

Confidence and communication in an E-FIT identification task

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- Both the police and jurors in a courtroom are faced with making judgements about how confident and accurate a person is, for example, a witness to a crime. When faced with a confident eyewitness or a non-confident one, which one would you believe?



London, Meldman and Lanckton (1970)

- Studied persuasion in simulated two-person juries and concluded that:
 - “the single significant behavioral difference between persuaders and persuadees was in the expression of confidence” (p. 182), and that in dyadic interactions persuasion is a function neither of intelligence, pre discussion conviction, position, or ability but of the expression of confidence during the discussion.

I'm absolutely sure that suspect five is the criminal.

INFORMATION ABOUT
THE SPEAKER'S LEVEL OF
CERTAINTY IN THEIR
ANSWER..

INFORMATION

Confidence Heuristic

- Proposed by Thomas and McFadyen (1995)
 - People should express degrees of confidence proportional to the certainty with which they hold those beliefs.
 - Recipients should tend to judge the reliability of the communicated information according to the confidence with which it is expressed.

A heuristic is a rule of thumb that we use when:

- we don't have the time to think carefully about the issue
- we have little knowledge or information to base a decision on
- we are overloaded with information
- we believe that the issues are not very important

Confidence heuristic

- The assumption that the most confident individuals are the most likely to be correct.

Our Experiment

- AIM – to manipulate confidence and see how people communicate it to each other.
- Do people with the highest confidence manage to persuade other people or do things like assertiveness or gender override?

Pilot study

- 32 Participants rated 73 e-fits.
- Rated the degree of likeness of an e-fit to a photo.
- Rated how confident they were that the e-fit was the person in the photo.
- Selected one face from a line-up of 9 faces (65 times).
- Rated how confident they were that they had chosen the correct face.

Pilot Study task:

Photo



E-fit -

good likeness,
high confidence



Main Study

- Working in dyads on the ‘Police and Suspects Problem’
- 56 participants (28 men and 28 women) attempted to determine which face, from an array of 9 photos, looked most like the suspect portrayed in an E-fit
- 24 suspects to identify (half men and half women).
- 8 fillers used to disguise the hypothesis.



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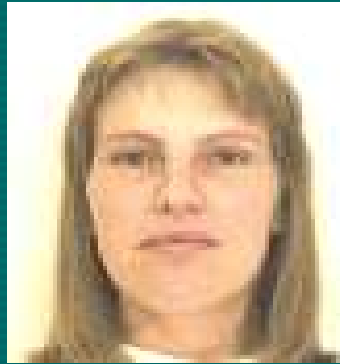
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8



9

Grid S4



?

Imagine that you and your partner in the experiment are two police officers. A crime has been committed and two witnesses have just been interviewed - one interviewed by you and the other interviewed by the other police officer. Each witness has created an e-fit picture of the criminal.

You must decide who to arrest for the crime. Eyewitnesses can often differ from each other because they have different views of the event and the criminal, so the e-fits created may be good or not-so-good likenesses of the suspect.

Payment:

- If you both choose the same face, of the person who did commit the crime, you will get 40p each.
- If you both choose the same but innocent person then you get 20p each.
- If you choose two different people, then you each get nothing, even if one of you chooses the person who is guilty.

E-fits

- A - very good e-fit likeness of one of the faces, designed to induce high confidence and high accuracy.
- B - a weak e-fit likeness of one or more of the other faces in the array, designed to induce low confidence and low accuracy.



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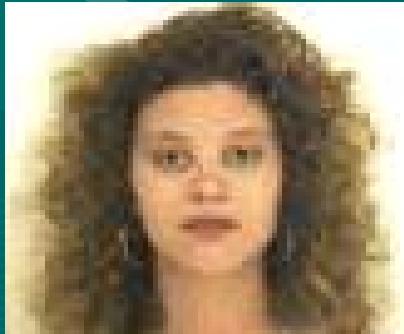
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Grid S4



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**Player A has a strong
resemblance
to suspect 3**



**Player B has a weak
resemblance to
suspect 5**

- The strong e-fit evidence was given to one player on 8 of the trials and to the other player on another 8 of the trials.
- The same e-fits were used twice, shown once to player 1 and later on in the session to player 2.

Method

- Ps allowed two minutes to discuss each e-fit and write down answer.
- The players also indicated on a 0-100 scale how confident they felt that they had selected the correct person
- The player's gender and their partner's gender was investigated, as were individual differences such as assertiveness, need for cognition, need for closure and overconfidence

