

This chapter examines differences between countries and economies in students' feelings, and how those feelings are associated with student characteristics and reading performance. It also looks at how time spent connected to the Internet and different aspects of the school climate are related to students' feelings.

Given the growing interest in students' well-being, PISA 2018, for the first time, asked students how they normally feel in their lives. Students reported their positive – "happy", "lively", "proud", "joyful" and "cheerful" – and negative – "scared", "miserable", "afraid" and "sad" – affect states. This chapter examines the affective element of the subjective well-being of 15-year-old students. The cognitive element of subjective well-being is examined in Chapter 11.

Affect is the extent to which a person experiences certain emotions and moods (Watson, Clark and Tellegen, 1988<sub>[1]</sub>). When these feelings are related to intense and conscious experiences happening at a particular point in time, they are usually referred to as state affect or emotions; when they are related to diffuse, subconscious and general feelings, they are considered trait affect or moods (Bernoster, Mukerjee and Thurik,  $2018_{[2]}$ ; Forgas, Wyland and Laham,  $2006_{[3]}$ ). The question analysed in this chapter lies somewhere in between these two, as students reported on enduring emotions that can largely be described as "feeling in a good/bad mood".

Previous studies have shown that positive and negative affect states are largely independent from each other, particularly when they refer to a long time span; and they do not necessarily predict the same student outcomes (Diener and Emmons,  $1984_{[4]}$ ). Consequently, positive and negative affect states are analysed as separate dimensions in this chapter.

Many studies have tried to understand what makes students feel good or bad. Students who feel attached to their school, love learning, persevere and are goal-oriented, for instance, are more likely to report positive affect states, such as enthusiasm, inspiration and happiness (Anderman,  $1999_{[5]}$ ; Weber, Wagner and Ruch,  $2016_{[6]}$ ). Students who enjoy positive life outcomes, like success, good sleep and positive relationships with parents and friends, also show more positive affect (Lyubomirsky, King and Diener,  $2005_{[7]}$ ; Paterson et al.,  $2011_{[8]}$ ; Rogers et al.,  $2018_{[9]}$ ). Interestingly, negative affect states, like sadness, fear, despair or shame, are generally more difficult to predict than positive affect states (Weber, Wagner and Ruch,  $2016_{[6]}$ ). Yet, some student behaviour, such as working in teams and self-regulation, and attitudes towards school and life, including enjoying a sense of belonging at school, hope and love, seem to protect students from experiencing negative emotion (Anderman,  $1999_{[5]}$ ; Weber, Wagner and Ruch,  $2016_{[6]}$ ).

#### What the data tell us

- On average across OECD countries, more than 85% of students reported sometimes or always feeling happy, cheerful or
  joyful; about 6% of students reported always feeling sad.
- In all countries and economies, girls were more likely than boys to report sometimes or always feeling sad.
- Compared to students who reported never feeling happy, students who reported they sometimes feel happy scored 62 points higher in reading. Students who reported feeling rarely happy and always happy also scored higher, but less so.
- The more time students spent on the Internet outside of school, the more likely they were to report feeling sad or miserable.
- In virtually all countries and economies, students were more likely to report positive feelings when they reported a stronger sense of belonging at school and greater student co-operation; they were more likely to express sadness when they were bullied more frequently.

Positive and negative affects are important student outcomes in themselves, but they are also related to students' academic growth and well-being. According to broaden-and-build theory, the experience of positive emotions, such as happiness, pride, enjoyment and love, urges students to play, explore, aspire and be creative, broadening and improving their skills in the process (Fredrickson,  $2001_{[10]}$ ). In the school context, positive affect is positively associated with motivation, self-efficacy and engagement at school, and indirectly with academic achievement (King et al.,  $2015_{[11]}$ ; Mega, Ronconi and De Beni,  $2014_{[12]}$ ; Pekrun et al.,  $2002_{[13]}$ ; Weber, Wagner and Ruch,  $2016_{[6]}$ ).

