

Give Intelligence Its Due, But Put it In Its Place

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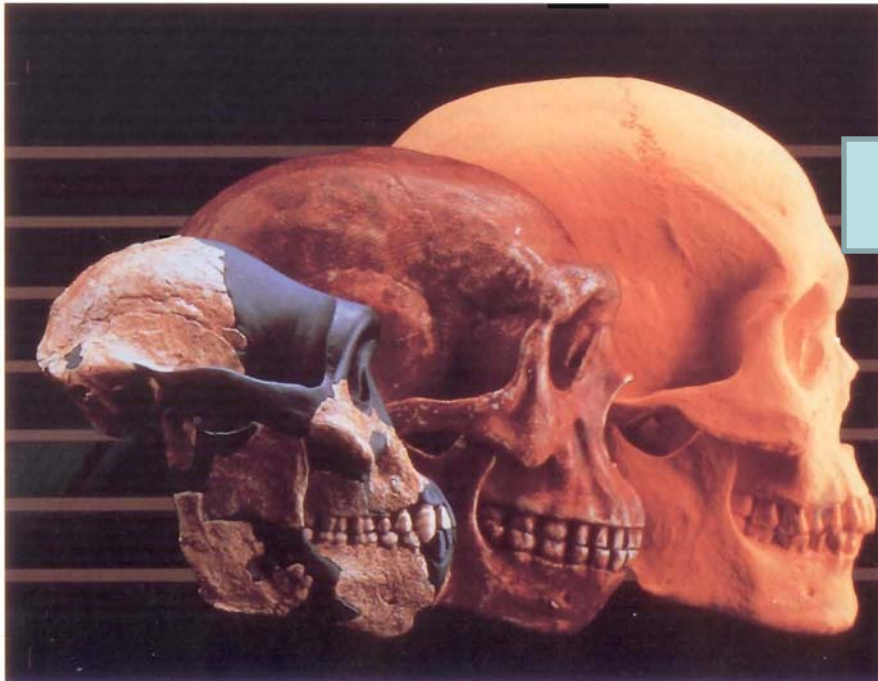
New Voices in Intelligence & Creativity Conference
University of Kansas, Lawrence, KS
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Homo sapiens' big brain

Modern
chimp



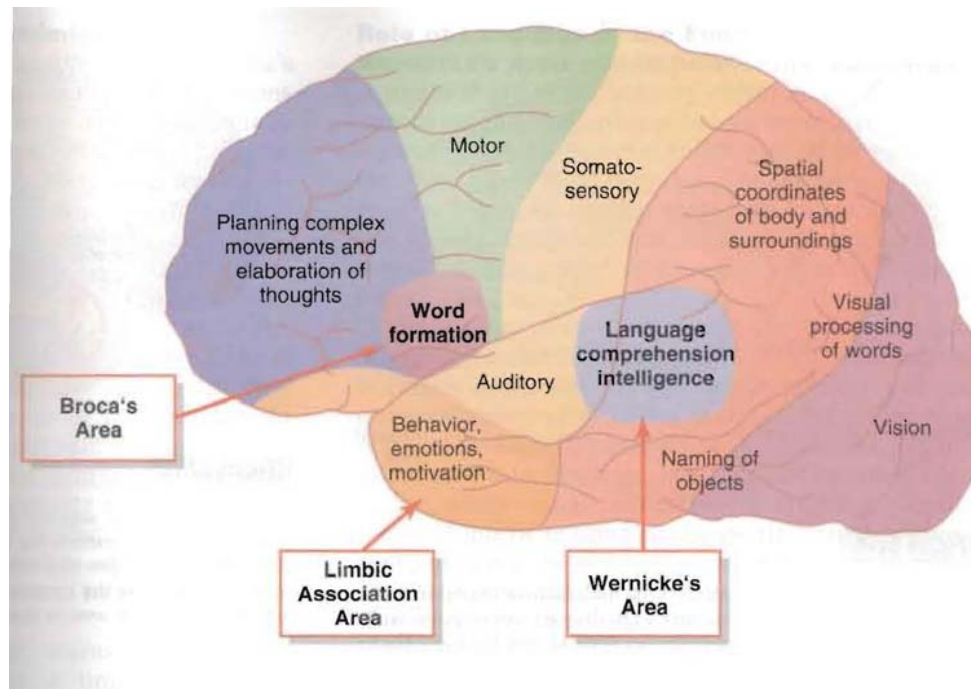
Hominid line



Modern
human

During human evolution, the size of the brain increased, as illustrated by the skulls between Australopithecus (left), an early hominid (center), and modern human (right). The human and the chimpanzee have similar body sizes, but the human brain is about three times larger than the chimpanzee's.

Lots of human abilities, talents



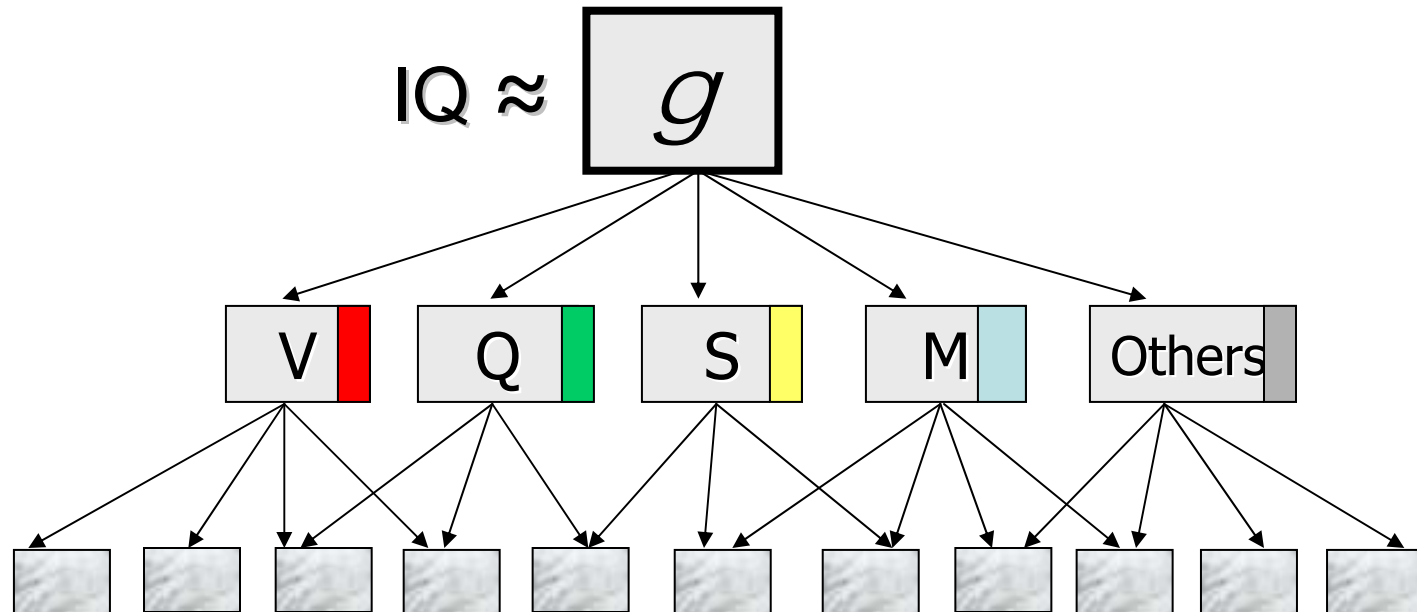
But g is chief source of human cognitive diversity

