

Competence and learning capabilities of the ageing workforce

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Paper presented at "Research Market" at

Promoting Active Ageing in Work Life

Oslo June 2-3, 2005



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Project background – Point of departure

- OECD's Definition and Selection of Competencies (DeSeCo) Project:

Key competencies for a successful life and a well functioning society:

- Interaction in heterogeneous groups
- Independence
- Interactive use of tools including
 - Traditional tools
 - IT
 - Languages
 - Calculation
 - Practical and abstract problem solving

Project background - Practical

- Life-long working careers requires exposures to changing
 - Technologies
 - Organisational structures
 - Management principles and styles
 - Work methods and contents
 - Social and cultural contexts
- Coping with changes requires learning and competence development
- To what extent do senior workforce hold sufficient basic capabilities to master such changes and take part in the related teaching-learning processes?

Scope of presentation

- Increase the awareness about the possible role of basic intellectual capabilities as pre-requisites for extending senior workforce careers
- Draw attention to basic skills like:
 - Reading prose
 - Reading documents
 - Numerical skills
 - Problem solving skills
- Illuminate relationships between these basic capabilities and participation in working life

Problem statement

- To which extent do basic learning capabilities like
 - Prose reading skills
 - Document reading skills
 - Numeric skills
 - Problem solving skills
- contribute to inclusion in working life, especially for the elderly workers

Methodology

- Interviews developed by Statistics Canada and Educational Testing Service New Jersey
- Norwegian part of the “Adult Literacy and Life Skills Study”
- Financed by Ministry of Education and Research
- Random sample drawn by Statistics Norway, 5600 participants
- 320 specially trained interviewers
- 2 hours of interviews per person, mainly in the participant’s private home, 2003
- Response rate 60%

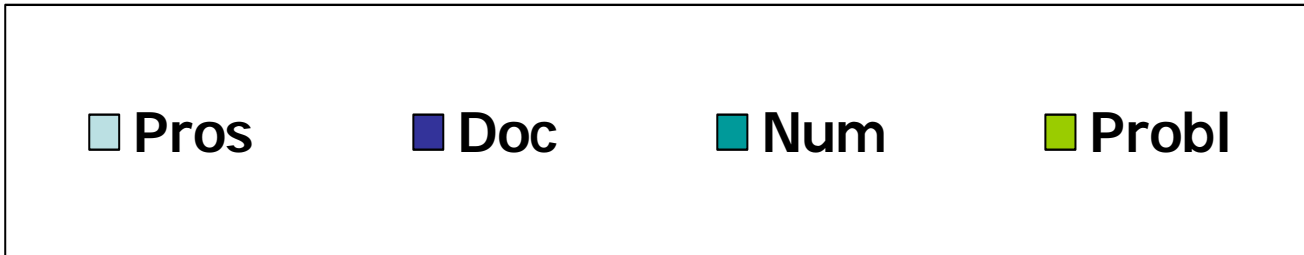
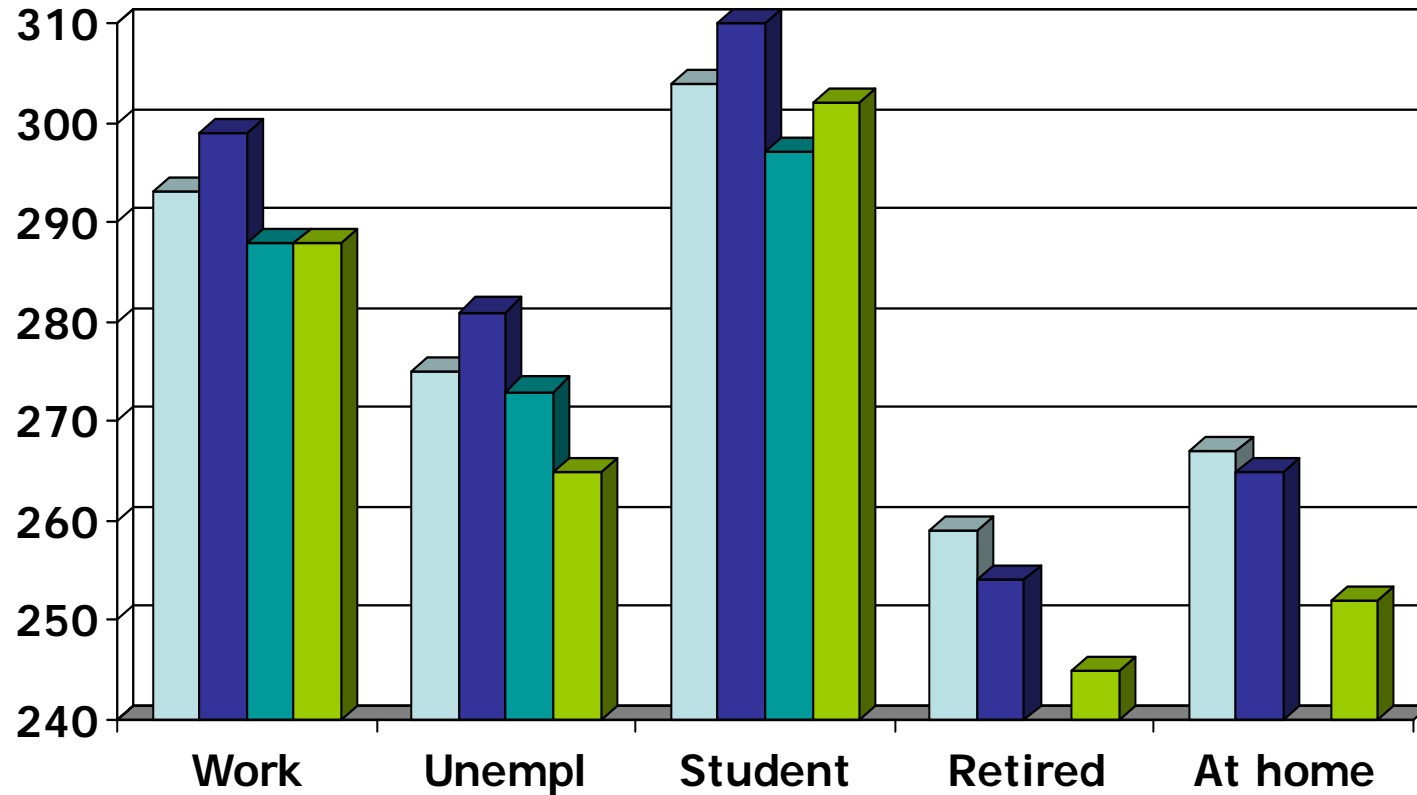
Basic measurements

