

What are the skills of parents of school-age children?

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Agenda

1. Background
2. Data and Methods
3. Results
4. Conclusion

Background

Remote instruction during pandemic

- Starting in early 2020, the COVID-19 pandemic has forced a lot of educational institutions to close in-person instruction.
- At its peak, more than 188 countries, around 91% of enrolled students worldwide, implemented school closures (OECD, 2020).
 - School-aged children ages 6 to 17 had to participate in remote education
 - » In turn, many parents had to provide additional help to their children with both navigating the online environment and completing and understanding their schoolwork.

Parents' education and skills of children

- Previous research has shown a strong relationship between parents' outcomes, such as education level, and the outcomes and skills of their children (OECD, 2013).
 - For example, Ford and Umbricht (2016) found that numeracy scores of first-generation college graduates were lower than the scores of the college graduates who had a college-educated parent
- With greater parental involvement in their children's education during remote learning, children with low-skilled parents may be at higher risk for learning loss if parents do not have the necessary skills to support them.

Research Questions

- To understand issues related to family literacy and potential impacts of parental involvement in remote learning and to examine the skills and characteristics of parents of school-age children, the following research questions are investigated:
 - What are the literacy, numeracy, and digital problem solving skills of parents across countries of interest?
 - What are the demographic, education, and employment characteristics of parents across countries of interest?

Data and Methods

Data and Methods

- Program for the International Assessment of Adult Competencies (PIAAC) data from a selected group of European and North American countries
 - Finland, France, the United Kingdom (2012) and,
 - the United States (2012/2014)
- Three domains of literacy, numeracy, and digital problem solving
 - France did not participate in the digital problem solving assessment
- Analysis conducted in Stata using the repest macro to look at distribution of skills and characteristics

Population of interest

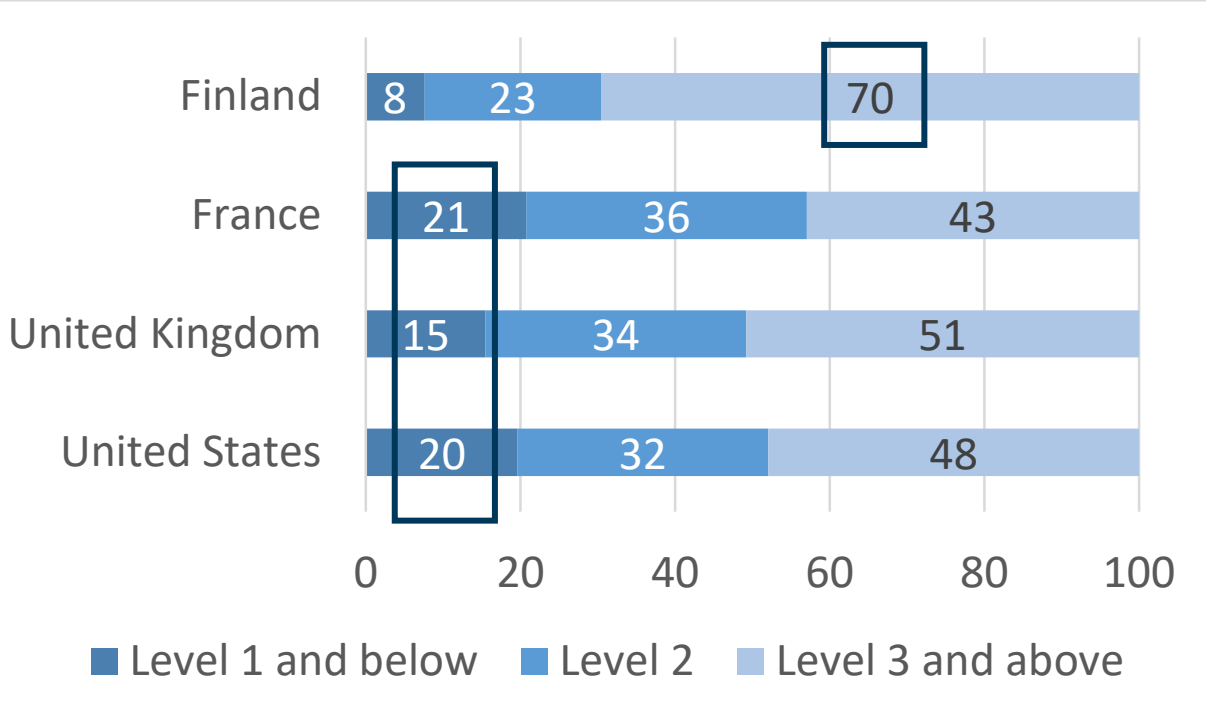
- Parents of school-age children (referred to as “parents”)
 - adults ages 16-to-65 who have at least one child in the 6-to-17-year-old age range.
- Approximately 25% to 30% of the adult population in countries studied here are parents of school-age children

