



Social Role of Schools

Symposium on Education, Health and Equity

Geneva July 11, 2010

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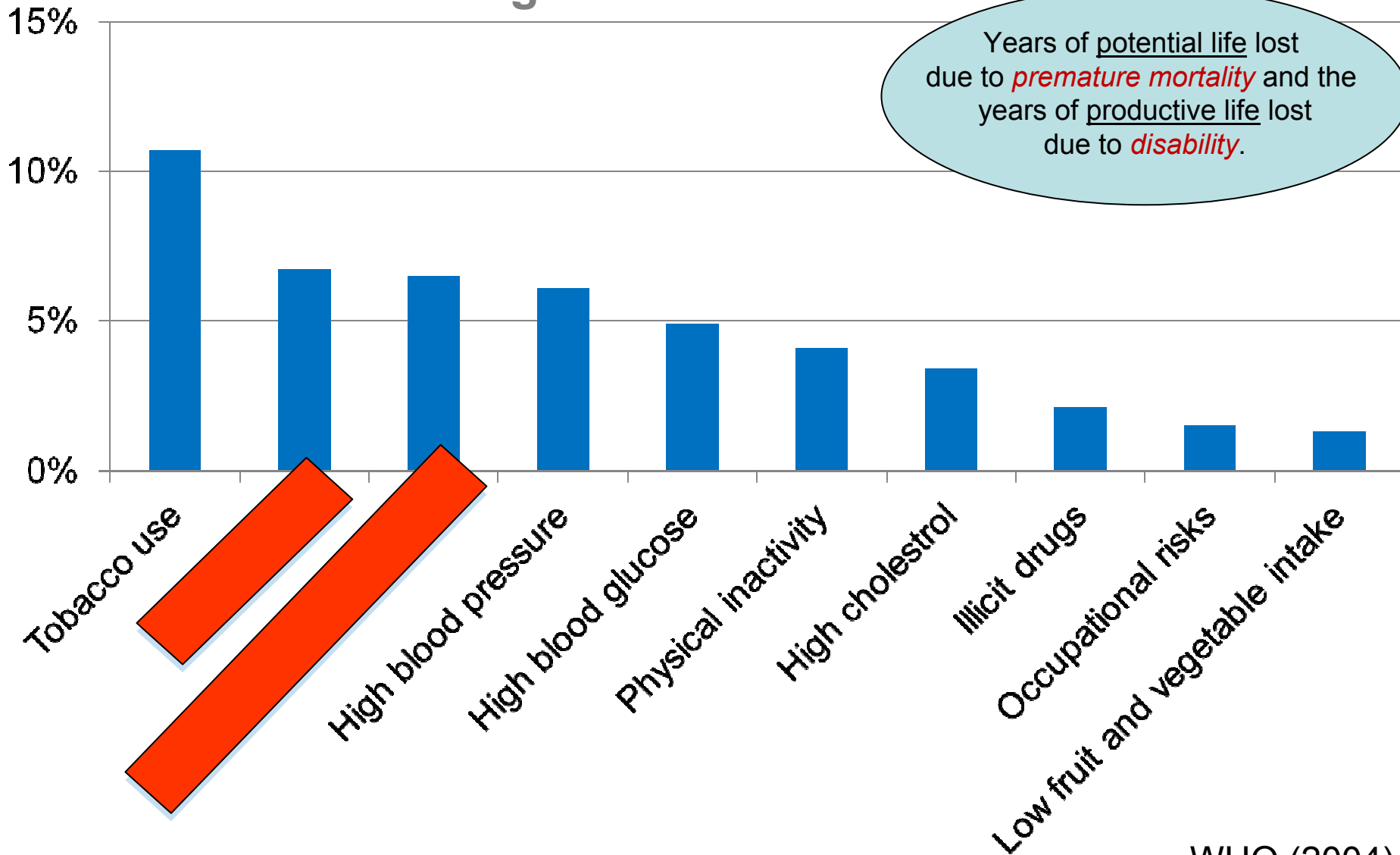
Outline

- 1. Social challenges in OECD countries***
- 2. Can education play a role?***
- 3. How might education play a role?***
- 4. Discussions***

1. Social challenges in OECD countries

Health Challenges

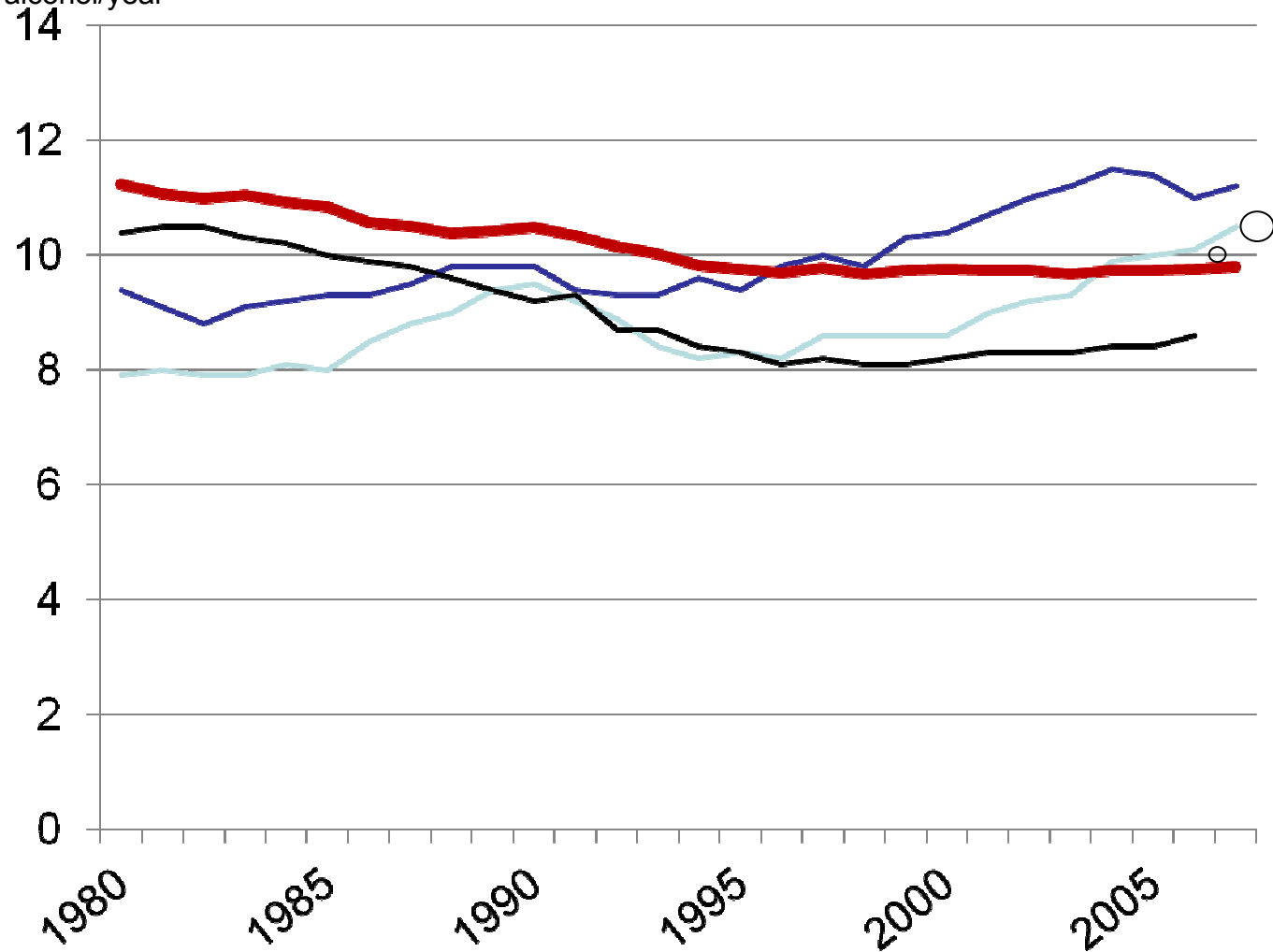
Leading Risk Factors of DALYs in High Income Countries



