

The acquisition of the exhaustive interpretation of Hungarian focus constructions

Lilla Pintér

Research Institute for Linguistics, Hungarian Academy of Sciences
Pázmány Péter Catholic University, Hungary



RESEARCH INSTITUTE FOR LINGUISTICS
HUNGARIAN ACADEMY OF SCIENCES



12th International Conference on the Structure of Hungarian
22-23 May 2015, Leiden

- **Research questions**
- Background
- Experiments
- Results
- Discussion
- Conclusion

Research questions

1. Regarding the exhaustive reading, what are the main differences between the acquisition processes of the following 3 sentence types:
 - (i) sentences with *csak* 'only',
 - (ii) sentences with **structural focus**,
 - (iii) **neutral SVO** sentences?
2. How do these results contribute to the semantic discussion concerning the exhaustive interpretation of these constructions?

- **Research questions**
- Background
- Experiments
- Results
- Discussion
- Conclusion

- Research questions
- **Background**
- Experiments
- Results
- Discussion
- Conclusion

Background – *csak* ‘only’

Horn (1969): sentences containing focus particles
have **two meaning components**

(1) *Only Muriel voted for Hubert.* (Horn 1969: 98)

Assertion: ‘No one other than Muriel voted for Hubert’
(negative contribution)

Presupposition: ‘Muriel voted for Hubert’
(positive contribution, prejacent)

Hungarian *csak*: Kenesei (1986), Szabolcsi (1994)

(2) *Csak Péter alszik.* (Kenesei 1986: 134)

Background – *csak* ‘only’

Different proposals regarding the status of the prejacent:

- Horn (1996): presupposition of existence
(‘Someone voted for Hubert’)
- van Rooij & Schulz (2005): conversational implicature
- Beaver & Clark (2008), Roberts (2011): backgrounded entailment

Consensus: the exhaustive implication is an **assertion**

Roberts (2011) – proffered content

Background – structural focus

structural / pre-verbal / identificational focus

- syntactically and prosodically marked

(3) *PÉTER aludt a padlón.* (Szabolcsi 1981: 144)

‘It was Peter who slept on the floor.’

What does structural focus express?

- exclusion by identification (Kenesei 1986)
- exhaustive identification (É. Kiss 1998)
- specificational predicate (Higgins 1973, É. Kiss 2011)

Background – structural focus

How do sentences containing structural focus express this exhaustive meaning?

1. [+exhaustive] semantic feature

Szabolcsi 1981, É. Kiss 1998, among others

2. presupposition

Kenesei 1986, van Leusen & Kálmán 1993,
Szabolcsi 1994, Bende-Farkas 2009, É. Kiss 2011

“The focus-containing utterance *presupposes* rather than *asserts* the uniqueness of its antecedent.”

(van Leusen & Kálmán 1993: 12)

Background – structural focus

3. implicature

- conversational implicature

Wedgwood 2003, 2005; Onea & Beaver 2011

“The pragmatic tendency to interpret cooperative answers to questions as complete then explains the exhaustivity effects.”

(Onea & Beaver 2011: 358)

- conventional implicature

Gerőcs, Babarczy & Surányi 2014

Background – Previous experiments I.

Onea & Beaver (2011)

(4) a. *Csak MARCI fogott meg egy lepkét.*

b. *MARCI fogott meg egy lepkét.*

c. *Marci megfogott egy lepkét.*

Possible responses:

Yes, and Peter caught a butterfly too.

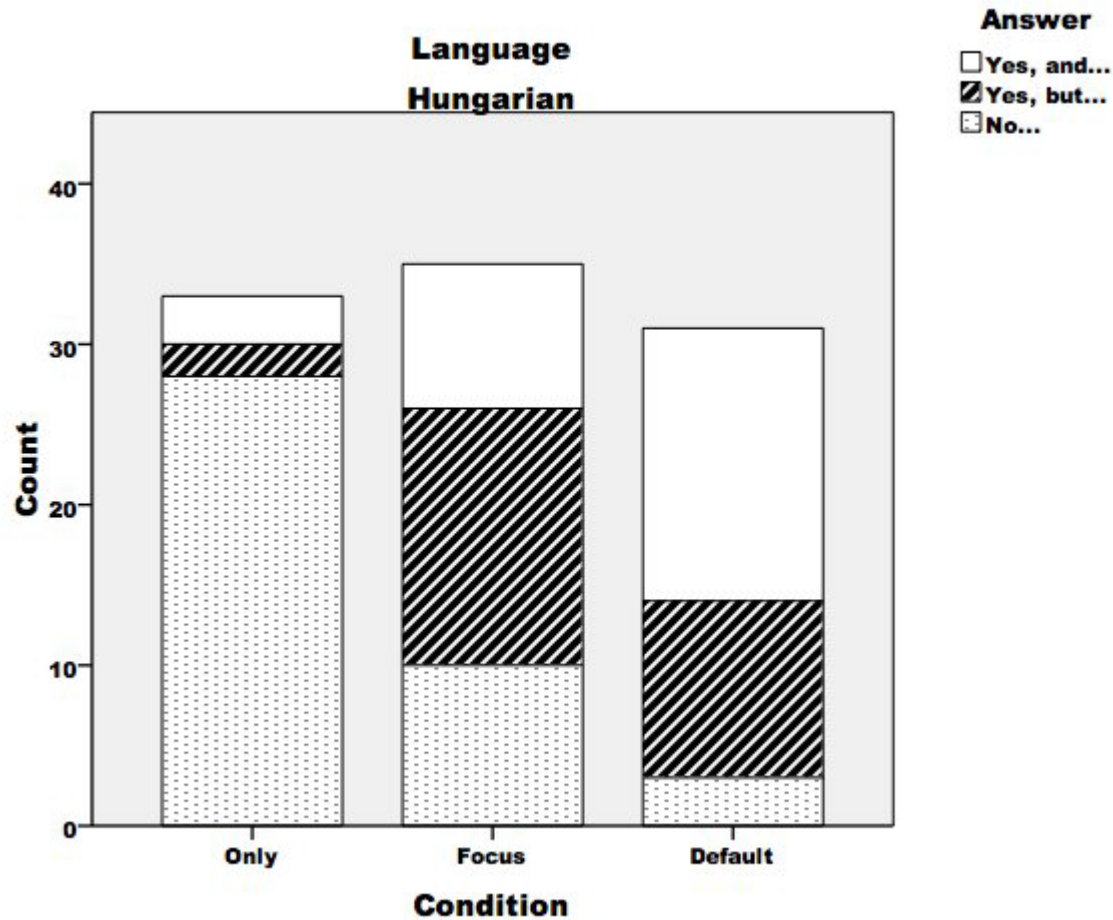
Yes, but Peter caught a butterfly too.

No, Peter caught a butterfly too.



Background – Previous experiments I.

Onea & Beaver (2011)



Background – Previous experiments II.

Gerőcs, Babarczy & Surányi (2014)

Experiment 1 – online truth-value judgment task

Experiment 2 – offline, indirect task

→ Exhaustivity of structural focus is due to a conventional implicature

- an implicature associated with a particular form;
- answer to the Question under Discussion
(Roberts 1998)

Background – Previous experiments III.

