
Interviewer respondent interactions in face-to-face interviews with children and juveniles

Results from a behavior coding study

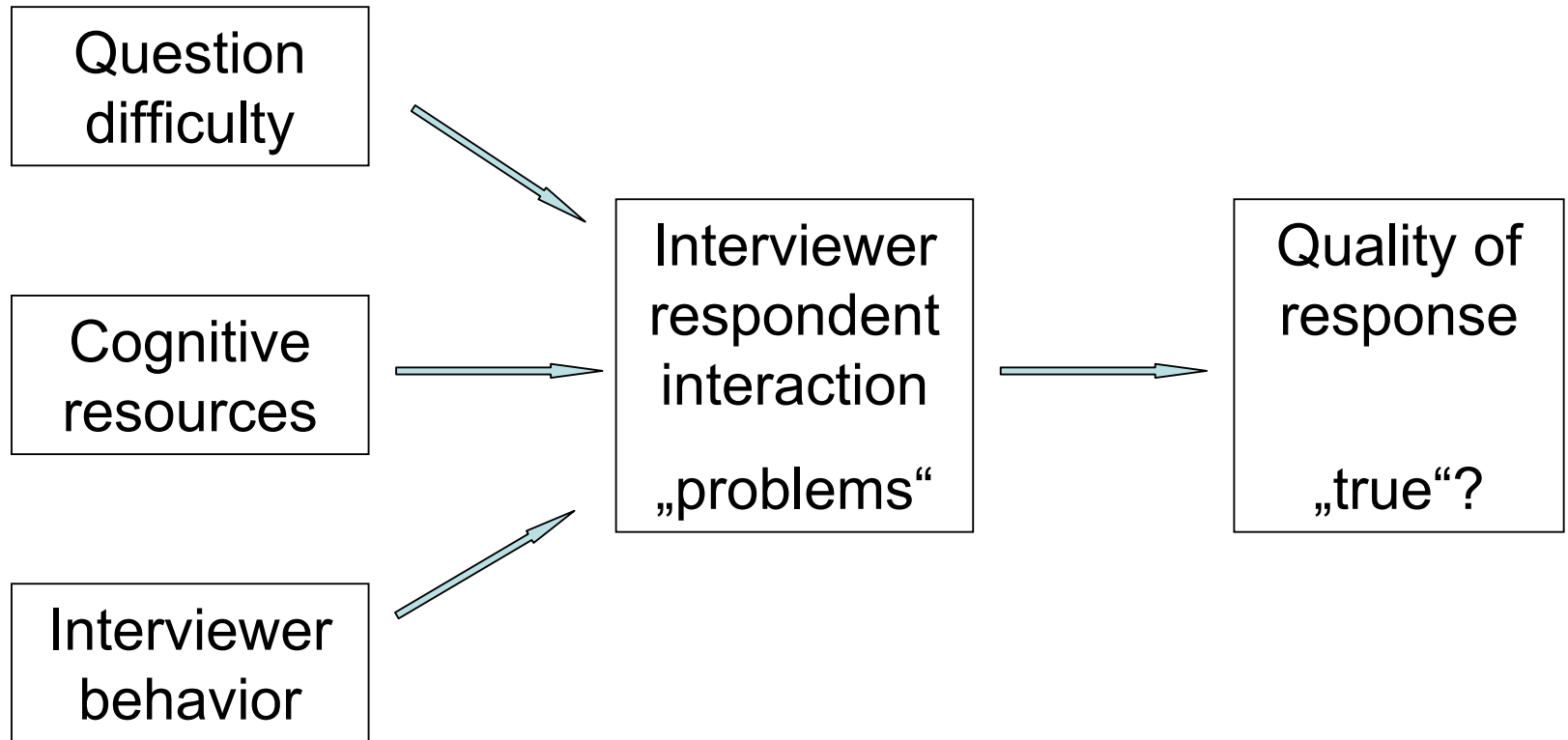
Marek Fuchs

University of Kassel, Germany

marek.fuchs@uni-kassel.de

- Research question
 - Are survey responses from children and juveniles reliable?
 - To what extent is the quality of the survey responses related to
 - Question difficulty
 - Interviewer behavior
 - The child's cognitive capacity

- Assumed model



- This model was confirmed with children age 8 thru 10
 - Poor cognitive functioning correlates with problematic respondent
 - Problematic respondent behavior decreases the validity of the responses

