

What causes Don't Know Responses of Children in Interviews?

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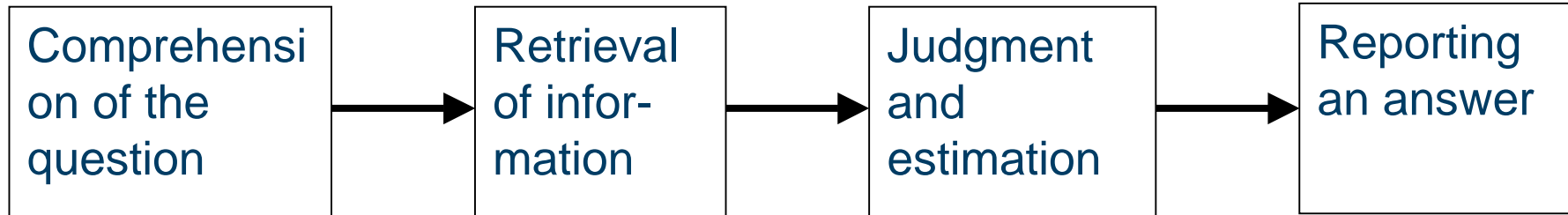
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Question-Answer Process



Groves et al. 2004

- Problems in the response process can be allocated
- Problems in comprehension and reporting are due to the research instrument
- Problems in retrieval and judgement can be ascribed to the respondent

Item-Nonresponse

- Response depends on
 - Cognitive State
knowledge of respondent
 - Available
 - Accessible
 - Generateable
 - Ignorant
 - Adequacy Judgement
assessment if answer meets requirements
 - Communicative intent
wish to provide information or not

Beatty et al. 1998

Categories of DK

- **Research instrument**
comprehension and response
- **Cognitive state**
accessible, generateable, ignorant
- **Adequacy judgement**
(also estimation and judgment)
- **Communicative intent**

= different reasons for don't know answers

Research Categories

- Research Instrument
 - Comprehension
 - Response
- Cognitive State
 - Failure in memory
 - No knowledge/ignorance
 - Not yet thought about
 - Indifference
 - Failure in estimation and judgement
 - Too taxing to compute a response
 - Failure to give a reason for earlier statement
- Adequacy Judgement
 - No more information (needed)
 - Expression of insecurity (but information given)
- Communicative Intent
 - Response to a sensitive question

