers or staff (including texting, emailing, etc.).

Table 3.3: Percentages of pupils who feel safe at school, and in schools with different degrees of discipline/safety problems, Ireland, comparison countries and study averages

	Pupil: I feel safe in this school		Principal: discipline/safety problems		
	Agree (a lot or a little)	Disagree (a lot or a little)	Hardly any problems	Minor problems	Moderate problems
Australia	88	12	64	34	2
England	90	10	75	24	1
Finland	91	9	64	34	2
Hong Kong SAR	84	16	87	12	1
Ireland	91	9	83	16	1
Korea, Rep.	78	22	76	18	6
New Zealand	90	10	68	32	<1
Northern Ireland	92	8	85	15	0
Russian Fed.	85	15	65	35	<1
Singapore	85	15	67	33	0
United States	87	13	63	35	2
PIRLS	89	11	58	31	11
TIMSS	89	11	61	29	11

Consistent with previous research (e.g., Eivers et al., 2010; McCoy et al., 2012), boys expressed much more negative views than girls about school (Table 3.4). In Ireland, 37% of boys reported *not liking (a lot or a little)* being in school. This was not only considerably higher than the 16% of girls in Ireland who did not like school, but also much higher than the averages for boys (20%) and girls (10%) across all PIRLS and TIMSS countries.

Similarly, lower percentages of boys than girls agreed that they belonged at their school and that they felt safe there. This is the case both in Ireland and internationally. Overall, pupils in Ireland were somewhat less likely to report a feeling of belonging at their school in Ireland than pupils internationally, but were slightly more likely to report feeling safe.

Table 3.4: Percentages of girls and boys endorsing various statements about their attitudes to school, Ireland, and PIRLS average

			Agree (a lot or a little)	Disagree (a lot or a little)
I like being in school	Ireland	Girls	84	16
		Boys	63	37
	PIRLS	Girls	90	10
		Boys	80	20
I feel like I belong at this school	Ireland	Girls	87	13
		Boys	78	22
	PIRLS	Girls	90	10
		Boys	85	15
I feel safe when I am at school	Ireland	Girls	95	5
		Boys	87	13
	PIRLS	Girls	91	9
		Boys	86	14

As the PIRLS and TIMSS means on these measures were almost identical, only PIRLS is shown.

Within Ireland, some variations in pupils’ affective engagement with school were evident when examined by school DEIS status (Table 3.5). Pupils attending non-DEIS schools, Rural DEIS and DEIS Urban Band 1 schools provided similar responses when asked about their liking of, belonging to, and feelings of safety at school. Pupils in Urban Band 1 schools (i.e., those identified as having the highest concentrations of socioeconomically-disadvantaged pupils, and in receipt of the greatest additional support) were most likely to *agree a lot* that they like being in school.

In contrast, pupils attending Urban Band 2 schools were most likely to *disagree (a little or a lot)* that they liked being in school (36%), that they felt they belong at their school (25%), and that they felt safe at their school (17%). This is in contrast to recent analyses of Growing Up in Ireland (GUI) data, which found little variation in nine-year-olds’ liking of school by DEIS status, either between DEIS and non-DEIS schools or between Urban Band 1 and Band 2 schools (McCoy et al., 2012).

Table 3.5: Percentages of pupils in Ireland endorsing various statements about their attitudes to school, by school DEIS status

		DEIS Urban 1	DEIS Urban 2	DEIS Rural	Non-DEIS
I like being in school	Agree (a lot or a little)	79	64	77	74
	Disagree (a lot or a little)	21	36	22	26
I feel like I belong at this school	Agree (a lot or a little)	79	75	85	83
	Disagree (a lot or a little)	21	25	15	17
I feel safe when I am at school	Agree (a lot or a little)	93	83	92	92
	Disagree (a lot or a little)	7	17	8	8

### **Attitudes to reading, mathematics and science**

Participating pupils were asked a number of questions about their enjoyment of reading (as part of PIRLS) and mathematics and science (as part of TIMSS). Their responses were combined to create three overall measures of the extent to which pupils like reading, like learning mathematics, and like learning science (Table 3.6).<sup>2</sup> Overall, Irish Fourth class pupils held much more positive attitudes towards reading and slightly more positive views towards science than their peers in other countries, but were less favourably disposed towards mathematics.

In Ireland, 37% of pupils *liked reading*, compared to the international average of 28%. The percentage of pupils who *do not like reading* in Ireland, at 14%, is similar to the international average (15%). Across PIRLS as a whole, Portugal and Georgia were the only countries with a greater percentage of pupils who *liked reading* than Ireland, at 46% and 42%, respectively.

While the 41% of Irish pupils who indicated that they *like learning maths* is higher than the comparable percentage for reading, it is below the corresponding international average of 48%. Countries where similar percentages of pupils to Ireland reported liking mathematics included Germany, Czech Republic, Austria, and England. Korea, Japan, Finland and Northern Ireland are among the countries whose pupils held more negative attitudes to mathematics. Almost one-quarter of Irish pupils reported that they *do not like learning maths*.