the “can do”

DOMAIN GENERAL



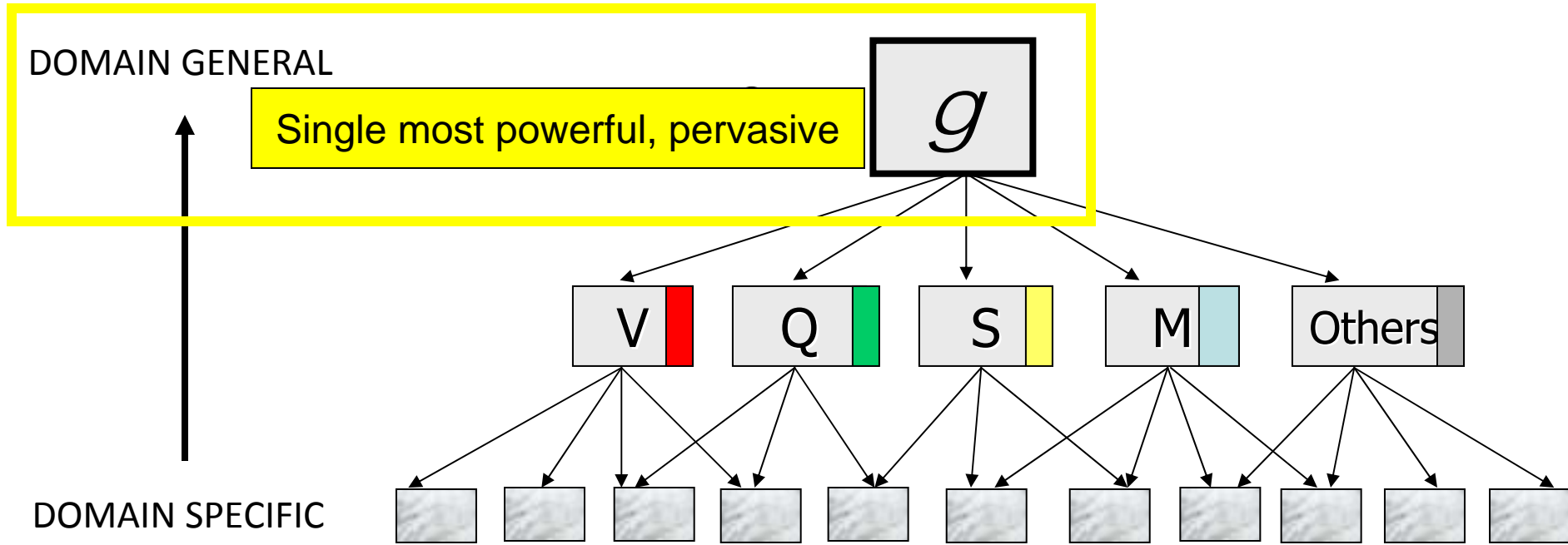
DOMAIN SPECIFIC



Phenotypic structure appears to be replicated at genetic level

Structure of differences in ability

Which differences matter most, & where?



Structure of differences in ability

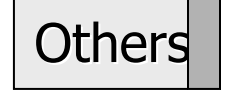
Which differences matter most, & where?

DOMAIN GENERAL

$IQ \approx$



Less impact, domain specific



DOMAIN SPECIFIC



Structure of differences in ability

Which differences matter most, & where?

