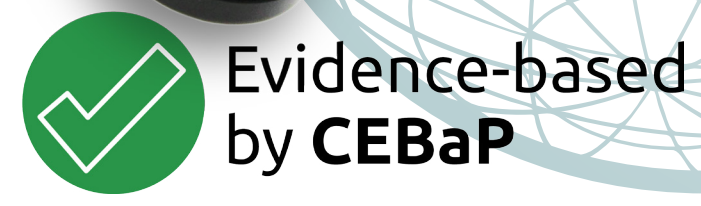


# Blended learning: equally effective as face-to-face learning for teaching EBP to a general audience

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## Background

- The Belgian Red Cross tries to spread Evidence-Based Practice (EBP) throughout its organisation.
- The Centre for Evidence-Based Practice (CEBaP) offers half-day face-to-face workshops to employees, unfamiliar with EBP, about the principles of EBP and developing a critical attitude towards information.
- A blended learning module, consisting of an E-learning module (3 sessions, 1 h to complete) and a face-to-face workshop (1.5 h) was developed to replace the former half-day workshop.



## Aim of the study

Blended learning  $\longleftrightarrow$  Face-to-face learning

- ?**
- Attitudes
  - Self-perceived EBP knowledge
  - Actual EBP knowledge

## Methods

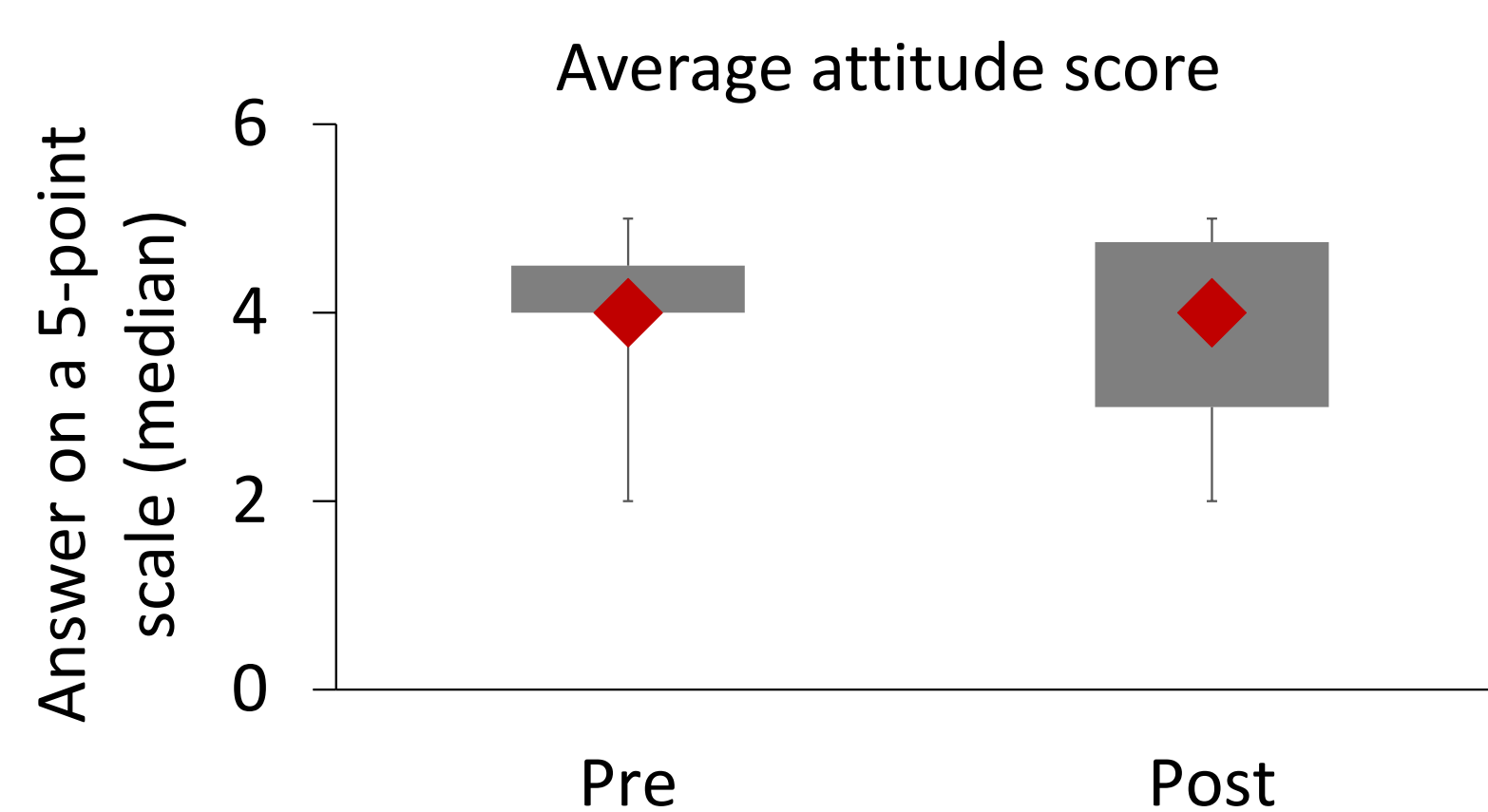
- Participants of the final face-to-face workshop (n=10) in January 2017 and participants of the first blended learning workshop (n=8) in May 2017.
- Quantitative measurement of attitude/knowledge with questionnaires (attitude: 19, self-perceived knowledge: 7, actual knowledge: 9 questions).
- Comparison pre-post and between workshops: Wilcoxon Log-Rank test.
- Qualitative enquiry about experiences with blended learning using a focus group discussion.