- However ...
 - Is this an age-related problem?
 - Is it the heterogeneity of children in terms of cognitive functioning?
 - E.g., young children also lack social skills
 - Accordingly, we will compare a younger group (8-10) and an older group (12-14)

- Hypothesis
 - Age: The older group shows fewer problems when answering survey questions
 - Cognition: Children with less developed cognitive resources show more problems when answering a survey question

- **Methods**
 - N = 144 children age 8-10
 - N = 73 children age 12-14

 - Female, male and minorities represented

 - Face-to-face interviews in the respondents' home

 - Previously used questions, total 120 items

 - 25 to 35 minutes

 - Cognitive testing of children

 - All interviews were video-taped

- Behavior coding of video tapes
 - 4 coders (reliability .70 to .90)
 - 206 cases with complete data
 - about 24,000 records
 - 22 interviewer behaviors
 - 20 respondent behaviors
 - Question understanding problems
 - Mapping problems

Results

Table: Questions affected by problematic respondent behavior (question level, N = 24,058)

| | 8 and 9 years | 10 and 11 years | 12 thru 14 years | Total |
|---------------------------------------|------------------|--------------------|---------------------|---------------|
| R provides inadequate answer (%) | 11 | 9 | 7 | 9 **** |
| R shows uncertainty (%) | 1 | 1 | 1 | 1 |
| R provides early response (%) | 2 | 2 | 3 | 2 ** |
| R refuses (%) | 0 | 0 | 0 | 0 |
| Implicit problems | 13 | 12 | 10 | 12 *** |
| R asks for explanation (%) | 4 | 3 | 3 | 3 **** |
| R asks to repeat question (%) | 1 | 1 | 0 | 1 **** |
| R provides DK (%) | 2 | 3 | 2 | 2 **** |
| Explicit problems | 6 | 6 | 4 | 6 *** |
| Total Problems | 19 | 17 | 13 | 16 *** |
| IW probing (%) | 16 | 17 | 14 | 16 **** |
| # of turns per question | 3.3 | 3.3 | 3.2 | 3.3 **** |
| Paradigmatic Q-A-sequences (%) | 55 | 55 | 63 | 57 *** |

Results

Table: Duration of each question and of the whole interview

| | 8 and 9 years | 10 and 11 years | 12 thru 14 years | Total |
|----------------------|---------------|-----------------|------------------|----------|
| Total interview | 1,771 | 1,786 | 1,597 | 1,721 ** |
| IW time | 1,204 | 1,155 | 1,085 | 1,153 * |
| IW time per question | 10.4 | 10.0 | 9.2 | 9.9 * |
| R time | 567 | 632 | 512 | 568 * |
| R time per question | 4.9 | 5.5 | 4.4 | 4.9 * |

