Inequalities in access to job-related learning among workers in Italy: evidence from Adult Education Survey (AES)

Population Days 2019
Italian Association for the Study of Population(Sis-Aisp)
Bocconi University, Milan 24-26 January 2019

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INAPP: National Institute for Public Policy Analysis

- *Low fertility*
- *High life expectancy*
- *Irreversible process in EU (IT in particular)*

Ageing

- *Over the next years, IT will face unprecedented demographic challenges*

Demographic consequences

Ageing influences labour force participation

- *Because of a shrinking number of young people and a growing number of elderly (over 50)*

Action / Aim

- *A higher participation to labour market of older workers is one of the goals of the new EU2020 agenda: Age management and LLL strategies*

Active ageing means helping people stay in charge of their own lives for as long as possible as they age and, where possible, to contribute to the economy and society

Source: European Commission (http://ec.europa.eu)

Active ageing is the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age

Source: World Health Organization (http://www.who.int)
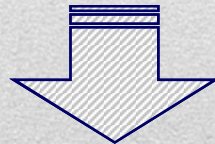
Focus on adult (50+) labour market participation

Over the past two decades there have been considerable **changes** in the **age distribution** of the population in Europe.

Ageing population is a ***demographic revolution*** (over 60 – Global, UE, Italy).

Ageing population may induce a variety of **social** and **economic effects.**

In particular, a large and growing proportion of older people has implication for the social security system and can lead to **important changes in the labour markets** because it brings an increase of:

- *Median age*
- *Old Age Dipendency Ratio*: (Pop 0-14+Pop>65)/Pop 15-64
- *Portion of older workers in the labour force*: Pop 55-64/Pop 15-64
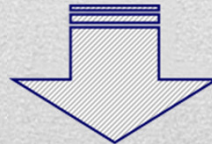
Ageing population's trend is connected to the workforce ageing trend: the **incidence of adult workers** tends to increase.

Since recent forecasts predict a relevant increase in participation rate of older workers from now on, **due also to the pension reform**, **specific attention must be paid to the older workers personal** and organizational resources for facing the (forced) extension of their working life (in terms of health conditions, skills maintenance, resilience to work-related stress factors etc.)

This strategy is aimed at leading the **competence transfer between generations**, monitoring and supporting the time and procedures of retirement, exchanging knowledge between youngest and oldest workers (reverse mentoring) and other good practices.
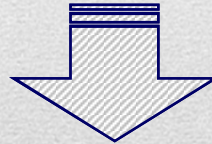
The strategy of promoting active ageing in the workplace implies a system of business strategies called "**Age Management**"
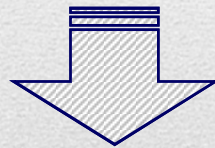
European Commission

Equitable access to adult learning for all is a goal for European education, training and employment policies. In particular, *"all workers should be able to acquire, update and develop their skills over their lifetime"*.

The nature of jobs is changing (particularly in relation to new technologies): it requires changes **to update the skills** they have adapting lifelong learning systems to the needs of an aging workforce (to avoid unemployment as well as for maintaining employability)

Demographic changes make it necessary to **work longer** and sustain a **skilled**, adaptable to change, and competitive workforce.
European Commission (2006, 2007, 2009); Third Demography Forum, 2010)
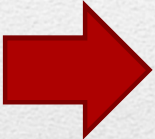
Labour market is strictly connected with <u>demography</u>

(in terms of changes in the workforce age structure)
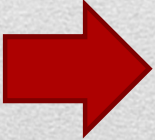
OECD

A key factor for increasing the productivity of older workers relies on using their strengths in terms of skills and competences and developing their skills. **Continuing training in general can temper any tendency to become less flexible** as well as increase the capacity to deal with technological change *(OECD 2015)*

Participation in education and training after the age of 16 **continues to add "value"** by increasing proficiency in information-processing skills. *OECD, (2013): First Results from the Survey of Adult Skills*

CEDEFOP

Employment and the labour market: populations are increasingly being expected **to work for longer**, making participation in the labour market an important aspect of active ageing. This phenomenon is highlighted through the fact that there are **less and less young persons to enter the labour market**. If people are to remain engaged in meaningful and productive activities as they grow older, **there is a need for continuous training in the workplace and lifelong learning** opportunities in the community. This requires older people to maintain and update the skills they have, particularly in relation to new technologies. **Continuous learning and development of an ageing workforce are important for employers' survival** in competitive markets, as well as for maintaining older people's employability.

Cedefop, Innovative Learning Measures for Older Workers, 2008

AES
(Adult Education Survey)

- **Eurostat/Istat (2011/2012)**
- **Individuals = 11.593 (w = 44.654.919)**
- Workers = 6.079 (w = 22.441.826)
- **No Armed Forces = 5.995 (w = 22.124.626)**

AES: Participation in education and training activities

- **AIM** is to provide a statistical picture of older workers participation in job-related training in Italy

- Participation in **formal** and **non-formal education**

- Participation in **informal learning**

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ACCESS TO MICRODATA

Overview

Self-study material for microdata users

European Community Household Panel

European Union Labour Force Survey

Community Innovation Survey

European Union Statistics on Income and Living Conditions

Structure of Earnings Survey

ADULT EDUCATION SURVEY

European Road Freight Transport Survey

European Health Interview Survey

Continuing Vocational Training Survey

Community Statistics on information Society

ADULT EDUCATION SURVEY (AES)

Description of dataset

The Adult Education Survey (AES) is a household survey which is part of the EU Statistics on lifelong learning. People living in private households are interviewed about their participation in education and training activities (formal, non-formal and informal learning). The target population of the survey is composed of people aged 25 to 64.

