

Continuing Education, Training Participation and Literacy Skills: Evidence from PIAAC

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Scope of Study



- Study the relationship between literacy and training participation
- Compare Singapore's training participation against other countries
- Who are lacking in training participation
- Barriers to training participation

PIAAC in Brief

Also known as

Survey of Adult Skills

Aims

- Develop international benchmarking on skills level and distribution;
- Understand importance of skills in relation to labour market and social outcomes; and
- Measure other indicators such as training participation rates, workplace and management practices.

Singapore's Participation Supported by

Ministry of Manpower
Ministry of Education
Singapore Workforce Development Agency

Implemented by

Institute for Adult Learning

PIAAC

Programme for the International Assessment of Adult Competencies



UNDERSTANDING ADULT SKILLS

Initiated by



Implemented by



Supported by



PIAAC in Brief



215 thousand adults...
Representing 815 millions 16-65 year-olds
in 34 economies

Took an internationally
comparable assessment...



in literacy, numeracy and problem
solving.



The assessment was administered either in
computer-based or paper-based versions.

Round 1 Countries

- 
1. Australia
2. Austria
3. Belgium
4. Canada
5. Cyprus
6. Czech Republic
7. Denmark
8. Finland
9. France
10. Germany
11. Ireland
12. Italy
13. Japan
14. Korea
15. Netherlands
16. Norway
17. Poland
18. Slovak Republic
19. Spain
20. Sweden
21. United Kingdom (England & N. Ireland)
22. United States
23. Estonia
24. Russian Federation

2011-12

Round 2 Countries

2014-15

1. Greece
2. Indonesia (Jakarta)
3. Israel
4. Lithuania
5. New Zealand
6. Singapore
7. Turkey
8. Chile
9. Slovenia



Methodology



- Singapore's data was collected from April 2014 to January 2015
- Random sampling was carried out to achieve national representation of Singapore's resident adult population
- Responses from about 5,400 adults aged 16 to 65
- Data collected:
 - ✓ Part I - Background questionnaire
 - ✓ Part II - Direct assessment of proficiency domains:
 - (i) literacy; (ii) numeracy, (iii) problem solving in technology-rich environments
- Assessment conducted only in English for Singapore

Definition of Training

- Participate in any of the following over the last 12 months:
 - ✓ Non-formal Education
 - Open/ distance education
 - On-the-job training
 - Seminars/ workshops
 - Courses/ private lessons
 - ✓ Formal education that leads to a certification
- Job- related
- In labour force
 - ✓ Employed
 - ✓ Unemployed

Questions on Training

Non Formal Education

During the last 12 months...

- ...have you participated in *courses conducted through open or distance education?*
- ...have you participated in *seminars or workshops?*
- ...have you participated in *courses or private lessons*, not already reported?
- ...have you attended any *organized sessions for on-the-job training or training by supervisors or co-workers?*