The positive effects extend beyond the school context. Experiencing positive emotions, for instance, has been related to better health, fewer sleep problems, greater life satisfaction and other positive life outcomes. Experiencing negative emotions, such as sadness, anger and despair, is often negatively related to the same academic and life outcomes described above (Kuppens, Realo and Diener, 2008<sub>[14]</sub>; Lyubomirsky, King and Diener, 2005<sub>[7]</sub>; Ong et al., 2013<sub>[15]</sub>; Pressman, Jenkins and Moskowitz, 2019<sub>[16]</sub>).

This chapter examines how students normally feel in their lives. PISA asked students to report how frequently ("never", "rarely", "sometimes", "always") they feel happy, lively, proud, joyful, cheerful, scared, miserable, afraid and sad. Three of these positive feelings – happy, joyful and cheerful – were combined to create an index of positive feelings whose average is 0 and standard deviation is 1 across OECD countries. Positive values in this index mean that the student reported more positive feelings than the average student in OECD countries. An index of negative feelings was not created because of the low internal consistency of the index across PISA-participating countries.

#### HOW STUDENTS' FEELINGS VARY ACROSS COUNTRIES. SCHOOLS AND STUDENTS

Overall, students reported feeling good in their lives (Figure III.12.1). On average across OECD countries, more than 80% of students reported sometimes or always feeling happy, cheerful, joyful and lively; 71% reported feeling proud with the same frequency. More surprising, as many as four in ten students reported always feeling happy, cheerful and joyful (Table III.B1.12.1). By contrast, less than 40% of students sometimes or always feel scared and miserable, and about half of students reported feeling sad and afraid with the same frequency. The frequency with which students experience these negative feelings is probably expected, and is not always harmful; after all, even negative feelings have a role to play in students' lives if they arise sporadically. Fear, for instance, prevents people from engaging in risky behaviours (Warr, 2000<sub>[17]</sub>). Fortunately, few students across OECD countries always feel afraid (10%), sad (6%), miserable (5%) or scared (4%) (Table III.B1.12.2).

Countries differ in the extent to which students expressed positive feelings, though the differences are more marked for some feelings than for others (Figure III.12.1). For instance, in every country and economy except Georgia, at least 80% of students reported sometimes or always feeling happy. However, in France, Italy, Lebanon, Montenegro, the Slovak Republic and Turkey, less than 75% of students reported sometimes or always feeling lively, whereas in 16 countries and economies more than 9 in 10 students reported so.

Differences are even more pronounced in the case of negative feelings (Figure III.12.1). In Chile, Costa Rica, the Republic of Moldova (hereafter "Moldova"), Montenegro, the Republic of North Macedonia, Slovenia and Uruguay, fewer than one in four students reported feeling sometimes or always scared, while in Beijing, Shanghai, Jiangsu and Zhejiang (China) (hereafter "B-S-J-Z [China]"), Brunei Darussalam, the Czech Republic, Hong Kong (China), Indonesia, Japan and the Philippines, more than half of students so reported. Similarly, in Kazakhstan, Kosovo, Romania, Saudi Arabia and Slovenia, less than 40% of students reported sometimes or always feeling sad, but in B-S-J-Z (China) and Hong Kong (China) more than 75% of students did.

There is probably no universally acceptable way of ranking countries based on the positive and negative feelings expressed by their students; but if there is one type of answer that most people would agree should be taken seriously it is when students report that they always feel sad, scared, afraid or miserable. On average across OECD countries, around 7% of students reported so (the average percentage of students reporting across the four negative feelings) (Table III.B1.12.2). Moreover, in Brunei Darussalam, 13% of students reported always feeling scared; in Brunei Darussalam, Hong Kong (China), Lebanon, Macao (China) and Thailand, at least 10% of students reported always feeling miserable; in B-S-J-Z (China), Hong Kong (China), Japan, Korea, Portugal and the United Kingdom, more than 15% of students reported always feeling afraid; and in Brazil, Brunei Darussalam, Hong Kong (China), Macao (China), Malaysia and Viet Nam, at least 13% of students said they were always sad. By contrast, less than 2% of students in Moldova, Portugal, Spain and Ukraine reported always feeling scared, and less than 4% of students in Albania, Denmark, Finland, Germany, Kosovo, the Netherlands, Portugal, Spain and Switzerland reported always feeling sad.

