

Some ideas on the psychology of poverty and scarcity

Evidence from outside the laboratory

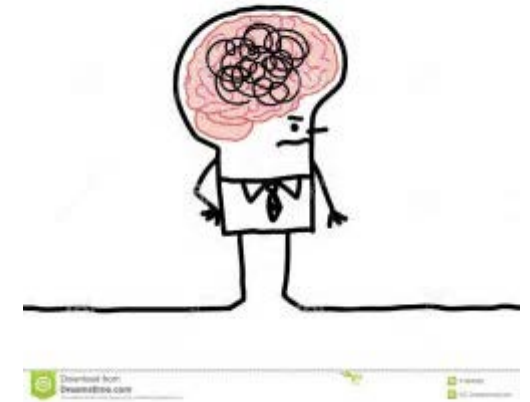
Sudhanshu Handa and Adria Molotsky on behalf of the
Malawi and Zambia CGP Evaluation Study Teams

Dakar, June 2017

Psychological state affects decision-making

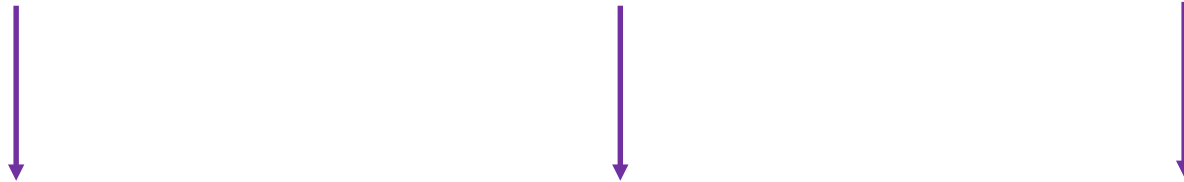
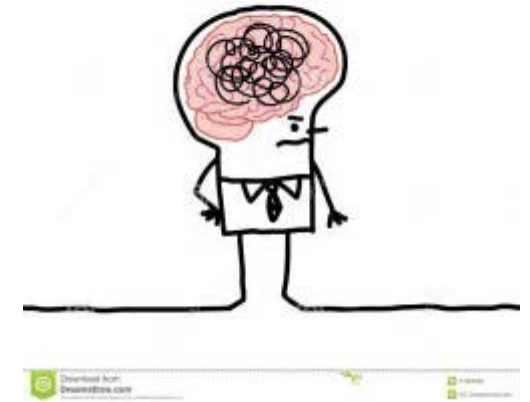
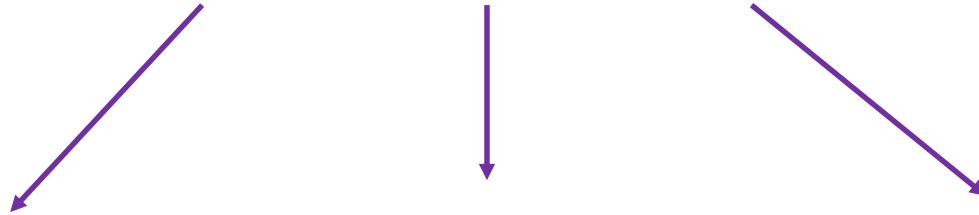
- These decisions can have long-term consequences
 - Myopia, short-sightedness
- This relationship exists among ALL humans
- Poverty may make this relationship stronger
 - Reinforces the condition of poverty

