



United Nations

Widening Access in Selection

A Look at GMA, SJT, & HDI

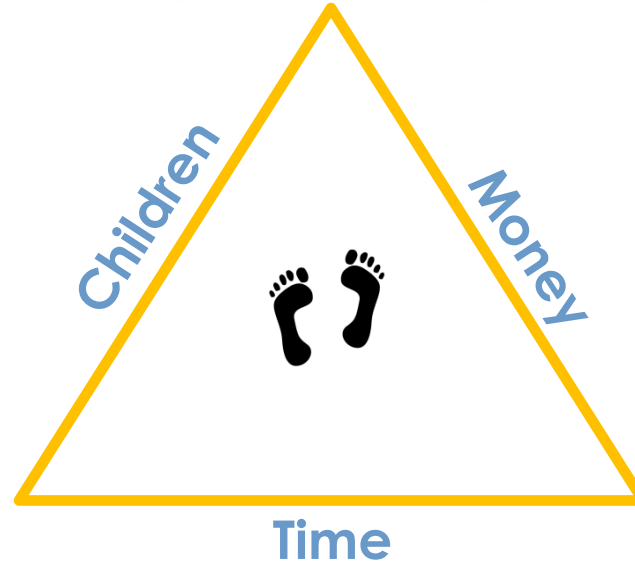
Dreams Network
York, UK
Anton I. Botha



Average Life



Life
(Choose any two)



Average relationship

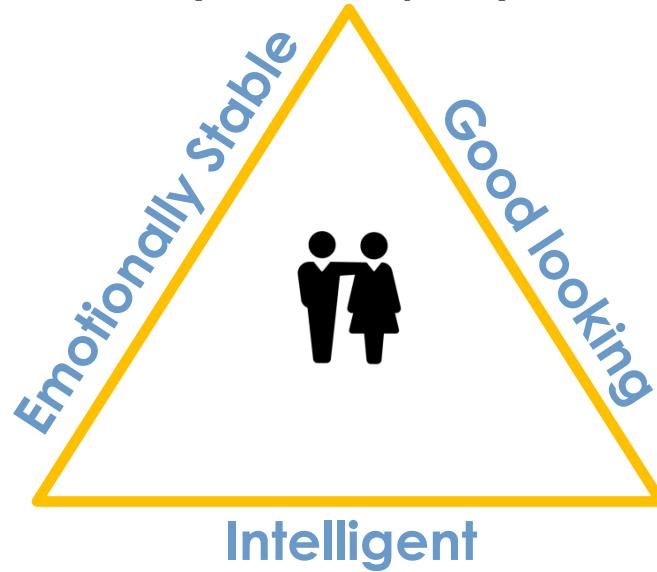


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Partner

(Choose any two)



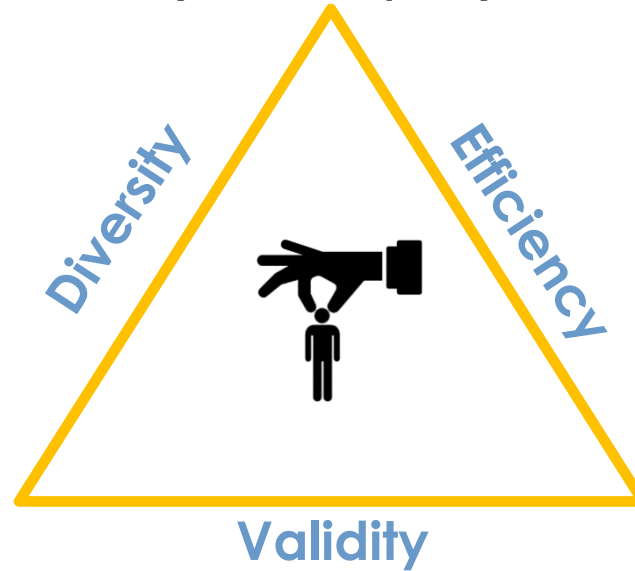
Average Selection System



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Selection System (Choose any two)