In general, boys and girls reported similar levels of positive feelings, but girls were considerably more likely than boys to report that they sometimes or always feel sad (Figure III.12.2, Tables III.B1.12.5 and III.B1.12.6). In 24 school systems, girls expressed more frequent positive feelings than boys did, whereas in 19 school systems the opposite was true. However, in every country and economy, girls were more likely than boys to report that they frequently feel sad. Specifically, on average across OECD countries, 37% of boys reported that they sometimes or always feel sad, while 64% of girls so reported. The smallest gender gaps – less than 10 percentage points – were observed in B-S-J-Z (China), Indonesia, Jordan and Saudi Arabia; the largest were observed in Denmark, Finland, Germany, the Netherlands and Sweden. Obviously, these differences may reflect a real disparity between the genders in this feeling, but they could also reflect boys' unwillingness to accept (or cope with) their negative emotions (Kilmartin, 2005<sub>[18]</sub>; MacLean, Sweeting and Hunt, 2010<sub>[19]</sub>). Moreover, socio-economically advantaged students were more likely than their disadvantaged peers to report positive feelings and, to a lesser extent, to report feeling sad, on average across OECD countries.

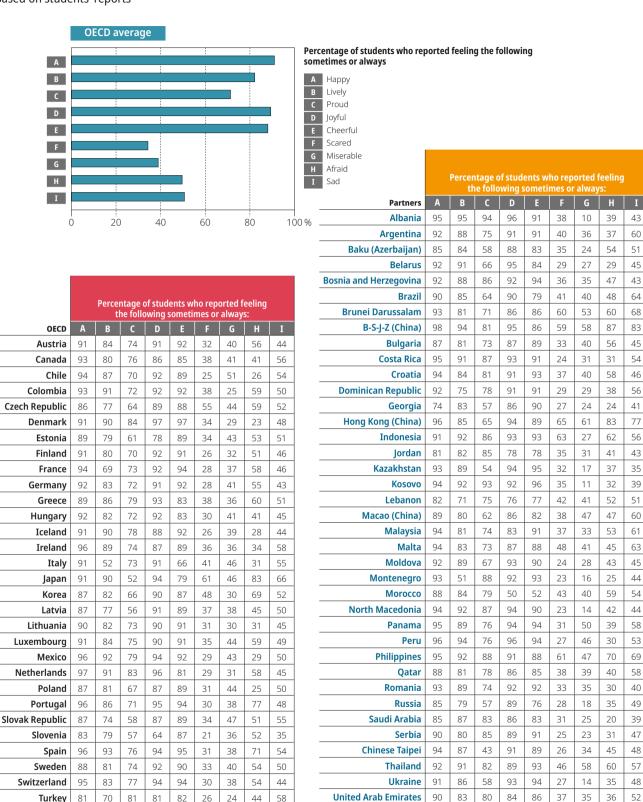
Students in different types of schools generally reported similar levels of positive feelings (Table III.B1.12.7). In this regard, just over 1% of the variation in the index of positive feelings lay between schools, considerably lower than for other indices analysed in this report. However, in a majority of countries and economies, 15-year-old students in socio-economically advantaged schools were more likely than students in disadvantaged schools to report that they frequently feel sad (Table III.B1.12.8). On average across OECD countries, students in city and private schools were more likely to report frequently feeling sad than students in rural and public schools, respectively.

#### HOW STUDENTS' FEELINGS ARE RELATED TO READING PERFORMANCE

The most important finding about the relationships between students' feelings and reading performance is that such relationships are largely curvilinear (increasingly positive until a certain point and decreasing thereafter), similar to what was observed when analysing life satisfaction (see Chapter 11) (Figure III.12.3). For that reason, the analyses look at how the frequency response options – "rarely", "sometimes", "always" – compare to the response option "never", as regards the relationship between students' feelings and reading performance.