Kas & Lukács (2013) – acquisitional study

Truth Value Judgment task – binary yes/no answers
(not suitable for testing theories concerning the semantic status of exhaustivity)

- Neither 6-year-olds nor 10-year-olds showed any sign of focus sensitivity as a group.
- Responses of adults were inconsistent too.

- Research questions
- **Background**
- Experiments
- Results
- Discussion
- Conclusion

- Research questions
- Background
- **Experiments**
- Results
- Discussion
- Conclusion

3 experiments

Experiment 1. (sentences with structural focus)

(1) A NYUSZI *emelte fel* *a* *zászlót.*
the rabbit raised up the flag-ACC
'It is the rabbit who has raised the flag.'

Experiment 2. (sentences with *csak* 'only')

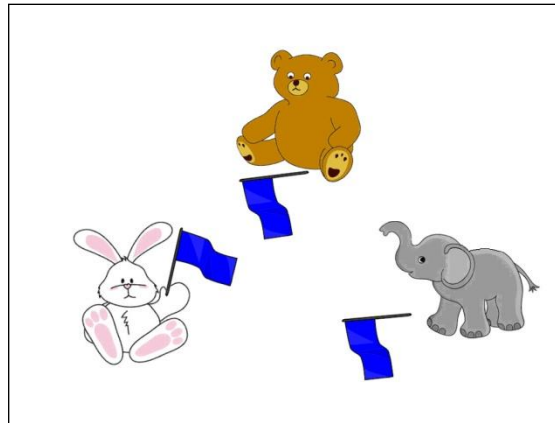
(2) Csak a nyuszi *emelte fel* *a* *zászlót.*
only the rabbit raised up the flag-ACC
'It is only the rabbit who has raised the flag.'

Experiment 3. (neutral SVO sentences)

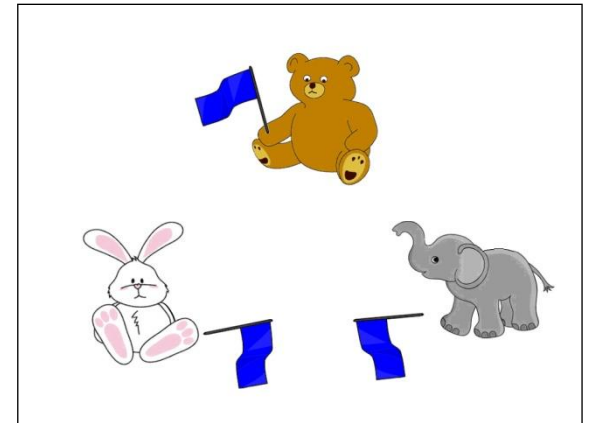
(3) *A nyuszi* *fel-emelte* *a* *zászlót.*
the rabbit up-raised the flag-ACC
'The rabbit has raised the flag.'

Conditions of Experiment 1–3.

Control conditions:

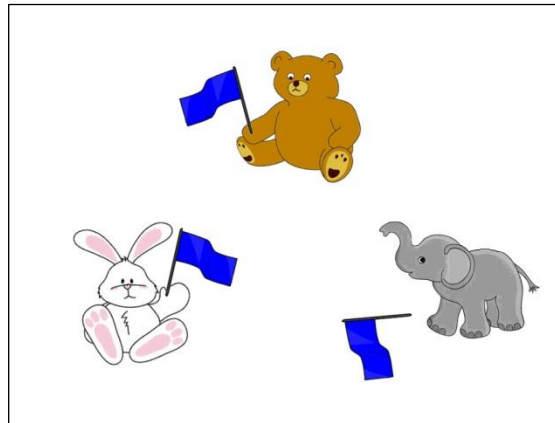


(i) true / exhaustive condition

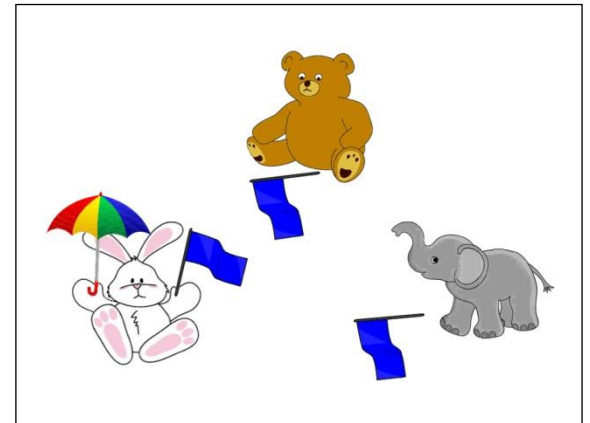


(ii) false condition

Critical conditions:



(iii) non-exhaustive condition



(iv) condition (i) with a distractor

Procedure

Sentence – picture verification task (Experiment 1 – 3)

Experiment 1 – 1a: yes/no answers

– 1b: 3-point-scale 

cf. Katsos & Bishop (2011)

Balázs & Babarczy (in press)

4 conditions x 8 items = 32 test sentence-picture pairs
+ 24 filler sentence-picture pairs

- randomized order, SR Research Experiment Builder
- 2 occasions

Procedure

Participants:

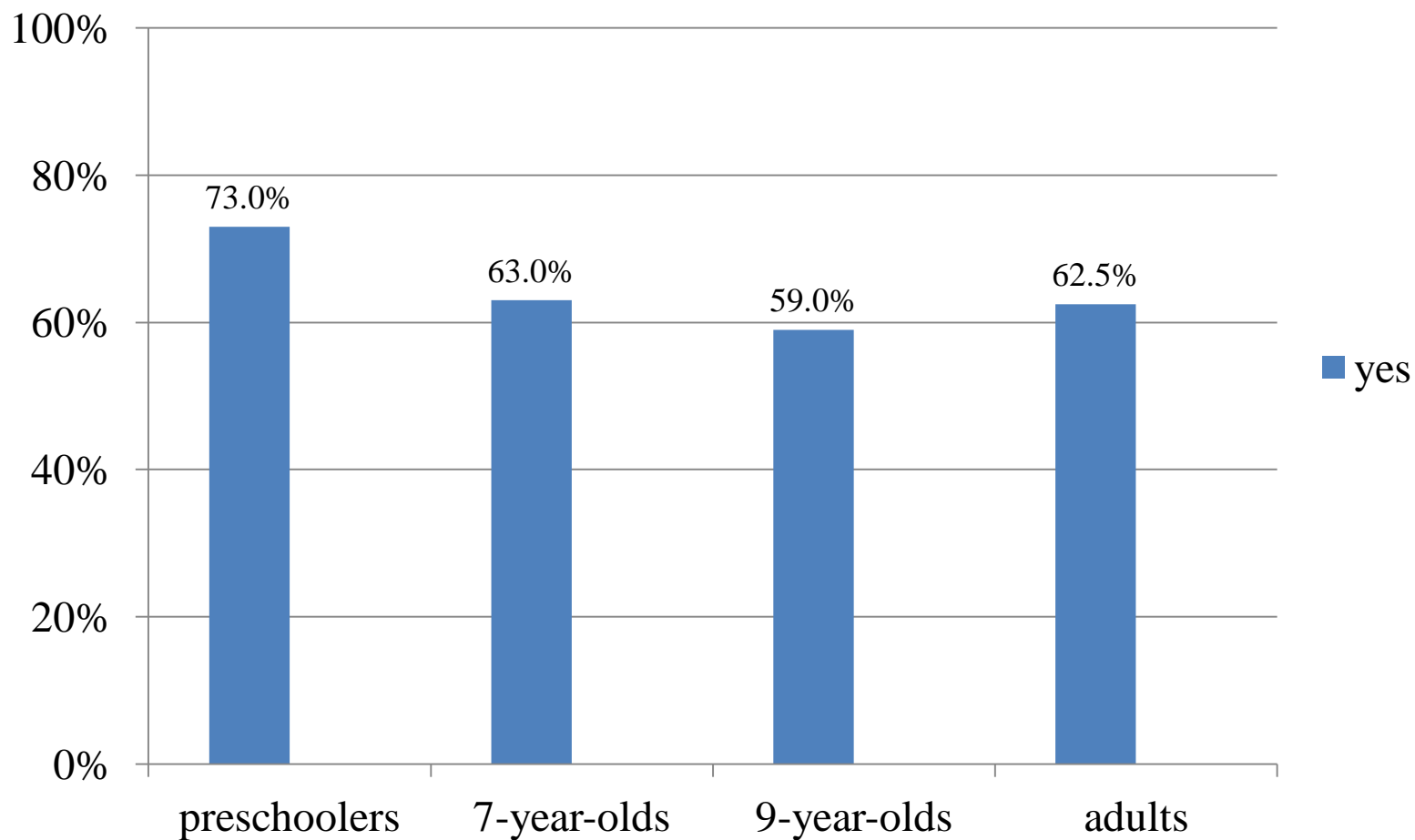
4 age groups in each experiments (Exp 1a, 1b, 2, 3)

