

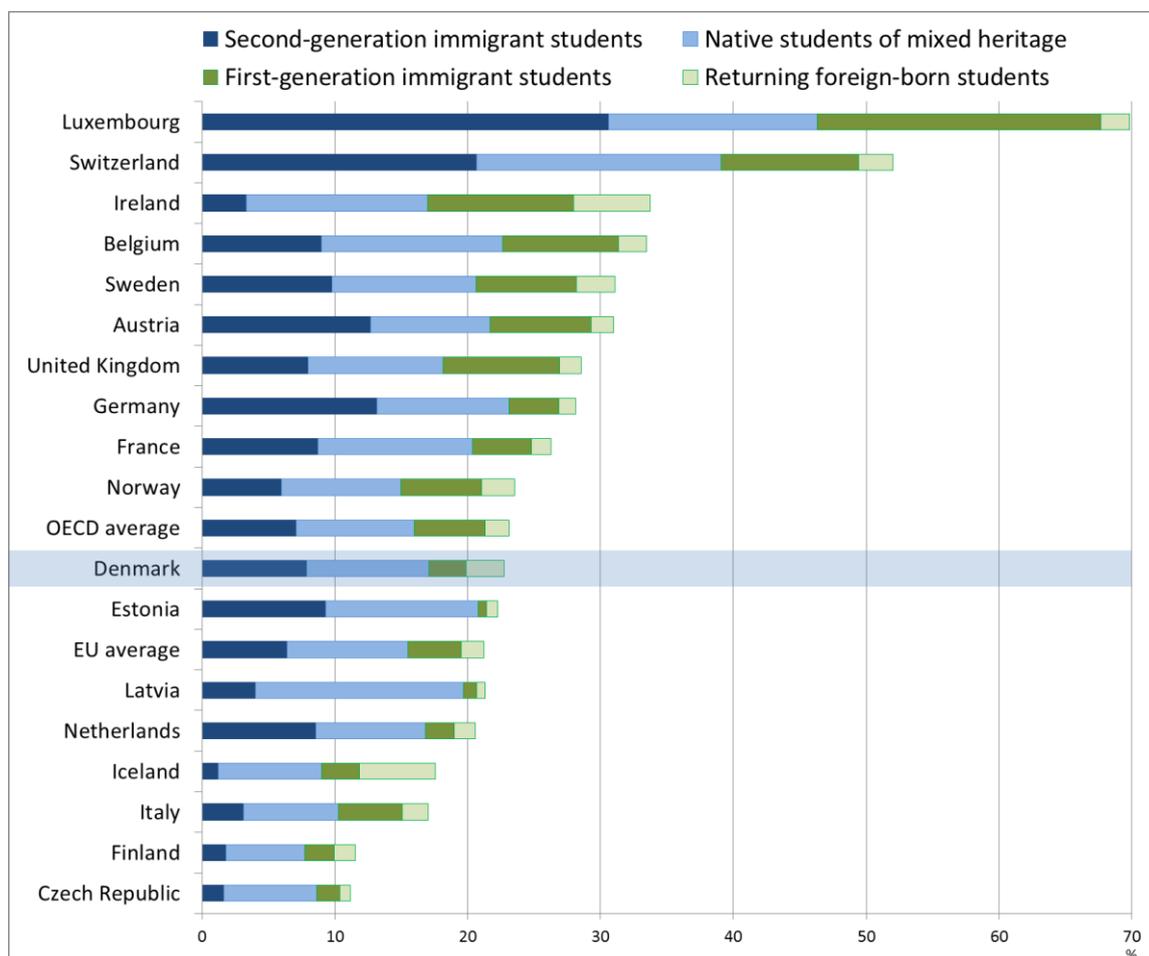
## **The resilience of students with an immigrant background: Factors that shape well-being**

### **Denmark**

In PISA 2015, almost one in four students in Denmark had an immigrant background, a share that was similar to the OECD average level and to the share in Norway. Denmark had a greater share of students with an immigrant background compared to Finland (which had about 22%) and a smaller one than Sweden (where about one in three students had an immigrant background). Compared to PISA 2003, the percentage of students with an immigrant background increased by eight percentage points (six percentage points on average across OECD countries). The share grew by only six percentage points in Finland, while it rose by nine percentage points in Finland and Norway.