Alcohol Consumption

– generally decreasing but ...

Litres of pure alcohol/year

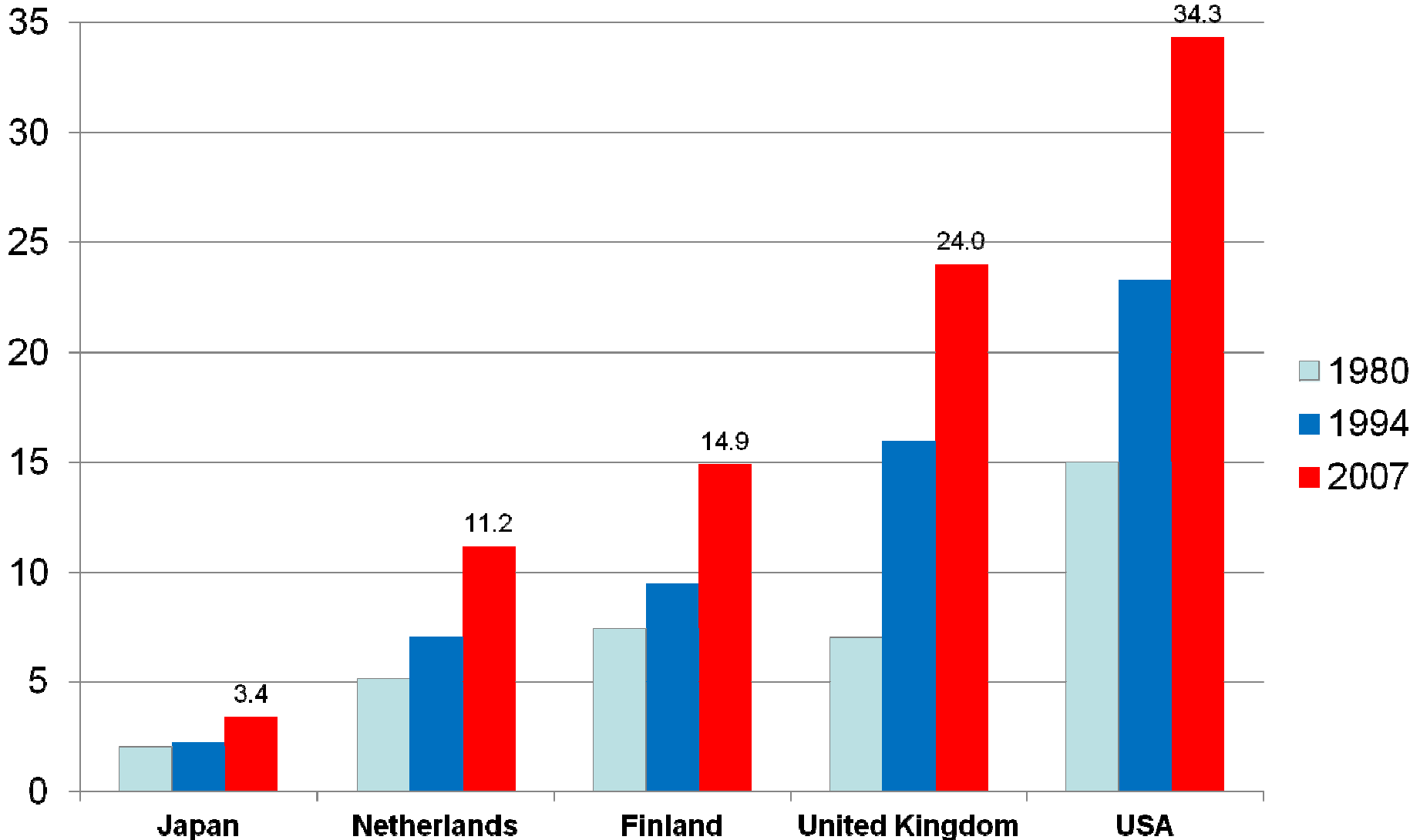


- Finland
- United Kingdom
- United States
- OECD

Obesity

- high incidence and increasing (% of pop with BMI>30)

