

Reading to children aged 0–3 years and the association with home literacy environment and early language development

Stiftung Lesen



Astrid Wirth, Simone C. Ehmig, Lukas Heymann & Frank Niklas



Why are we interested in early reading to children?



Early reading supports children's development in many ways

- Language input ⇒ Receptive and expressive vocabulary
letter knowledge
language comprehension¹⁻⁴
- Content of children's books ⇒ Behavioral role models and
world knowledge⁵
- Closeness to familiar people ⇒ Secure attachment⁶

⇒ Not only shared reading habits support children's development,
but also the surrounding factors of the Home Literacy Environment (HLE)

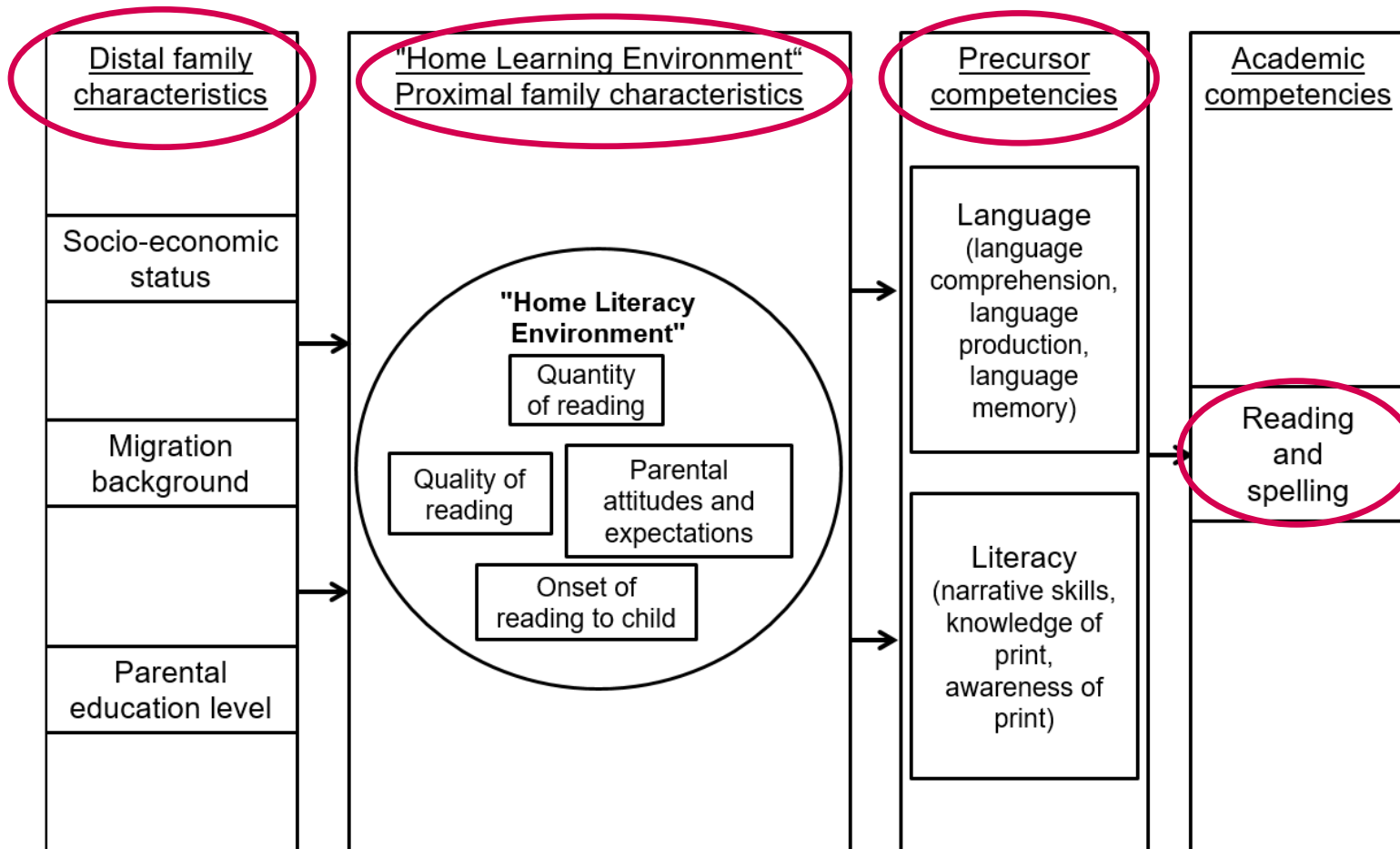


The Home Literacy Environment (HLE)

- Onset and frequency of reading to a child
- Number of (children's) books at home
- Parent's reading behavior
- Parent's attitudes towards reading
- Frequency of library visits
- Teaching of letters by the parents^{7,8}
- ...