In PISA 2015, 9% of students were native-born with one foreign-born and one native-born parent (native students of mixed heritage); 8% were native-born from two foreign-born parents (second-generation immigrant students<sup>1</sup>); 3% were foreign-born from foreign-born parents (first-generation immigrant students<sup>2</sup>); and 3% were foreign-born with at least one native-born parent (returning foreign-born students<sup>3</sup>). One fifth of first-generation immigrant students had arrived to Denmark at or after the age of 12 (about one third on average across OECD countries).

The shares of the total student population that belonged to each immigrant group differed widely across Nordic countries. The share of first-generation immigrant students was significantly larger in Norway (6%) and Sweden (8%) compared to Denmark, while Finland had a similar level. In Finland, only 2% of students were second-generation immigrants; in Norway 6% belonged to this group; and in Sweden as many as 10% did. The share of native students of mixed heritage in Norway was the same as the one in Denmark; in Finland the share was smaller (6%) and in Sweden it was greater (11%). In other Nordic countries, the share of first-generation immigrant students who had arrived at or after the age of 12 was at least nine percentage points greater than the share in Denmark.

**Figure 1 Percentage of students with an immigrant background, by group**

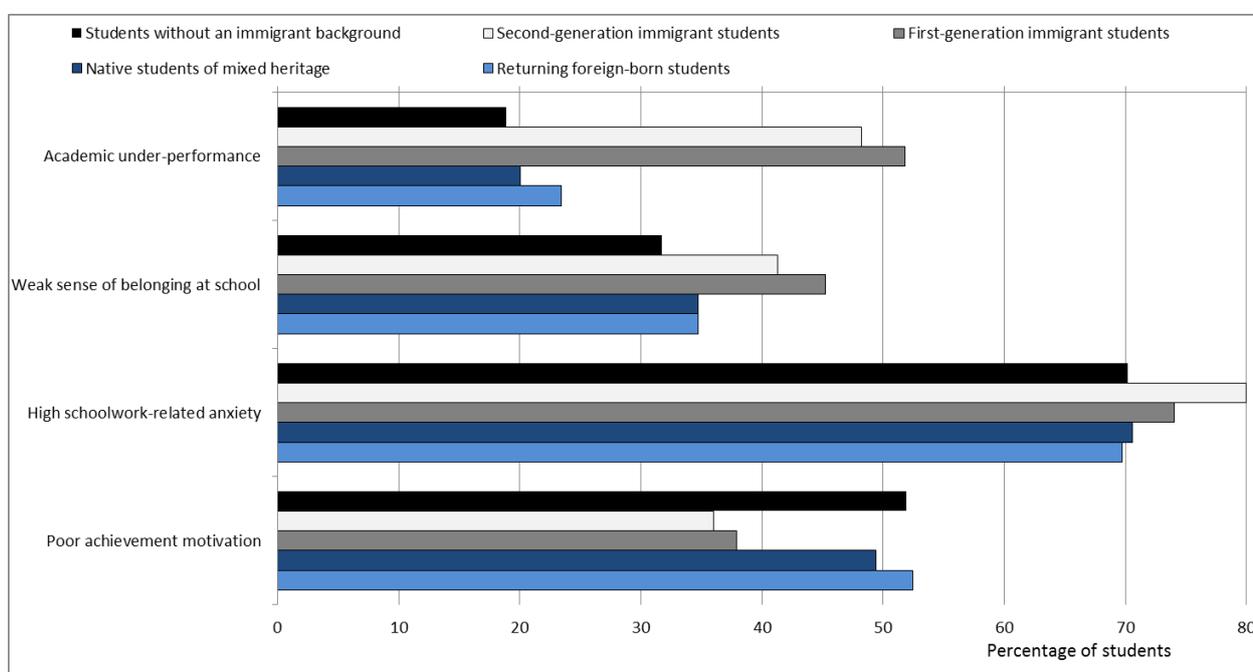
Source: [Figure 3.3](#).