The survey takes place every five years and its results are published on Eurostat website. Furthermore, the microdata that are collected can be used in research projects to study participation in lifelong learning (analyses using sociodemographic characteristics such as country of residence, individual and household characteristics, work context, etc...).
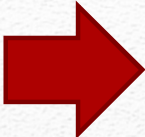
Available waves of the survey

A) 2007 AES (pilot survey)

The first wave of the survey, **2007 AES** (also called 'pilot survey') was carried out between 2005 and 2008 in 29 countries, either Member States of the European Union, candidate countries or countries of the European Free Trade Area. This pilot exercise was set up within a common EU framework including a standard questionnaire, tools and quality reporting. The reference year was set at 2007.

The 2007 AES anonymised microdata can be accessed via CD-Rom including the following 26 national datasets out of the 29 countries which implemented the survey: BE, BG, CZ, DK, DE, EE, EL, ES, FR, HR, IT, CY, LV, LT, HU, NL, AT, PL, PT, RO, SI, SK, FI, SE, UK and NO. The total net

Main concepts and definitions

Lifelong Learning (**LLL**) is defined as encompassing "all learning activity undertaken throughout life, with the aim of improving knowledge, skills and competences, within a personal, civic, social and or employment related perspective.
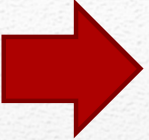
The **National Framework of Qualification** (**NFQ**) is defined as "the single, nationally and internationally accepted entity, through which all learning achievements may be measured and related to each other in a coherent way and which define the relationship between all education and training awards".
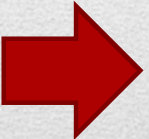
Formal Education as "education provided in the system of schools, colleges, universities and other formal educational institutions that normally constitutes a continuous "ladder" of full-time education for children and young people, generally beginning at age of five to seven and continuing up to 20 or 25 years old. Formal education refers to institutionalized learning activities that lead to a learning achievement that can be positioned in the National Framework of Qualifications (NFQ).

Non Formal Education is defined as "any organized and sustained educational activities that do not correspond exactly to the above definition of formal education. Non-formal education may therefore take place both within and outside educational institutions, and cater to persons of all ages. Non formal education programmes do not necessarily follow the "ladder" system, and may have a differing duration. Non-formal education refers to institutionalized learning activities, which are not part of the NFQ.

Informal Learning is defined as "…intentional, but it is less organized and less structured….and may include for example learning events (activities) that occur in the family, in the work place, and in the daily life of every person, on a self-directed, family-directed or socially directed basis. Informal learning activities are not institutionalized.

