

Poverty Impedes Cognitive Function (Mani, Mullainathan, Shafir, & Zhao, 2013)

An earlier summarized paper¹ discussed the correlation between lack of resources – e.g. time or money – with bad decision making. It explained how making people poor (giving them less time to perform a task) negatively impacts decision making by distorting the amount of importance those people give to the task.

One Sentence Summary

There is a significant increase of IQ in sugar cane farmers post-harvest, due to the less attention dedicated to financial problems. This supports the hypothesis that poverty status reduces cognitive ability and lead them to make worse decisions.

Main Findings

In India, sugar cane farmers get 60% of their yearly income on a one-time harvest season. I will use the conditions poor and rich as relative, i.e. a poor individual is someone who lacks resources to perform their normal life. Before the harvest those farmers could be considered “poor”, because most of the income from last year will be spent. After they will have of surplus of income and will be considered rich.

The authors performed a survey on India’s sugar cane farmers 15 days before and 15 days after the harvest on 2010. They measured cognitive functions and other characteristics. Pre-harvest farmers where 13 IQ points lower than the same farmer in a post-harvest period. They also found that pre-harvest farmers where more likely to pawn their belongings and take more unfavorable credits.

How does the same person improve their cognitive ability in only one month? The authors proposed that the status of poverty made them pay more attention to minor daily financial activities. As attention requires cognitive power and demands more cognitive energy to live day to day, leaving more energy to perform heavy cognitive performance tests. However, when the poor status is lifted post-harvest, less energy is spent on minor details. They arrived at this conclusion by eliminating other alternative explanations like biological stress, physical exhaustion, nutrition habits or time availability.

Concluding Remarks

If poverty affects the cognitive ability of agents, governments should analyze the cognitive load of their policies. Some social security programs demand several paperwork which increases the cognitive demand from those who the government want to help. With this insight a relevant public policy is to reduce bureaucracy. They also suggest public policy to include smart defaults, planning prompts, reminders or specialized help to fill forms.

¹ Some Consequences of Having Too Little (One-page Econ #2) for our summary.

References

- Mani, A., Mullainathan, S., Shafir, E., & Zhao, J. (2013). Poverty impedes cognitive function. Science. <https://doi.org/10.1126/science.1238041>.