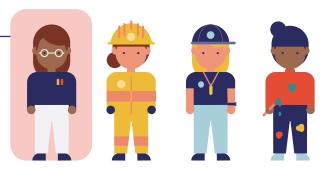


FIVE-YEAR-OLDS SPEAK ABOUT THEIR FUTURES

GENDER NORMS ARE EVIDENT IN WHAT MANY CHILDREN SAY AT FIVE ABOUT WHAT THEY WANT TO BE OR DO WHEN THEY GROW UP.

Children's career aspirations are linked to their motivation and persistence at school, their subject choices, and even to their later occupations.¹

However, these early aspirations can be constrained by traditional expectations and stereotypes, meaning children limit their horizons and ambitions. 1 in 4
of the 30 most popular
roles selected by girls
are in traditionally
female-dominated
occupations.



More than

1 in 2

of the top 30 roles specified by boys are in traditionally maledominated fields.



Findings based on

±4000five-year-olds in England and Estonia.

The International Early Learning and Child Well-being Study (IELS) is an in-depth analysis of five-year-olds' cognitive and social-emotional development. The study also collects a wealth of contextual information from parents and educators, and provides children the opportunity to give their own perspectives on their lives.



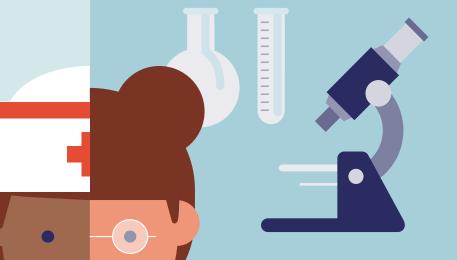
For example, Croll (2008).

Five-year-old girls aspire to careers that involve caring for others, whereas boys tend towards traditionally maledominated roles

Girls and boys are equally likely to choose STEM-related roles

Girls and boys from advantaged backgrounds were more likely to want to be a scientist or an engineer than children from disadvantaged backgrounds.

Roles like veterinarian, doctor and nurse were more popular with girls, while more boys preferred transportation and construction roles.



Family background relates more strongly to the choices made by boys

Roles such as doctor and pilot were popular among boys from advantaged backgrounds, while boys from disadvantaged backgrounds more commonly wanted to be in the armed forces or to drive lorries or trucks.

Children's early skill development is related to their perceptions of their futures

> Children who aspired to be creative or performing artists had high average socialemotional skills.





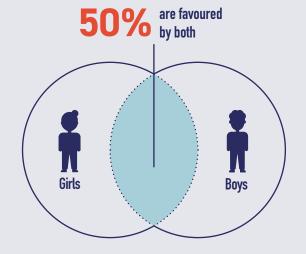
TABLE 1: THE TOP 30 ASPIRATIONS OF FIVE-YEAR-OLD GIRLS AND BOYS²



The Top 30 aspirations for girls and boys included in Table 1 above reflect over 80% of valid responses. Children's responses were coded, where possible, with the International Standard Classification of Occupations 2008 (ISCO-08; International Labour Office, 2008).

ALTHOUGH GIRLS AND BOYS HAVE SOME SIMILAR ASPIRATIONS, CLEAR DIFFERENCES EXIST

Half of the top 30 roles specified by children are favoured by both girls and boys, including the wish to be a police officer, teacher, doctor and a cook/chef.





AND GENDER STEREOTYPES ARE MOST EVIDENT AMONG BOYS

Studies with older cohorts of children³ have previously shown that children's career aspirations are strongly shaped by gender-specific ideas about certain jobs. This study indicates that these gendered ideas are already entrenched by the age of five years.

Girls are often more concrete than boys on the job or occupation they want to do when they grow up. On average, the types of roles stated by girls require higher qualifications and are better paid than the roles favoured by boys.

Girls are more likely to nominate jobs that are maledominated (like police officer and fire-fighter) than boys are to aspire to roles that are less traditional for men. Nonetheless, the most popular aspiration among five-yearold girls is to be a teacher and, internationally, 68 percent of teachers are women.⁴

Girls and boys are equally likely to say that they want to be parents when they grow up.

officer Doctor Teacher Chef

I want to be a teacher on Monday. Tuesday. Wednesday and Thursday, and a hairdresser on Friday. Saturday and Sunday.*



Examples include: the Drawing the Future study undertaken with 7- and 11-year-olds (Chambers, Kashefpakdel, Rehill, J. & Percy, 2018), analyses of Millennium Cohort Study data on aspirations collected at age 7 (Flouri, Tsivrikos, Akhtar & Midouhas, 2015), findings from a large-scale survey of the aspirations of 12- and 13-year-old children in England (Archer, DeWitt & Wong, 2014) and findings from the Programme of International Student Assessment (PISA) on the career aspirations of 15-year-old students (Mann, Denis).

