

# Accuracy of Metacomprehension Judgements on Health-Related Texts

Chadwick, S.<sup>1</sup>, Davies, R.<sup>1</sup>, & Costain, D.<sup>2</sup>

<sup>1</sup>Department of Psychology, Lancaster University, UK

<sup>2</sup>Department of Statistics, Lancaster University, UK

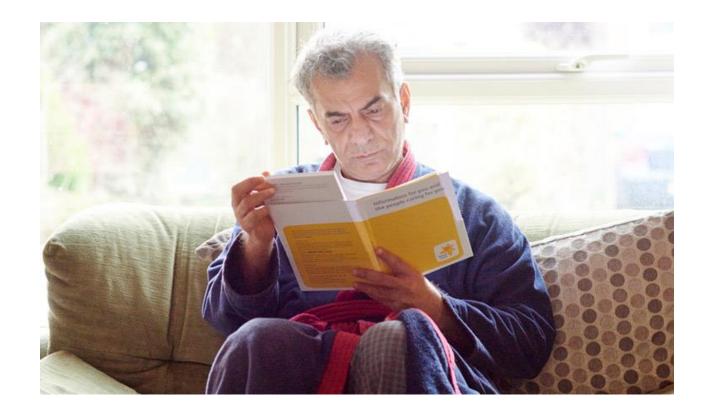
### Feedback / Discussion:

What do we mean by comprehension of health information? (In terms of breadth and depth)





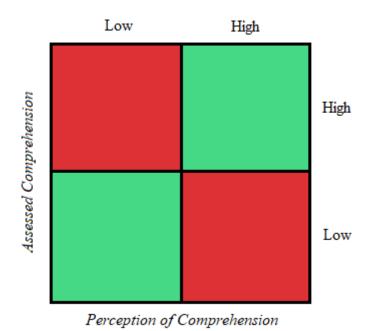
Q. "How well do you understand this information?"





# Accuracy of Metacomprehension Judgements

### A simplification:



# Study 1



Design: N=175, 10 texts, 1-5 Rating, 4 MCQs per text

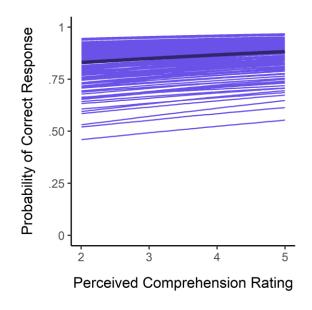
**Model:**  $\log \left( \frac{P_{ijk}}{1 - P_{ijk}} \right) = \beta_0 + (\beta_1 + u_{1i}) X_{ij} + u_{0i} + u_{0j} + u_{0k} + \varepsilon_{ijk}$ 

Results: Population effect:

# 

Perceived Comprehension Pating

## Individual variability:



# Study 2



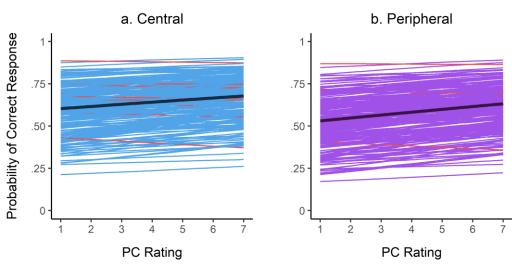
Design: N=225, 13 texts, 1-7 rating, 6 MCQ per text (1/2 per type)

**Model:**  $\log \left( \frac{P_{ijk}}{1 - P_{ijk}} \right) = \beta_0 + (\beta_1 + u_{1i})X_{1ij} + (\beta_2 + u_{2i})X_{2k} + (\beta_3 + u_{3i})X_{1ij}X_{2k} + u_{0i} + u_{0j} + u_{0k}$ 

### Results: Population effect:

# Probability of Correct Response .75 **Question Type** Central Peripheral Perceived Comprehension Rating

# Individual variability:



# **Interim Conclusions**



- Weak positive association on health-related texts
- Judgements are informative of central and peripheral details
- Limited individual variability



### Thank you for listening.

Feedback / Discussion: What do we mean by comprehension of health information? (In terms of breadth and depth)