Assessing Self-Assessment Accuracy and Investigating its Association with Academic Performance

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Metaknowledge

- An appreciation of how much, or little, one knows

- Requires a greater level of expertise than primary knowledge
  
  (Ramnarayan et al 1997)

- Appreciating how much one knows helps to understand whether more information is needed
  
  (Renner & Renner 2001)

- Professional educators therefore have a responsibility to assist learners in knowing how much they do not know.
  
  (Kennedy et al 2002)

- Metaknowledge tends not to be developed during formal education
  
  (Russo & Schoemaker 1992)
Research Instrument

30 item multiple-choice questionnaire designed to assess both knowledge and metaknowledge

**Example**

Which of the following countries is biggest in terms of area?

- a) Peru
- b) Mexico
- c) Denmark
- d) Italy

Confidence level (25-100%) ...60........%
Operationalising Metaknowledge

Bias score = MC - KS

Where:
MC = Mean confidence across all judgements
KS = Overall proportion correct

BS>0 = overconfidence
BS<0 = underconfidence
Findings

Metaknowledge

- The majority of respondents (72%) were overconfident in their knowledge (*mean bias score* = 8.9%)

Calibration Curve
Findings

Individual differences

- Gender
  - Males
  - Females

- Nationality
  - Chinese
  - UK
Findings

Individual differences

○ Gender
  - Males: 9.9%
  - Females: 7.6%

○ Nationality
  - Chinese: 16.2%
  - UK: 5.1%

Association with Academic Performance

- Overconfidence and academic performance negatively correlated
References