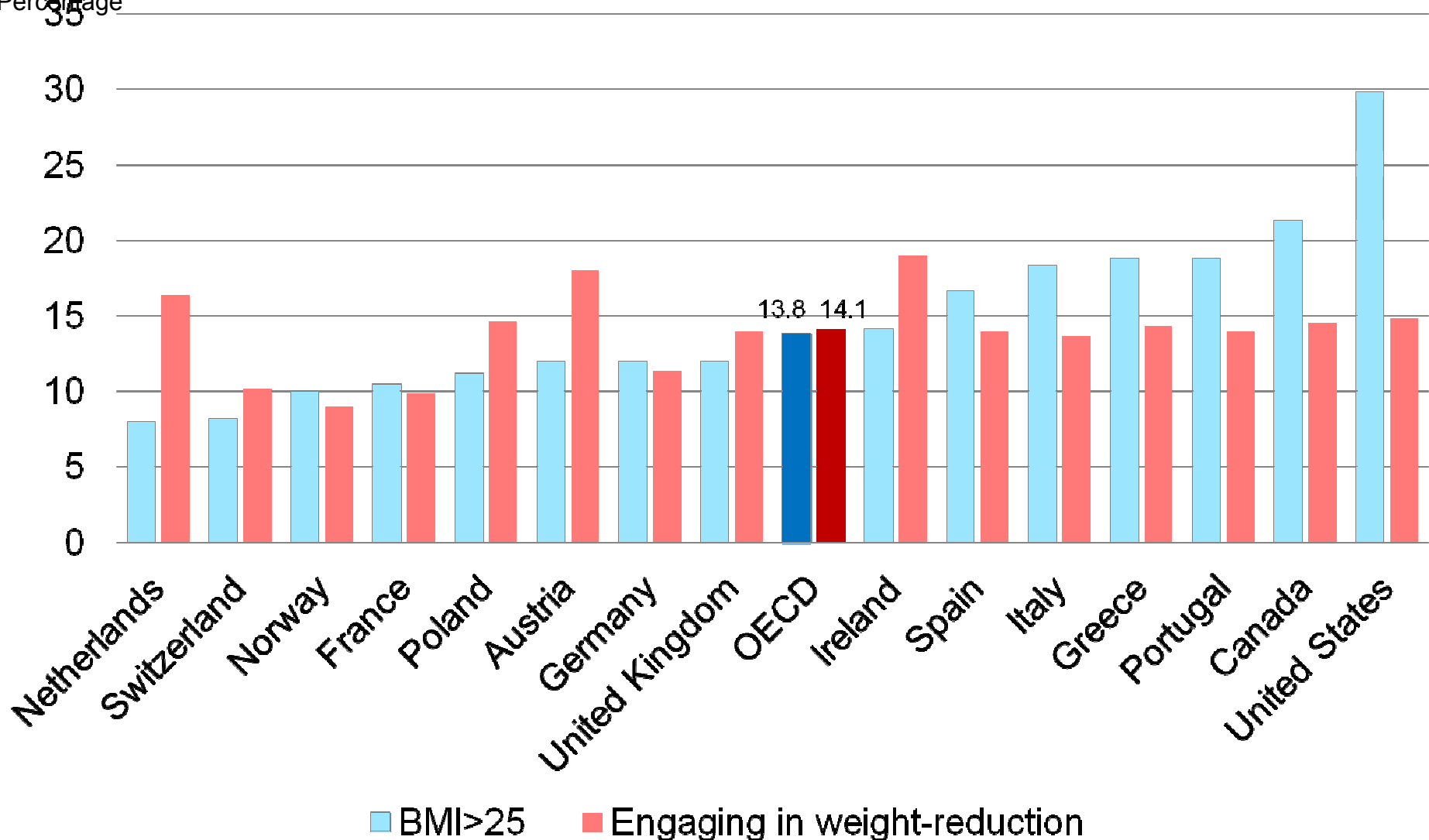
Percentage



Obesity

– also an issue among children (11~15 yrs old)...

