

Scarcity, Bandwidth, & Policy

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2013
P O L I C Y
S U M M I T

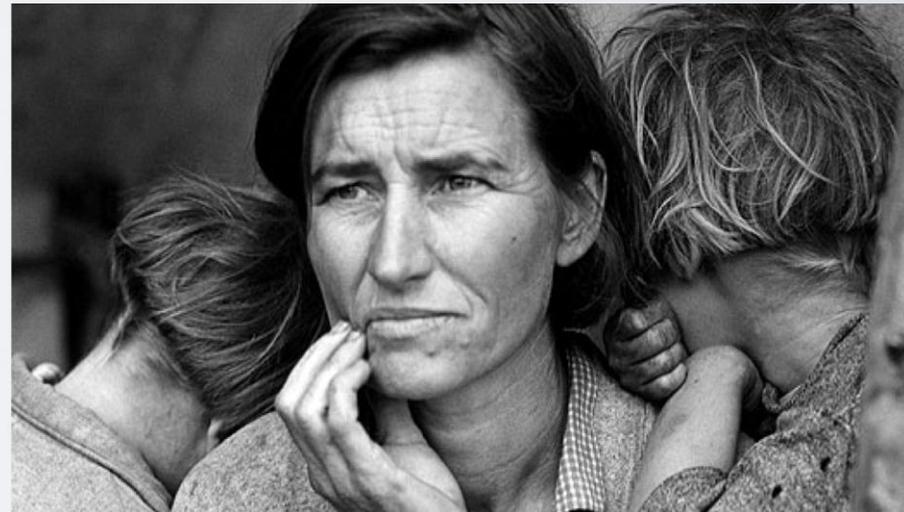




SCARCITY



A source of demand on cognitive capacity...







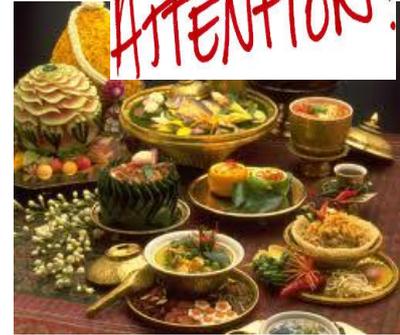
WATER

ATTENTION!



FOOD

ATTENTION!



FRIENDS

ATTENTION!



