

Situational Judgment Tests & Disparate Impact: The Big Picture

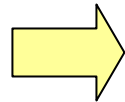
Linda S. Gottfredson
University of Delaware
SIOP, Los Angeles
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Fact-Set 1: Structure & Relation of Predictor & Criterion Domains

Predictor domain

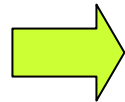
Criterion domain

Cognitive



Technical

**Non-
cognitive**



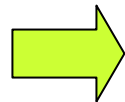
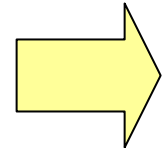
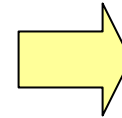
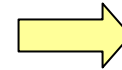
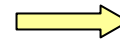
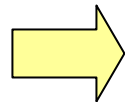
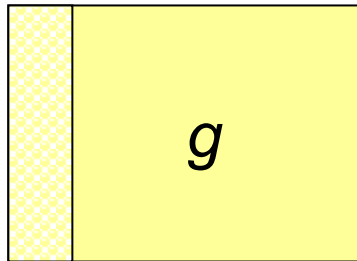
Citizenship

Fact-Set 1: Structure & Relation of Predictor & Criterion Domains

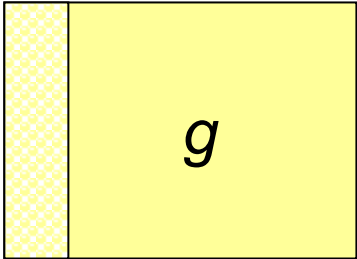

Predictor domain

