

# Neuroscience Meets Welfare Economics

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## The “Behavioral Public Economics” Paradigm:

- Behavior and welfare are the result of different sets of brain processes
- These processes can often lead to systematic mistakes
- Public policy might help to reduce extent of mistakes in multiple ways

Hard problem:

- Public policy analysis requires notion of welfare
- What is the right notion when revealed preference is not valid?

## “Easy” cases

- Individual who wishes to save more than he does
- Addict who wants to quit but is often overwhelmed by cravings
- Individual who inappropriately assigns context dependent weights

In both cases:

- Individual’s “cognition” aware of desirable action (before, after, (sometimes) during, or at least when confronted with the mistake)
- Individuals recognize that their brain leads them to make this type of mistakes

## Potentially Solution:

- Welfare measure = “reported preference”
- Hopefully consistent if use the right elicitation method

## Limitations:

- Need repeated reports by same individual under different circumstances
- Need to induce domain specific “affective” or cognitive states
- Need “endogenous” questioning protocols to avoid obvious problems such as framing, etc.
- Performance in novel domains and infrequent decisions?

## Medium cases

- Might love literature, but only after forced exposure to the activity
- After 6 months of mandatory physical education, individuals might learn to enjoy it for its own sake

In these cases:

- Ex-post brain learns to choose and enjoy the activity
- But ex-ante brain might not make the right choices, and thus might not develop the habit (ex – cognitive and affective shortcomings)
- Ex-post individual realizes policy helps to overcome a mistake

## Potential Solution:

- Ex-post reported and revealed preferences
- Are individuals satisfied with “developmental” experience? Do they engage in the target activity?

## Why are these cases harder?

- Easy cases: policy intervention reduces mistakes, but leaves perceptions of welfare unchanged
- Hard cases: Perception of welfare now changes with the policy intervention

## Hard Cases

- Psychopath receives an intervention to increase his ability to experience empathy and guilt.
- Before intervention no desire to change
- After the intervention, the psychopath expresses satisfaction with treatment only 10% of time
- Most of the time he still wishes to “misbehave” and the new sensitivity to guilt is “costly”

### Problem:

- There is no consistent ex-post “reported preference” that can be used ex-post
- No stable sense-of-self



## Another hard case:

- Peter is an outstanding scholar, but a terrible athlete
- Due to his family's influence, his attention is focused on athletics
- Peter is depressed most of the time: he feels like a failure
- Would an intervention that teaches Peter to focus on academics (and ignore athletics) make him better off?

## Problem:

- Again, intervention changes how Peter's brain constructs his welfare experience
- Welfare is more than cognitive driven affect: Would you agree to connect to machine that only allows you to “think happy thoughts”, but also makes you passive and ineffective?