- Prose reading skills: capacity to understand and apply continuous ('running') texts like newspapers, magazines, manuals, leaflets and books
- Document reading skills: capacity to understand and apply texts in matrixes, tables, graphs, and forms, including abbreviations and informal languages
- Numeracy: Capacity to effectively manage and respond to mathematical demands of real situations
- Problem solving: Capacity for goal directed thinking in situations where no routine solution or procedure is available based on a) understanding the problem, and b) step-by-step transformation based on planning and reasoning



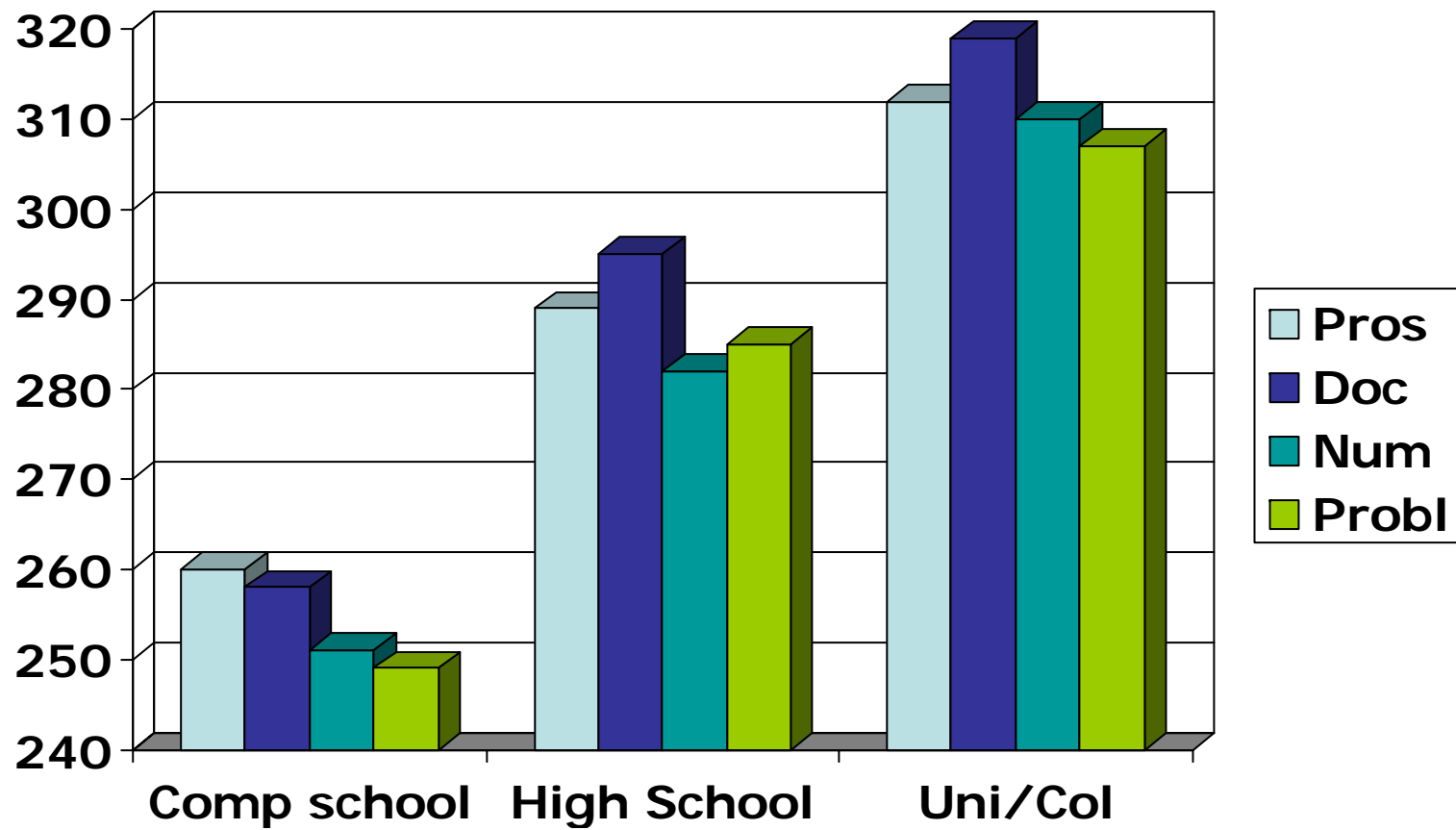
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Basic capabilities and relationship to working life

