

# METACOGNITIVE MYOPIA IN A NOVEL PARADIGM COMBINING ADVICE TAKING AND DIRECTED FORGETTING

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## Introduction

- metacognition: two processes of **monitoring and control**
- function: check **quality and validity of memory** (meta-memory) and **reasoning** (meta-reasoning),
  - deficits in metacognition may interfere with rational thinking and subsequent decisions

A phenomenon called **metacognitive myopia** constitutes a **major impediment of human rationality** (Fiedler, 2012)

**assumption 1:** agents are often sensitive to even complex and multifaceted data arrays

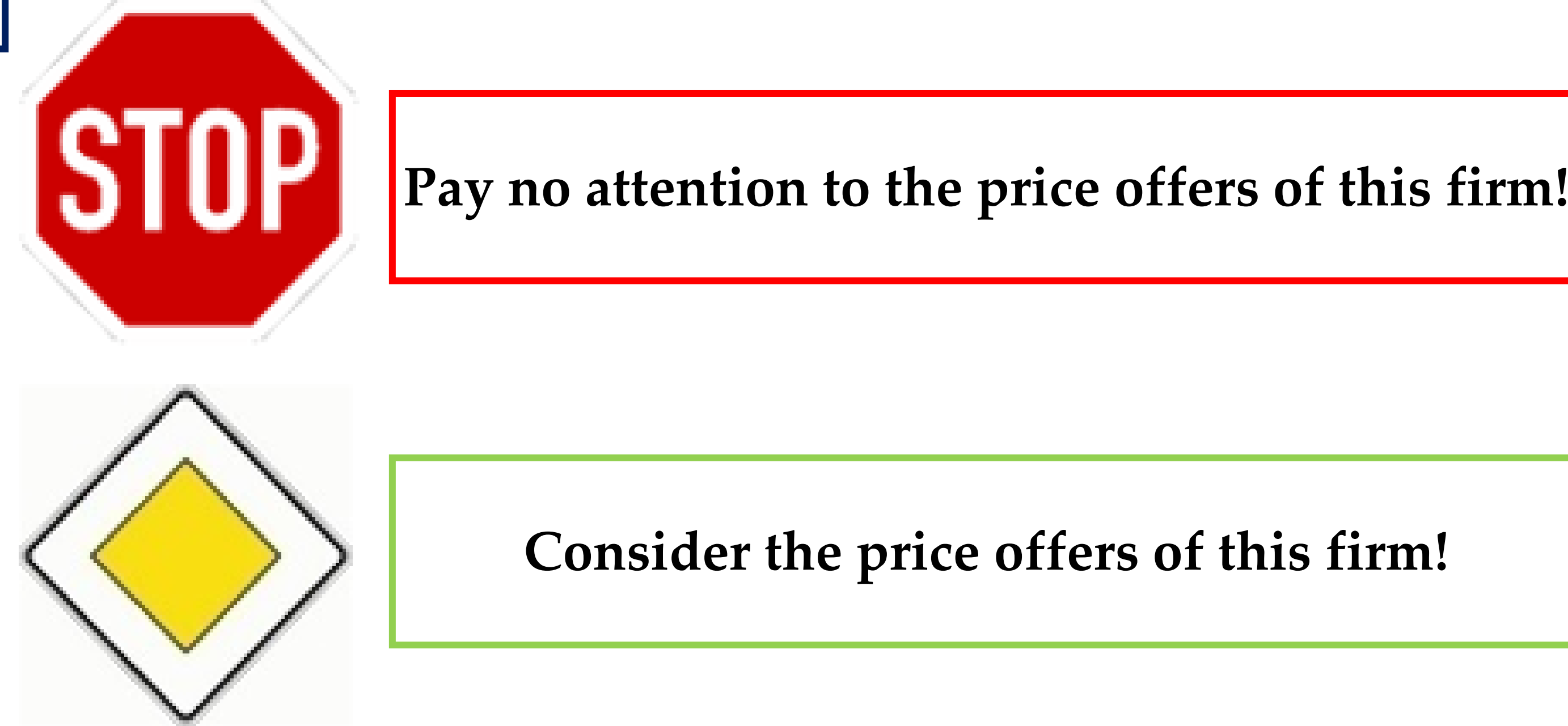
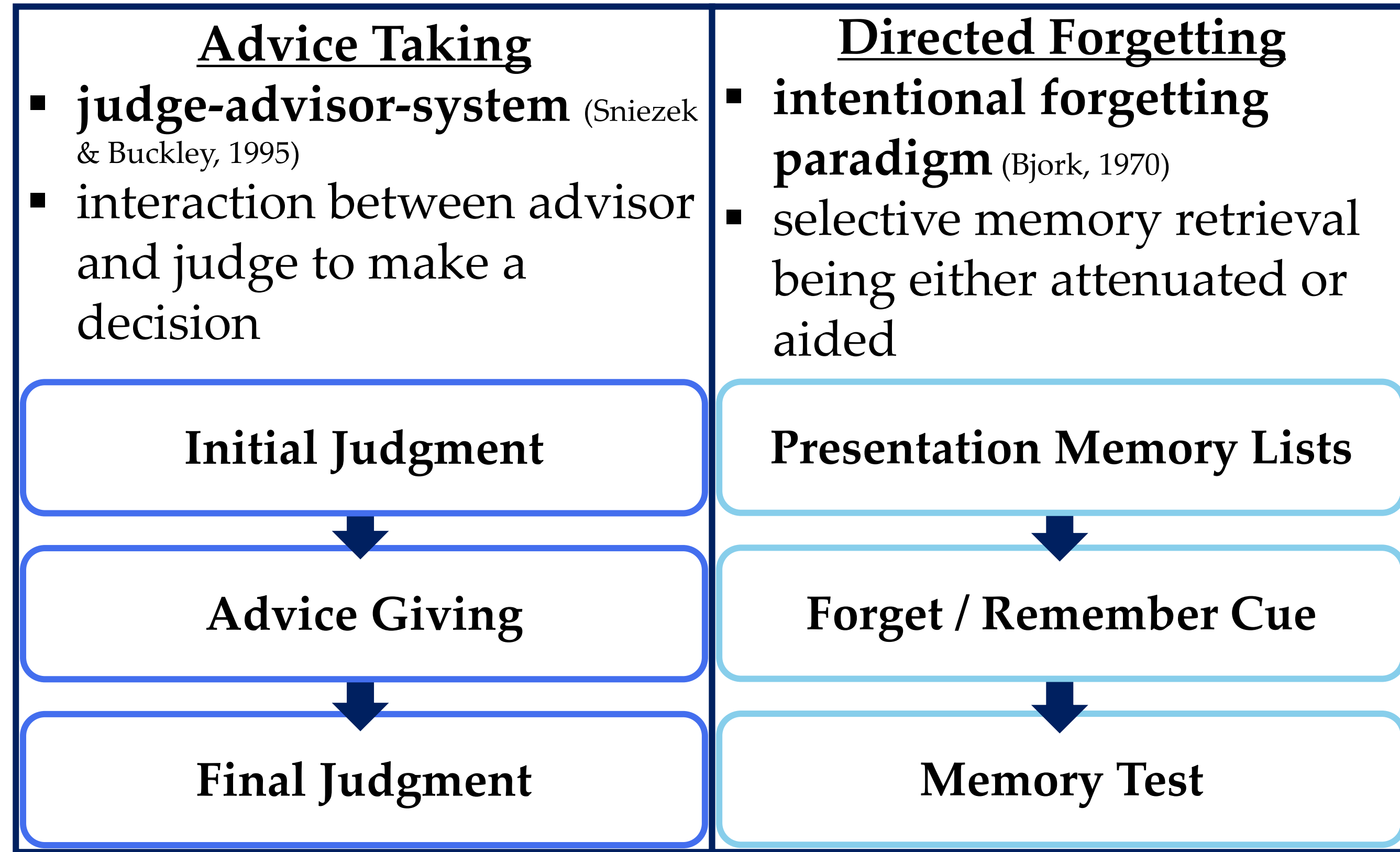
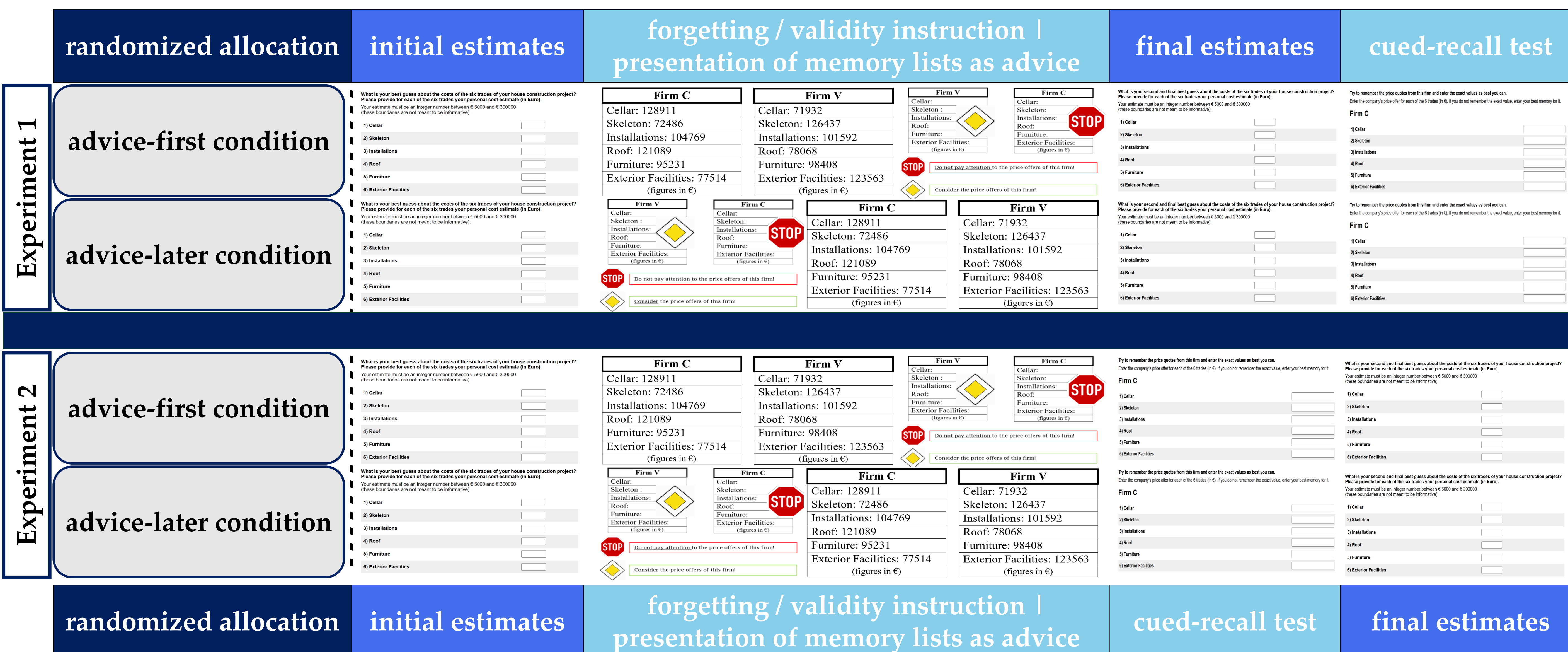
**assumption 2:** agents adhere to the sample trends in an uncritical and naive manner, and entirely disregard the information's source

