The Journal of Credibility Assessment and Witness Psychology
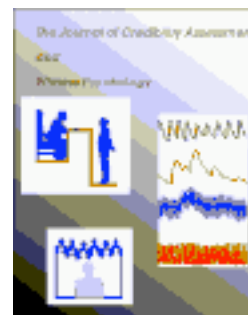
Multimethod Assessment of Deception on Personnel Tests: Reading, Writing, and Response Time Measures

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Experimental Design

	Item Presentation	
Guilt Condition	Serial	Parallel
Cash	n = 10	n = 10
Card	n = 10	n = 10
Innocent	n = 20	n = 20

Procedure

- Flyers posted around campus
- Interested students/staff called a secretary
- Preliminary instructions emailed
- Students came to a designated room
  - Signed a consent form
  - Read instructions on a computer

The Experiment

- 2 guilty conditions, 1 innocent condition
  - 2 mock-crimes
    - Cash
    - Card
- 3 types of true/false items
  - Neutral
    - "I was born prior to the year 1990."
  - Cash
    - "I was involved in the theft of the $20."
  - Card
    - "I took nothing from the student's computer."

Data Collection
Applied Sciences Laboratory Model 501
head-mounted eye tracker
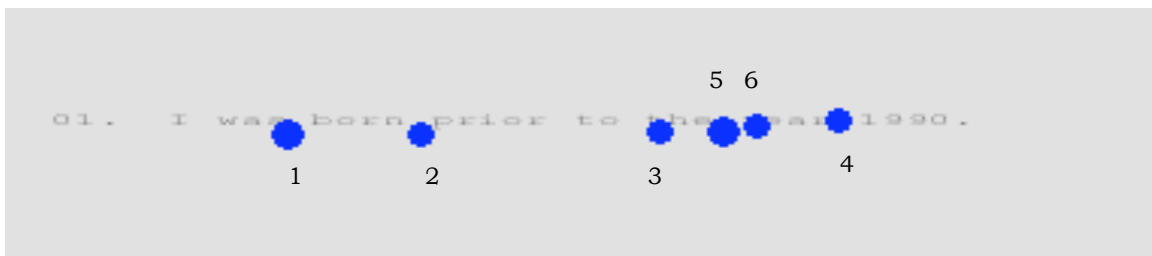

Item Presentation

T   F

3. I did not take the money that was in the secretary's purse.   O   O
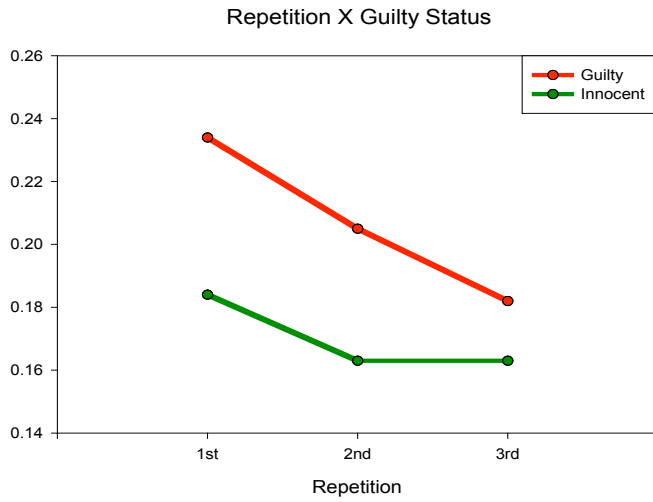
Participants