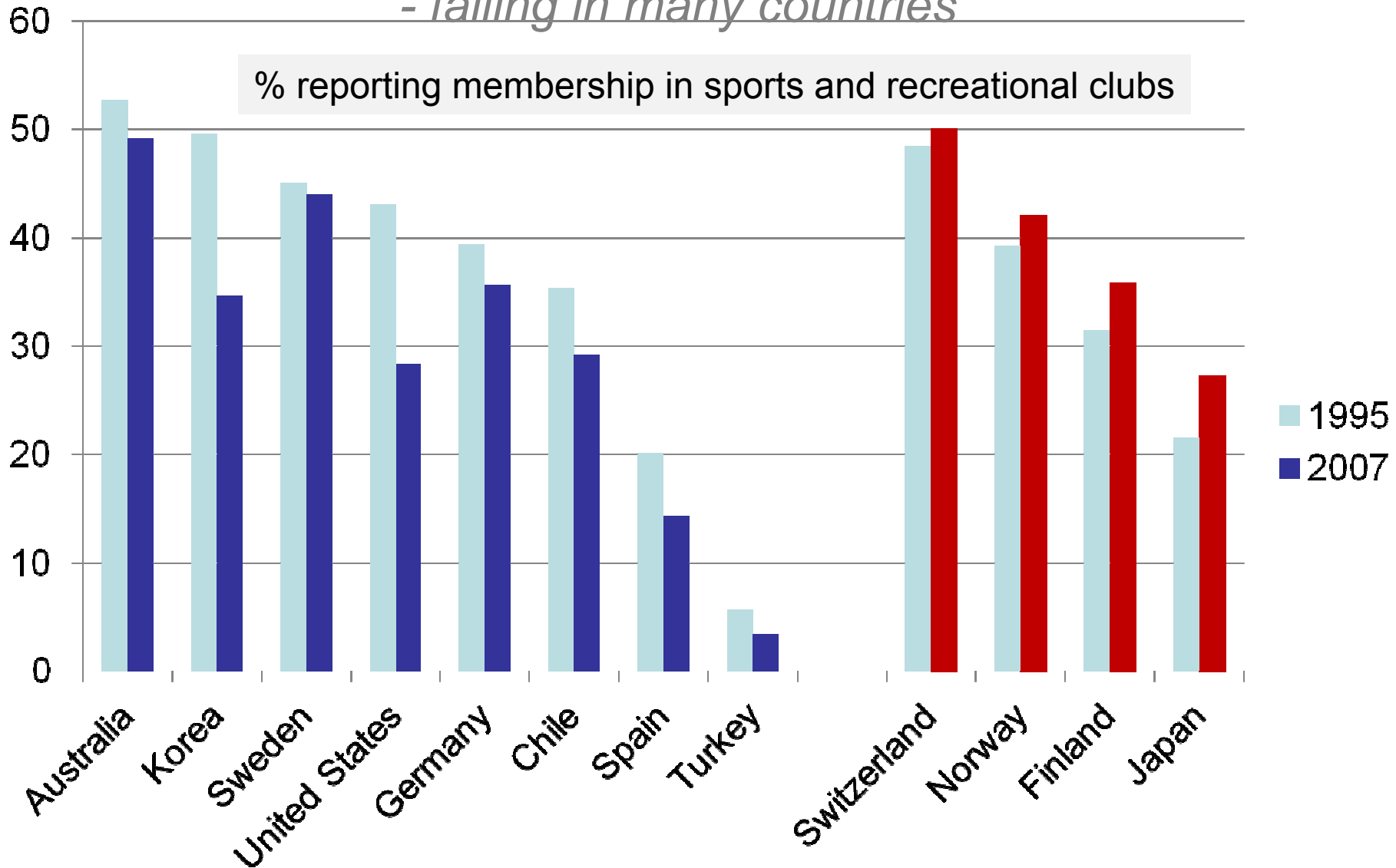
Percentage



Social Cohesion Challenges

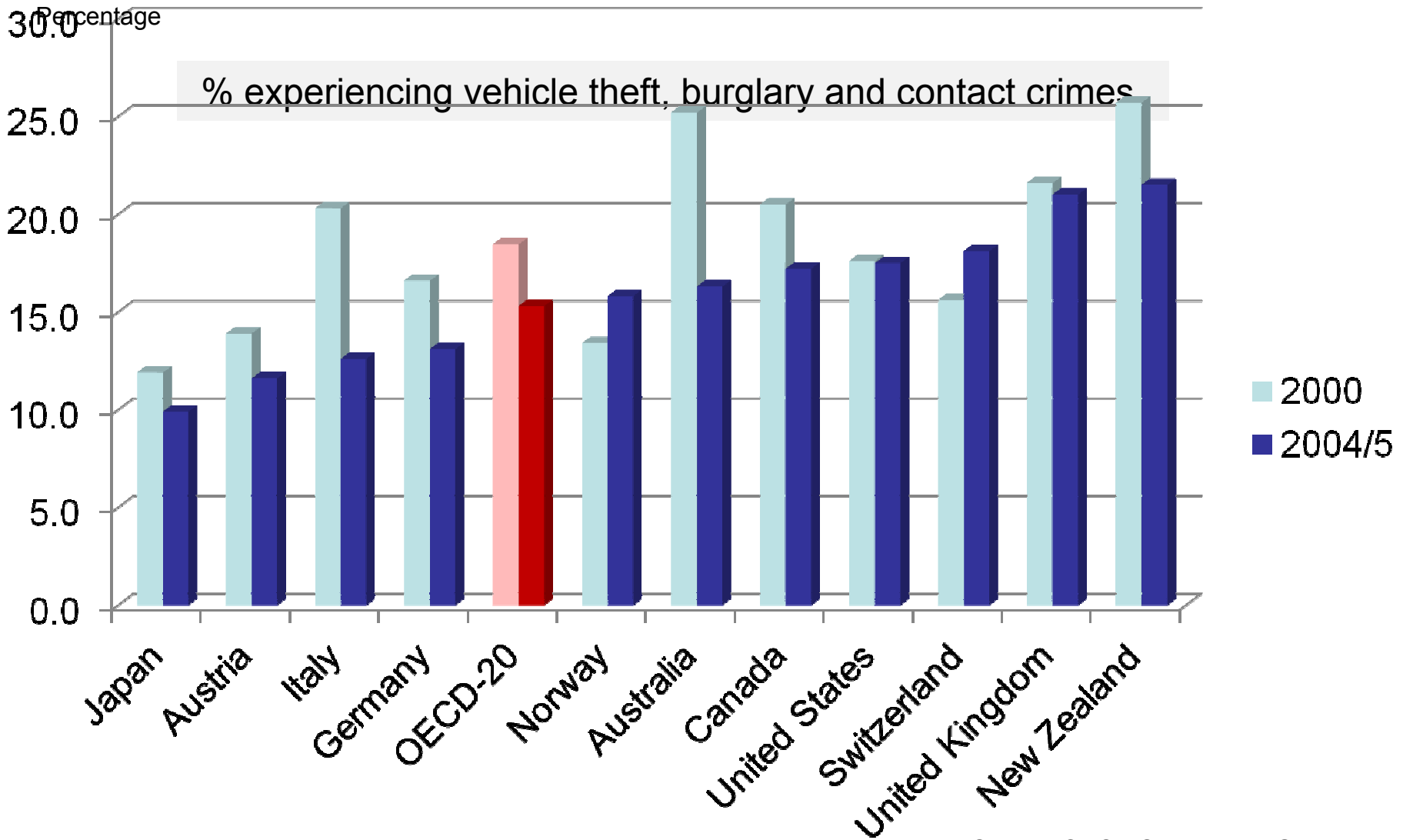
Civic Participation

- falling in many countries



Crime Victimization

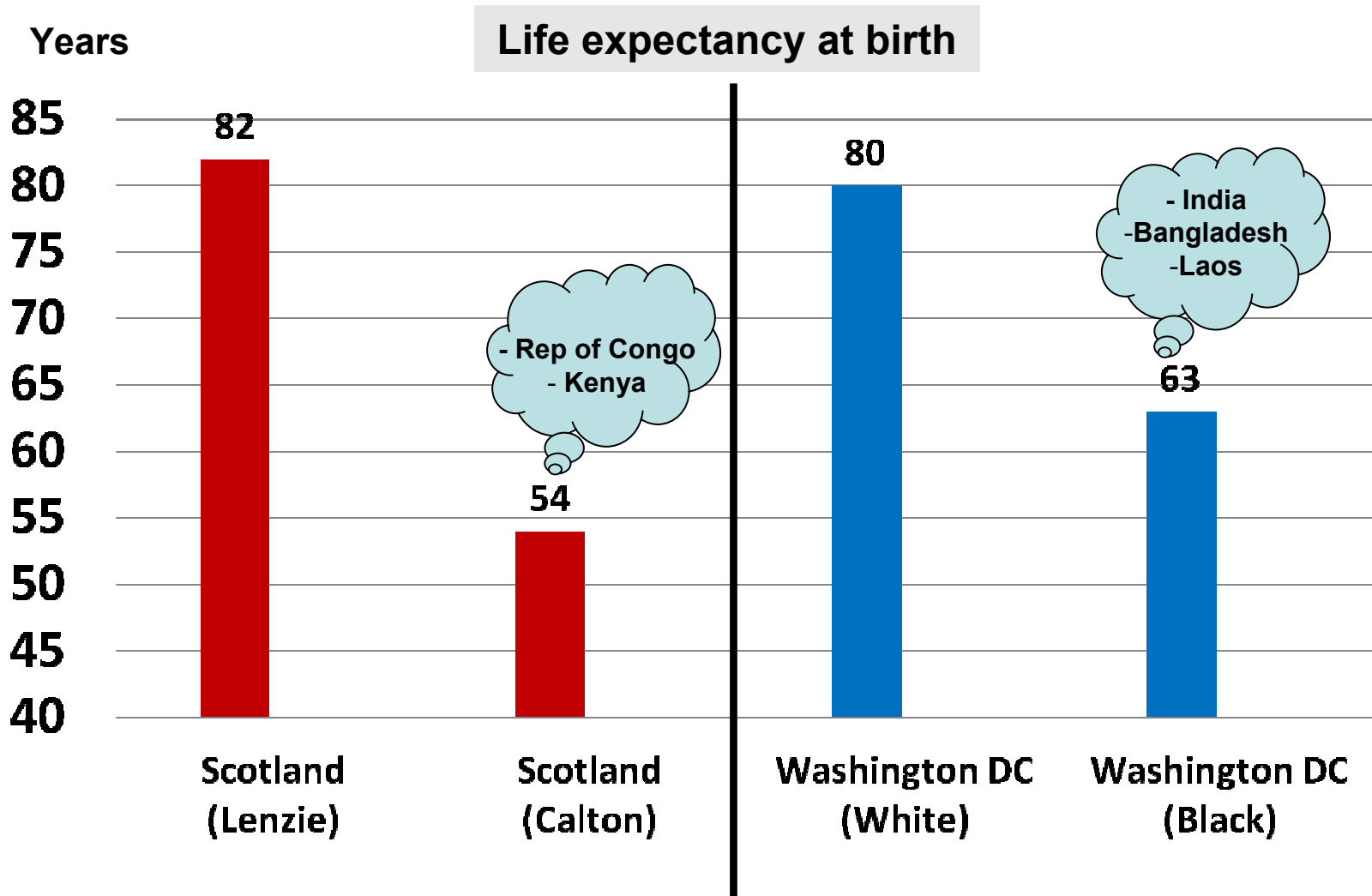
– falling but remain high