Psychological state and decision-making

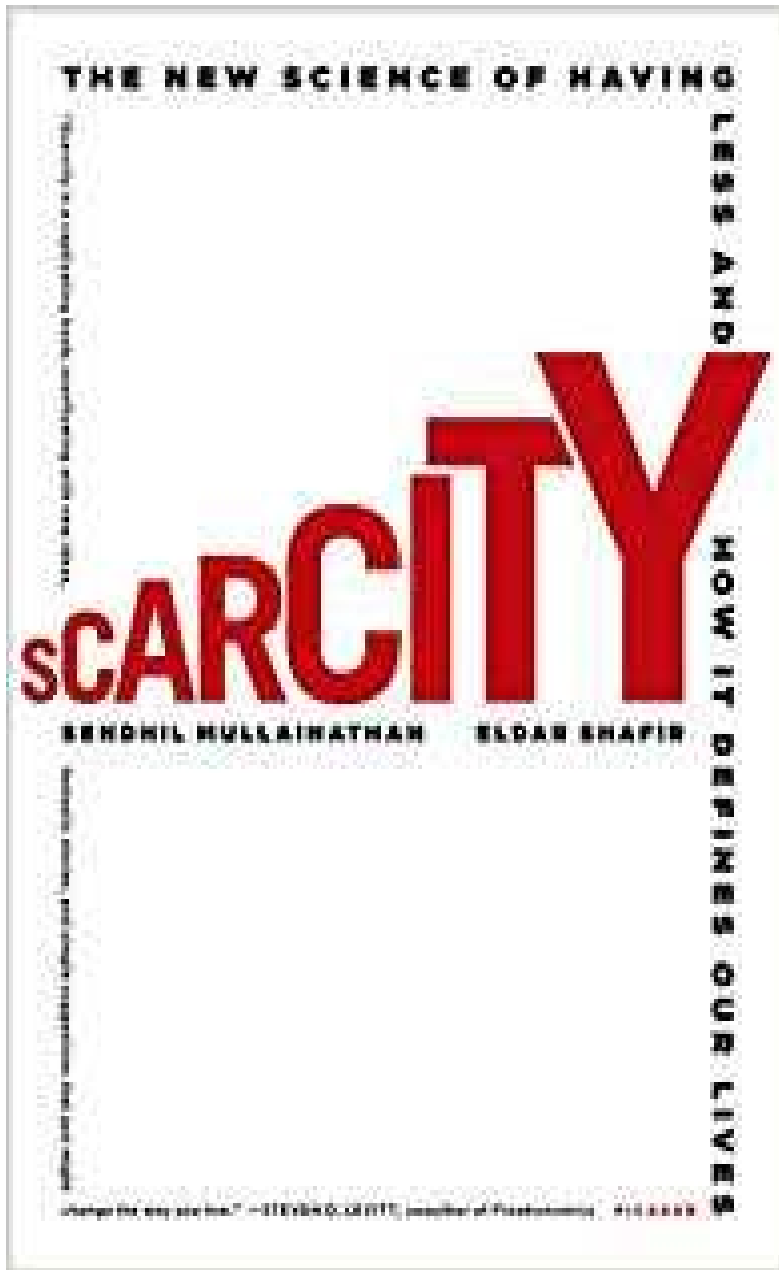


Self-control, short-term behavior, executive function

Poverty Condition



Self-control, short-term behavior, loss of executive function



Scarcity (poverty) leads to excessive focus on resolving the immediate scarcity

‘Tunneling’: myopic behavior

Perpetuates poverty

Data from your responses: N=72, male=57%,
French=37%, average age=42 years

If you won \$200/\$500/\$1000, how much would you need
in order to wait one month?

Impatience ratio: (Amount needed in one month/amount
today)

