



International Early Learning and Child Well-being Study

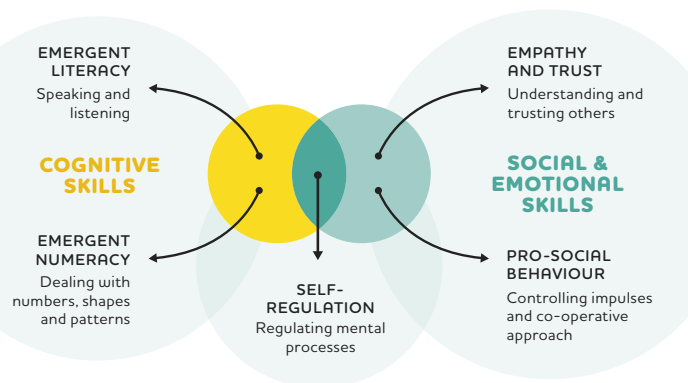


## What is the IELS study?

The aim of the IELS study is to collect detailed information on **early learning and key competences of 5-year-old children** in order to better support their development and well-being. The study focuses on early childhood education and the learning environment that influences it at home and in the kindergarten.

## What aspects of early learning are included?

The study takes a holistic approach to analysing the development of 5-year-old children including several areas of early learning: **cognitive skills** (emergent literacy and numeracy), **self-regulation skills** (inhibition, working memory, mental flexibility) and **social and emotional skills** such as empathy (emotion identification and attribution). Children's prosocial and non-disruptive behaviours and trust are analysed based on information gathered from parents and teachers.



## Why IELS matters?

Studies have shown that the first five years of children's lives are very important for their development. During these years, children develop cognitive, socio-emotional, and self-regulatory skills, laying the foundation for **children's general well-being** for the rest of their lives.

## What is meant by participation in the study?

Children solved **playful tasks on a tablet**. The assessment tasks included many stories and pictures – main characters being **Mia and Tom**. All instructions were given to the children in audio form and children were guided by trained study administrators. Parents and teachers filled out questionnaires about each child's background and skills.



## What are the main characteristics of the three participating countries?

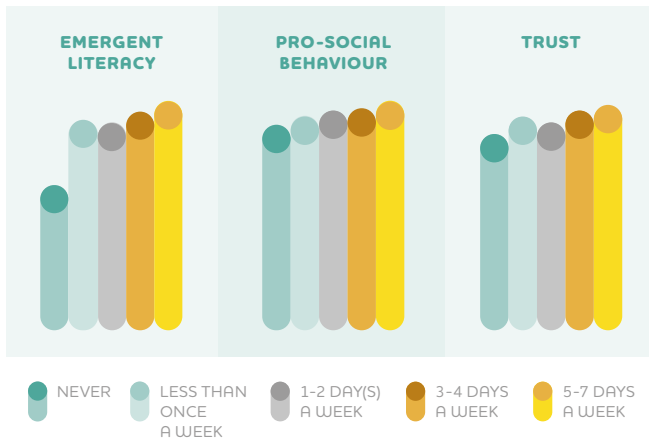
- The countries participating in the IELS study differ in their demographic, economic and educational characteristics.
- In 2017, there were 54,000 children in Estonia aged between 0-5 years, compared to 3 million children in England and 24 million children in the United States (US), in the same age group.
- The population of Estonia is relatively homogeneous, with only 4% of children with migrant background participating in the survey. The corresponding figure was 25% in the US and 18% in England.
- Estonia and England have higher proportion of children living with two parents than the US.
- The per capita GDP is lowest in Estonia compared to England and the US, but Estonia achieves greater income equality.
- Child poverty rates in Estonia (10%) are less than half the rates in the US (21%) and a little lower than in the United Kingdom (UK) (12%).
- Estonia provides 87 weeks of paid parental leave and England provides 39 weeks, while in the US there is no statutory entitlement to paid parental leave.
- Estonia and England have an integrated early childhood education and care (ECEC) system, which is part of the education system and focuses on supporting children's holistic development. In the US, primary education is separated from the education system and is the responsibility of the Department of Health.
- The participation rate of 4-year-olds in ECEC in Estonia (92%) is higher than the OECD average (88%) and US rate (66%), but is lower than in England (100%).
- Estonia is one of the highest performing countries in the OECD's Programme for International Student Assessment (PISA). The UK sits above the OECD mean. The US mostly performed at a similar level to the UK, but at a significantly lower level in mathematics.
- In this study, 54% of Estonian mothers of 5-year-old children had at least a bachelor's degree, compared to 40% of mothers in England and 39% of mothers in the US.

# Findings of the first large-scale early learning study

IELS is a new OECD study that aims to provide reliable data that enables countries to analyse and improve children's early learning experiences. In 2018, a large-scale main study was carried out in Estonia, England and the United States. Approximately 600 schools and kindergartens, 7000 children aged five, their parents and teachers participated in the main study. More than 2100 children from 200 kindergartens, about 1800 parents and 700 teachers participated in Estonia. In addition, 200 kindergarten coordinators were involved, and same number of educational staff participated as study administrators. A national report will be published in June 2020. Additional information can be found on Innove's webpage.

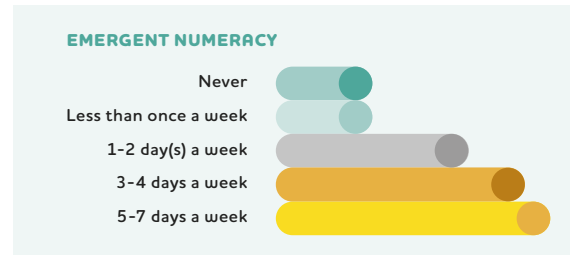
## What were the results of children in Estonia?