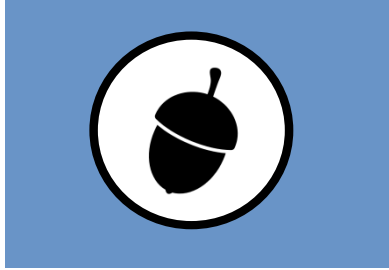
Diversity in the UN Context



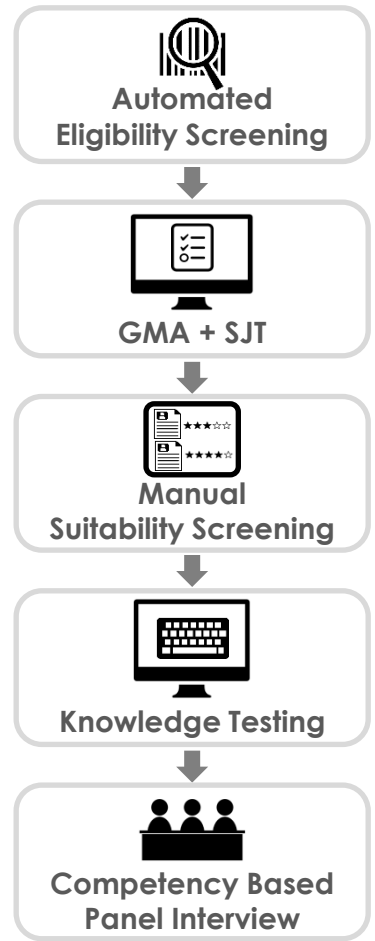
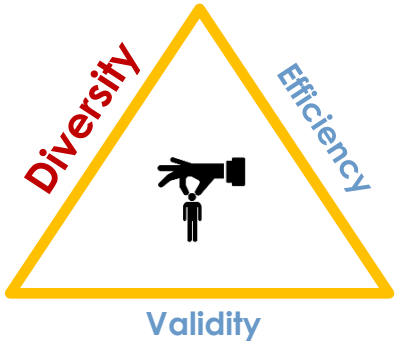
+



Developed vs. Developing
aka Social Economic Status (SES)



UN Staff Selection System Steps



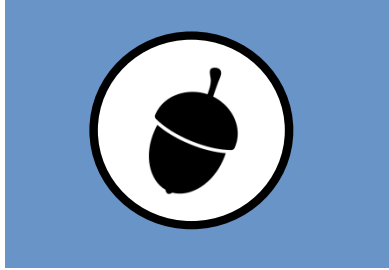
Typical Exercise

34,000 - applications

161 - countries

50 - positions





Developed

vs.

Developing

60%



Automated
Eligibility Screening

50%

40%



GMA + SJT

20%

60%



Manual
Suitability Screening

50%

25%



Knowledge Testing

20%

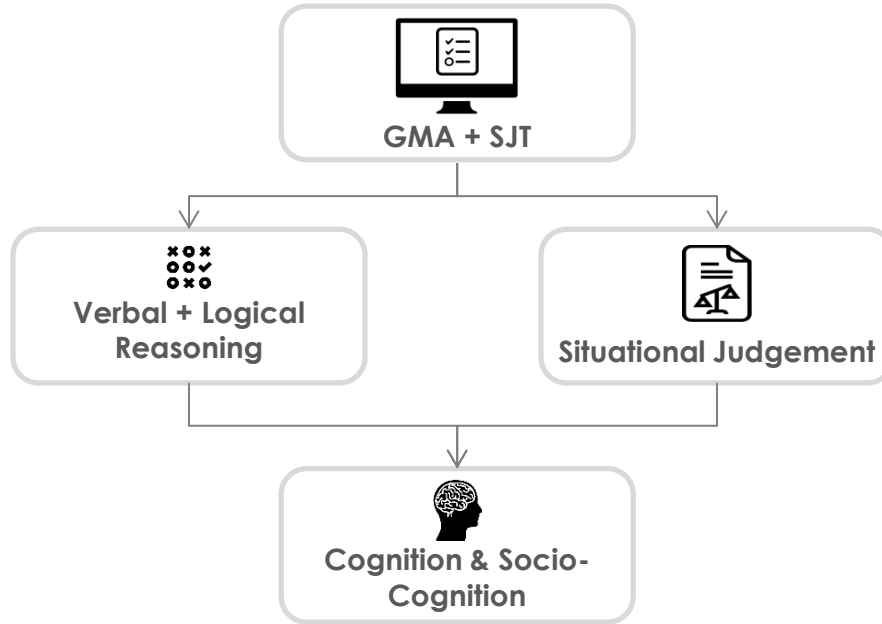
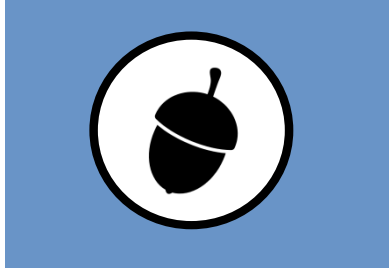
60%