- 15 **preschoolers** (mean ages: 5;9, 6;2, 5;9 and 6;4)
- 15 **7-year-olds** (mean ages: 7;5, 7;2, 7;5 and 7;6)
- 15 **9-year olds** (mean ages: 9;7, 9;7, 9;3 and 9;6)
- 15 **adults** (mean ages: 22;7, 37;5, 42;7, and 22;10)

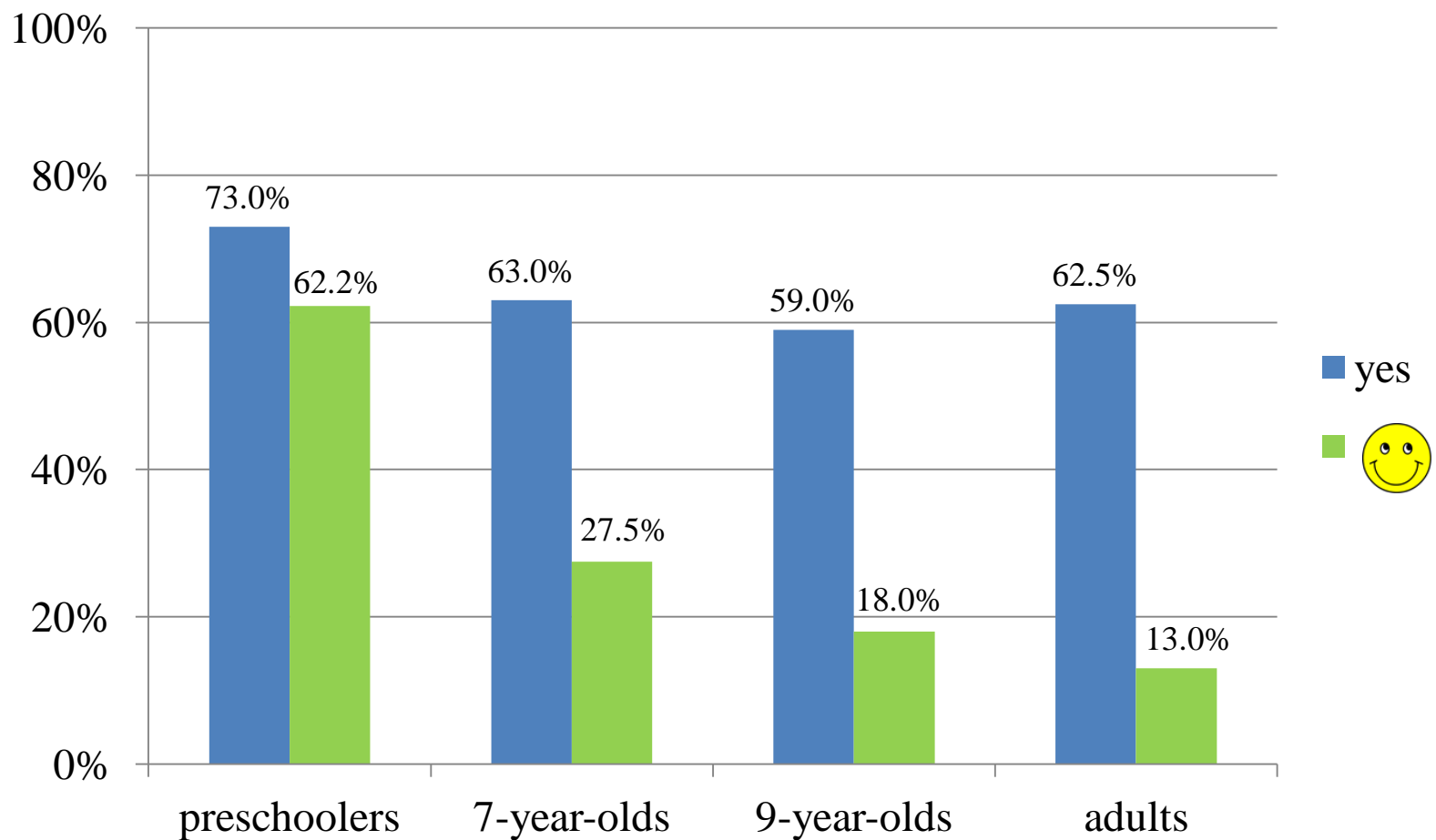
- Research questions
- Background
- **Experiments**
- Results
- Discussion
- Conclusion

- Research questions
- Background
- Experiments
- **Results**
- Discussion
- Conclusion

Acceptance ratings of sentences with structural focus (Experiment 1a and 1b) in non-exhaustive contexts



Acceptance ratings of sentences with structural focus (Experiment 1a and 1b) in non-exhaustive contexts