Classification of Learning Activities

The organising concept of the **CLA** (*Classification of Learning Activities - Eurostat*) is based on 3 broad categories: **Formal Education** (F), **Non Formal Education** (NF) and **Informal Learning** (INF).
It is possible to classify all learning activities into these 3 categories.
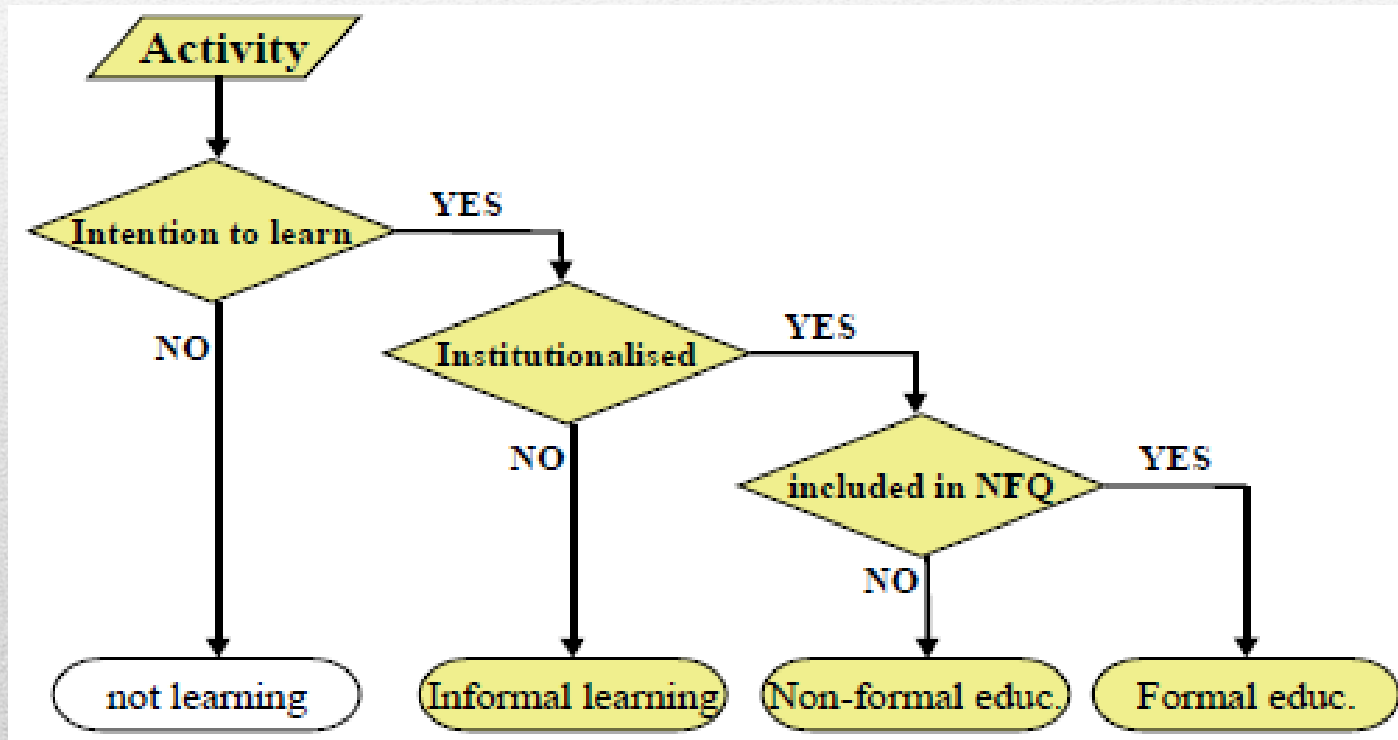
Participation in a training course by age and learning category (%)
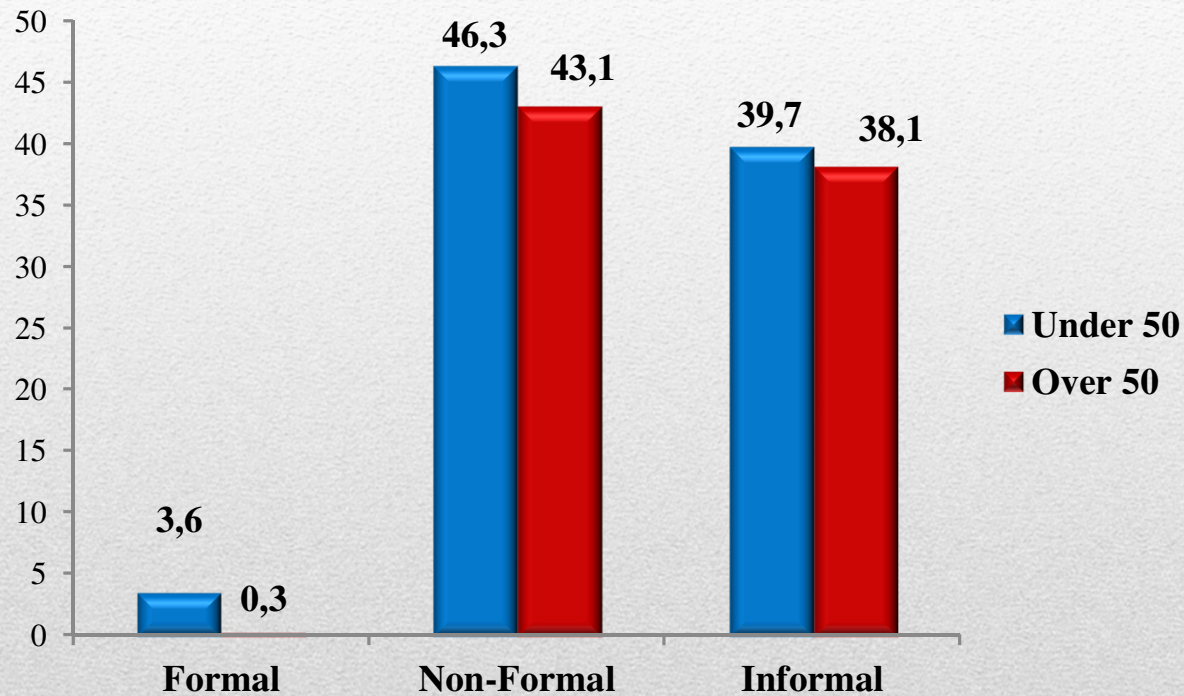
AES – Descriptive analysis (2)

Participation in a training course by age and gender (%)

- Under 50
- Over 50

Male: 64,0 / 59,6
Female: 64,0 / 61,7
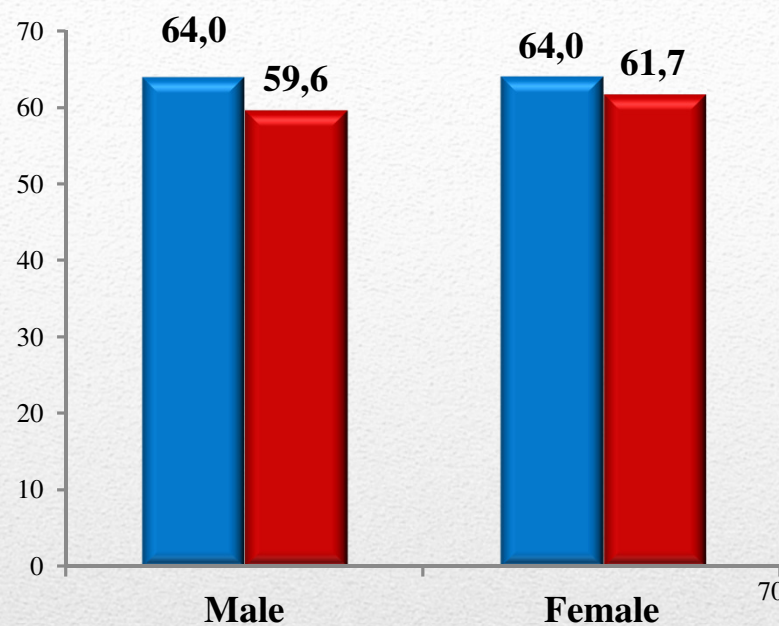
Participation in a training course by age and citizenship (%)

