



Reconsidering the scarcity mindset: Greater focus and attentional neglect?

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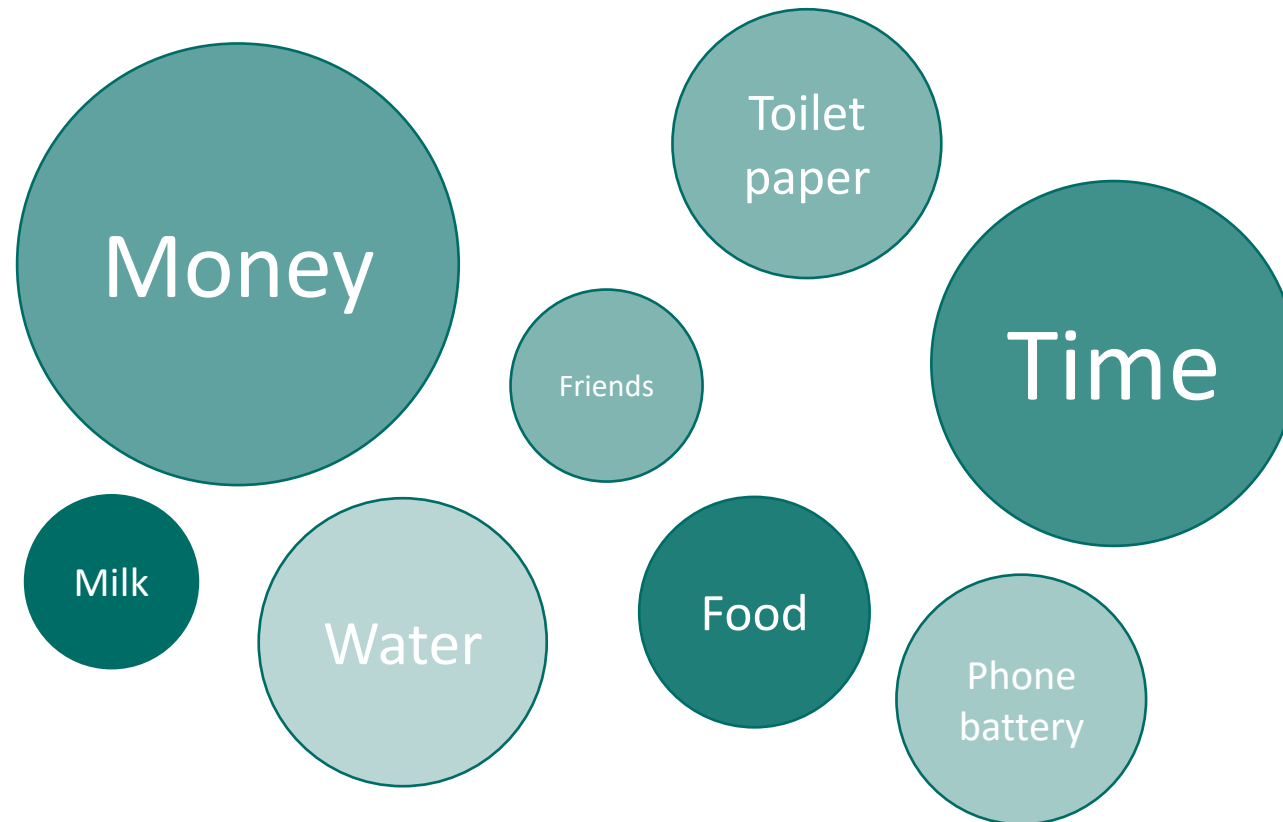
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Scarcity

= condition of having insufficient resources to cope with demands.



Scarcity creates its own mindset

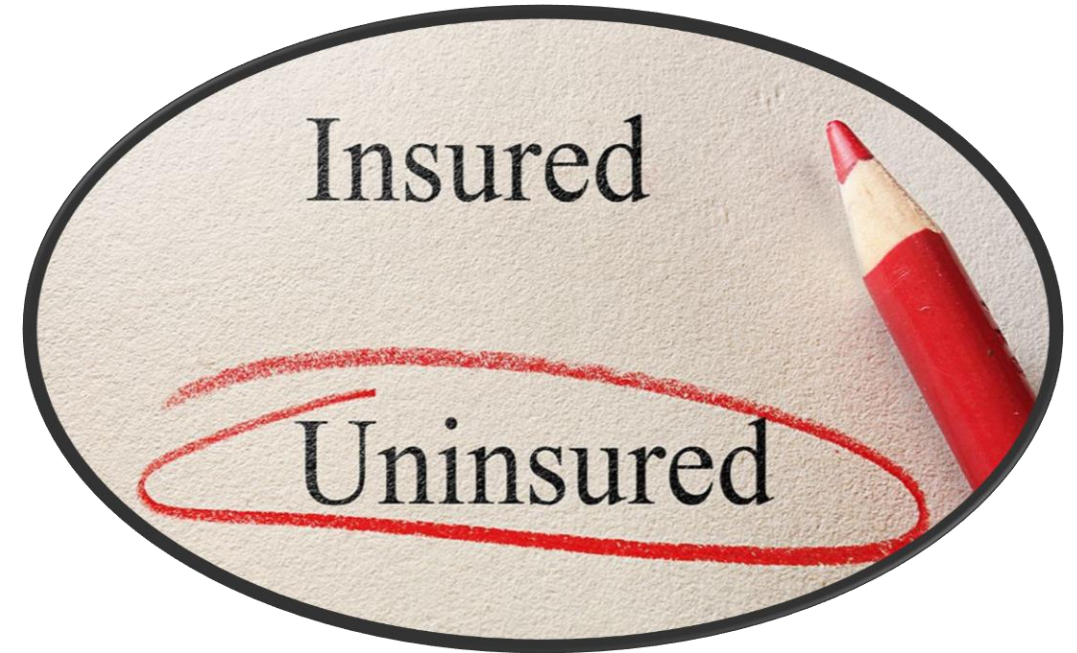
Greater focus

vs.

Attentional neglect



Tunneling „in the wild“



Shah, Mullainathan & Shafir (2012)

- Published in Science, over 1300 citations on google scholar
- Broad media coverage
- Five different experiments:
 - Wheel of Fortune
 - Angry blueberries
 - Family Feud
 - Family Feud with immediate borrowing
 - Family Feud with preview