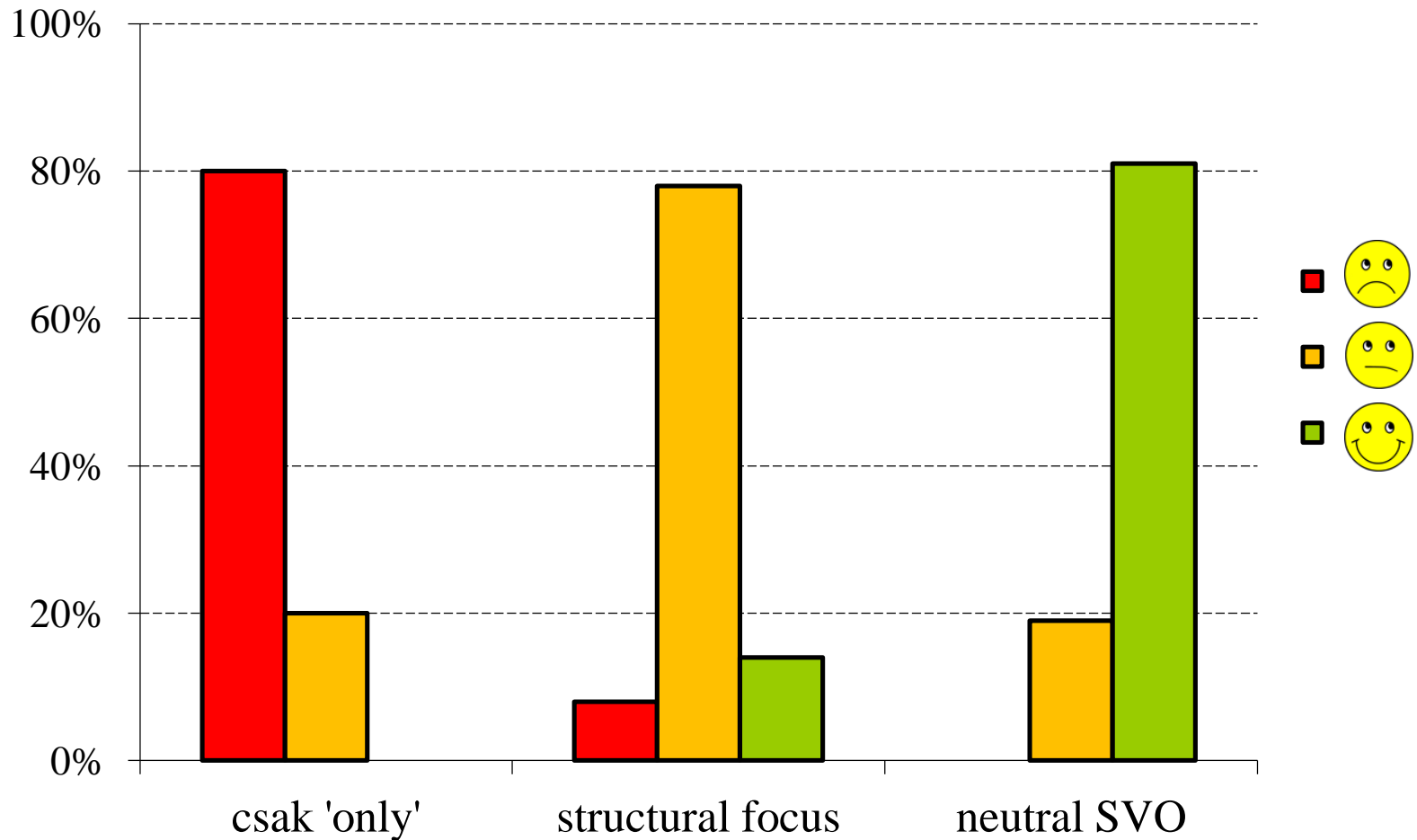


Results of Experiment 1a and 1b

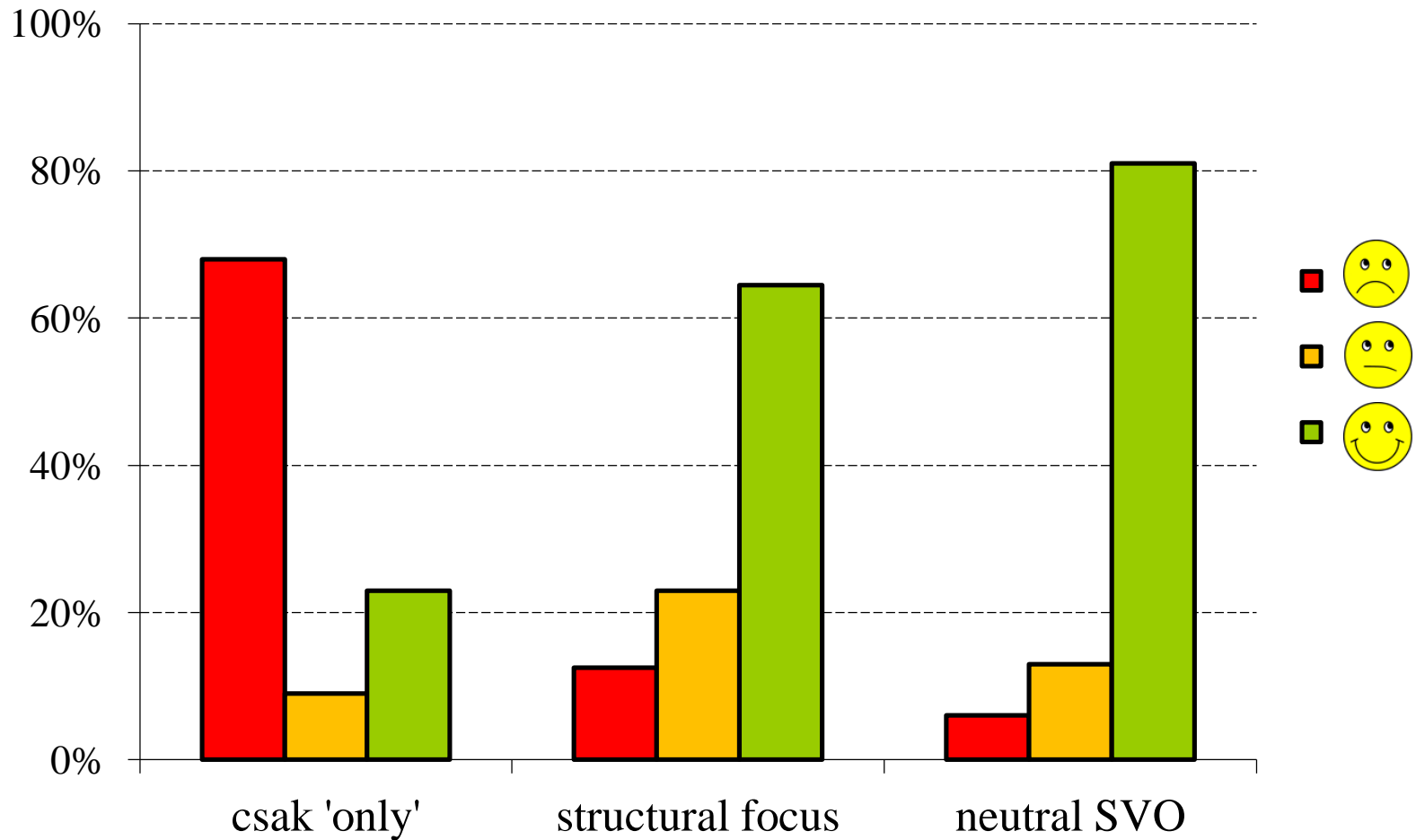
- Experiments using a binary judgment are not suitable to point out the exhaustivity of structural focus.
- In what follows, I am only discussing the results of Experiment 1b.
- In the next experiments, I am going to use the three-point scale.