- Children in Estonia had constantly strong self-regulation and social and emotional skills.
- Estonian children's emergent numeracy and literacy skills were similar to those of children in other countries.
- Children who were read to often at home, scored higher in emergent literacy and social and emotional skills.



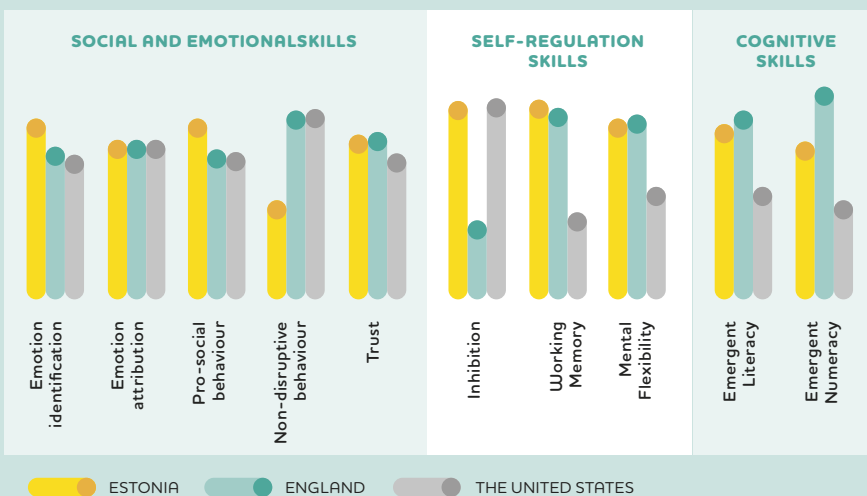
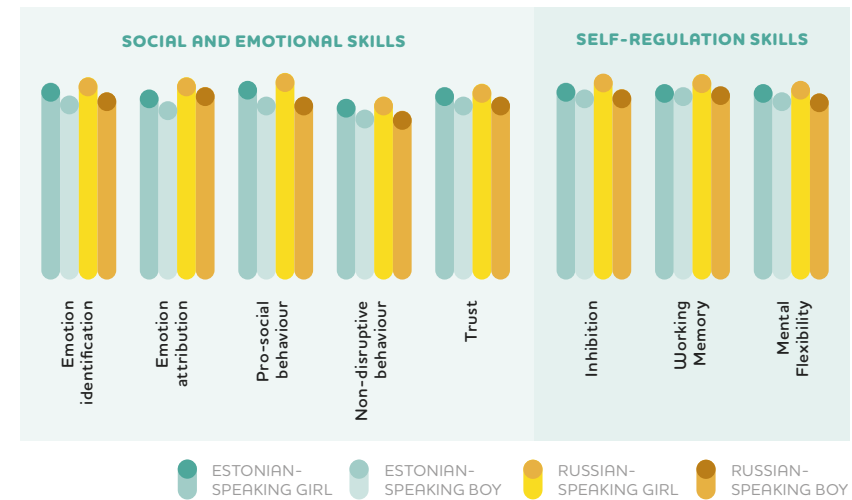
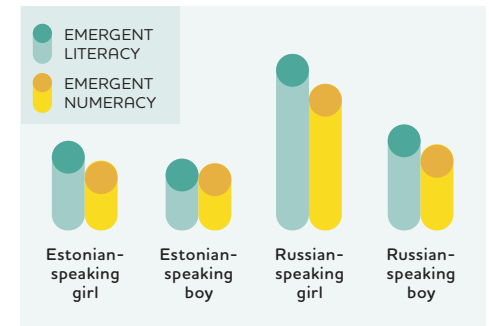
- In Estonia, girls' emergent literacy, social and emotional skills and self-regulation skills were on average better than boys' skills.

- Children who played games related to numbers, counting and measuring at home more often scored higher in emergent numeracy.



- Russian-speaking girls had higher results in most areas in the study.
- In social and emotional skills, girls achieved higher results in all areas compared to boys. Results of Russian-speaking children were on average better than Estonian-speaking children's results.
- The results of girls with Estonian and Russian as the language of instruction were similar in emotion identification and mental flexibility and higher than the results of boys.
- Estonian- and Russian-speaking boys had generally similar average results in self-regulation and social and emotional skills, but the results on Russian-speaking boys were slightly better in emotion identification and attribution.

- On average, Russian-speaking children had better emergent literacy and numeracy skills than Estonian-speaking children.
- The emergent literacy and numeracy skills of boys and girls with Estonian as language of instruction were similar.



## What were the results of the three participating countries?

- Children in Estonia had the highest results in self-regulation and social and emotional skills. » **Strong start for educational path.**
- Children in England had higher scores in emergent literacy and numeracy than children in the other two countries.
- Children from low socio-economic backgrounds generally had lower cognitive and social and emotional skills. » **This relationship was weak for children in Estonia.**
- Children's social emotional skills were more closely related to cognitive development than their socio-economic background.

- Girls had higher scores than boys in emergent literacy, self-regulation and social and emotional skills, with no significant differences in emergent numeracy.
- Teachers rated girls as having stronger skills than boys across all areas in the study.
- Teachers' ratings of children's skills were generally more in line with children's actual outcomes than parents' ratings.
- Children in Estonia used digital devices the least, while children in the US used them the most.
- The use of electronic devices was not associated with overall poorer outcomes for children.