

Student attitudes

Attitudes to school and to certain subjects can shape students' interactions as they progress through their education. For this reason, it was important to collect information about students' attitudes to learning. The PILNA programme took an approach that incorporated students' opinions to school overall and to each of the three cognitive domains covered by PILNA: reading, writing and numeracy.

Students were provided with a list of statements for each (such as "I enjoy going to school") and asked to rate how much they agreed with each statement. Students could respond with 'Agree a lot', 'Agree', 'Disagree', or 'Disagree a lot'. The statements covered:

- whether students enjoyed the activity.
- whether students did the activity in their own time.
- whether students thought it was important to be good at the activity;
- whether students found the activity easy; and
- whether students thought they did well in the activity.

Additionally, students were asked whether they thought it was important to go to school, if they felt safe at school, and if they felt like they belonged at school.

Student attitudes to subjects and school

Most students in the region, both year four and year six, reported agreement with all the attitude statements ('Agree a lot' or 'Agree') about the cognitive domains and school. This shows overall positive attitudes towards reading, writing, mathematics and school.

On average, more than 90% of students in Tonga reported that they enjoyed going to school (year four, 97%; year six, 94%) and felt that it was important to do so (year four, 96%; year six, 94%). Additionally, more than four out of five students reported that they felt safe at school (year four, 92%; year six, 89%) and safe travelling to school (year four, 92%; year six, 88%). Most year four and year six students in Tonga enjoy schooling, value schooling, and feel safe at school and travelling to school.

When it came to literacy, about nine out of ten students reported that they enjoyed reading (year four, 94%; year six, 92%) and writing (year four, 90%; year six, 93%). About four out of five students reported that they found reading easy (year four, 90%; year six, 82%) and found writing easy (year four, 85%; year six, 85%).

For mathematics, at the year four level, 87% of students agreed that they found mathematics easy and 88% agreed that they did well in mathematics. At the year six level, 82% of students agreed that they found mathematics easy and 81% agreed that they did well in mathematics.

The full breakdown of these results can be seen in Table STT1.7

Table STT1.7

Percentage of students agreeing with statements reading, writing, mathematics and school

Statement	Year 4	Year 6
Reading		
Enjoy reading	 94% (0.6)	 92% (0.7)
Read in my own time	 87% (1.1)	 86% (1.5)
Think it is important to be a good reader	 92% (0.8)	 90% (1.0)
Find reading easy	 90% (1.2)	 82% (2.2)
Do well in reading	 89% (0.9)	 82% (1.9)
Writing		
Enjoy writing	 90% (0.9)	 93% (0.7)
Do writing in my own time	 82% (1.3)	 84% (1.8)
Think it is important to be a good writer	 91% (0.9)	 89% (0.9)
Find writing easy	 85% (1.5)	 85% (1.9)
Do well in writing	 84% (1.4)	 85% (1.9)
Mathematics		
Enjoy doing mathematics	 94% (0.7)	 89% (1.0)
Do mathematics in my own time	 86% (1.3)	 80% (1.5)
Think it is important to be good at mathematics	 93% (0.9)	 91% (0.9)
Find mathematics easy	 87% (1.1)	 82% (1.9)
Do well in mathematics	 88% (1.0)	 81% (1.5)
School		
Enjoy going to school	 97% (0.6)	 94% (0.9)
Think it is important to go to school	 96% (0.7)	 94% (0.7)
Think it is important to do well in school	 95% (0.9)	 93% (0.8)
Find school easy	 90% (1.2)	 89% (1.2)
Feel like I belong at this school	 93% (0.9)	 90% (1.2)
Feel safe at the school	 92% (1.1)	 89% (1.3)
Feel safe travelling to school	 92% (0.9)	 88% (1.5)

Percentage of students agreeing with statements about reading, writing, mathematics, and school, Tonga, PILNA 2021

() Standard errors appear in parentheses.

Student attitudes and student performance

Using the results above, regional scales for student attitudes to school, reading, writing, and numeracy were established. Higher scores on the scales indicated more positive attitudes to these areas. The scales were then compared to student performance in reading and numeracy. It should be noted that comparisons were not made to writing performance because the proficiency scale for writing performance has not yet been established.

The PILNA scales for attitudes to school, reading, writing, and numeracy all have an average of 200 and a standard deviation of 40. Most scores on these scales are expected to be within 40 points of 200 (160–240). The attitudes to reading, writing, and numeracy scales were all formed from analysis of the answers to five questions students were asked in each area. The attitude to school scale was formed from analysis of the seven answers to questions students were asked in this area.