DOMAIN GENERAL

$IQ \approx$

g

V

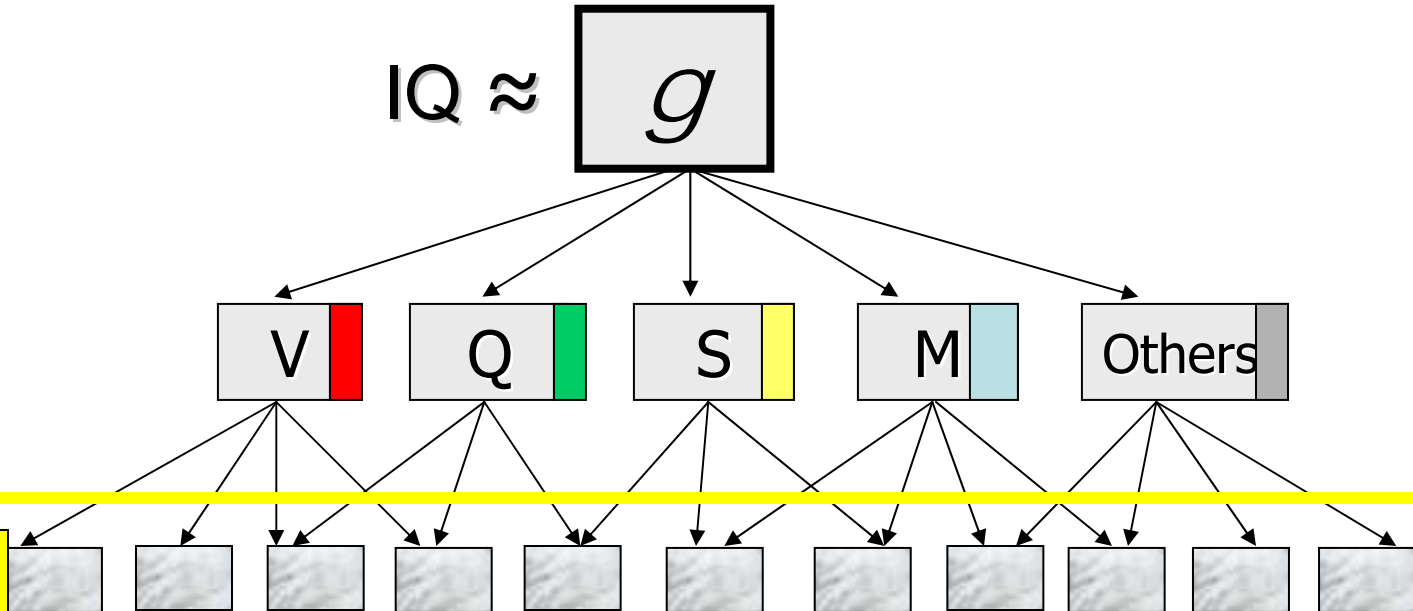
Q

S

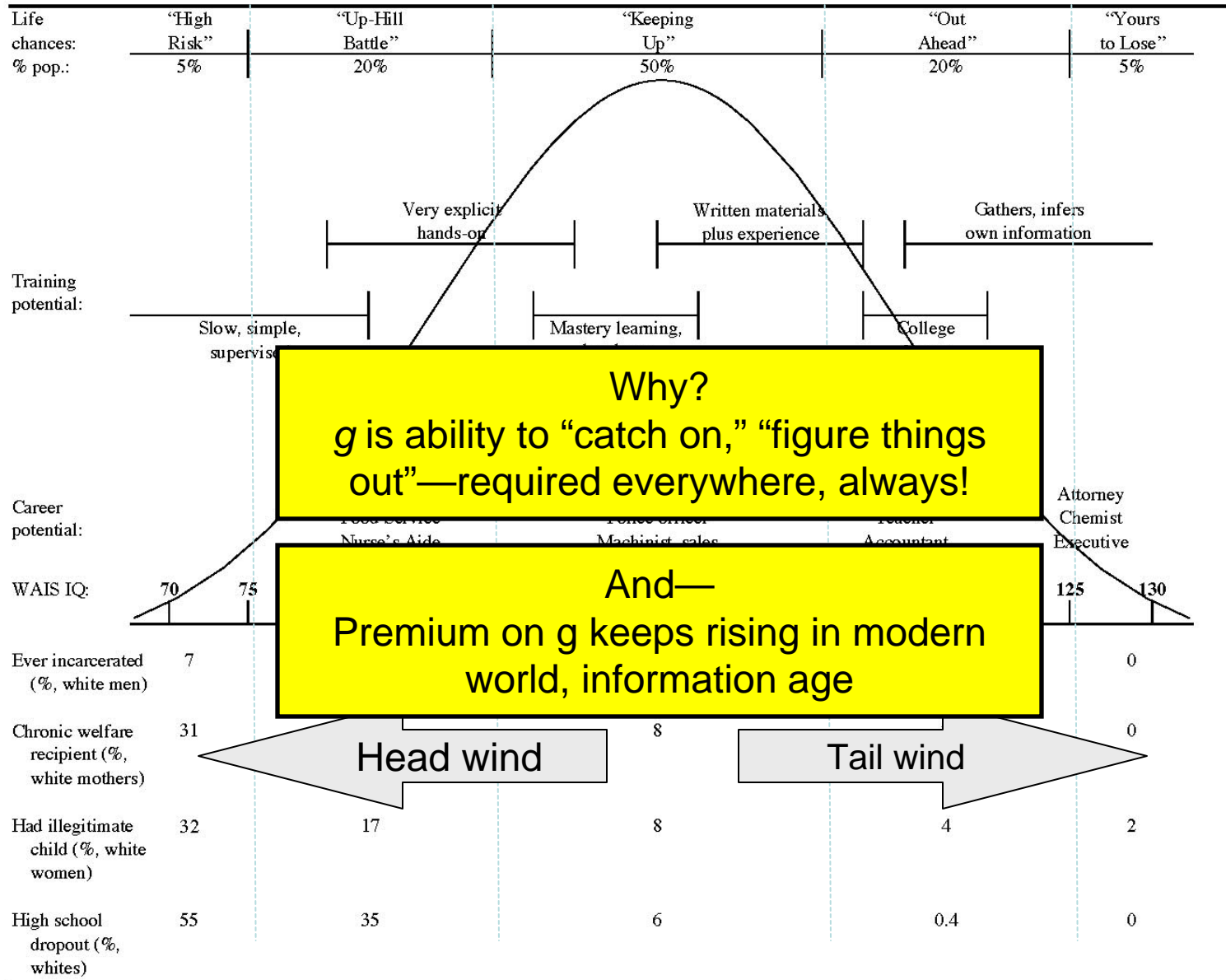
M

Others

Task specific

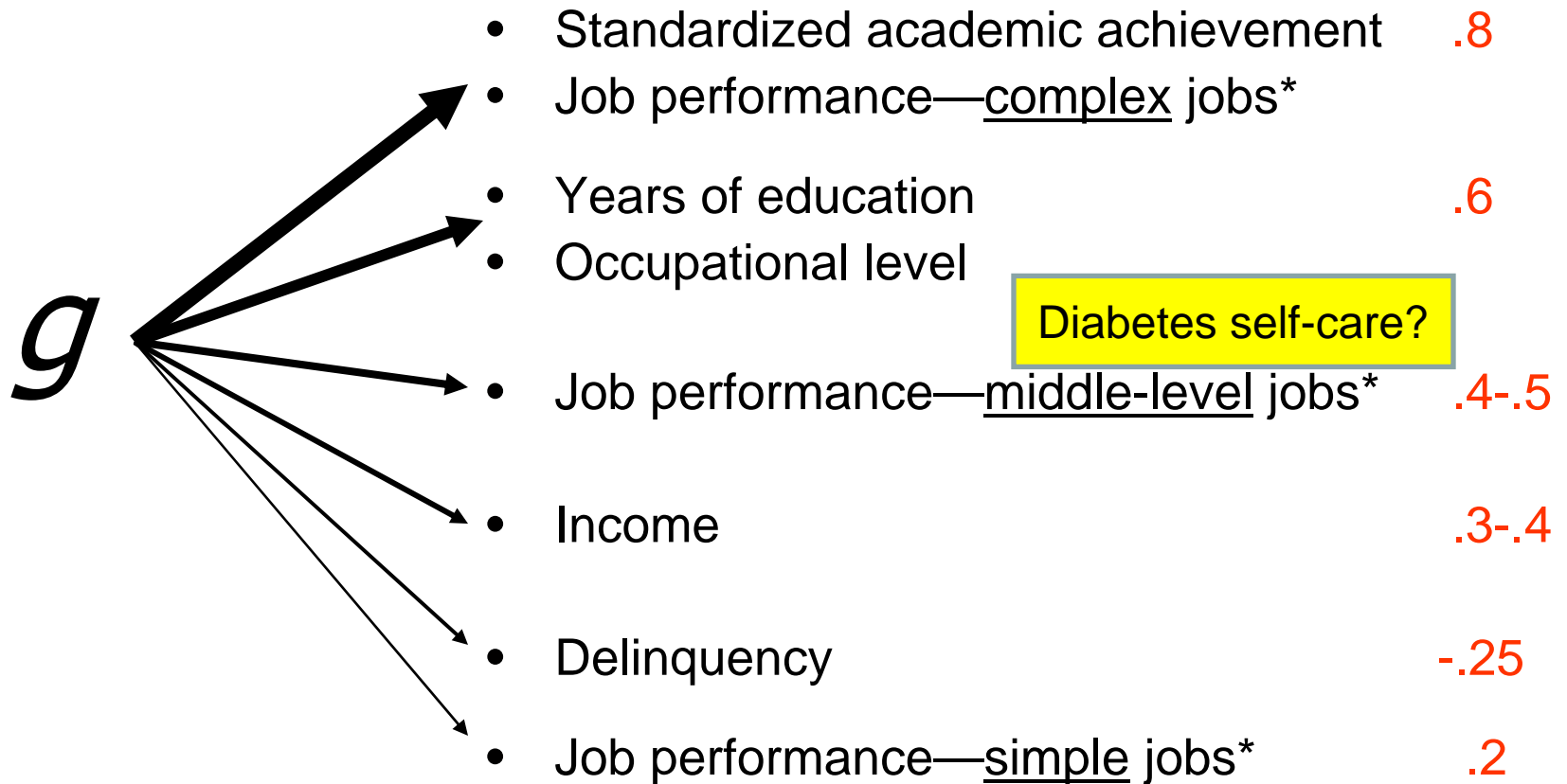


g has pervasive, persistent effect on life chances



Effect sizes vary systematically by life arena, task complexity

correlation
with IQ

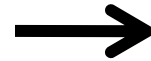


* Correlations corrected for attenuation & restriction in range

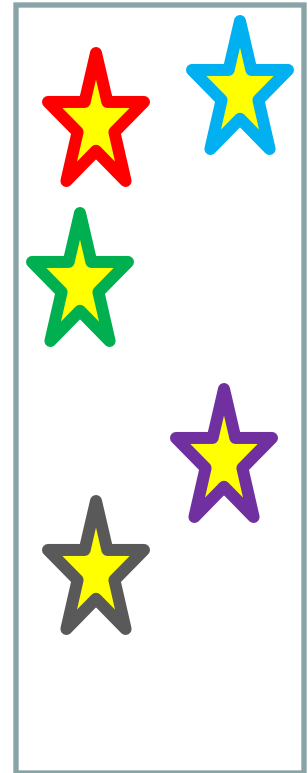
Higher g always helps (on average)