<sup>2</sup> See the international reports (Martin, Mullis, Foy, & Stanco, 2012; Mullis, Martin, Foy, & Arora, 2012; Mullis, Martin, Foy, & Drucker, 2012) for the components of the combined scales.

Table 3.6: Attitudes to reading, mathematics, and science, Ireland, comparison countries and study averages

	Reading		Maths		Science	
	Like	Do not like	Like	Do not like	Like	Do not like
Australia	30	19	45	22	55	14
England	26	20	44	19	44	21
Finland	26	21	34	31	36	25
Hong Kong SAR	21	16	47	17	52	14
<b>Ireland</b>	<b>37</b>	<b>14</b>	<b>41</b>	<b>23</b>	<b>59</b>	<b>12</b>
Korea, Rep.	–	–	23	29	39	16
New Zealand	32	14	47	18	55	13
Northern Ireland	29	20	36	26	51	13
Russian Fed.	26	13	58	8	62	7
Singapore	22	15	48	19	57	12
United States	27	22	45	22	56	15
<b>PIRLS</b>	<b>28</b>	<b>15</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>
<b>TIMSS</b>	<b>–</b>	<b>–</b>	<b>48</b>	<b>16</b>	<b>53</b>	<b>12</b>

To facilitate comparison across all three domains, the middle category (“somewhat like”) is not shown in the Table.

In contrast to reading and mathematics, a majority of Irish pupils (59%) reported that they *like learning science*, slightly above the international average (53%). Similar percentages of Fourth graders in Germany, Singapore, and Chinese Taipei fell into this category, while pupils in Finland, England, and Korea were among those expressing the least positive attitudes. Turkish and Tunisian pupils were the most positive about science, with 72-73% reporting that they *like learning science*. More than one-tenth (12%) of Fourth class pupils in Ireland said that they *did not like learning science*.

The association between pupils’ liking of a particular subject and achievement in that domain is not uniform (Table 3.7). In Ireland, the achievement gap between pupils who *like* and *don’t like* a domain is highest for reading, at more than three-fifths of a standard deviation (65 scale points), and larger than the PIRLS average of 57 points. For science, the gap is two-fifths of a standard deviation (39 points), similar to the TIMSS average gap of 43 points. For mathematics, the gap is relatively small, at one-fifth of a standard deviation (18 points), and considerably smaller than the corresponding TIMSS average difference of 42 points. While Irish pupils who *don’t like* reading and mathematics achieved mean scores above the international scale centrepunt, those who *don’t like* science scored below the centrepunt.

Table 3.7: Mean achievement scores in each domain by pupil liking of that domain, Ireland and study averages

		Like		Somewhat like		Do not like		Gap (Like – Do not like)
		%	Mean	%	Mean	%	Mean	
Reading	Ireland	37	580	49	543	14	514	65
	PIRLS	28	542	57	506	15	485	57
Maths	Ireland	41	535	36	529	23	517	18
	TIMSS	48	509	36	478	16	466	42
Science	Ireland	59	529	29	506	12	490	39
	TIMSS	53	504	35	469	12	461	44

In addition to questions about their liking of each subject, pupils were asked to respond to several statements about the extent to which they could follow and were engaged

in their lessons, such as “I know what my teacher expects me to do” and “I think of things not related to the lesson”.<sup>3</sup> The responses to these statements were combined to create an overall indicator of classroom engagement for each of the three subjects, with pupils categorised as being *engaged*, *somewhat engaged*, or *not engaged*, depending on their responses.

Children in Fourth class in Ireland were found to be generally interested in their lessons, with most pupils classified as being *engaged* or *somewhat engaged* (Table 3.8). The percentage of pupils in Ireland who were *engaged* or *somewhat engaged* was similar to the corresponding international averages for each of the three domains. Eight percent of pupils were described as being *not engaged* in each of the three subject domains, both in Ireland and at the international averages. The percentage of *not engaged* pupils across individual countries ranged from 2-20% for reading, 3-33% for mathematics, and 2-34% for science. Surprisingly, perhaps, some of the best-performing countries in PT 2011 had large percentages of *not engaged* pupils.

In PIRLS, countries with high percentages of pupils classified as *not engaged* with their reading lessons included Finland (20%), Hong Kong (18%), and Singapore (13%). *Engaged* pupils in these countries achieved a mean score about 14-21 points higher than *not engaged* pupils on the reading assessment, similar to the 16-point difference in Ireland but less than the 30-point difference at the PIRLS average. Relatively high percentages of *not engaged* pupils were also found in Denmark (14%) and the Netherlands (15%), both of which achieved a similar overall score to Ireland on the assessment.

Table 3.8: Mean achievement scores in each domain by pupil engagement with that domain, Ireland and study averages

		Engaged		Somewhat engaged		Not engaged		Gap (Engaged – Not Engaged)
		%	Mean	%	Mean	%	Mean	
Reading	Ireland	43	557	49	550	8	541	16
	PIRLS	42	519	50	510	8	489	30
Maths	Ireland	45	538	47	522	8	516	22
	TIMSS	42	507	49	482	8	464	43
Science	Ireland	51	529	41	506	8	503	26
	TIMSS	45	504	47	476	8	458	46

A similar pattern was evident with regard to mathematics and science. Here, Japan (23% for mathematics; 34% for science), Korea (29%; 23%) and Finland (31%; 20%) had large percentages of *not engaged* pupils, but performed better overall on the assessments than almost every other participating country. These somewhat counter-intuitive patterns underline the need for caution when comparing attitudinal variables across (rather than within) countries, particularly where a wide range of cultures are represented, as is the case with TIMSS and PIRLS.