In PISA 2015, 81% of native-born students of native-born parents attained baseline levels of academic proficiency (at least proficiency level 2 in the three PISA core domains – math, reading and science). By contrast, only 51% of immigrant students (either first- or second-generation) did so, a statistically significant difference of 30 percentage points. This is almost the double of the OECD average difference of 18 percentage points. The difference was similar in Finland and Sweden, while in Norway, immigrant students were only 20 percentage points less likely than native students to attain baseline levels of academic proficiency.

Unlike most OECD countries, in Denmark, first- and second-generation immigrant students had a similar academic performance<sup>4</sup>. There was no statistically significant difference in the percentage of first- and second-generation immigrant students who attained baseline levels of academic proficiency. On average across OECD countries, second-generation immigrant students were about 11 percentage points more likely to attain such levels. In Finland and Sweden, second-generation immigrant students were 19 percentage points more likely to attain baseline levels of academic proficiency compared to first-generation, and in Norway they were 10 percentage points more likely to do so. In Denmark, immigrant students with at least one native-born parent (returning foreign-born students and native students of mixed heritage) were as likely to attain baseline levels of academic proficiency as native students. The same is true in other Nordic countries, but averages mask some differences. In Norway, returning foreign-born

students were 12 points less likely than native students to attain baseline levels of academic proficiency, and in Finland they were 13 percentage points less likely.

**Figure 2 Academic and well-being outcomes, by immigrant background**



Source: [Figure 1.1](#).

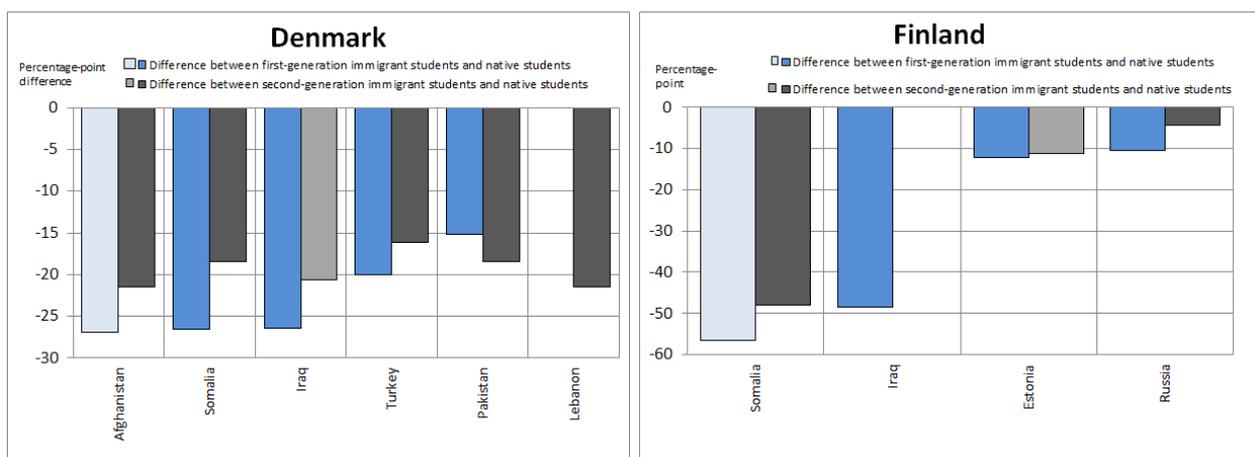
In PISA 2015, 68% of native students in Denmark reported a sense of belonging at school<sup>5</sup>, while only 58% of immigrant students did so (a gap of 10 percentage points). In Sweden the gap was similar (nine percentage points), while in Finland and Norway, immigrant and native students expressed similar levels of sense of belonging. In Denmark, the gap in the percentage of students reporting a sense of belonging at school between native and first-generation immigrant students was 14 percentage points (9 percentage points on average across OECD countries). The gap is statistically similar for second-generation immigrant students. By contrast, in other Nordic countries, second-generation immigrant students are at least nine percentage points more likely than first-generation immigrant students to report a sense of belonging at school. In Denmark, first-generation immigrant students who arrived at or after the age of 12 were 19 percentage points less likely to report a sense of belonging at school compared to native students. The late arrival gap was even larger in Norway and Sweden, where they were, respectively, 21 and 33 percentage points less likely than native students to report a sense of belonging at school. Immigrant students in Denmark with at least one native-born parent (returning foreign-born students and native students of mixed heritage) were as likely to report a sense of belonging at school as native students. The same was true in all other Nordic countries, except for Sweden, where they were seven percentage points less likely to report a sense of belonging at school.