Can do

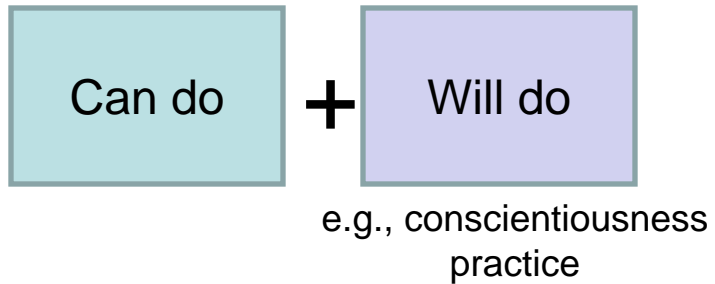
g



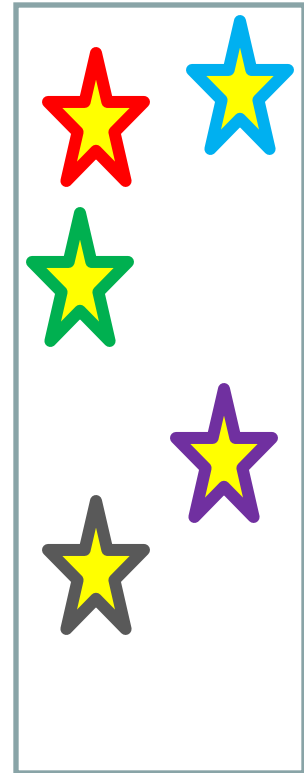
Achievements



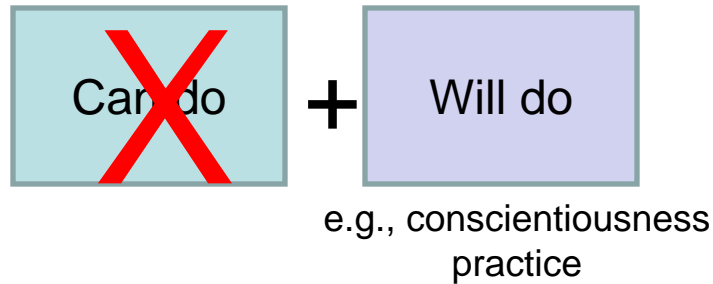
High g never sufficient



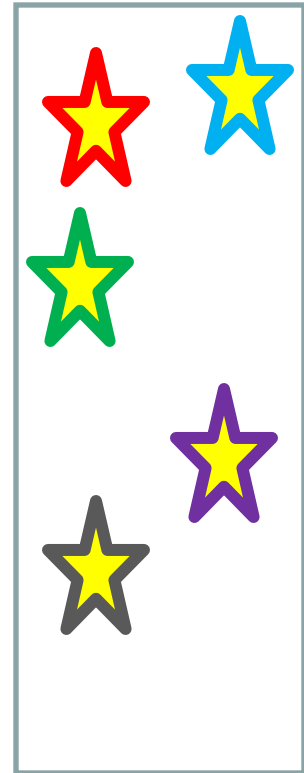
Achievements



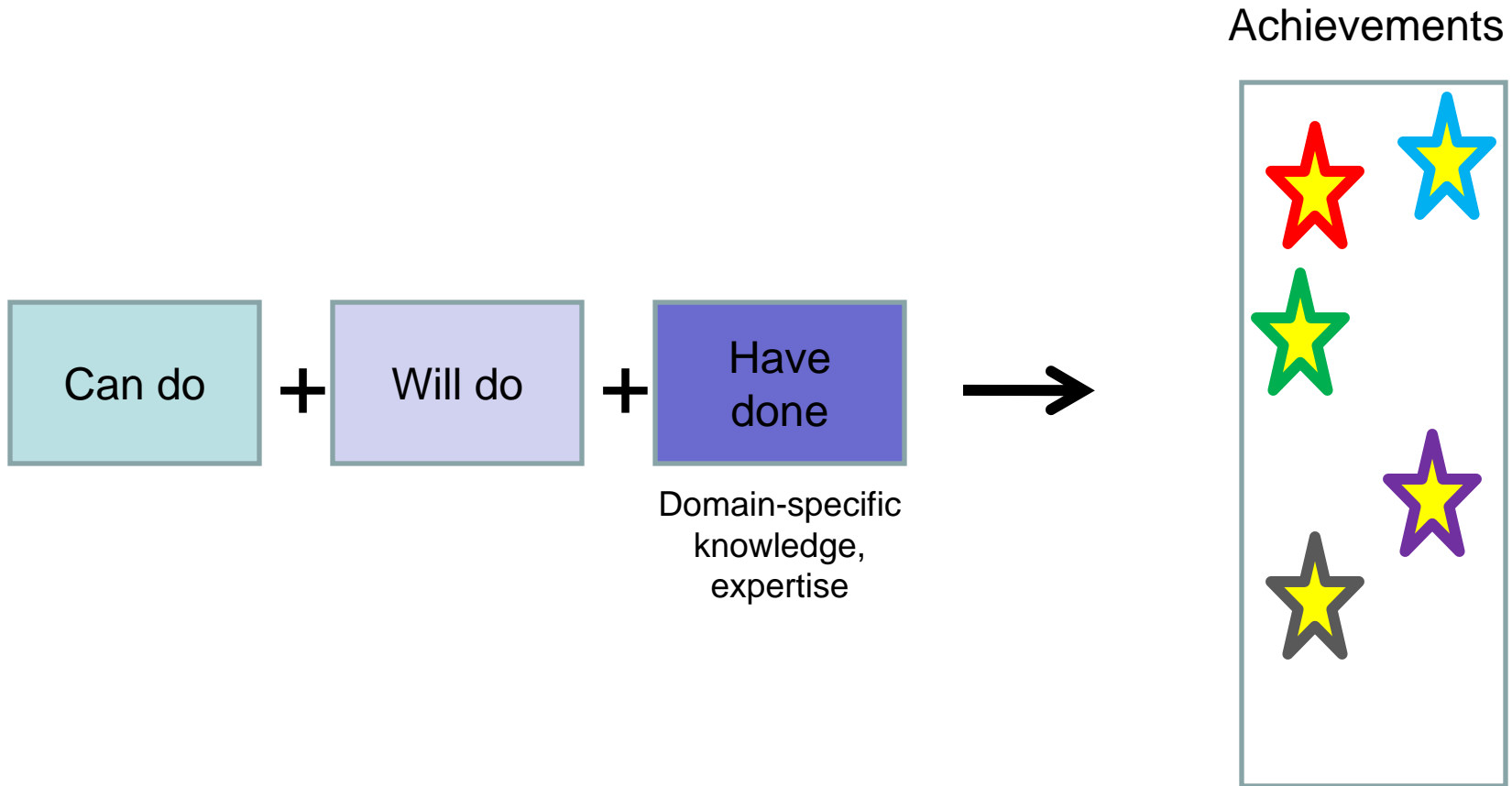
But *g* necessary—nothing can compensate for not “catching on,” etc.