Results of the **adult** control groups in the
non-exhaustive conditions of Experiment 1 – 3

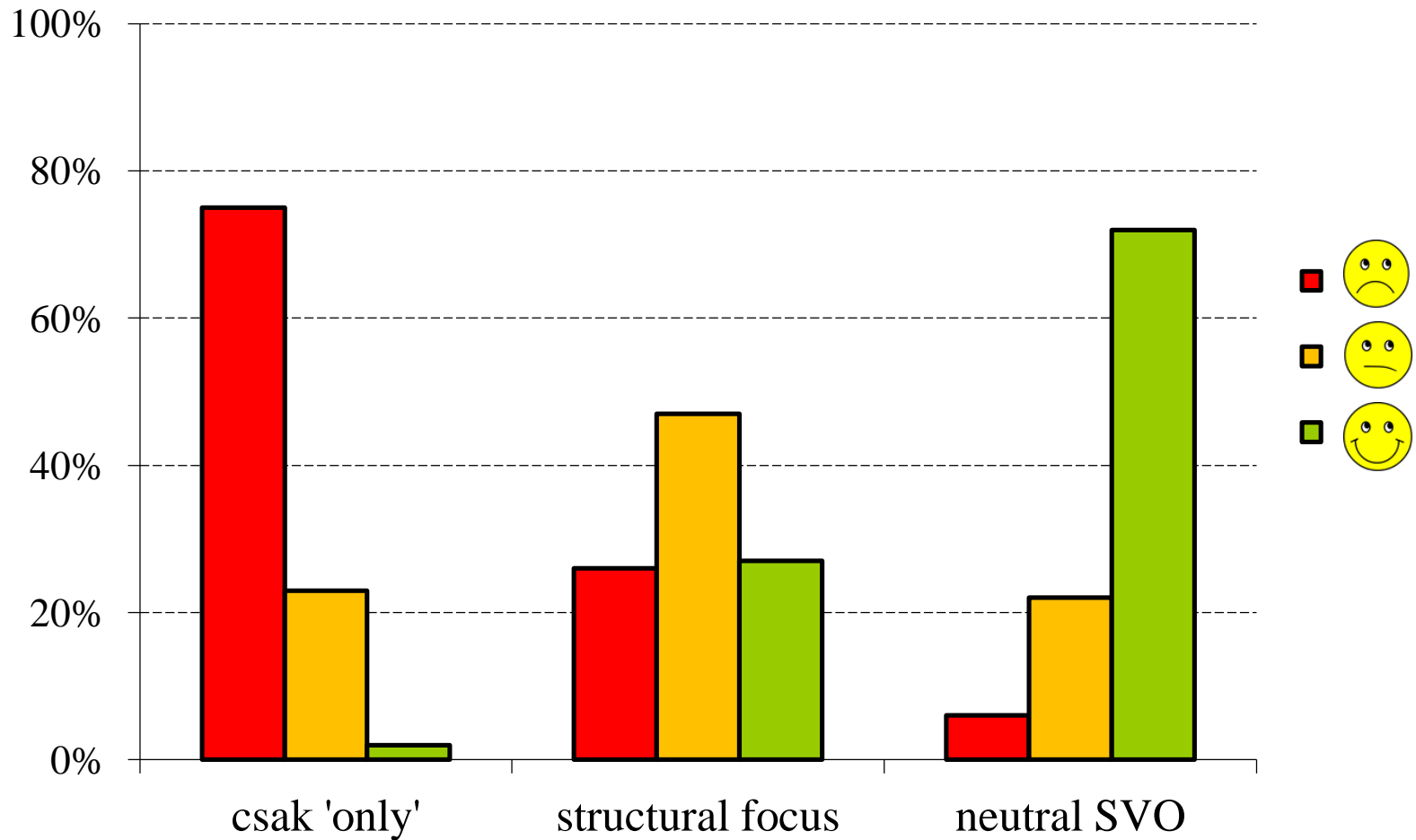
Results of the **adult** control groups in the **non-exhaustive conditions** of Experiment 1 – 3



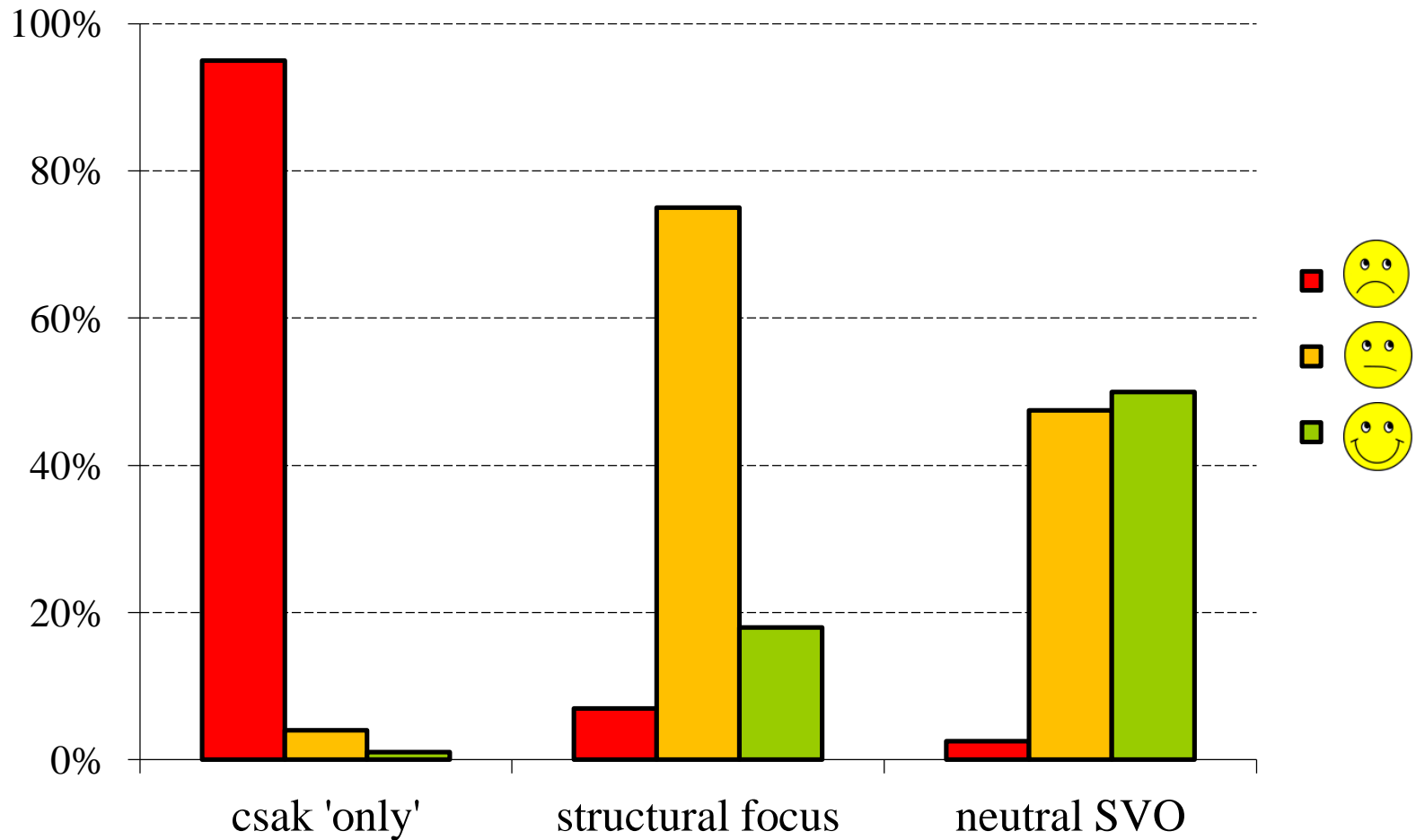
Results of the preschoolers in the non-exhaustive conditions of Experiment 1 – 3