Results

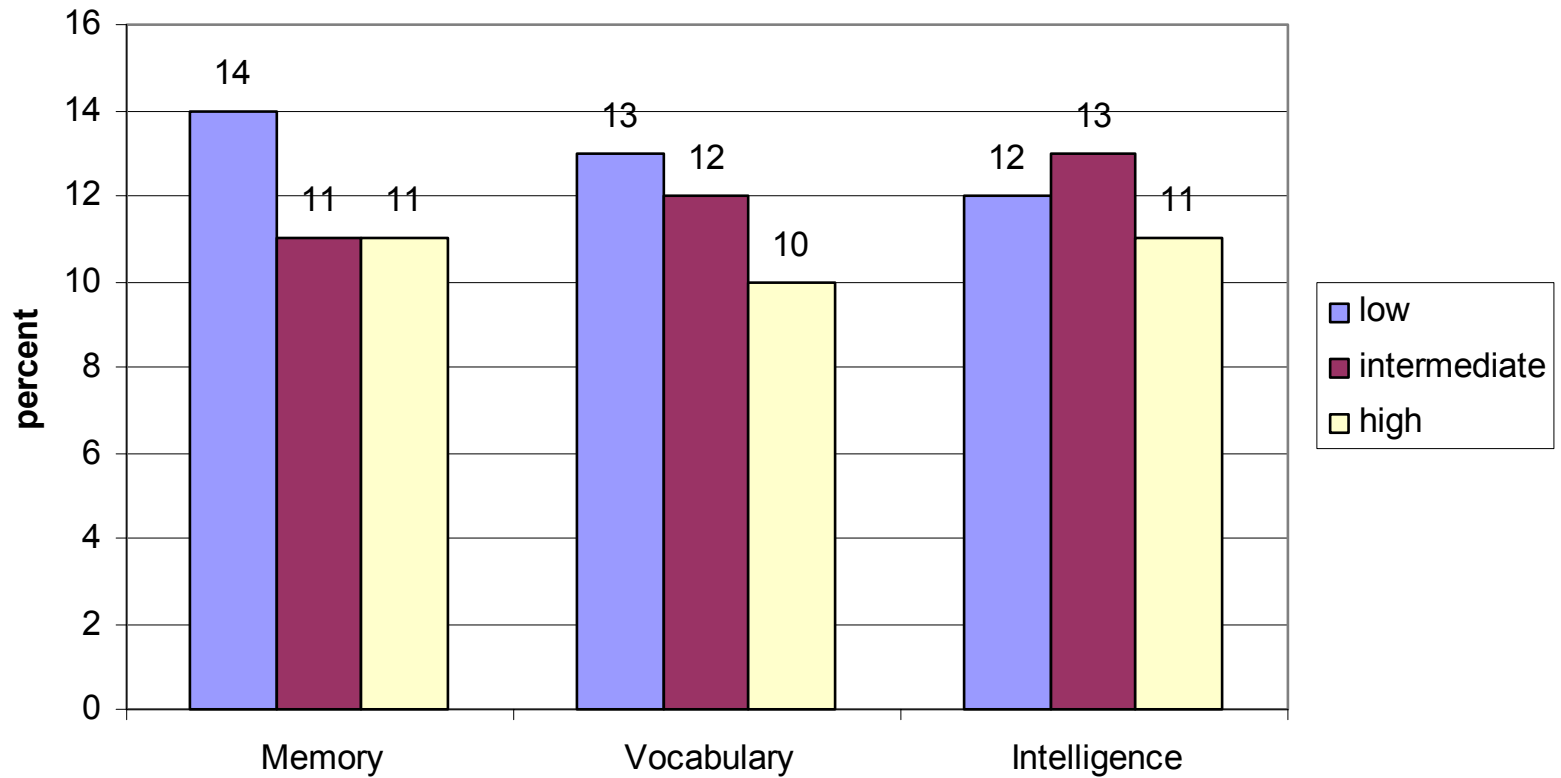
Table: Cognitive functioning of children and juveniles

| | Memory test | Digit memory test | Vocabulary test | Fluid intelligence |
|------------------|-------------|-------------------|-----------------|--------------------|
| 8 and 9 year | 140 | 13 | 16 | 28 |
| 10 and 11 years | 130 | 14 | 19 | 29 |
| 12 thru 14 years | 110 | 16 | 25 | 33 |
| Total | 128 ** | 15 *** | 19 *** | 30 *** |

