Subjective Well-being, Time Discounting and Risk Preference in a Large Field Survey

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AIMS

Assess the performance of expectations and preference questions on a large scale

Do people understand them? Are results plausible?

'Preferences' module incorporated into impact evaluation of Kenya Cash Transfer for Orphans & Vulnerable Children (CT-OVC)

Does program have impact on these measures?

CONTRIBUTIONS

One of only three studies to incorporate preferences in large field study

First to include in context of cash transfer evaluation

CT-OVC is largest poverty program in Kenya—real program, externally valid

CT-OVC and Impact Evaluation Study Design

CT-OVC largest social protection program in Kenya

170,000 households, ultra-poor with OVC, unconditional transfer ~$20 per month

Location Randomized Control Trial to evaluate impact 2007-2011

1542T, 755C households, baseline 2007, follow-ups 2009 and 2011;

7 districts, 4 Locations in each district, 2 randomized out to C status

Preferences Module

Added to 2011 follow-up survey, translated into Luo and Swahili and Somali; took 15-30 minutes to implement; flash cards used to help communicate questions; all hypothetical, no money ever paid

Respondents are very poor, elderly, illiterate (caretakers of OVC)

	T	C	p-value
Age in years	57.3	59.1	0.03
Female	79.3	77.3	0.57
Partner in household	34.5	33.5	0.68
Can read	29.9	29.9	0.91
Chronically ill (baseline)[1]	14.9	17.8	0.14
Disabled (baseline)[1]	6.3	6.29	0.98
Consumption pp per day	0.63	0.65	0.73
N	1280	525	