⁴ International Labour Organisation (ILO, 2020).

Quotes from children involved in the IELS.

The most frequent career choice for five-yearold boys is to be a police officer, followed by athlete or sportsperson and then fire fighter. Protective services professions, which include police officers and fire fighters, are 84 percent male.⁵

The fourth most common aspiration of five-year-old boys is to work as a builder or in a construction-related field. Men account for 97 percent of employment in construction and related trades.⁶



Boys are more likely than girls to favour being:

- farmers
- train, bus, tram, truck or lorry drivers
- inventors
- · car mechanics
- · astronauts
- · in the armed forces



I want to be able to drive an electric Volvo.

Girls are also much more likely than boys to want to be a:

- veterinarian
- dentist
- hairdresser
- beautician
- dancer
- sports coach
- · royal
- ambulance worker
- nurse



Girls are more likely than boys to nominate roles that involve an element of protecting, helping or caring for others.

These include female-dominated professions such as teacher and nurse, occupations that are largely gender-balanced (e.g. doctor, veterinarian), as well as protective services professions that continue to be male-dominated. The latter include police officer, fire fighter and ambulance worker.



I would like to be a nurse and help to make people better.

⁵ International Labour Organisation (ILO, 2020).

⁶ International Labour Organisation (ILO, 2020).

EVEN WHEN GENERAL ASPIRATIONS OVERLAP THERE ARE STEREOTYPICAL DIFFERENCES



The most common sports mentioned by boys were football and car racing.

AN ATHLETE OR SPORTSPERSON IS:

2ND most popular for boys and



Girls who want to be an athlete or sportsperson tend to cite gymnastics or horse riding as their chosen sport.

11TH most popular for girls



CHILDREN ASPIRE TO ROLES THAT ARE FAMILIAR TO THEM

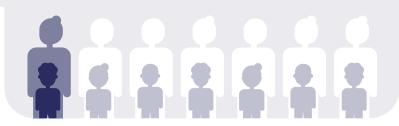
Most of the future roles children aspire to are likely known to them from their family or community, or from books, television and films. Children identify jobs undertaken by adults they have contact with, such as in their school or early childhood centre, and in the day-to-day activities they undertake with their parents. They also draw inspiration from books and media entertainment.

I want to be the director of the Kindergarten.
Then I can write in the computer.



15% of children aspire to roles that are the same as or very similar to their parents' occupations. Other family members can also be influential, with children mentioning their grandparents, siblings, aunts and uncles in their responses.





Of the children who state that they want to do exactly the same job as a parent (3 percent) (e.g. "I'd like to be a postman like daddy"), nine out of ten girls want to do the same job as their mother and a similar proportion of boys mention their father.

The **14TH** most popular future aspiration stated by boys is working with or being with their father

SOCIO-ECONOMIC STATUS DOES NOT HAVE A LARGE INFLUENCE ON CHILDREN'S PREFERENCES

Consistent with other studies on children's career aspirations, IELS did not find strong associations between socio-economic status (SES) and five-year-olds' future career intentions. As noted in these previous studies, the aspirations of children from advantaged and disadvantaged backgrounds are more striking for their similarities than their differences.

TABLE 2A: CAREER CHOICES OF GIRLS IN THE TOP AND LOWEST SES QUARTILES

Top SES quartile	GIRLS Bottom SES quartile	
Teacher	Teacher	1
Veterinarian	Doctor	2
Doctor	Veterinarian	3
Parent	Hairdresser	4
Dancer	Dancer	5
Police officer	Shop sales assistant	6
Artist	Parent	7
Hairdresser	Royalty	8
Musician	Police officer	9
Scientist or engineer	Fire fighter	10

7 OUT OF THE 10 most popular career aspirations are the same for girls in the top and bottom SES quartiles.

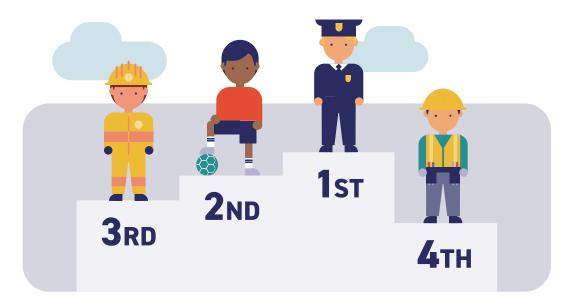
Artist, musician and scientist or engineer appear for high-SES girls and not low-SES girls, while shop sales assistant, fire fighter and royalty appeared in the top 10 of girls in the lowest SES quartile and not of those in the top quartile.