The Home Literacy Environment



Association of distal and proximal family characteristics with precursor and academic competencies (cf. Niklas, 2015)



Early reading and the HLE as a long-term investment in children's competencies

→ Good Readers Had an Early Start in Literacy Learning

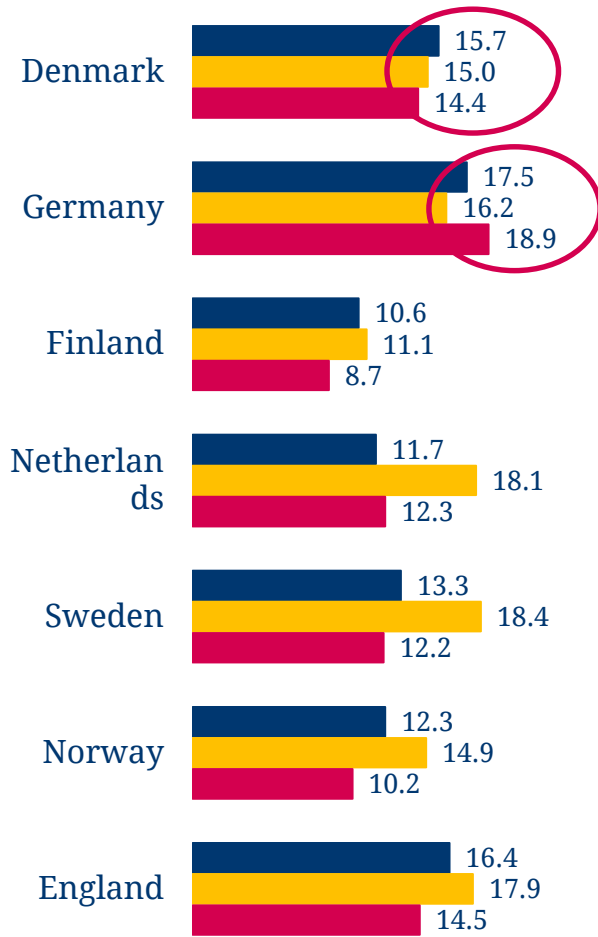
PIRLS indicates two basic ways students get an early start in literacy learning:

- Having parents who often engage them in early literacy activities
- Attending preprimary education

Parents are students' first teachers, and 39 percent of the students had parents who reported often engaging their children in early literacy activities such as reading, talking, or singing to them as well as telling them stories and teaching them to write alphabet letters. These students had higher reading achievement than students whose parents engaged them less frequently in early literacy activities.



Low performance in literacy – A “renewable” problem in most European countries



Percentage of low performers in reading:

- Adults aged 16-65 (PIAAC 2013; < Competence level 2)
- Adolescents aged 15 (PISA 2015; < Competence level 2)
- Children in 4th year of schooling (PIRLS 2017; < Competence level 3)



The present study



Aim of the present study

Previous studies emphasized the importance of an early onset of reading.⁹

The present study focuses on the situation in families:

- When are parents beginning to read to their children?
- How do they differ from parents who do not (yet) read to their children?
- How is an early onset of reading associated with children's linguistic abilities?
- What can we do to support parents' early reading?



Background of the present study – The reading aloud studies



The present research is part of a series of studies on reading aloud,

- the German Reading Foundation (*Stiftung Lesen*) is providing annually year since 2007,
- focusing specific research questions of reading aloud in Germany,
- connected to the *German Reading Aloud Day* (3rd Friday in November) – 2018 more than 250.000 individuals were involved, reading aloud and listening.
- The studies usually are based on structured interviews with representative samples of parents and / or children in Germany.
- Responsible for conception, operationalization and analysis is the *Institute for Research on Reading and Media*, which is part of the German Reading Foundation.