Comparing Tables 3.7 and 3.8 reveals that, in Ireland, reading achievement has a stronger relationship with *liking* reading than with *engagement* with reading. For science, the

<sup>3</sup> The statements in the text above were two of five common to all three domains. The remaining three were: “My teacher is easy to understand”, “I am interested in what my teacher says”, and “My teacher gives me interesting things to do”. Two additional statements were included for reading engagement: “I like what I read about in school”, and “My teacher gives me interesting things to read”.



relationship between achievement and engagement is also weaker than between achievement and liking. However, for mathematics achievement, engagement shows a slightly stronger relationship than liking. At the international level, self-reported liking of and engagement in mathematics and science produce similar differences in achievement between the positive and negative extremes of the scale. Like Ireland, the largest gap is found between those who *like* and who *don't like* reading.

For all three domains, the difference in Ireland between *engaged* and *not engaged* pupils is slightly less than half the corresponding difference for the studies overall. In fact, pupils in Ireland who reported not being engaged with their reading lessons still performed well on the assessment, with an average score of 541 points – higher than the overall average achievement for most participating countries. As noted above, the difference in achievement between these pupils and those who reported being *engaged* was only 16 points, considerably smaller than the 65-point difference between pupils who *like* and *don't like* reading shown in Table 3.7.

Within Ireland, gender differences are evident in pupils' liking of the three domains (Table 3.9). Girls are about 1.6 times as likely as boys to *like* reading, and boys are almost twice as likely as girls are to say that they *don't like* reading. These proportions are similar to, but marginally less pronounced than the corresponding PIRLS averages.

In contrast, boys in Ireland are slightly more likely than girls to *like* science, and more girls than boys *don't like* science in Ireland, while these patterns are reversed at the TIMSS average. However, in general, the majority of both boys and girls report positive views towards science, both in Ireland and internationally.

In Ireland, 21% of girls and 25% of boys indicated that they *don't like* mathematics, more than for reading or science, and more than the corresponding international averages for mathematics. That said, it is notable that more Irish boys *like* mathematics than *like* reading.

Table 3.9: Mean achievement scores in each domain by gender and pupil liking of that domain, Ireland and study averages

			Like		Somewhat like		Do not like		Gap (Like – Do not like)
			%	Mean	%	Mean	%	Mean	
Reading	Ireland	Girls	45	583	46	544	10	524	56
		Boys	29	574	52	541	19	509	65
	PIRLS	Girls	35	544	55	511	10	490	54
		Boys	21	538	58	501	21	483	55
Maths	Ireland	Girls	42	530	37	529	21	514	16
		Boys	40	539	35	530	25	519	20
	TIMSS	Girls	47	505	36	480	17	470	35
		Boys	48	512	35	477	16	464	48
Science	Ireland	Girls	57	529	30	506	13	487	42
		Boys	62	529	28	506	10	493	36
	TIMSS	Girls	55	502	34	471	11	465	37
		Boys	52	507	35	467	13	457	49

Some differences in liking scores were also apparent by DEIS status. Pupils in DEIS Rural schools were particularly positive about learning science (with 71% reporting that they *like* science and only 7% *not liking* science). For mathematics, pupils in Urban Band 2 schools were the least positive. Only 42% *liked* mathematics and 30% *did not like* mathematics. In

contrast, pupils' ratings for liking reading varied little by school DEIS status, with about half of pupils in each school category *somewhat liking* reading and around one-third (between 32% and 38%) *liking* reading.

## Experience of bullying

The questionnaire completed by pupils in PT 2011 included six questions related to experiences of bullying. In Ireland, and internationally, being bullied was related to lower achievement in reading, mathematics, and science. Across all participating countries and across all three domains, there was an average difference of approximately one-third of a standard deviation in the achievement of pupils who were categorised as being *almost never* bullied, and those who were bullied *about weekly* (Martin et al., 2012; Mullis, Martin, Foy, & Arora, 2012; Mullis, Martin, Foy, & Drucker, 2012). The association for Irish pupils between being bullied and achievement in particular is considered in more detail in Chapter 10 of this volume (Cosgrove & Creaven, 2013). In this section, we examine general school and pupil characteristics associated with bullying, both in Ireland and internationally, and look at differences within the Irish population.

### Prevalence

Pupils were asked how often they had experienced each of six different bullying behaviours at school during the course of the year, with responses combined to create a single overall indicator of bullying; the “*Students Bullied at School*” scale.

Compared to other countries, Irish pupils reported relatively little bullying at school (Table 3.10). In Ireland, 64% of pupils were categorised as *almost never* experiencing bullying, compared with an international average of 47% for PIRLS, and 48% for TIMSS. Only in four countries (Azerbaijan, Sweden, Georgia, and Denmark), did pupils experience bullying on a less frequent basis than in Ireland. Nonetheless, 25% of Irish pupils were bullied *about monthly* and 12% were bullied *about weekly*. By comparison, 20% of pupils in both PIRLS and TIMSS were described as being bullied *about weekly*.