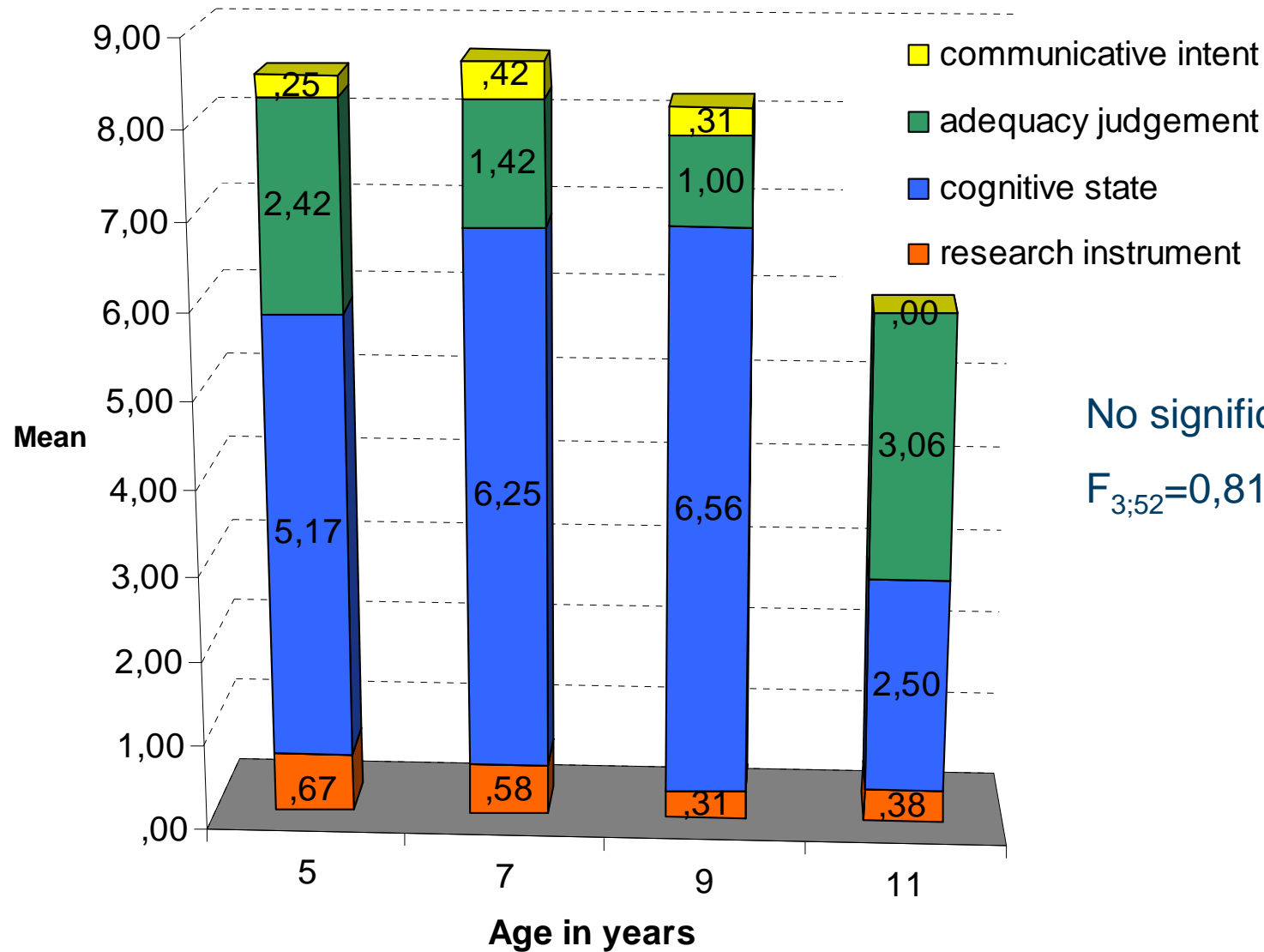
Research Question

- Hypothesis 1
The younger the respondent the more DK answers due to problems with the research instrument.
- Hypothesis 2
The younger the respondent the more DK answers because of the cognitive state.
- Hypothesis 3
The younger the respondent the more DKs as a result of an adequacy judgment.
- Hypothesis 4
The younger the respondent the less DK answers as a consequence of the communicative intent.

Research Design

- Semi-structured qualitative interview approach
- 56 children aged 5 to 11
- Telephone and face-to-face interviews with each respondent
- Interview guideline structured by task complexes (for comparability)
Smalltalk, instruction, introduction, warming up, narration, association, projection, sensitive topic, questions, evaluation
- Interview content: leisure time activity and consumption