** $p < .01$; *** $p < .001$.

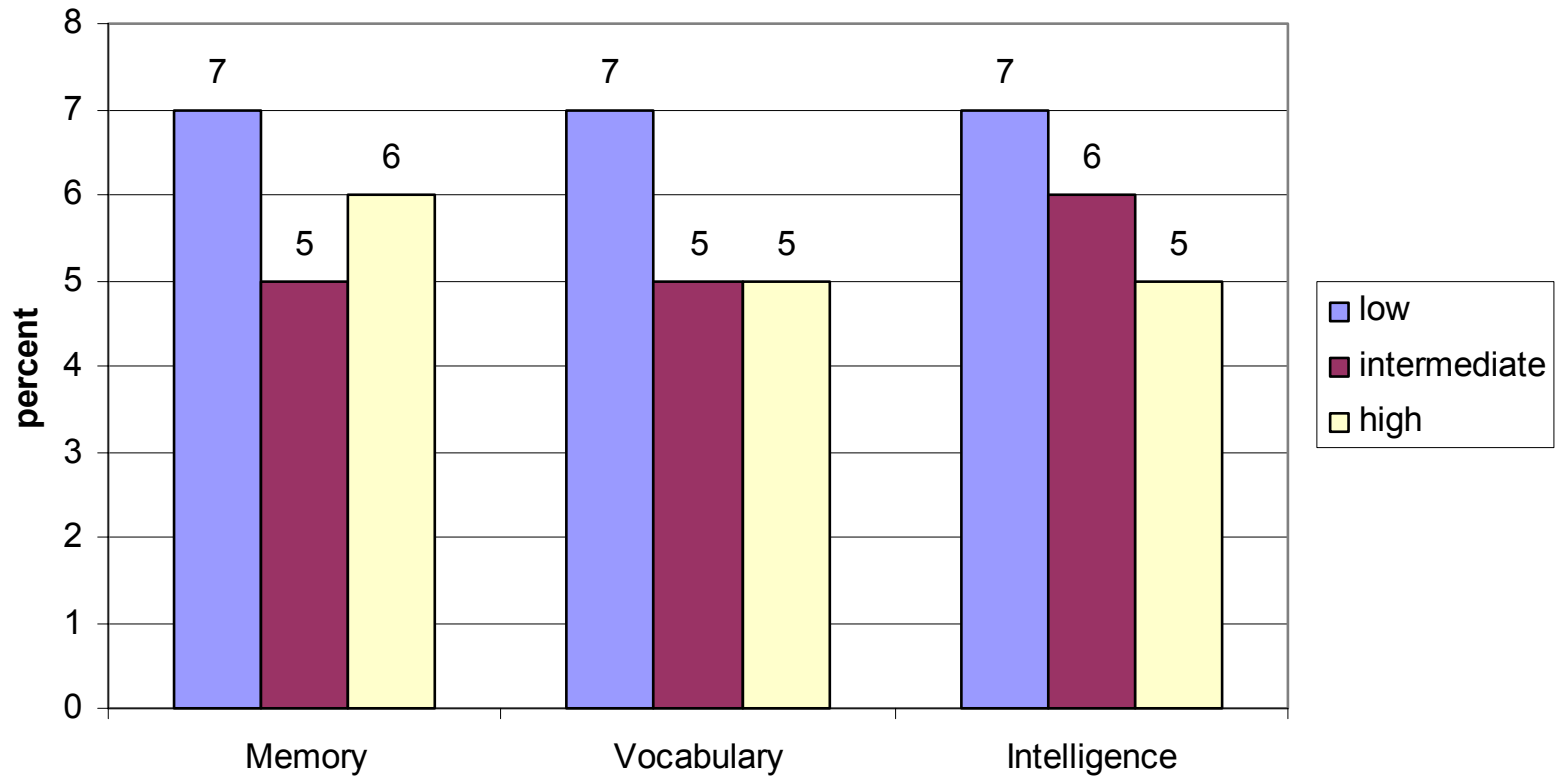
Results

Implicit Problems



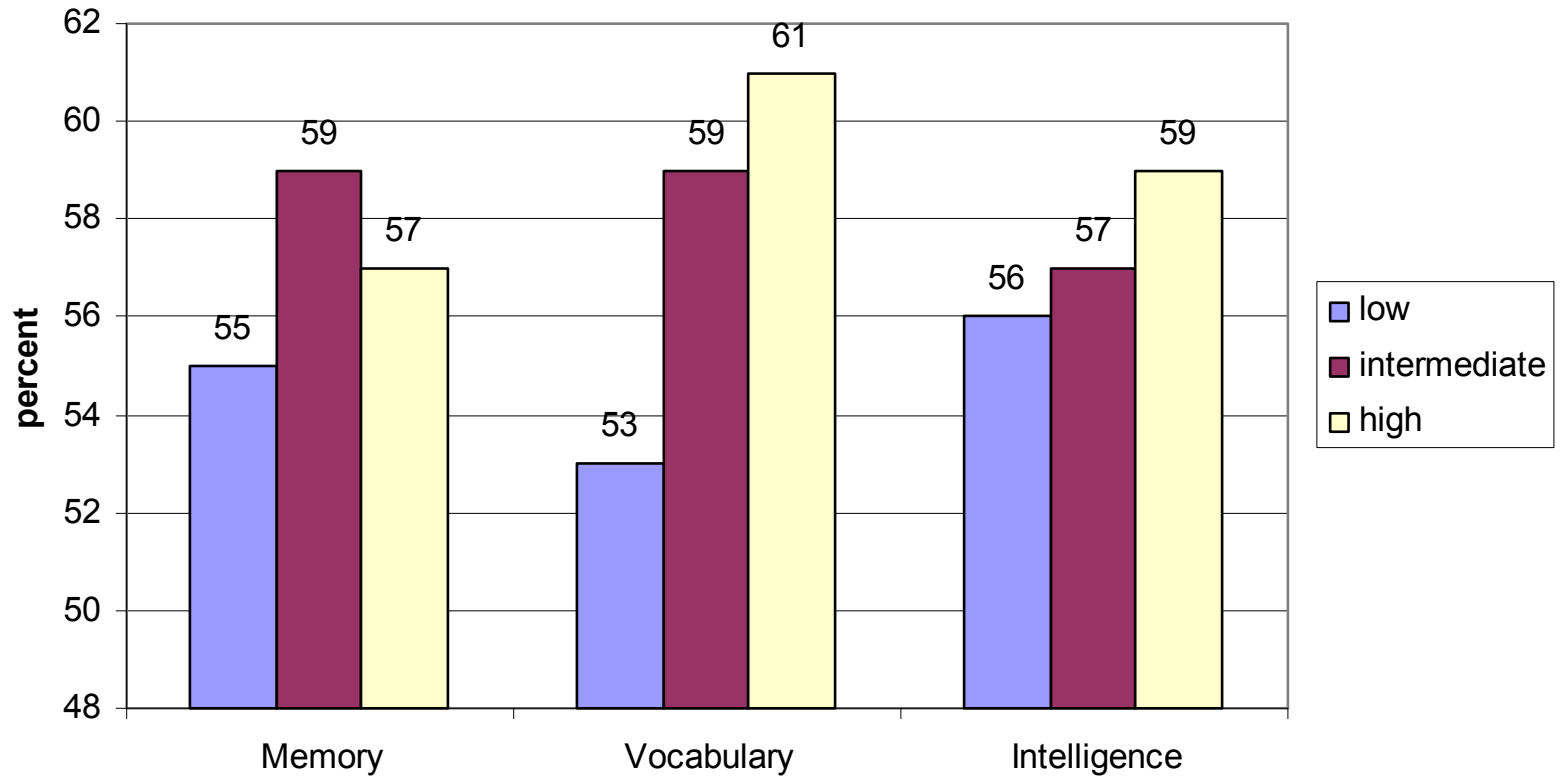
Results

Explicit Problems



Results

Paradigmatic Q-A-Sequence



Results

Table: Implicit by levels of short-term memory

| Age | Short term memory | | | Total |
|------------------|-------------------|--------------|------|--------|
| | Low | Intermediate | High | |
| 8 and 9 years | 16 | 12 | 11 | 14 *** |
| 10 and 11 years | 13 | 10 | 12 | 12 * |
| 12 thru 14 years | 7 | 10 | 10 | 10 ** |
| Total | 14 | 11 | 11 | 12 *** |

Results

Table: Paradigmatic Q-A-sequences by levels of passive vocabulary

| Age | vocabulary | | | Total |
|------------------|------------|--------------|------|--------|
| | Low | Intermediate | High | |
| 8 and 9 years | 53 | 57 | 61 | 55 *** |
| 10 and 11 years | 54 | 56 | 52 | 55 * |
| 12 thru 14 years | 67 | 63 | 63 | 63 |
| Total | 54 | 59 | 61 | 58 *** |

Results

Table: Paradigmatic Q-A-sequences by levels of short-term memory

| Age | Short term memory | | | Total |
|------------------|-------------------|--------------|------|--------|
| | Low | Intermediate | High | |
| 8 and 9 years | 52 | 57 | 55 | 55 *** |
| 10 and 11 years | 55 | 57 | 53 | 55 * |
| 12 thru 14 years | 73 | 64 | 60 | 63 *** |
