**Research Questions**

**Experiment 1**

1. How many robbers were there? - NS

2. What was the pattern on the bottom of the burglar's vest? - A

3. Where did the robbers say they were going after the robbery? - U

4. What did the witness say about the robbers? – A, excluded from the analyses

5. Where did the police think the robbers were going? - A

6. What did the witness tell the police about herself when she called? – U, excluded from the analyses

7. What was the driver of the robbers' car wearing? - A

8. What did the robber do upon entering the car? - A

9. How did the robber get into the house? - U

10. Did the robbers know the people who lived in the house that they robbed? - U

11. What did the police have to say about the speed of the robber's car during the chase? - A

12. What was the color of the carpet in the bedroom? - A

13. What was the robber's criminal history, if any? - U

14. Were the robbers related? - U

15. How old were the robbers? - U

16. What gender(s) were the police officers? - NS


*A _ Answerable; U _ Unanswerable; NS _ Not Scored (easy question).*

**Experiment 2**

1. What kind of vehicle passes behind the person in a helmet, when seen via video intercom? (A)

2. The woman in the office goes to the next room for a moment. When she comes back, she is holding: (A)

3. When the person in a helmet leaves the building, who is standing across the street? (A)

4. On which floor is the office where the theft occurred? (U)

5. What is in the envelope delivered to the office by the person in a helmet? (U)

6. The number of the building where the theft took place is: (A)

7. What is the age of the person who committed the theft? (U)

8. On the pavement, on the left side by the entrance to the building where the theft occurred, there is: (A)

9. What kind of shoes is the person in a helmet wearing? (A)

10. What does the woman in the office do right after receiving a parcel, but before she leaves to the next room? (A)

11. What hour does the watch of the person in a helmet indicate? (A)

12. Did some other people also work in the building where the theft occurred? (U)

13. How far from the city center did the person throw the helmet away? (U)

14. A woman walking down the pavement was carrying the bags which were knocked off her hands by the person in a helmet when running away. What was inside of those bags? (U)

15. Is there another computer in the next room, the one where the woman in the office is going to for a moment? (U)

16. What is the color of the poster placed in the glass-case in front of the building where the theft occurred? (A)

17. What is the number dialed by the woman from the office when she could not catch up with the thief? (U)

18. What is on the screen of a larger monitor standing on a desk where the woman is working? (U)


A – Answerable

U - Unanswerable

*Please note that the questions were presented to participants in Polish language. The Polish language version is available at https://osf.io/rhwdu for Experiment 1 and at https://osf.io/q7wsu for Experiment 2.*

**Examples of participants' responses to unanswerable questions:**

Question: Where did the robbers say they were going after the robbery?

"It was not in the video. The robbers did not say where they were going. It was only the policeman who suggested that they were going to the robber's sister."

Question: What were the robber's previous crimes, if any?

"It was not in the video. The video said that he had a criminal record and was on parole but did not say for what."

Question: How did the robber get into the house?

"It was not shown in the video. The video starts when he is already in the house."

**Indications of strength of evidence behind the reported Bayes Factors.**

Please note that the interpretations provided below are based on the study by Jeffreys (1961).

Jeffreys, H. (1961), Theory of Probability, 3rd ed., Oxford University Press, Oxford.

See more: https://easystats.github.io/effectsize/reference/interpret_bf.html

- Jeffreys (1961)
  - **BF = 1** - No evidence
  - **1 < BF <= 3** - Anecdotal
  - **3 < BF <= 10** - Moderate
  - **10 < BF <= 30** - Strong
  - **30 < BF <= 100** - Very strong
  - **BF > 100** - Extreme.

**Please note that if this is not otherwise indicated, we provide strength of evidence for $H_1$**

**Experiment 1**

**Table 2.**

*Experiment 1, Question Series 1, Unanswerable Questions. Bayes Factors for the Inclusion of the Instruction Type in the Models of the Three Dependent Variables, as Compared to the Null Model.*

| Dependent variable | Instruction type | Strength of evidence |
|---|---|---|
| Correct Rejections | $BF_{Inclusion} = 5.188e+6$ | Extreme |
| Errors | $BF_{Inclusion} = 13035.66$ | Extreme |
| "Don't know" answers | $BF_{Inclusion} = 4078.78$ | Extreme |

*Note.* The table displays Bayes Factors for inclusion of predictors in the model of each dependent variable, and not the differences between conditions.

