

# If A gets better, B must get worse: Mutual change of interdependent stereotypes



Stefanie Maris<sup>1,2</sup> & Vera Hoorens<sup>1</sup>  
K.U.Leuven<sup>1</sup>, FWO<sup>2</sup>



## HYPOTHESIS, RATIONALE & IMPORTANCE

### HYPOTHESIS

In the case of two mutually exclusive and exhaustive groups stereotype-incongruent information about one group (the target group) reduces the stereotype of the other group (the alternative group)

### RATIONALE

Stereotypes are about group differences → stereotypes are interdependent

- If limited number of exhaustive & mutually exclusive groups
- E.g. gender stereotypes: if men are good at math, women must be bad at it

Implication: 2 types of information are incongruent with a group stereotype

- Directly incongruent: about members of the relevant group
- Indirectly incongruent: about members of the alternative group

E.g. gender → information that is incongruent with the stereotype of men

- Directly: men showing characteristics that are atypical of men
- Indirectly: women showing characteristics that are typical of men

Thus far: effects of indirectly stereotype-incongruent information neglected

### IMPLICATIONS IF SUPPORTED

Changing one stereotype may come with a cost for another stereotype

A group stereotype may change in the absence of any stereotype-incongruent information about members of that group

Stereotypes are remarkably vulnerable to change



## METHOD: THE STEREOTYPE LEARNING PARADIGM

### STEREOTYPE LEARNING PHASE

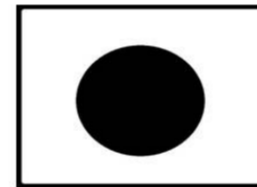
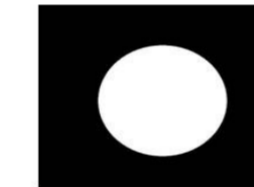
Cover story:

- 'Study on drawing conclusions from scientific data'
- Read data 'from study on perceptual styles and thinking styles'
  - 2 perceptual style groups: Core-perceivers vs. Field-perceivers
- Do the groups differ on creative thinking vs. scientific thinking?

Learn stereotypes by

- Reading test scores of individual core-perceivers and field-perceivers on
  - Tobin & Capie Test of Logical Thinking (TOLT)
  - Torrance Test of Creative Thinking (TTCT)
- With test scores suggesting complementary stereotypes (counterbalanced)
  - One group good on TOLT, bad on TTCT
  - Other group good on TTCT, bad on TOLT

Examples

<p>Core-perceiver 3</p>  <p>Torrance Test of Creative Thinking = low Tobin &amp; Capie Test of Logical Thinking = high</p> <p>Press the spacebar to continue</p>	<p>field-perceiver 3</p>  <p>Torrance Test of Creative Thinking = high Tobin &amp; Capie Test of Logical Thinking = low</p> <p>Press the spacebar to continue</p>
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### ADDITIONAL INFORMATION PHASE

Manipulating congruency of additional scores of individual core-perceivers and field-perceivers on TOLT and TTCT → 3 conditions:

- Congruent condition: 6 congruent + 1 incongruent member
- Core-perceiver incongruent condition: 6 incongruent + 1 congruent core-perceiver
- Field-perceiver incongruent condition: 6 incongruent + 1 congruent field-perceiver

### STEREOTYPE MEASUREMENT AFTER EACH PHASE

Mean group score rating (1-7), e.g.:

What is the mean group score on TOLT for the core-perceivers?