Comparisons to student performance were made between the average attitudes of students who were at or above expected levels of performance and students who were below these levels of performance.

The analysis showed that, across both year levels, students who performed at or above the expected proficiency level in reading and numeracy scored higher on the attitude scales for reading, numeracy and school. This means that they tended to have positive attitudes towards reading, mathematics and school.

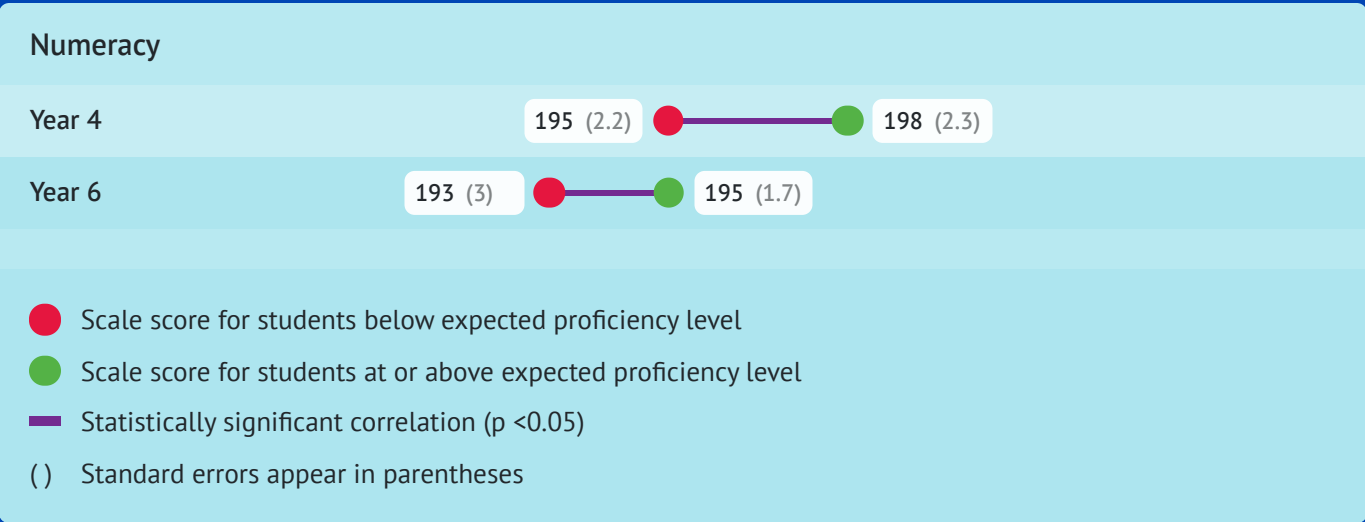
For attitudes to mathematics, year four and year six students who performed at or above the expected level in numeracy had higher attitude scores on average (year four, 198; year six, 195) than students in the same year groups who did not meet expected numeracy performance (year four, 195; year six, 193).

These results are presented in Figure STF1.3.

Figure STF1.3: PILNA Scale: Student attitudes to mathematics

Average scores of students on attitude to mathematics scale by year level and proficiency, Tonga, PILNA 2021

The PILNA scales for attitudes to school, reading, writing, and numeracy all have an average of 200 and a standard deviation of 40. Most scores on these scales are expected to be within 40 points of 200 (160–240). The attitudes to reading, writing, and numeracy scales were all formed from analysis of the answers to five questions students were asked in each area. The attitude to school scale was formed from analysis of the seven answers to questions students were asked in this area.



For attitudes to reading, year four and year six students who performed at or above the expected level in reading had higher attitude scores on average (year four, 213; year six, 204) than students in the same year groups who did not meet the expected level (year four, 205; year six, 192). These comparisons are shown in Figure STF1.3.

Figure STF1.4: PILNA Scale: Student attitudes to reading

Average scores of students on attitude to reading scale by year level and proficiency, Tonga, PILNA 2021

The PILNA scales for attitudes to school, reading, writing, and numeracy all have an average of 200 and a standard deviation of 40. Most scores on these scales are expected to be within 40 points of 200 (160–240). The attitudes to reading, writing, and numeracy scales were all formed from analysis of the answers to five questions students were asked in each area. The attitude to school scale was formed from analysis of the seven answers to questions students were asked in this area.