**Table 3.**

*Experiment 1, Question Series 1. Answerable Questions. Bayes Factors for the Inclusion of the Instruction Type in the Models of the Three Dependent Variables, as Compared to the Null Model.*

| Dependent variable | Instruction Type | Strength of Evidence |
|---|---|---|
| Correct Responses | $BF_{Inclusion} = 0.1$ | Moderate Evidence for $H_0$ |
| Errors | $BF_{Inclusion} = 1.5$ | Anecdotal Evidence for $H_1$ |
| "Don't know" answers | $BF_{Inclusion} = 0.607$ | Anecdotal Evidence for $H_0$ |

*Note.* The table displays Bayes Factors for inclusion of predictors in the model, and not the differences between conditions.

**Figure 2**

*Experiment 1, Question Series 1. Summary of Differences Between Experimental Conditions, with BF for each comparison.*
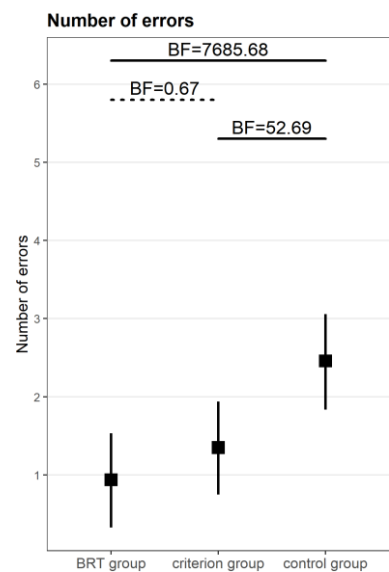
A. Unanswerable Questions
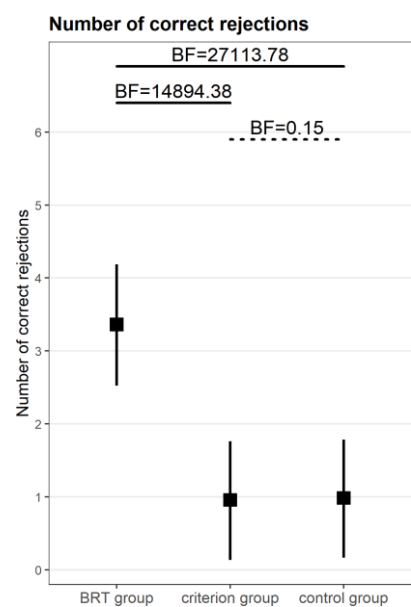


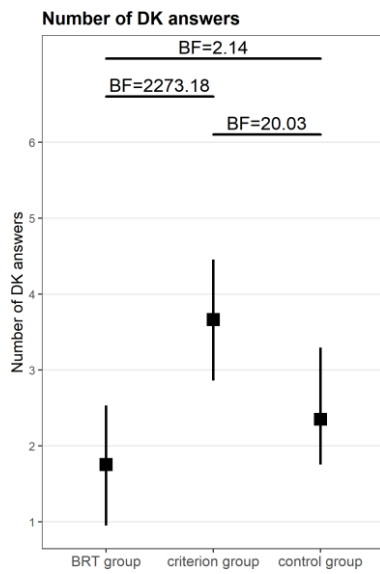BF = 27113.78 extreme evidence

BF = 14894.38 extreme evidence

BF = 0.15 moderate evidence for $H_0$



BF = 7685.68 extreme evidence

BF = 0.67 anecdotal evidence for $H_0$
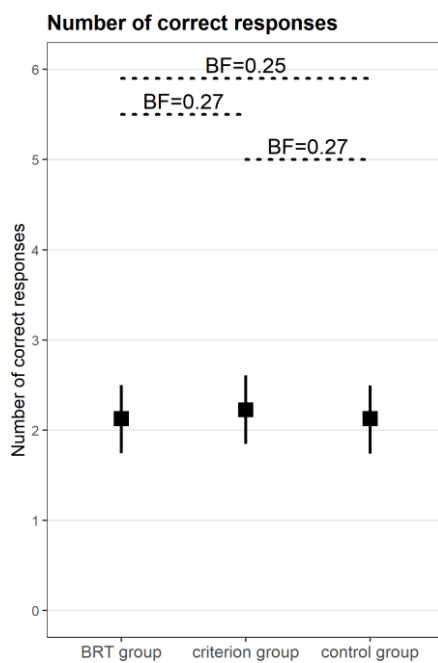
BF = 52.69 very strong evidence