- 10 Cash, 9 Innocent
  - 8 female, 11 male
- Mean age: 22.32
- 78.9% Caucasian

Measures

- Number of fixations
- First pass duration (time reading)
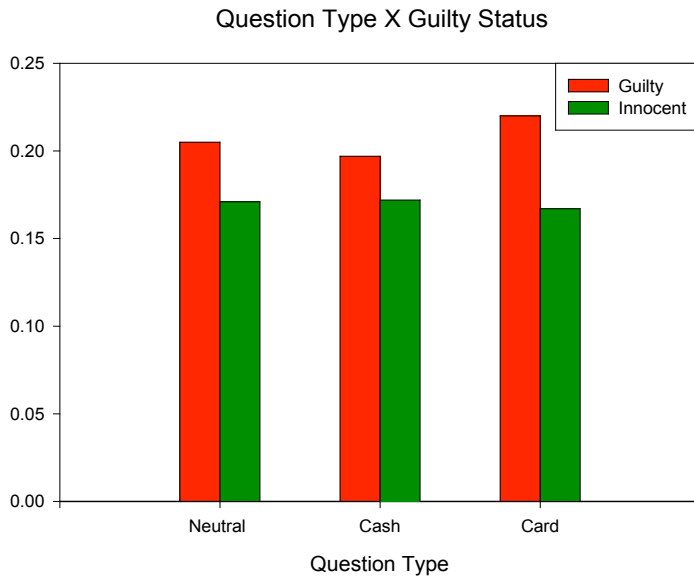- Second pass duration (time rereading)

Results: Number of Fixations

Repetition X Guilty Status

- Guilty subjects make more fixations across repetitions than do innocent subjects
- Decrease in number of fixations across repetitions is predicted
  - savings in processing time

Results: Number of Fixations

Question Type X Guilty Status

- Guilty subjects make more fixations across question types than do innocent subjects
- Guilty subjects make more fixations on the card items than on the other two types

Results: Reading and Rereading
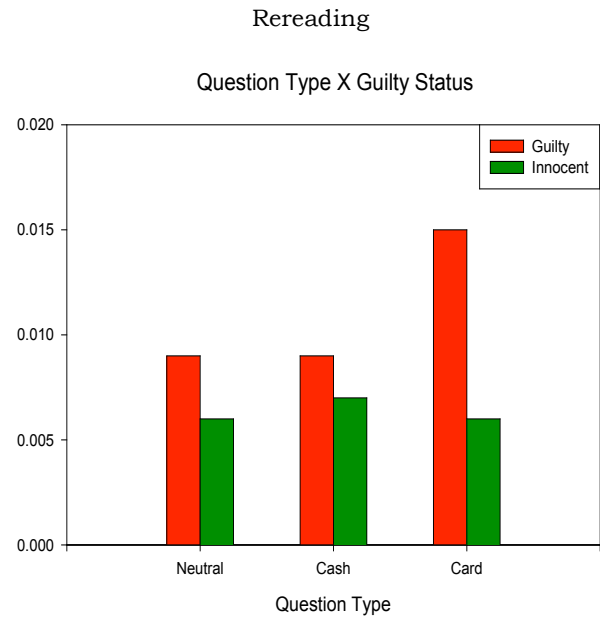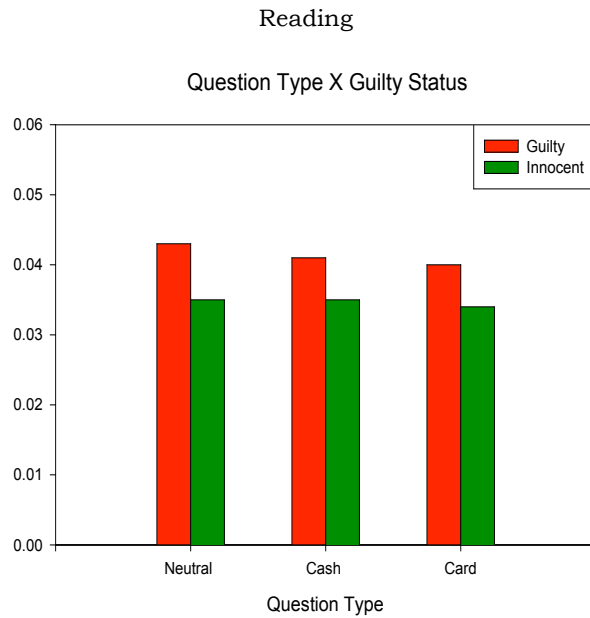
Reading

Rereading

- Guilty subjects reread more than did innocent subjects
- Guilty subjects reread card items more than other items

Summary

- Traditional reading measures can be used to distinguish between guilty and innocent subjects
- Writing and response time measures
- Other eye movement measures
- Recruitment differences
- Motivation

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