A 3000 0
B 12000 0
C 7000 1000
D 8000 0
E 2000 1000

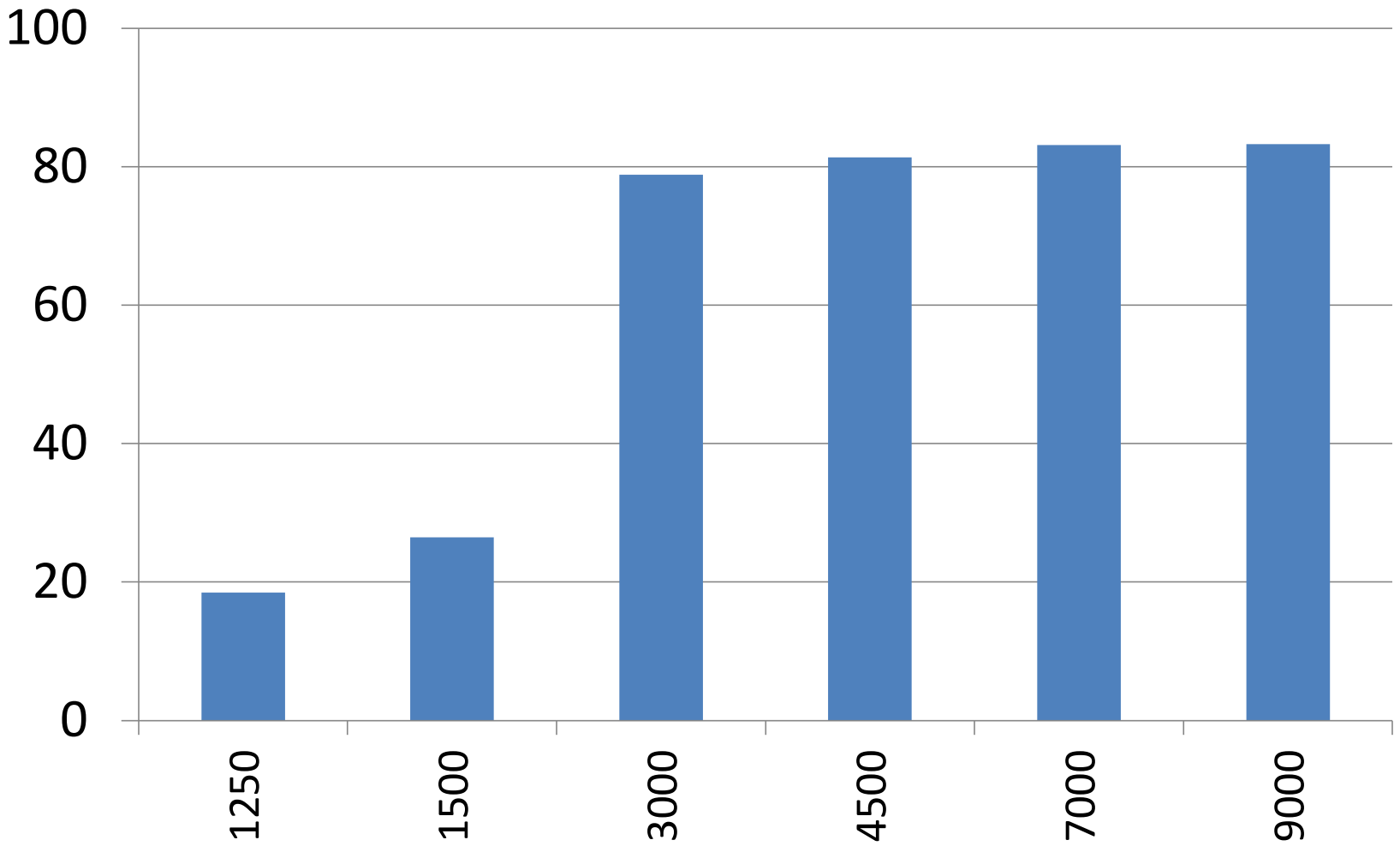
Inter-temporal choice

“Suppose that you suddenly win money in the Lotto. If you could choose between these payment options which do you choose?”

KES1500 today or KES1250 in one month?
KES1500 today or KES1500 in one month?
KES1500 today or KES3000 in one month?
KES1500 today or KES4500 in one month?
KES1500 today or KES7000 in one month?
KES1500 today or KES9000 in one month?

(not asked in this order)

Inter-temporal choice performance



Inconsistent responses 7.8% (double switch)

Future value	Consistent (N)	%	Inconsistent (N)	%	Total
1250	233	*70.0*	100	*30.0*	333
1500	229	*94.2*	14	*5.8*	243
3000	844	*97.8*	19	*2.2*	863
4500	46	*86.8*	7	*13.2*	53
7000	24	*100.0*	0	*0.0*	24
9000	5	*100.0*	0	*0.0*	5
Impatient (never wait)	284	*100.0*	0	*0.0*	284
Total	1665	*92.2*	140	*7.8*	1805

Females slightly more likely to be inconsistent, poor fit of regression

Risk Preference

In this game you can choose to get KES 1500 or you can choose a lottery that will give you a 50% chance of winning an even greater amount or a 50% chance of getting less than KES1500. Which of these lotteries would you prefer over getting KES 1500 for certain?