The New York Times

The Washington Post
Democracy Dies in Darkness

The Guardian

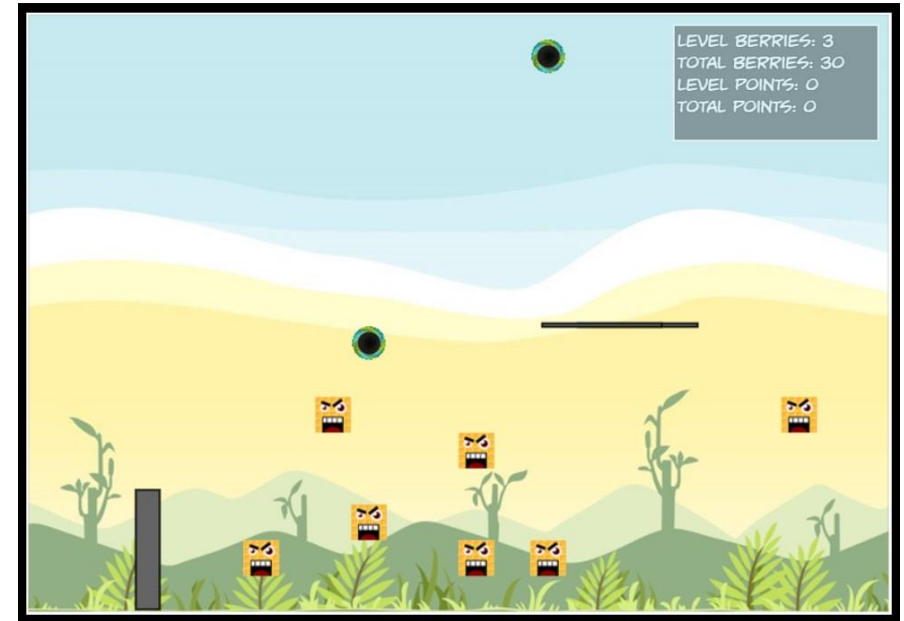
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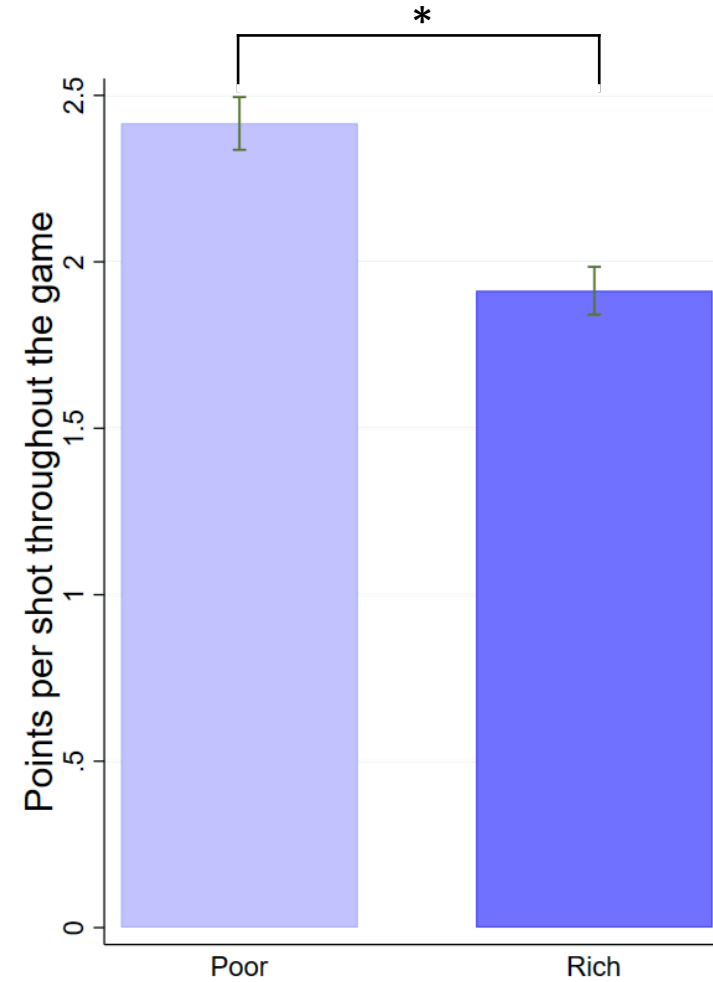
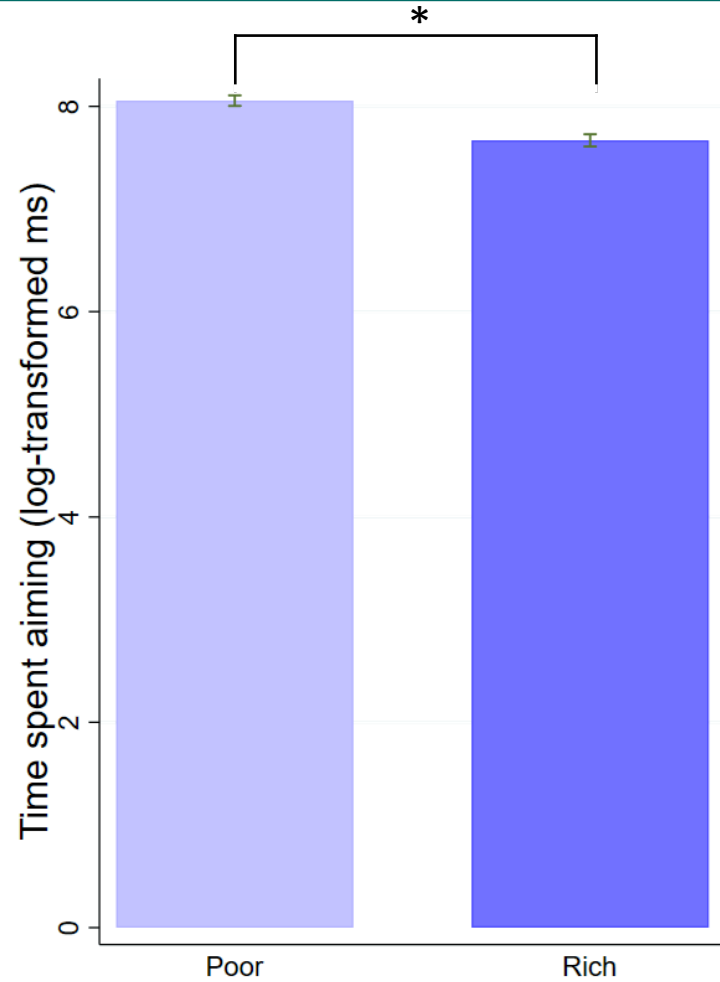