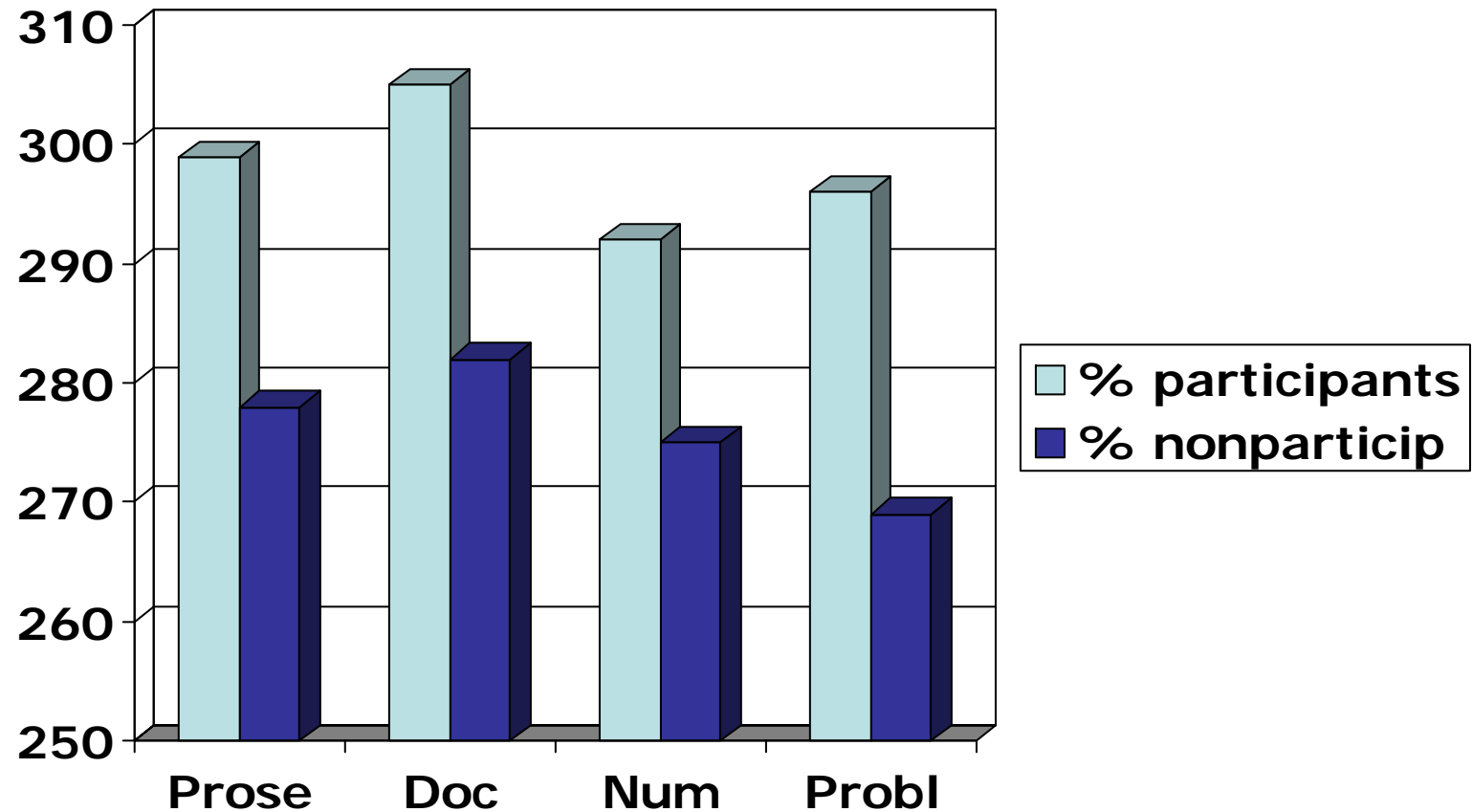




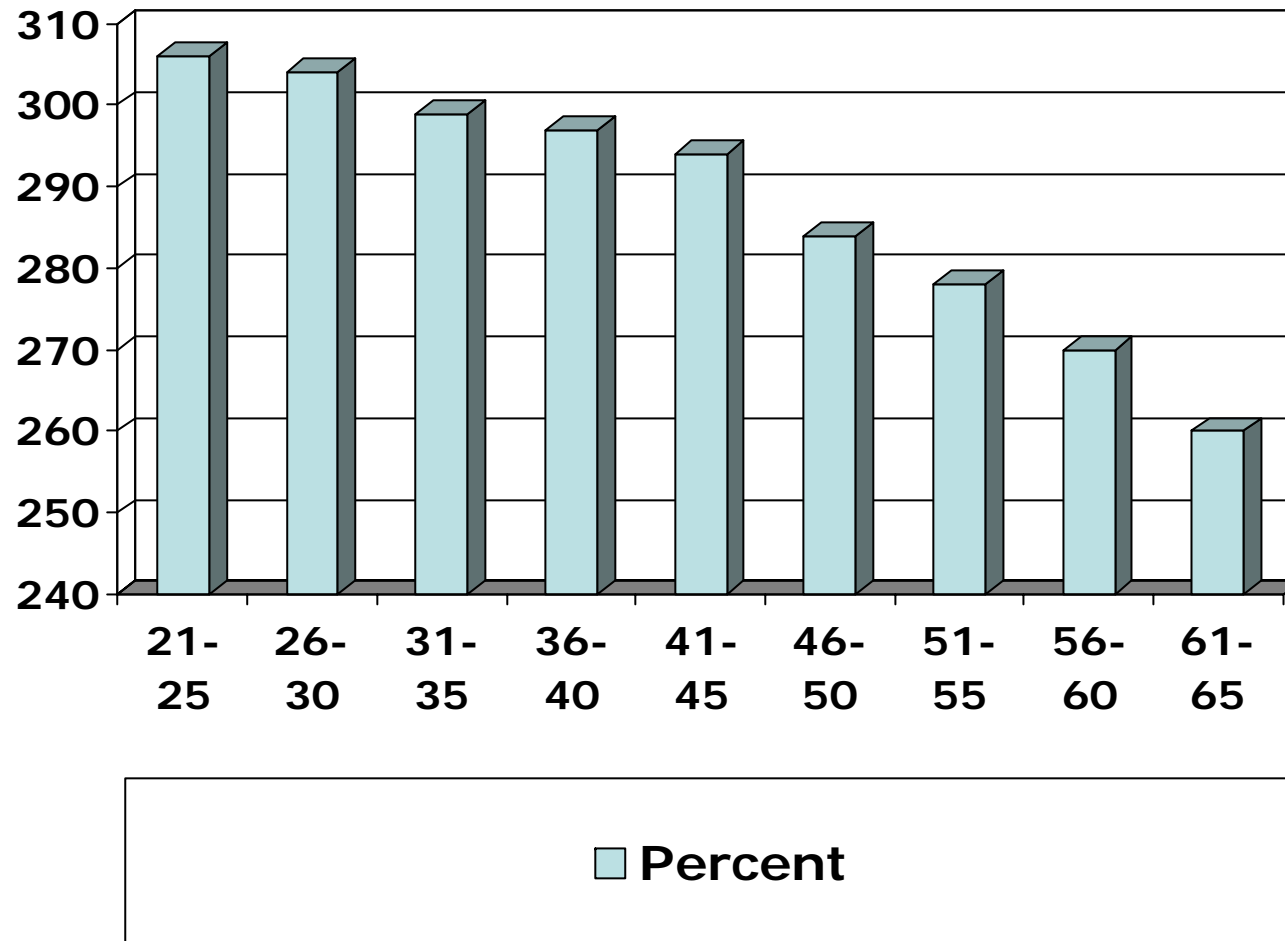
Basic capabilities and level of education