Formal Education

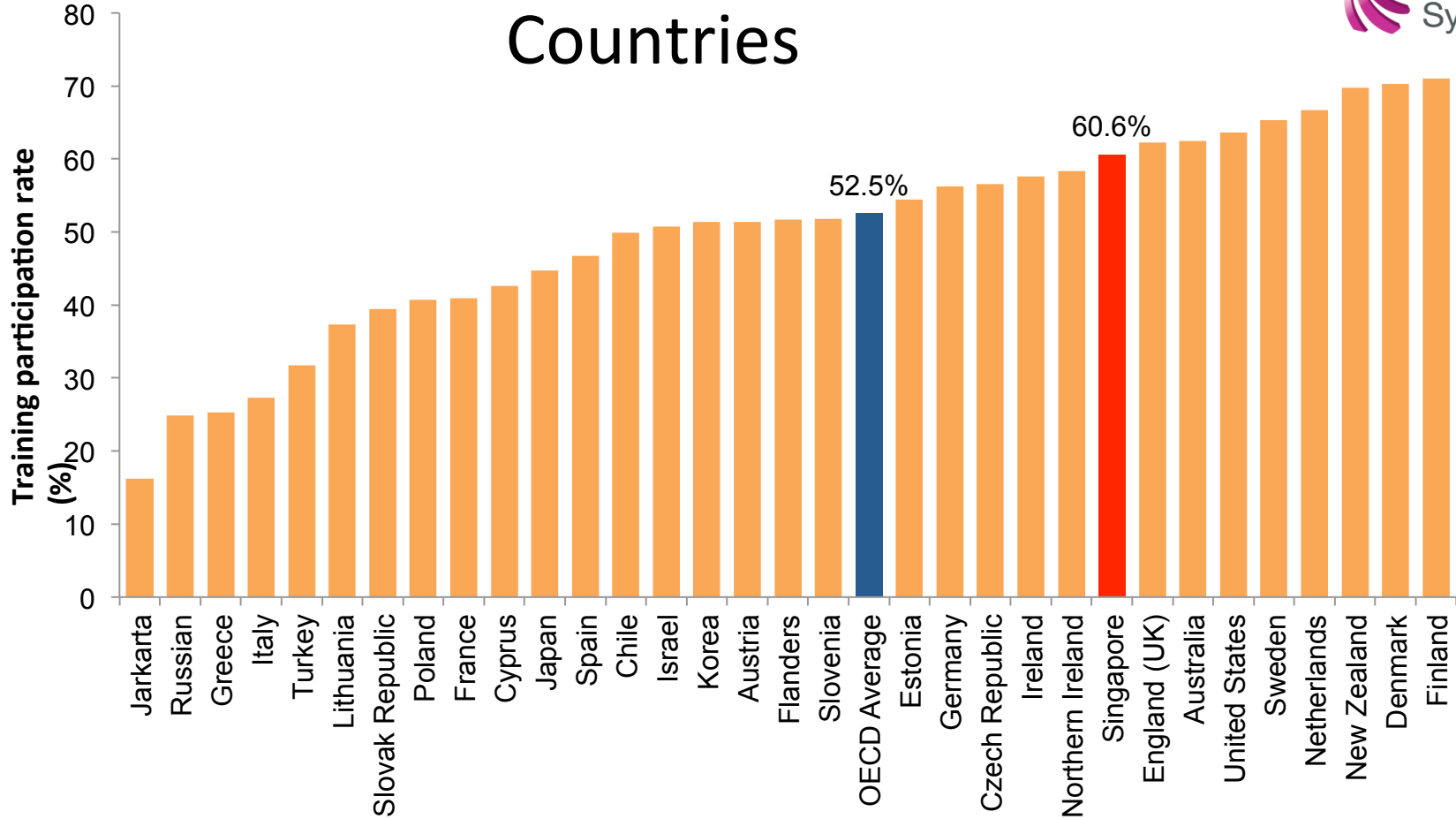
- During the last 12 months, that is since ^MonthYear, have you studied for any *formal qualification*, either full-time or part-time?