SCARCITY IS TOP OF MIND



WATER
JUICE
SODA
THIRST

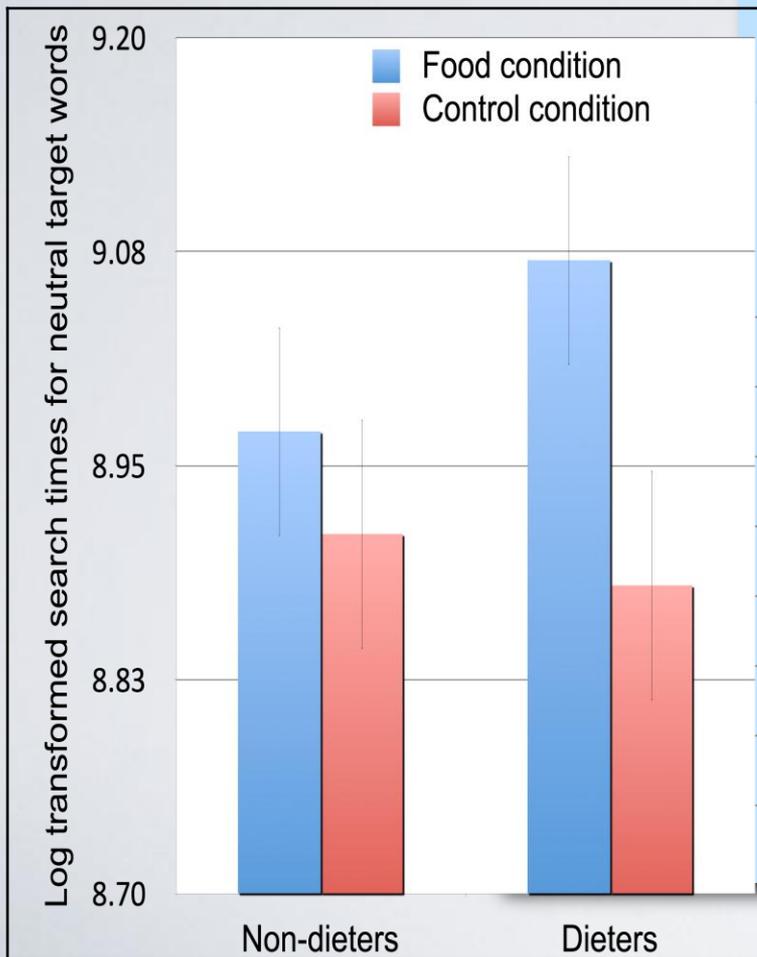


CHAIR
FRIENDS
TREES
TALKING

AND SCARCITY IS DISTRACTING



Search times – *for neutral targets* – by condition and group



Word Search

Word Search

G	P	P	O	F
T	R	R	C	Q
E	C	H	Q	L
E	D	O	V	V
R	T	F	Z	A
T	F	V	G	A
S	C	R	F	P

STREET

TREE

PICTURE

CLOUD

CARPET

LAMP

DAYTIME

RAIN

VACUUM

DOOR

CAKE

TREE

DONUT

CLOUD

SWEETS

LAMP

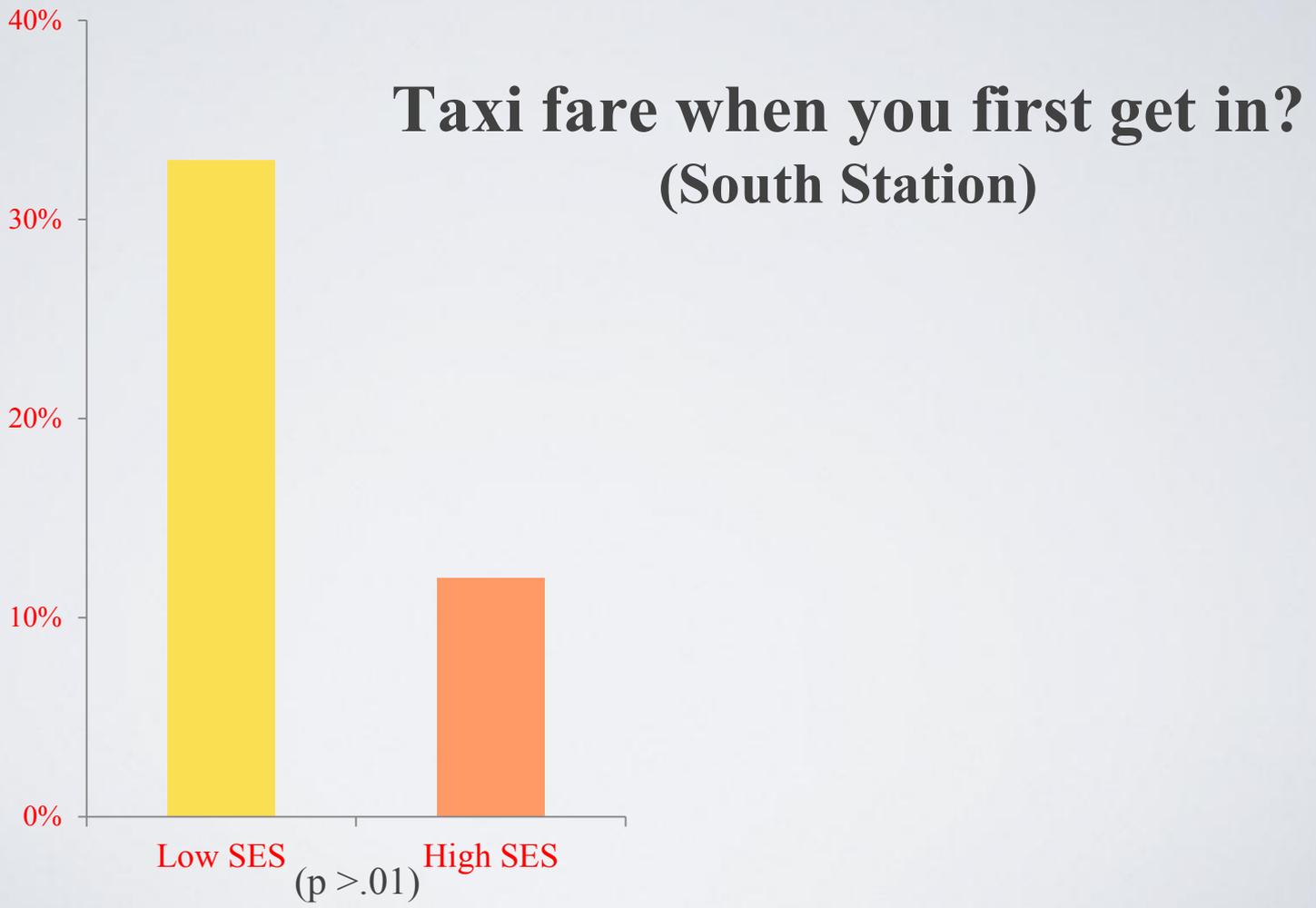
INDULGE

RAIN

DESSERT

DOOR

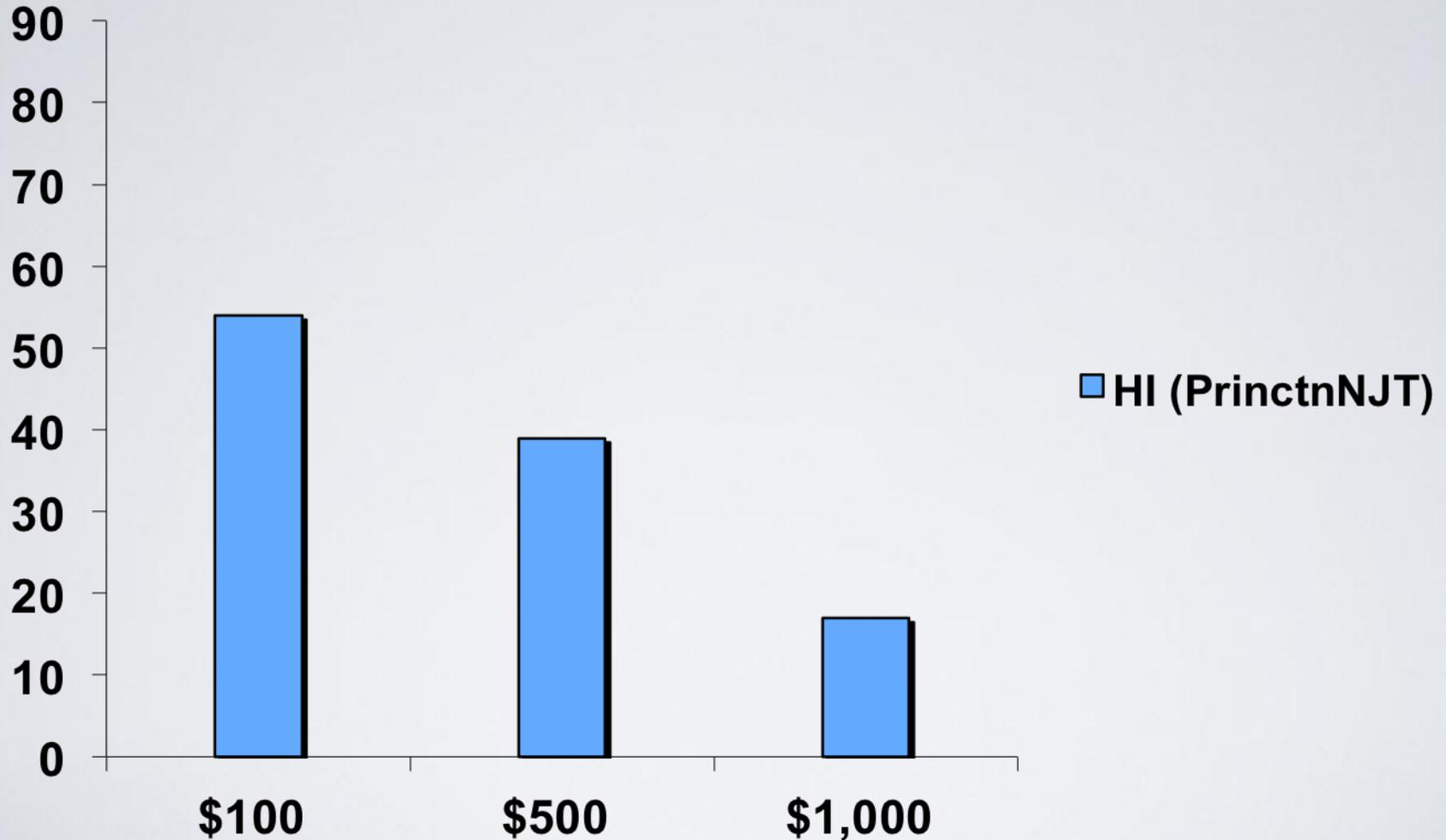
Similarly with money:
Focus on immediate prices, tradeoffs,..
BUT less mind for elsewhere...