- Under 50
- Over 50

Italian: 65,5 / 61,1
EU: 51,1 / 30,0
Extra EU: 37,5 / 34,8

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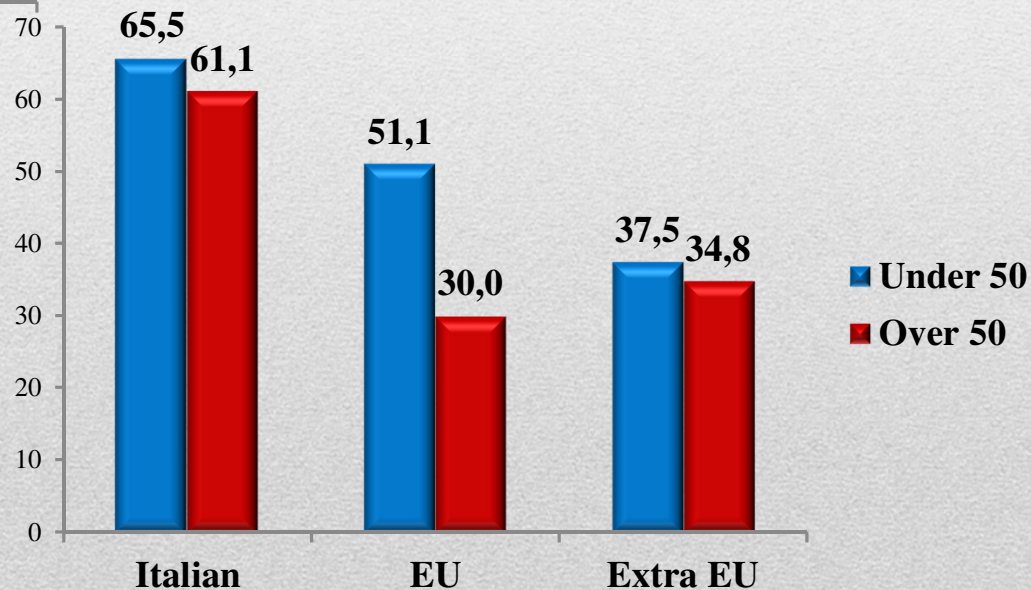
Participation in a training course by age and education level (%)
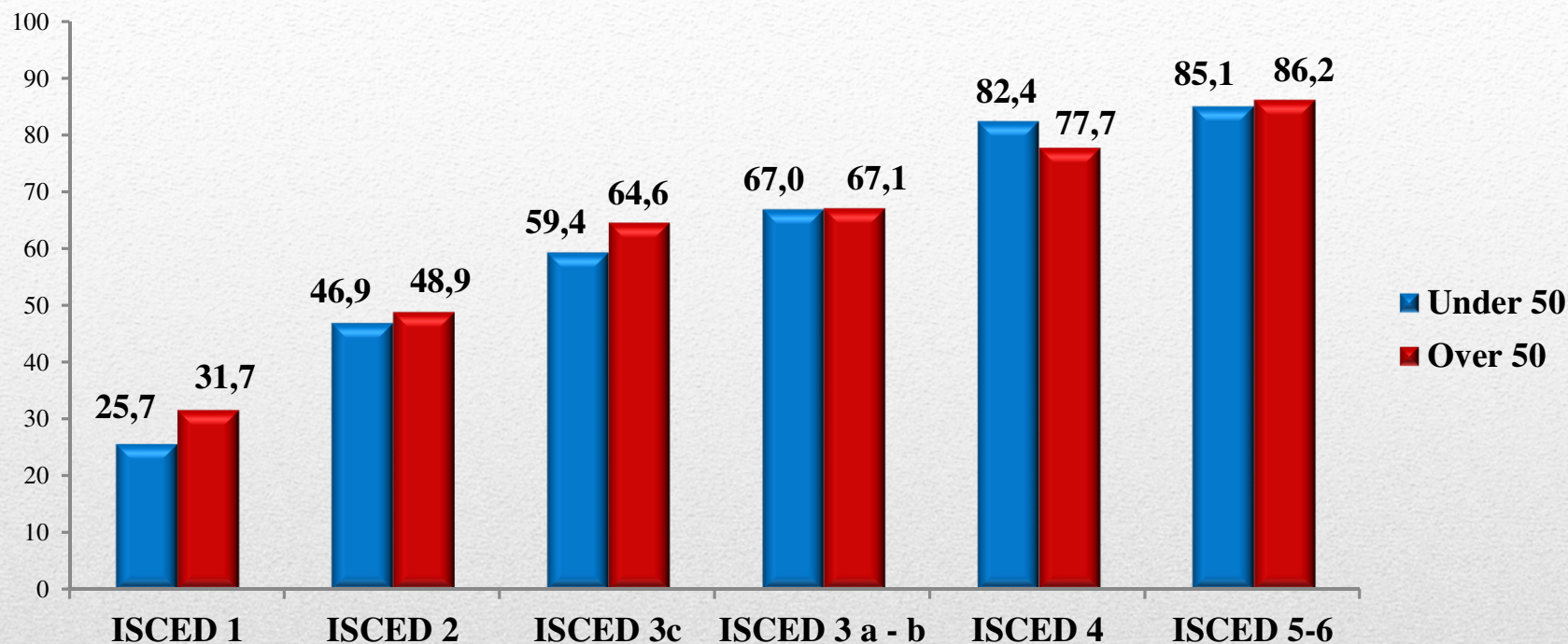
Participation in continuous vocational training is positively correlated to educational level

AES – Descriptive analysis (4)

Participation in a training course by age and occupation (%)