**Research question:** Can **intentional forgetting** be endorsed as a **memory tool** to correct for the influence of invalid advice in a subsequent estimation task?

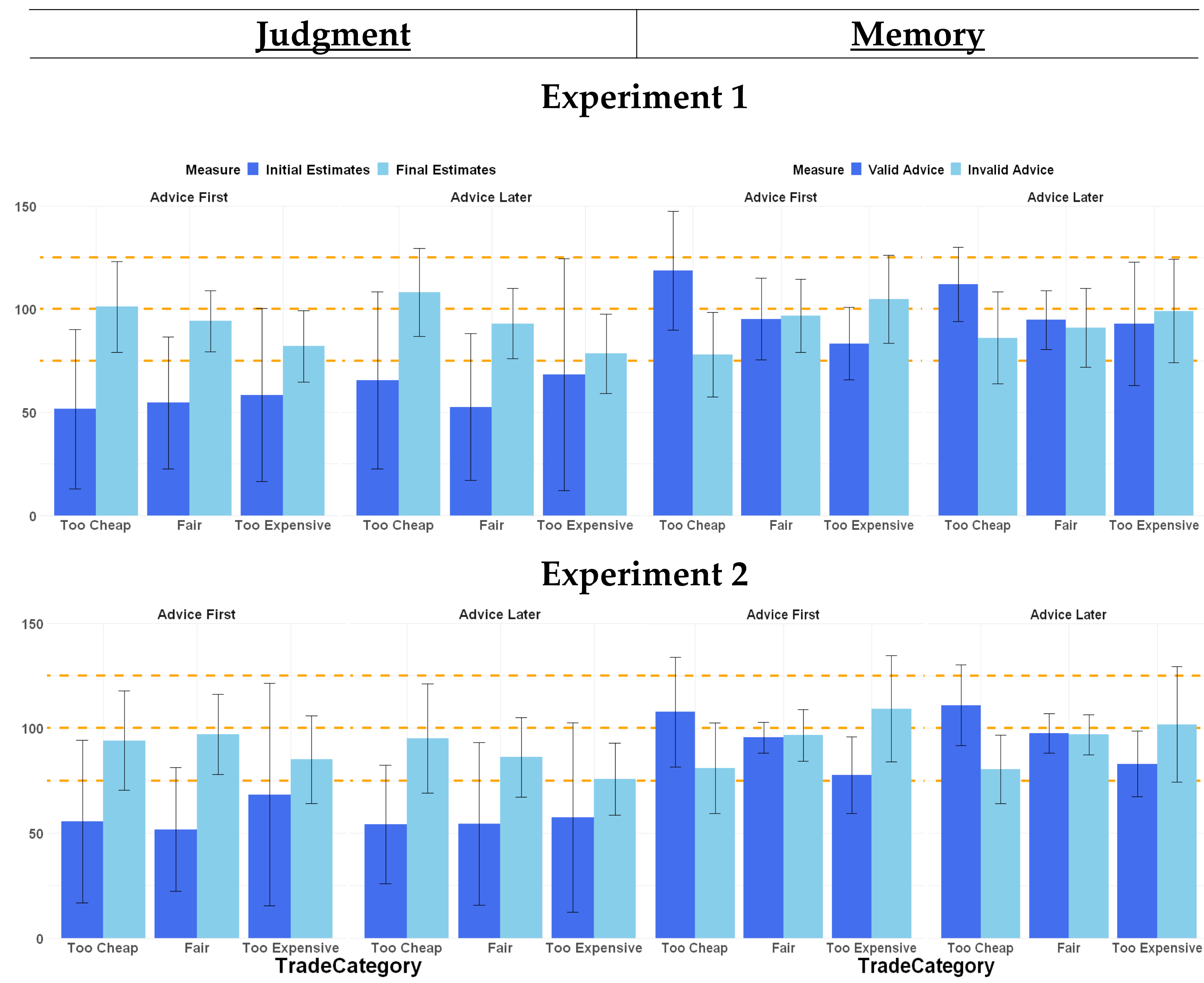
We created a **combined paradigm of list-method directed forgetting and advice taking** to investigate the impact of validity information on memory and judgments.
 

- metacognitive strategy fostering adaptive decision making

## Methods



## Results



predictor	$\beta$	$t$
memory valid advice	.13	< 1
memory invalid advice	.09	< 1

**Table 1.** Multiple regression model predicting the shift from the initial to the final judgment. The multiple correlation amounts to  $R = 0.16$ .

## Discussion

- list-method directed forgetting fosters the integration of valid advice into the final judgment, as opposed to invalid advice
- intentional forgetting can be an effective metacognitive regulation strategy
- participants construct the material to be remembered bottom-up on-line instead of controlling for it top-down after processing advice
- participants attempt to recall and exclude invalid information rather than simply forgetting it
- The remaining biases associated with invalid information can be observed as discrete phenomena within the modules of memory and judgment
- the challenge of combating metacognitive myopia is complex, necessitating the development of tailored interventions for memory and judgment
- our novel paradigm permits an investigation of the relationship between biases in judgment and memory

### Key References

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