Equity Challenges

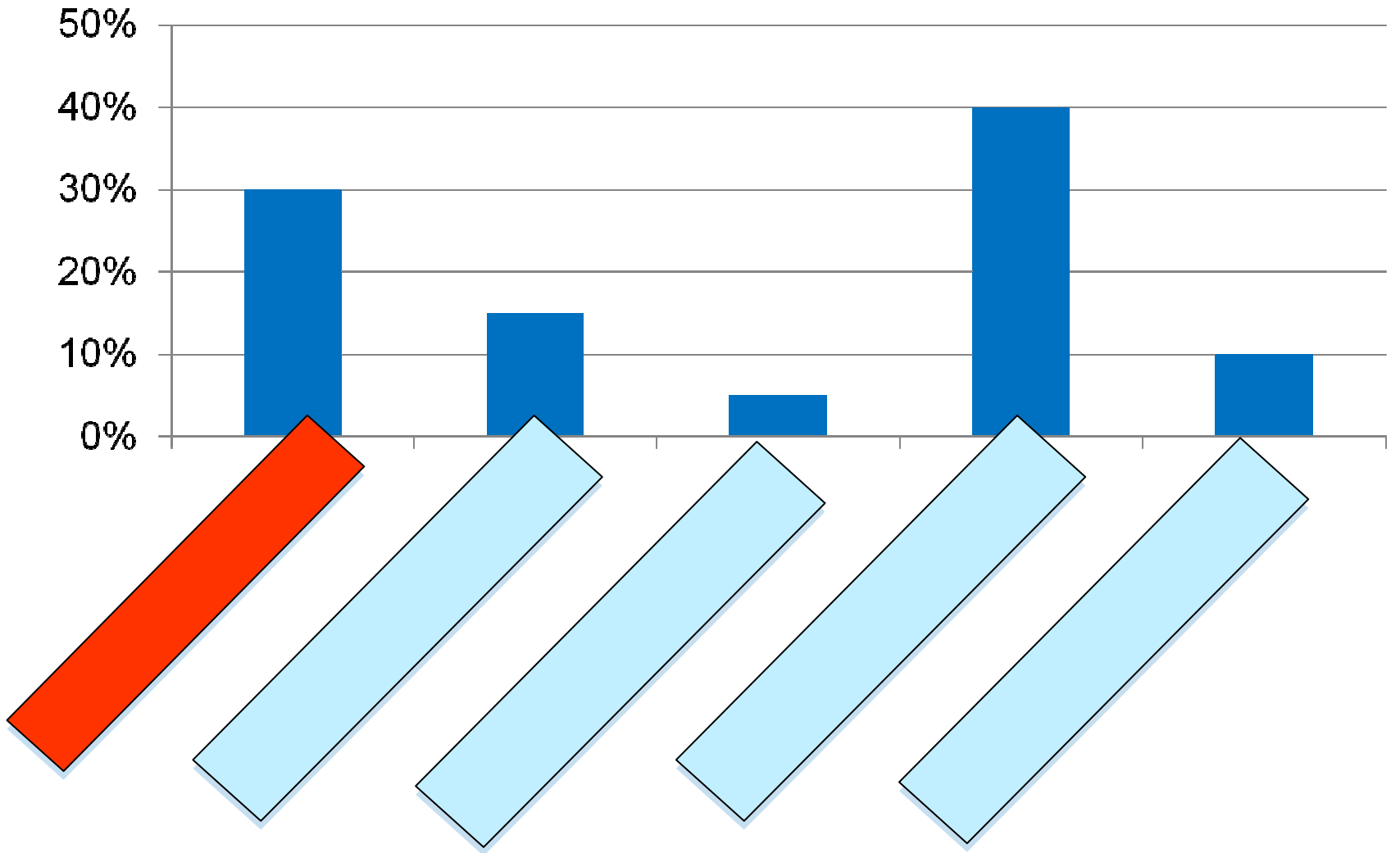
Health inequality

- is present within rich countries



2. Can education play a role?

Determinants of Premature Death (USA)



Education relates to Life Expectancy

- college graduates live longer...