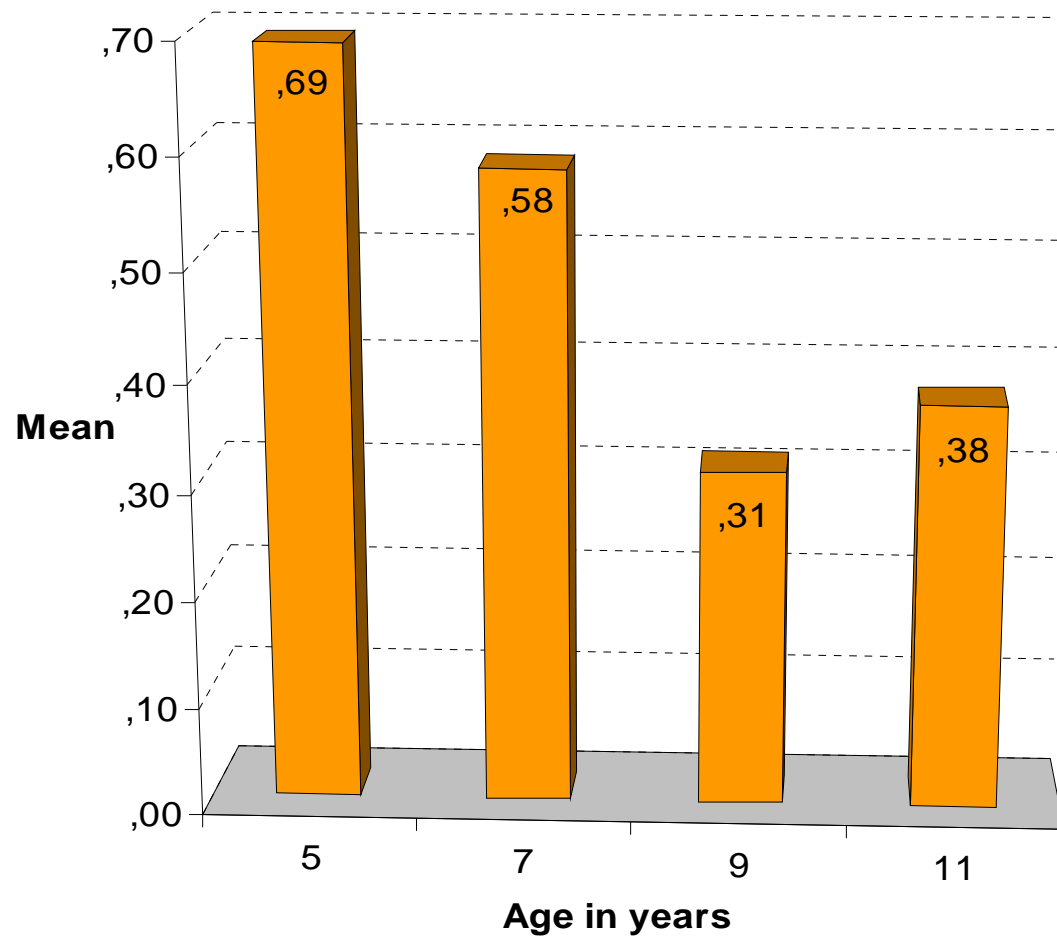
Results: Data Overview



No significant age difference
 $F_{3;52}=0,811; p=.494$

Results: Hypothesis 1

Average number of DK responses due to problems with research instrument by age of respondents