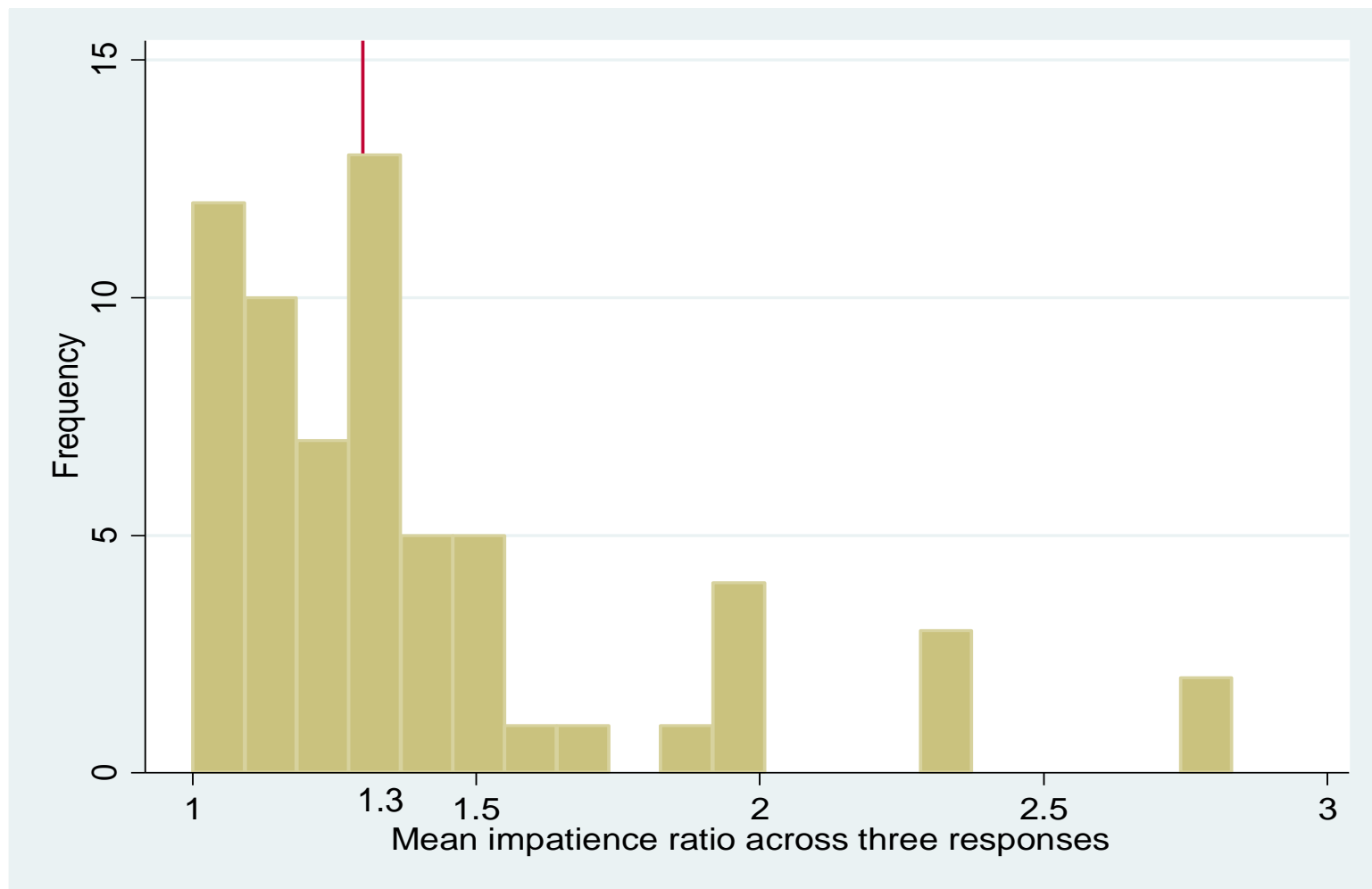
For example if I win \$200 and need \$250 to wait one
month