Stiftung Lesen, based in Mainz, Germany, is a foundation that is committed to reading and literacy promotion. We believe that reading is a prerequisite for full participation in today's media-led and culturally diverse society. Reading is fundamental to human development, it enables people to live full and meaningful lives and contribute towards the enrichment of the communities in which we all live. → www.stiftunglesen.de



The reading aloud studies of Stiftung Lesen 2007 – 2019

Stiftung Lesen



- 2007 – Reading aloud in the family context
- 2008 – Children's perceptions on reading aloud
- 2009 – Why fathers aren't reading to their children
- 2010 – Shared reading habits in families with migration background
- 2011 – The importance of shared reading for children's later development
- 2012 – Reading aloud with digital media
- 2013 – Reading aloud in the family context (changes since 2007)
- 2014 – Reading aloud and families attachment
- 2015 – Reading aloud and children's development of personality and social competencies
- 2016 – Reading aloud – what children desire
- 2017 – Early reading to children
- 2018 – Reading aloud on a regular basis facilitates children's learning to read
- 2019 – The situation of reading aloud in Germany – update and changes since 2013



Methods

- Representative sample of $N = 523$ parents with children between 3 months and 39 months of age
- Quantitative assessment: structured face-to-face interviews with either $N = 128$ fathers (24.5 %) or $N = 395$ mothers
- Mean age of children: 21.6 months ($SD = 12.24$)
- Sex of children: 49.9 % boys, 50.1 % girls



Participants – further demographics of our sample

	<i>N</i>	Percentage (%)
Marital status		
married and living together	363	69.4
unmarried and living together	61	11.7
living apart or single parent	99	18.9
Highest level of education (mothers / fathers)		
low level of education	128 / 138	28.3 / 28.1
Intermediate level of education	209 / 185	39.9 / 35.3
high level of education	166 / 191	31.8 / 36.5
Net household income		
781 € to 2.300 € per month	212	40.5
2.301 € to 3.419 € and over per month	311	59.5
Migration background		
yes, study child or at least one parent	185	35.4
neither child nor parents	338	64.6



Measures

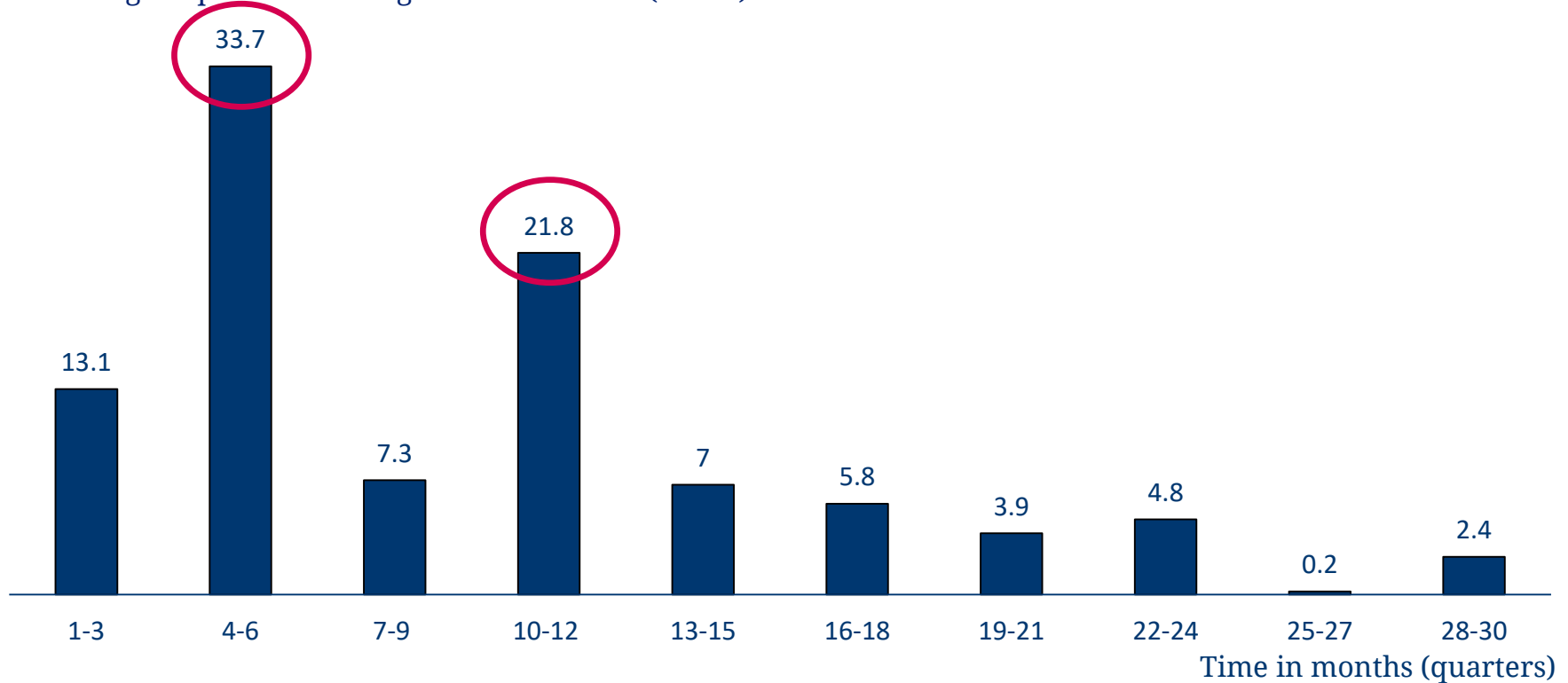
- HLE questionnaire (cf. Niklas, 2015)
9 items, max. 36 points, $M = 18.15$ ($SD = 6.16$), Cronbach's $\alpha = .79$
- Linguistic ability questionnaires SBE-2-KT und SBE-3-KT
(Suchodoletz, Sachse, Kademann & Tippelt, 2012)
58 / 172 items and max. points, $M = 29.85$ ($SD = 7.50$) / $M = 114.46$ ($SD = 15.92$),
Cronbach's $\alpha = .80$ / $.94$
- Further questions regarding
 - parental attitudes towards reading,
 - onset,
 - frequency and quality of reading,
 - everyday behaviour,
 - demographic background