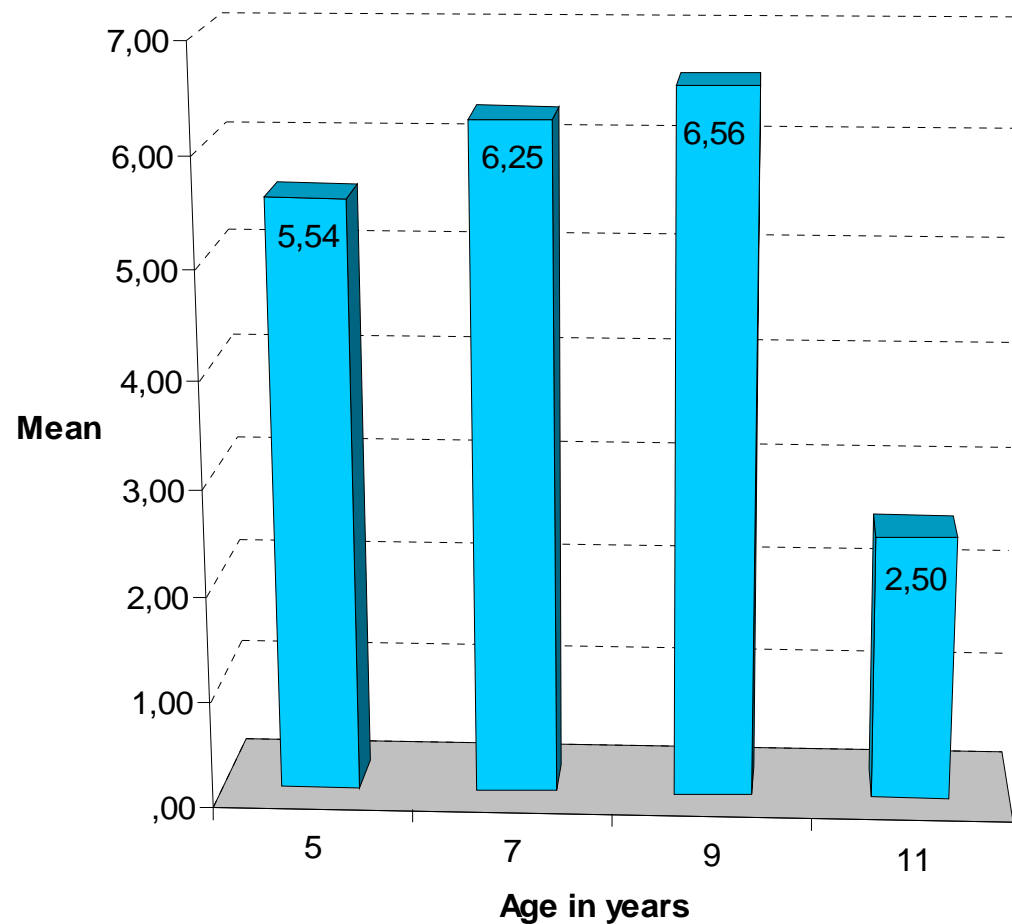


- Younger children don't have significantly more difficulties in comprehension and response.