Angry blueberries

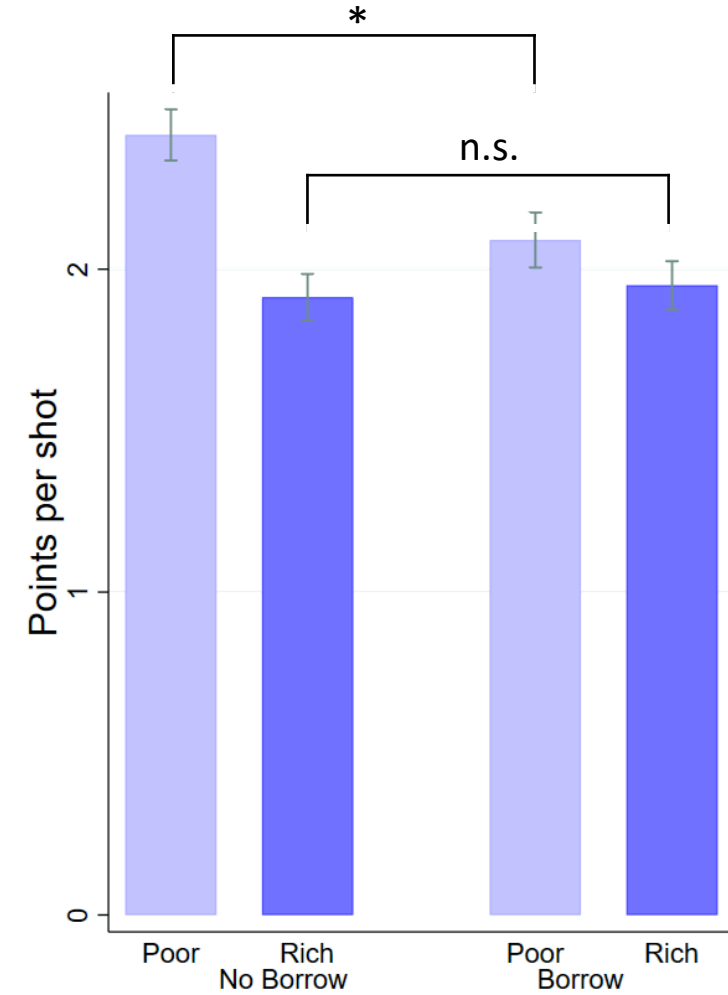
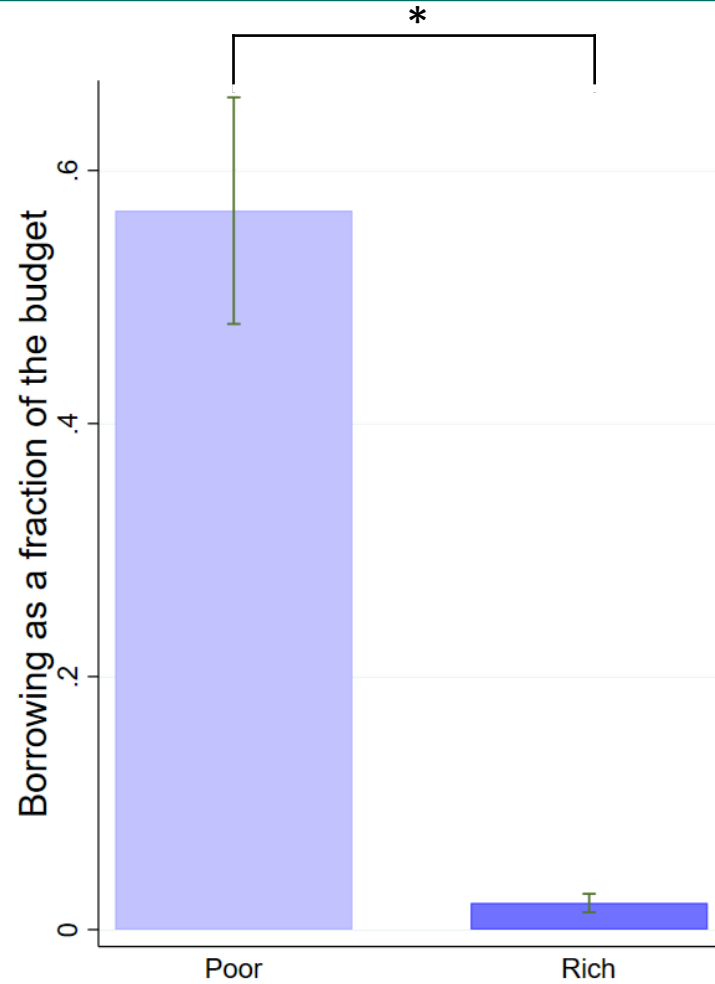
- Earning points by clearing targets
 - If all seven targets are cleared, participants receive 3 points extra
- Manipulations
 - Rich (15 shots per level & 150 shots per game) vs. poor (3 shots per level & 30 shots per game)
 - No borrowing vs. Borrowing (interest rate of 100%)



Greater focus (no borrow condition)



Attentional neglect (borrow condition)



The authors' conclusion

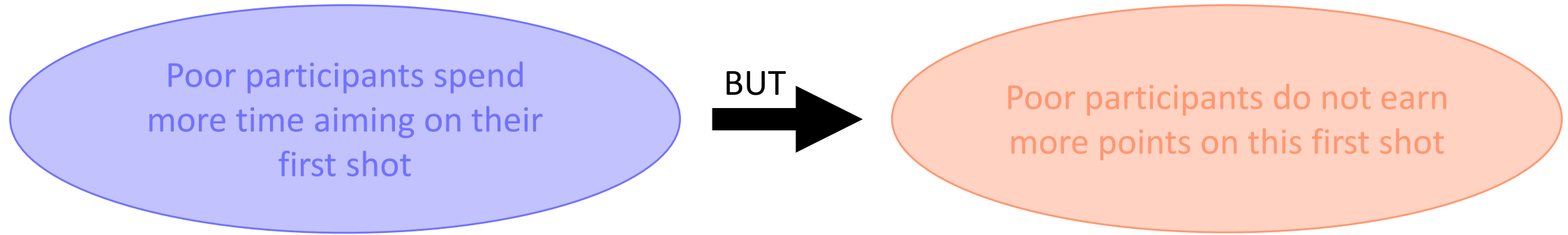
„Taken together, these studies provide compelling support for the notion that scarcity elicits greater engagement and that a focus on some problems leads to neglect of others (manifesting in behaviors such as overborrowing).“