Results

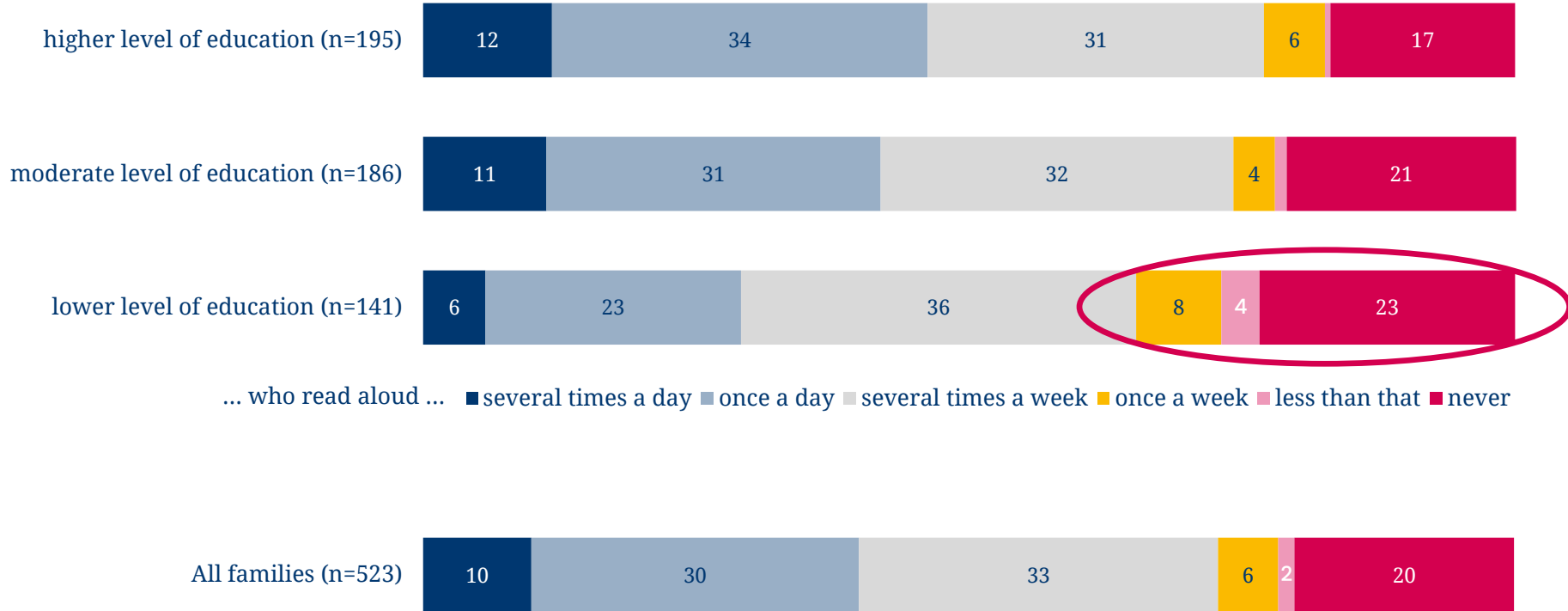
When do parents begin to read to their children?