The Needs of Training

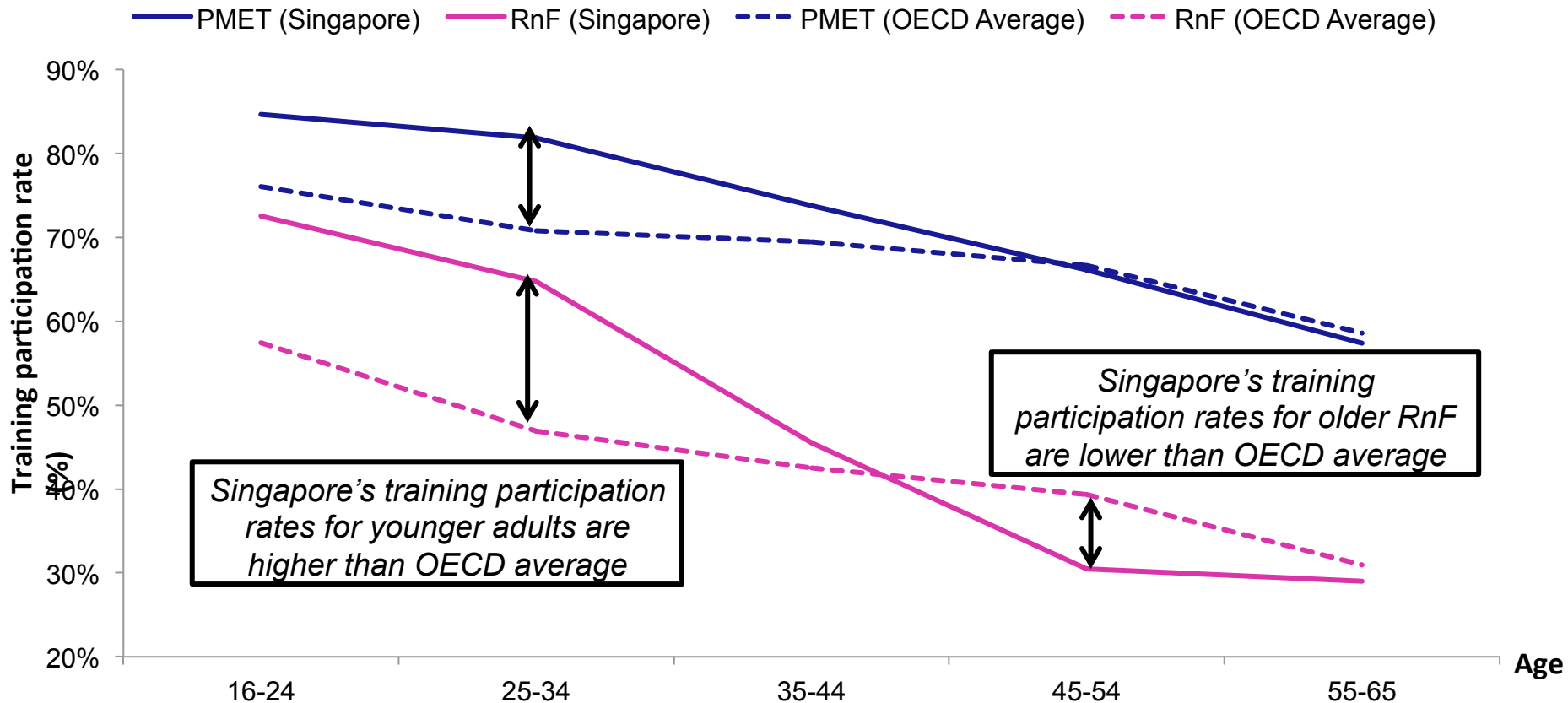


- Tackle employees shortcomings
- Improvement of performance
- Improve satisfaction
- To meet the needs for new skills
- Keep workforce productive

