

# IQ, Education and Success

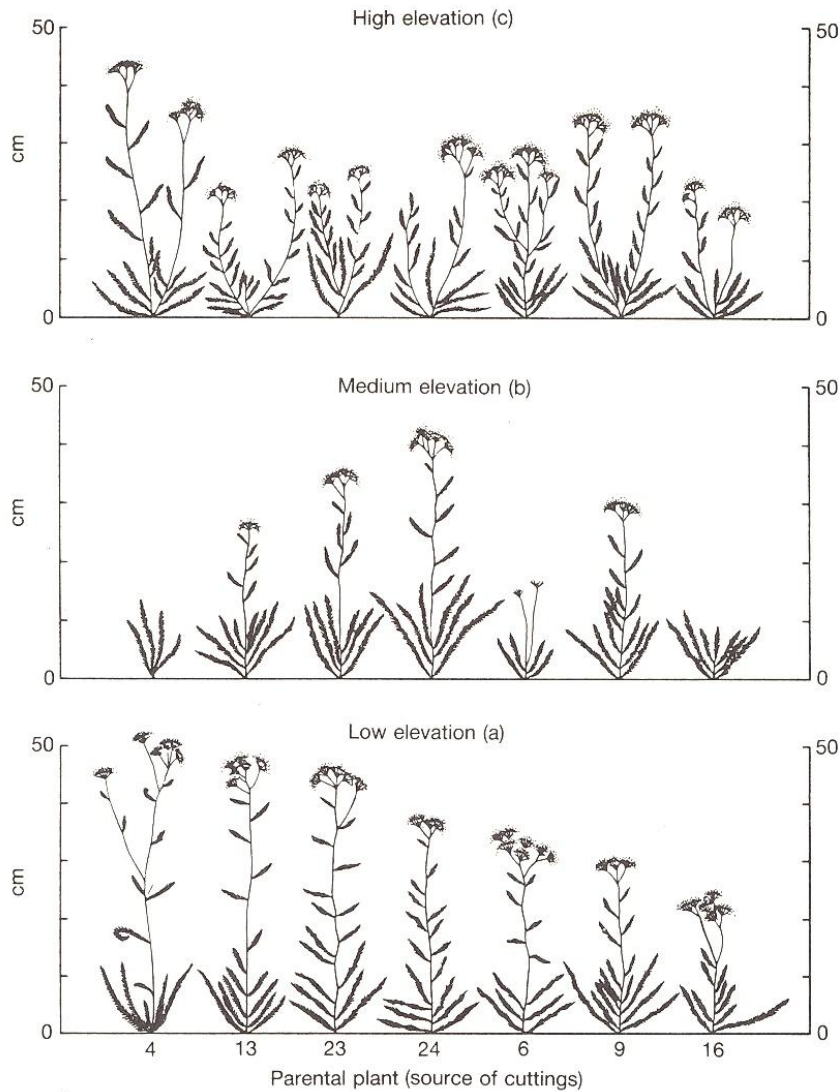
SIS

# Some background

- Spearman and  $g$
- Pearson and eugenics
- Inter-war population fears
- Scottish Mental Surveys
- Flynn effect
- Cyril Burt

# Trait variability

- Population variance =
- Genotypic variance +
- Environmental variance +
- Genotype\*environment interaction