A. 3000 or 0;
B. 12000 or 0;
C. 7000 or 1000;
D. 8000 or 0;
E. 2000 or 1000;

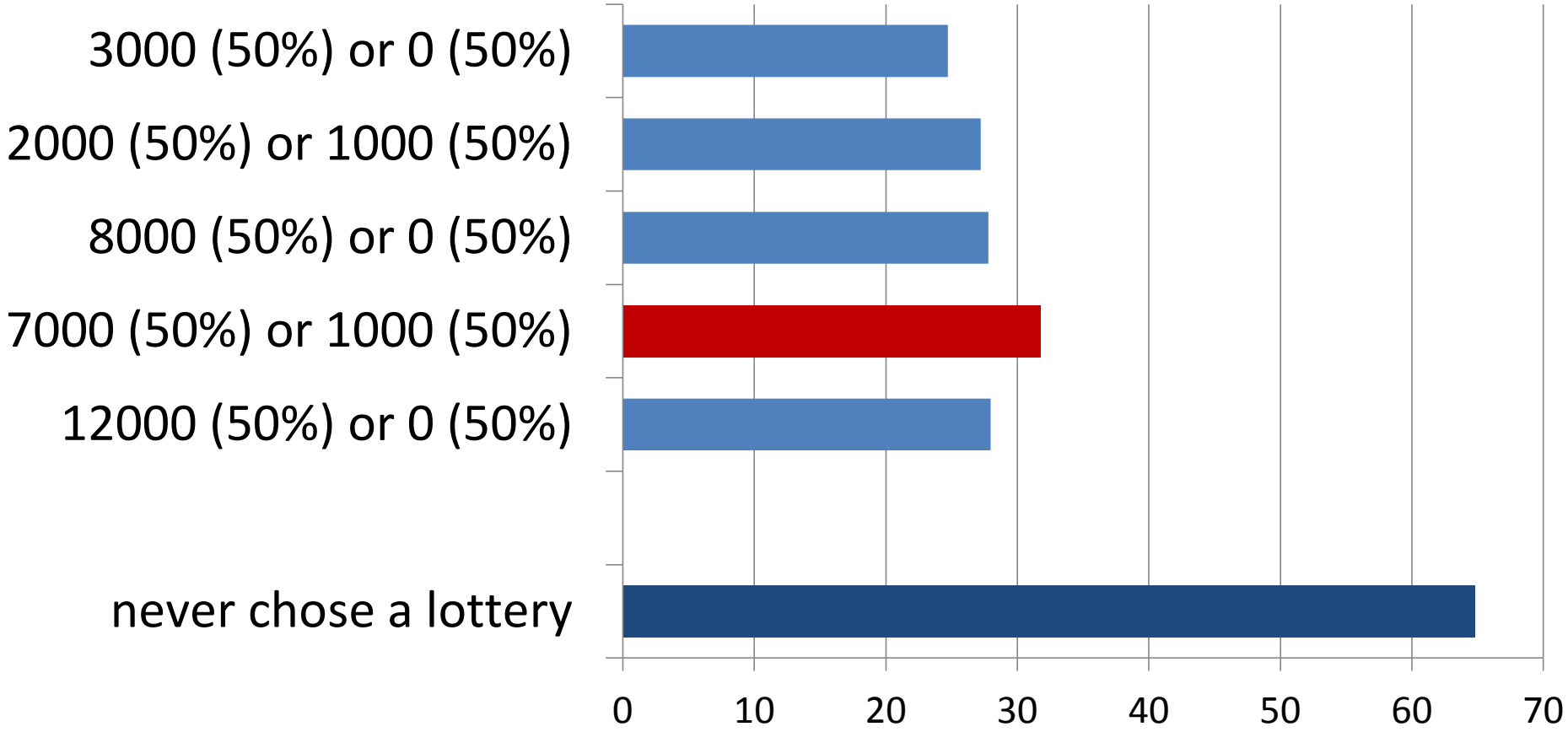
Visual Aid for Lottery Choices

		
A	3000	0
B	12000	0
C	7000	1000
D	8000	0
E	2000	1000

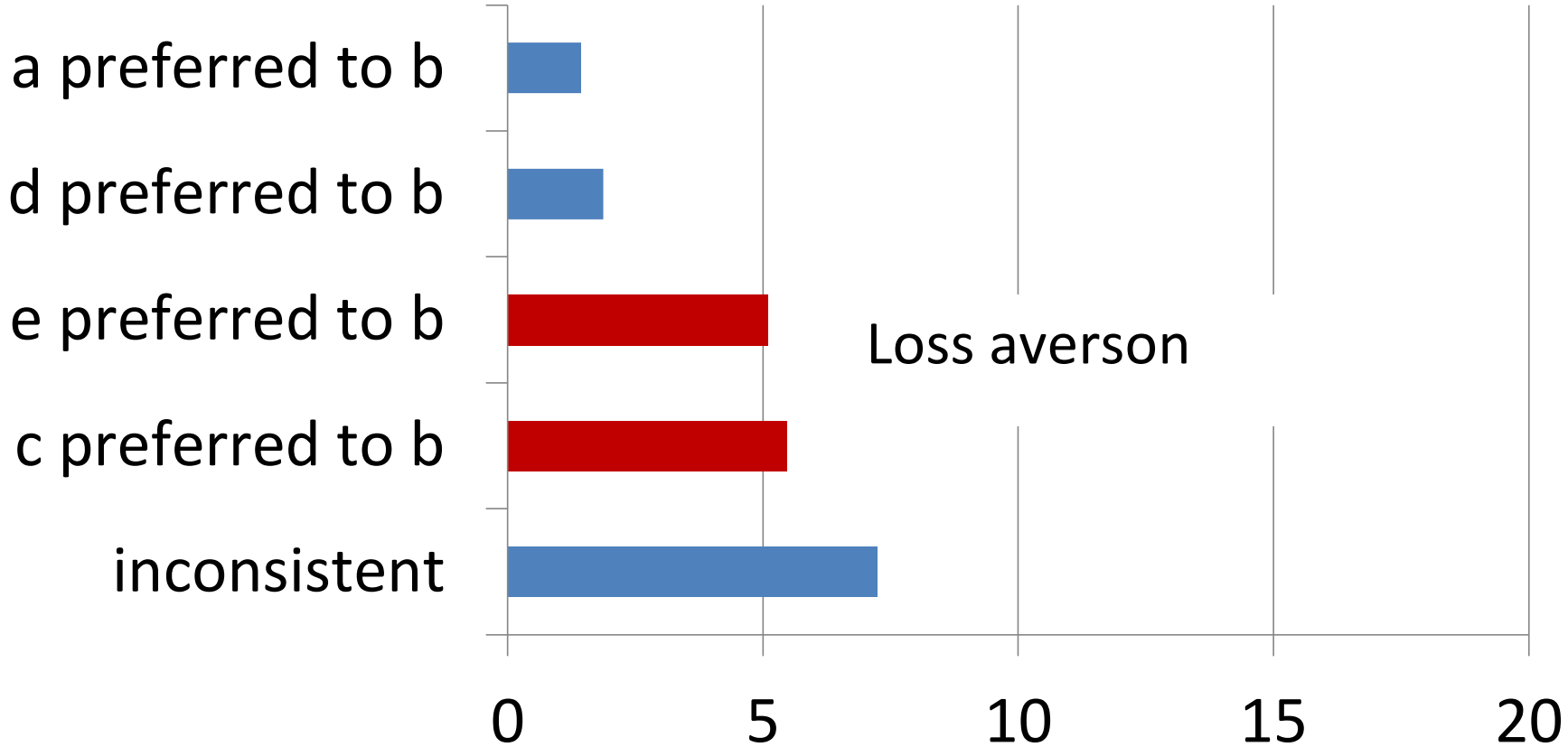
A vs. E and C vs. D test loss aversion

B has highest expected value

Distribution of lottery choices



Inconsistency in lottery choices 7.3%; some evidence of loss aversion



Future Risk Assessment

In the next year what is the chance you will have a food shortage?