Number of DK answers

BF = 2.14 anecdotal evidence

BF = 2273.18 extreme evidence

BF = 20.03 strong evidence

B. Answerable Questions



Number of correct responses

BF = 0.25 moderate evidence for $H_0$

BF = 0.27 moderate evidence for $H_0$

BF = 0.27 moderate evidence for $H_0$

**Number of errors**
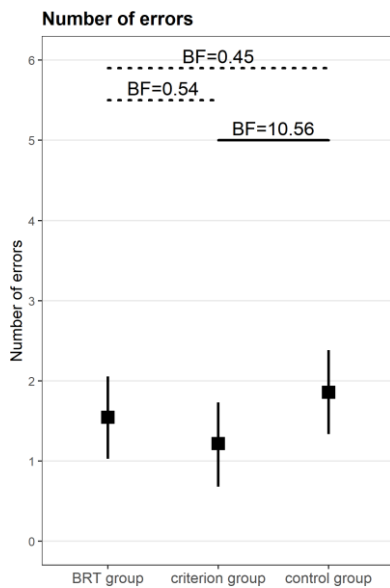


BF = 0.45 anecdotal evidence for $H_0$

BF = 0.54 anecdotal evidence for $H_0$

BF = 10.56 strong evidence

**Number of DK answers**
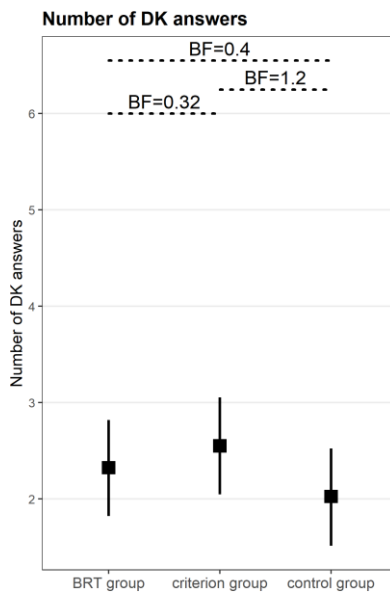


BF = 0.4 anecdotal evidence for $H_0$

BF = 1.2 inconclusive, see footnote 8

BF = 0.32 moderate evidence for $H_0$

*Note*. Rectangles with horizontal lines represent estimated marginal means with 95% credible intervals in each condition. Solid lines represent evidence for $H_1$ (difference between conditions), and dotted lines represent evidence for $H_0$ (no differences between conditions).

**Table 4.**

*Experiment 1, Question Series 2. Unanswerable Questions. Bayes Factors for the Inclusion of the Predictor in the Model of Monitoring Resolution, as Compared to the Intercept-Only Model.*

| Predictors(s) | Bayes Factor | Interpretation |
|---|---|---|
| Instruction Type | 7.88e+12 | Extreme |
| Confidence | 2.75e+39 | Extreme |
| Instruction Type * Confidence | 0.218 | Moderate evidence for $H_0$ |

*Note.* The correctness in a given trial was most probable when both confidence and instruction type were included as predictors. However, the most probable model did not include interaction of the predictors.

**Table 5.**

*Experiment 1, Question Series 2. Answerable Questions. Bayes Factors for the Inclusion of the Predictor in the Model of Monitoring Resolution, as Compared to the Intercept-Only Model.*

| Predictors(s) | Bayes Factor | Interpretation |
|---|---|---|
| Instruction Type | 1.07 | Anecdotal evidence for $H_1$/ inconclusive |
| Confidence | 4.55e+19 | Extreme |
| Instruction Type * Confidence | 0.03 | Very strong evidence for $H_0$ |

*Note.* The correctness in a given trial was most probable when both confidence and instruction type were included as predictors. However, the most probable model did not include interaction of the predictors.

## Experiment 2

**Table 6.**

*Experiment 2. Unanswerable Questions. Bayes Factors for the Inclusion of Predictors in the Models of the Three Dependent Variables, as Compared to the Null Model.*

| Dependent variable | BRT | Strength of evidence | *Reject Option* | Strength of evidence | *BRT * Reject Option* | Strength of evidence |
|---|---|---|---|---|---|---|
| Correct Rejections | $BF_{Inclusion} =$ 4.85e+21 | Extreme | $BF_{Inclusion} =$ 1.37e+19 | Extreme | $BF_{Inclusion} =$ 2.23e+19 | Extreme |
| Errors | $BF_{Inclusion} =$ 3.99e+12 | Extreme | $BF_{Inclusion} =$ 8.56 | Moderate | $BF_{Inclusion} =$ 2.42 | Anecdotal |
| DK answers | $BF_{Inclusion} =$ 7.74e+04 | Extreme | $BF_{Inclusion} =$ 2.81e+16 | Extreme | $BF_{Inclusion} =$ 10.05 | Strong |

*Note.* The table displays Bayes Factors for the inclusion of predictors in the model and not the differences between conditions. All predictors displayed BF values greater than 1, which means that both predictors and their interaction, should be included in the model.