■ Under 50 ■ Over 50

1. Managers
2. Professionals
3. Technicians and associate professionals
4. Clerical support workers
5. Services and sales workers
6. Skilled agricultural, forestry and fishery workers
7. Craft and related trades workers
8. Plant and machine operators and assemblers
9. Elementary occupations
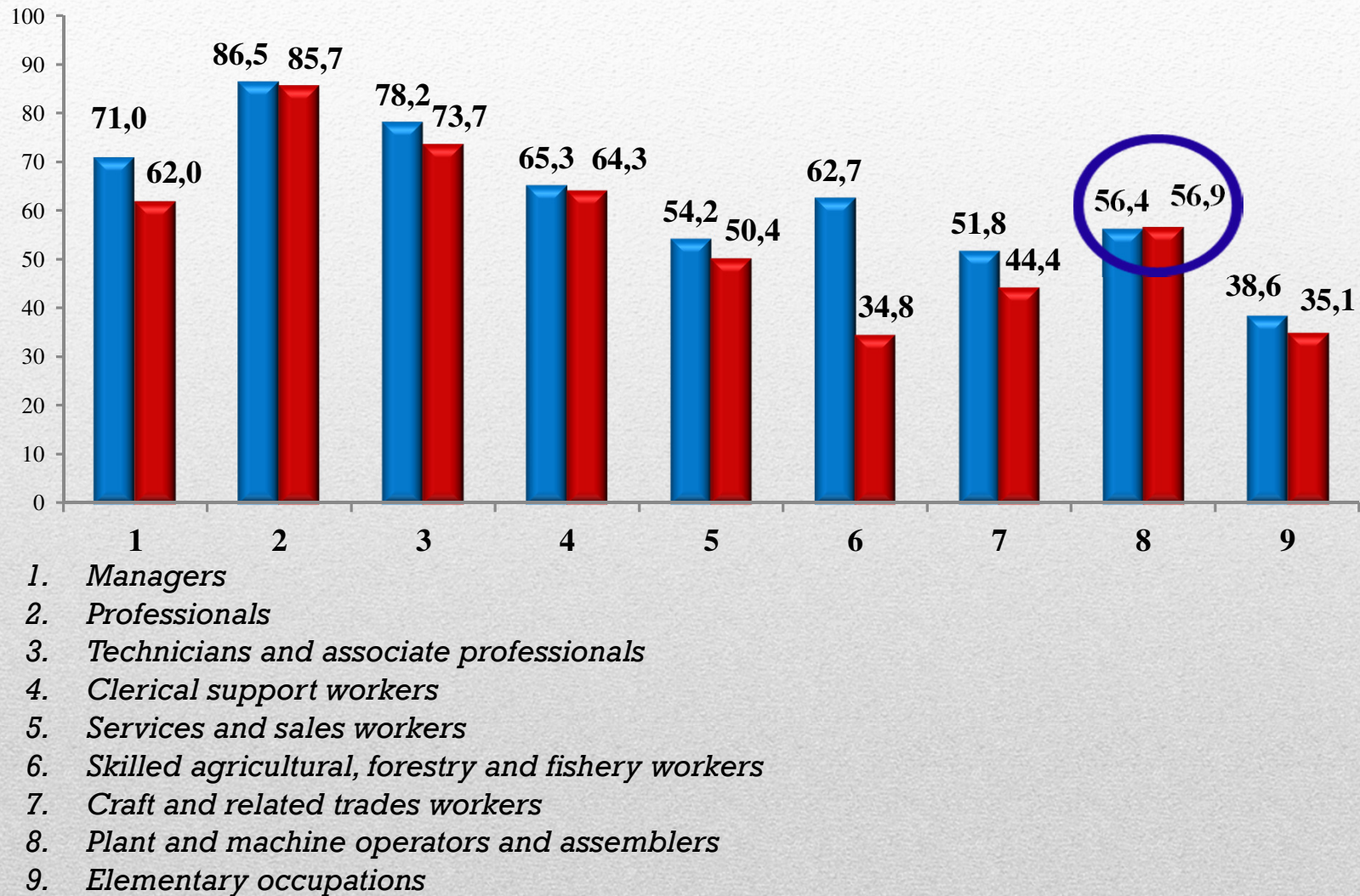
AES – Descriptive analysis (5)

Participation in a training course by reason and learning category (%)

Legend: ■ Formal ■ Non-Formal

Values by category:

1. 73,2 / 60,6
2. 18,5 / 13,2
3. 70,0 / 12,0
4. 25,0 / 3,3
5. 4,7 / 34,6
6. 73,0 / 51,9
7. 88,5 / 71,4
8. 84,7 / 32,9
9. 26,1 / 25,4

1. *To improve job and career*
2. *To avoid losing job*
3. *To increase the chances of finding/changing job*
4. *To start own business*
5. ***He/she was forced to attend***
6. *To learn knowledge/skills useful for life*
7. *To increase skills on a specific topic*
8. *To get a certification*
9. *To meet new people*