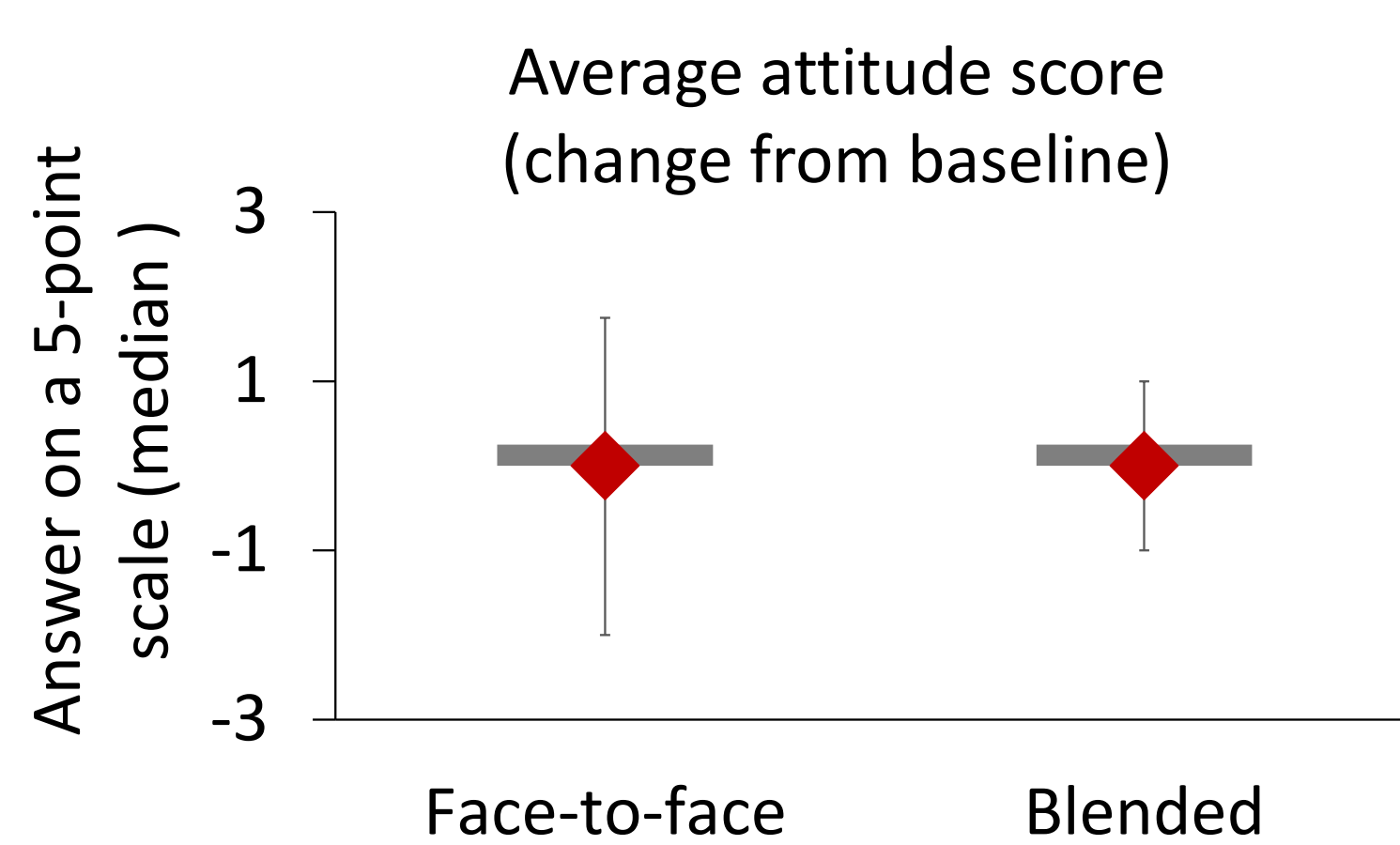
## Results

### 1. Attitudes towards EBP

A face-to-face workshop does not influence attitudes towards EBP ( $p=0.4$ )