Basic capabilities and participation in life-long learning – group mean values

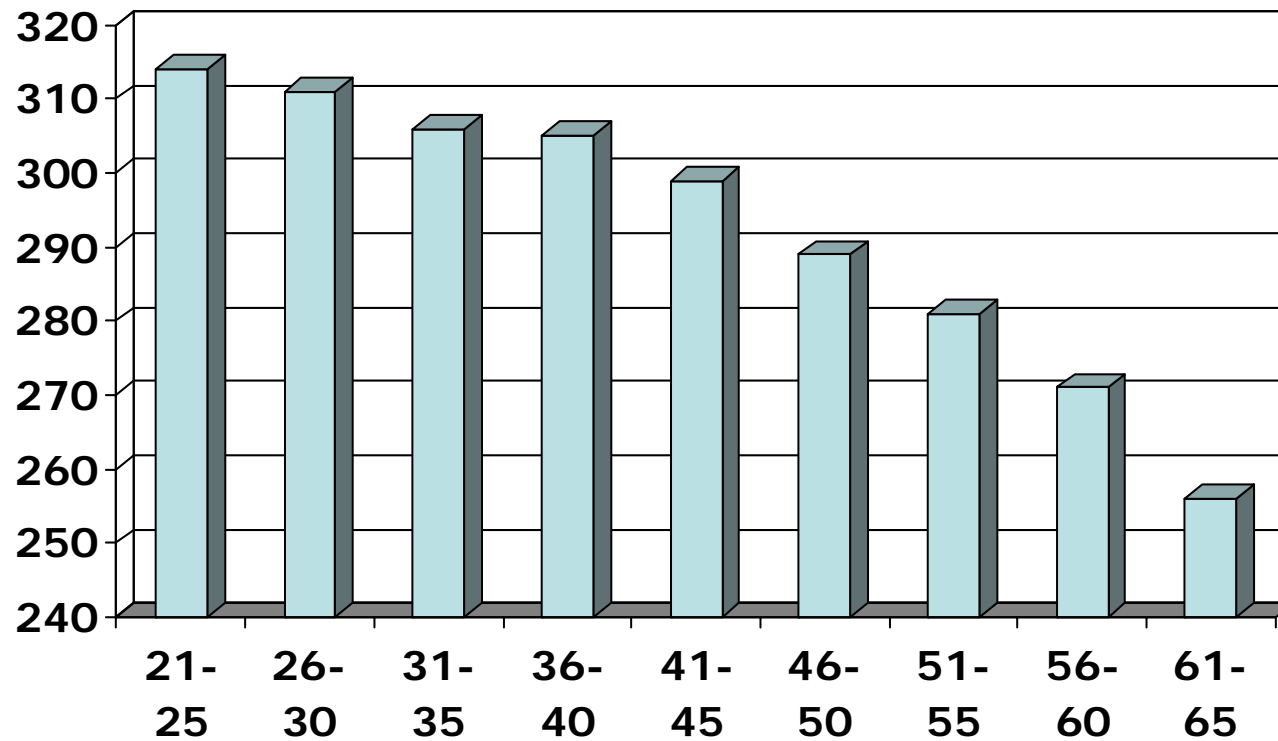


Age and prose reading skills (average scores)