Table 3.10: Percentages of pupils reporting various frequencies of experiencing bullying in school, Ireland, comparison countries and study averages

	About weekly	About monthly	Almost never
Australia	25	38	37
England	20	35	45
Finland	9	30	61
Hong Kong SAR	17	33	51
Ireland	12	25	64
Korea, Rep.	15	32	53
New Zealand	30	37	33
Northern Ireland	14	29	57
Russian Fed.	19	35	45
Singapore	23	38	39
United States	18	30	52
PIRLS	20	33	47
TIMSS	20	32	48

Table 3.11 provides the detail from which the summary measure shown in Table 3.10 was developed. Pupils were asked to indicate how frequently, if at all they experienced each of six specific types of bullying behaviours while at school. Generally, Irish pupils were less

likely than were pupils internationally to experience a particular type of bullying, while nonetheless showing the same broad pattern of *relative* frequency. Thus, in Ireland and internationally, verbal bullying was the most common form reported, followed by physical bullying and bullying by exclusion. This broadly corresponds to Williams et al.'s (2009) finding that for the 9-year-old cohort in GUI, verbal bullying was the most common form of bullying experienced, followed by being bullied by exclusion, and then by being physically bullied. Cyberbullying – which GUI data suggest is a far less common form of bullying – was not explicitly assessed in PIRLS and TIMSS, although may have been considered an aspect of some of the categories shown in Table 3.11.

In Ireland, 24% of pupils were made fun of or called names at school *a few times a year* while 11% experienced such bullying *at least once a week* (Table 3.11). While high, the incidence is considerably lower than the study averages for both PIRLS and TIMSS (21% of pupils reported weekly experience of name-calling or being made fun of). Eight percent of Irish pupils reported being left out of games or activities at least weekly, and 8% reported being hit or hurt by another pupil on a weekly basis. Pupils in Ireland, and internationally, were least likely to be made do things against their will or to have something stolen from them at school.

Table 3.11: Percentages of pupils reporting various frequencies of experiencing specific bullying behaviours, Ireland and study averages

During this year, how often...		At least once a week	Once or twice a month	A few times a year	Never
...have you been made fun of or called names at school?	IRL	11	9	24	56
	PIRLS	21	13	22	43
	TIMSS	21	13	21	45
...have you been left out of games or activities by other students at school?	IRL	8	9	21	61
	PIRLS	16	13	17	54
	TIMSS	16	13	17	54
...has someone spread lies about you at school?	IRL	7	9	19	65
	PIRLS	15	13	20	52
	TIMSS	15	13	20	53
...has something been stolen from you at school?	IRL	5	7	21	67
	PIRLS	9	8	18	66
	TIMSS	9	8	17	66
...have you been hit or hurt by other student(s) at school?	IRL	8	9	22	62
	PIRLS	13	12	22	52
	TIMSS	13	12	21	54
...have you been made to do things you didn't want to do by other students at school?	IRL	4	5	12	80
	PIRLS	7	6	11	76
	TIMSS	7	6	11	75

## Pupil characteristics

In Ireland, boys, and pupils who *sometimes* or *never* spoke English at home<sup>4</sup> were most likely to have experienced bullying.

### Pupil gender

Fourteen percent of boys were bullied *almost weekly*, compared to 10% of girls. Similar gender differences were reflected across the studies as a whole (e.g., across PIRLS, 24% of boys experienced bullying *almost weekly* compared to 17% of girls). As well as differences in overall prevalence, there was some variation in the types of bullying experienced by girls and boys, as shown in Table 3.12. For example, girls in Ireland were less likely to report being hit or hurt by another pupil (70% of girls reported they had *never* been hit compared to 54% of boys).

Table 3.12: Percentages of pupils, by gender, reporting various frequencies of experiencing specific bullying behaviours, Ireland and PIRLS averages

During this year, how often...			At least once a week	Once or twice a month	A few times a year	Never
...have you been made fun of or called names at school?	Ireland	Girls	8	7	22	63
		Boys	14	10	26	50
	PIRLS	Girls	18	12	22	47
		Boys	24	14	22	39
...have you been left out of games or activities by other students at school?	Ireland	Girls	7	10	23	60
		Boys	9	9	19	63
	PIRLS	Girls	14	12	18	56
		Boys	18	14	17	51
...has someone spread lies about you at school?	Ireland	Girls	6	8	20	67
		Boys	8	10	19	62
	PIRLS	Girls	13	12	21	54
		Boys	16	13	19	51
...has something been stolen from you at school?	Ireland	Girls	4	7	21	68
		Boys	7	6	21	66
	PIRLS	Girls	8	7	17	68
		Boys	10	8	18	63
...have you been hit or hurt by other student(s) at school?	Ireland	Girls	6	7	18	70
		Boys	10	11	25	54
	PIRLS	Girls	11	11	21	57
		Boys	16	14	24	47
...have you been made to do things you didn't want to do by other students at school?	Ireland	Girls	4	4	13	79
		Boys	4	5	10	81
	PIRLS	Girls	6	6	11	77
		Boys	8	7	11	75

As PIRLS and TIMSS data on these measures are very similar, only PIRLS is shown.