A greater focus on tradeoffs..

Imagine that a friend goes to buy an appliance priced at \$100(\$500/\$1000). Although the store's prices are good, the clerk informs your friend that a store 45 minutes away offers the same item on sale for \$50 less. Would you advise your friend to travel to the other store to save \$50 on the \$100(\$500/\$1000) expense?

Percent willing to travel 45 mins to save \$50

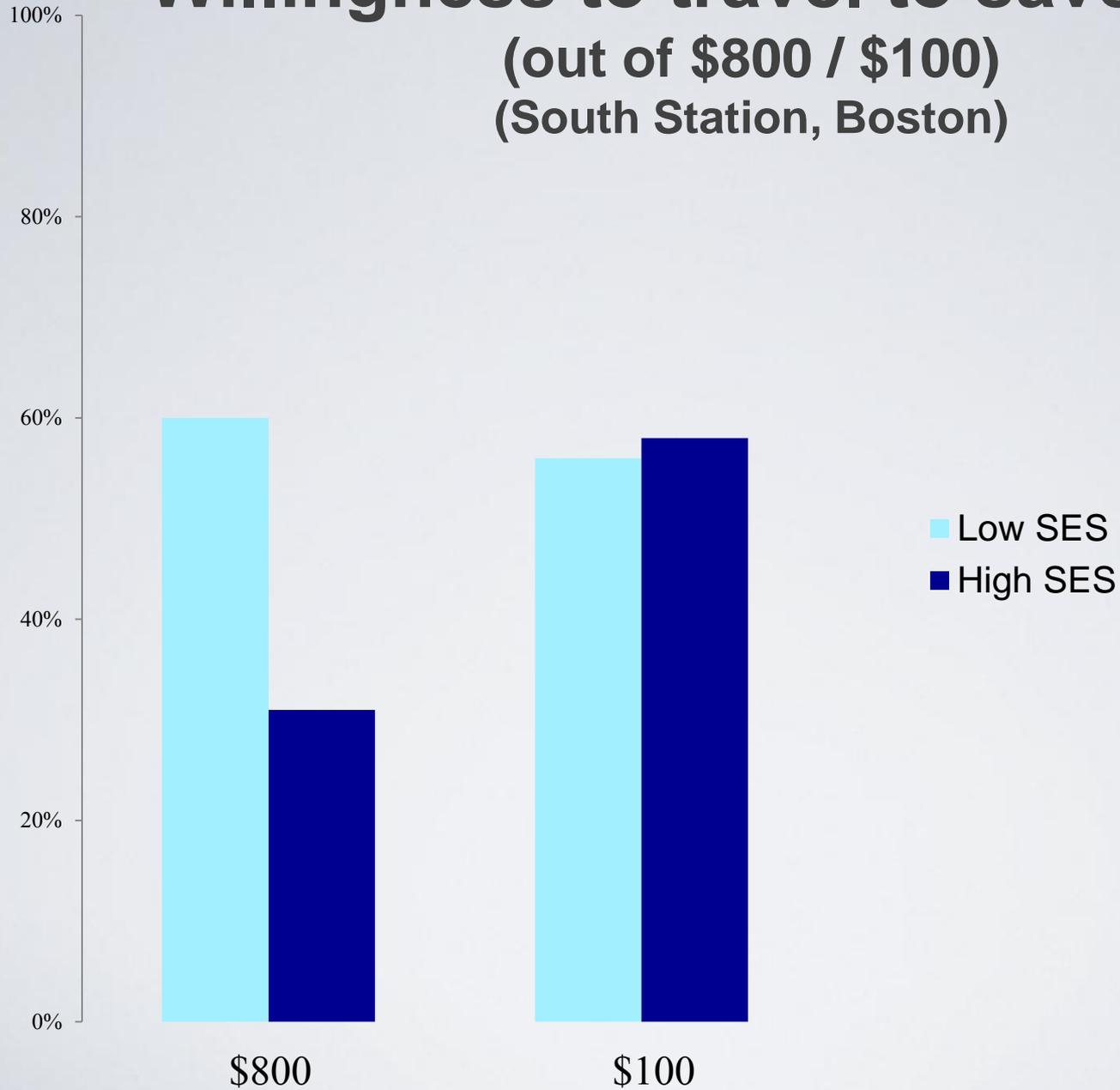


Percent willing to travel 45 mins to save \$50



Willingness to travel to save \$25...

(out of \$800 / \$100)
(South Station, Boston)



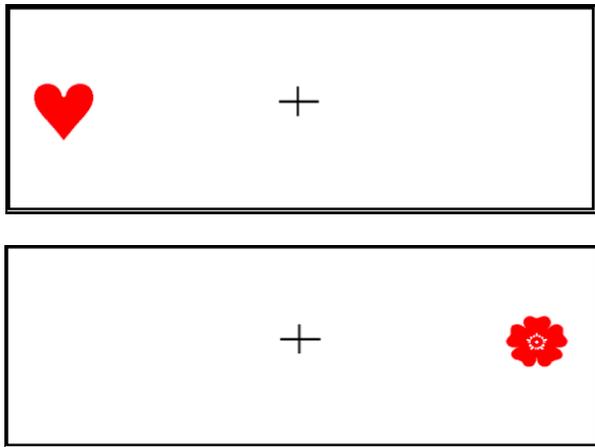
FINANCIAL CHALLENGES

(in a NJ mall...)