In Denmark, second-generation immigrant students were 10 percentage points less likely to report low levels of schoolwork-related anxiety<sup>6</sup> compared to native students. All other groups of students with an immigrant background were as likely as native students to report so. In other Nordic countries, both first- and second-generation immigrant students expressed greater levels of schoolwork-related anxiety compared to native students. In Finland, first- and second-generation immigrant students were, respectively, 17 and 16 percentage points less likely than native students to report low levels of schoolwork-related anxiety.

On average across OECD countries, immigrant students (first- and second-generation) showed greater motivation to achieve than native students. In Denmark, immigrant students were 15 percentage points more likely than native students to report high achievement motivation<sup>7</sup>, which is almost three times as large as the gap at the OECD average level (6 percentage points). In Finland and Sweden, the immigrant-native gaps in achievement motivation were similar as in Denmark, while in Finland, immigrant students were 20 percentage points more likely than native students to express a high motivation to achieve.

Denmark is one of the few countries in PISA that gathers more specific information on the country of origin of foreign-born students or students with foreign-born parents. This allows analysing the performance of specific migrant groups separately. In Denmark, first-generation immigrant students from Afghanistan, Somalia and Iraq have a similar likelihood of attaining baseline academic proficiency, after accounting for their socio-economic status. Turkish and Pakistani first-generation immigrant students have a significantly lower likelihood of attaining such levels. The academic performance of second-generation immigrant students varies more across countries of origin. The children of two Turkish immigrants are about 5 percentage points less likely to attain baseline academic proficiency than the children of two Afghan or two Lebanese immigrants, after accounting for their socio-economic status.

**Figure 3 Attaining baseline academic proficiency, by country of origin**



Source: [Figure 4.1](#).

Compared to other education systems, the Danish one tends to be more effective at promoting the academic resilience of immigrant students from various countries. The children of Somali and those of Iraqi immigrants are over 15 percentage points more likely to be academically resilient in Denmark compared to Finland, after accounting for socio-economic status. First-generation immigrant students from Korea are 10 percentage points more likely to be academically resilient in Denmark than in the United Kingdom, after accounting for socio-economic status.

The same does not always translate to social resilience. Compared to the Finnish system, the Danish one is more effective at promoting the sense of belonging of first-generation immigrant students than of second-generation immigrants. After accounting for socio-economic status, first-generation immigrant students from Somalia are as likely to be socially resilient in Finland and in Denmark; however, the children of two Somali immigrants are almost twenty percent more likely to be socially resilient if they were born in Finland compared to those who were born in Denmark. While first-generation immigrant students from Iraq are 15 percentage points more likely to report a sense of belonging at school in Denmark compared to

Finland, the children of Iraqi immigrants born in Finland are 25 percentage points more likely to so report compared to those born in Denmark.