| Total | 55 | 59 | 57 | 57 *** |

Results

Multilevel logistic regression

| | Paradigm. Q-A-Sequence | | | Implicit Problems | | |
|-------------------|------------------------|---------|---------|-------------------|--------|----------|
| | M1 | M2 | M3 | M4 | M5 | M6 |
| Age | .30 ** | .19 | .20 | -.49 *** | -.12 | -.37 *** |
| Memory | .14 + | | | -.28 *** | | |
| Age*Memory | -.01 + | | | .03 *** | | |
| Vocabulary | | .08 | | | -.03 | |
| Age*Vocabulary | | -.01 | | | -.001 | |
| Intelligence | | | .04 | | | -.09 + |
| Age*Intelligence | | | -.004 | | | .001 |
| -2 Log Likelihood | -15,152 | -14,932 | -15,016 | -8,436 | -8,267 | -8,326 |
| Level 3 IW | .09 | .10 | .09 | .00 | .00 | .00 |
| Level 2 R | .49 | .49 | .50 | .36 | .39 | .39 |

- Problematic respondent behaviors
 - Children are prone to many problematic behaviors which do not show up in the data set
 - Moderate impact of cognitive resources
 - Visible interaction effect
 - Cognitive resources work differently
 - depending on age

- Future research
 - Multilevel modeling of interaction effect
 - Validation of responses
 - Assessment of question characteristics
 - Interviewer behavior
 - General approach
 - Resolving problems

End

Thank you

marek.fuchs@uni-kassel.de