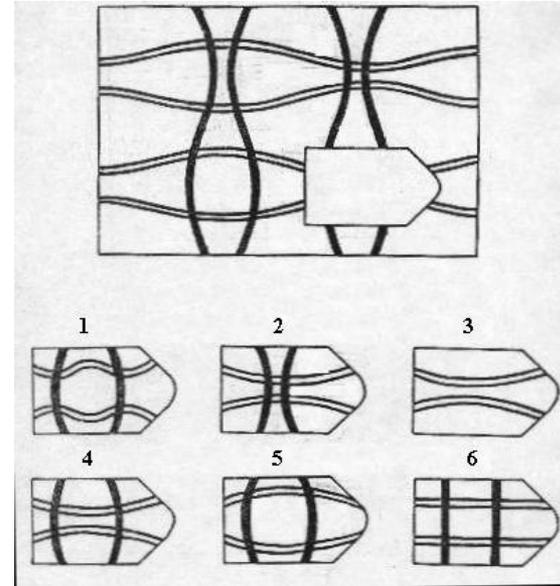
COGNITIVE CONTROL TASK

press the same side as the heart
press the opposite side as the flower



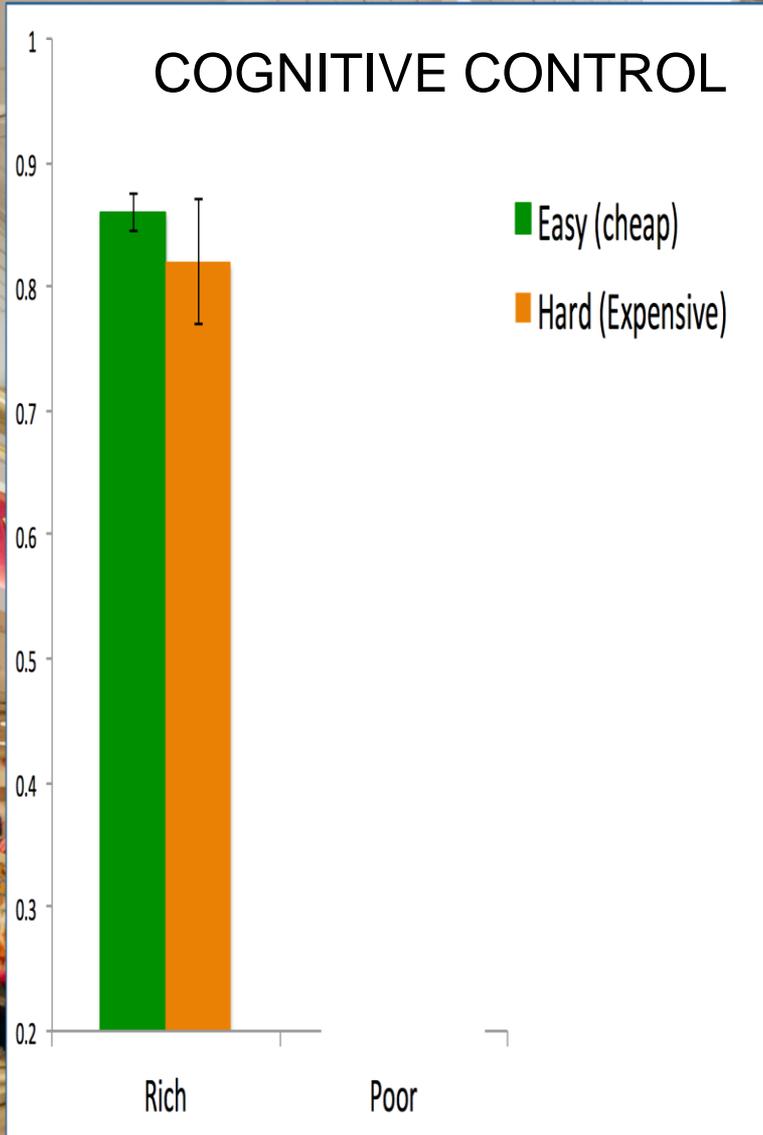
Measures cognitive control &
executive function...