### **Factors that shape the well-being of students with an immigrant background**

#### *Linguistic barriers*

In PISA 2015, on average across OECD countries, about 2% of students without an immigrant background did not speak the language of PISA assessment at home. Conversely, about 28% of students with an immigrant background and 50% of immigrant students were non-native-speakers. In Denmark, among foreign-born students, few spoke the language of the PISA assessment at home: 68% of first-generation immigrant students and 82% of foreign-born students who arrived at or after the age of 12 to Denmark were non-native-speakers (both about 8 percentage points above the OECD average). In other Nordic countries, it was more common for students with an immigrant background to speak a language at home that was different from the one in which they sat the PISA assessment. In Finland and Sweden, the share of non-native-speakers among first-generation immigrant students was about 80% and over 9 out of 10 late arrivals were non-native-speakers.

Language barriers to academic resilience are strong in Denmark and mostly affect native-born students with an immigrant background. For both first-generation immigrant students and returning foreign-born students, there was no statistically significant difference in the percentage of academically resilient among native- and non-native-speakers. By contrast, among second-generation immigrant students, non-native speakers were 11 percentage points less likely to be academically resilient compared to native-speakers. Linguistic barriers are even greater for native students of mixed heritage: while native-speakers within this group were as likely as native students to attain baseline levels of academic proficiency, non-native speakers were 24 percentage points less likely to attain such levels. In other Nordic countries, linguistic barriers to academic achievement were weak for most groups of students with an immigrant background. However, also in Sweden, native students of mixed heritage experienced large language related disadvantages.

Linguistic barriers to social well-being are stronger for foreign-born students than for native-born students with an immigrant background. Among returning foreign-born students, native-speakers were as likely as native students to report a sense of belonging at school, while non-native-speakers were over 45 percentage points less likely to report so (in Finland, they were 22 percentage points less likely). The impact of speaking a different language on the likelihood of being socially resilient was also large for first-generation immigrant students but effects are not statistically significant because of small sample sizes. In Norway and Sweden, native-speaking first-generation immigrant students were as likely as native students to report a sense of belonging at school, while non-native speakers among them were at least 10 percentage points less likely to so report.

#### *Socio-economic barriers*

In Denmark, immigrant students face remarkable socio-economic disadvantages compared to native students and such gaps are larger than those observed on average across OECD countries. In 2015, the difference in the PISA index of social, economic and cultural status (ESCS) between native and immigrant students in Denmark was above half a standard deviation (about one third of a standard deviation at the OECD average level). The gap in Denmark was the largest among Nordic countries.

Second-generation immigrant students in Denmark face the largest disadvantages, while in other Nordic countries, first- and second-generation immigrant students were equally disadvantaged. In Denmark, compared to the parents of native students, the parents of first-generation immigrant students completed

0.7 year less of education and the parents of second-generation immigrant students completed 1.8 years less (0.4 and 0.6 less on average across OECD countries). Compared to the parents of native students, the parents of first-generation immigrant students had a score on the occupational prestige scale<sup>8</sup> that is 8 points lower, which is just slightly above the OECD average of 7 points. By contrast, the parents of second-generation immigrant parents had an 11-point lower score on the occupational prestige scale, which is well above the OECD average of 7 points. Unlike most countries, in Denmark, second-generation immigrant students are not economically advantaged compared to first-generation immigrant students, as shown by their scores on the PISA index of household possessions. While the score of first-generation immigrant students on the household possession index was 0.27 points below the one of native students, second-generation immigrant students scored 0.41 points below native students.

As was the case in most countries, immigrant student in Denmark with at least one native-born parent (returning foreign-born students and native students of mixed heritage) were socio-economically advantaged compared to native students. Their ESCS score was 0.16 point of a standard deviation higher than the one of native students (slightly above the average difference across OECD countries of 0.13 point). In Finland and Norway, they had reported a similar socio-economic advantage, while in Sweden, they were not socio-economically advantaged compared to native students.