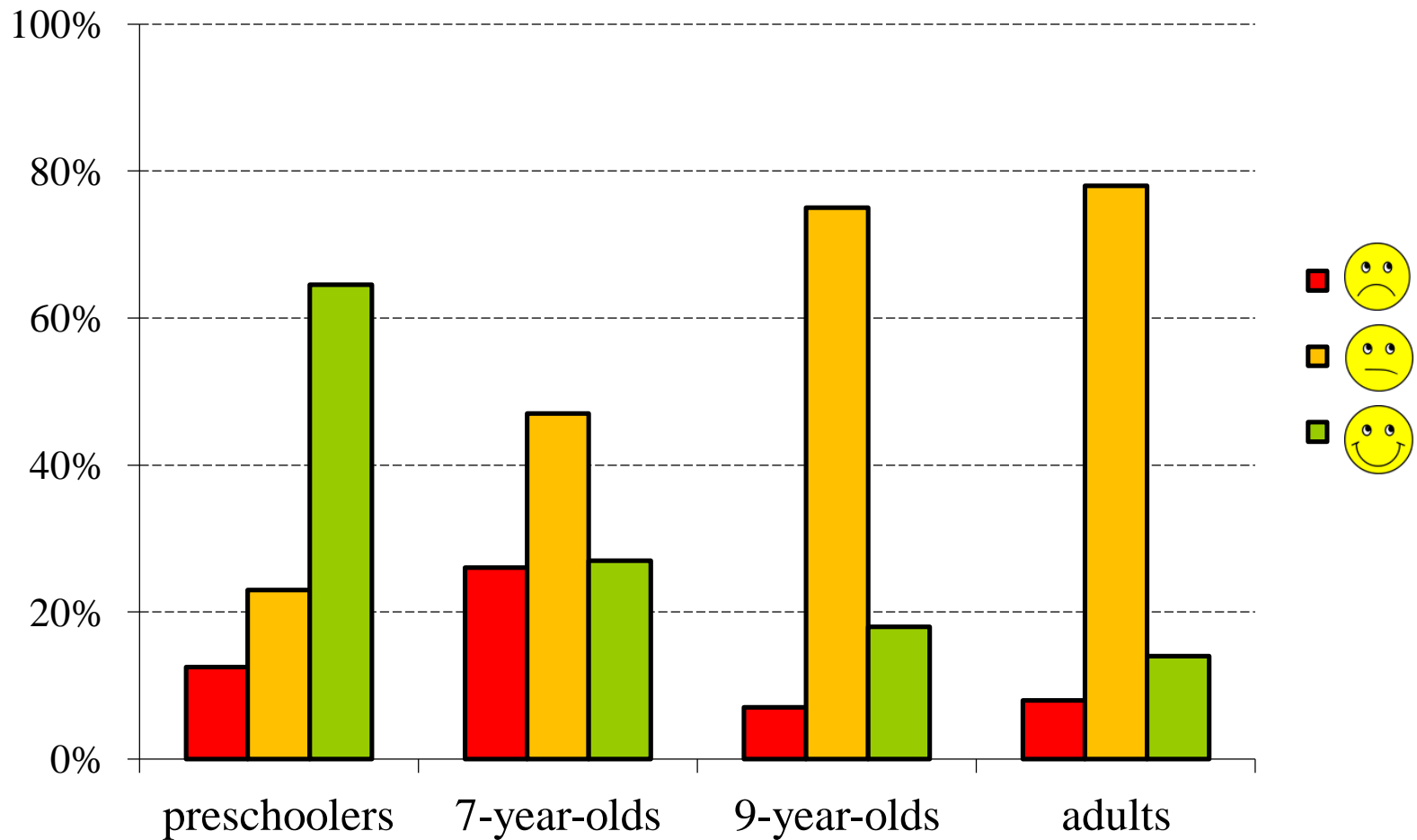
Results of the 7-year-olds in the non-exhaustive conditions of Experiment 1 – 3



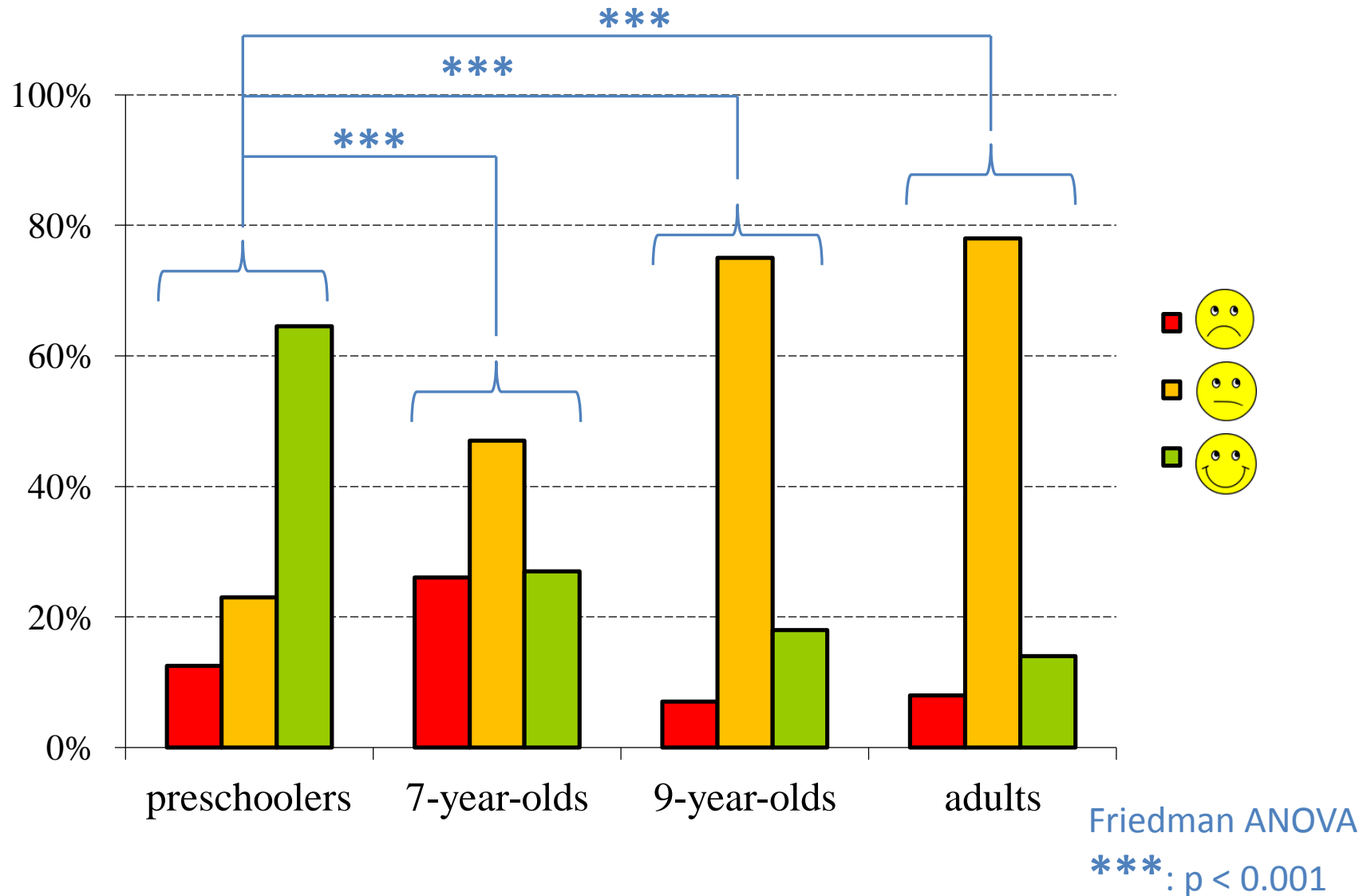
Results of the 9-year-olds in the non-exhaustive conditions of Experiment 1 – 3