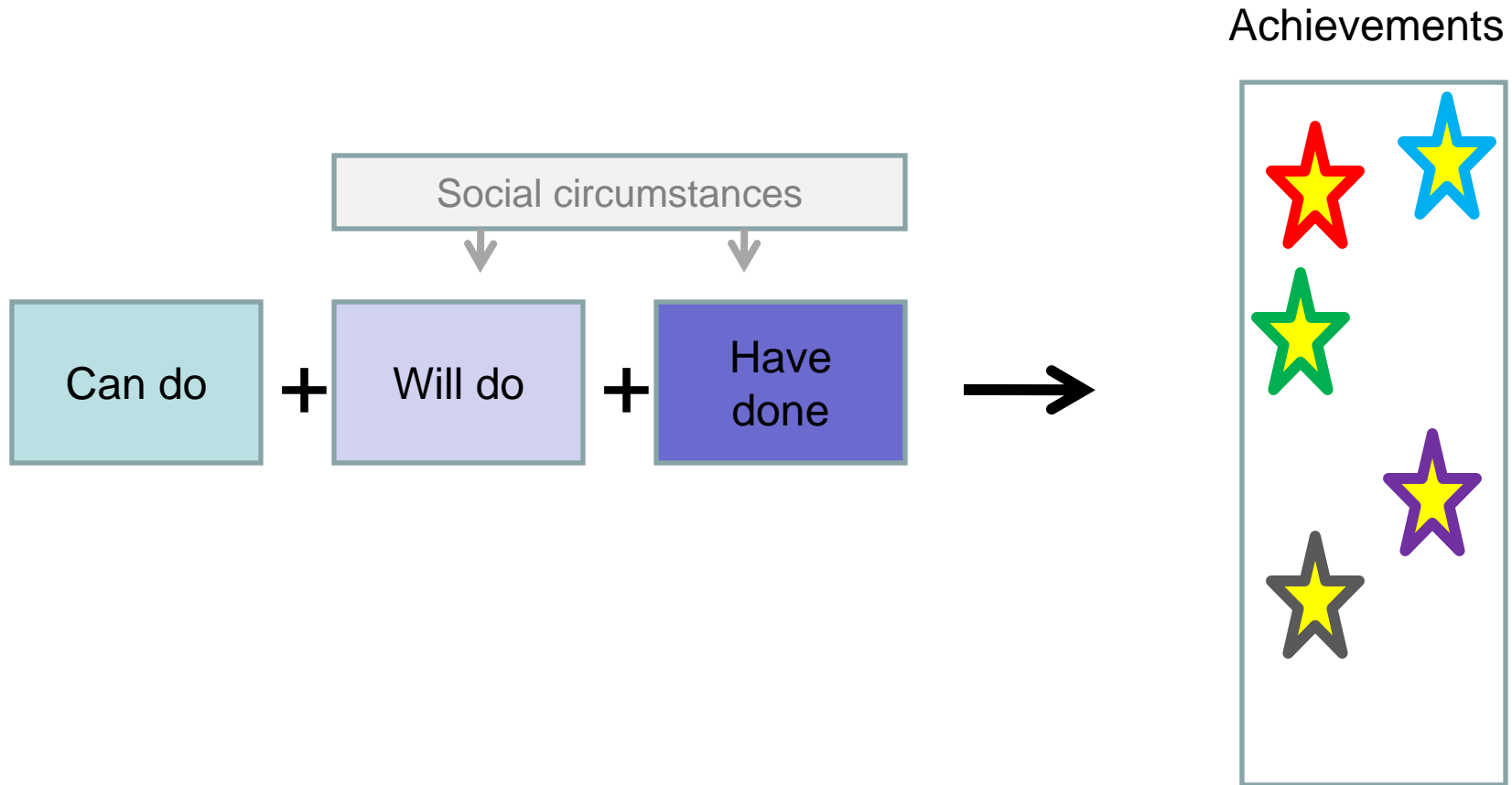
Achievements



Need to invest in domain specific experience, however



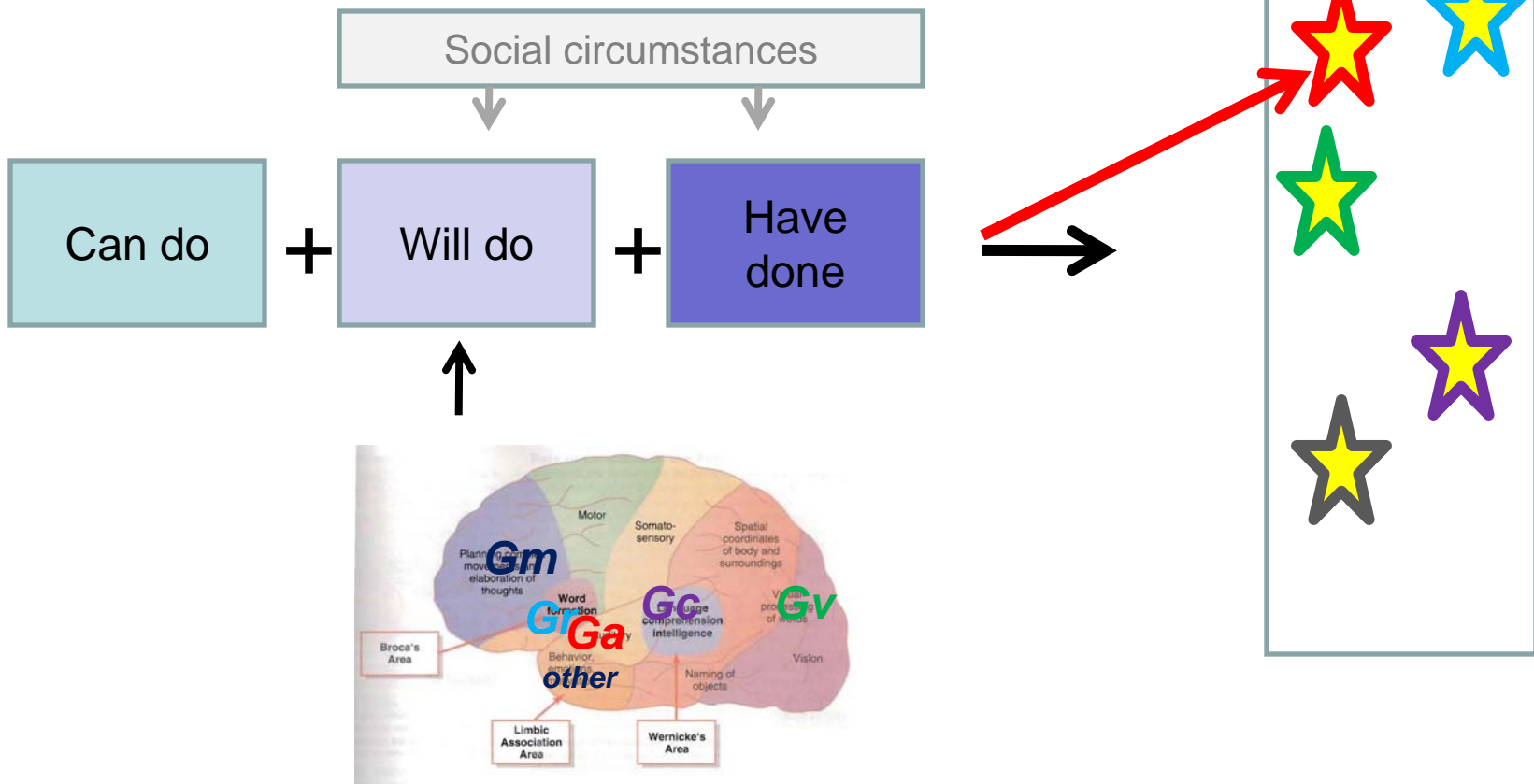
Social constraints on investment



Domain-specific tilt channels the “will do”

Where is “creativity”? In emergences?