Immigrant-native differences in socio-economic background explain about one fifth of the observed gaps in academic performance, which is in line with the OECD average. After accounting for students' socio-economic status, the immigrant-native gap in the percentage of students attaining baseline academic proficiency between native and immigrant students dropped from 30 to 24 percentage points (a six-percentage point decrease). In Sweden and Norway, the gap dropped by a similar percentage, but before accounting for socio-economic status the gap was smaller than in Denmark. This implies that in Sweden and Norway, socio-economic status explained a larger share of immigrant-native gaps in academic performance. By contrast, in Finland, it explained a smaller share than in Denmark.

In Denmark, the immigrant-native gap in academic performance was largest in the middle tercile of the ESCS distribution, where the effects of the socio-economic background on academic performance are the weakest. The same was true in Sweden, while in Norway the gap was greater in the top tercile, and in Norway it was larger in the bottom one. In Denmark, even more socio-economically advantaged immigrant students are highly disadvantaged compared to native students: immigrant students in the top two terciles of the ESCS distribution were 14 percentage points less likely to attain baseline academic proficiency compared to native students in the bottom tercile of the ESCS distribution. In other Nordic countries, socio-economically advantaged students were as likely to attain baseline academic proficiency as disadvantaged native students.

The positive effects of a more advantaged socio-economic background on academic performance were stronger for native than immigrant students. A 1-point increase in the ESCS index led to a 11 percentage-point increase in the likelihood of attaining baseline academic proficiency among native students but only a six percentage-point increase among immigrant students. This implies that immigrant-native gaps in academic performance tend to widen when more socio-economically advantaged students are compared. In other Nordic countries, the effect of a 1-point increase in the ESCS index on academic performance was identical for immigrant and native students.

Immigrant-native differences in socio-economic background explain about one third of observed gaps in sense of belonging (about three times as much as on average across OECD countries). After accounting for students' socio-economic status, the immigrant-native gap in the percentage of students reporting a sense of belonging at school between native and immigrant students dropped from 10 to seven percentage points (a three percentage point decrease). In Sweden, the only other Nordic country where immigrant students are less likely than native students to report a sense of belonging at school, socio-economic differences

account for a smaller share of the difference in gap. Differences in socio-economic background also explain about one third of observed gaps in schoolwork-related anxiety (about one seventh on average across OECD countries). In Sweden and Norway they explain between one tenth and one fifth of the gap, while in Finland, the large immigrant-native gap in schoolwork-related anxiety is not related to socio-economic differences.

In Denmark, native-immigrant gaps in sense of belonging are greater when more socio-economically advantaged students are compared. A 1-point increase in the ESCS index led to a six percentage-point increase in the likelihood of reporting a sense of belonging at school among native students, while it had no significant effect on the likelihood of immigrant students reporting so. In Norway, it led to a seven percentage-point increase for native students, while it had no effect for immigrant students. In Finland and Sweden, it had the same effect for immigrant and native students.

#### *School policies and the school environment*

In Denmark, disciplinary climate was similar in the schools attended by the average immigrant and native students. However, truancy was relatively more spread in schools attended by the average immigrant student – a 3 percentage-point difference compared to the schools attended by the average native student. The same was true in Sweden, while in Finland and Norway truancy levels were the same in schools attended by the average native and immigrant student.

Differently from most countries, in Denmark, immigrant students were as likely as native students to be victims of frequent bullying. However, foreign-born students (both first-generation immigrant students and returning foreign-born student) were about five percentage points more likely to report being frequently bullied compared to native students. In Denmark, bullied students are about seven percentage points less likely to attain baseline academic proficiency and 20 percentage points less likely to report a sense of belonging at school. In all other Nordic countries, all students with an immigrant background were as likely as native students to report being victims of frequent bullying.

In Denmark, compared to native students, immigrant students were 10 percentage points and first-generation immigrant students as much as 14 percentage points more likely to report being victims of frequent unfair treatment from their teachers. In Sweden, immigrant students were 11 percentage points more likely than native students to report being frequently treated unfairly by their teachers, while in Finland and Norway they were equally likely. In Denmark, unfairly treated students were 10 percentage points less likely to attain baseline academic proficiency and 13 percentage points less likely to report a sense of belonging at school. Immigrant students were six percentage points more likely than native students to report receiving frequent feedback from their science teachers, after accounting for their science performance (18 percentage points more likely in Finland, 13 percentage points more likely in Norway and nine percentage points more likely in Sweden). However, this had no statistically significant effects on outcomes.