Results

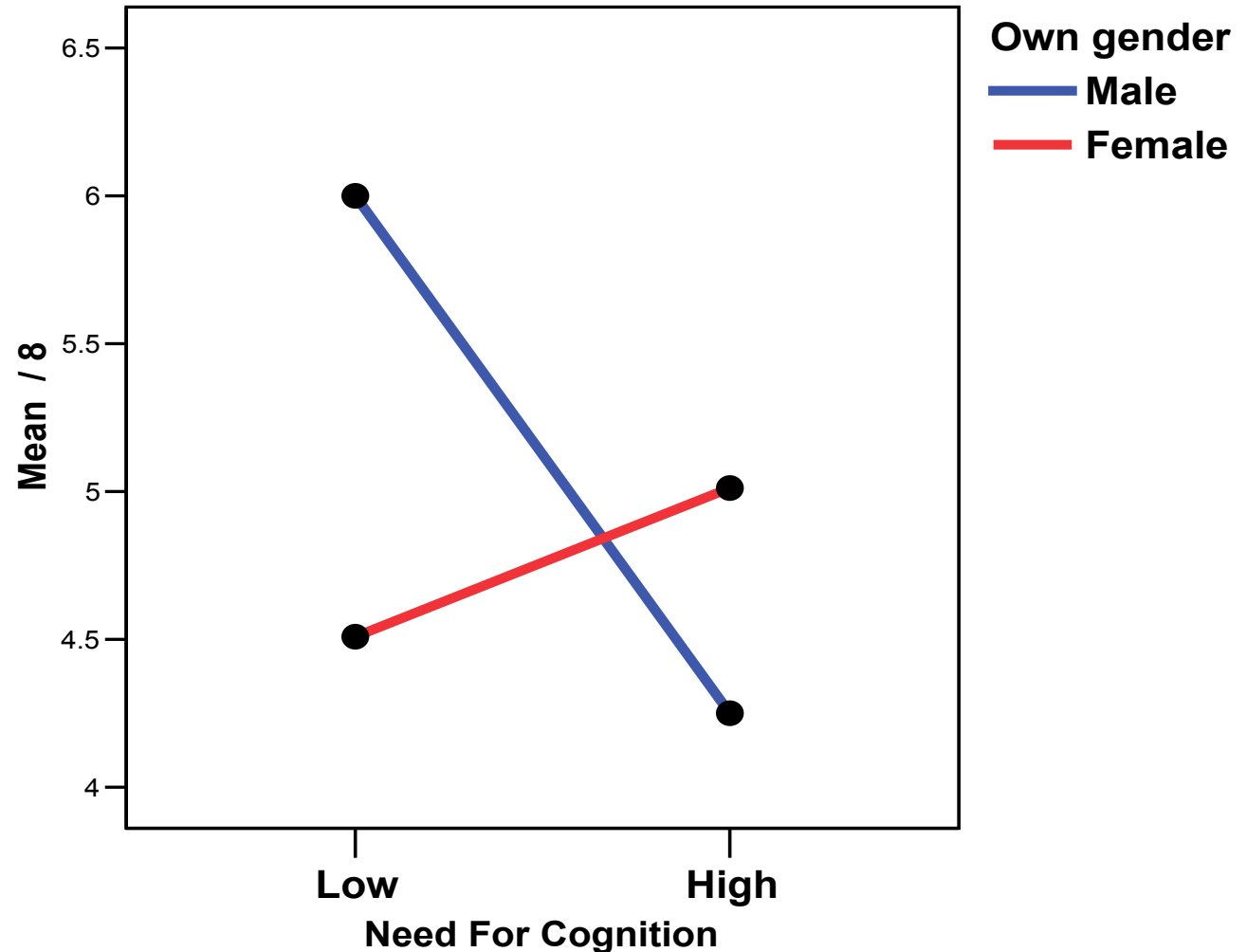
- Players disagreed with each other less than 8% of the time, and half of the pairs never failed to reach agreement with each other
- The number of times that the person with the strong evidence persuaded the other to agree on the correct face was 61% - significantly higher than the 39% of the time that the person with the weak evidence persuaded the one with the strong evidence to agree on the incorrect face, $t(55) = 3.68, p < .001, d = .98$.

Gender x NFC
Significant
interaction

$F(1, 48) = 6.09,$
 $p = .017.$

Low NFC men
are more
persuasive.

Number of times the person with strong
evidence persuaded the less confident person / 8



Conclusion

- We found evidence for the operation of the confidence heuristic.
- People do tend to judge the reliability of the communicated information according to the confidence with which it is expressed.
- Not as strong as predicted.
- We still have tapes to transcribe and analyse the language used.

- Our findings accord with those of Price & Stone (2004) who found that advisors' confidence influenced participants' perception of their knowledge.
- We agree with Price & Stone's assertion that people “assume that a more confident advisor makes more categorically correct judgments and is more knowledgeable” (p. 39).

Problem:

- We may have underestimated the size of the effect if participants chose the wrong face when they had good evidence/high confidence.
- We repeated the experiment with a shape discrimination task and found much stronger use of the confidence heuristic (86% agreement with the most confident person).

Summing up:

- These results apply when people are communicating their opinions about things that they have seen.
- This may be an effective heuristic, aiding us in our decision making, as long as higher confidence does generally reflect higher accuracy.
- Confident communicators are more persuasive and we should bear this in mind in the courtroom.

References

- London, H., Meldman, P.J., & Lanckton, A.V.C. (1970). The jury method: How the persuader persuades. *Public Opinion Quarterly*, 34, 171-183.
- Price, P. C. & Stone, E. R. (2004). Intuitive evaluation of likelihood judgment producers: Evidence for a confidence heuristic. *Journal of Behavioral Decision Making*, 17, 39-58.
- Thomas, J. P., & McFadyen, R. G. (1995). The confidence heuristic: A game-theoretic analysis. *Journal of Economic Psychology*, 16, 97-113.