#### Figure III.12.1 Students' feelings

#### Based on students' reports



Uruguay

**Viet Nam** 

88 78 93 92 23 27 30 53

85 81 74 64 91 41 24 44 48

Source: OECD, PISA 2018 Database, Tables III.B1.12.1 and III.B1.12.2. StatLink III.B1 http://dx.doi.org/10.1787/888934030439

83 | 65 | 82 | 84 | 39 | 52 | 66 | 60

93 81 78 85 83 45 40 42 63

**United Kingdom** 

**United States** 

Figure III.12.2 Positive and negative student feelings, by student characteristics

#### Based on students' reports Positive difference Negative difference Difference is not significant Missing values Girls - boys Advantaged - disadvantaged students Difference in the percentag of students who reported sometimes or always feeling sad: Immigrant - non-immigrant students Difference in the index of positive feelings1: В В **Partners** Albania **Argentina** Baku (Azerbaijan) Difference in the percentage of students who reported sometimes or always feeling sad: Belarus Bosnia and Herzegovina Difference in the index of positive feelings1: Brazil OECD **Brunei Darussalam** OECD average B-S-J-Z (China) Austria Bulgaria Canada Costa Rica Chile Croatia Colombia **Dominican Republic** Czech Republic Georgia Denmark Hong Kong (China) Estonia Indonesia **Finland** Jordan Kazakhstan France Germany Kosovo Greece Lebanon Hungary Chinese Taipei Iceland Macao (China) Ireland Malaysia Italy Malta Moldova Japan Korea Montenegro Latvia Morocco Lithuania **North Macedonia** Luxembourg **Panama** Mexico Peru Netherlands **Philippines Poland** Qatar **Portugal** Romania **Slovak Republic** Russia Saudi Arabia Slovenia Serbia Spain Sweden **Thailand** Switzerland Ukraine Turkey United Arab Emirates **United Kingdom** Uruguay **United States Viet Nam** 43 15 50 26 24 40 0 50 Countries/economies with no difference 19 2 20 0 7 7 Countries/economies with a negative difference

**Source**: OECD, PISA 2018 Database, Tables III.B1.12.5 and III.B1.12.6. **StatLink** III.B1.12.6.

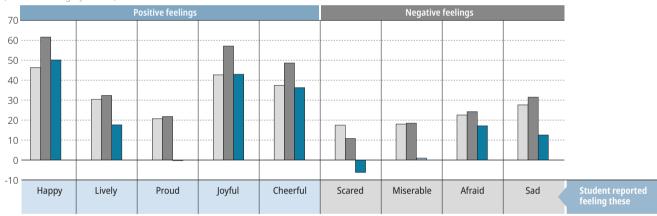
<sup>1.</sup> The index of positive feelings is based on three items: "happy", "joyful" and "cheerful".

When all response options to the statements concerning positive feelings are analysed individually, and the socio-economic profile of students and schools (as measured by the PISA index of economic, social and cultural status) is accounted for, the common findings (except when considering "pride") were that students who responded "never" scored the lowest in reading; and those who responded "sometimes" scored the highest (Figure III.12.3). For instance, compared to students who reported never feeling happy, students who said that they rarely feel happy scored 46 points higher in reading, those who reported sometimes feeling happy scored 62 points higher, and those who reported always feeling happy scored 50 points higher, on average across OECD countries.

The analyses concerning negative feelings, which also account for students' gender, also show a curvilinear relationship with reading performance (Figure III.12.3). On average across OECD countries, students who reported rarely or sometimes feeling scared, afraid, miserable or sad scored higher in the reading assessment than students who reported never or always feeling that way, by a wide margin. For instance, compared to students who reported never feeling sad, students who said that they rarely feel sad scored 28 points higher in reading, those who reported sometimes feeling sad scored 31 points higher, and those who reported always feeling sad scored 13 points higher, on average across OECD countries.