Participation in Job-related Training by Countries



Training Participation Rate by Age and Occupation



Regression: Logit Model



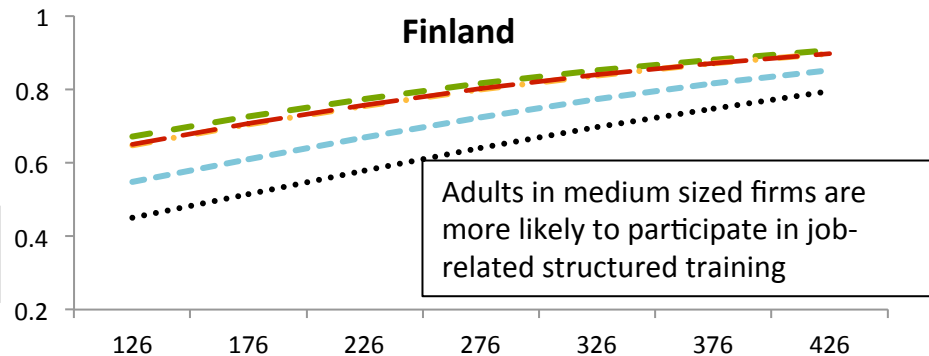
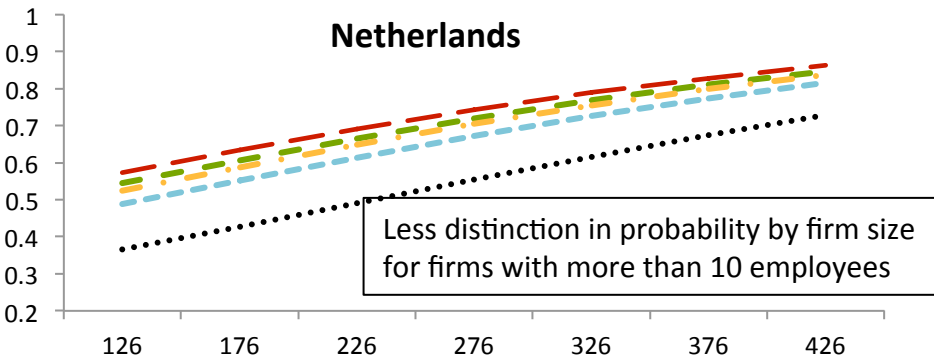
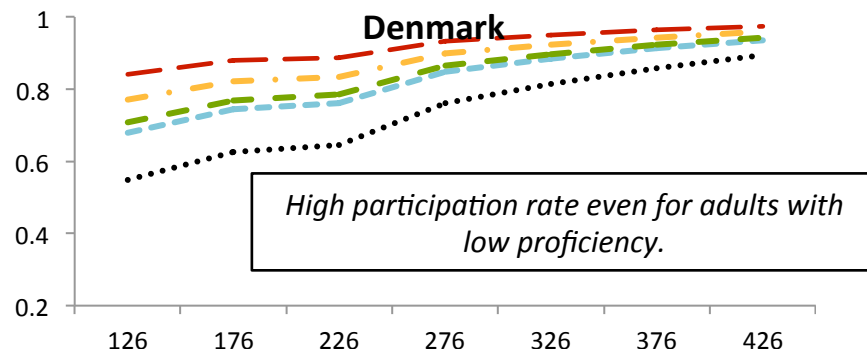
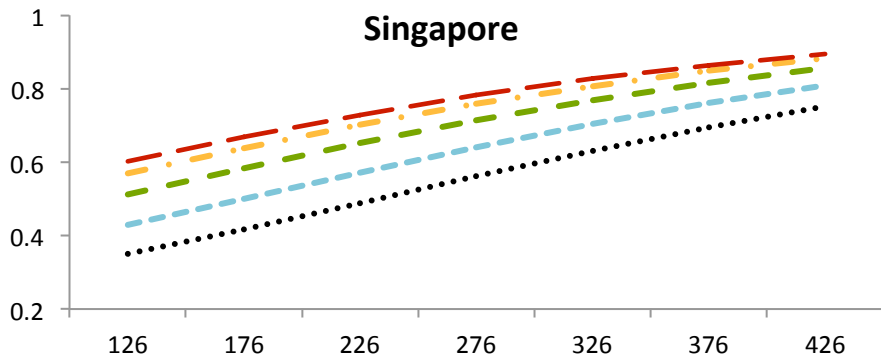
$$\text{Logit}(P(\text{Training}=1)) = \beta_0 + \beta_1(\text{Literacy Score}) + \beta_3(\text{Firm Size}) + \text{Control variables} + \varepsilon$$

Training participation = $\left\{ \begin{array}{ll} 1 & \text{Participated in Training} \\ 0 & \text{Otherwise} \end{array} \right.$