Compared to native students, immigrant students in Denmark were four percentage points more likely to have repeated at least one grade, after accounting for their academic performance and socio-economic status (six percentage points more likely in Finland and eight percentage points more likely in Sweden). First-generation immigrant students were 10 percentage points more likely and returning foreign-born students were eight percentage points more likely to do so. Students who repeated at least one grade were 18 percentage points less likely to report a sense of belonging at school.

#### **The expectations for the future of students with an immigrant background**

In several countries and economies in PISA, students with an immigrant background, and especially immigrant students, were more likely to expect to complete tertiary education. In Denmark, immigrant students were as likely as native students to expect to do so. However, after accounting for the socio-economic status and academic performance of students, immigrant students were 13 percentage points more likely to so expect (nine percentage points on average across OECD countries, seven percentage points in Finland, 22 percentage points in Norway and 28 percentage points in Sweden). The difference was particularly large for second-generation immigrant students.

Immigrant students who hold high educational expectations often lack the academic skills to fulfil them. Students who do not reach baseline levels of proficiency in the core PISA subjects – science, reading and mathematics – are unlikely to be able to realise ambitious academic goals and unlock their full potential. In Denmark, immigrant students were eight percentage points less likely than native students to expect to complete tertiary education and attain baseline levels of academic proficiency (four percentage points less likely on average across OECD countries). In Finland and Sweden there was no statistically significant difference in the likelihood between the two groups, while in Norway, immigrant students were five percentage points more likely than native students to expect to complete tertiary education and attain baseline levels of academic proficiency.

Immigrant students in Denmark were 21 percentage points more likely to hold ambitious career expectations (expect to become managers, professionals or associate professionals and technicians) compared to native students, after accounting for their socio-economic status and academic performance (about the double of the average difference across OECD countries, 25 percentage points in Finland, 18 percentage points in Norway and 24 percentage points in Sweden). However, they were 14 percentage points less likely to hold ambitious but realistic career expectations and simultaneously attain baseline levels of academic proficiency (10 percentage points on average across OECD countries, 16 percentage points in Finland, nine percentage points in Norway and 14 percentage points in Sweden).

**Notes**

1. Native-born students with one foreign-born parent living in single-parent households are also considered first-generation immigrant students.
2. Foreign-born students with one foreign-born parent living in single-parent households are also considered first-generation immigrant students.
3. Foreign-born students with one native-born parent living in single-parent households are also considered returning foreign-born students.
4. Students with an immigrant background who reach proficiency level 2 or above in the PISA reading, mathematics and science assessment are classified as being academically resilient.
5. Students who report a sense of belonging at school are students who reported that they “agree” or “strongly agree” with the statement “I feel like I belong at school” and “disagree” or “strongly disagree” with the statement “I feel like an outsider at school”.
6. Students who report being satisfied with life are students who reported a life satisfaction of 7 or above on a scale from 1 to 10.
7. Students who report poor motivation to achieve are students who “disagree” or “strongly disagree” with the statement “I want to be the best, whatever I do”.
8. Occupational prestige is measured in PISA using the International Socio-Economic Index of occupational status (ISEI). Higher values on the scale indicate occupations with higher prestige.

**Contacts:**

**Andreas Schleicher:** [Andreas.Schleicher@OECD.org](mailto:Andreas.Schleicher@OECD.org)

**Francesca Borgonovi:** [Francesca.Borgonovi@OECD.org](mailto:Francesca.Borgonovi@OECD.org)

**Alessandro Ferrara:** [Alessandro.Ferrara@OECD.org](mailto:Alessandro.Ferrara@OECD.org)

**For more information:**

<http://www.oecd.org/education/school/strength-through-diversity.htm>

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