Figure III.12.3 Intensity of students' feelings and reading performance

# OECD average Frequency (reference category: "never") Rarely Sometimes Always Score-point difference in reading performance (reference category "never") Positive feelings



Notes: Statistically significant values are shown in darker tones (see Annex A3).

Results are based on linear regression analysis, after accounting for gender and students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Source: OECD, PISA 2018 Database, Tables III.B1.12.10 and III.B1.12.12.

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#### HOW IS INTERNET USE OUTSIDE OF SCHOOL RELATED TO STUDENTS' FEELINGS?

Given the amount of time 15-year-olds spend on line today, and the remarkable increase in Internet use amongst adolescents in recent years (Echazarra,  $2018_{[20]}$ ), it is crucial to understand how time spent on the Internet is related to students' feelings. PISA 2015 results showed that heavy Internet users reported lower overall satisfaction with life than students who spend less time connected (OECD,  $2017_{[21]}$ ), a finding that is largely congruent with previous studies on smartphone use (Lepp, Barkley and Karpinski,  $2014_{[22]}$ ; Samaha and Hawi,  $2016_{[23]}$ ) and video gaming (Mentzoni et al.,  $2011_{[24]}$ ). However, Brunborg, Mentzoni and Froyland ( $2014_{[25]}$ ) point out that it is addiction to video games, and not necessarily the time spent playing video games, that correlates with negative outcomes, like depression and behavioural problems.

In 51 of the 52 countries and economies that distributed the ICT questionnaire (46 of which also have data on students' feelings), PISA 2018 asked students how much time they spend using the Internet during the typical weekday and weekend day outside of school. These two questions were combined to calculate the amount of time students spend connected to the Internet during a typical week. Five categories of Internet users were then created based on this indicator: "low Internet user" (0-9 hours per week); "moderate Internet user" (10-19 hours per week); "average Internet user" (20-29 hours per week); "high Internet user" (30-39 hours per week); and "heavy Internet user" (more than 40 hours per week).

Analysing students' usual feelings against the time they spend using the Internet, it appears that low, moderate and average Internet users were more likely to report positive feelings than high and heavy users of the Internet, particularly in the case of feeling lively and proud (Figure III.12.4). When students were asked about fear-related negative feelings, their responses did not vary much across the different categories of Internet users; but when students were asked how frequently they feel sad and miserable, the differences between the categories of Internet users were greater. The more time students reported spending connected to the Internet, the more likely they were to report feeling sad and miserable. For instance, on average across OECD countries, 35% of low Internet users reported feeling miserable sometimes or always, compared to 38% of average Internet users and 44% of heavy Internet users. In Austria, Estonia, Finland and Slovenia, the difference between low and heavy Internet users in sometimes or always feeling miserable amounted to at least 15 percentage points.

Figure III.12.4 Internet use outside of school and students' feelings

#### **OECD** average Type of student according to the time they spend on the Internet outside of school:1 Low Internet users Moderate Internet users Average Internet users High Internet users Heavy Internet users Percentage of students Negative feelings 100 90 20 70 60 50 40 30 20 10 Ω Нарру Lively Proud Joyful Cheerful Scared Miserable Afraid Sad

1. Low Internet users: 0-9 hours(h)/week(w); Moderate users: 10-19 h/w; Average users: 20-29 h/w; High users: 30-39 h/w; Heavy users: More than 40 h/w.

**Note**: Results are based on linear regression analysis, after accounting for gender and students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

**Source**: OECD, PISA 2018 Database, Tables III.B1.12.15 and III.B1.12.16.

StatLink http://dx.doi.org/10.1787/888934030496

Moreover, the association between time spent on line and certain student feelings is even stronger amongst girls (Tables III. B1.12.17 and III. B1.12.18). For instance, the difference between low and heavy Internet users in the likelihood of sometimes or always feeling miserable was 7 percentage points amongst boys and 13 percentage points amongst girls, on average across OECD countries. It appears that the amount of time spent on line is a better predictor of girls' feelings than it is of boys' feelings, particularly so when it comes to negative emotions.