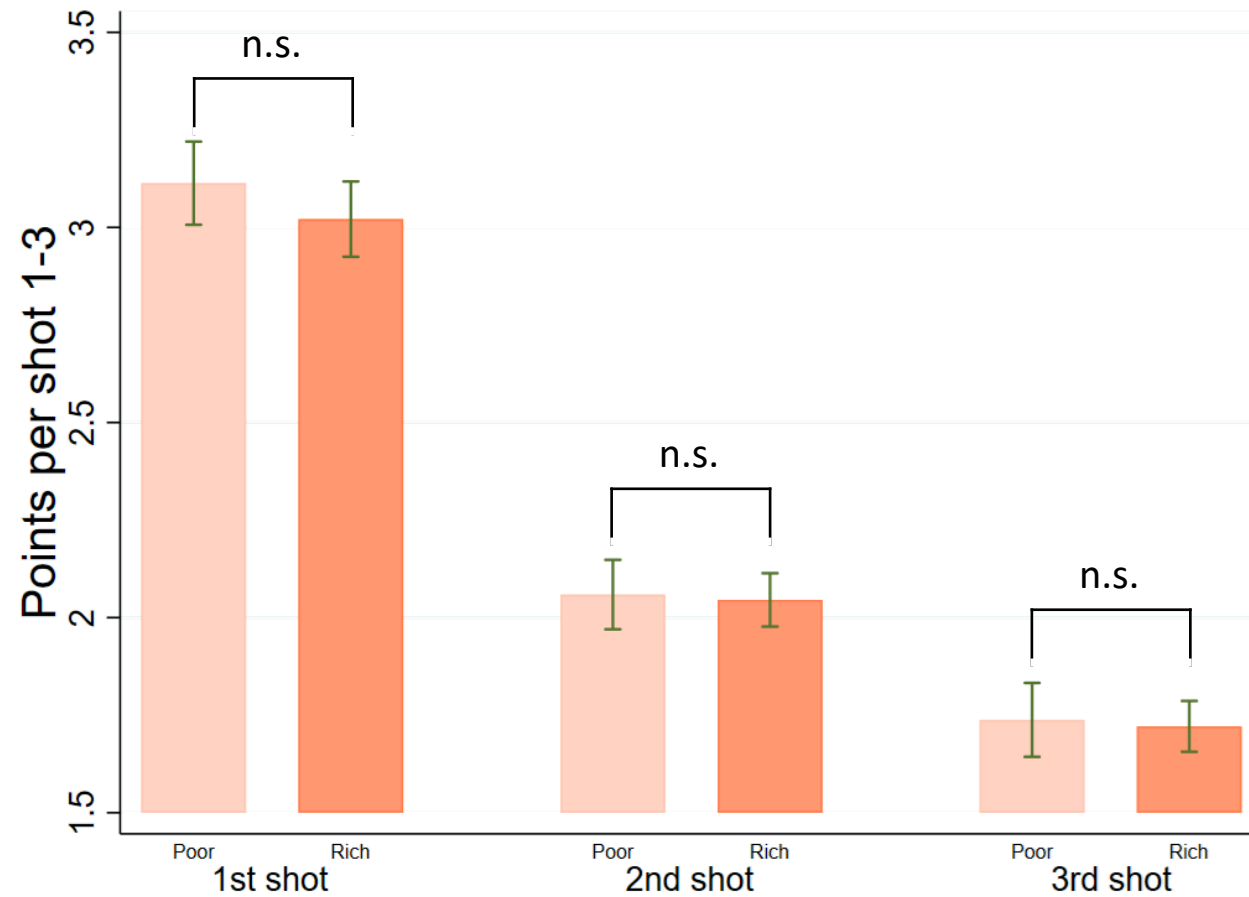
Re-Analysis

Shah, A. K., Mullainathan, S., & Shafir, E. (2019). An exercise in self-replication: Replicating Shah, Mullainathan, and Shafir (2012). *Journal of Economic Psychology*, 75, 102127.

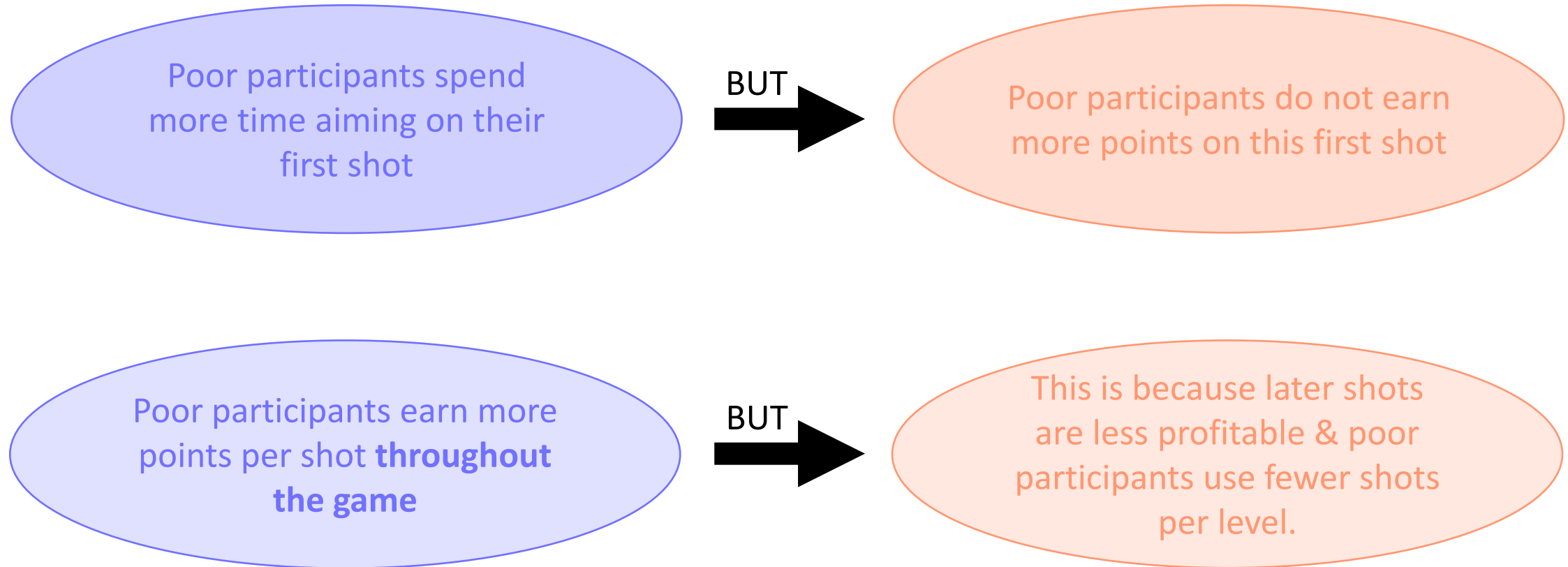
Greater focus (no-borrow condition)