Paolo Emilio Cardone   *30/01/2019*
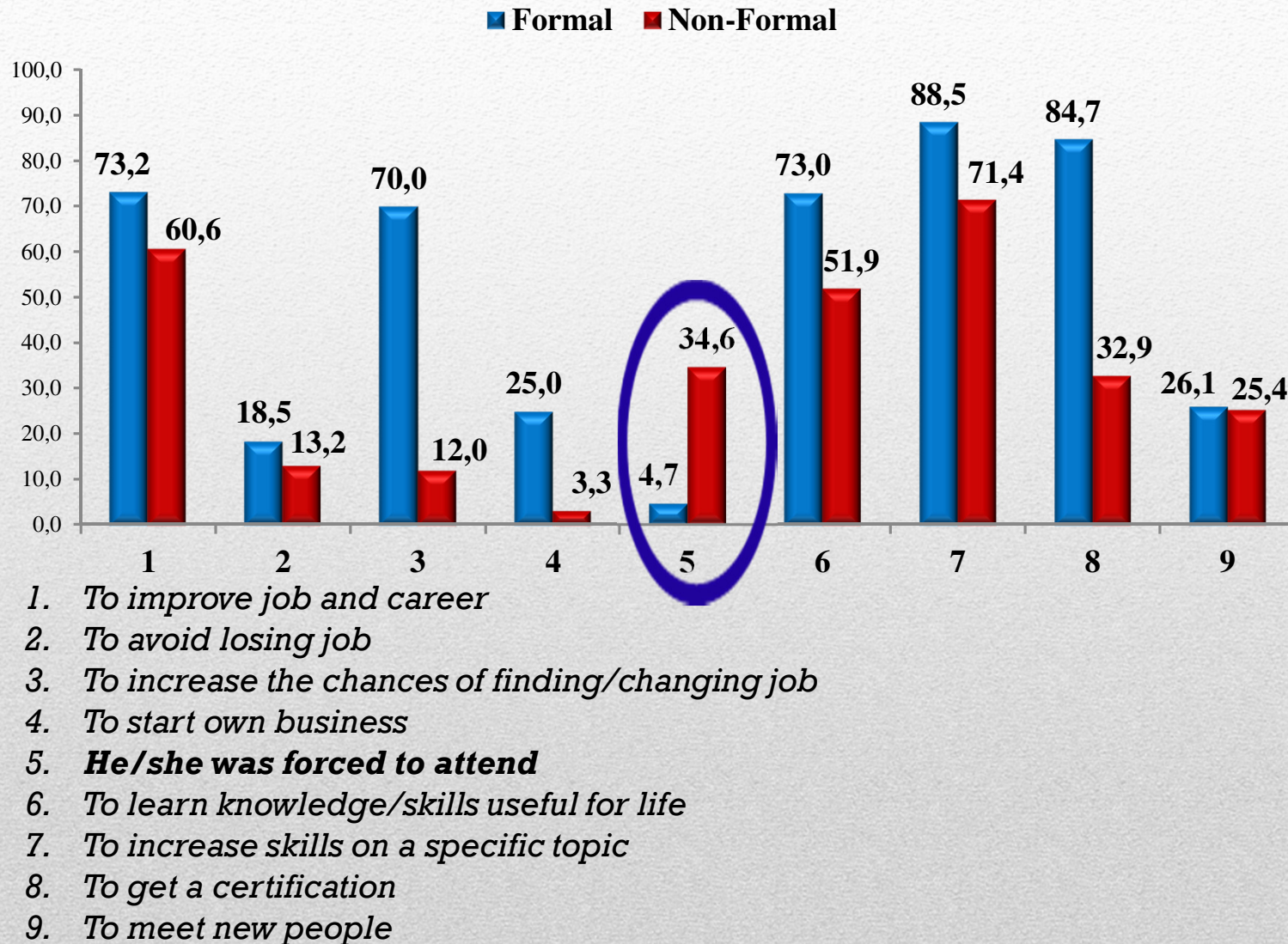
Participation in a training course by age and size company (%)

Legend: ■ Under 50 ■ Over 50 ■ Under 50 only Non-Formal ■ Over 50 only Non-Formal

	Micro	Small	Medium	Large
Under 50	55,9	63,7	73,7	75,7
Over 50	52,4	62,2	69,9	73,1
Under 50 only Non-Formal	39,4	47,9	55,9	58,9
Over 50 only Non-Formal	31,1	47,4	57,1	59,1
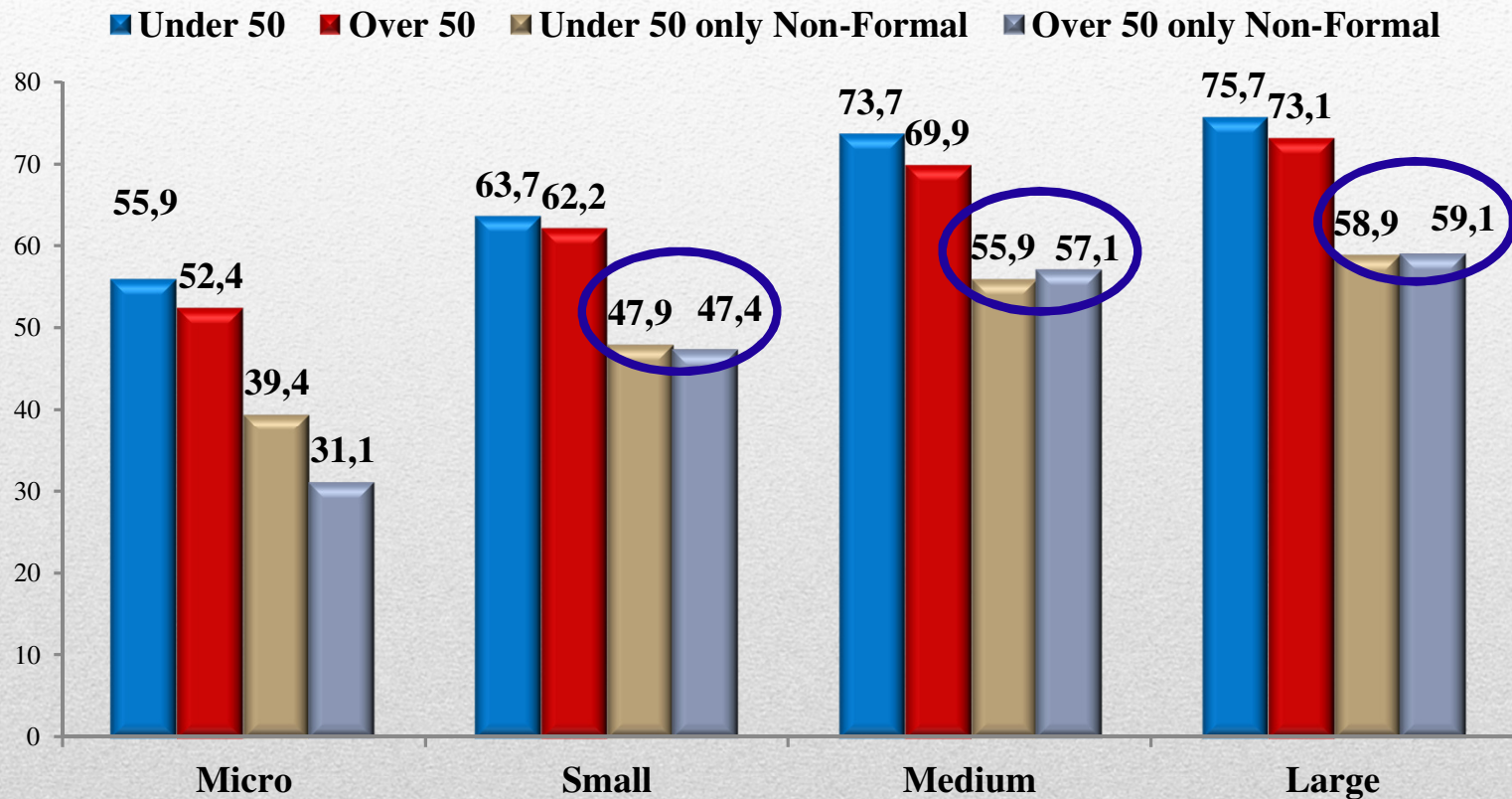
Participation method in informal training course (%)