Extra years of life

55

Life expectancy at Age 25 (1998 – 2000)

50

50

50

45

47

45

40

35

38

30

32

25

20

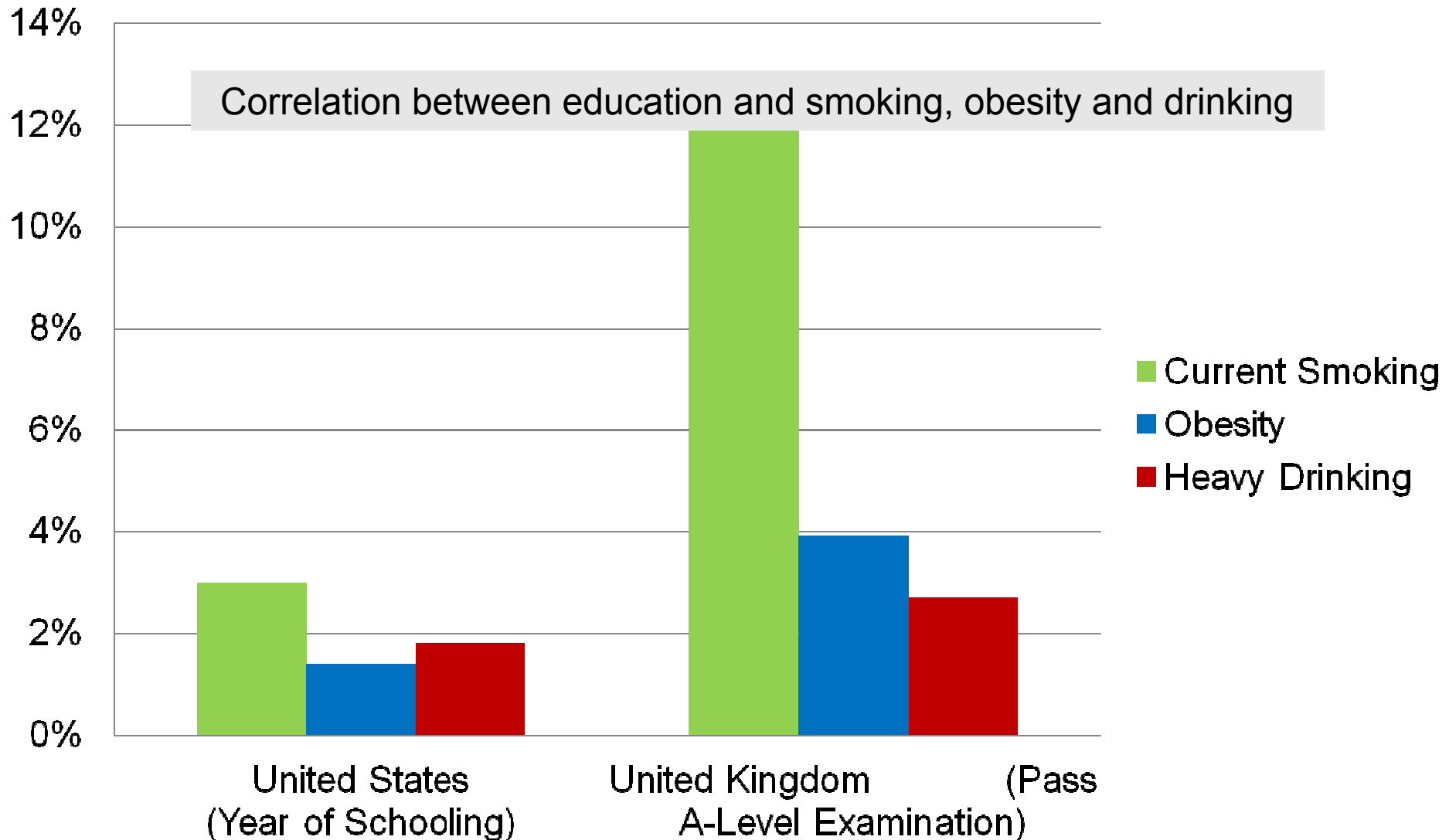
Denmark

Finland

Czech Republic

■ < Tertiary ■ ≥ Tertiary

Education relates to Risk Factors of DALY



Education is also related to crime

- ❑ **USA:** 75% of state and 59% of federal **prison inmates** didn't have a high school diploma (Harlow, 2003).
- ❑ **Italy:** More than 75% of **convicted persons** had not completed high school (Buonanno and Leonida, 2009).
- ❑ **UK:** **Incarceration rates** among men aged 21-25 were more than 8 times higher for those without an education qualification relative to those with a qualification (Machin and Vujic, 2005).

There is also evidence suggesting “causal effects” of education...

- ❑ **Mortality, Obesity/BMI, Mental health and Drinking** (Grossman, 2007; OECD, 2010).
 - ✓ 1 year of extra schooling reduces the probability of dying in the next 10 years by 3.6 percent.
- ❑ **Civic participation, voting and political interest** (Campbell 2006; OECD 2010).
 - ✓ 2.5 years of secondary schooling would increase voter turnout by 17% points (Dee, 2004).
- ❑ **Crime and adolescence risky behaviour** (Heckman, Stixrud and Urzua, 2006; Lochner, 2010).
 - ✓ 10% increase in high school graduation rates would reduce arrest rates by 9% points (Lochner and Moretti, 2004).

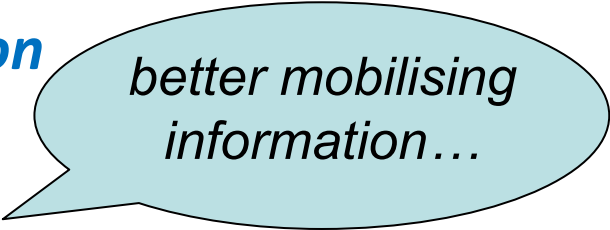
Moreover, there is evidence suggesting “cost-effectiveness” of education...

- ❑ OECD (2010) suggest that school-based intervention in Europe is a cost-effective strategy to tackle obesity (comparable to health interventions such as physician’s counselling, food advertising regulation, food labelling intervention).
- ❑ Groot and Maasen van den Brink (2006) report that the health returns to education in the Netherlands is about 2.5 – 5.8 % for Men.
- ❑ Carneiro and Heckman (2003) suggest that early childhood intervention targeted to disadvantaged group is a cost-effective strategy to tackle crime.
- ❑ Lochner (2010) suggests that a 1% point increase in male US high school graduation rates would lead to a 2 billion USD in savings due to reduced crime. → equivalent to 3000 USD annual savings per additional male graduate.

3. How might education play a role?

By fostering competencies...

- ❑ **Information**
limited...