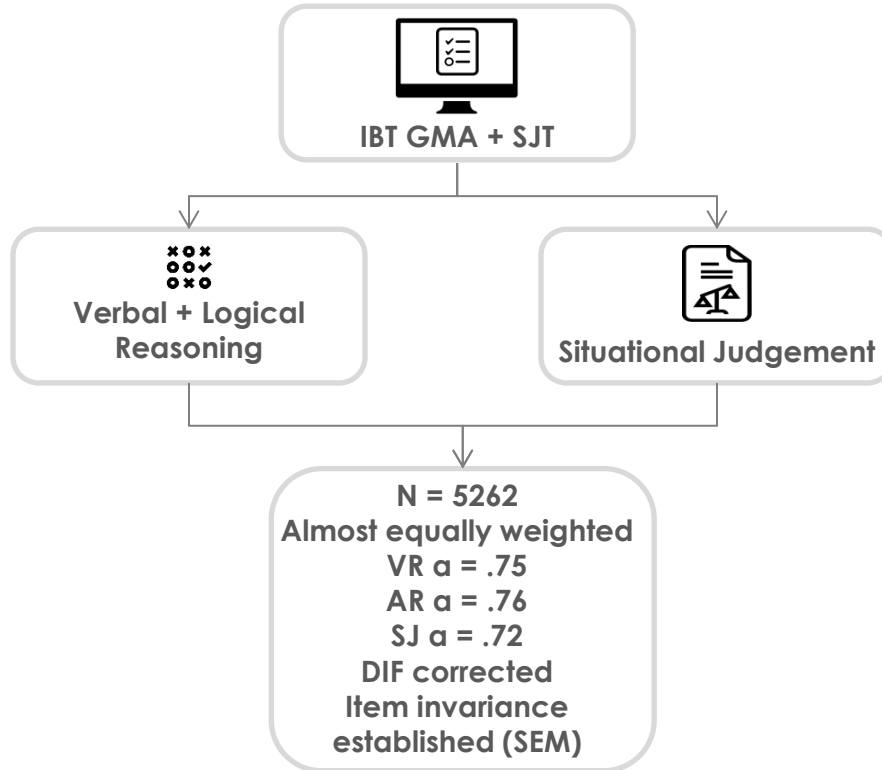
Competency Based
Panel Interview

40%

Cognitive Ability Testing



Cognitive Ability Testing





What does developmental psych tell us about cognition?

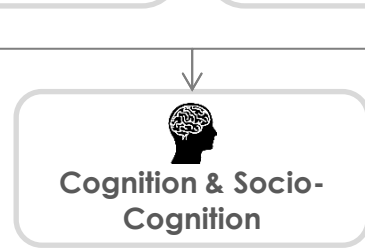


The more the brain is **stimulated**, the more connections are developed and the better brain will function.

A **secure environment** enables optimum mental and emotional development of a child

Optimum brain and social developmental is facilitated by **stimulation** in young children – such as reading, music, playing and talking.

Nutrition at the early stages of fetal and young child development contributes significantly to optimum brain development