<sup>4</sup> Hereafter described as EAL (English as an Additional Language) pupils. See also Chapter 4 in this volume (Eivers, 2013) for more detail on some of the issues related to EAL pupils generally, and to EAL pupils and bullying, in particular.

The gender differences outlined in Table 3.12 are broadly in line with gender differences found in the GUI study and in a recent Irish study examining bullying in primary and post-primary schools (Minton, 2010; Williams et al., 2009). However, unlike both these studies, PT 2011 data did not show that girls were more likely to experience bullying by exclusion. In Ireland 7% of girls and 9% of boys experienced bullying by exclusion weekly. The comparable study averages were 14% of girls and 18% of boys.

### Pupil language

Pupils who *always* spoke English at home were less likely to be bullied than were pupils who *sometimes* or *never* spoke English at home (Table 3.13). For example, almost one in five EAL pupils were bullied *about weekly*, compared to one in ten non-EAL pupils.

Table 3.13: Percentages of pupils in Ireland who reported various frequencies of being bullied, by how often they spoke English at home

Frequency of speaking English at home	Frequency of being bullied		
	About weekly	About monthly	Almost never
Always	10	23	67
Sometimes / Never	19	32	49

Note. As few pupils never spoke the test language at home, the *sometimes* and *never* categories are collapsed. Pupils for whom the language of instruction is Irish are excluded.

EAL pupils experienced each of the six bullying behaviours more frequently than their non-EAL counterparts, as shown in Table 3.14. In particular, EAL pupils were more likely to be excluded from games and activities on an at least monthly basis (25% for EAL pupils, and 15% for non-EAL pupils). Half of EAL pupils had been made fun of or called names, and had been left out of games at least a few times in the school year, while just over one-quarter had been made to do things they didn't want to do by other students at school.

Table 3.14: Percentages of pupils in Ireland who reported various frequencies of experiencing specific bullying behaviours, by how often they spoke English at home

During this year, how often ... at school?	How often do you speak English at home?	At least once a week	Once or twice a month	A few times a year	Never
...have you been made fun of or called names?	Always	10	8	23	58
	Sometimes / Never	16	11	23	49
...have you been left out of games or activities by other students?	Always	7	8	21	64
	Sometimes / Never	14	12	26	48
...has someone spread lies about you?	Always	6	8	18	68
	Sometimes / Never	11	13	24	52
...has something been stolen from you?	Always	4	6	21	69
	Sometimes / Never	12	7	20	61
...have you been hit or hurt by other students?	Always	7	8	20	65
	Sometimes / Never	11	13	25	51
...have you been made to do things you didn't want to do by other students?	Always	4	4	11	81
	Sometimes / Never	7	7	13	73

## School characteristics: Ireland

The prevalence of bullying varied according to some school characteristics (Table 3.15). Pupils in DEIS Urban Band 1 and Band 2 schools were twice as likely to experience bullying as pupils in DEIS Rural and non-DEIS schools. Mirroring this contrast between DEIS Urban and Rural schools, pupils in urban schools generally (including non-DEIS schools) were twice as likely to be categorised as experiencing *about weekly* bullying as were pupils in small towns or remote rural areas. Pupils in smaller schools were also slightly less likely to experience bullying than were those in larger schools.

As many rural schools are also categorised as small schools, urban/rural differences in bullying may be a function of school size, or *vice versa*. Although school size has been found to be more strongly associated than location with some aspects of school climate (e.g., school connectedness; Thompson, Iachan, Overpeck, Ross, & Gross, 2006), the relationship between school size or urbanicity and bullying is unclear (Klein & Cornell, 2010; Nansel et al., 2001; Ma, 2002; Wolke, Woods, Stanford & Schulz, 2001). Moreover, Irish schools tend to be considerably smaller than in many countries. Many “large” Irish schools would be classified as small or medium in other countries, making it difficult to draw conclusions about school size solely from international research.

In terms of school gender composition, almost one-fifth of pupils in all-boys schools experienced bullying on an *about weekly* basis, compared with only approximately one-tenth of those in mixed and in all-girls schools. However, no notable differences in frequency of bullying were evident by school ethos or language of instruction.

Table 3.15: Percentages of pupils in Ireland reporting various frequencies of experiencing bullying, by selected school characteristics

		About weekly	About monthly	Almost never
DEIS	DEIS Urban 1	20	27	53
	DEIS Urban 2	23	29	48
	DEIS Rural	7	23	71
	Non-DEIS	10	24	66
Location	Urban	20	23	57
	Suburban	13	25	62
	Large town	13	27	60
	Small town	8	23	69
	Remote rural	9	25	66
School size	Small	9	24	67
	Medium	11	24	64
	Large	14	26	60
Gender composition	Mixed	11	25	65
	Girls	11	23	66
	Boys	19	26	55

Pupil reports of bullying were aggregated to the school level to create a measure of bullying prevalence for each school. There was considerable variation between schools, with 3% of pupils enrolled in schools where all pupils were classified as *almost never* being bullied. At the other extreme, 7% of pupils were in schools where more than one quarter of pupils experienced bullying *about weekly*.