$$F_{3;52}=0.181; p=.909$$

Results: Hypothesis 2

Average number of DK responses due to the cognitive state by age of respondents

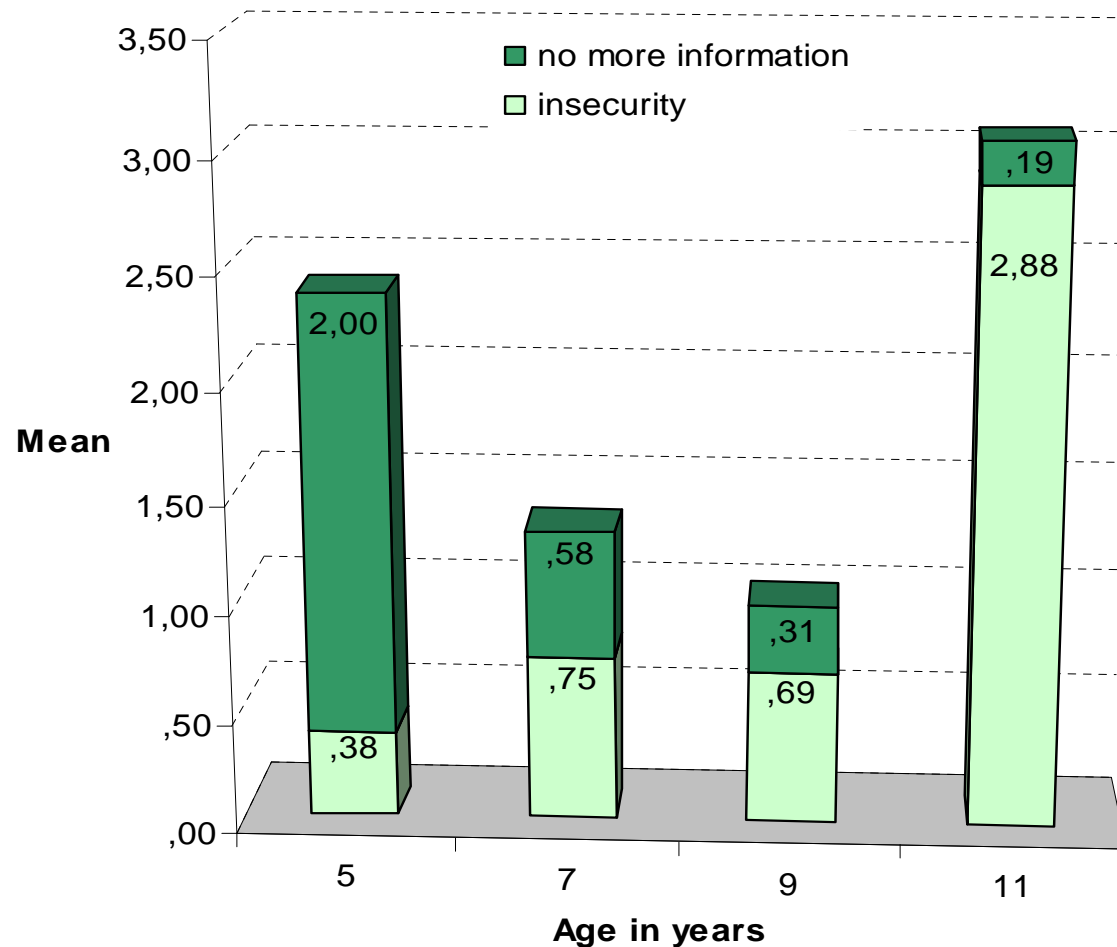


- Significant effect of age on DK due to cognitive state
- Oldests with significant lower number of DKs

$$F_3=3.184; p=.031; \eta^2=.155$$

Results: Hypothesis 3

Average number of DK responses due to an adequacy judgement by age of respondents



- Age groups differ in the number of DK as a result of an adequacy judgement only on a 10% level.
- Subcategories with opposite effects outweigh age differences
older respondents more insecure but use less DK to end enumeration

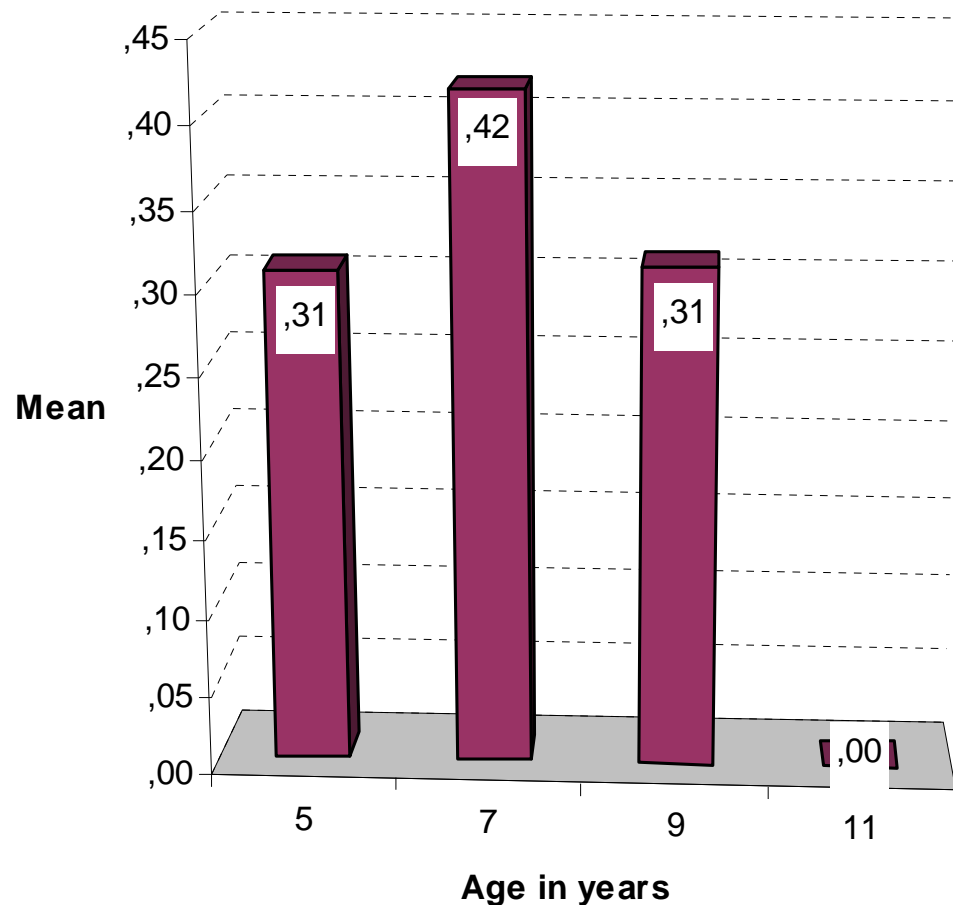
$F_3=2.420$; $p=.077$, $\eta^2=.122$

Insecurity: $F_3=6,811$; $p=.001$; $\eta^2=.28$

No more: $F_3=7.019$; $p<.000$; $\eta^2=.288$

Results: Hypothesis 4

Average number of DK responses due to the communicative intent by age of respondents