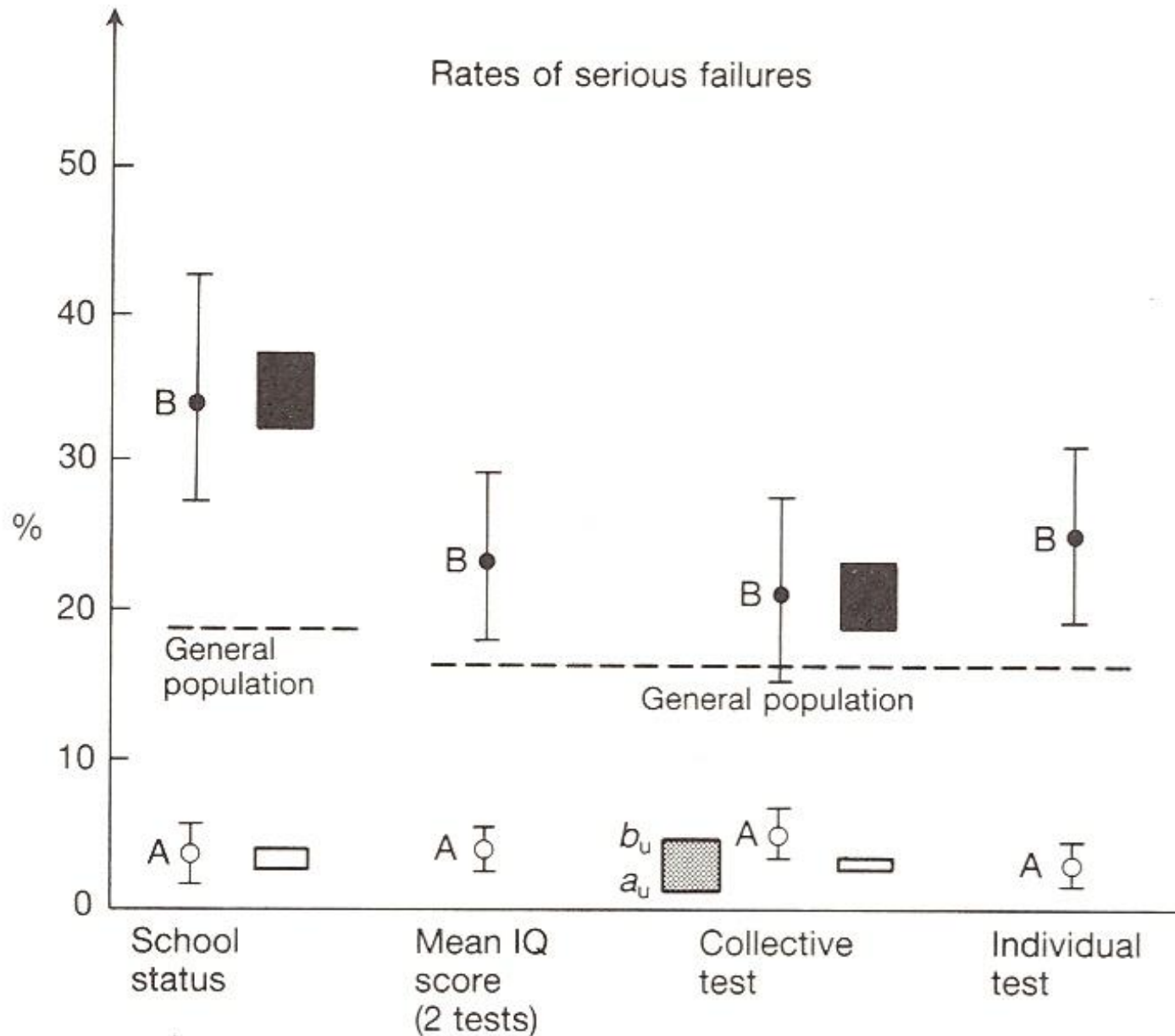


Schiff, M. and Lewontin, R.  
 (1986) *Education and Class: The  
 Irrelevance of IQ Genetic  
 Studies*, pp. 172.

**Fig. 5.2** The impossibility of ordering genotypes by ordering phenotypes. Norms of reaction to elevation for seven different *Achillea* plants (seven different genotypes). A cutting from each plant was grown at low, medium, and high elevations. The cuttings from the same original plant are shown one under the other (Carnegie Institute of Washington).

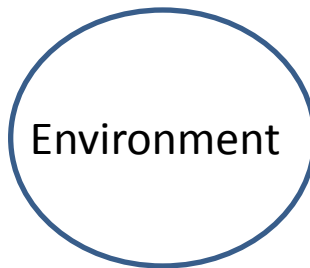
# Heritability

- Heritability does not imply immutability
  - Think of height

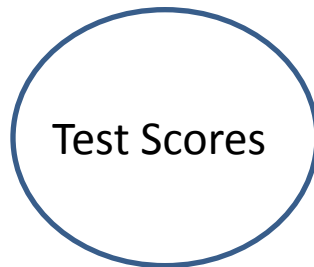


# Bell Curve World

## INPUTS



Father's education  
Mother's education  
Father's occupation  
Household Income  
Family structure  
Neighbourhood  
Family values  
In utero

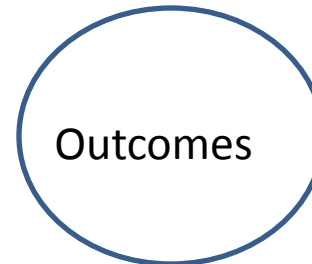


Word knowledge  
Paragraph comprehension  
Arithmetic reasoning  
Mathematical knowledge