RAVEN'S PROGRESSIVE MATRICES

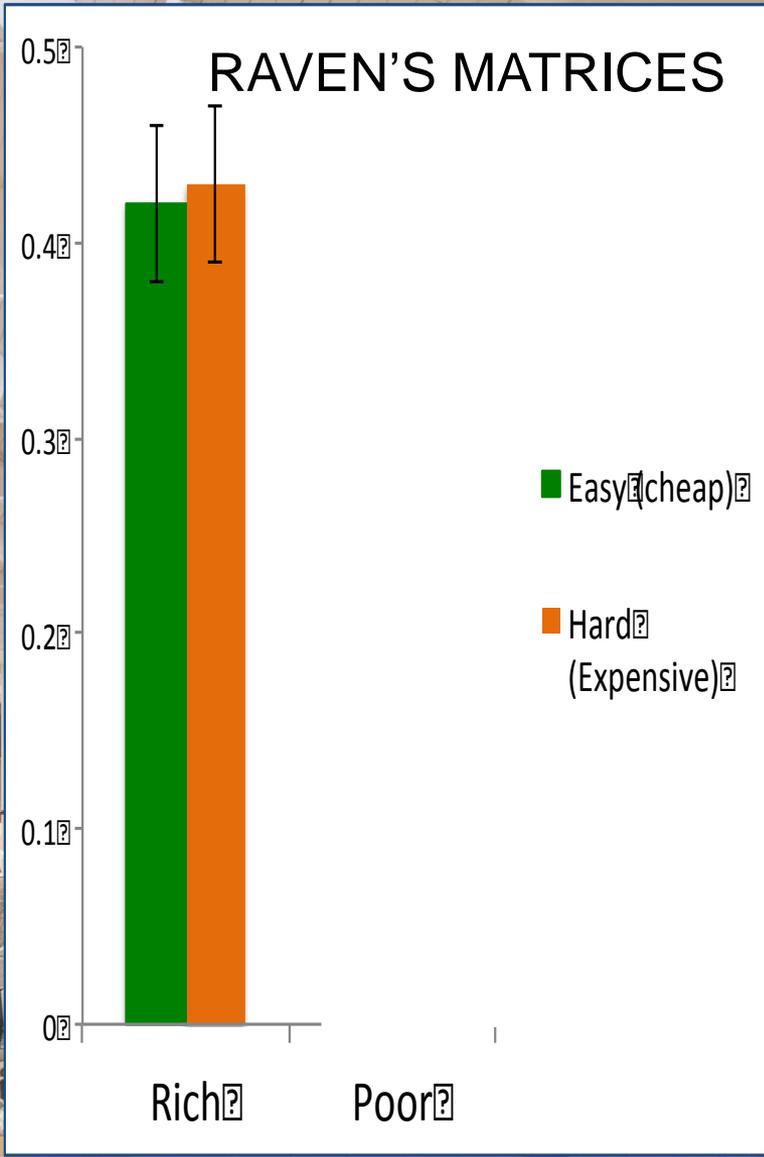


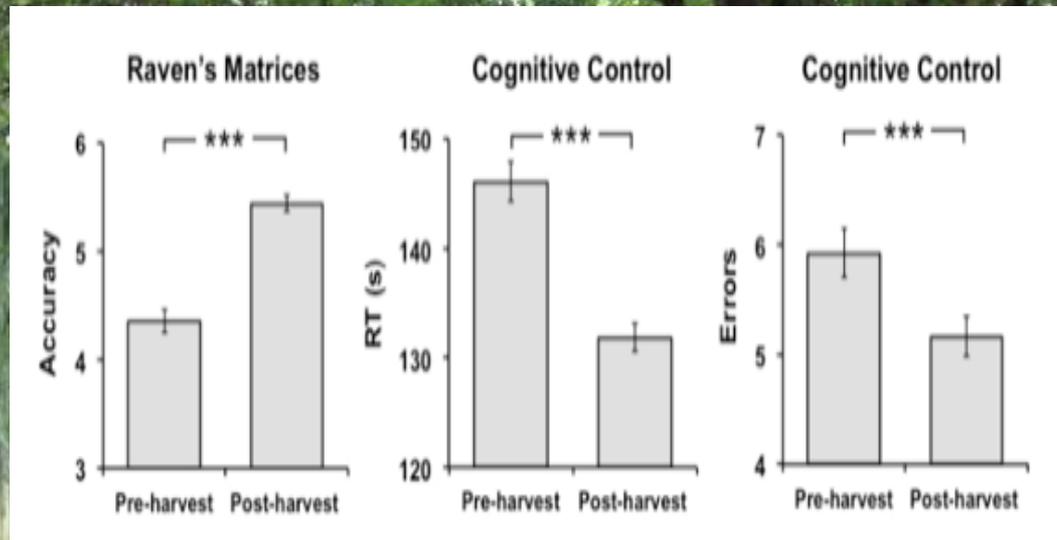
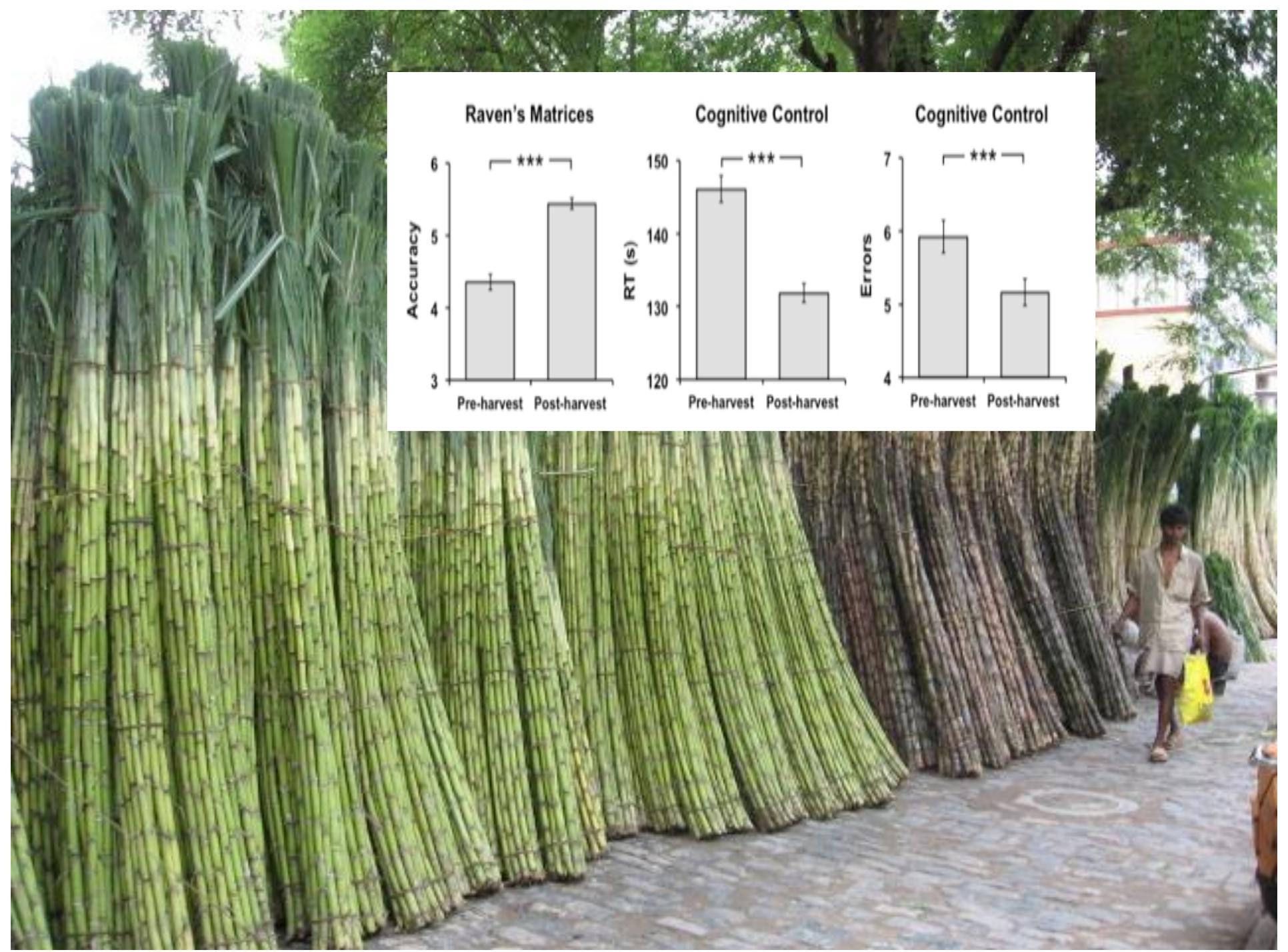
“Measures high-level
observation skills, clear
thinking ability, and
intellectual capacity.”

COGNITIVE CONTROL



RAVEN'S MATRICES





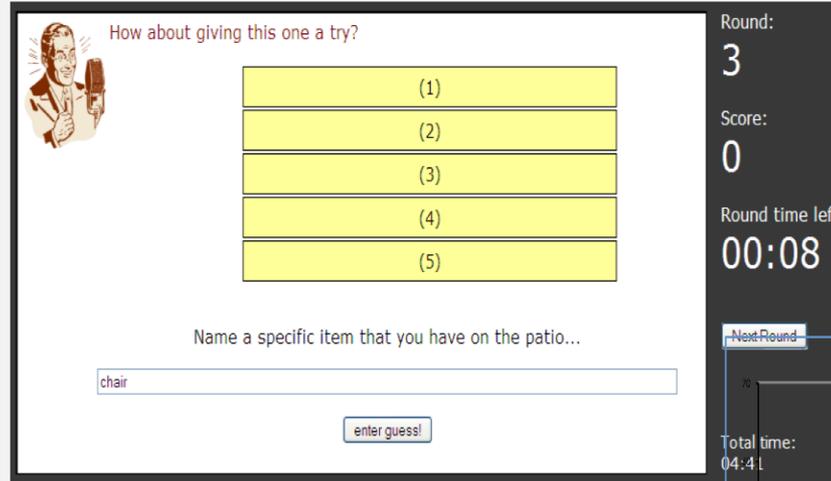


20 rounds

“Rich”: 50 sec / rnd (1000 sec total)