Results

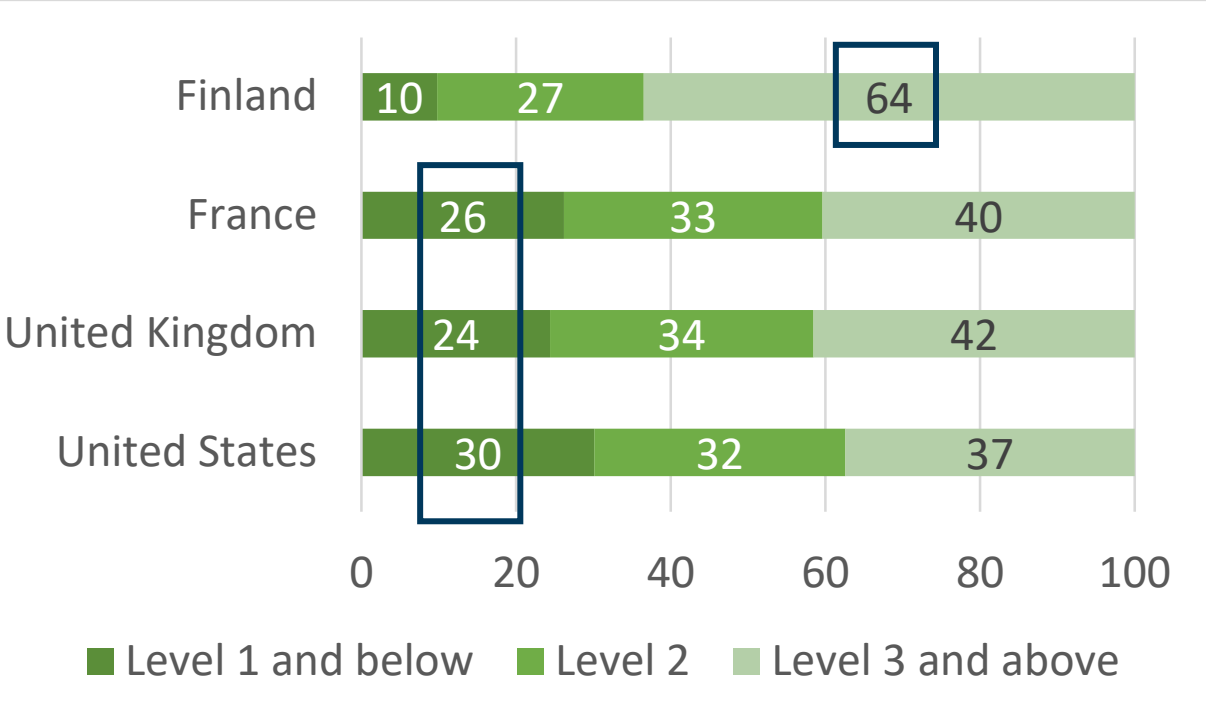
Skill levels of parents

Literacy and Numeracy (% of parents)