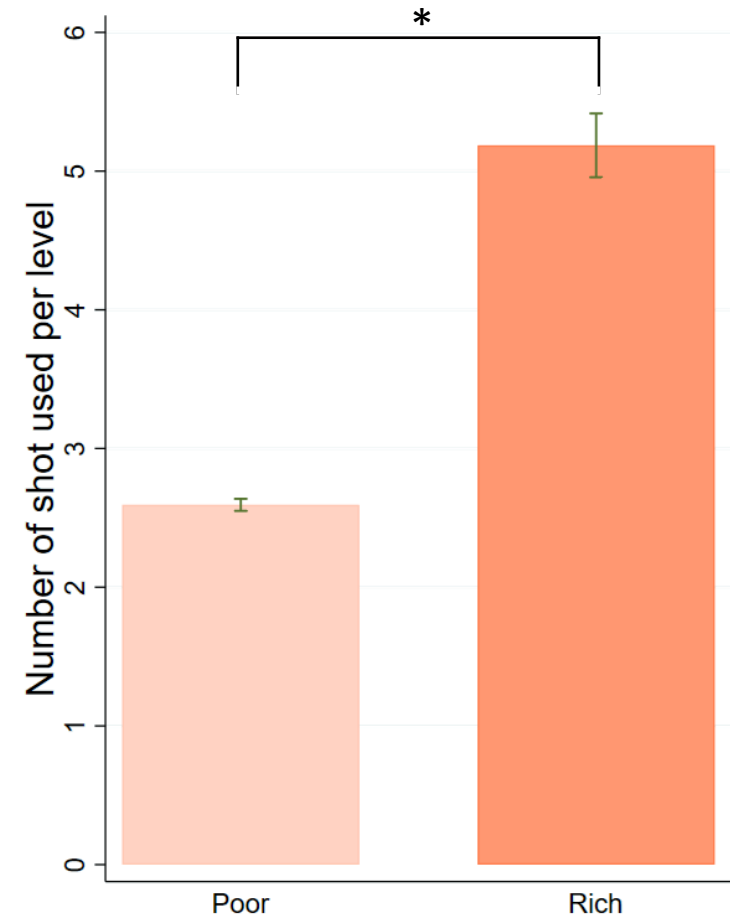
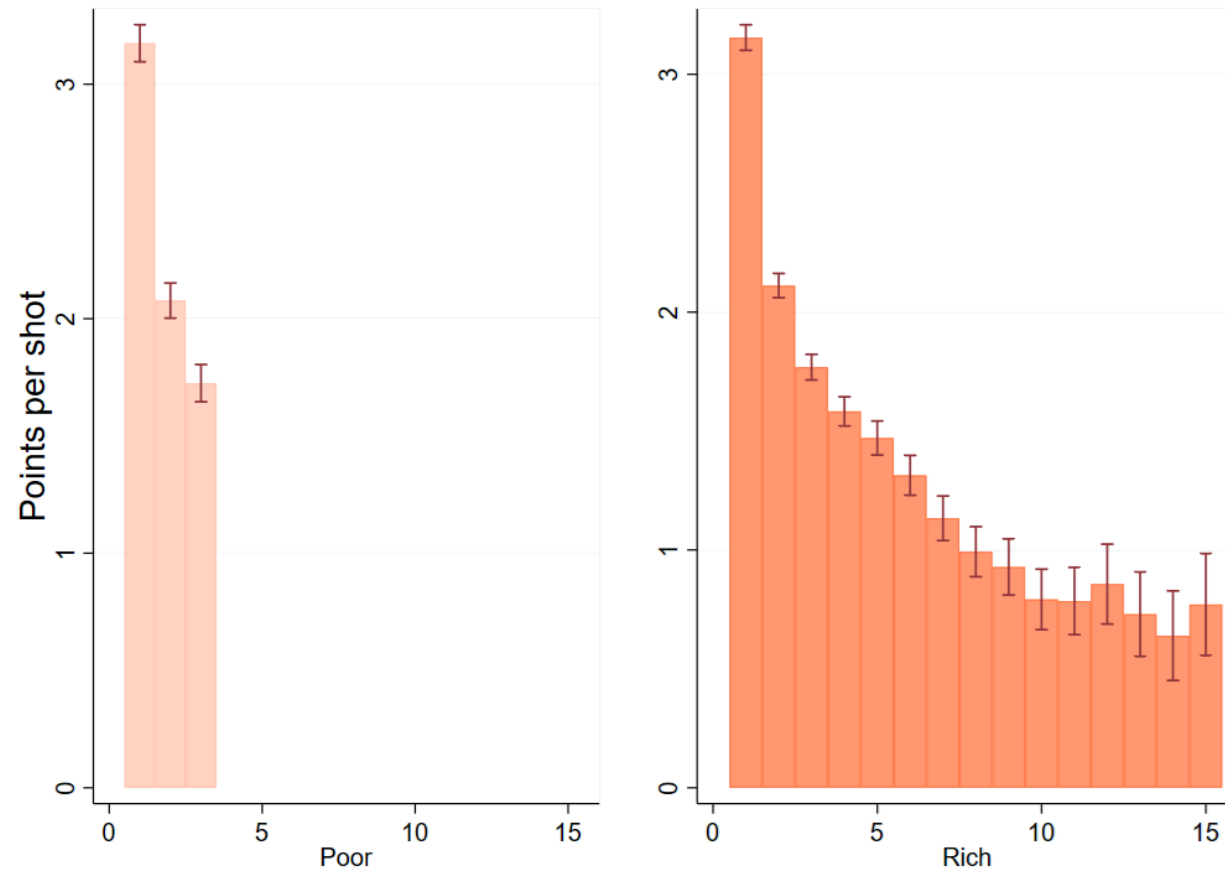
Poor participants do not earn more points on this first shot



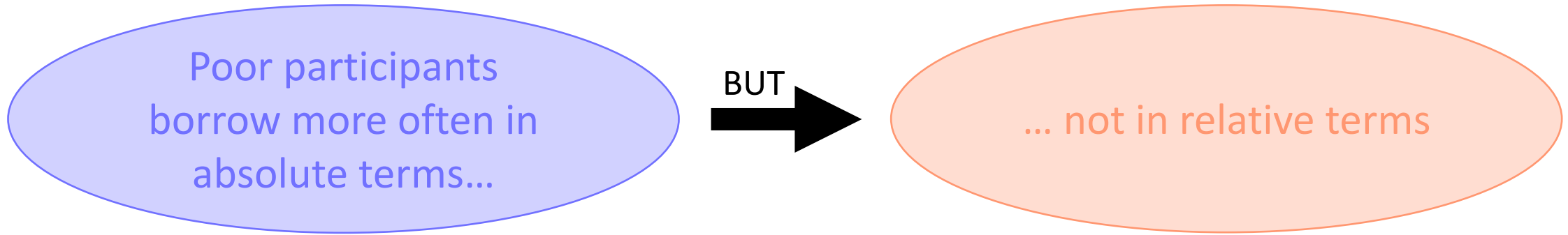
Greater focus (no-borrow condition)



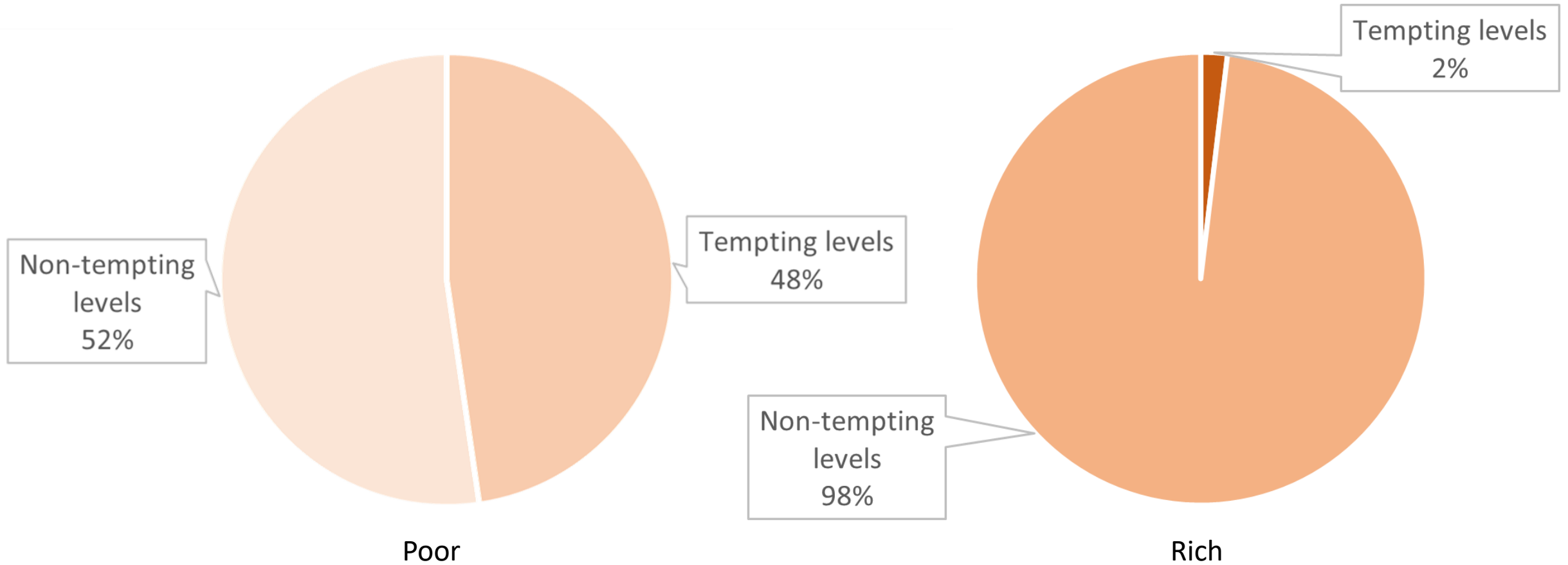
Later shots are less profitable



Attentional neglect (borrow condition)