$$\$250/\$200 = 1.5$$

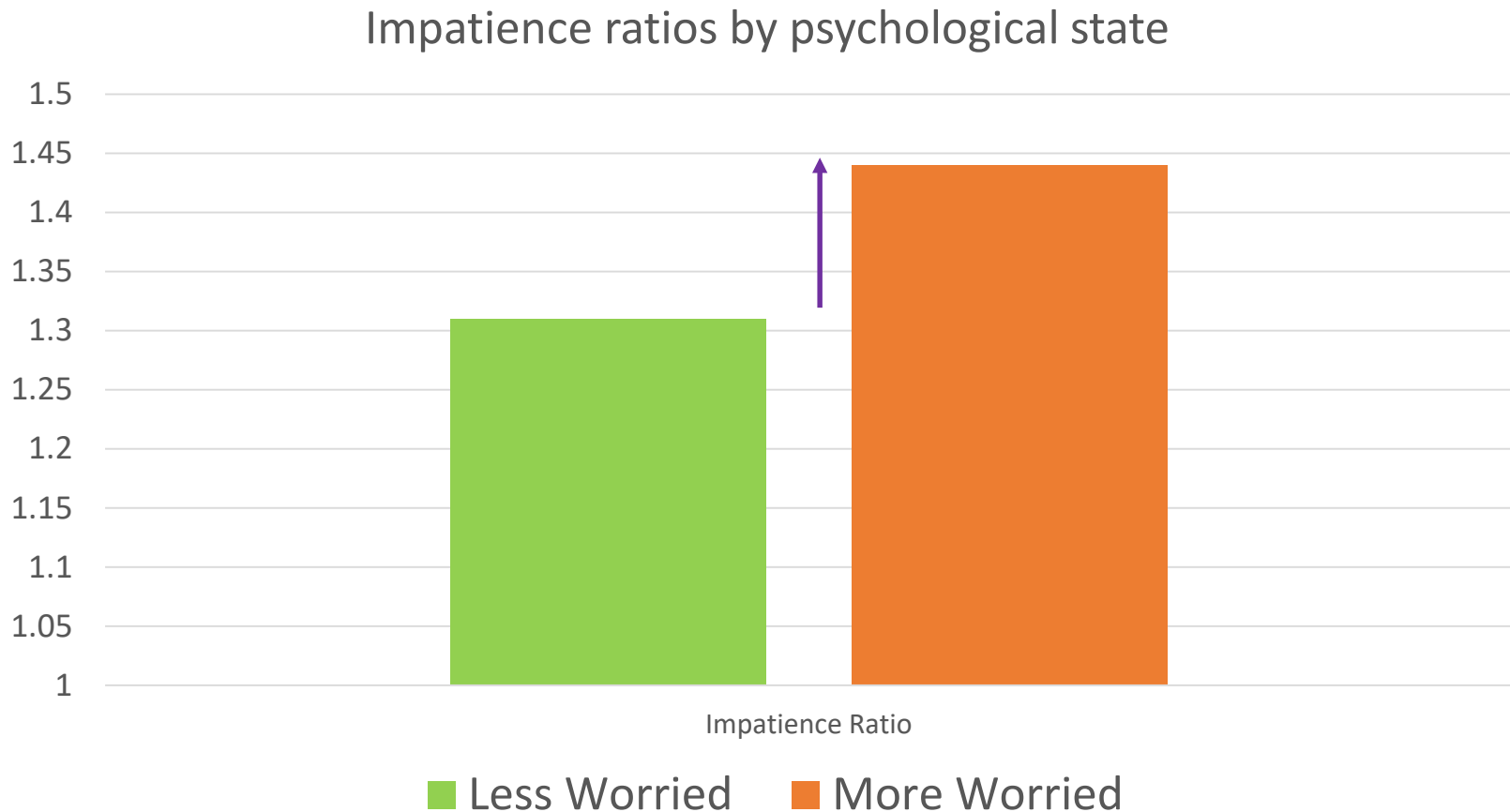
More impatient, higher is this ratio

How impatient are you?