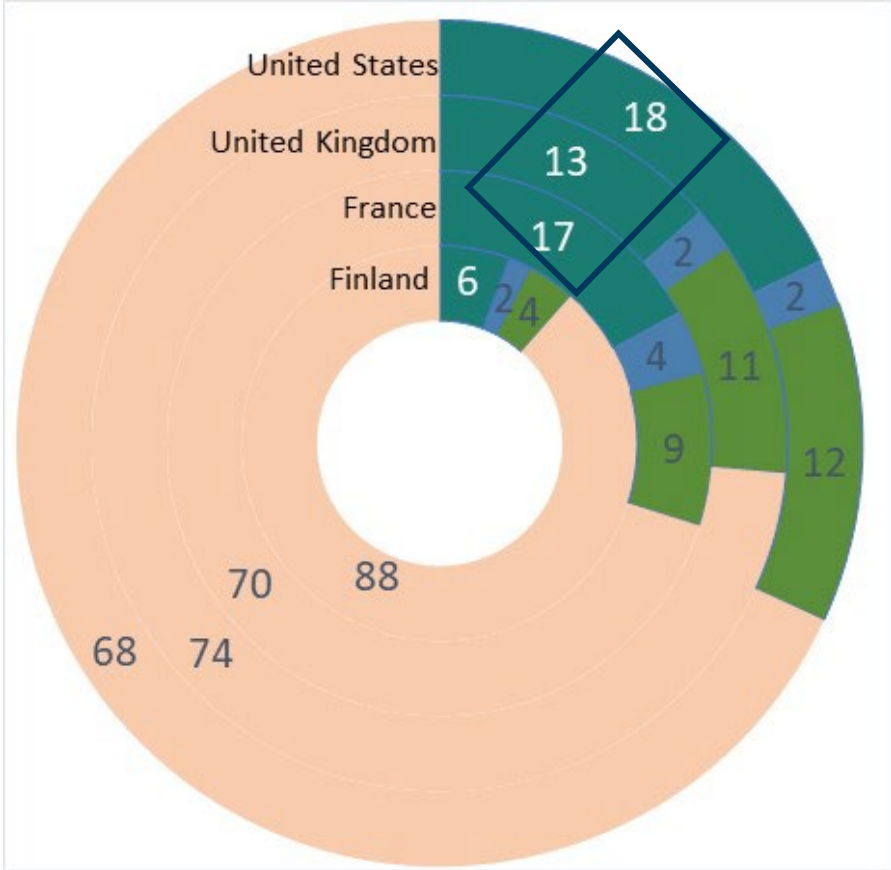
Literacy



Numeracy



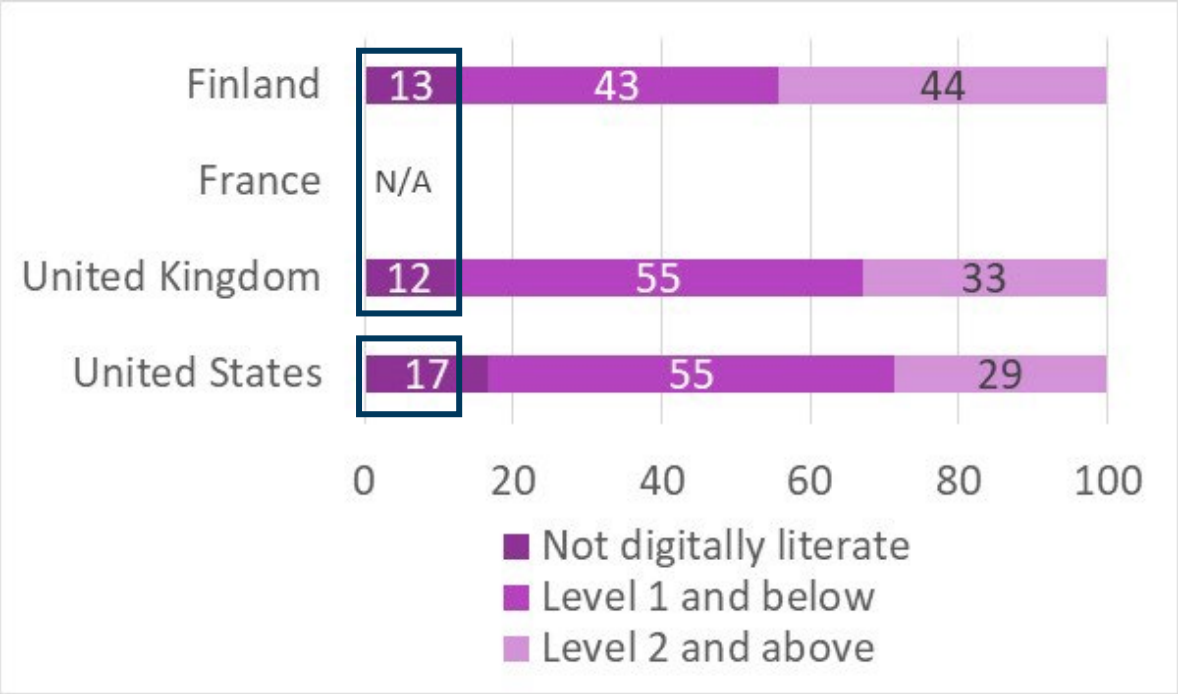
Low-skilled in Literacy and Numeracy (% of parents)



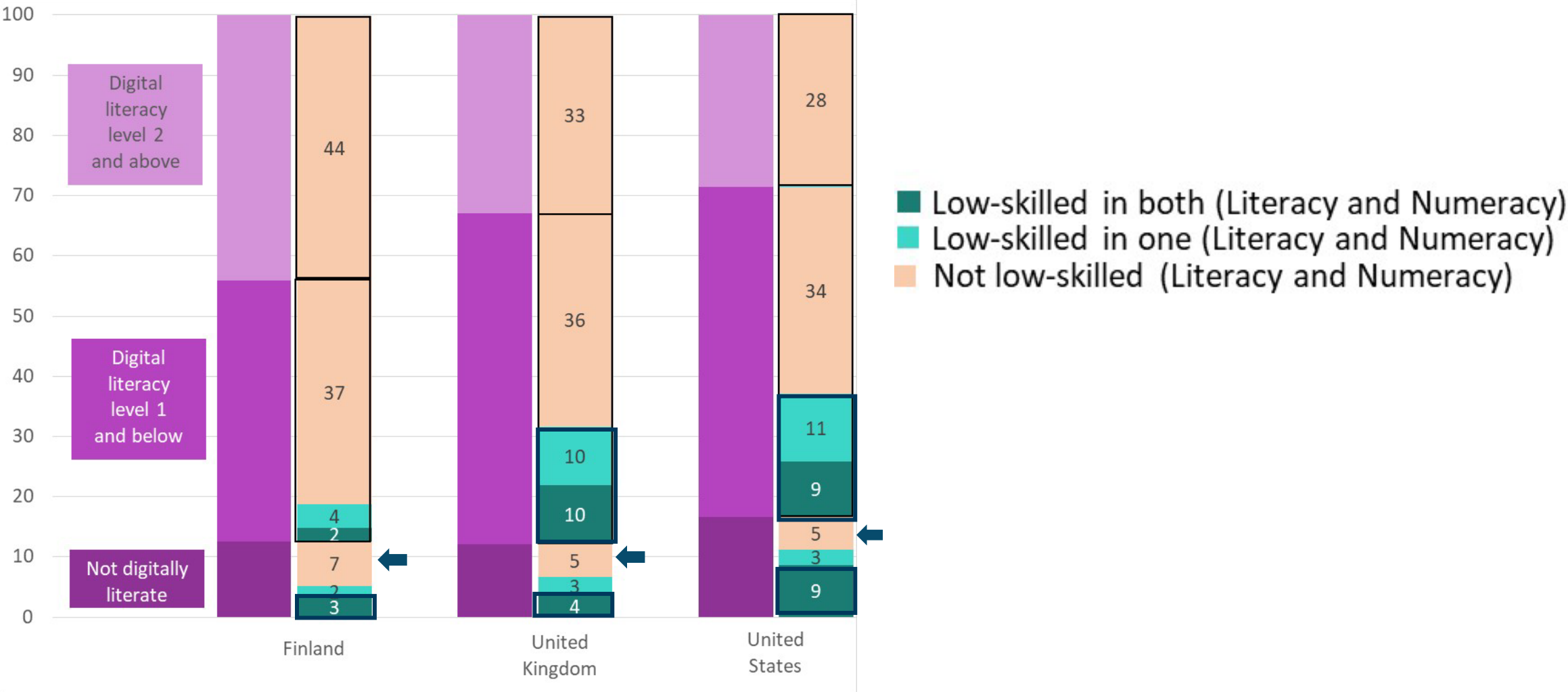
- Low-skilled in both (Literacy and Numeracy)
- Low-skilled in Literacy only
- Low-skilled in Numeracy only
- Not low-skilled (Literacy and Numeracy)

Digital problem solving (% of parents)

Digital Problem Solving



Digital problem solving – Low-skilled in Literacy and Numeracy (% of parents)