#### **HOW IMPORTANT IS LIFE AT SCHOOL FOR STUDENTS' FEELINGS?**

One of the main ideas that informs this report is that life at school is a key aspect of students' lives. School is not only the place where children acquire knowledge but, crucially for this report, it is the place where children make friends, build trusting relationships with teachers and develop an attachment to the school. Unfortunately, school can also be the place where children are bullied, punished and expelled, and where they develop negative reactions towards schooling and the world of education more generally. Aspects of the school climate, such as safety, reputation and the learning environment, are the most important criteria parents consider when choosing a school for their children (see Chapter 10); but is the school climate equally important for students?

This section looks at how different aspects of the school climate examined in the first part of this report are related to students' feelings. It should be borne in mind that events outside of school, such as a country- or regional-level economic downturns and natural disasters, as well as family-related issues, could directly and indirectly shape students' feelings. Amongst the five indices of school climate analysed, the ones that best predicted students' positive feelings across OECD countries were the index of sense of belonging at school, followed by the indices of student co-operation and exposure to bullying (Table III.B1.12.19).

# Figure III.12.5 Predictors of positive feelings

#### Based on students' reports

			associat		Neg	ative ass	sociation	n	Associa	ation is not significant Miss	sing valu	ies									
	A Disciplinary climate <sup>1</sup> B Sense of belonging at school C Student co-operation D Student competition												Predictors of the index of positive feelings								
	E												School climate indices Other indicators								
					otional omic st		t			Partners	Α	В	С	D	E	F	G	Н	I		
			nt is a gi		OTTIC 30	atus				Albania											
	I	Studer	nt has a	n immi	grant b	ackgro	und			Argentina											
										Baku (Azerbaijan)											
		Prec	lictors	of the i	ndex o	f positi I	ve feeli	ings³		Belarus											
		School	climate	indice	es	c	ther in	dicato	rs	Bosnia and Herzegovina											
OECD	A	В	С	D	E	F	G	Н	I	Brazil											
OECD average										Brunei Darussalam											
Austria										B-S-J-Z (China)											
Chile										Bulgaria											
Colombia										Costa Rica											
Czech Republic										Croatia											
Denmark										Dominican Republic											
Estonia										Georgia											
Finland										Hong Kong (China)											
France										Indonesia											
Germany										Jordan											
Greece										Kazakhstan											
Hungary										Kosovo											
Iceland										Macao (China)											
Ireland										Malaysia											
Japan										Malta											
Latvia										Moldova											
Lithuania										Montenegro											
Luxembourg										Panama											
Mexico										Peru											
Netherlands										Philippines											
Poland										Qatar											
Portugal										Romania											
Slovak Republic										Russia											
Slovenia										Saudi Arabia											
Spain										Serbia											
Sweden										Chinese Taipei											
Switzerland										Thailand											
Turkey										Ukraine											
United Kingdom										United Arab Emirates											
United States										Uruguay											
	Α	В	С	D	E	F	G	Н	I												
	33	65	64	31	0	65	8	15	6	Countries/economies with a p			ation								
	32	0	1	34	16	0	40	24	39	Countries/economies with no	tries/economies with no association										

<sup>1.</sup> Higher values indicate a more positive disciplinary climate.

17

26 11

Countries/economies with a negative association

49

**Note**: All predictors were included in the same linear regression model.

Source: OECD, PISA 2018 Database, Table III.B1.12.19.

<sup>2.</sup> The socio-economic status of students is measured by the PISA index of economic, social and cultural status (ESCS).

<sup>3.</sup> The index of positive feelings is based on three items: "happy", "joyful" and "cheerful".