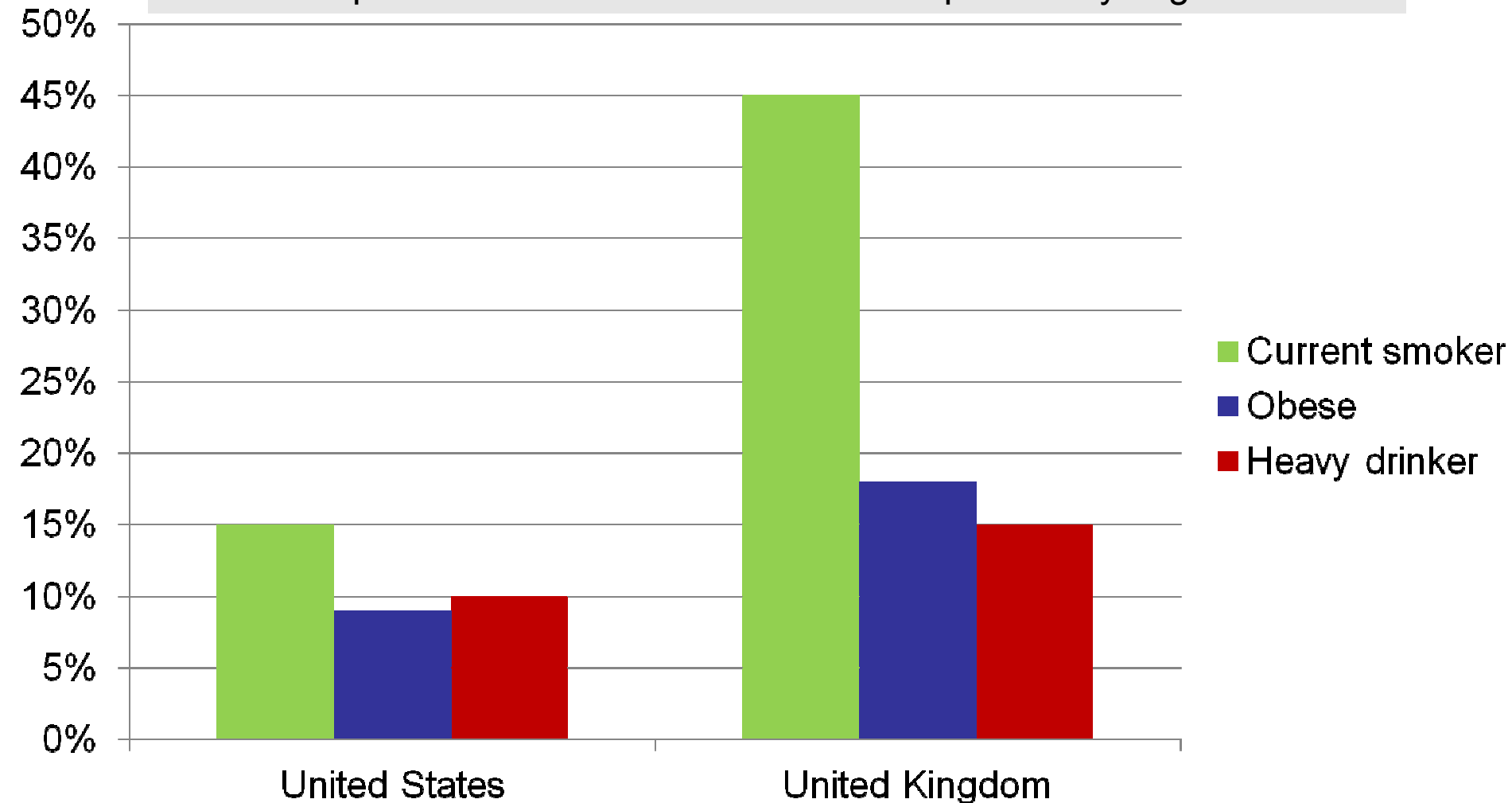
*better mobilising
information...*

- ❑ **Cognitive skills**

Literacy, numeracy and high-order processing.

Cognitive skills matter for health...

Relationship between education and health explained by cognitive skills



By fostering competencies...

- ❑ **Information**

limited...

*better mobilising
information...*

- ❑ **Cognitive skills**

Literacy, numeracy and...