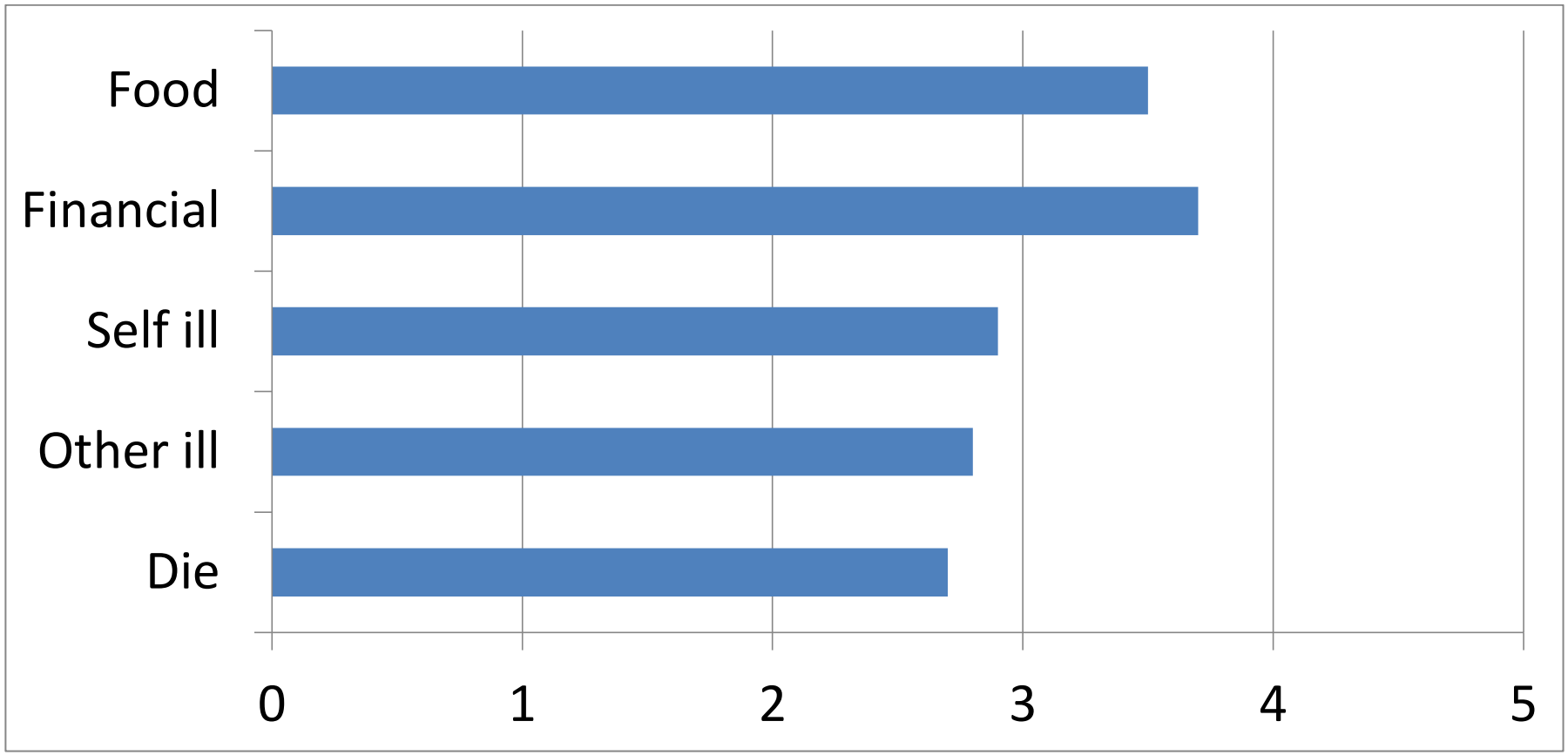
In the next year what is the chance you will seek financial assistance from someone?

In the next year what is the chance you will fall ill and not be able to conduct your daily activities?

What is the chance someone else in your household will fall seriously ill and not be able to conduct daily activities?

In the next year what is the chance somebody you know will die?