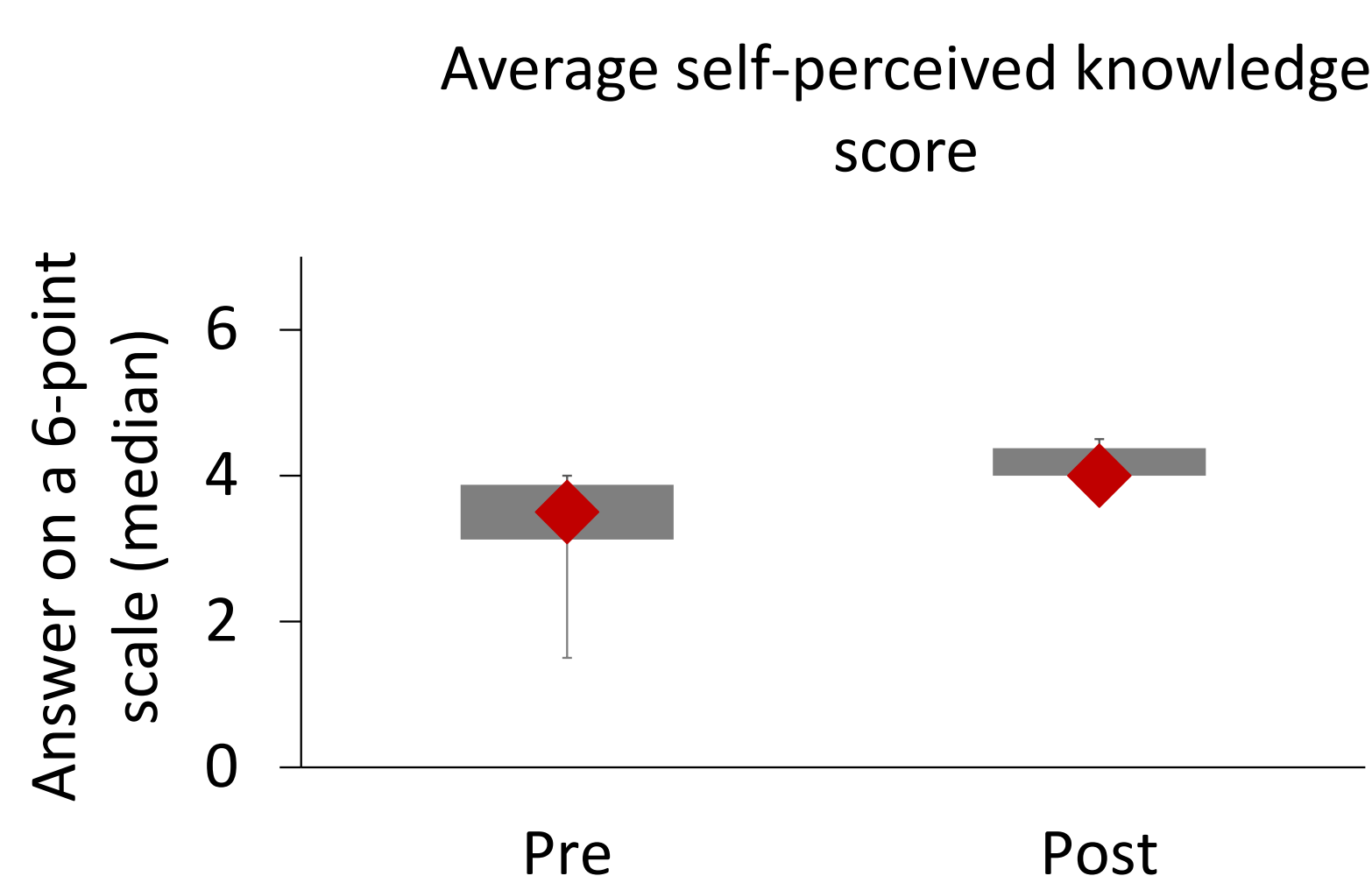


The change in attitudes towards EBP before and after learning does not differ between face-to-face and blended learning ( $p=0.38$ )