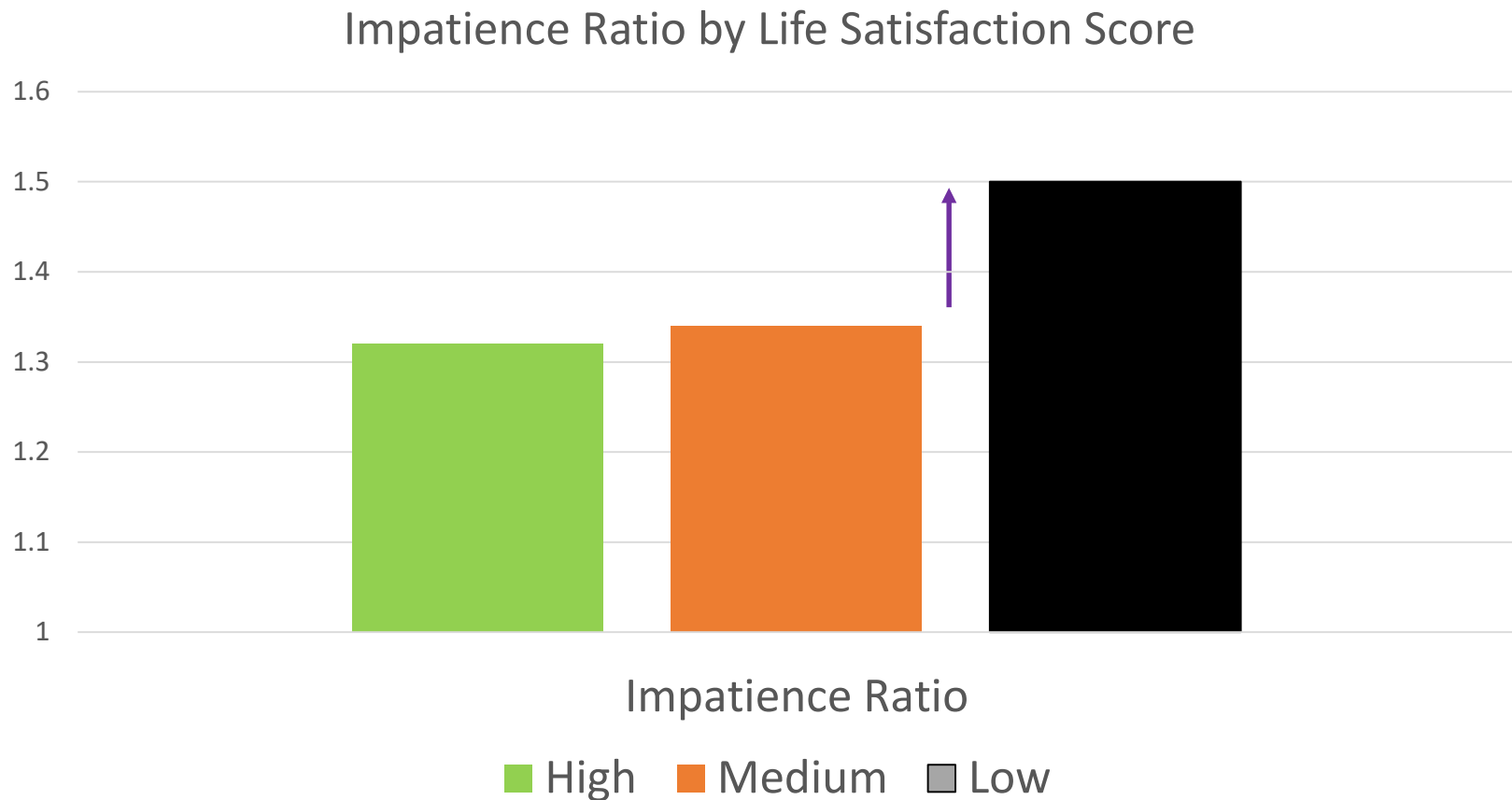
Mean is 1.3 (need 30% more to wait one month)



Does psychological state affect inter-temporal choice among us? **More worried are more impatient....**



Among our group, less satisfied with life also more impatient!



Lets go to the field and see what we find...

- RCT to evaluate Malawi Social Cash Transfer Programme
 - 2013 (baseline), 2014, 2015
 - N=3200; panel survey
- RCT to evaluate Zambia Child Grant Programme
 - 2010 (baseline), 2012, 2013 (harvest), 2013 (lean)
 - N=2250; panel survey

Measures of inter-temporal choice: Save money? Wait for future money?

Example from Zambia:

Suppose you suddenly win ZMW200 in the Lotto. If you could choose between these two options, which do you choose?

A: 1 = ZMW 200 TODAY OR 2 = ZMW 200 IN ONE MONTH

B: 1 = ZMW 200 TODAY OR 2 = ZMW 300 IN ONE MONTH

C: 1 = ZMW 200 TODAY OR 2 = ZMW 400 IN ONE MONTH

D: 1 = ZMW 200 TODAY OR 2 = ZMW 600 IN ONE MONTH

E: 1 = ZMW 200 TODAY OR 2 = ZMW 800 IN ONE MONTH

21 percent in Zambia will never wait for future money

38 percent in Malawi will never wait for future money

Measures of psychological states

STRESS

In the past 4 weeks did you ever worry that your household would not have enough food?

Perceived stress scale (10-item in Zambia; 4-item in Malawi)