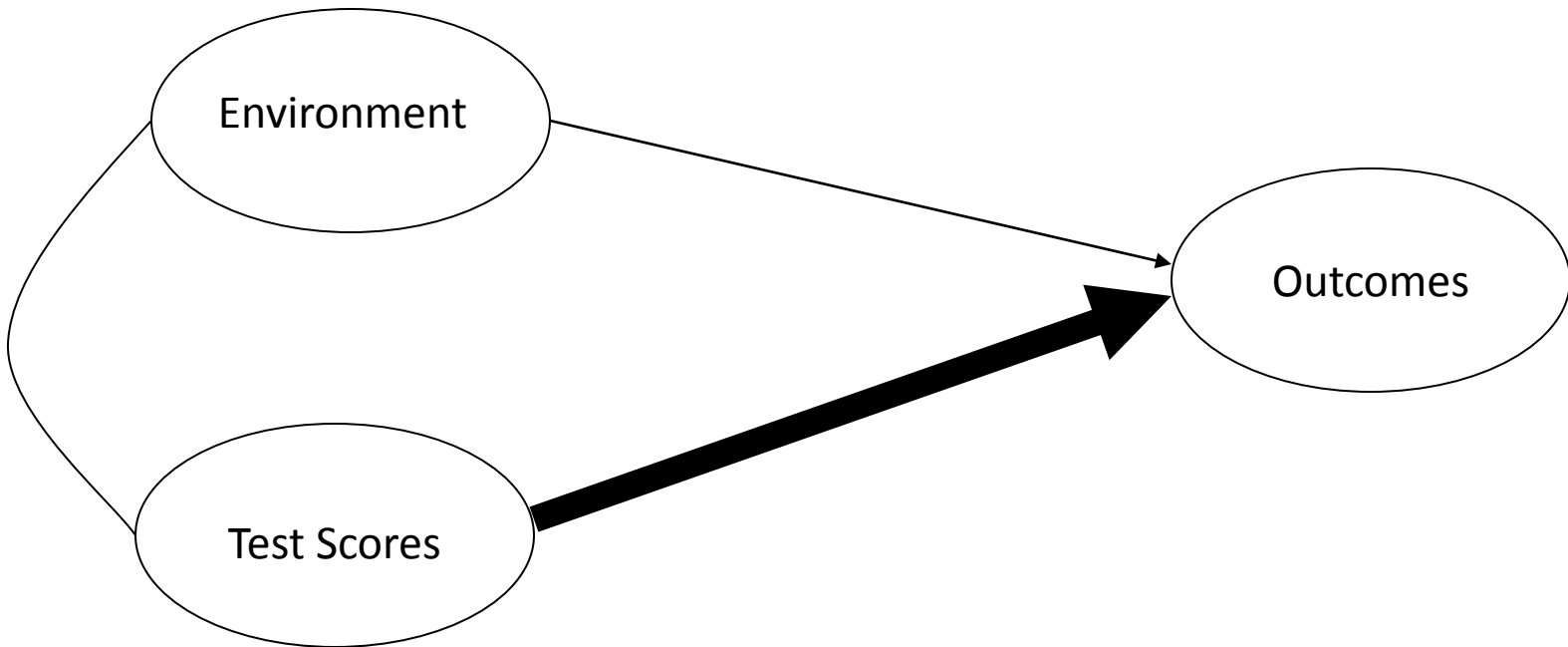
Scarcely considered by H&M

## OUTPUTS



Poverty  
High school dropout  
Unemployment  
Child out of wedlock  
On welfare  
Low birth-weight baby  
Low IQ child

# M&H World





# M&H World

- Big impact of test scores on outcomes
- But
  - Thin representation of environment
  - Reliability of environment scores lower than reliability of test scores
    - Biases environment “effects” towards zero

# H&M

- Point to certain alleged tendencies (in USA)
  - an increasingly isolated cognitive elite
  - a merging of the cognitive elite with the affluent
  - a deteriorating quality of life for people at the bottom end of the cognitive ability distribution
- “Unchecked these trends will lead the US toward something resembling a caste society, with the underclass mired ever more firmly at the bottom...Among the casualties of this process would be American society as we know it”

# More H & M

- A consequence of their definition of the problem is that African Americans make up a substantial proportion of the “underclass”
- They emphasize that intelligence is linked not only to educational and occupational attainment but also to poverty, single parenthood and crime
- Argue that the state gives people of low intelligence greater incentives to have children
- Criminal law should be simplified because:
  - “People of limited intelligence can lead moral lives in a society that is run on the basis of Thou shalt not steal. They find it much harder to lead moral lives in a society that is run on the basis of Thou shalt not steal unless there is a really good reason to.”

# Even more H & M

- “Our policy prescription ...is to return marriage to its formerly unique legal status.”
- “The technically precise description of America’s fertility policy is that it subsidizes births among poor women, who are disproportionately at the low end of the intelligence distribution. We urge generally that these policies...be ended.”
- “It should be among the goals of public policy to shift the flow of immigrants away from those admitted under nepotistic rules...and toward those admitted under competency rules.”