Criterion domain

Simple to complex jobs

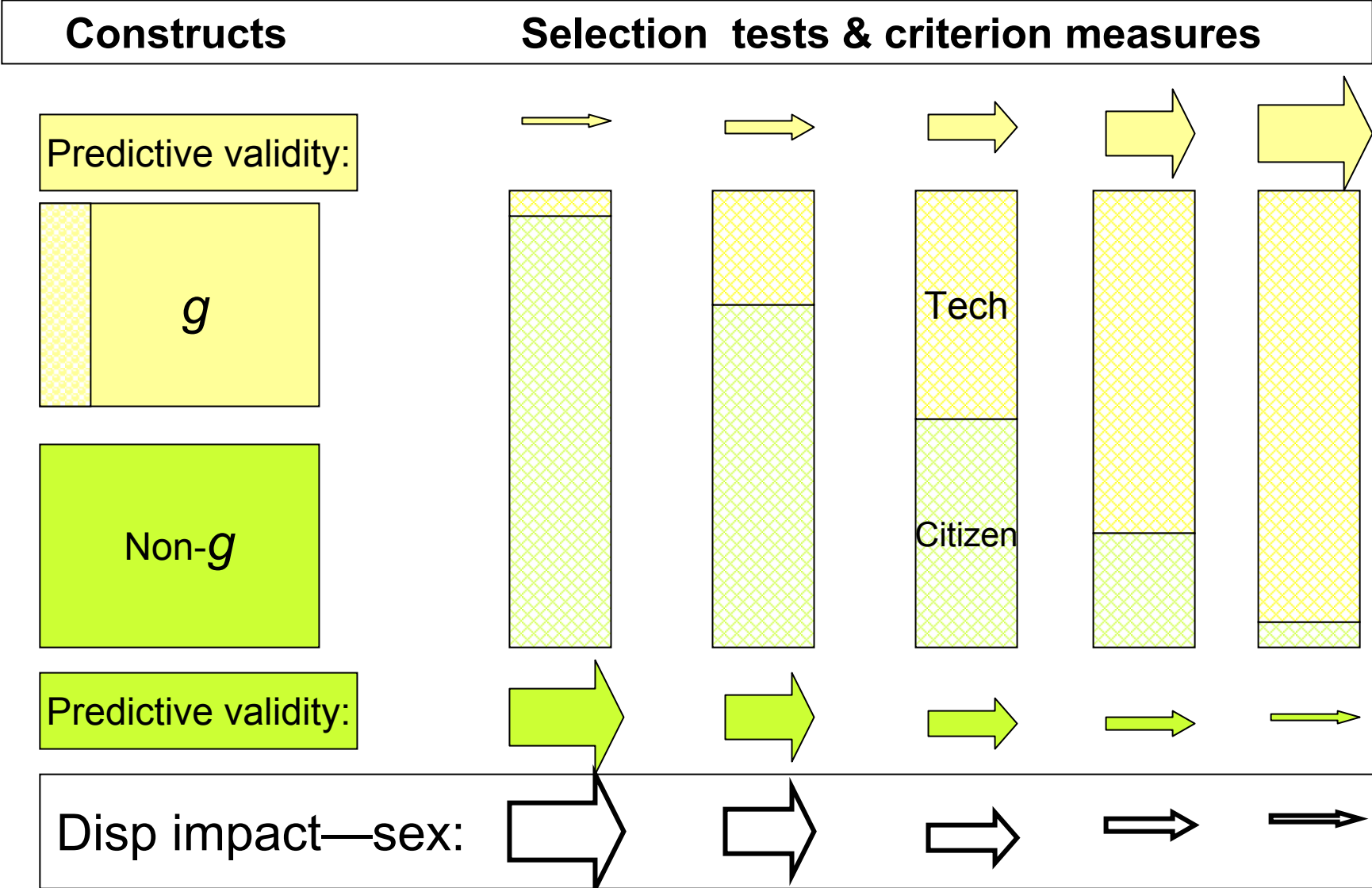


Fact-Set 2: Race & Sex Differences in g and Personality

Predictor domain	d :	W-B	W-H	W-A	Male-Female
		1.1	.7	-.2	0
		~0	~0	?	~0
					+ emotional stabil. - agreeable - conscientious

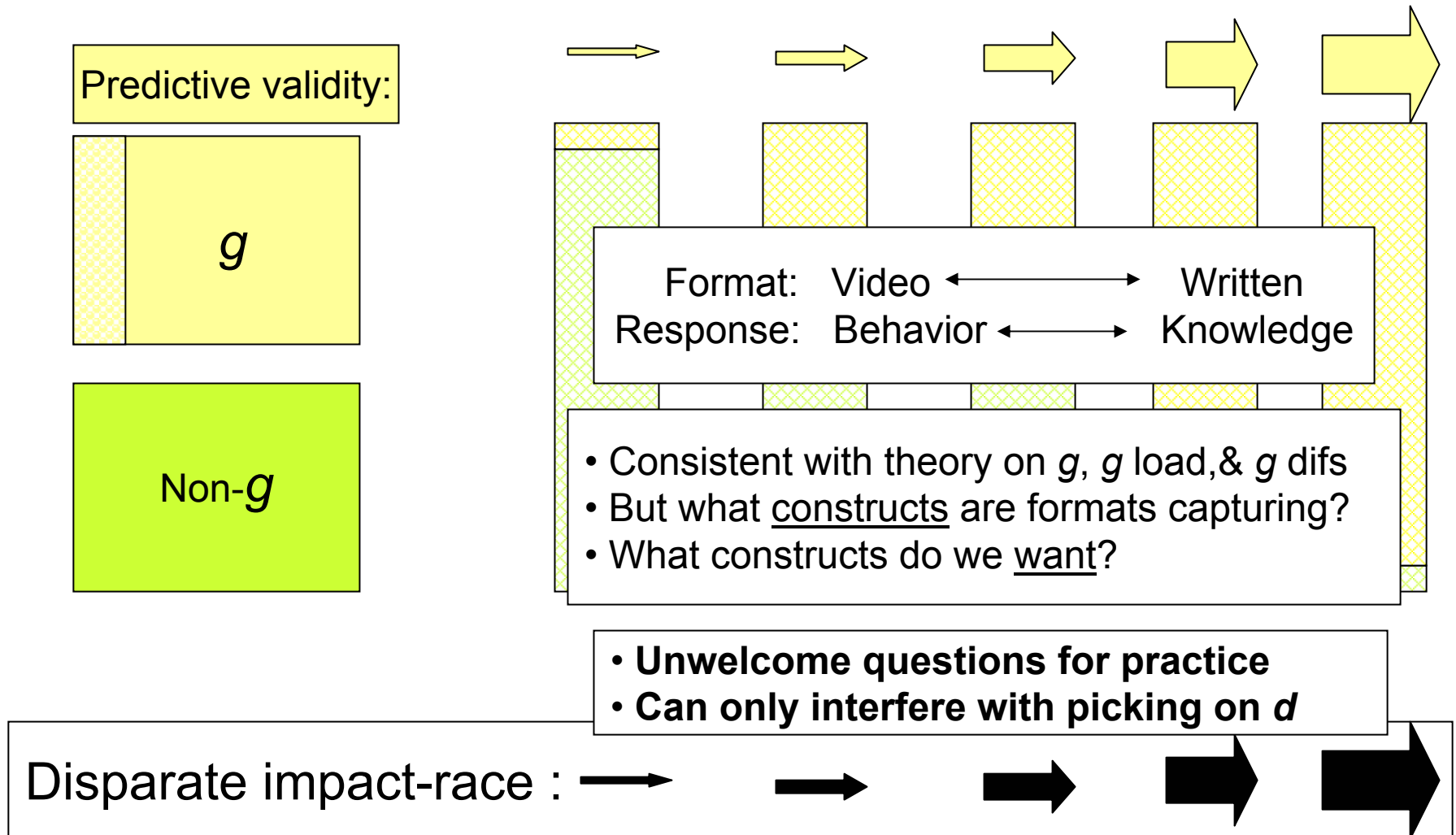
- No evidence of change over place or time
- g (and d) not a function of content or format, but cognitive load