Age and document reading skills

(average scores)

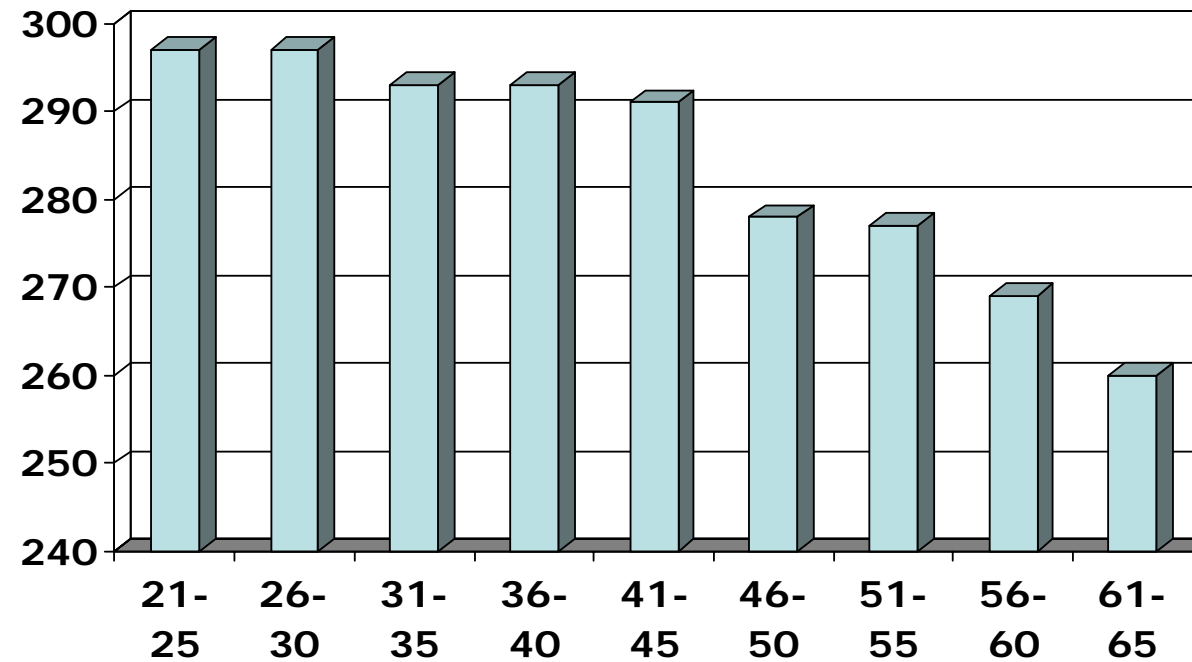


■ Percent



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Age and numeric skills (average scores)

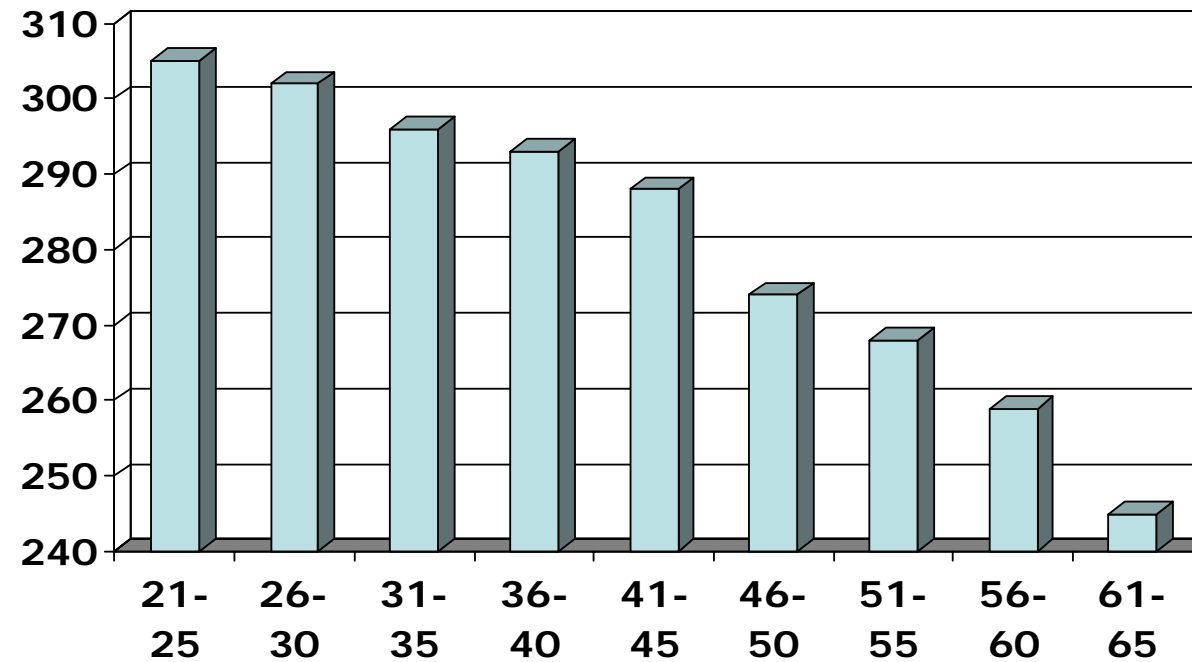


■ Percent



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Age and problem solving skills (average scores)