Tempting levels as share of all levels

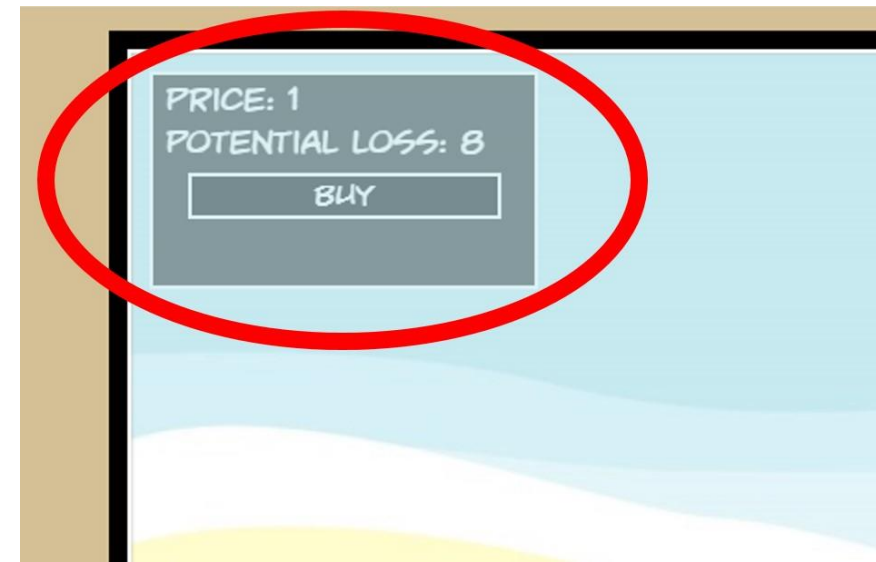


Levels in which participants borrowed/resisted when facing the decision of whether to borrow

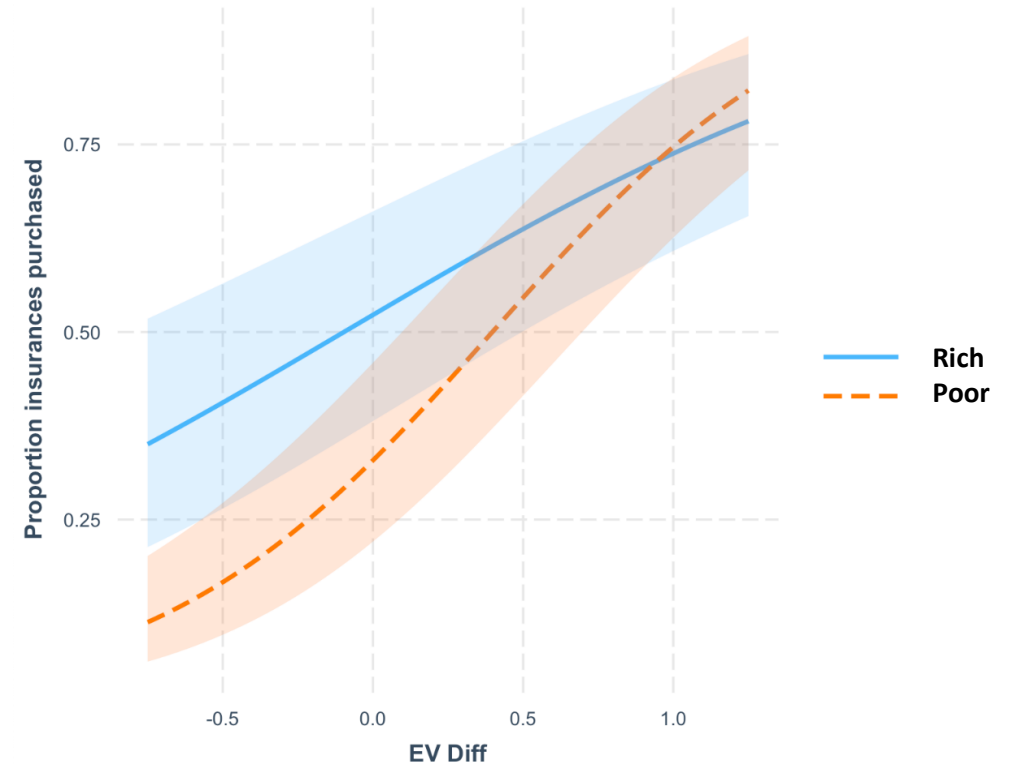
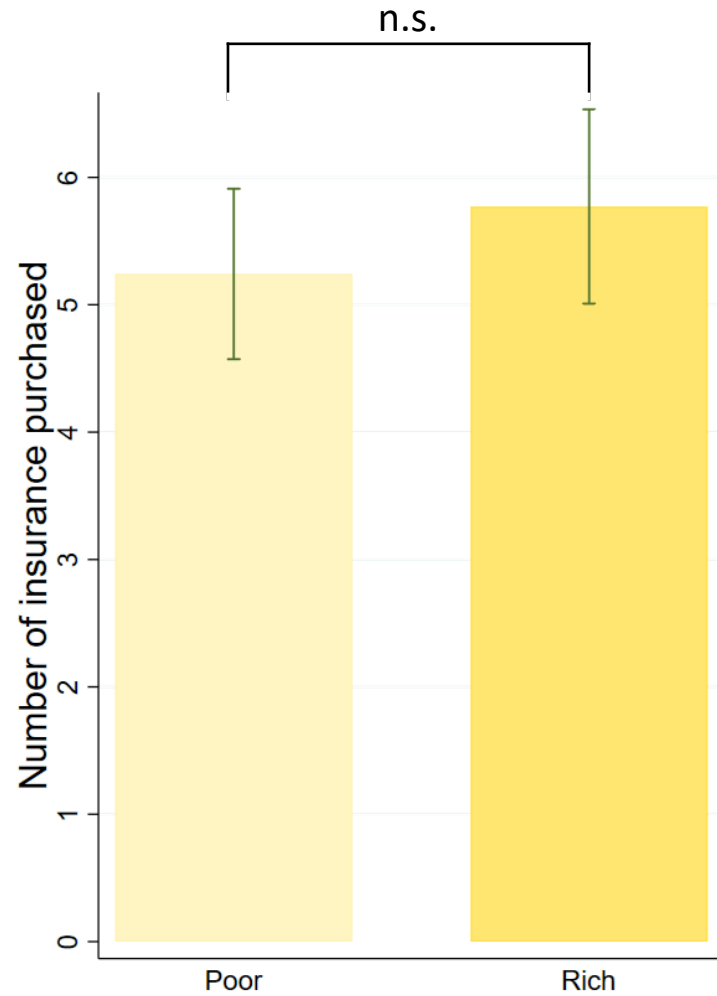