Figure III.12.6 **Predictors of sadness** 

# Based on students' reports

		Positive	associat	ion	Neg	ative ass	ociation		Associa	ntion is not significant Miss	ing valu	ies										
		A Disciplinary climate <sup>1</sup> B Sense of belonging at school  C Student co-operation  D Student competition																				
													Predictors of sadness									
			ire to b								School climate indices						Other indicators					
					otional		t			Partners	A	В	С	D	E	F	G	Н	I			
					omic st	atus <sup>2</sup>				Albania												
			nt is a g nt has a		grant b	ackoroi	ınd			Argentina									$\vdash$			
					9					Baku (Azerbaijan)												
				Predict	ors of	sadnes				Belarus												
										Bosnia and Herzegovina												
		School (	climate	indice		0	ther in	dicato	rs	Brazil												
OECD	A	В	С	D	E	F	G	Н	I	Brunei Darussalam												
OECD average										B-S-J-Z (China)												
Austria										Bulgaria												
Chile										Costa Rica												
Colombia										Croatia												
Czech Republic										Dominican Republic												
Denmark										Georgia												
Estonia										Hong Kong (China)												
Finland										Indonesia												
France										Jordan												
Germany										Kazakhstan												
Greece										Kosovo												
Hungary										Macao (China)												
Iceland										Malaysia												
Ireland										Malta												
Italy										Moldova												
Japan										Montenegro												
Latvia										Morocco												
Lithuania										Panama												
Luxembourg										Peru												
Mexico										Philippines												
Netherlands										Qatar												
Poland										Romania												
Portugal										Russia												
Slovak Republic										Saudi Arabia												
Slovenia										Serbia												
Spain										Chinese Taipei												
Sweden										Thailand												
Switzerland										Ukraine												
Turkey										United Arab Emirates												
United Kingdom										Uruguay												
United States										Viet Nam												
	Α	В	С	D	E	F	G	Н	I													
	<b>A</b> 0	0	1	ע 15	61	0	30	68	4	Countries/economies with a	nnsitive	associ	ation —									
	42	0	54	51	7	21	37	0	45	Countries/economies with no			ation									
	26	68	13	2	0	47	1	0	8	Countries/economies with a												
		-00	L' ,			-77				Countries/ economies with a l	regativ	C 0330C	idtiOII									

<sup>1.</sup> Higher values indicate a more positive disciplinary climate.

**Note**: All predictors were included in the same logit regression model.

Source: OECD, PISA 2018 Database, Table III.B1.12.20.

<sup>2.</sup> The socio-economic status of students is measured by the PISA index of economic, social and cultural status (ESCS).

Racad on students' reports

In this regard, in all 65 countries and economies with available data, students were more likely to express positive feelings when they reported a stronger sense of belonging at school (Figure III.12.5). In all school systems, except in Switzerland, students who perceived their peers to be more co-operative were more likely to express positive feelings. In addition, in a majority of countries and economies, students who were more frequently bullied reported that they were happy, joyful and cheerful less frequently than students who were bullied less frequently.

In about half of the countries and economies that participated in PISA 2018, a positive association was observed between the index of positive feelings and the indices of disciplinary climate and student competition. In every education system, parents' emotional support, as perceived by students, was positively associated with students' positive feelings. The three other aspects considered – students' socio-economic status, gender and immigrant background – did not show a clear pattern of association with students' positive feelings across countries and economies.

The results are similar, though in the opposite direction, when feelings of sadness were examined. In every school system, the index of sense of belonging at school was negatively associated with feeling sad (Figure III.12.6). This was followed by the index of exposure to bullying, which was positively related to feelings of sadness in about 9 out of 10 school systems. On average across countries, feeling sad was only moderately associated with how much students co-operate (negatively) and compete (positively) at school, or with how well students behave in class (negatively) (Table III.B1.12.20). Socio-economically advantaged students said they felt sad more frequently than disadvantaged students, on average across OECD countries and in almost half of school systems. In every school system, girls were more likely than boys to report that they feel sad sometimes or always.