■ Percent

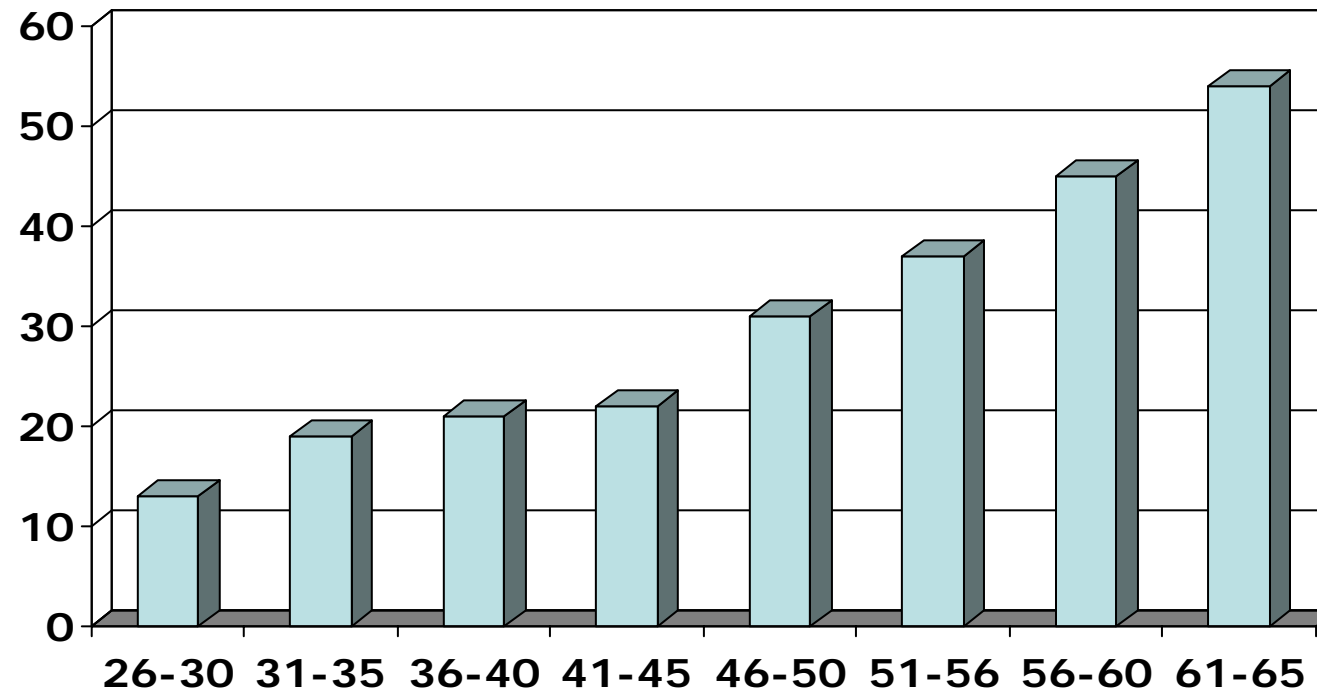
Branches, occupations and basic capabilities

- Workforce in branches with recent growth has higher average scores compared to sample average
 - Finance, insurance, office workers
- Workforce in branches with recent decline has lower average scores compared to sample average
 - Transport, construction, process industries
- Basic capabilities are related to amount of exposure to relevant demands
 - Workplace demands
 - Spare time activities

Risk groups

- Risk groups are defined as groups that due to their low levels of basic learning capabilities will be likely to face difficulties in coping with everyday life as well as the demands at the work place
- Risk group = lowest score (1) on one or more of the four measurements:
 - Reading prose
 - Reading documents
 - Numeracy
 - Problem solving