**Table 7.**

*Experiment 2, Answerable Questions. Bayes Factors for the Inclusion of Predictors in the Models of the Three Dependent Variables, as Compared to the Null Model.*

| Dependent variable | BRT | Strength of evidence | *Reject Option* | Strength of evidence | *BRT * Reject Option* | Strength of evidence |
|---|---|---|---|---|---|---|
| Correct | $BF_{Inclusion} = 0.13$ | Moderate evidence for $H_0$ | $BF_{Inclusion} = 0.12$ | Moderate evidence for $H_0$ | $BF_{Inclusion} = 0.02$ | Very strong evidence for $H_0$ |
| Errors | $BF_{Inclusion} = 0.51$ | Anecdotal evidence for $H_0$ | $BF_{Inclusion} = 0.16$ | Moderate evidence for $H_0$ | $BF_{Inclusion} = 0.15$ | Moderate evidence for $H_0$ |
| DK answers | $BF_{Inclusion} = 0.45$ | Anecdotal evidence for $H_0$ | $BF_{Inclusion} = 0.26$ | Moderate evidence for $H_0$ | $BF_{Inclusion} = 0.13$ | Moderate evidence for $H_0$ |

*Note.* The table displays Bayes Factors for inclusion of predictors in the model, and not the differences between conditions. Based on the displayed BF values, none of the predictors should be included in the model of any of the dependent variables for answerable questions.

**Figure 5**

*Experiment 2. Summary of Differences Between Experimental Conditions, with BF for each comparison.*

    A.   Unanswerable questions
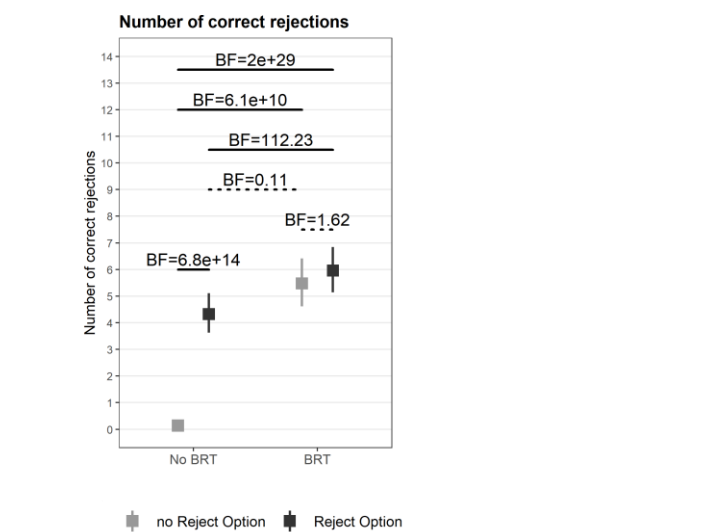


BF = 2e+29 extreme evidence
BF = 6.1e+10 extreme evidence
BF = 112.23 extreme evidence
BF = 0.11 moderate evidence for $H_0$
BF = 1.62 inconclusive (see Footnote 12 in the manuscript)
BF = 6.8e+14 extreme evidence
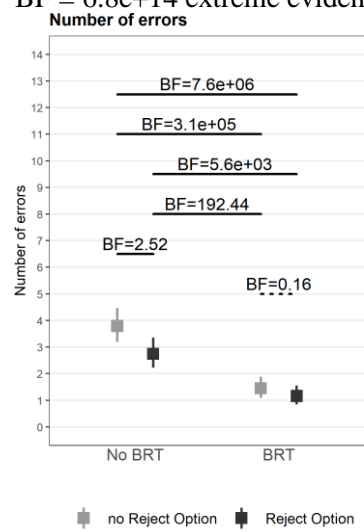


BF = 7.6e+06 extreme evidence
BF = 3.1e+05 extreme evidence
BF = 5.6e+03 extreme evidence
BF = 192.44 extreme evidence
BF = 2.52 anecdotal evidence
BF = 0.16 moderate evidence for $H_0$

**Number of DK answers**

BF = 1.5e+11 extreme evidence
BF = 230.12 extreme evidence
BF = 0.15 moderate evidence for $H_0$
BF = 79.67 very strong evidence
BF = 1.8e+08 extreme evidence
BF = 3.43 moderate evidence

B. Answerable questions
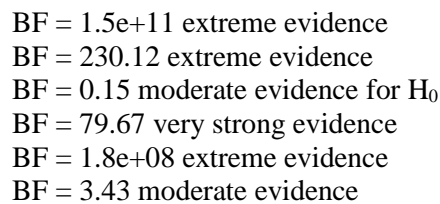
Since there were no differences between conditions caused by BRT and Reject Option (see Table 7), we do not provide interpretations for BFs for differences. The reader may refer to the interpretations of BFs for inclusion provided in Table 7.



*Note*. Rectangles with horizontal lines represent estimated marginal means with 95% credible intervals in each condition. Lines represent the contrast comparisons. Solid lines represent evidence in favor of $H_1$ (difference between conditions), and dotted lines represent evidence for $H_0$.