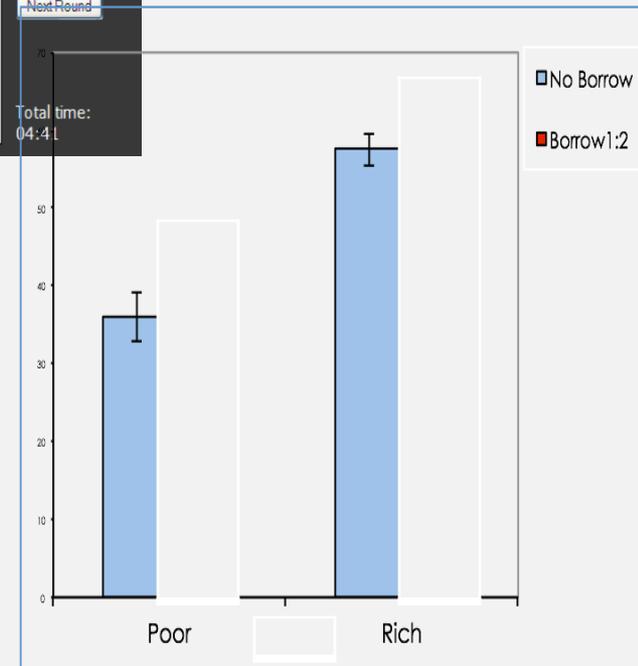
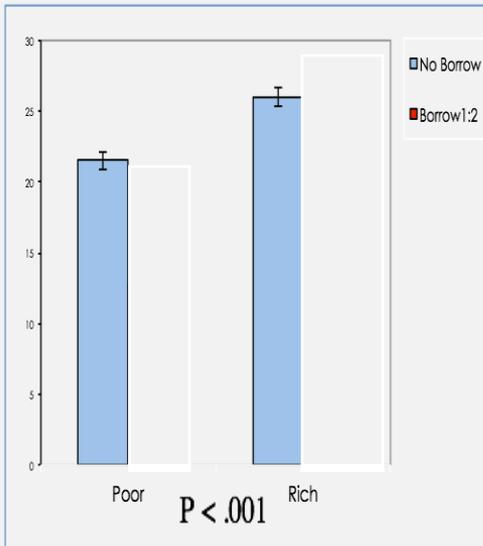
“Poor”: 15 sec / rnd (300 sec total)

No borrowing vs. High Interest Borrowing



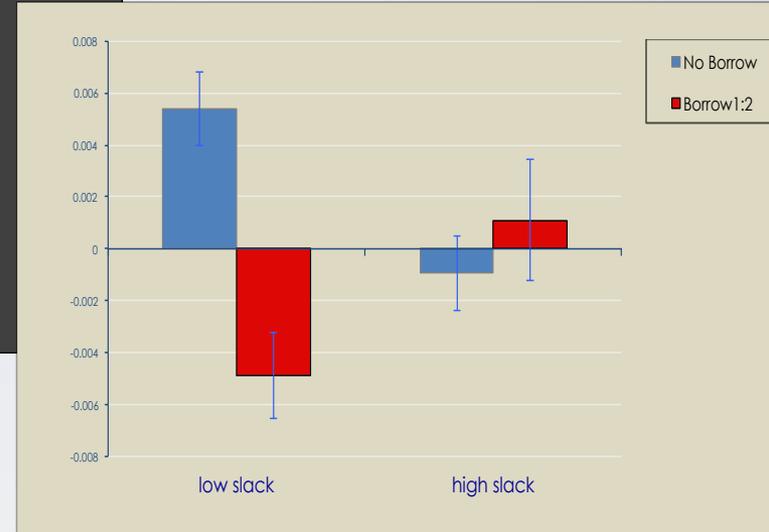
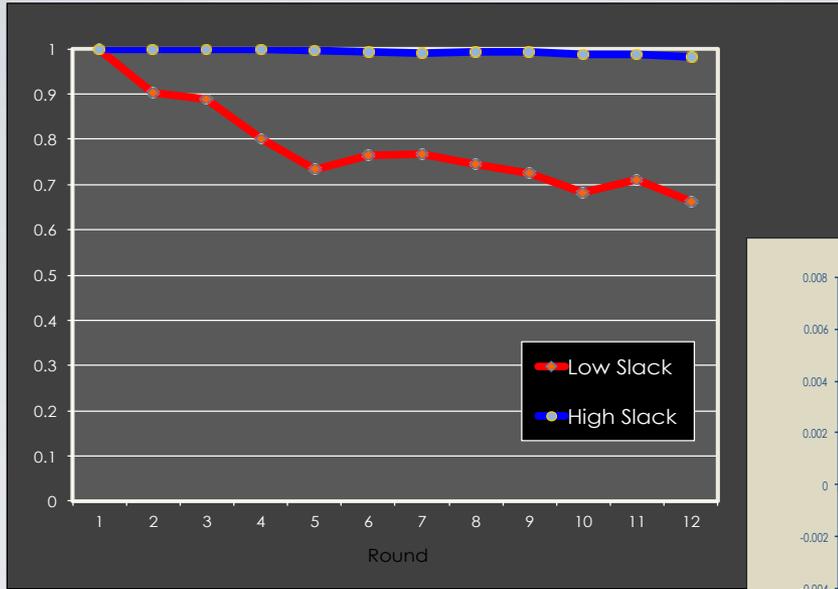
Points Earned

Rounds Completed

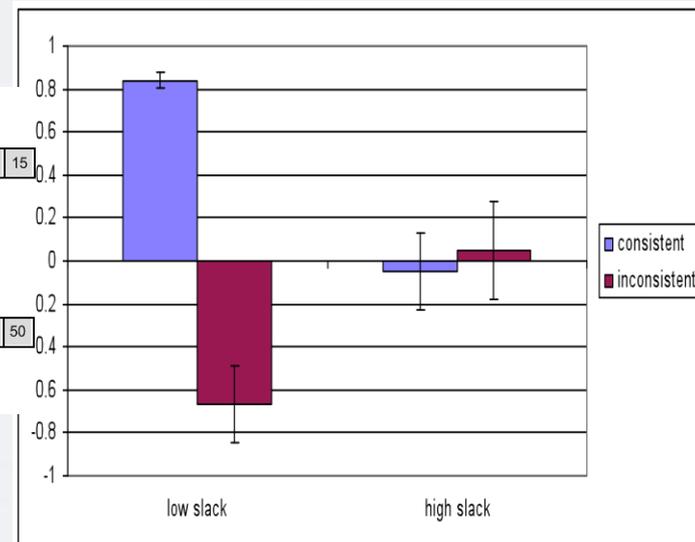
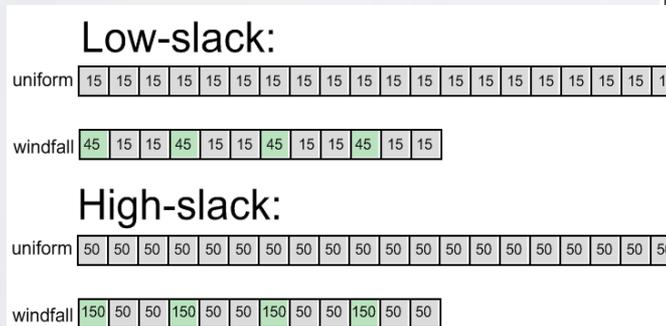