- Age groups differ in amount of DK answers due to communicative intent (on a 10% level)

$F_3=2.252$; $p=.093$; $\eta^2=.115$

Summary of results

	Age effect	Mean	Eta ²
DK	No	7.7143	0.045
Research instrument	No	0.4643	0.010*
Cognitive state	Yes	5.0357	0.155*
Adequacy judgement	Yes (on a 10% level)	1.9821	0.122*
Communicative intent	Yes (on a 10% level)	0.2321	0.115**

* transformed to the square root due to violation of assumption of homogeneity of variances

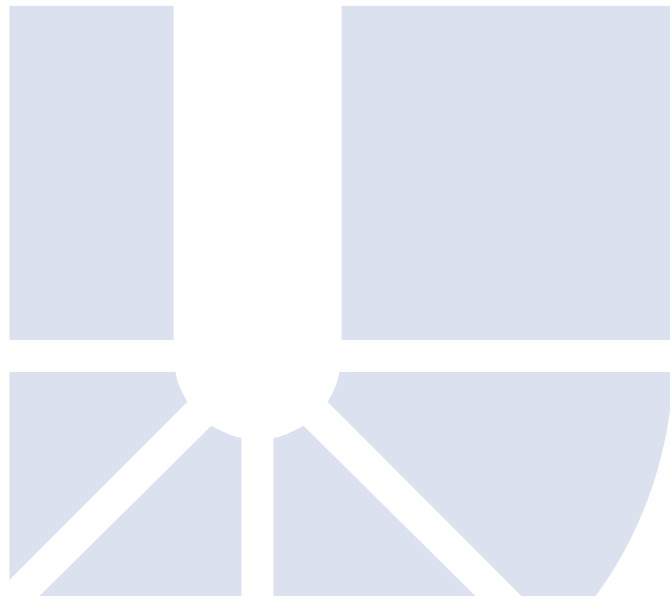
** violation of assumption of homogeneity of variances (although transformed)

- No linear correlation but u- or inverse u-curves
- Cognitive state: less DK for 11 year olds
- Insecurity as personal characteristic causes more DK with age
- Communicational style to end enumeration with DK disappears with age
- More DK due to communicative intent for 7 and 9 year olds

Summary

- To avoid DK due to research instrument:
 - pretesting
 - non-standardised methods
 - no distractions
- To avoid DK due to cognitive state:
 - DK might be preferred
 - No time limits
- To avoid DK due to adequacy judgement
 - Encourage + interviewer training

Thank you!



Examples Coding

■ Research instrument

I: Wie groß ist der denn dann?

LL (m, 5): Weiß ich nicht.

I: ((zeigt mit den Händen)) Mh, so ein kleiner oder eher so ein größer?

LL (m, 5): Kleiner.

I: *How big is it then?*

LL: *I don't know.*

I: *((gives a measure with hands)) Mh, such a small one or more like a big one?*

LL: *Smaller.*

■ Cognitive state

I: Wie viel hast du da?

JD (f, 7): Äh, das weiß ich nicht, die muss ich dann zählen.

I: *How many do you have?*

JD (f, 7): *Äh, I don't know that, I have to count them then.*

Examples Coding

■ Adequacy judgement

I: Warum mag sie das nicht so.

I: Why doesn't she like that?

NS (f, 7): Weiß ich nicht, weil (.) das nicht so gut ist für die Zähne.

NS (f, 7): Don't know, because (.) that's not so good for the teeth.

■ Communicative intent

I: Was war das wo du da angestellt hast?

I: What was it you have done?

6 Sek. Pause

6 sec. pause

SD (m, 7): Ich weiß nicht mehr.

SD (m, 7): I don't know any more.