Legend:
- Family, friends, work
- Books
- PC
- Tv, radio, video

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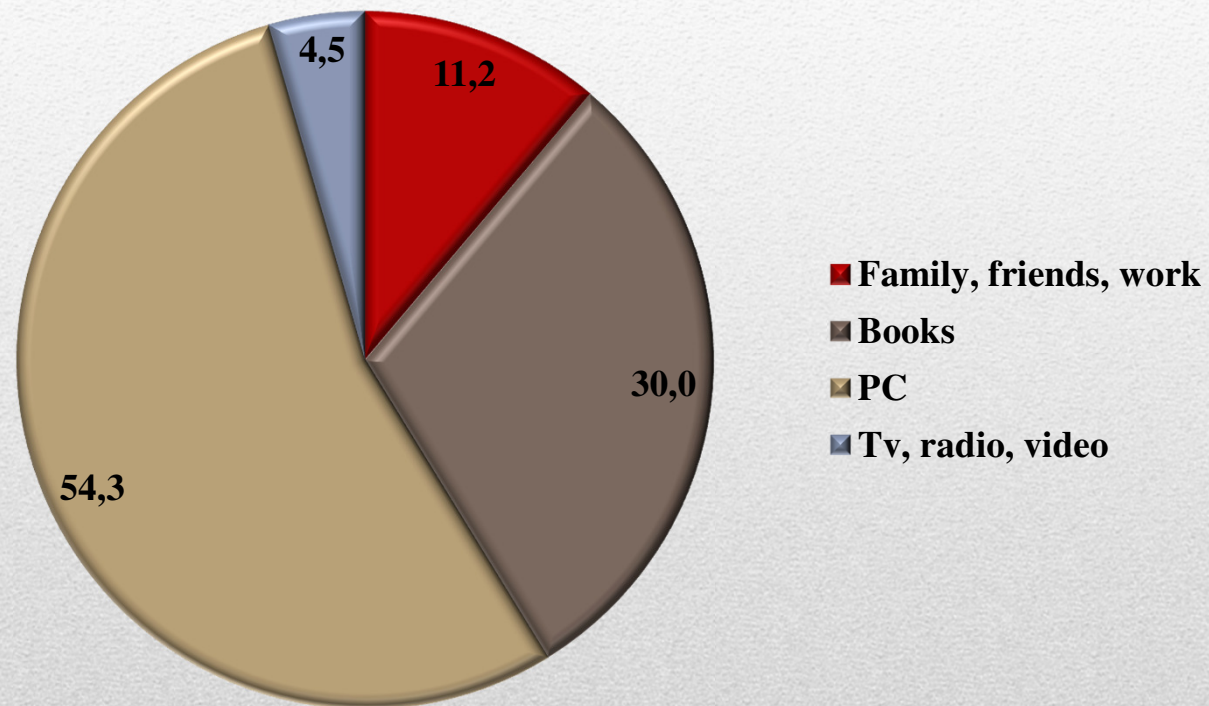
IT employees were analyzed using a logistic regression model (Stata 13).

Aim: which variables affect the "risk" to participate or not at least one training activity.

In order to achieve this goal, we have used "*Training*" as the dependent variable (<u>weigthed</u> model). *Training* =1 if the worker has participated at least one training activity (formal, non formal or informal).

- *Gender*. Categorical. Dummy variable: Female, Male (reference cat.).

- *Citizen*. Categorical. Three values. Italian citizenship (reference cat.), Other citizenship UE, citizenship extra UE.

- *JobISCO*. Categorical. Nine levels. Elementary occupations (reference cat.); Managers; Professionals; Technicians and associate professionals; Clerical support workers; Services and sales workers; Skilled agricultural, forestry and fishery workers; Craft and related trades workers; Plant and machine operators and assemblers.