## Bullying and attitudes to school

Pupils who were *almost never* bullied were more likely to express positive attitudes to school than those who were bullied *about weekly* (Table 3.16). In particular, those who were *almost never* bullied were more likely to agree that they belonged in the school than were those bullied *about weekly* (87% and 68%, respectively).

Table 3.16: Percentages of Irish pupils indicating whether they agreed that they liked being in school, belonged in school, and felt safe there, by frequency of being bullied

		About weekly	About monthly	Almost never
I like being in school	Agree	66	70	76
	Disagree	34	30	24
I feel safe when I am at school	Agree	81	89	94
	Disagree	19	11	6
I feel like I belong in school	Agree	68	78	87
	Disagree	32	22	13

In terms of engagement in lessons, those who were *almost never* bullied were more likely to be classified as “engaged” in reading, mathematics and science than those who were bullied either *about monthly* or *about weekly* (Table 3.17), a pattern reflected in other PIRLS and TIMSS countries. Similar but weaker associations were observed between bullying and “liking” these subjects (Table 3.17).

Table 3.17: Percentages of pupils in Ireland reporting various frequencies with which they were bullied, by engagement in, and liking of, each of reading, mathematics, and science

		Frequency of being bullied		
		About weekly	About monthly	Almost never
Reading lessons	Engaged	35	34	48
	Somewhat engaged	51	56	46
	Not engaged	14	10	7
Mathematics lessons	Engaged	31	40	50
	Somewhat engaged	54	50	44
	Not engaged	15	10	6
Science lessons	Engaged	37	47	56
	Somewhat engaged	51	43	38
	Not engaged	12	10	6
Likes reading	Like	33	36	38
	Somewhat like	50	49	48
	Do not like	17	15	14
Likes mathematics	Like	34	42	42
	Somewhat like	36	34	37
	Do not like	30	25	21
Likes science	Like	53	56	62
	Somewhat like	33	30	28
	Do not like	14	14	10

## Difficulties in engaging pupils

The preceding sections have examined pupil interest and engagement from the pupil perspective. In this section, we use teacher reports to examine some problems that could be symptomatic of, or contributory factors to, a lack of pupil engagement in the classroom. Teachers were asked about a range of problems that they faced in teaching their classes, and the extent to which these problems limited their teaching.

Disruptive behaviour in the classroom was reported as being *a lot* of a problem for the teachers of 10% of pupils in Ireland and 12% of pupils across all PIRLS countries (Table 3.18). The countries where this figure was notably low (less than or equal to 3%) were Azerbaijan, Chinese Taipei, Georgia, Indonesia, and Romania. Conversely, countries where a notably high percentage of pupils (at least 20%) are taught by teachers who reported that disruptive behaviour limited their teaching *a lot* include Belgium (French), France, Italy, Lithuania, and Slovenia. For the majority of pupils in Ireland, their teachers said that disruptive behaviour is a problem *to some extent* (43%; compared to PIRLS average, 53%) or *not at all* (47%; compared to PIRLS average, 35%).

The teachers of 4% of Irish pupils indicated that uninterested pupils limited teaching *a lot*, well below the international average of 10%. Other countries where very few pupils' teachers indicated that uninterested pupils were a major problem included England, Finland, Germany, the Netherlands, New Zealand, and Northern Ireland. Uninterested pupils were reported to be *not at all* a problem for the teachers of 39% of Irish pupils, higher than the percentages (30% for PIRLS countries, 31% for TIMSS countries) reported internationally.

Table 3.18: Percentages of pupils whose teachers indicated the extent to which various factors limited their teaching, Ireland, TIMSS and PIRLS averages

		A lot	To some extent	Not at all
Disruptive pupils	Ireland	10	43	47
	PIRLS	12	53	35
	TIMSS	13	51	37
Uninterested pupils	Ireland	4	57	39
	PIRLS	10	60	30
	TIMSS	11	58	31
Pupils lacking prerequisite knowledge or skills	Ireland	8	56	37
	PIRLS	11	61	28
	TIMSS	12	61	27
Pupils with special needs (e.g., physical disabilities, mental or emotional/psychological impairment)	Ireland	4	53	43
	PIRLS	8	46	46
	TIMSS	8	44	49
Pupils suffering from not enough sleep	Ireland	6	56	38
	PIRLS	5	43	51
	TIMSS	5	42	53
Pupils suffering from lack of basic nutrition	Ireland	4	18	78
	PIRLS	4	23	73
	TIMSS	5	24	71

That lack of interest among pupils is a relatively small problem for teachers may be considered in light of reports from principals that the majority of Irish pupils are in schools that are characterised as having high levels of teacher and parental support, both of which



might be expected to support pupils' engagement (Blumenfeld & Meece, 1988; Fredericks et al., 2004; Jimerson et al., 2000). For example, about 95% of Fourth class pupils in Ireland are in schools where the teachers are reported to have *high* or *very high* expectations for their achievement, compared to 69% and 74% of pupils at the TIMSS and PIRLS (respectively) averages. More on the attitudes and practices of Irish teachers can be found in Chapter 5 (Clerkin, 2013) of this volume. Furthermore, as will be discussed in Chapter 6 (Eivers & Creaven, 2013), principals' ratings of general levels of parental support for pupils' achievement were also far more positive in Ireland than for either the PIRLS or TIMSS average.