*translating intentions
to actions...*

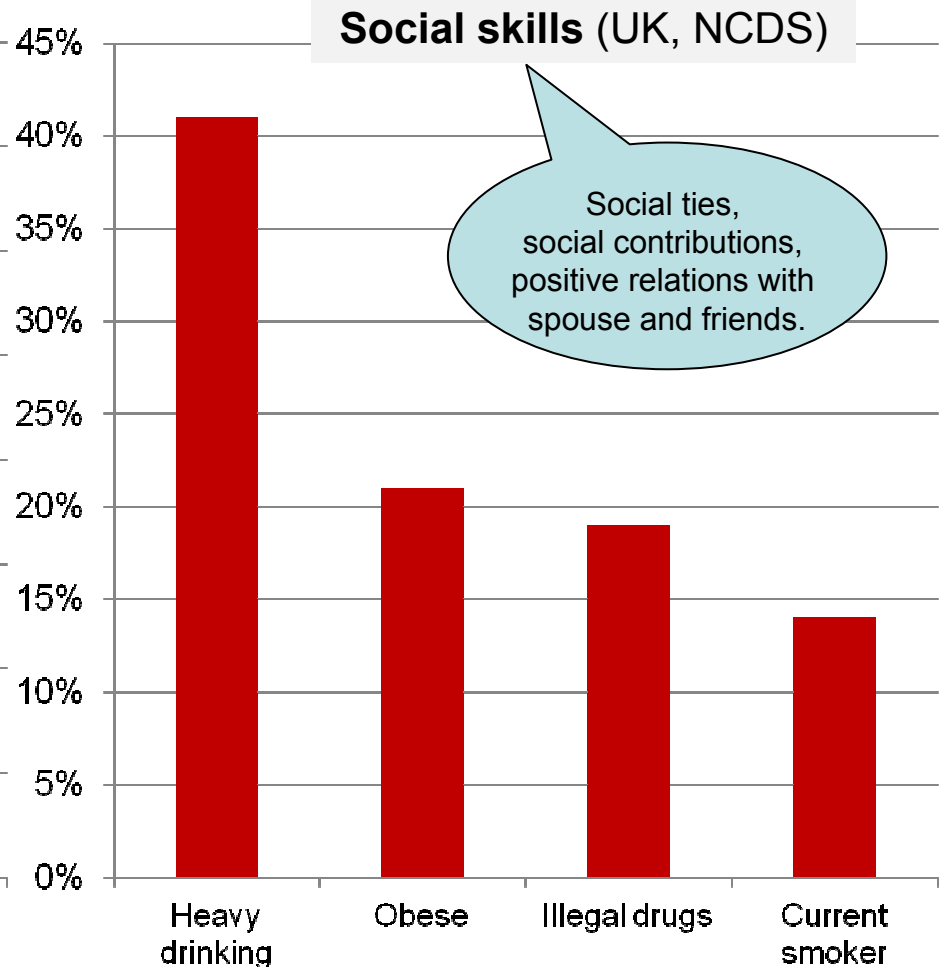
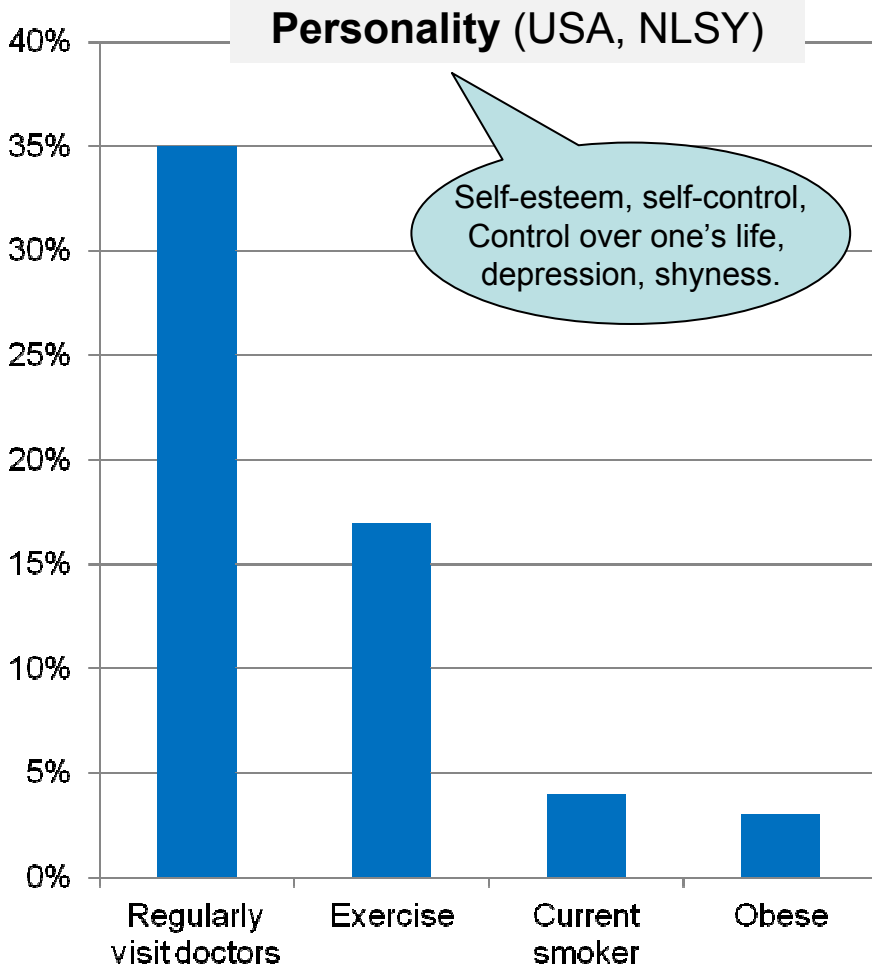
...ing.

- ❑ **Non-cognitive skills**

*Self-efficacy, self-esteem, self-control, motivation,
sociability, self-regulation, etc.*

Non-cognitive skills also matters for health...

Relationship between education and health explained by non-cognitive skills



Skills also explain social cohesion...

- ❑ **OECD Countries:** Denny (2003) shows that **adult literacy** explains **civic participation** and **interpersonal trust**.
- ❑ **UK:** Schoon et al, (2010) suggest that **cognitive test** at age 11 predicts **trust, tolerance and positive attitude towards equality** at age 33.
- ❑ **US:** Heckman, Stixrud and Urzua (2006) show that **non-cognitive skills** at age 15-23 explain **imprisonment and illegal activities** during adulthood.
- ❑ **UK:** Carneiro, Crawford and Goodman (2007) suggest that **social skills** at age 11 explain incidence of **crime** during adolescence and adulthood.

By fostering attitudes, perceptions and habits...

Healthy lifestyles and habits –balanced diet and exercise

- ✓ *School meals*
- ✓ *Physical exercise*
- ✓ *School culture*

Peer effects - drinking, smoking, obesity and mental health

Active citizenship and social responsibilities

- ✓ *Situated knowledge*
- ✓ *open classroom climate → student voice and participation*
- ✓ *School ethos → sense of community within schools*

4. Discussions

Should the education sector play a more prominent role?

- ❑ *Education is generally **effective in raising skills** that have been shown to improve measures of health, ‘civic and social engagement’ and crime.*
- ❑ *Education (including education intervention) is among the **cost-effective** class of interventions*
 - *Obesity*
 - *Crime*
- ❑ *We have started to understand what works*
 - *Competencies (including non-cognitive skills and habits)*
 - *Starting early*
 - *Involving families and communities*

Too much pressure on schools?

- ❑ ***Certain measures are likely to be resource intensive.***
 - ✓ *Introducing healthy school meals (e.g. Netherlands)*
 - ✓ *Reducing access to unhealthy snacks (e.g., USA)*
 - ✓ *Active involvement of parents.*
 - ✓ *Addressing the disadvantaged population.*

- ❑ ***But certain measures “may” not require significant extra resources.***
 - ✓ *Increasing the amount of exercise.*
 - ✓ *Making efforts to raise non-cognitive skills via existing curricula (this may require creative teaching methods). –persistence, self-esteem?*
 - ✓ *Raising school climates and norms by improving school environment.*

What are the policy challenges in leveraging education's potential?

- Promoting horizontal linkages (linking different ministries)*
- Promoting vertical linkages (linking different levels of government)*
- Promoting stakeholder linkages (parents, teachers, school administrators and policy makers).*
- Measuring/monitoring key competencies that matter
-not only cognitive skills, but social and emotional skills and habits.*

OECD Activities on the Social Role of the School

- ***“Social Outcomes of Learning” Project (2005-10).***

Final Publication

***“Improving Health and Social Cohesion
through Education”***

Forthcoming, October, 2010

- ***“Education at a Glance” (2009 and 2010 forthcoming).***
- ***“Education and Social Progress” Project (planned for 2011-)***