Age as risk factor

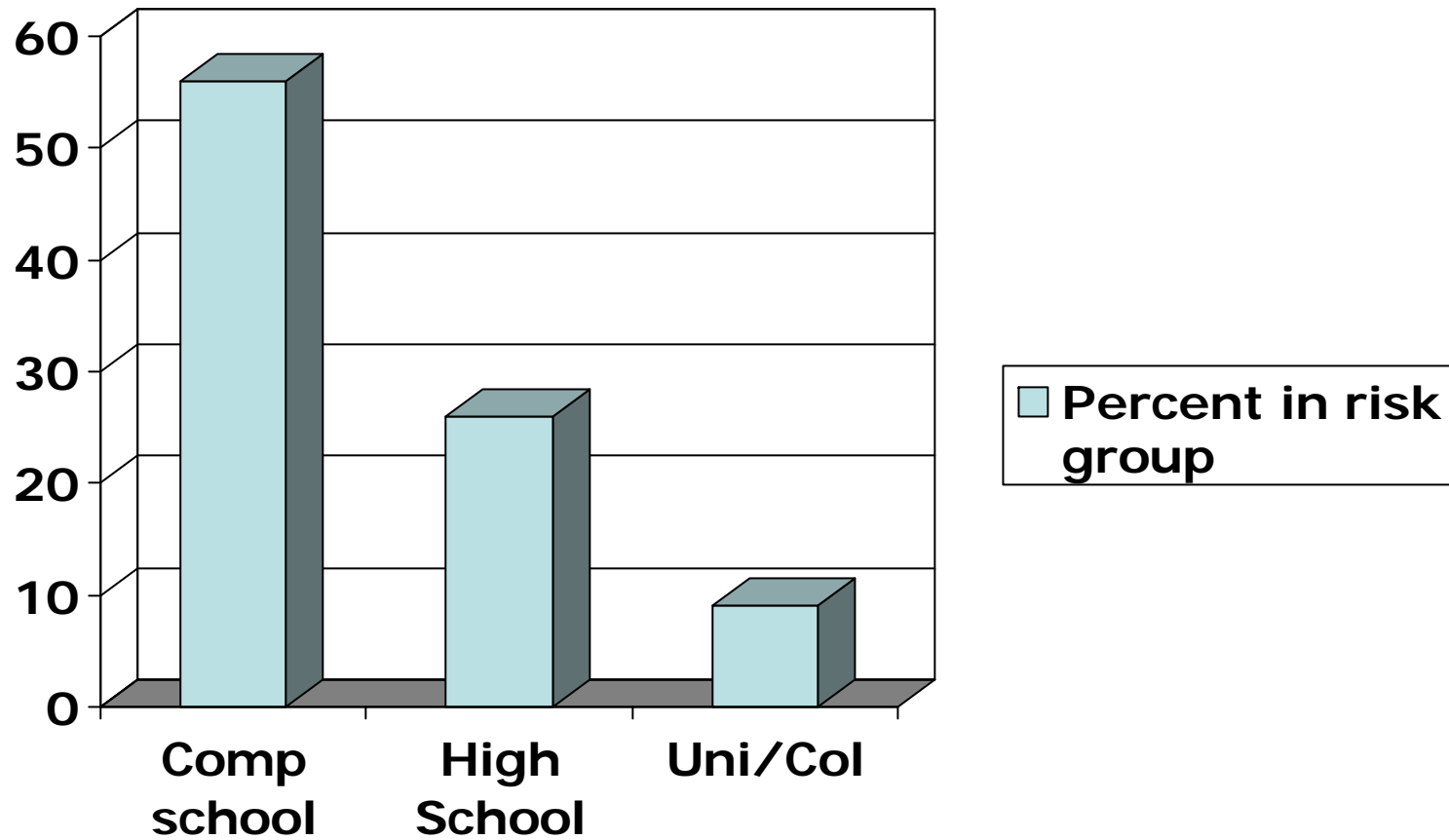


■ Percent in risk group



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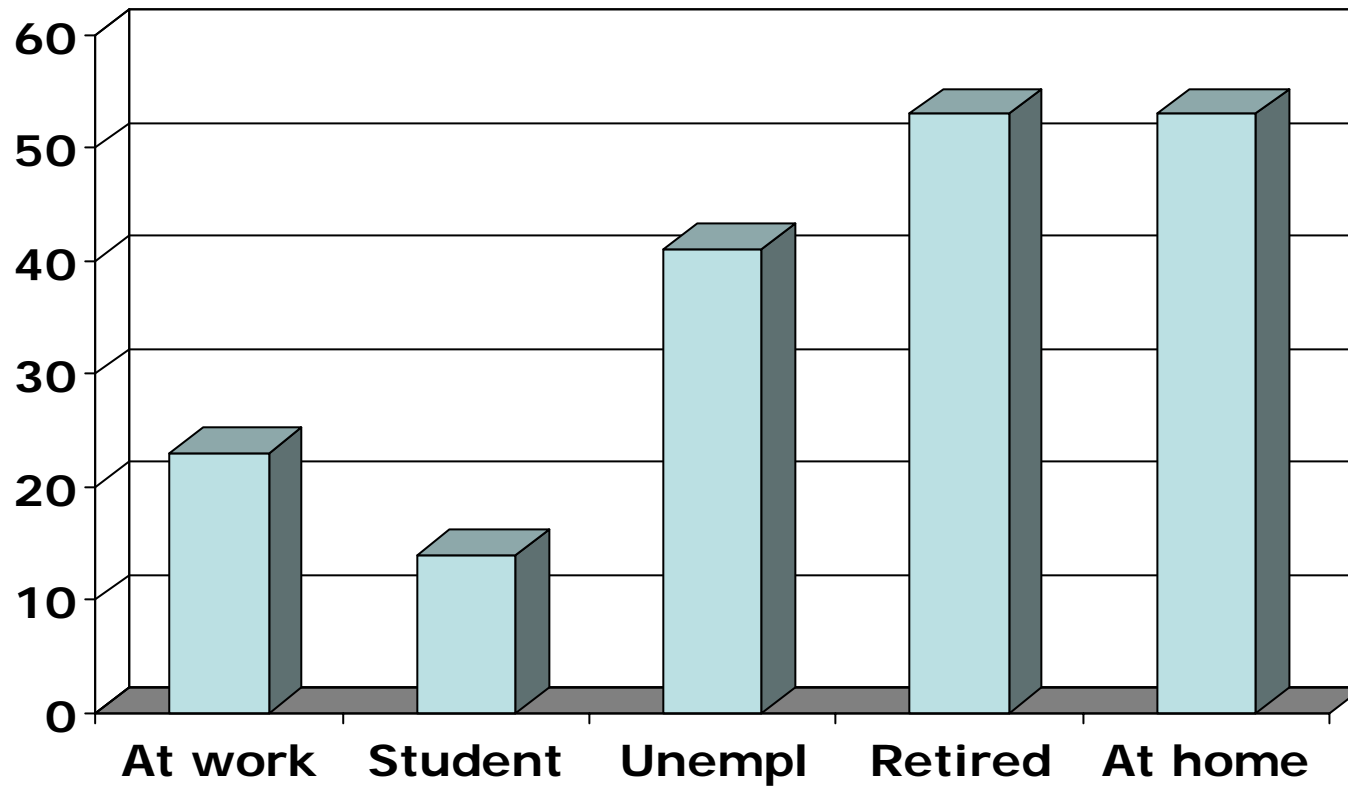
Education as risk factor