Two common issues identified by teachers as limiting their teaching relate directly to the home environment (Table 3.18). The first is that of pupils coming to class without being sufficiently well-rested. In Ireland, almost two-thirds of pupils (62%) were taught by teachers who said that their teaching was limited *to some extent* or *a lot* because pupils were not getting enough sleep. This is well above the PIRLS (48%) and TIMSS (47%) averages. In some countries – including Australia (68%) and the US (76%) – lack of sleep was reported to be an even greater problem than in Ireland. In others, such as high-performing Singapore (40%), Korea (29%) and Japan (20%), pupils' lack of sleep was much less of an issue than in Ireland.

Two features that may be worth noting in this regard are that 54% of the Fourth class pupils in Ireland reported that they had a TV in their bedroom, while 19% had a computer in their bedroom. Pupils attending DEIS schools were much more likely to report having a television in their bedrooms. A large majority of pupils in both Urban Band 1 (78%) and Band 2 schools (74%), and a smaller majority of pupils in DEIS Rural schools (63%) reported having a TV in their bedroom, compared to 49% of pupils in non-DEIS schools.<sup>5</sup> Nationally, Fourth class boys (58%) were somewhat more likely than girls (49%) to have a TV in their bedroom.

Lack of basic nutrition was also identified as a problem by the teachers of 22% of Irish pupils, of whom 4% say that poor nutrition among pupils limits their teaching *a lot*. These figures are broadly in line with the international averages. However, pupils coming to class lacking proper nutrition was a more common problem in Ireland than in some of our comparison countries, including Northern Ireland (where no pupils were taught by teachers whose teaching was limited *a lot* by pupils' lack of nutrition, and 20% were in classes where teaching was limited *to some extent*), Singapore (1% of pupils in classes where teaching is limited *a lot*, and a further 13% limited *to some extent*), and Finland (less than half a percent of pupils in classes where teaching is limited *a lot*, and only 9% in classes where teaching is limited *to some extent*).

## Discussion

Although most pupils in Ireland liked their school, Irish pupils were nonetheless twice as likely as the TIMSS and PIRLS international averages to *disagree a lot* that they liked being in school. Irish pupils were also slightly less likely than the average to express a feeling of belongingness at their schools, although the difference between Ireland and our comparison countries on this measure is less marked. Given the substantial portion of their time that pupils spend in school, and the fact that lower liking of school is linked to higher rates of absenteeism even among primary-aged pupils (Thornton, Darmody, & McCoy, in press), our

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<sup>5</sup> As questions about a TV or computer in the bedroom were Irish national additions, no international comparative data are available.

findings suggest that efforts are needed to foster and maintain engagement and enthusiasm among pupils who do not perceive the school environment as a positive one.

Consistent with previous research (Eivers et al., 2010; Williams et al., 2009), boys reported much more negative views of school than girls. In PT 2011, the percentages of boys who either *strongly agreed* or *strongly disagreed* that they liked school (26% and 21%, respectively) were reasonably comparable. In contrast, girls were seven times more likely to *strongly agree* than to *strongly disagree* that they liked school (42% and 6%). Pupils in DEIS Urban Band 2 (but not Band 1) schools consistently reported lower affective engagement with school than pupils in other DEIS categories or pupils in non-DEIS schools. However, multilevel analyses of the GUI dataset revealed no association between 9-year-olds' liking of school and schools' DEIS status (McCoy et al., 2012). This suggests that secondary analyses of the PT 2011 data might explore the relationship between engagement and socioeconomic disadvantage in greater detail, incorporating information provided by the pupils' parents.

PT 2011 revealed that the experience of being bullied is less frequent in Irish classrooms than in most other countries, with two-thirds of Irish pupils almost never experiencing bullying at school. Ireland ranked best among our key comparison countries on this measure. Overall, pupils in only four countries from among all PIRLS and TIMSS participants reported lower rates of bullying than that reported by Irish pupils. This, in conjunction with principals' ratings of school safety and discipline suggests that Irish schools provide a safe environment for pupils, safer than those found in most other countries.

Although the overall prevalence of bullying was relatively low in Ireland, bullying remains a significant problem for some groups of pupils. For example, EAL pupils were more likely to experience each of the six types of bullying listed than were non-EAL pupils. In addition, the proportion of pupils being bullied weekly was twice as high in DEIS Urban schools as in non-DEIS and DEIS Rural schools. The findings suggest that teachers of EAL pupils, and teachers in DEIS Urban schools in particular, may need additional support to tackle bullying in their classrooms.