Shah, Mullainathan, & Shafir, *Science*, 2012

Debt Traps



Smoothing consumption



POLICY MAKERS NEED TO CARE ABOUT BANDWIDTH



The logistics around benefits (e.g., SNAP)

The requirements of time, self-presentation, planning...

Training / Financial literacy (?)....

Peripheral vs central (under load)

Menacing forms!

FAFSA 2010-2011

Section 1: Student Information

FAFSA Form 2010-2011

Section 2: Financial Information

FAFSA Form 2010-2011

Section 3: Assets

FAFSA Form 2010-2011

Section 4: Income

FAFSA Form 2010-2011

Section 5: Expenses

FAFSA Form 2010-2011

Section 6: Other Information

FAFSA Form 2010-2011

Section 7: Signatures

FAFSA Form 2010-2011

Section 8: Additional Information

FAFSA Form 2010-2011



Section 9: Federal Student Aid

FAFSA Form 2010-2011

Section 10: Additional Information

FAFSA Form 2010-2011

Section 11: Additional Information

FAFSA Form 2010-2011

Section 12: Additional Information

FAFSA Form 2010-2011

Section 13: Additional Information

FAFSA Form 2010-2011

Section 14: Additional Information

FAFSA Form 2010-2011

Section 15: Additional Information

FAFSA Form 2010-2011

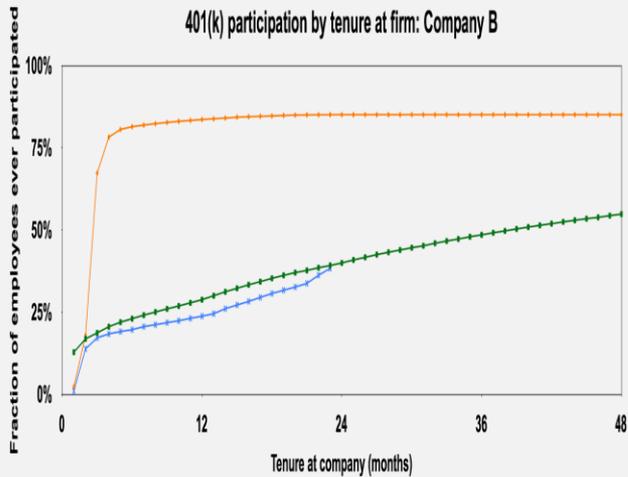
Section 16: Additional Information

FAFSA Form 2010-2011

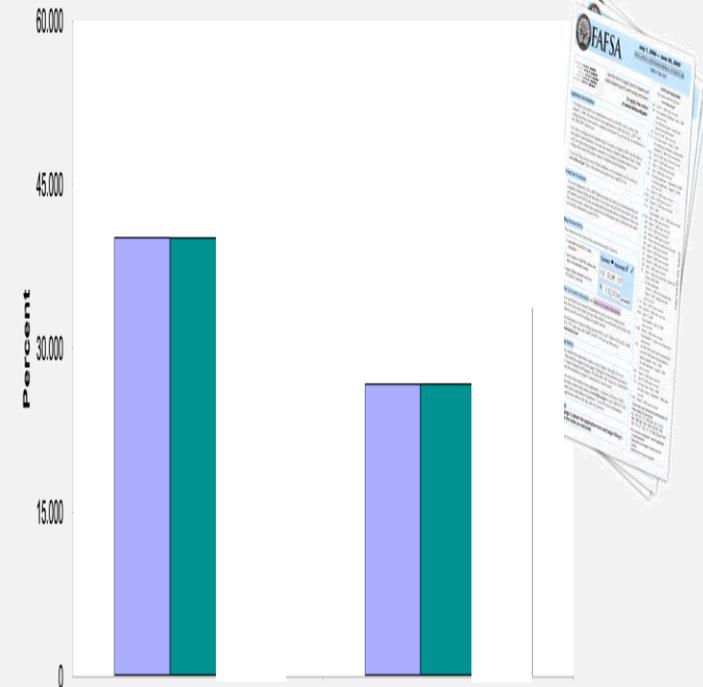
POLICY MAKERS NEED TO CARE ABOUT BANDWIDTH



Retirement Savings



FAFSA forms



(Bettinger, Long, Oreopoulos & Sanbonmatsu, 2009)



Aim to be more scarcity-proof...

Dodd-Frank, Consumer Protection, Qualified mortgages,...

Fail-proof courses...

Regular pay periods; work shifts; child-care, transportation...

Because one bandwidth for all...

Thank you!

What's Advertising Content Worth? Evidence from a Consumer Credit Marketing Field Experiment (Bertrand, Karlan, Mullainathan, Shafir, Zinman; *Quarterly Journal of Economics*, 2010)

Account Number 105349191

BUSINESS HOURS
MON - FRI: 08:00 - 18:00
SAT: 08:00 - 12:00

SIYASIKHULUMA ISIZULU

A special rate for you.

Congratulations! As a valued client, you are eligible for a special interest rate on your next cash loan from [REDACTED]. This is a limited time offer so please come in by 31 October 2003 to take advantage of this offer. You can use this cash to pay off a more expensive debt, repair your home, buy an appliance, pay for school or for anything else you want.

Enjoy low monthly repayments with this offer! For example:

Interest Rate	Loan Amount	Loan Term	Monthly Repayment
10.50%	R2000.00	4 Months	R710.00

LOAN AVAILABILITY SUBJECT TO TERMS & CONDITIONS

Loans available in other amounts. There are no hidden costs. What you see is what you pay.
If you borrow elsewhere you will pay 10% more in interest payments on a R2000, 4 month loan!