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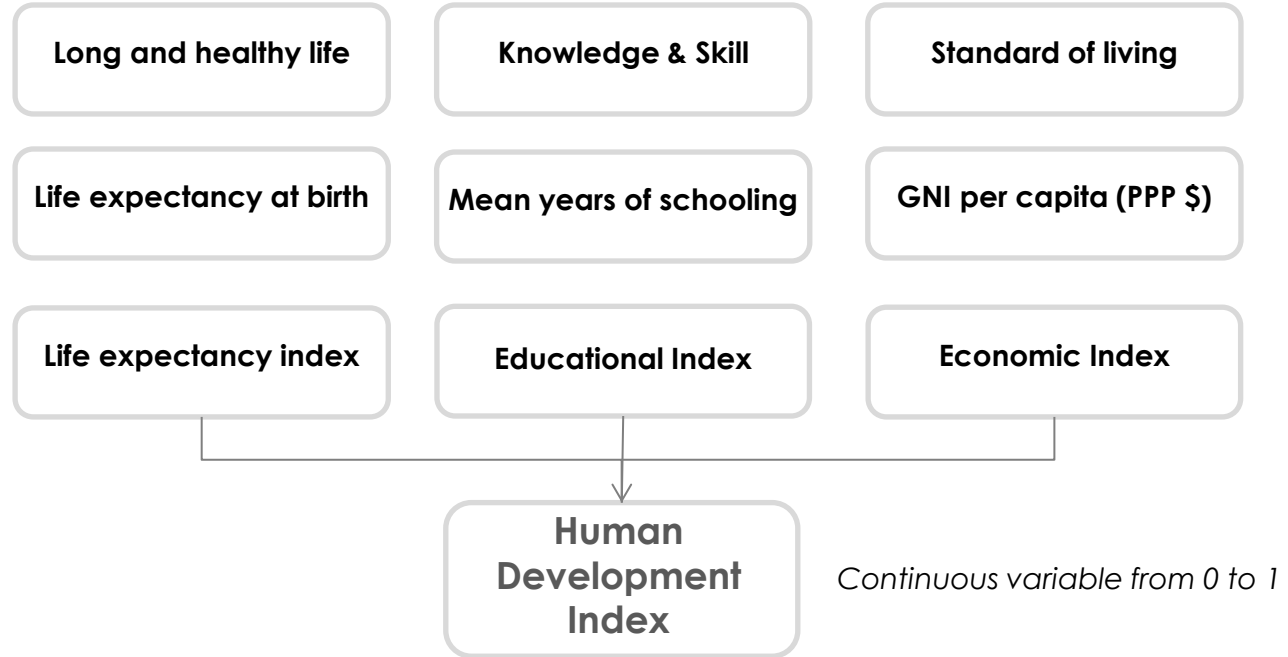
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Human
Development
Index

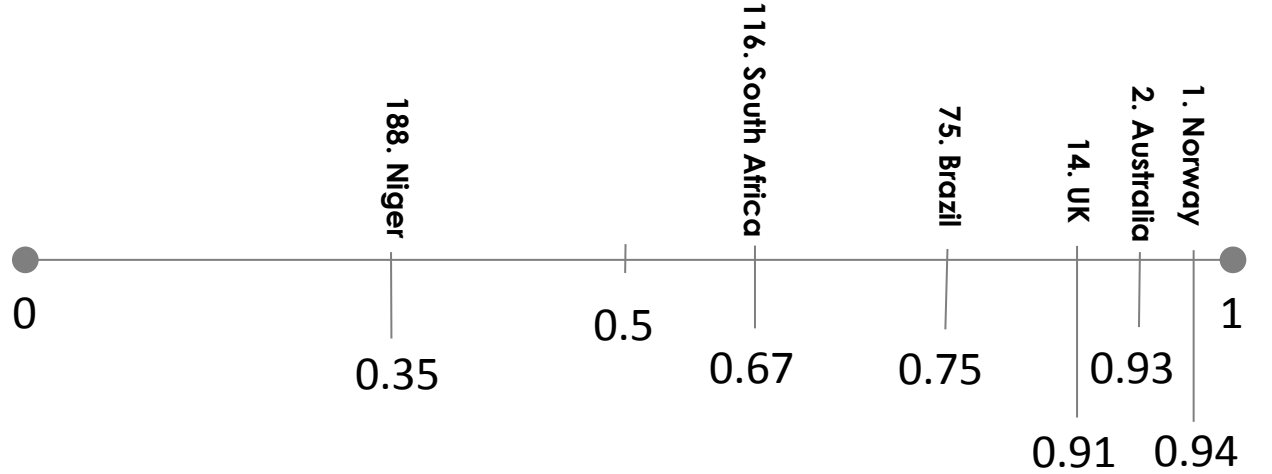


Human Development Index as a proxy for SES





Human Development Index as a proxy for SES



Human
Development
Index

Continuous variable from 0 to 1

GMA scores R² with HDI



?