TABLE 2B: CAREER CHOICES OF BOYS IN THE TOP AND LOWEST SES QUARTILES

RAI	NK	BOYS			
	Top SES quartile		Bottom SES quartile		
	1	Police officer	Police officer		
	2	Athlete/sportsperson	Athlete/sportsperson		
	3	Fire fighter	Fire fighter		
	4	Builder	Builder		
	5	Pilot	Teacher		
	6	Teacher	Parent		
	7	Doctor	Fictional character		
	8	Parent	Truck/lorry driver		
	9	Cook/chef	Armed forces		
	10	Scientist or engineer	Bigger/older		

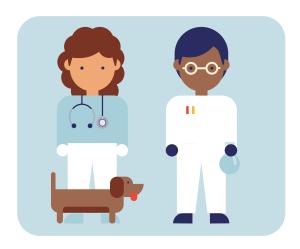
There is also commonality across the career aspirations of boys from high- and low-SES backgrounds. The top four aspirations are in fact the same. Aspirations in the top 10 for high-SES boys and not for low-SES boys include doctor, pilot, chef and scientist or engineer. Armed forces, being a fictional character such as a superhero and the wish to be bigger/older are among the top 10 choices of lower SES boys and not of higher SES boys.



Boys with an immigrant background,⁷ however, tended to aspire to roles that are more qualified and higher paid than other boys, while the aspirations of girls with and without an immigrant background are similar.

An immigrant background is defined as having at least one parent born outside of the country in which the child participated in IELS.

EARLY SKILL DEVELOPMENT IS RELATED TO CHILDREN'S VIEWS OF THEIR FUTURES



Some aspirations are associated with particularly high early literacy and social-emotional skills.

Aspiring to be a scientist or engineer was associated with particularly high emergent literacy scores, while the role associated with the highest average social-emotional skills score was to be a pet groomer or animal care worker.

Children with high emergent literacy are more likely to want to be scientists, engineers, artists or pilots than other children, including children with high social-emotional skills. Children with high social-emotional skills are more likely to want to be teachers or musicians than other children.

TABLE 3: TOP 10 ASPIRATIONS LINKED TO THE HIGHEST AVERAGE EMERGENT LITERACY AND SOCIAL-EMOTIONAL SKILLS

EMERGENT LITERACY	RANK	SOCIAL- EMOTIONAL SKILLS
Scientist or engineer	1 (Pet groomer/ animal care worker
Artist	2	Dancer
Veterinarian	3	Pilot
Dancer	4	Scientist or engineer
Pilot	5	Musician
Hairdresser	6	Teacher
Builder	7	Hairdresser
Nurse	8	Fire-fighter
Shop sales assistant	9	Shop sales assistant
Pet groomer/ animal care worker	10	Royalty

IELS findings show that gendered patterns in how children see their futures are clearly visible at the age of five, and are particularly pronounced for boys. The International Early Learning and Well-Being Study will continue to ask young children how they see their futures, to track whether the gendered nature of young children's aspirations changes over time.



Emergent literacy refers to children's oral language skills, such as listening comprehension, vocabulary knowledge and phonological awareness. It does not include any assessment of children's reading or writing abilities. Emergent literacy skills are directly assessed in IELS.

Social-emotional skills refer to children's levels of trust, pro-social and non-disruptive behaviour. These skills are reported by children's parents and teachers.

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FIND OUT MORE:

To learn more about gender differences among five-year-olds:

- Read the summary report on the International Early Learning and Wellbeing Study (IELS): http://www. oecd.org/education/school/early-learning-and-child-well-being-study/early-learning-and-child-well-being-3990407f-en.htm
- Watch the video presentation by Andreas Schleicher, Director of Education and Skills at the OECD, on the key findings of the IELS study, including key gender differences: https://www.youtube.com/watch?v=_g4p7-FYRYk&feature=emb_title
- Read the full international report: Early Learning and Child Well-being A study of five-year-olds in England, Estonia and the United States: http://www.oecd.org/education/school/early-learning-and-child-well-being-study/early-learning-and-child-well-being-3990407f-en. htm
- Check out the OECD Early Learning and Child Well-being website at: www.oecd.org/education/school/earlylearning-and-child-well-being-study
- Learn more about the OECD's wider work on child wellbeing via: http://www.oecd.org/social/family/child-wellbeing
- Send questions and comments to the OECD Early Learning and Child Well-being team: earlylearning@oecd.org

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