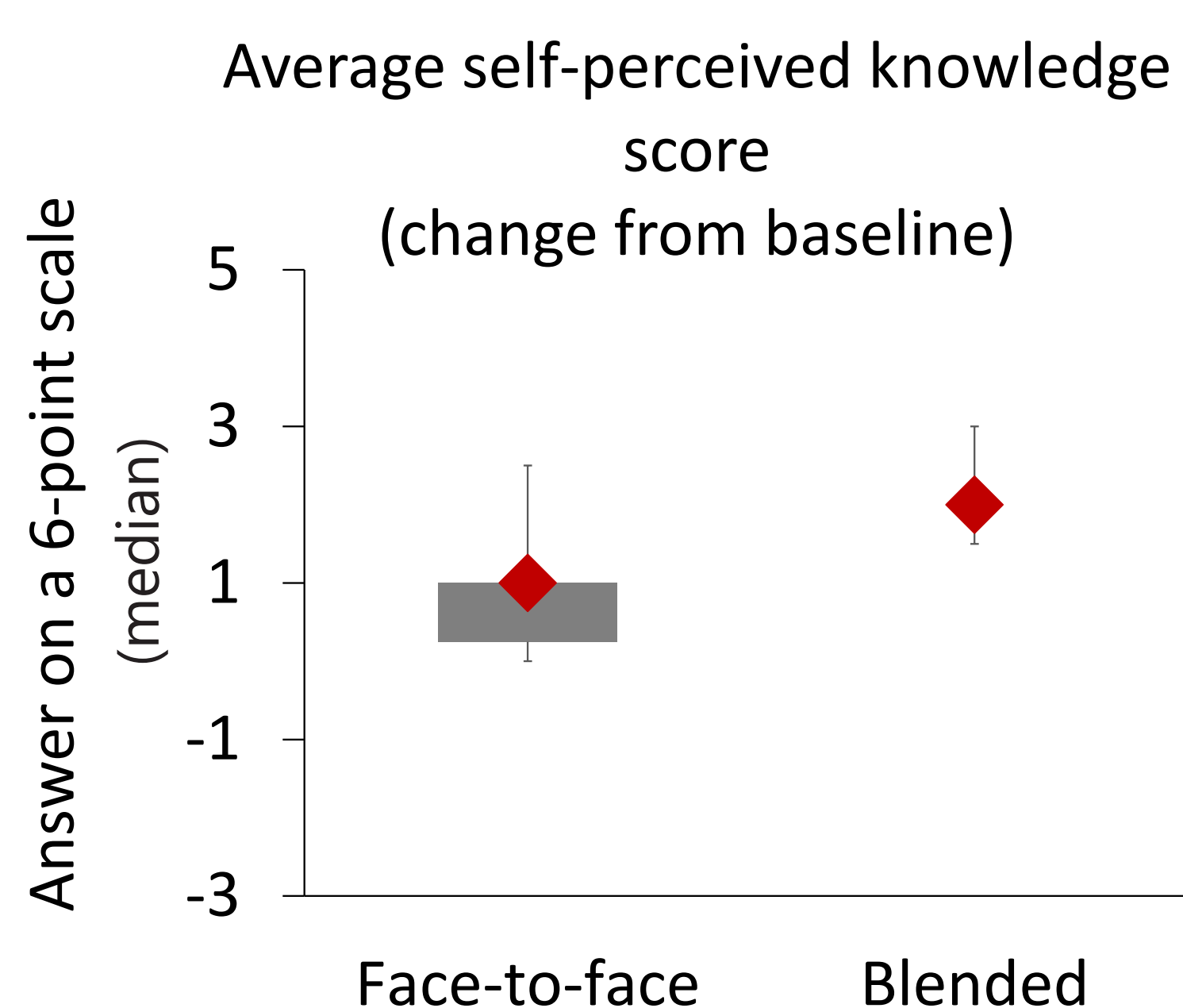


### 2. Self-perceived knowledge on EBP

Self-perceived knowledge tends to increase after face-to-face learning ( $p=0.09$ )