The *Students Bullied at School Scale* does not explicitly assess cyberbullying, and may thus underestimate the frequency of bullying. However, as face-to-face bullying has been found to be more common than bullying online (O'Neill, Grehan, & Ólafsson, 2011), the measure probably captures much of the bullying experienced by Fourth grade pupils. As well as being associated with lower achievement in reading, mathematics, and science, being bullied appears to be associated with lower engagement in lessons across all three domains, and to a lesser extent, with *liking* these subjects. Being bullied was also associated with lower endorsement of statements about liking of, feeling safe at, and belonging in school. Thus the PT 2011 data underscore findings from previous research showing that bullying can have profound effects on children's well-being as well as academic achievement. As noted earlier, the association between bullying and achievement on the measures of reading, mathematics and science is explored in more detail in Chapter 10 (Cosgrove & Creaven, 2013).

In general, attitudes to reading and to science were positive. Proportionally more pupils in Ireland expressed a liking of each subject than did their Fourth grade peers internationally, particularly so in the case of reading. Such pupils also achieved higher scores than their classmates who did not like the subjects. Relatively more girls than boys in Ireland liked reading, and one-fifth of boys reported that they *do not like* reading – twice the corresponding percentage of girls. Boys, on the other hand, were marginally more likely than girls to report liking science.

In contrast to the relatively positive attitudes towards reading and science, fewer pupils in Ireland than in most other countries liked mathematics, and more expressed a dislike of mathematics. The gap in mathematics achievement between pupils who *like* and *do*

*not like* the subject is smaller than for reading or science. Gender differences in liking of mathematics were less apparent than in the other two domains, but the high proportion of Fourth class pupils (one in five girls and one in four boys) who report that they don't like mathematics at this early stage in their education (see also McCoy et al., 2012) is a concern.

Teacher reports suggested that, in a significant minority of Irish classrooms, teaching practices were constrained by pupils not receiving adequate nutrition.<sup>6</sup> Concerns have been expressed previously about a lack of connection between Irish pupils' understanding of healthy and unhealthy foods, and their relative consumption of each type and general eating patterns (Broderick & Shiel, 2000). Pupils' ability or motivation to pay attention and work in class may be impaired as a result of poor nutrition (Cooper, Bandelow, & Nevill, 2011), which is more likely to be found among girls and children from low-SES families. For example, in an Irish context, a World Health Organisation study found that 11-year-old girls were slightly more likely than boys to skip breakfast in the mornings, and that children from lower-SES families were much less likely to eat breakfast on a school day (Currie et al., 2012).

Some limited funding is available for schools to organise breakfast clubs for their pupils,<sup>7</sup> and supporting information and resources are also available from websites such as [www.healthyfoodforall.com](http://www.healthyfoodforall.com) (see, e.g., Foley, 2011). Many schools avail of these resources. However, a small number of teachers in Ireland nonetheless report that insufficient nutrition among their pupils limits their classroom participation *a lot*. Also, lack of basic nutrition remains a problem at least *to some extent* for more than one-fifth of children in Fourth class. These figures compare poorly with some of our comparison countries, including Northern Ireland, Singapore and Finland, and are similar to the international averages, perhaps surprisingly given Ireland's status as an economically-developed nation.

Lack of sleep appeared to be a widespread problem in Ireland, with almost two-thirds of Irish pupils taught by teachers who said it was limiting their instruction. This is a finding of particular concern. Insufficient rest can impair pupils' concentration and attention in class (Meijer, 2008). It has also been associated with lower enjoyment of school (Garmy, Nyberg, & Jakobsson, 2012) and with elevated risk of obesity (Chen, Beydoun, & Wang, 2008).

It may be the case that some parents are unaware that their children are not getting enough sleep. For example, while most may consider about eight hours of sleep per night to be typical for adults, it is less well known that a 10-year-old typically needs about 10 hours (Chen et al., 2008). However, inadequate sleep may also be related to the widespread availability of TVs in Irish children's bedrooms, and, for a substantial minority, a computer too. Garmy et al. (2012) reported that a TV in the bedroom and prolonged computer use were both associated with sleep deprivation in school-aged children, while Eivers et al. (2010) found that pupils with a TV in their bedroom tended to have fewer (or no) books at home and achieved lower reading and mathematics scores than pupils without their own TV.

Combined, lack of sleep and lack of basic nutrition can represent significant barriers for pupils' engagement with school, and the evidence would suggest that the combination is most common among children from less affluent families. Indeed, within Ireland, problems with children not getting enough sleep and receiving poor or inadequate nutrition have been implicated as factors that "militate against school completion", particularly in socioeconomically-disadvantaged areas (Downes, Maunsell, & Ivers, 2006; Downes &

<sup>6</sup> As the question asked about "lack of basic nutrition", teacher responses are likely to encompass both lack of food (e.g., pupils coming to school hungry) and lack of appropriate food (e.g., pupils with an unhealthy diet).

<sup>7</sup> <http://www.welfare.ie/en/Pages/School-Meals-Programme.aspx> (last verified, 7<sup>th</sup> May, 2013).

Maunsell, 2007). Efforts to ensure that children receive appropriate rest and nutrition might therefore be expected to have a positive impact on pupils' liking of and engagement with school, on attendance rates, academic performance, health, and wellbeing.

## Additional references



This section does not repeat the core references already listed in Chapter 1. These include the three international reports and the Irish national report on PT 2011, and those related to other key studies such as National Assessments and PISA.

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