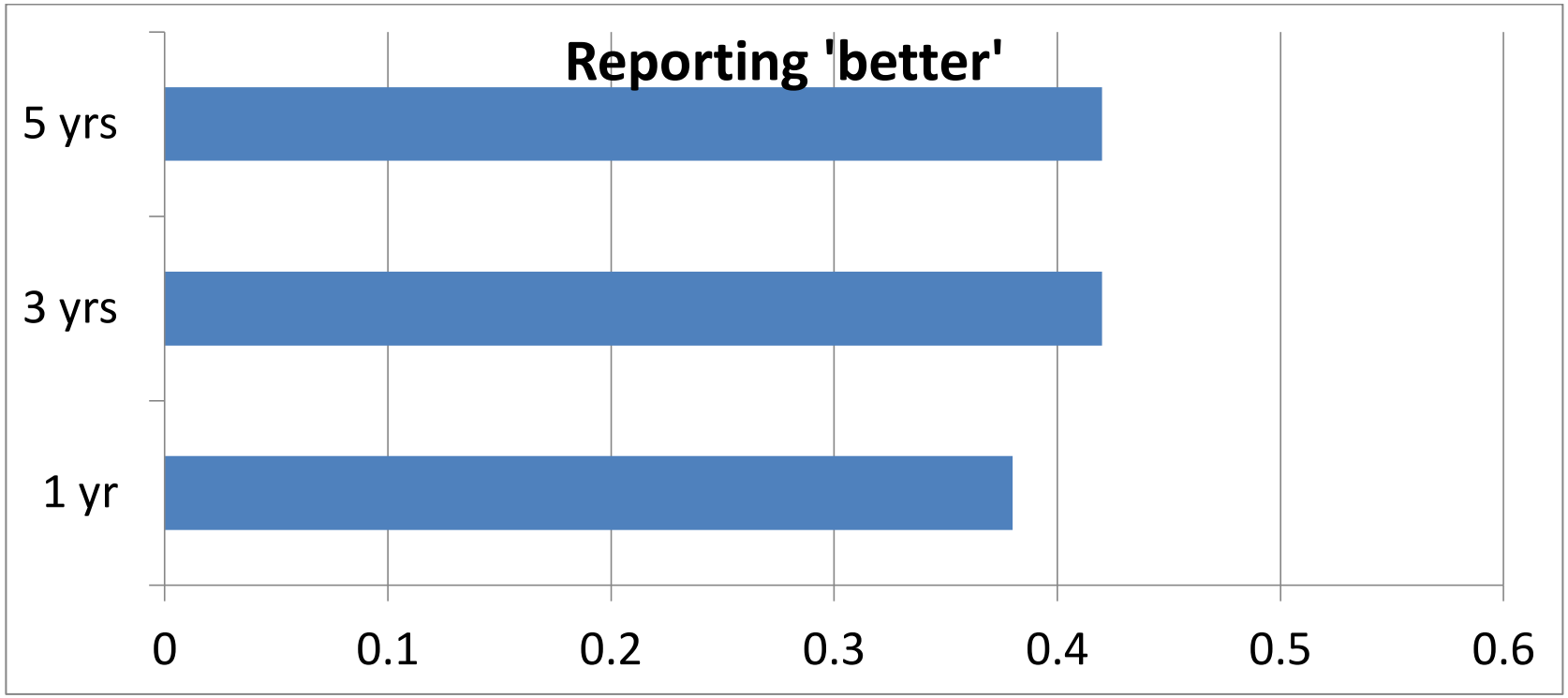
Future risk assessment (1=unlikely, 5=very likely)



Cronbach alpha=0.61; two factors (illness, death vs. food, financial)

Future Well-Being

Do you think your life will be better, the same or worse in [1/3/5] year(s) from now? [1=Better, 2=Same, 3=Worse]