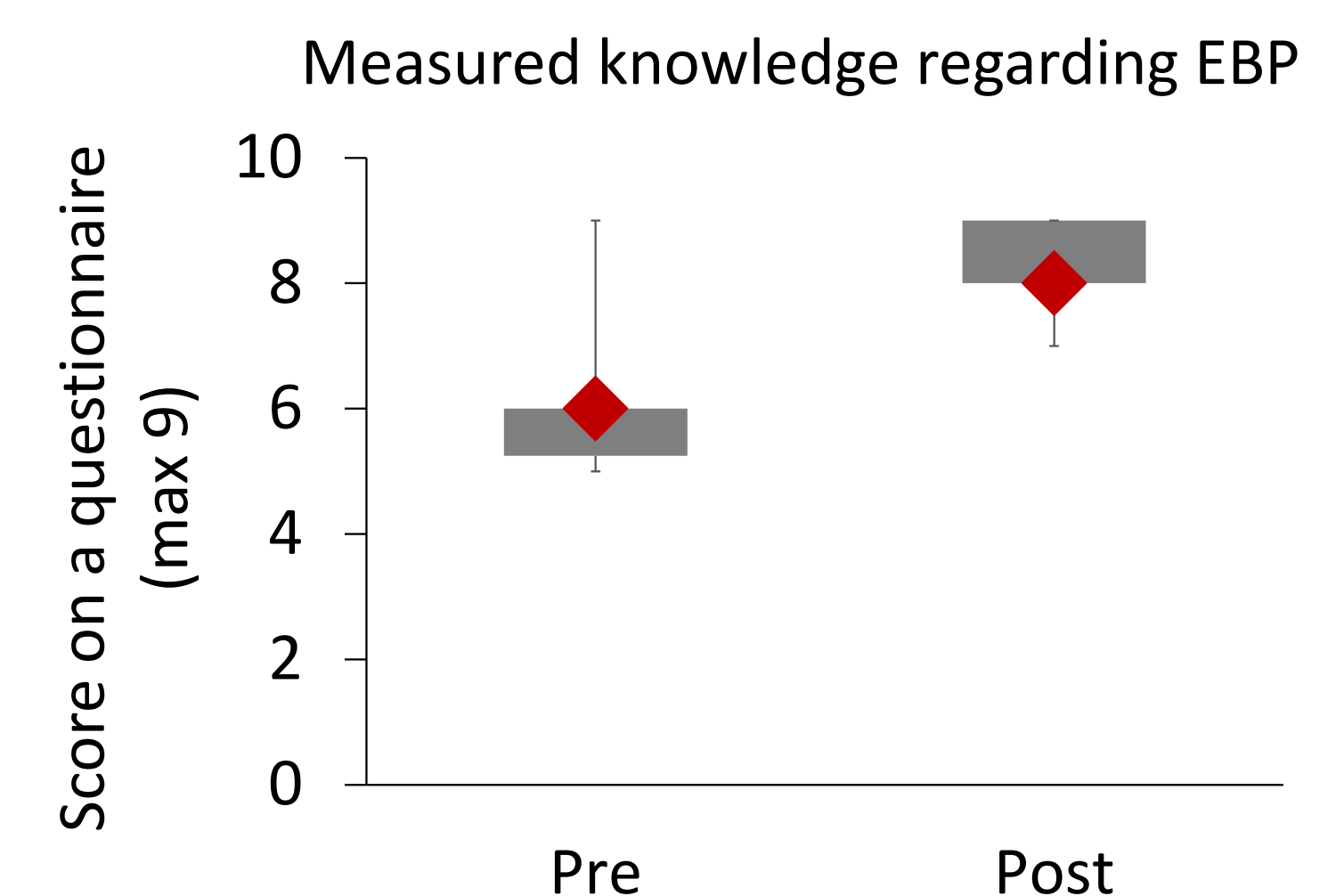


Blended learning increases self-perceived knowledge on EBP more than face-to-face learning ( $p=0.04$ )