Achievements



Your “flow”

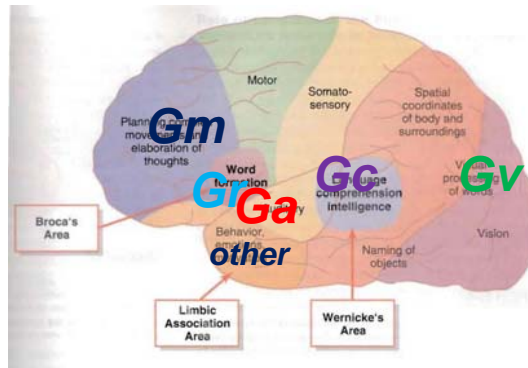
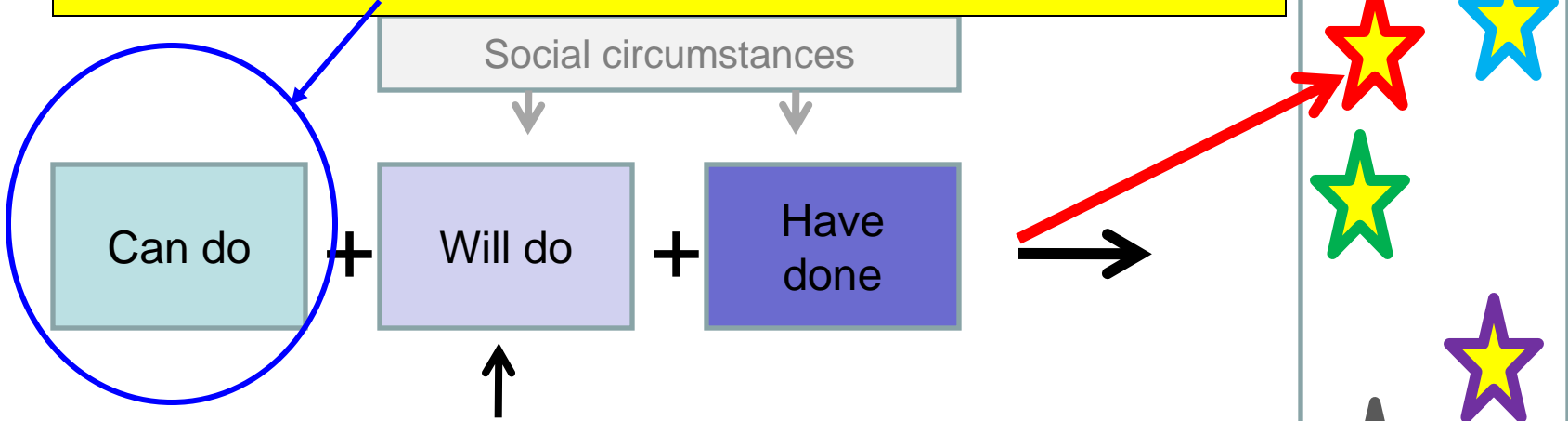
Domain-specific talents, passions

Domain-specific tilt channels the “will do”

Where is “creativity”? In emergence?

So, give *g* its due, but put it in its place

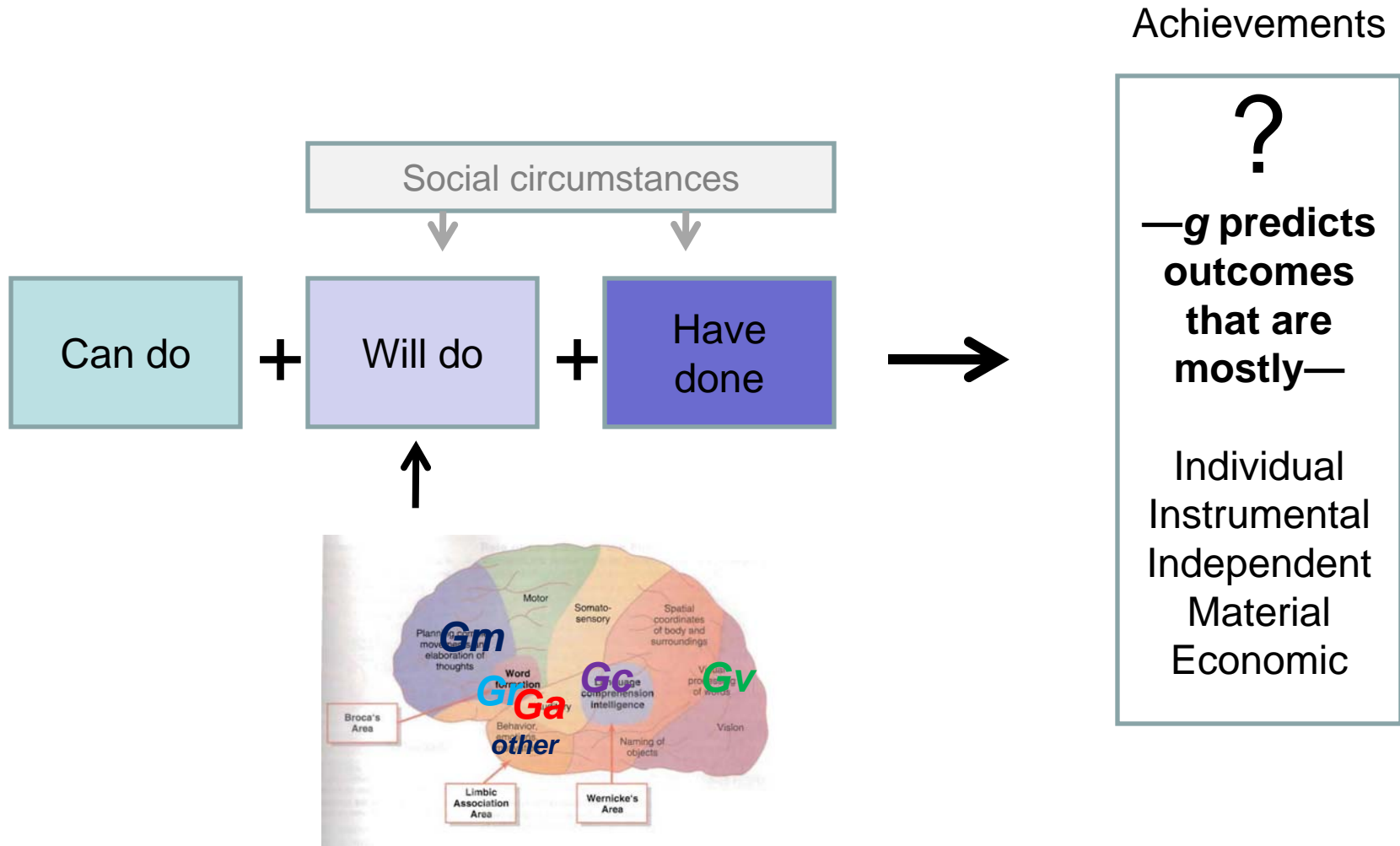
Achievements



Your “flow”