Predictions From 2 Fact-Patterns



MA Results for SJT Predictors

(Nguyen, McDaniel, & Whetzel paper)



Tweaking Tests Won't Help Much

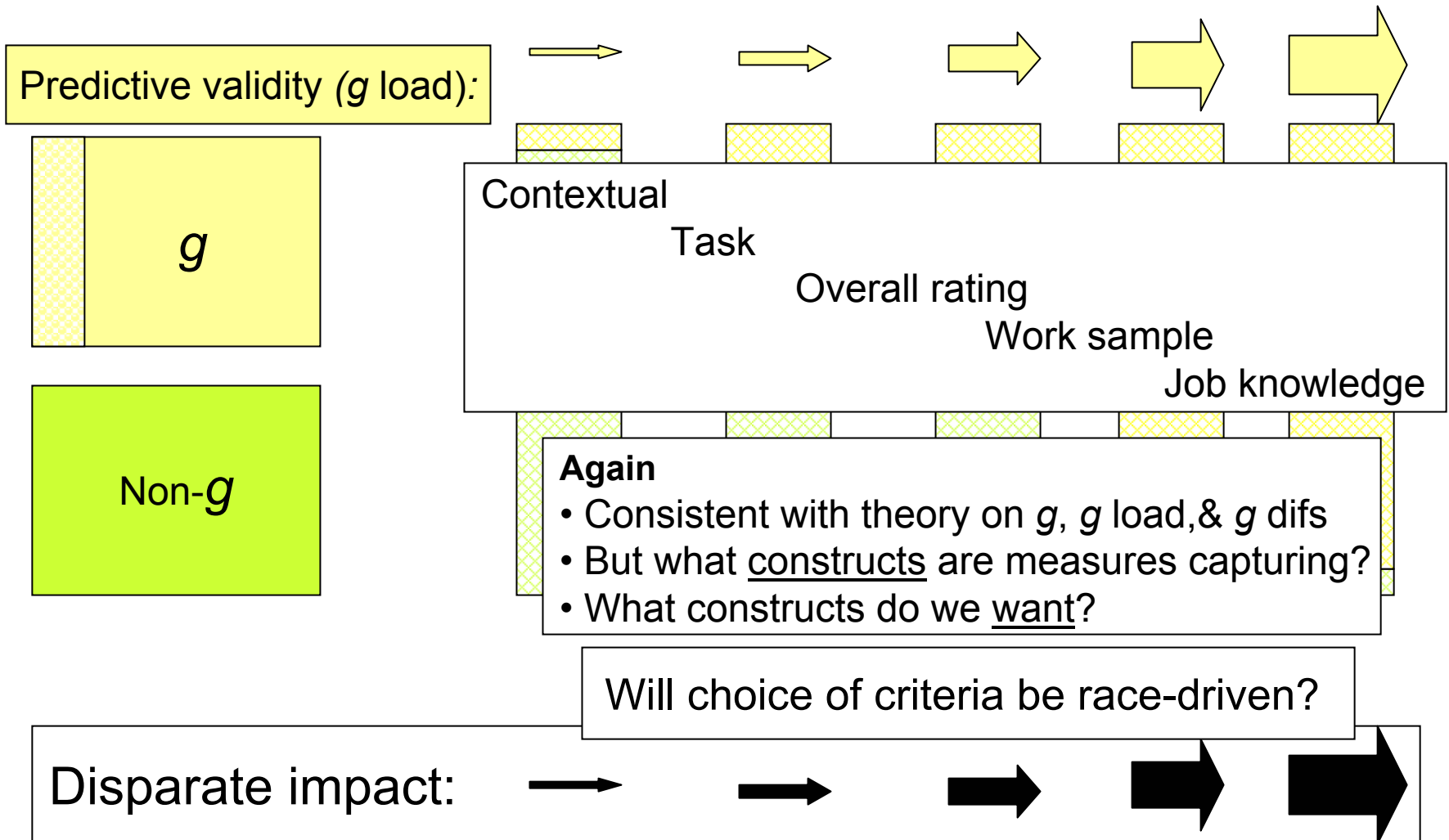
Rules of thumb

1. Eliminating d requires eliminating g
2. Eliminating g reduces validity (would you want your doctor picked only on personality?)
3. Don't-ask-don't-tell governs discussion
4. Law, politics, & employer insist on $\sim 0 d$

So, new enthusiasm for changing the criteria

Race-driven, but an important question

MA Results for Performance Criteria (McKay & McDaniel paper)



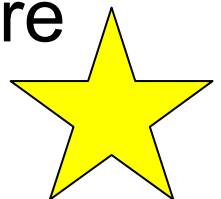
Two MA Studies: Bottom Line

Conclusions

- Cognitive load is the major source of disparate impact (by race) in both predictors and criteria

Recommendations

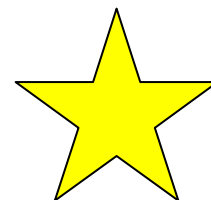
- Avoiding the big picture?
 - Pick SJTs with lower g load (but prudently)
- Avoiding the here-and-now?
 - Raise cognitive ability of lower-scoring groups
- But, less so than others. Show the big picture