Novel experiment

- Instead of borrowing: buying insurance against a drought
 - Intertemporal component
 - Same base rate for everyone
- Insurance varied on expected value



Attentional neglect



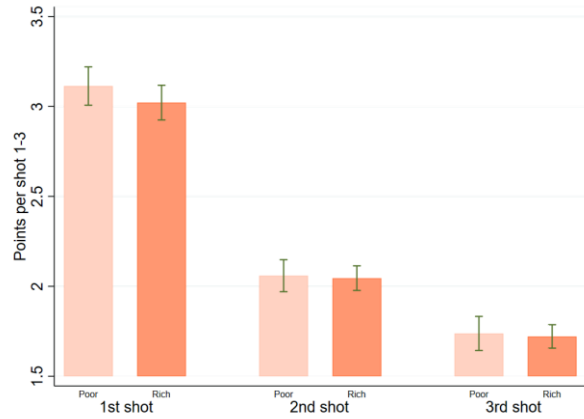


What does this mean?

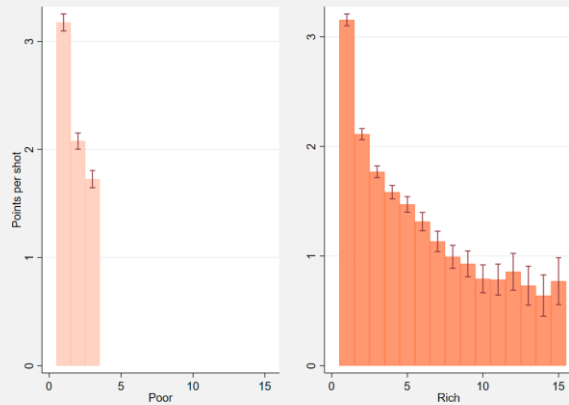
What does this mean?

- We do not find evidence for the cognitive mechanism of tunneling
 - It is not greater focus that leads to better performance
 - It is not attentional neglect that leads to overborrowing
 - both behavioral results (better performance in game & overborrowing) seem to be driven (mainly) by the game structure
- Game structure might still capture real-world behavior well
 - Example overborrowing
- Open question:
 - Why do poor participants spend more time aiming?
 - What falls within the tunnel, what falls outside?

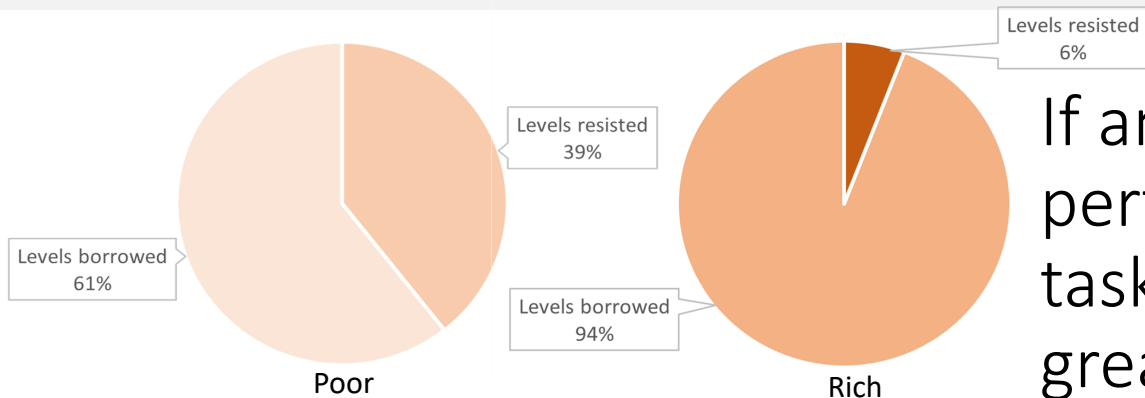




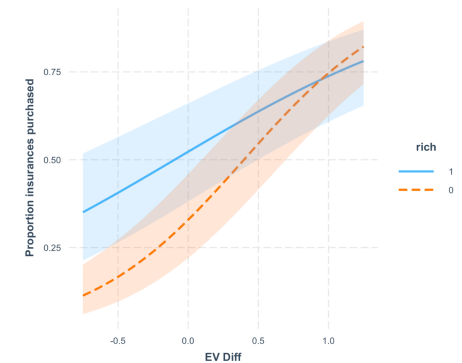
Though poor participants spend more time aiming, they do not earn more points per shot when considering each shot in isolation.



Poor participants earn more points throughout the game because they use fewer shots per level and later shots are less efficient.



If anything, poor participants perform better on the non-focal task, providing more support for greater focus.

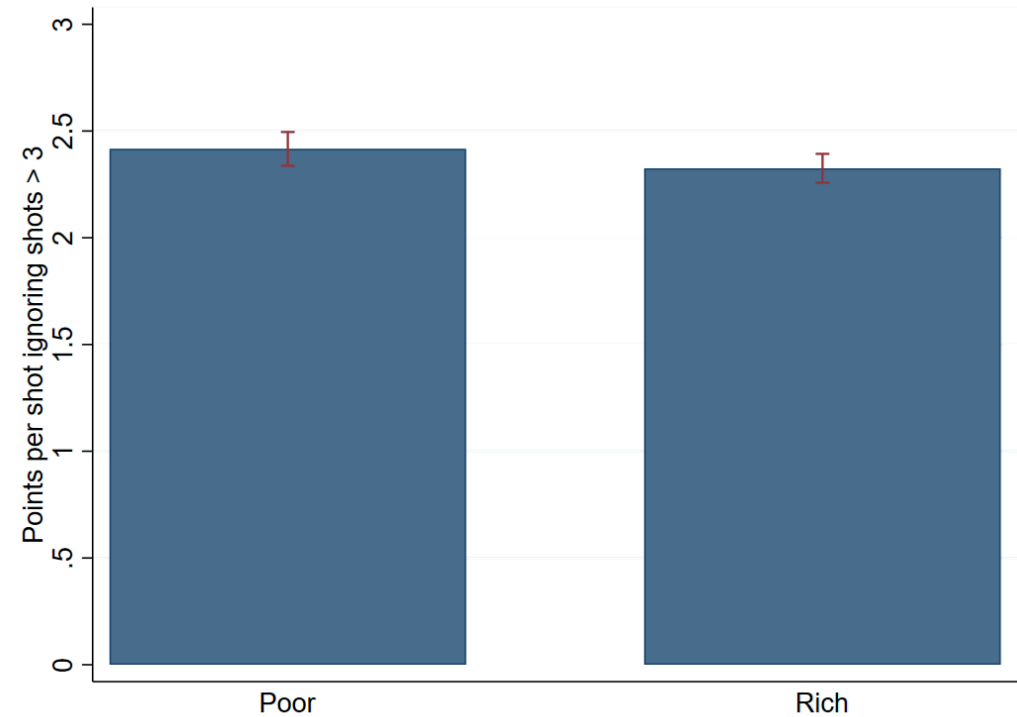
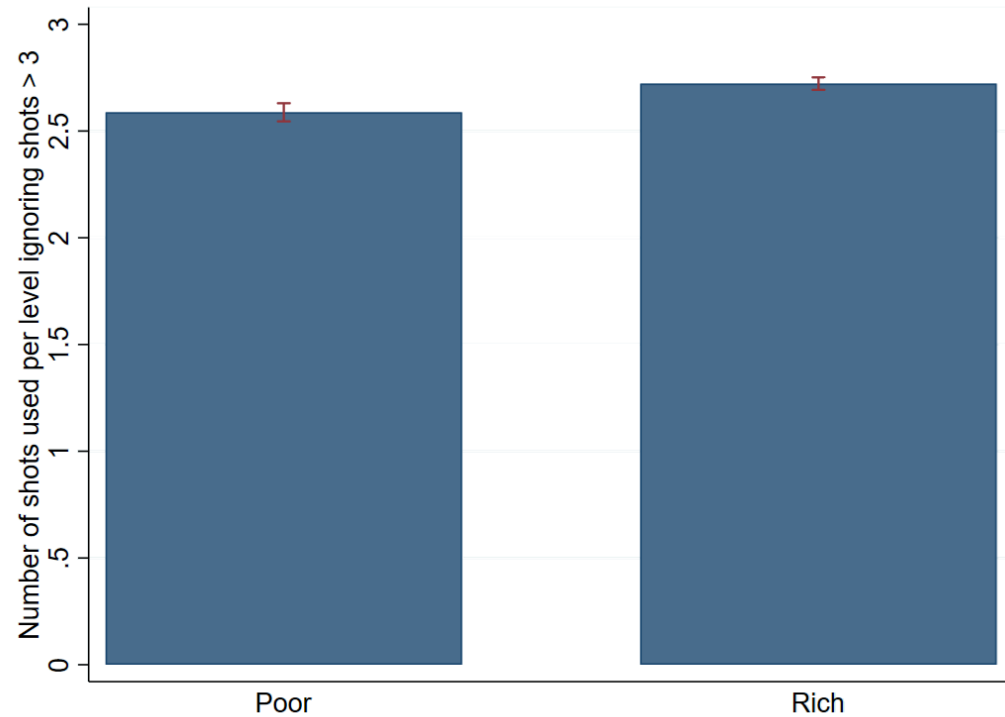