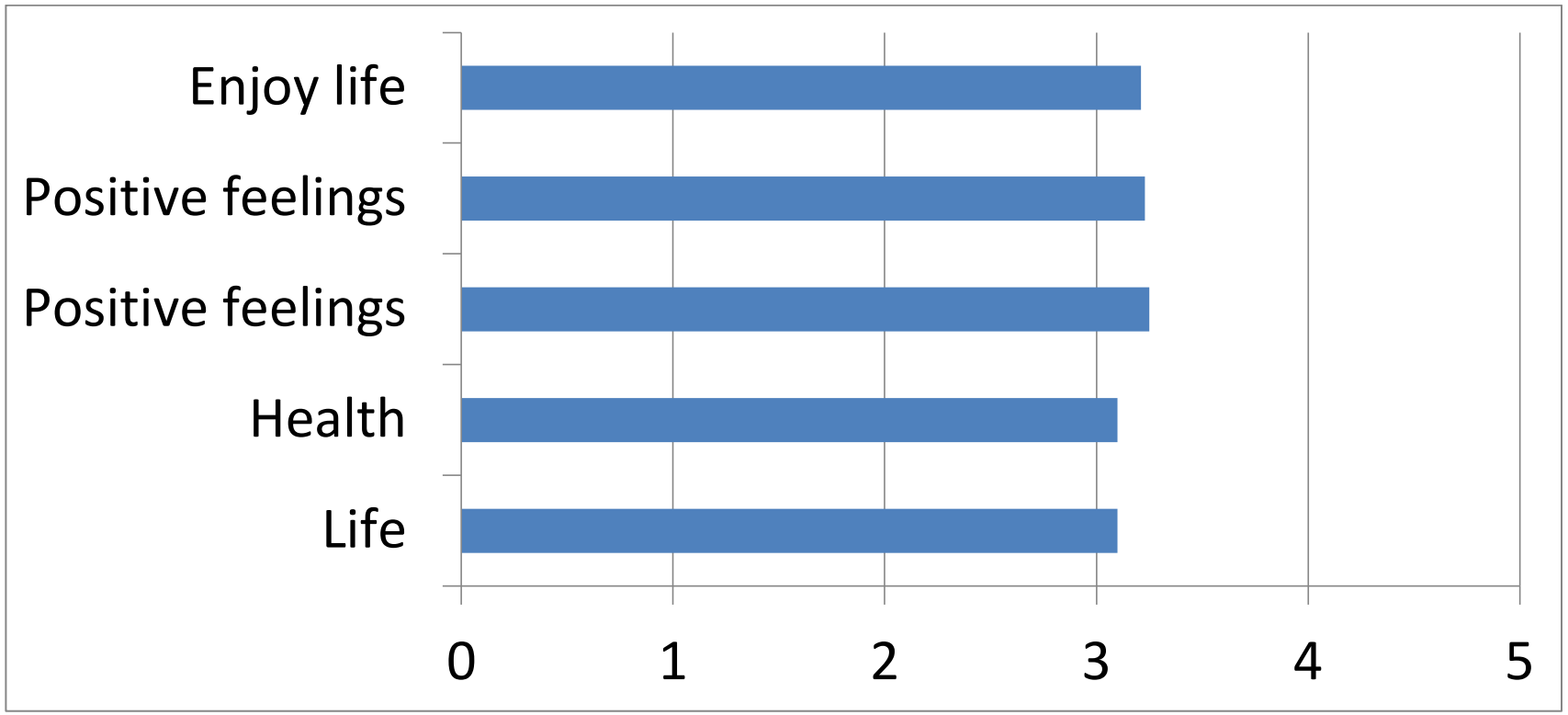
Cronbach alpha=0.92; only 9 inconsistent

Quality of Life (taken from WHO QoL 'Positive Feelings' and Overall Life and Health Domains)

I enjoy life.
I experience positive feelings in my life.
I feel positive about my future.
I am satisfied with my health.
I am satisfied with my life