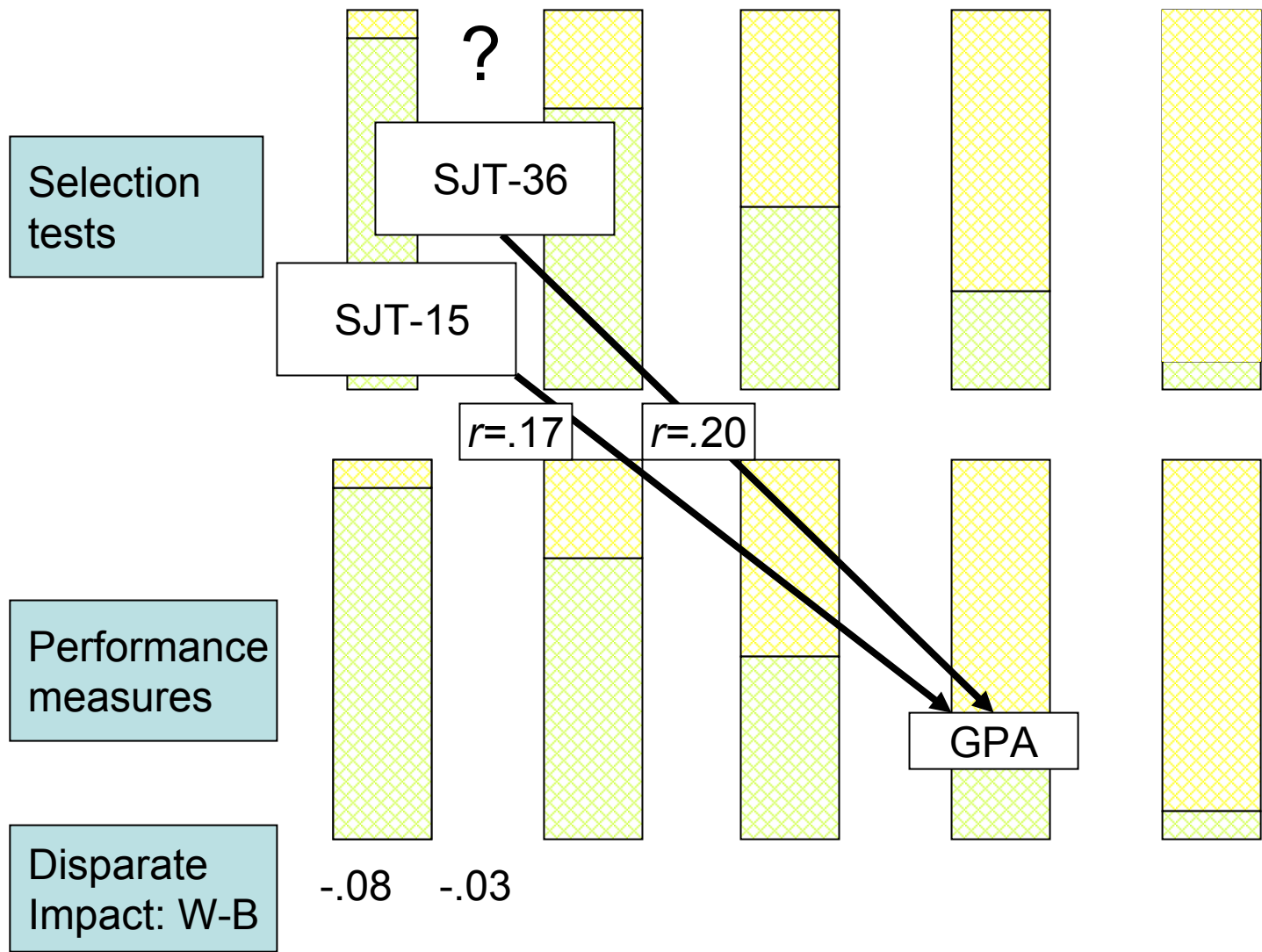
SJTs for College Admission

(Imus, Schmitt, Kim, Friede, & Oswald paper)

- Two similarities
 - Same basic $g-d$ tradeoffs in selection
 - That's why “non-cognitive” predictors are being sought
- One difference
 - Women over-represented in college (60-40)
- College Board efforts—one of two teams highly competent



Academic SJT: Research Design and Results



• Why seek unidimensionality?

• What constructs captured?

• Is GPA the correct criterion?
• Does it select for female personality?

• What incremental validity?

• Maybe really a sex effect?

Bottom Line

- **Conclusions**—Good news for SJTs in admissions
 - Biased items, but balanced so make no difference
 - Some validity
 - No disparate impact (by race)
- **Recommendations**—IRT can be useful with SJTs
 - Avoiding the big picture?
 - Proceeding as if didn't have the 2 fact-sets?
 - Can expect same disappointments/tradeoffs as in personnel selection for race
 - Primary effect of SJTs may be to further reduce male representation
 - Problem is not a technical one
 - Its roots in g will not be entertained first in this field (health is more promising)

- `gottfred@udel.edu`
- `http://www.udel.edu/educ/gottfredson/`