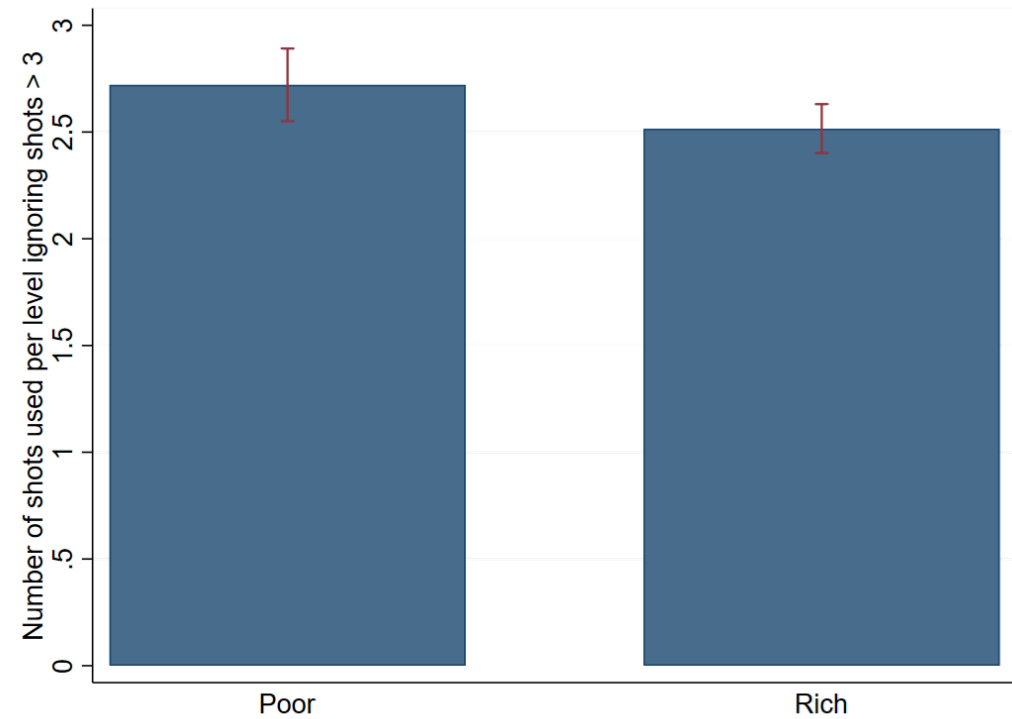
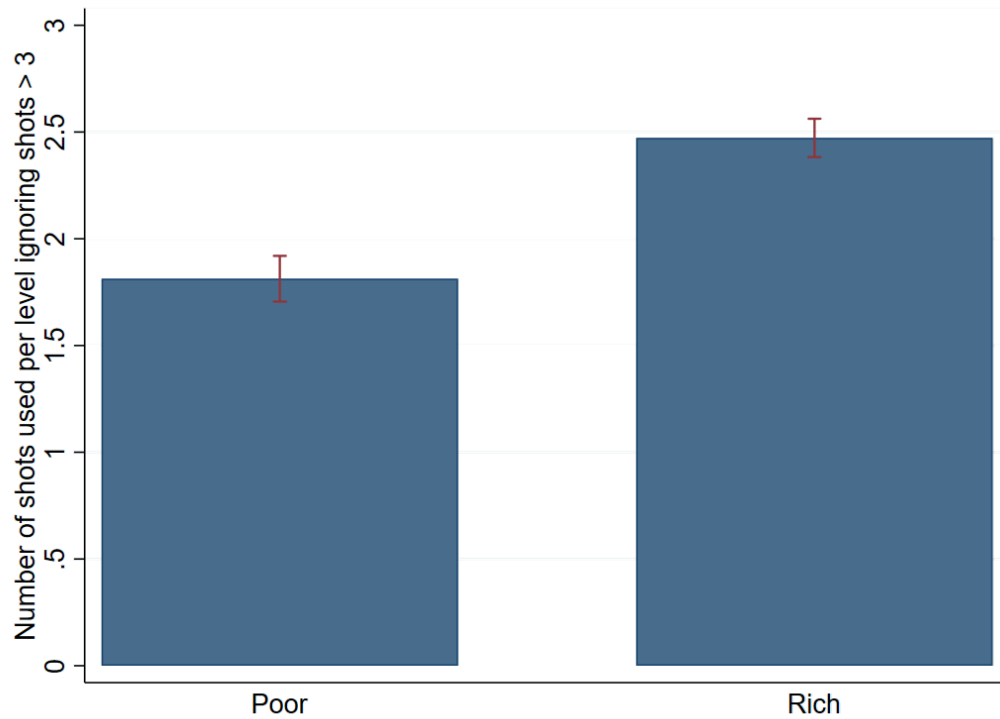
Thank you!

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Some support for greater focus (Re-analysis)



Some support for greater focus (Experiment)



Zooming into the interaction