That school life matters for students' lives can also be ascertained from the analysis of students' feelings and their satisfaction with different aspects of their lives. In the nine countries and economies that distributed the well-being questionnaire, students were asked how satisfied ("not at all satisfied", "not satisfied", "satisfied", "totally satisfied") they were with ten aspects of their lives: "health"; "the way [they] look"; "what [they] learn at school"; "the friends [they] have"; "the neighbourhood [they] live in"; "all the things [they] have"; "how [they] use [their] time"; "their relationship with [their] parents or guardians"; "[their] relationship with [their] teachers"; and "[their] life at school". Students' answers were recoded so that students were classified as either not satisfied ("not at all satisfied" or "not satisfied") or satisfied ("satisfied" or "totally satisfied") with these aspects of life.

Figure III.12.7 Satisfaction with different aspects of life and positive feelings

Based on students' reports												
Positive association Negative association Association is not significant Missing values												
	the	Change ey were sa	in the in	dex of po r totally s	sitive fee atisfied v	res:						
	A	В	С	D	E	F	G	Н	I	J		
Average-9												
Bulgaria											A Health B The way they look	
Georgia											c What they learn at school	
Hong Kong (China)											D The friends they have	
Ireland											The neighbourhood they live in  All the things they have	
Mexico											G How they use their time	
Panama											H Their relationship with their parents or guardians	
Serbia											Their relationship with their teachers Their life at school	
Spain											Their life at scriool	
United Arab Emirates												
	Α	В	С	D	E	E	G	Н	T	1	I	
	6	9	3	4	2	3	7	7	0	9	Countries/economies with a positive association	
	3	0	6	5	7	5	2	2	9	0	Countries/economies with no association	
	0	0	0	0	0	1	0	0	0	0	Countries/economies with a negative association	

<sup>1.</sup> The index of positive feelings is based on three items: "happy", "joyful" and "cheerful".

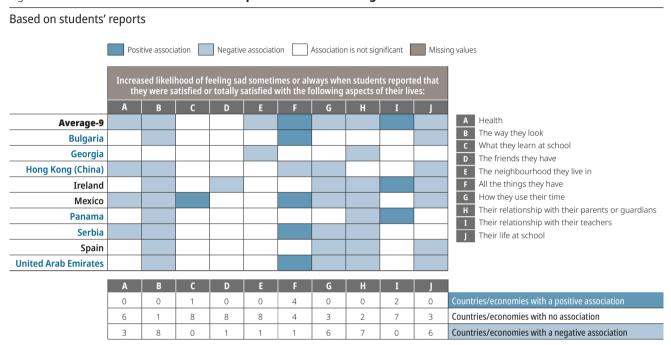
**Notes**: Results based on a linear regression analysis, after accounting for students' gender, immigrant background and socio-economic status. The socio-economic status is measured by the PISA index of economic, social and cultural status (ESCS).

All predictors were included in the same linear regression model.

Source: OECD, PISA 2018 Database, Table III.B1.12.21.

On average across the nine countries that distributed the well-being questionnaire, the best predictors of students' positive feelings were how satisfied they were with the way they look, their relationship with parents or guardians, and their life at school, followed by how they use their time, their health and their friends (Table III.B1.12.21). In this regard, in all nine school systems, students were more likely to say they feel happy, joyful and cheerful when they were satisfied or totally satisfied with the way they look and with their life at school (Figure III.12.7). Results were similar when considering feelings of sadness (Table III.B1.12.22 and Figure III.12.8). The best predictor was how satisfied students were with the way they look, which was negatively related to feeling sad in eight out of the nine school systems, followed by their relationship with parents or guardians and their satisfaction with school life.

Figure III.12.8 Satisfaction with different aspects of life and feelings of sadness



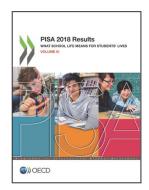
**Notes**: Results based on logit regression analysis, after accounting for students' gender, immigration background and socio-economic status. The socio-economic status is measured by the PISA index of economic, social and cultural status (ESCS).

All predictors were included in the same logit regression model.

Source: OECD, PISA 2018 Database, Table III.B1.12.22.

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