?

?

?

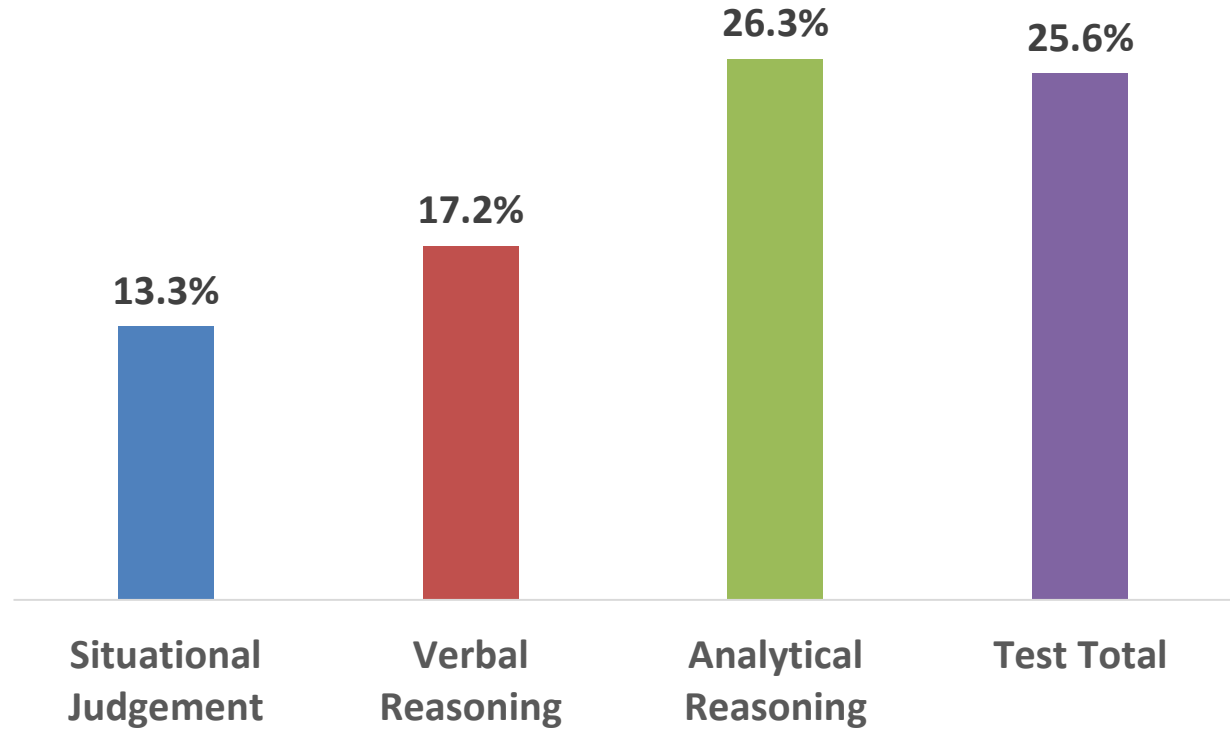
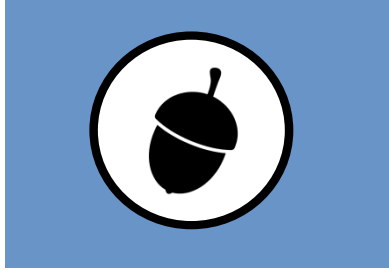
Situational
Judgement