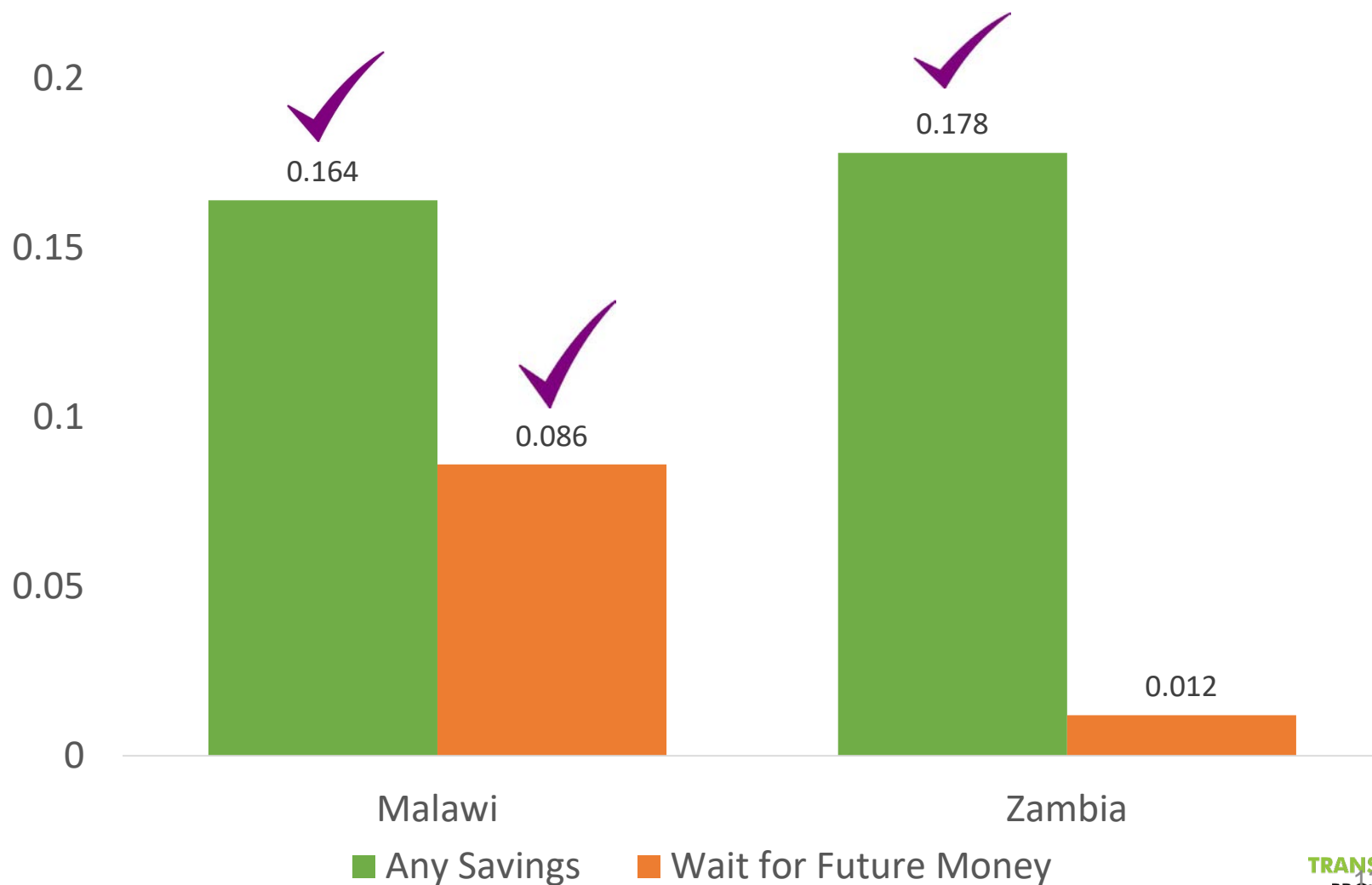
AFFECT OR MOOD

Are you generally happy?