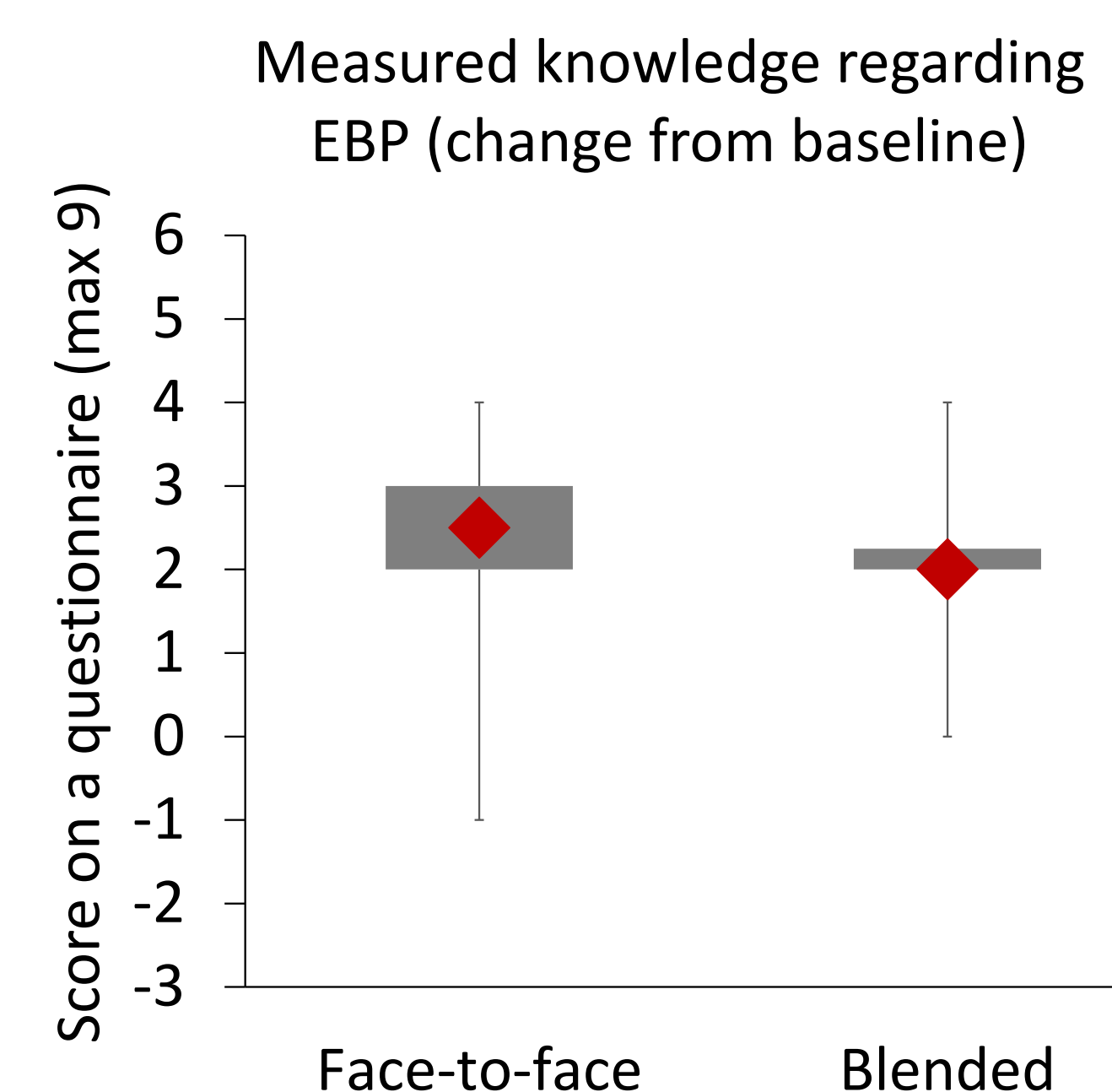


### 3. Actual knowledge on EBP

A face-to-face workshop increases actual knowledge on EBP ( $p=0.01$ )



A difference in knowledge on EBP after learning between face-to-face learning and blended learning was not found ( $p=0.67$ )



### 4. Experiences with blended learning for learning EBP

*"The combination of an E-learning session and a face-to-face moment has added value, as the reiteration helps to really grasp the concepts"*

*"The E-learning module is pleasant to follow"*

*"I think everyone in the organisation should follow it"*

*"The course is very approachable, also for someone who is not familiar with science"*

## Conclusion

- A blended learning module seems equivalent to a traditional workshop for improving knowledge on the principles of EBP in a general audience.
- Blended learning is well-received by participants.