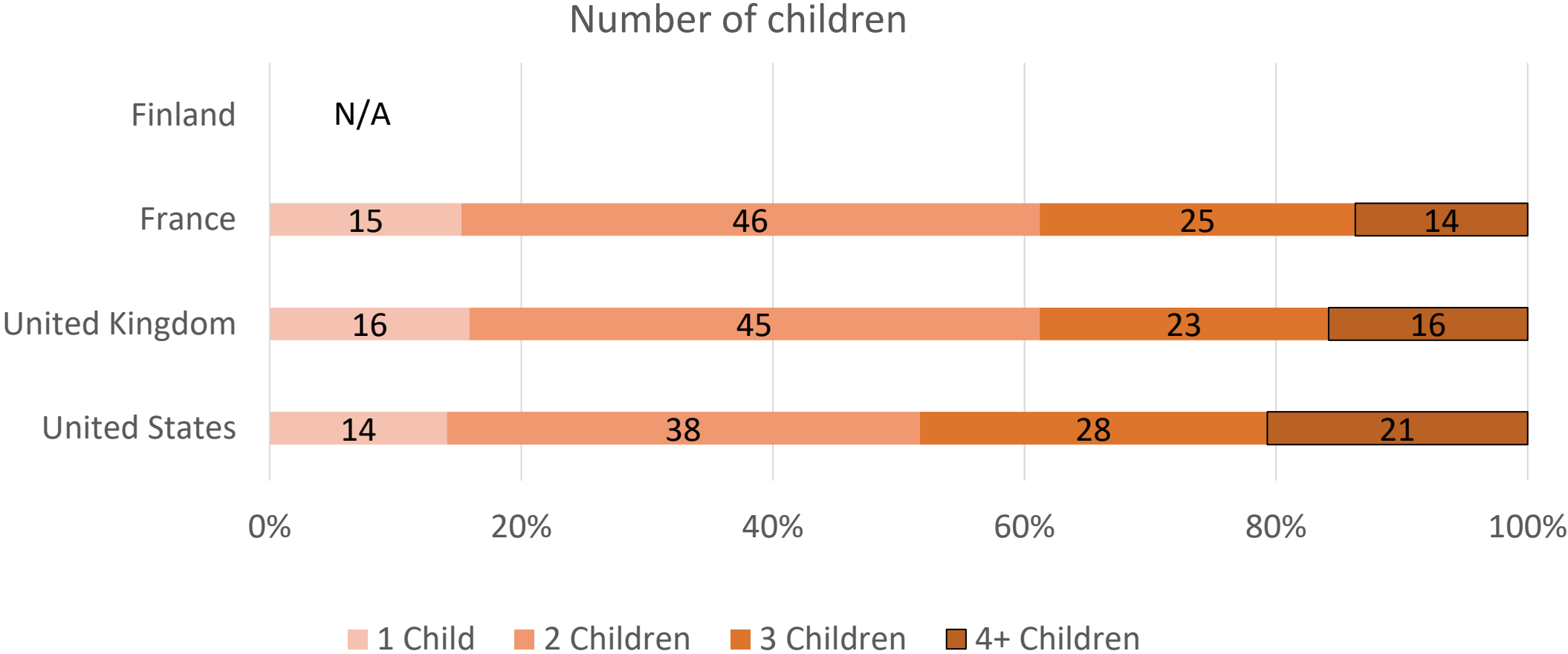


Demographics and Family Structure

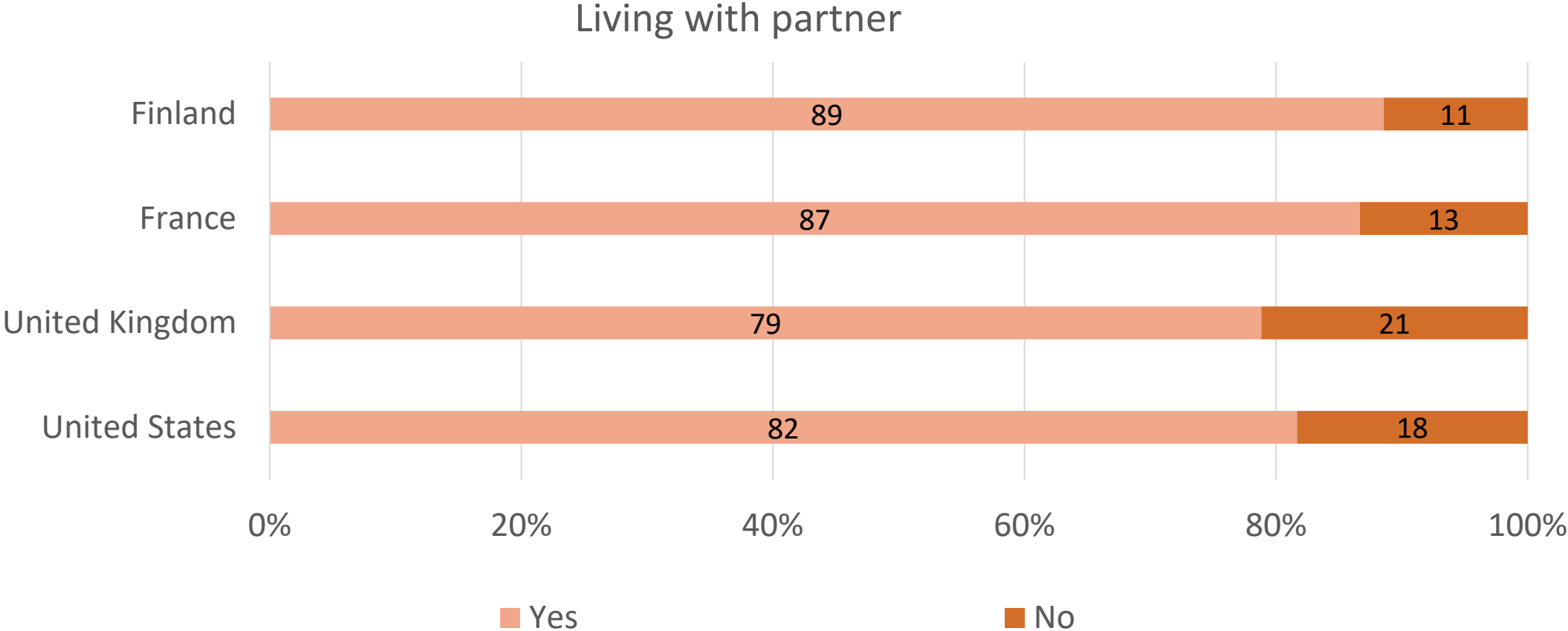
Gender and Age

- A somewhat higher percentage of parents were female compared to male in France, the United Kingdom, and the United States (~53% female and ~47% male).
- The majority of parents across these countries were middle-aged adults, ages 35-44 (42% to 48% across countries) or 45-54 (30% to 36% across countries).