- *Sizefirm*. Categorical. Four intervals. From 1 to 10 (micro, reference cat.), between 11 and 49 (small), between 50 and 249 (medium) and more than 250 (large).

- *Age*. Dummy variable: Over 50 (reference cat.), Under 50.

AES – Logistic Model (1)

Variables		Coef (B)	Exp (B)	Sign.
• Gender				
Male (ref.)	Female	-0,10	0,91	0.174
• Citizen				
Italian (ref.)	EU	-0,58	0,56	0.025
	Extra EU	-0,56	0,57	0.001
• Sizefirm				
Micro (1-10) (ref.)	Small (11 - 49)	0,19	1,21	0.019
	Medium (50 - 249)	0,48	1,62	0.000
	Large (250 +)	0,59	1,81	0.000
• Age				
Over 50 (ref.)	Under 50	0,20	**1,22**	0.009

Variables		Coef (B)	Exp (B)	Sign.
• Job ISCO				
Elementary occupations (ref.)	Managers	1,24	3,44	0.000
	Professionals	2,24	9,44	0.000
	Technicians and associate professionals	1,53	4,61	0.000
	Clerical support workers	0,96	2,61	0.000
	Services and sales workers	0,66	1,94	0.000
	Skilled agricultural, forestry and fishery workers	0,84	2,32	0.002
	Craft and related trades workers	0,34	1,40	0.018
	Plant and machine operators and assemblers	0,55	1,74	0.000
	Intercept	0,38	1,46	0,001

Dependent variable: _Training_ =1 if the worker has participated at least one NON-FORMAL training activity.

Variables		Coef (B)	Exp (B)	Sign.
• Gender				
Male (ref.)	Female	0,40	1,04	0.556
• Citizen				
Italian (ref.)	EU	-0,47	0,63	0.065
	Extra EU	-0,40	0,67	0.028
• Sizefirm				
Micro (1-10) (ref.)	Small (11 - 49)	0,29	1,34	0.000
	Medium (50 - 249)	0,51	1,66	0.000
	Large (250 +)	0,62	1,86	0.000
• Age				
Over 50 (ref.)	Under 50	0,19	**1,21**	0.007

Variables		Coef (B)	Exp (B)	Sign.
• Job ISCO				
Elementary occupations (ref.)	Managers	1,07	2,93	0.000
	Professionals	1,87	6,49	0.000
	Technicians and associate professionals	1,30	3,67	0.000
	Clerical support workers	0,83	2,28	0.000
	Services and sales workers	0,48	1,62	0.001
	Skilled agricultural, forestry and fishery workers	0,76	2,14	0.006
	Craft and related trades workers	0,27	1,30	0.083
	Plant and machine operators and assemblers	0,47	1,60	0.004
	Intercept	-1,35	0,26	0.000

Dependent variable: _Training_ =1 if the worker has participated at least one <u>INFORMAL</u> training activity.

Variables		Coef (B)	Exp (B)	Sign.
• Gender				
Male (ref.)	Female	-1,55	**0,86**	0.021
• Citizen				
Italian (ref.)	EU	-0,24	0,79	0.370
	Extra EU	-0,76	0,47	0.000
• Sizefirm				
Micro (1-10) (ref.)	Small (11 - 49)	-0,06	0,94	0.447
	Medium (50 - 249)	0,18	1,19	0.044
	Large (250 +)	0,16	1,18	0.110
• Age				
Over 50 (ref.)	Under 50	0,11	**1,12**	0.106

Variables		Coef (B)	Exp (B)	Sign.
• Job ISCO				
Elementary occupations (ref.)	Managers	1,05	2,86	0.000
	Professionals	1,66	5,24	0.000
	Technicians and associate professionals	1,11	3,04	0.000
	Clerical support workers	0,85	2,34	0.000
	Services and sales workers	0,69	1,99	0.000
	Skilled agricultural, forestry and fishery workers	0,91	2,48	0.001
	Craft and related trades workers	0,39	1,48	0.014
	Plant and machine operators and assemblers	0,43	1,54	0.014
	Intercept	-1,35	0,26	0.000

✓ Access to **learning activities** is essential when working life is extended

✓ However, despite the increasing need for learning later in life, participation and access to **learning decrease with age**

✓ **Informal learning** plays an important role

✓ Strong correlation between learning participation and the **employment status** of individuals (and **education level**)

✓ Older workers access to learning increases with **size company**

✓ It would be better to reduce the age gap by increasing participation and access rates, rather than increasing the volume of training offered (**non learners**)

✓ **Valuing experience** is a key factor for ensuring inter-generational knowledge transfer and identifying tasks where older workers are productive
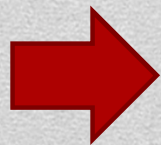
Overall the data confirm the existence of strong inequalities in access to job-related learning among workers: this requires **policy attention**, to increase the focus on job-related training as part of **active labour market policies**, to prevent skills' obsolescence

There is a significant **shortage of information** on actual skill needs and skill supply in different occupations.

Well-functioning labour markets rely on a **match between the skills and formal qualifications** of the workers and those that the jobs require and employers look for. Formal qualifications are often **quite different** from the real skills workers have but are nevertheless an important way to signal skill levels (mismatch).

- *Validation of non-formal and informal learning (VNFIL)*

Improving and developing a **lifelong learning culture** is the other key, vindicating the messages that "*It's never too late to learn*" because **learning must be for all**. Despite the increasing need for learning later in life, participation and access to learning decrease with age. **However, it will be crucial increasing the level of continuous Vocational training for all workers in future.**

This is (or should be) the real challenge

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Thanks for your attention!

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