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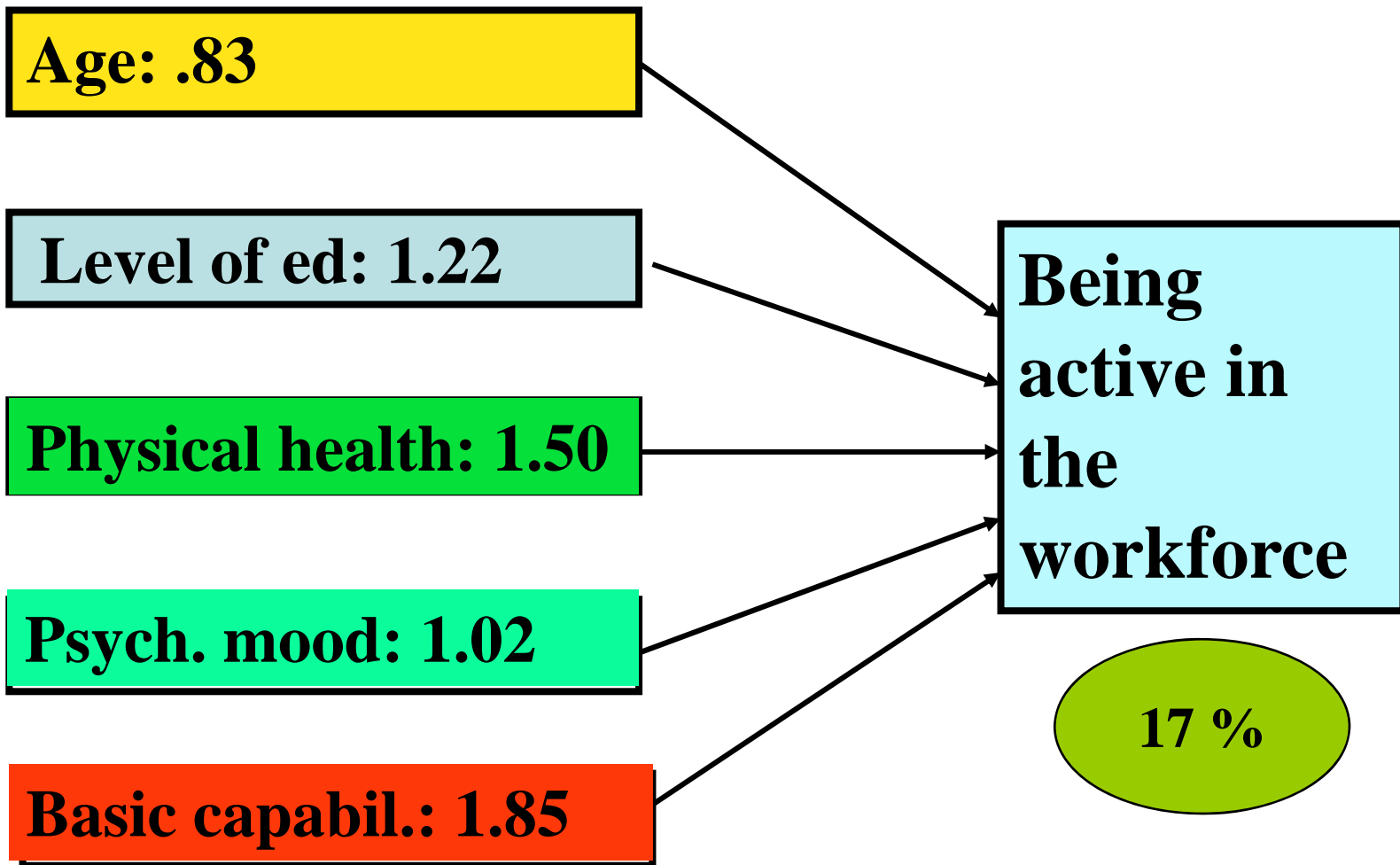
Relation to work and position in risk groups



■ Percent in risk groups

Relative impacts of basic capabilities to retention of senior workforce

(Log-linear multiple regression; stepwise / enter: odds ratios)



Conclusions

- Basic capabilities are important for participation in working life:
 - Prose reading skills
 - Document reading skills
 - Numeric skills
 - Problem solving skills
- No quick fix available?

Recommendations

- Increase work participation by improving basic skills?
 - Education (basic)
 - Life long learning
 - Work content and processes
 - Culture / spare time activities
- Continuous efforts
- Long program horizons
 - Public sector concern and involvement
 - Joint efforts between working life partners
 - Internal company efforts

Thank you – questions please