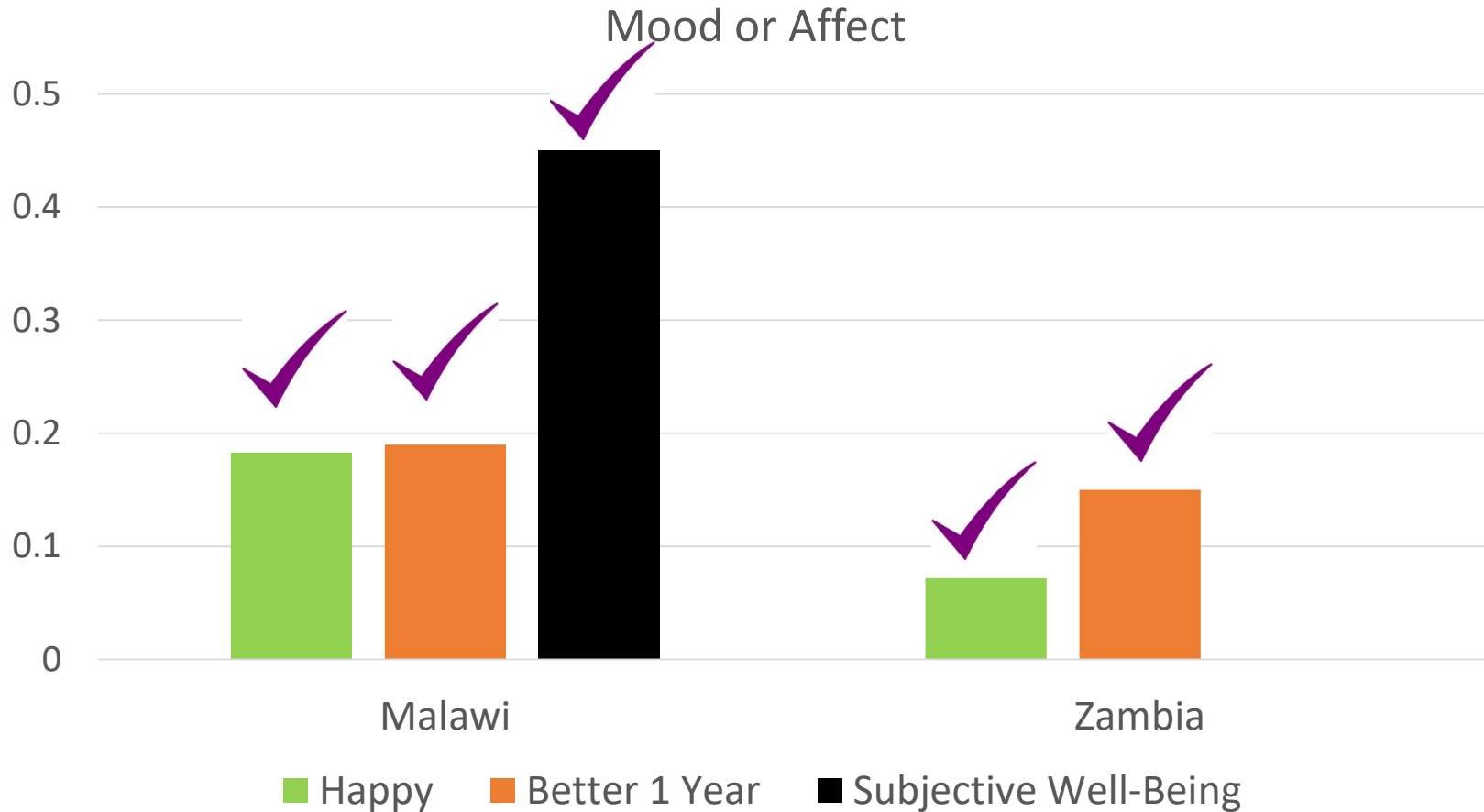
Do you think your life will be better in 1 year?

Subjective well-being scale (Malawi only)