Reading



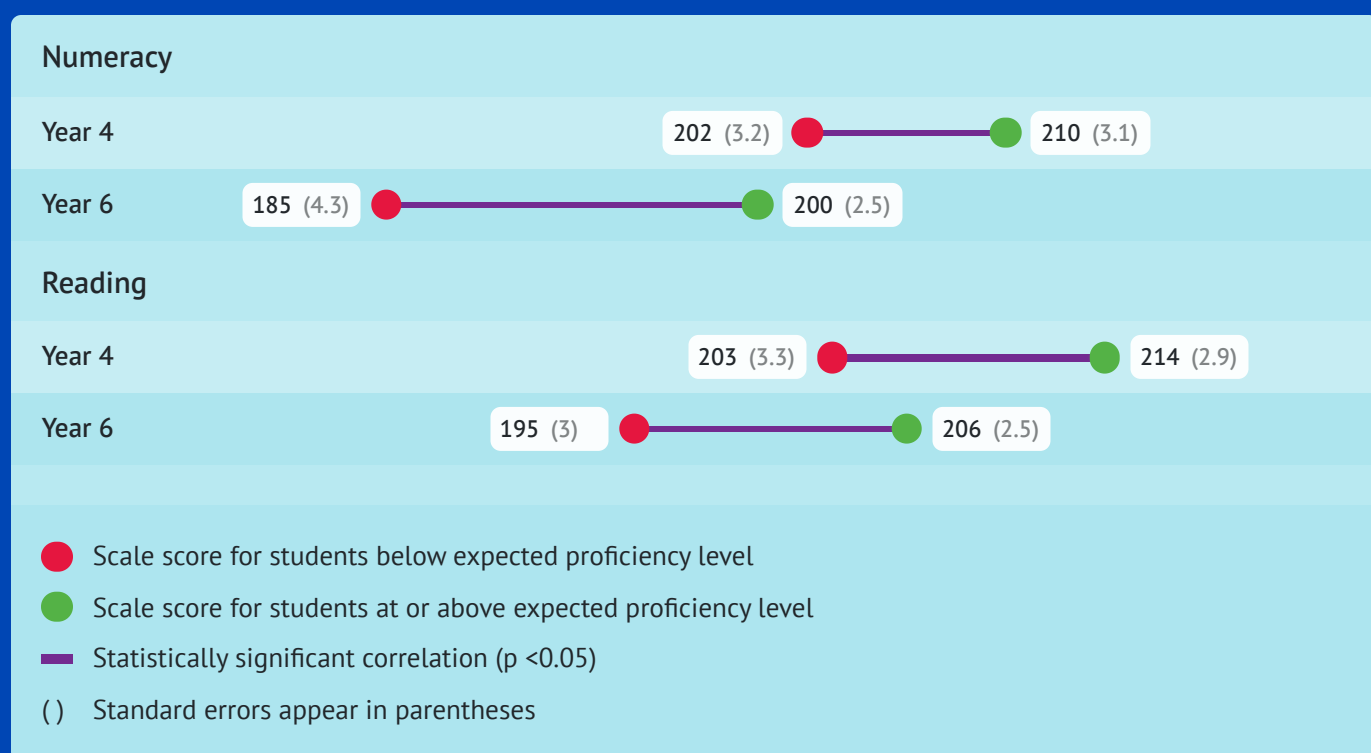
- Scale score for students below expected proficiency level
- Scale score for students at or above expected proficiency level
- Statistically significant correlation ($p < 0.05$)
- () Standard errors appear in parentheses

Comparisons were also made between student performance and attitudes to school in general. Across both year four and year six levels, students who were performing at or above the expected level had higher attitude scores to school in general. This was true for students performing at expected levels in numeracy and for students performing at expected levels in reading. Figure STF1.5 shows these comparisons.

Figure STF1.5: PILNA Scale: Student attitudes to schooling

Average scores of students on attitude to school scale by year level and proficiency, Tonga, PILNA 2021

The PILNA scales for attitudes to school, reading, writing, and numeracy all have an average of 200 and a standard deviation of 40. Most scores on these scales are expected to be within 40 points of 200 (160–240). The attitudes to reading, writing, and numeracy scales were all formed from analysis of the answers to five questions students were asked in each area. The attitude to school scale was formed from analysis of the seven answers to questions students were asked in this area.



What does this mean

The findings from this PILNA cycle show that a high proportion of students in Tonga in both year levels are enjoying reading, writing, and mathematics, and identify them as being important.

When comparing student attitude scores to performance, one thing was clear; students who met the expected performance in a subject area had higher attitude scores for the subject and for school in general. This suggests an association between student attitudes to a subject and their performance in that subject. Importantly, this association is not clear and causality cannot be determined. For example, do positive attitudes to reading make someone more likely to be a better reader or is it those who are already good at reading who develop positive attitudes to reading because it's easier for them?