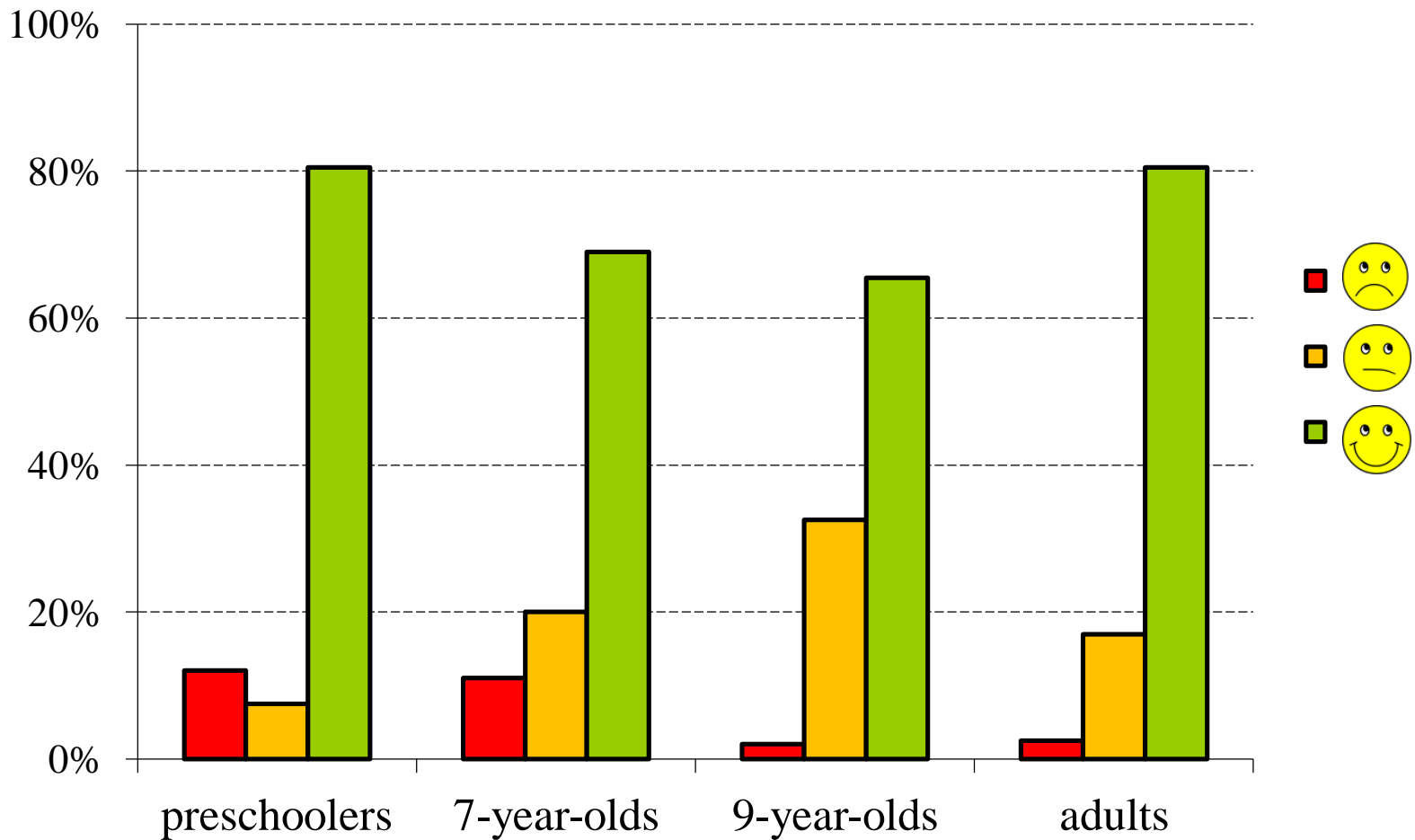
Proportion of responses of the **non-exhaustive condition of Experiment 1b** (structural focus)



Proportion of responses of the **non-exhaustive condition of Experiment 1b** (structural focus)



Proportion of responses of true plus distractor condition of Experiment 1b (structural focus)



- Research questions
- Background
- Experiments
- **Results**
- Discussion
- Conclusion

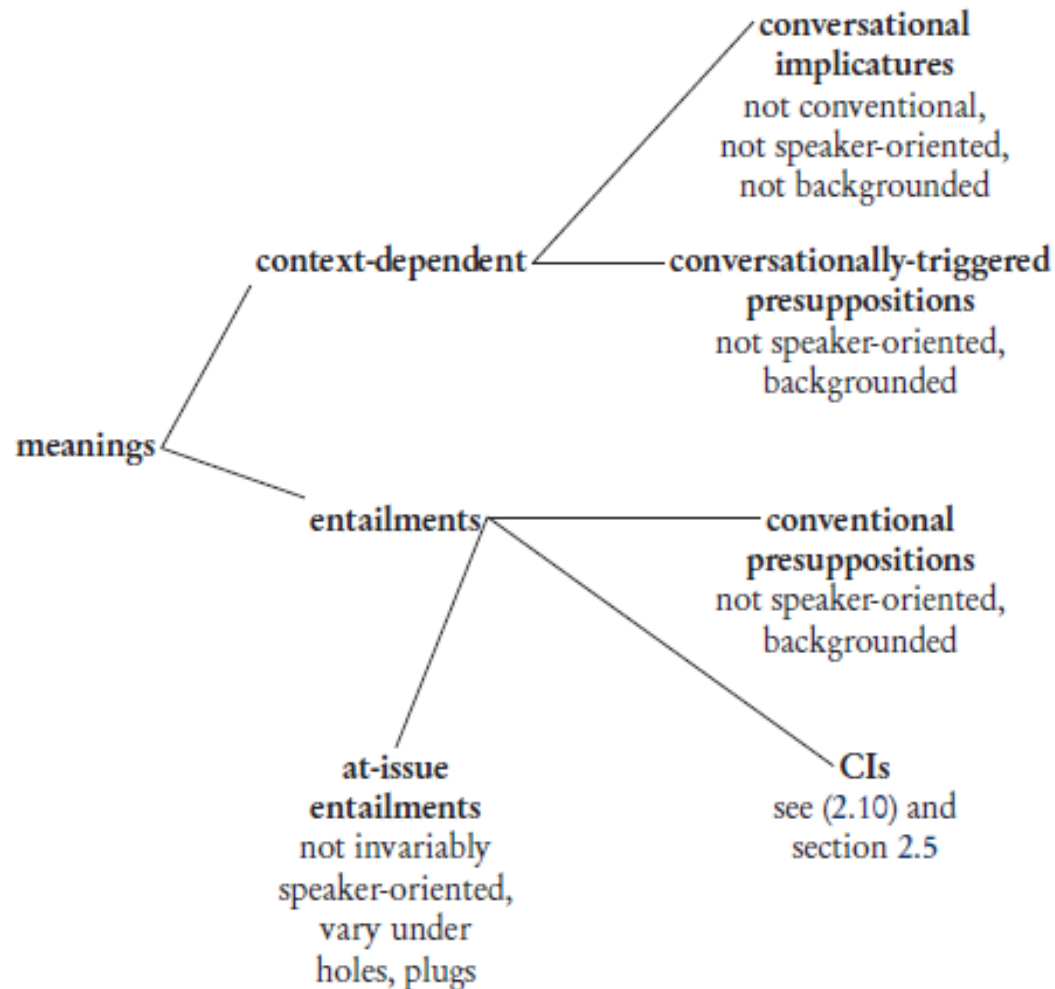
- Research questions
- Background
- Experiments
- Results
- **Discussion**
- Conclusion