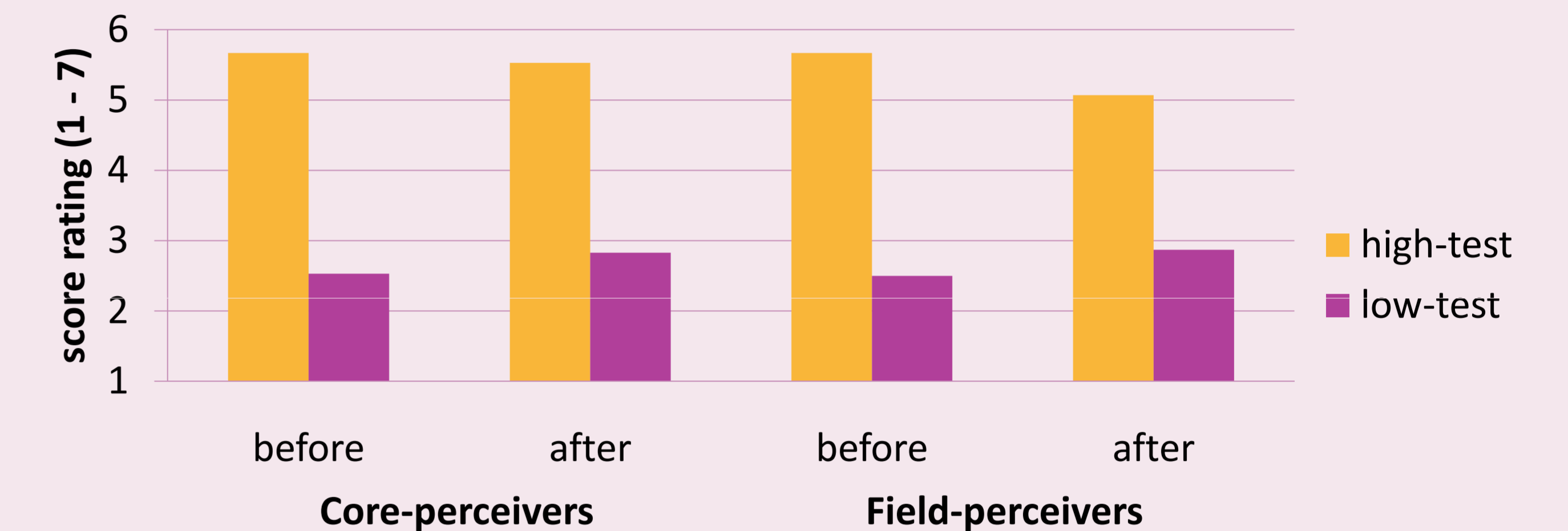
1 2 3 4 5 6 7  
very low very high

- Before additional information: Select participants who learned the stereotypes
- 94 out of 171 students of social sciences
  - Gender: 33 men and 61 women (aged 18–39)

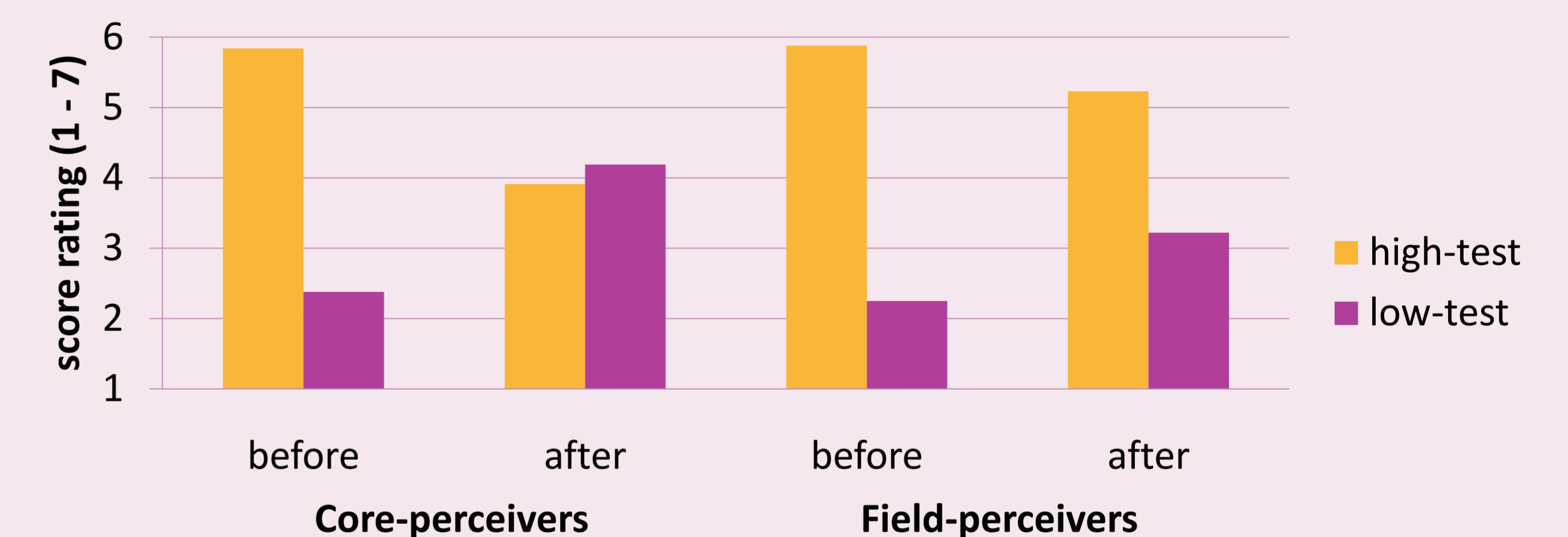
Before versus after additional information phase: Stereotype change?