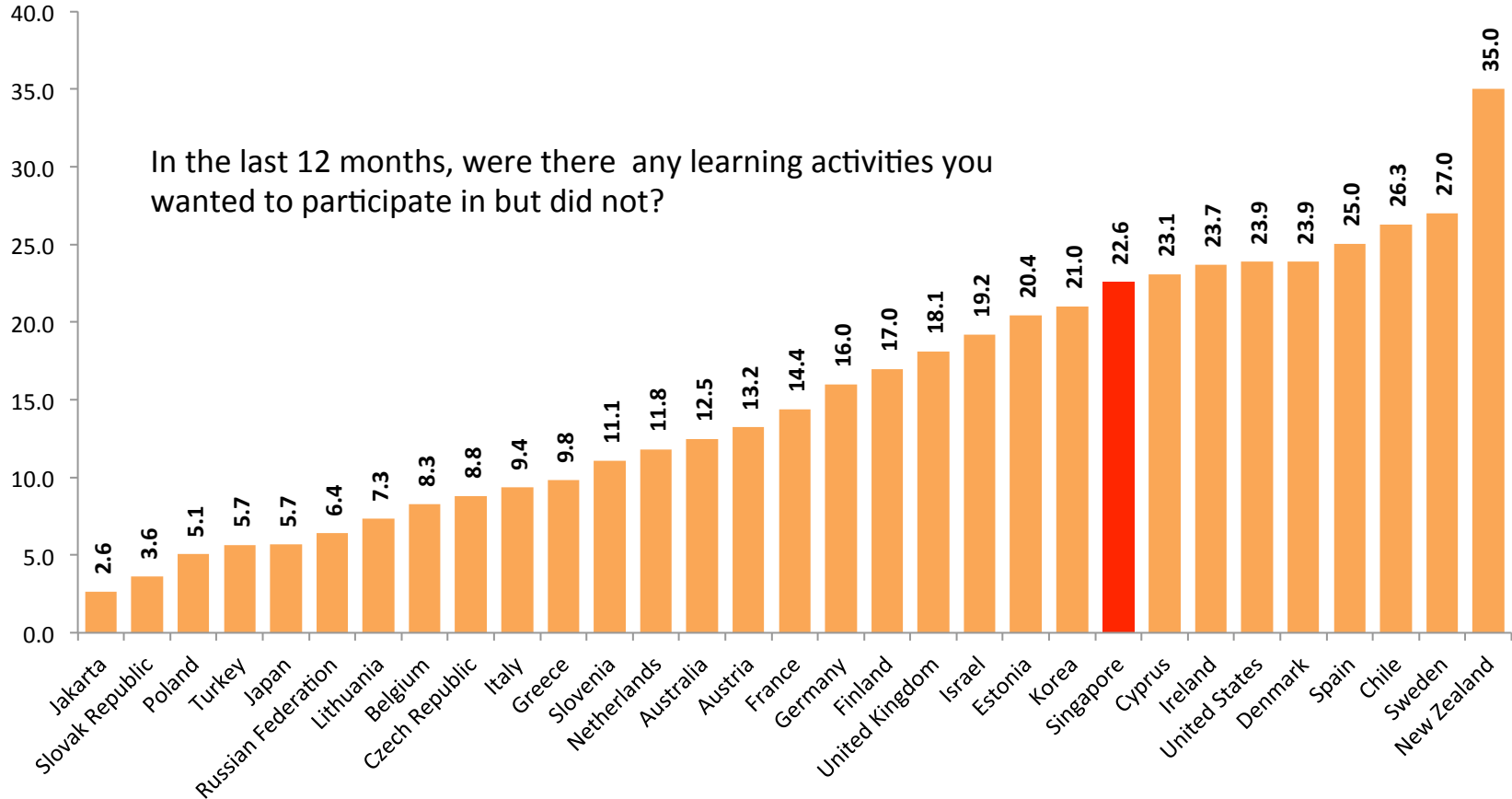
Control variables: Gender, Age, Education

Participation in Training by Firm Size and Literacy Skills

Probability of participating in job related structured training by firm size and literacy proficiency skills



In Singapore, high proportion of employees with low literacy wanting to participate in job-related training but did not



Top Three Most Important Reasons for not Attending Training



- Close to 35% quoted “I was too busy at work”
- Another 20 % said “I did not have time because of child care or family responsibilities”
- A good 13% mentioned “Education or training was too expensive/I could not afford it”

Conclusions

- Training participation in Singapore is relatively high, however, there are areas to improve on
- The rank & files and the older age groups are lower in training participation when compared to their counterpart in OECD
- After controlling for education, gender and age, employees with low literacy proficiency and in small size firms have low training participation rate
- Reasons for not participating in training are mainly time and finance related

Moving Forward...



- Thematic Report
- Improve the model by including more variables, using advance statistical methods like multi-level models to take into account of between countries variation
- To further analyse on:
 - Determinants of Training
 - Returns to Training

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3 - 4 November 2016



Thank You

Organised by: **SKILLS**future SG