Discussion – Findings

- No difference between the age groups in the interpretation of *csak* 'only'.
- In the case of neutral SVO sentences, only 9-year-olds differed from other age groups.
- In the case of structural focus, there is an **increase of exhaustive interpretation with age**.
 - Exhaustivity encoded by a specific syntactic configuration is harder for children to process.

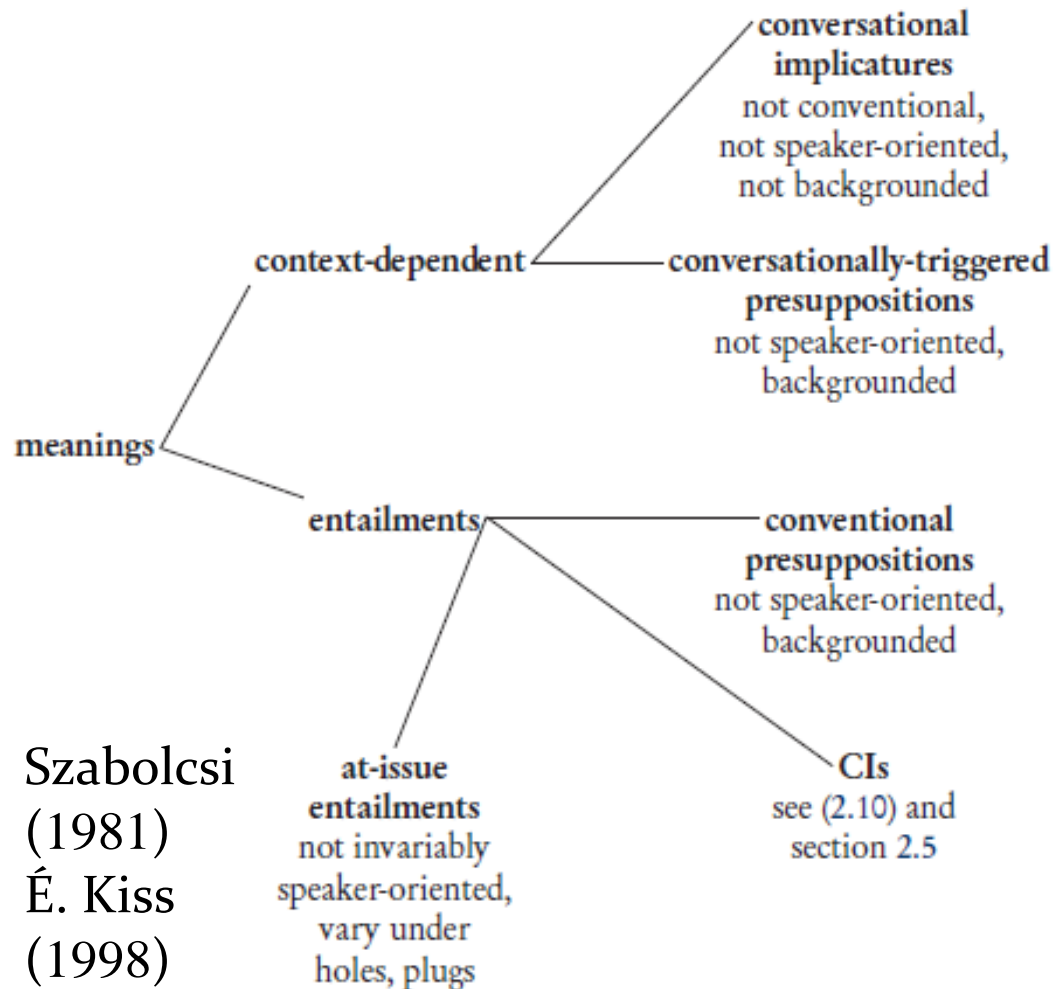
Discussion – The exhaustivity issue

Potts (2005: 23)



Discussion – The exhaustivity issue

Potts (2005: 23)



Wedgwood (2005)

Onea & Beaver (2011)

van Leusen & Kálmán (1993)

Kenesei (1986),
Szabolcsi (1994),
Bende-Farkas (2009)

Gerőcs, Babarczy &
Surányi (2014)

Szabolcsi (1981)
É. Kiss (1998)

Discussion – The exhaustivity issue

- At-issue meanings can be ruled out, because of the differences between Experiment 1b and 2.
(structural focus vs. csak)
- Context dependent meanings can be excluded, because of the differences between Experiment 1b and 3. (structural focus vs. neutral SVO)

Discussion – The exhaustivity issue

- Conventional implicatures:

“In some cases the conventional meaning of the words used will determine what is implicated, besides helping to determine what is said.” (Grice 1967)

(5) *He is an Englishman; he is, therefore, brave.*

(Grice 1967: 24)

Potts (2005): CIs are speaker-oriented entailments which are independent of the at-issue entailments.

(6) *Sheila believes that Chuck, a psychopath, is fit to watch the kids.*

(Potts 2005: 117)

Discussion – The exhaustivity issue

- Conventional presupposition seems to be a good candidate
 - Gazdar (1979: 108): conventional presuppositions arising through syntactic operations (e.g. clefting)
 - see also Karttunen (1974), Büring and Križ (2013)
 - Potts (2005): speaker-oriented, backgrounded meanings that are not easily altered by contextual factors.
- Adopting the view of Kenesei (1986), Szabolcsi (1994), Bende-Farkas (2009) with modification: exhaustivity is a **conventional presupposition**

- Research questions
- Background
- Experiments
- Results
- **Discussion**
- Conclusion

- Research questions
- Background
- Experiments
- Results
- Discussion
- **Conclusion**

Conclusions

Experimental data support the view that there are 3 different kinds of exhaustivity in the 3 discussed constructions.

- Csak – **assertion**
- Structural focus – **conventional presupposition**
- Neutral SVO sentences can also be interpreted exhaustively, however, this is only a **pragmatic implicature** arising in certain contexts.

Thank you for your attention!

This research was supported by grant 108951 of OTKA,
the National Scientific Research Foundation.