## RESULTS

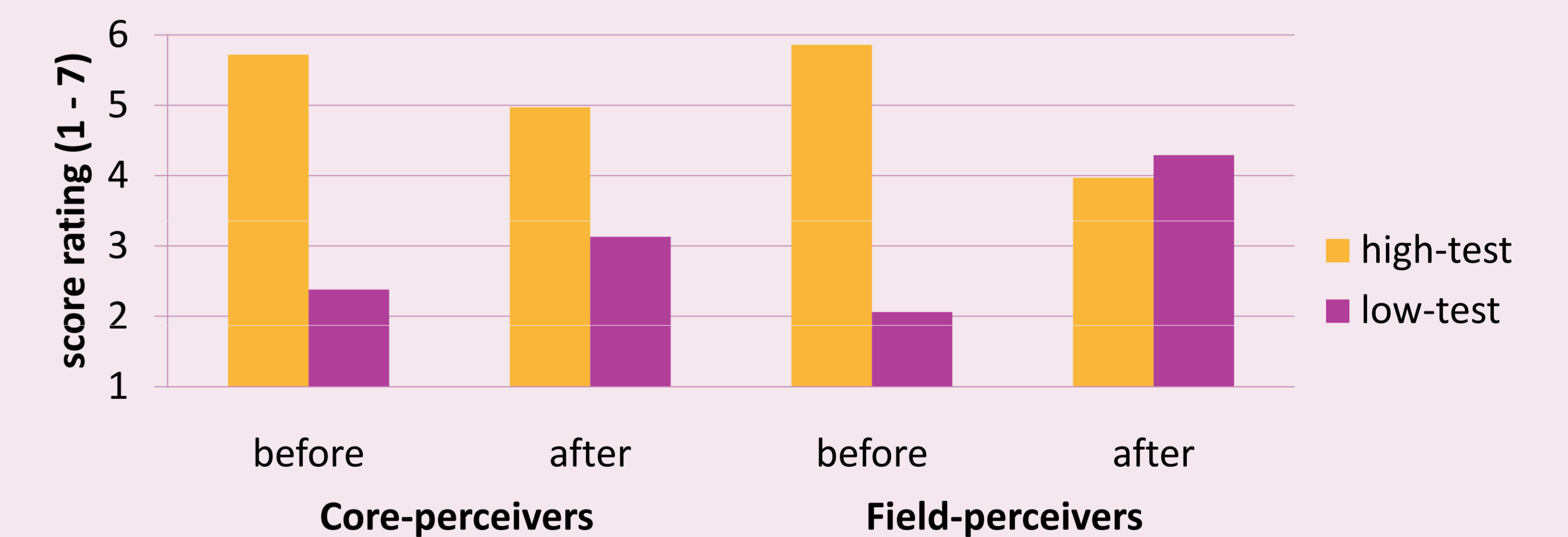
### CONGRUENT CONDITION



### CORE-PERCEIVER INCONGRUENT CONDITION



### FIELD-PERCEIVER INCONGRUENT CONDITION



## CONCLUSION

- Indirectly stereotype-incongruent information sufficient for stereotype change
- Stereotype change in the absence of directly stereotype-incongruent information
- Communicating Stereotype (CoSt) effect**  
= change in one stereotype evokes change in an interdependent stereotype