How to apply:
Bring your ID book and latest payslip to your usual branch, by 31 October 2003 and ask for
To extend your deadline, call 0860 333 0004 or SMS 0860 222 334.

PS: Unfortunately, if you have already taken a loan since the date this letter was issued, you do not qualify for this offer

WIN

10 CELLPHONES UP FOR GRABS EACH MONTH!



Behavioral (“Marketing”) Manipulations:

- # of loan examples shown
- subtle peripheral cues; photos

Some results:

1 vs. 4 examples: ~ 2.3 percent. points

For males: female picture = ~ 4.5 points

Affirmation at a Soup Kitchen



80 patrons

mean age = 42.9 (s.d.=12)

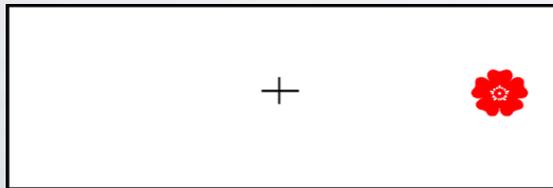
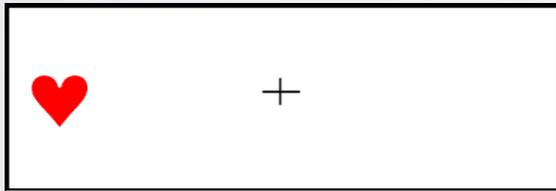
mean annual income ~ \$8,000



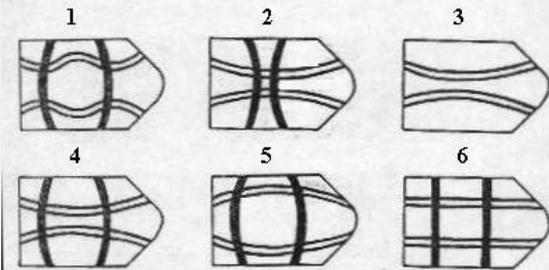
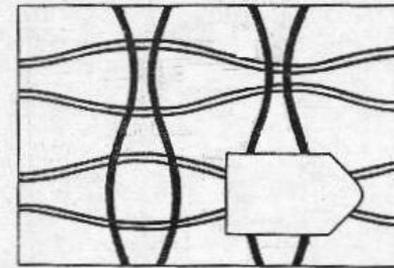
Cognitive control task:

press the same side as the heart

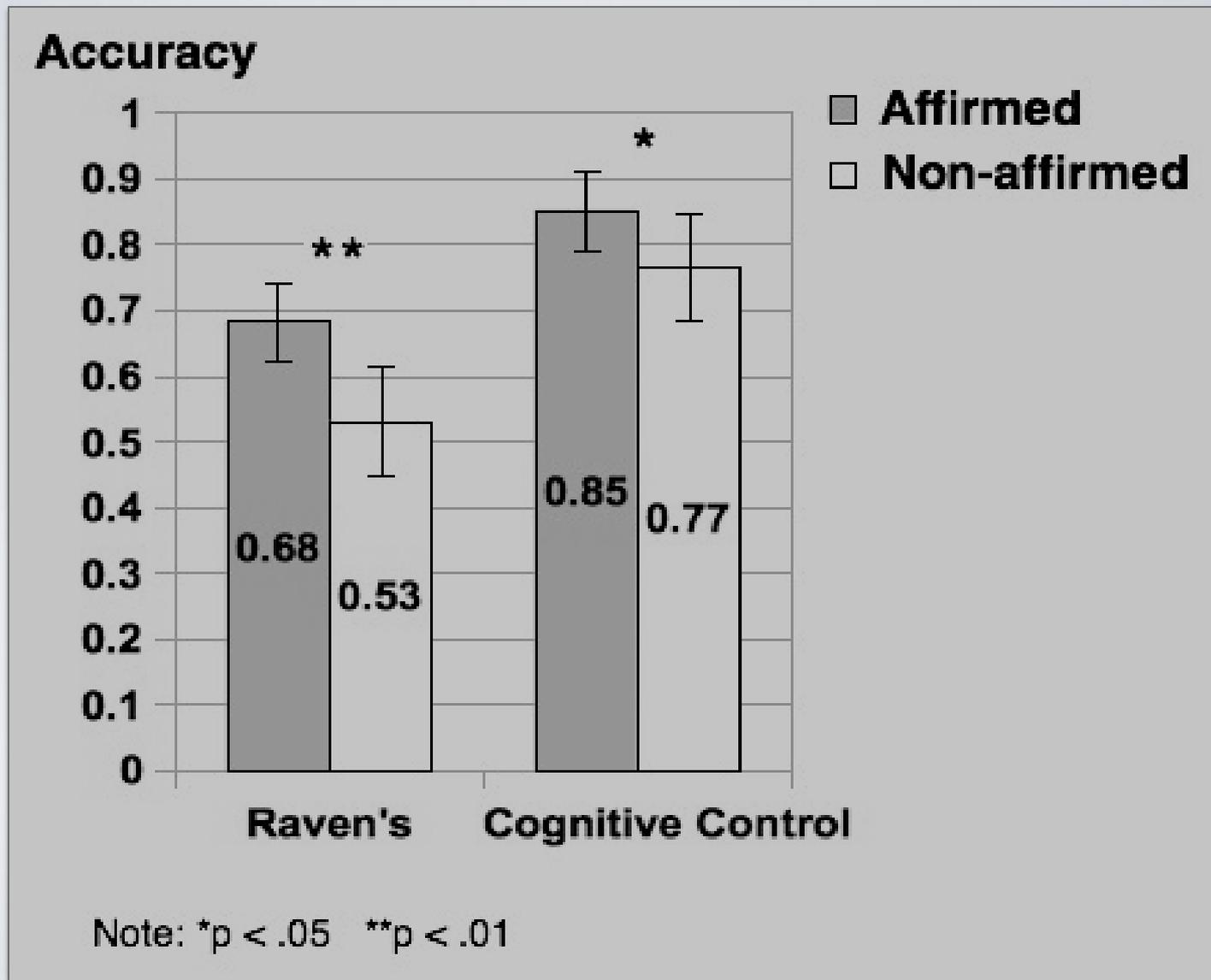
press the opposite side as the flower



Raven's Progressive Matrices



Results





Affirmation in the context of welfare benefits programs
(EITC and local VITA sites) ...

	Condition:		
	<u>Neutral</u>	<u>Affirmation</u>	
Stopped to consider:	44%	58%	(<i>ns</i>)
Of those, took the information:	36%	79%	$p=.03$
(Total take up:)			
	<u>16%</u>	<u>46%</u>	$p<.01$