Verbal
Reasoning

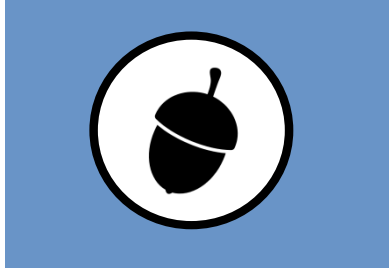
Analytical
Reasoning

Test Total

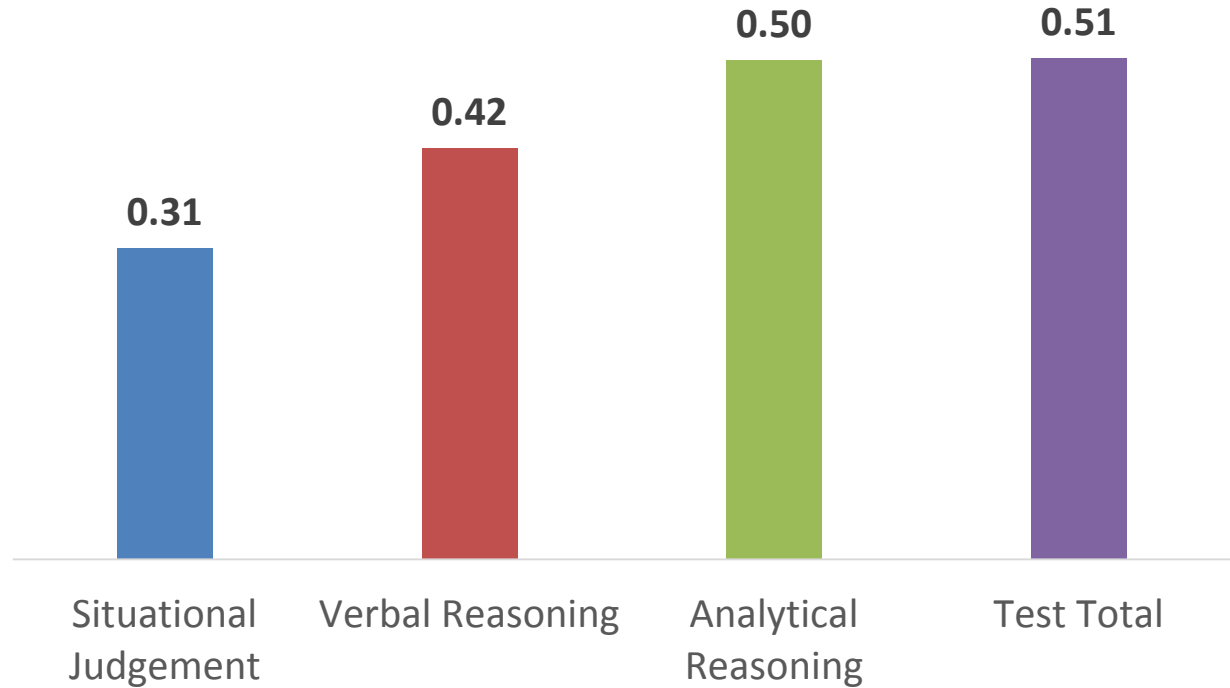
GMA scores R² with HDI



N = 5262



Test score correlated with HDI



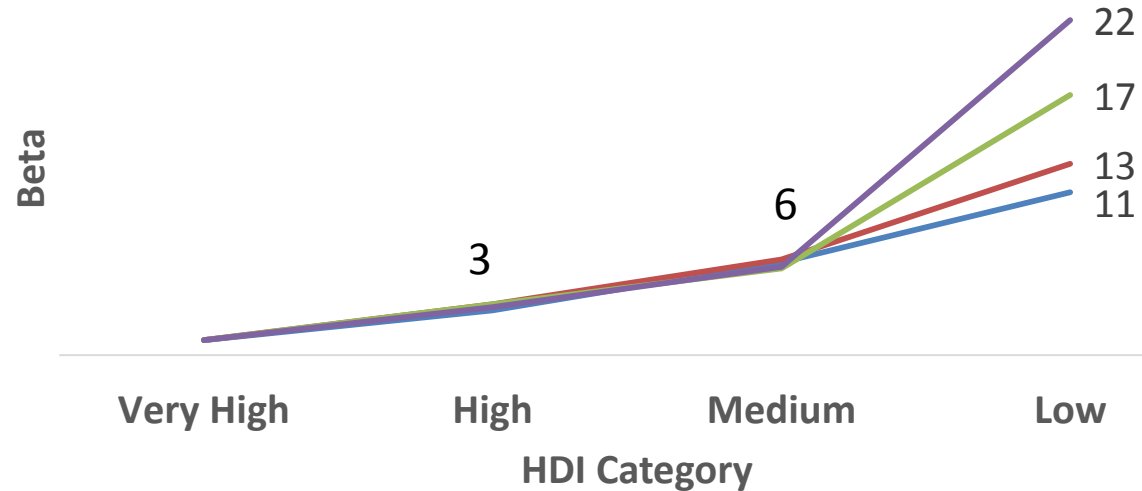
N = 5262



Test outcomes at variable pass rates



Beta of failing GMA + SJT at different cut scores
(Beta) by HDI Category



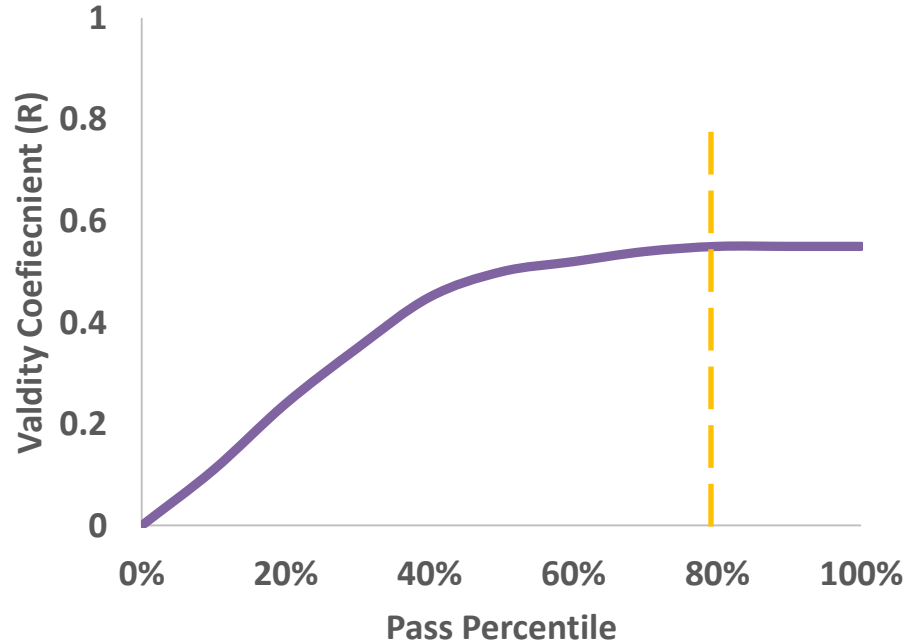
— -.5 Std Div. — Mean — +.5 Std Div. — 1 Std Div.



Marginal Utility of Test Scores



Margin Utility Test Score for predicting Criterion Validity





Recommendations for widening access



Determine at what point the **marginal return of validity** for a given cut-score of a test approaches zero (less SME).

“Good tests show differences, they don’t create difference”. PR and Communication.

Multi-channel

Recognize that, for more lower SES applicants to make it through, more have to enter the funnel to begin with (**data modelling + outreach**)

Other measures?
“Scrappers” vs. “Silver spoons” – Hartley
Measures of motivation, grit, integrity, values?

Recommendations



Q & A

Thank you!
Merci!
謝謝!
شكرا
Спасибо!
Gracias

References



Pollak, S. D., Nelson, C. A., Schlaak, M. F., Roeber, B. J., Wewerka, S. S., Wiik, K. L., ... & Gunnar, M. R. (2010). Neurodevelopmental effects of early deprivation in postinstitutionalized children. *Child development, 81* (1), 224-236.

Pollitt, E., Gorman, K. S., Engle, P. L., Martorell, R., Rivera, J., Wachs, T. D., & Scrimshaw, N. S. (1993). Early supplementary feeding and cognition: effects over two decades. *Monographs of the Society for Research in Child Development, i*-118.

Shonkoff, J. P. (2011). Protecting brains, not simply stimulating minds. *Science, 333*(6045), 982-983.

Shonkoff, J. P., Garner, A. S., Siegel, B. S., Dobbins, M. I., Earls, M. F., McGuinn, L., ... & Committee on Early Childhood, Adoption, and Dependent Care. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics, 129*(1), e232-e246.

Zhou, S. J., Gibson, R. A., Crowther, C. A., Baghurst, P., & Makrides, M. (2006). Effect of iron supplementation during pregnancy on the intelligence quotient and behavior of children at 4 y of age: long-term follow-up of a randomized controlled trial. *The American journal of clinical nutrition, 83*(5), 1112-1117.