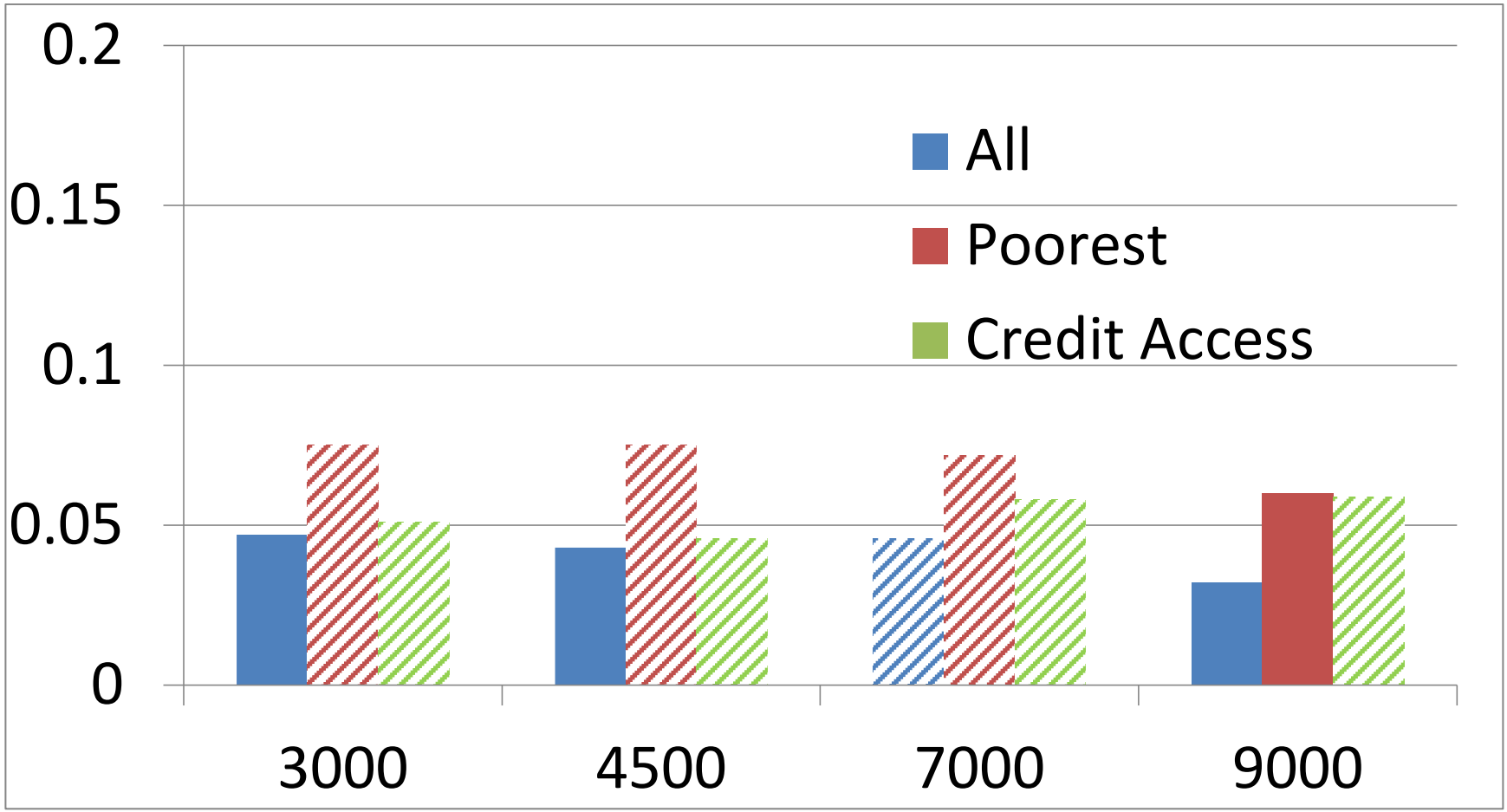
Cronbach alpha high (0.86);
'Health' has lowest pairwise correlations with other items;
'Enjoy life' and 'satisfied with life' 0.98 correlation;
All others are at least 0.70 correlation—high consistency

Distribution of responses on QoL



Treatment effect on probability of waiting for future money

Patterned bars indicate significance p<.10



Summary of other treatment effects

	Significant effect (p<.10)
Risk preference (any choice)	
Quality of Life Scale	√
Better 1 year	√
Better 3 years	√
Better 5 years	√
Fall ill	√
Other ill	√
Other die	√
Food shortage	
Financial shortage	

Conclusions

Hypothetical questions perform well in a large field survey

Respondents are very poor, mostly illiterate, yet appear to understand questions

Less than 8% inconsistent, measurement error likely no worse than consumption, agricultural production or income

Health moves differently from other subjective items

CT-OVC supports individuals to wait for future money

Impacts larger among poorest and those who are less liquidity constrained; explained by low value of transfer, unable to solve liquidity constraint by itself

CT-OVC impacts subjective well-being, future risk perceptions