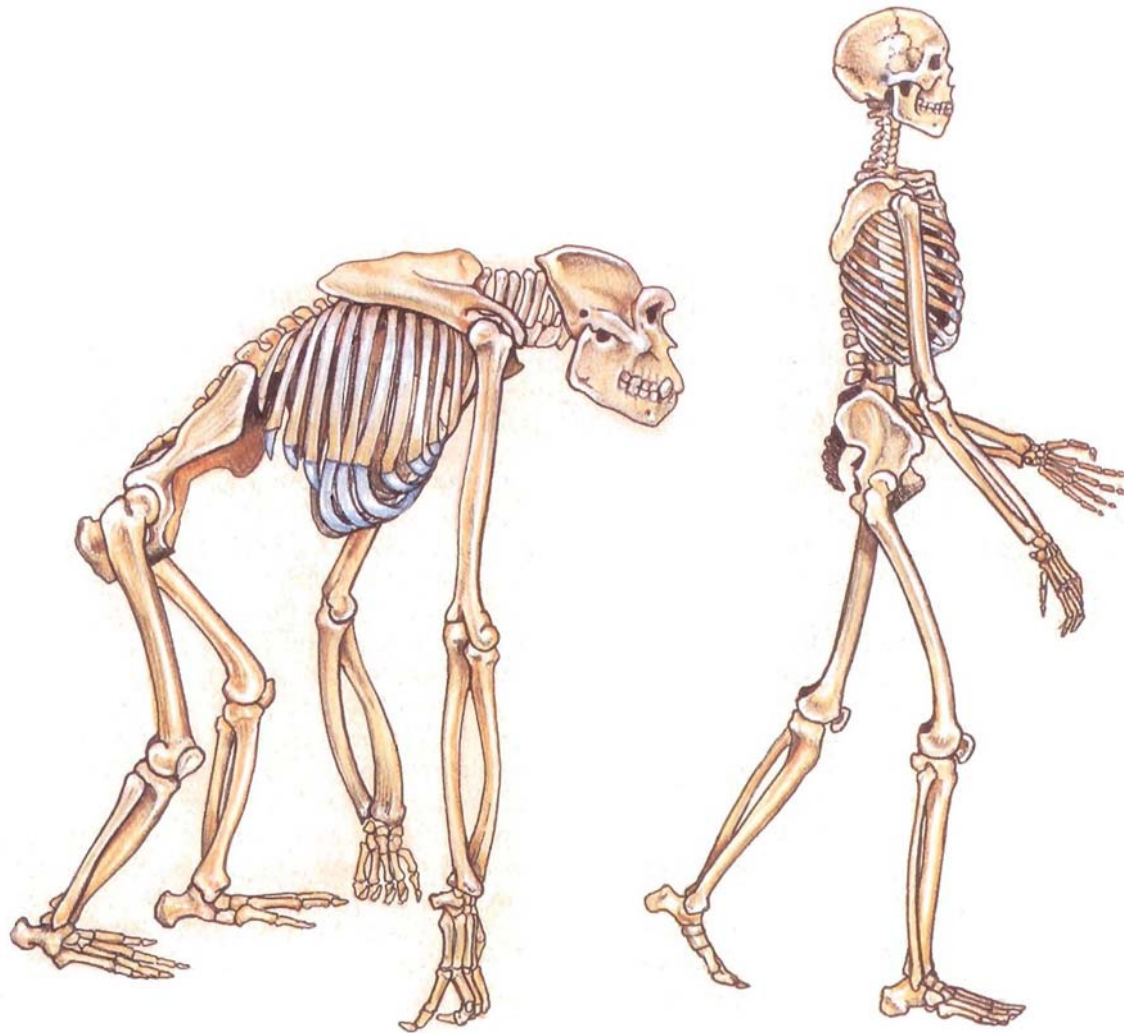
Domain-specific talents, passions

Criterion problem, too



Your "flow"

What makes us human?
Can't be just our smarts or achievements...



A comparison of posture and skeletal proportions in apes and humans reveals dif.

Non-material outcomes matter, too: E.g., social-emotional connectedness



Parental love

IQ doesn't predict
happiness



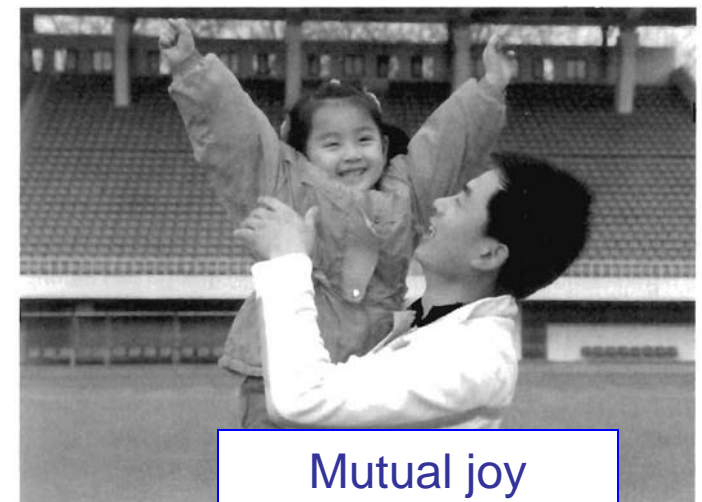
Family commitment



Minimizing conflict



True friendship



Mutual joy

Final thought

- Shunning & social isolation = physical death when humans evolved
- Humans are acutely sensitive to social isolation
- Being different, odd, “out-of-step,” unusual can isolate a person
- Extremely high (or low) IQ makes one unusual
- Attributes that lead to creativity (marching to own drummer) makes one unusual
- So, high intelligence and creativity can pose psychic and emotional challenges
- Those challenges are manageable if understood

Thank you.

- www.udel.edu/educ/gottfredson