Number of children

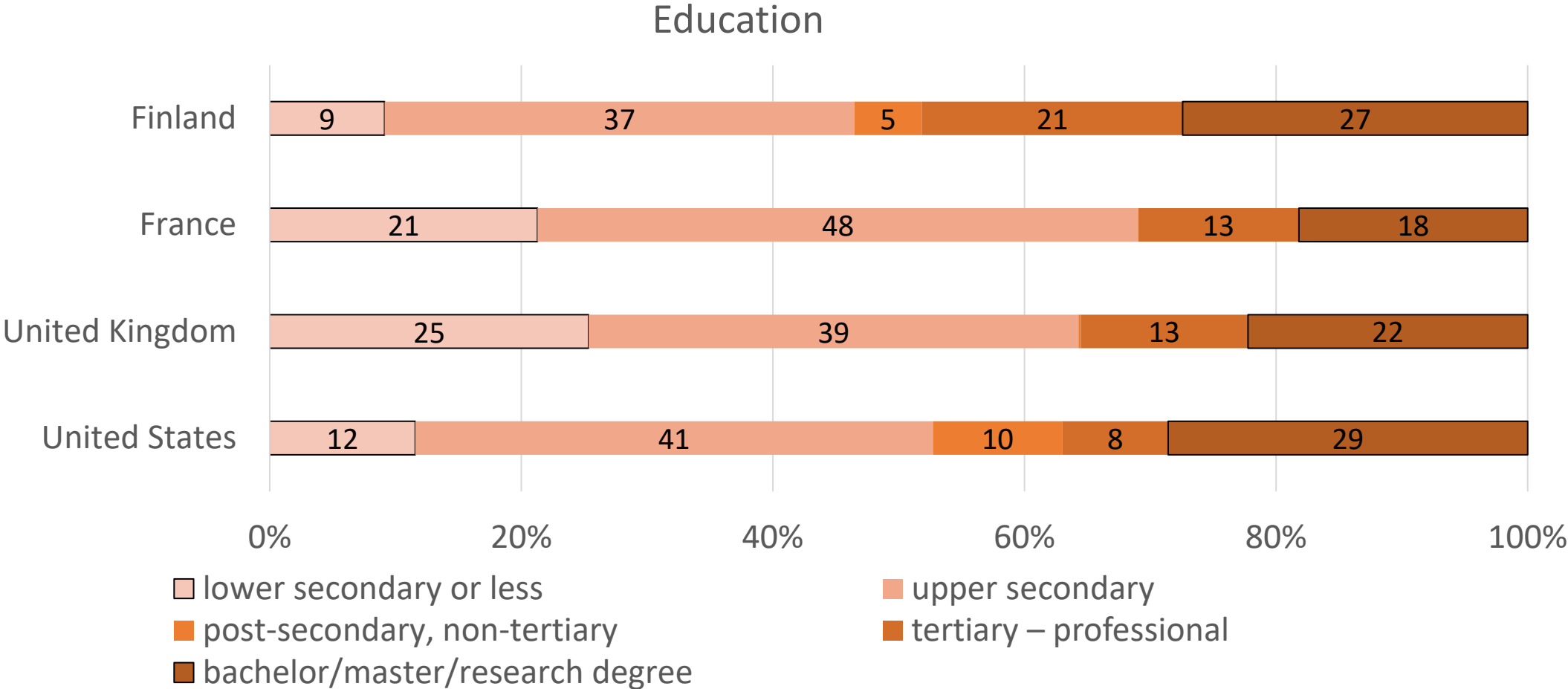


Living with partner



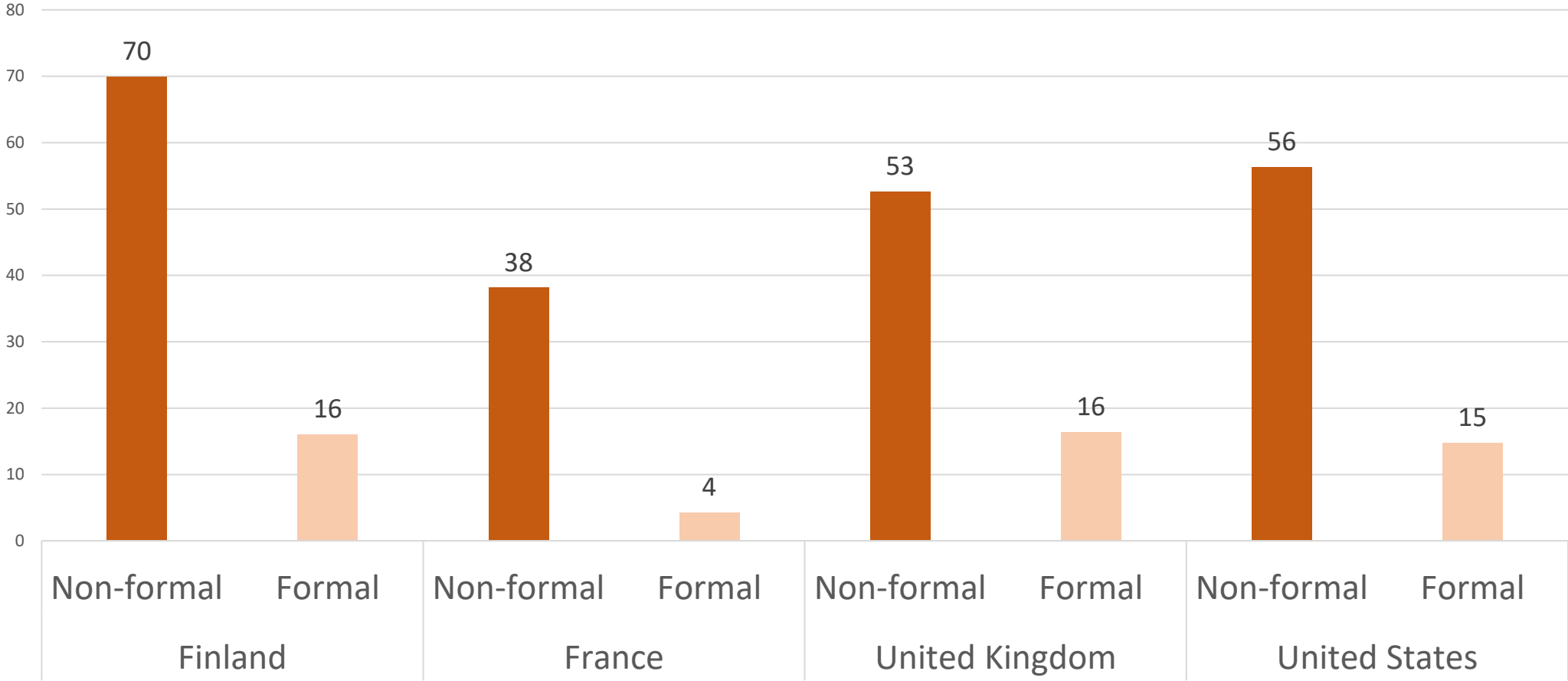
Education

Education



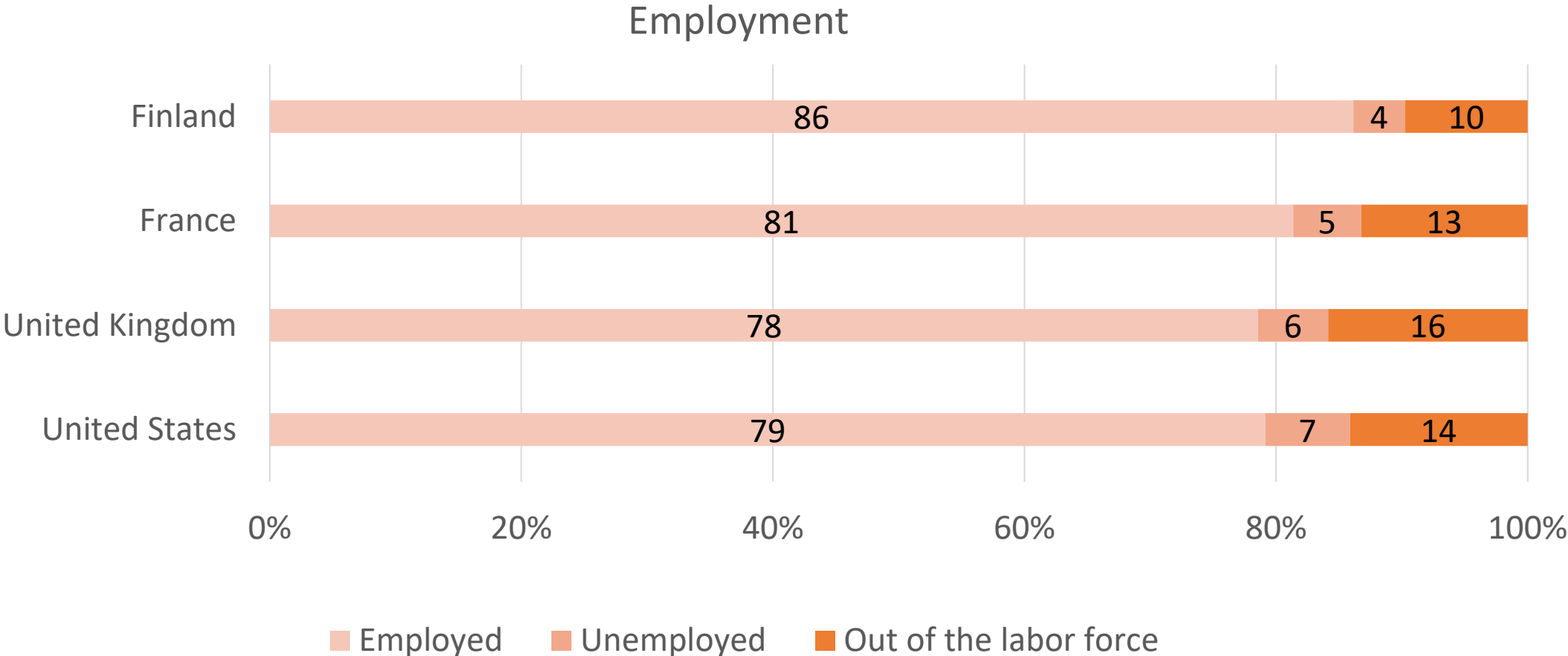
Participation in education

Participation in education in last 12 months

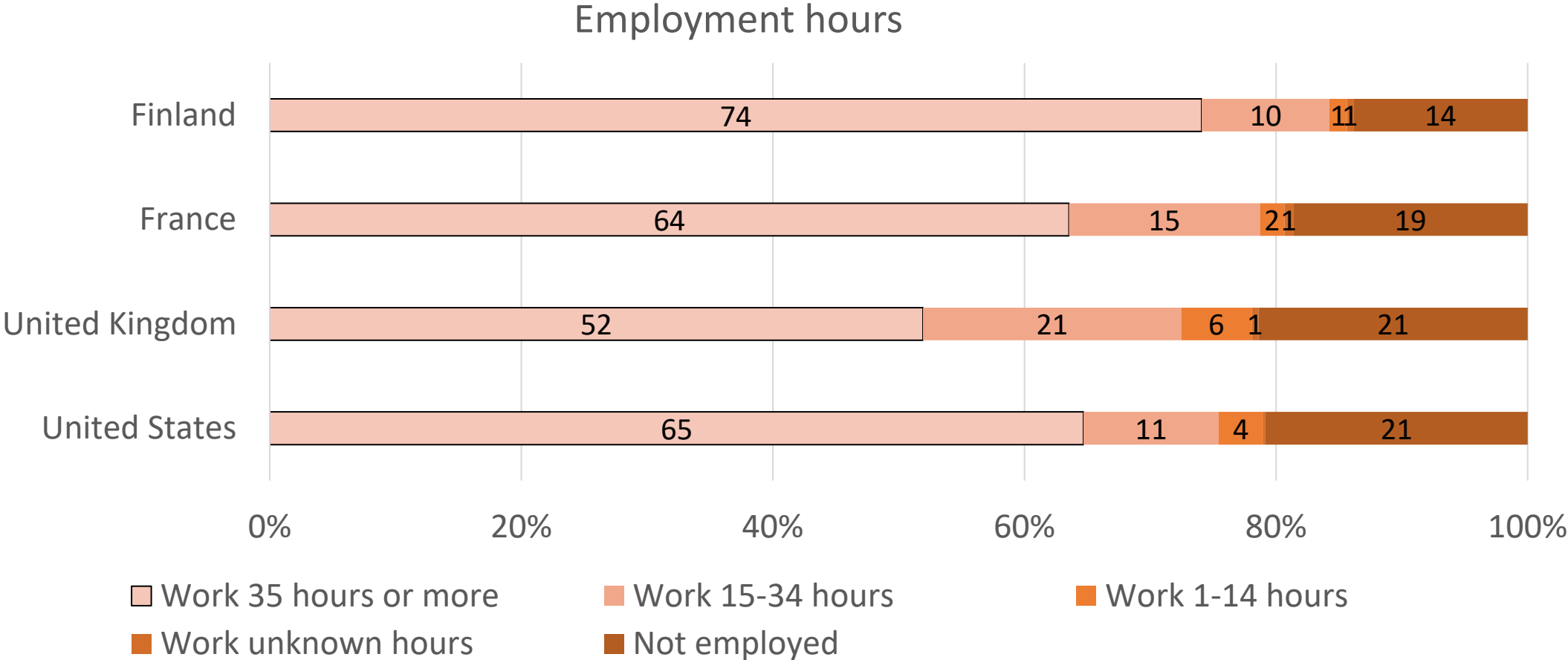


Employment

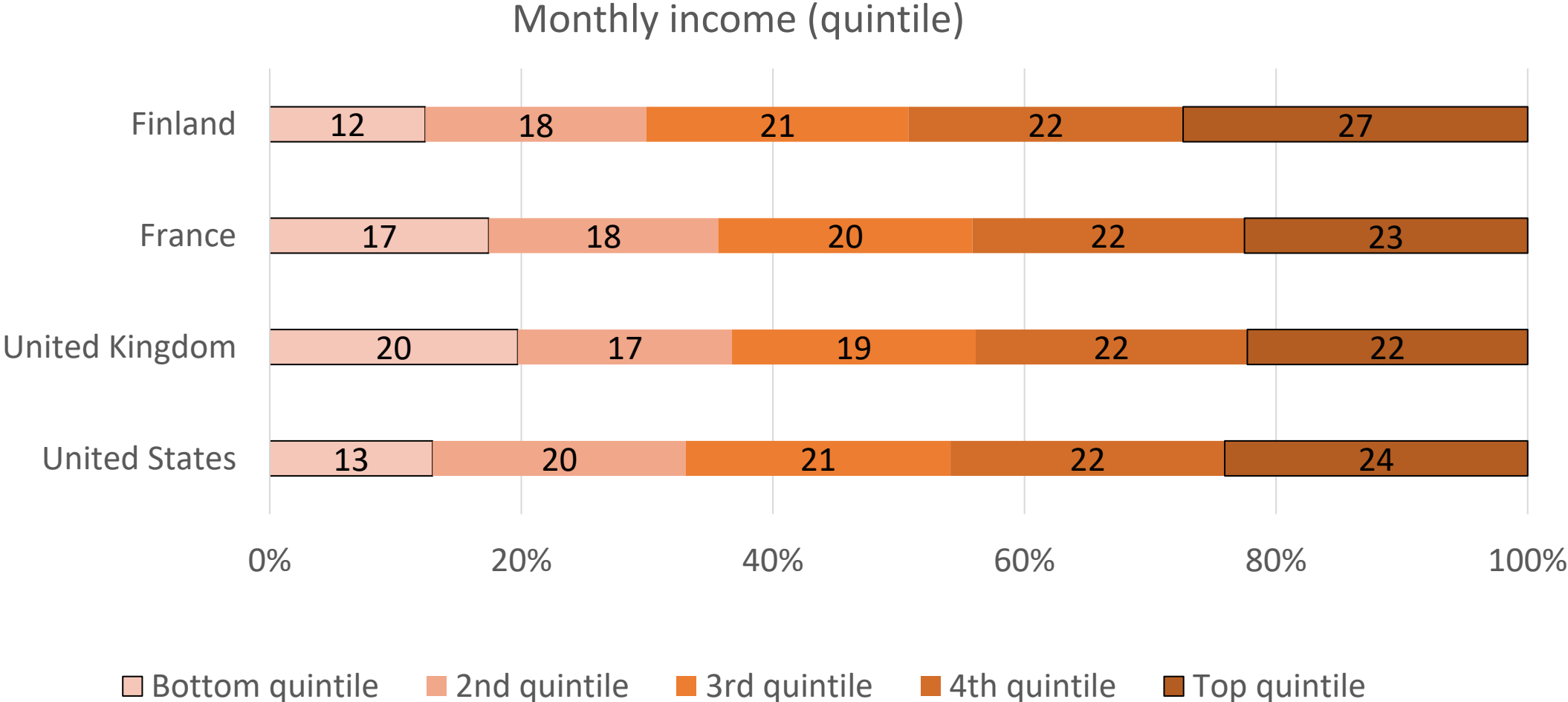
Employment



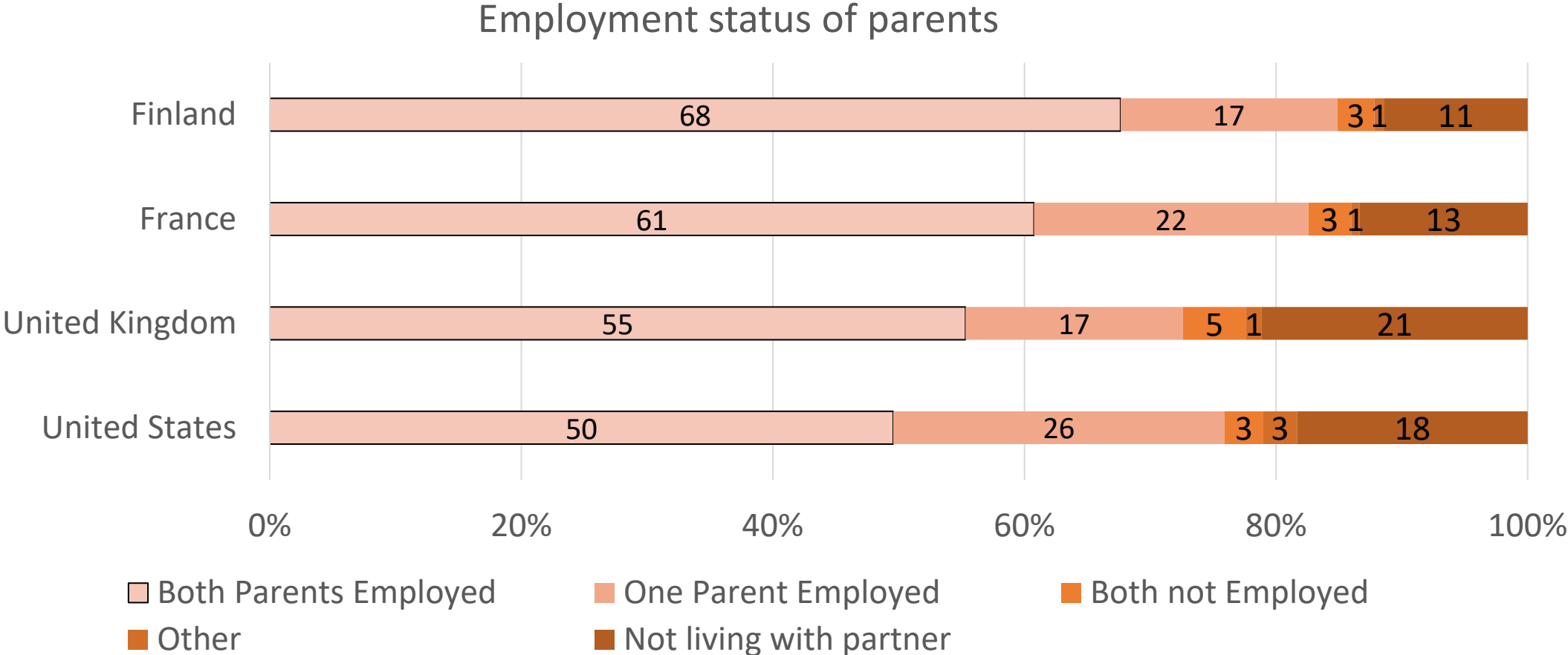
Employment hours



Income



Employment status of parents living with partners



Conclusion

Summary of Results

- Variations in skills of parents across countries
 - Finland had the lowest percentage of parents low skilled in both literacy and numeracy
 - U.S. had the highest percentage of not digitally literate parents
- Variations in characteristics of across countries
 - More U.S. parents had 4+ children
 - Finland and France have greater percentage of parents living with partner
 - U.S. and Finland had more parents with higher education
 - Finland had most full-time employed parents

Significance

- With increase in remote learning during pandemic, understanding skills of parents, along with other potential barriers, these results from PIAAC can provide an understanding the potential impact on student outcomes
- Evidence for creating targeted policies to help mitigate learning loss.
 - e.g., countries with higher skilled parents with high levels of employment may need more flexible work time arrangements, while those with lower skilled parents with high levels of employment may need on the job upskilling that would benefit both work and home life.



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