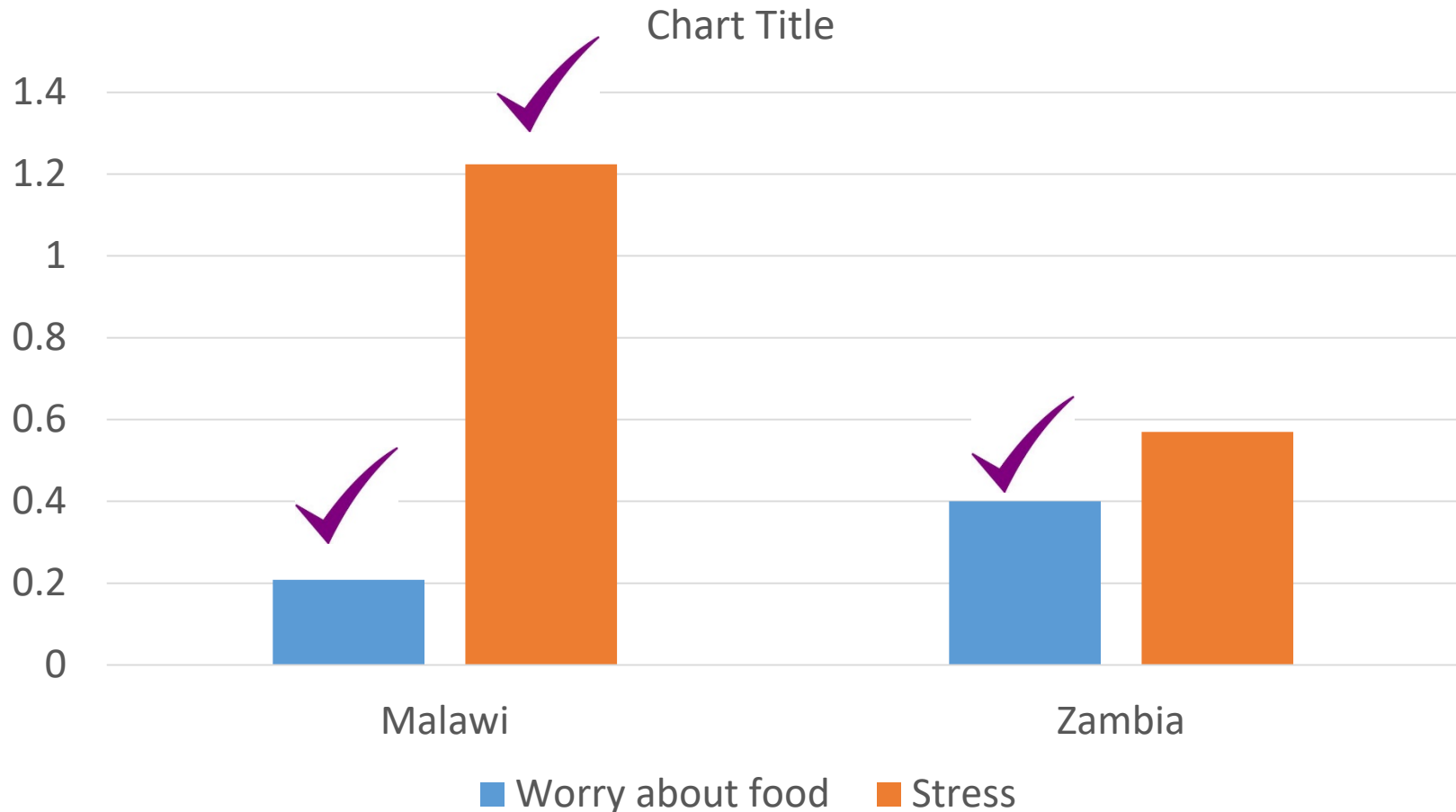
Does cash transfer program affect inter-temporal choice behavior?



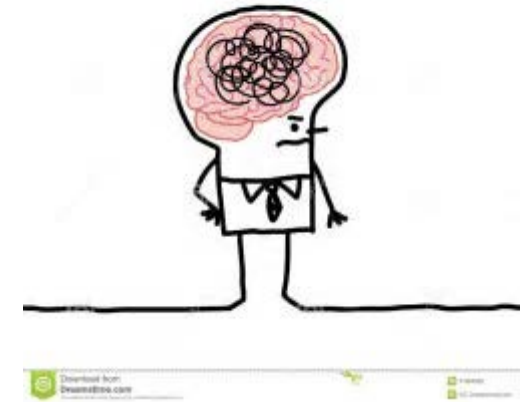
Does psychological state (affect or mood) predict inter-temporal choices? Yes!



Does psychological state (stress/worry) predict inter-temporal choices? Yes!



Poverty Condition



Self-control, short-term behavior, loss of executive function

Preliminary implications

- Myopia, short-term behavior, perpetuates poverty
 - Influenced not just by financial constraints but by psychological state
- Are the poor to blame for their condition?
 - Actually we (the non-poor) display the exact same behavior!
- Re-think program design
 - Address stress and cognitive overload in design
 - For example, excessive rules and conditions simply increases cognitive burden, stress

Preliminary implications

- Poverty creates toxic stress
 - Depletes immune system, makes us more susceptible to disease and infection
- Old school – poor are unhealthy because don't understand value of preventive/curative care or health system inadequate
 - Behavioral change, information, conditions
- New school – poor are unhealthy because immune system weakened by poverty-induced toxic stress
 - Address poverty, reduce 'stressors'
- New measures to understand behavioral consequences of poverty
 - Stress, cognitive capacity, emotion