Percentage of parents reading to their children (n=413)



The educational level of the parents influences whether they read to their children early on

Families with



... who read aloud ... ■ several times a day ■ once a day ■ several times a week ■ once a week ■ less than that ■ never

All parents n=523, in %

“The questions that follow concerns shared reading. By shared reading, we mean looking at picture books together, including books with few pictures or books made of different fabrics, like wood or plastic. How often do you read to your child?“ | “How often does your partner read to your child?“

Source: German Reading Foundation | 2017 Reading Aloud Study



Comparing reading and non-reading parents

- Matching of two subsamples ($N = 89$, respectively) of reading and non-reading parents with regard to their children's age:

$$M_{readers} = 13.69, SD_{readers} = 10.6$$

$$M_{non-readers} = 13.69, SD_{non-readers} = 10.6$$

- Children's sex was approximately evenly distributed with:

$N = 49$ boys (55.1 %) and $N = 40$ girls (44.9 %)



Comparing reading and non-reading parents

Reading and non-reading parents differed significantly with regard to:

- Highest level of education, $t(172) = 2.43, p = < .05, d = .37$
- Net household income, $t(176) = 2.60, p > .05, d = .39$
- Migration status, $\chi^2(1, n = 178) = 3.96, p < .05$

- Non-reading parents estimate the influence of shared reading and frequent talking to children on their later life significantly lower than reading parents,
 $t(176) = 5.16, p < .001, d = .77$ and
 $t(154) = 4.40, p < .001, d = .67$



Everyday behavior of reading and non-reading parents

Variables	<i>M(SD)</i> reading parents	<i>M(SD)</i> non-reading parents	<i>t</i> -value	<i>df</i>	Cohen's <i>d</i>
Showing and naming objects	5.61 (2.02)	1.74 (2.23)	12.12**	174	1.82
Telling made-up stories	1.64 (1.56)	0.35 (1.10)	6.39**	158	.96
Including the child in daily activities, e.g. cooking, cleaning or others	2.83 (2.93)	0.57 (1.75)	6.25**	144	.94
Making music, sing or dance	1.91 (2.10)	0.55 (1.34)	5.13**	149	.77
Doing something where you can get dirty	1.79 (1.59)	0.70 (1.41)	4.85**	174	.73
Playing at home, e.g. with puppets, toy blocks	4.54 (2.20)	3.03 (2.29)	4.47**	176	.67
Drawing or crafting	1.70 (2.01)	0.63 (1.18)	4.32**	142	.65
Playing together outside	4.19 (1.68)	3.35 (2.00)	3.05**	176	.46
Visiting courses, e.g. baby massages, baby swim courses	1.10 (1.08)	0.70 (0.98)	2.69*	176	.40
Saying rhymes, playing finger games	2.06 (2.03)	1.36 (2.29)	2.15*	176	.32
Watching movies, videos, series together	1.89 (2.32)	1.75 (2.72)	0.36	176	.05

Note. ** significant with $p < .01$, * significant with $p < .05$



The HLE and children's level of language skills



- Significant association between the HLE and children's level of linguistic abilities were found,
 $r(52) = .31, p < .05$ for the SBE-2-KT (smaller children) and
 $r(231) = .14, p < .05$ for the SBE-3-KT (older children)
- The frequency of reading to a child correlated significantly with children's linguistic abilities, with
 $r(283) = .17, p < .05$.



Limitations

- Associations between the HLE and children's level of linguistic abilities were lower than in previous studies^{1,10}
- Assessing children's level of linguistic abilities in test settings would have been more expedient



What can we do to support parents' early reading?



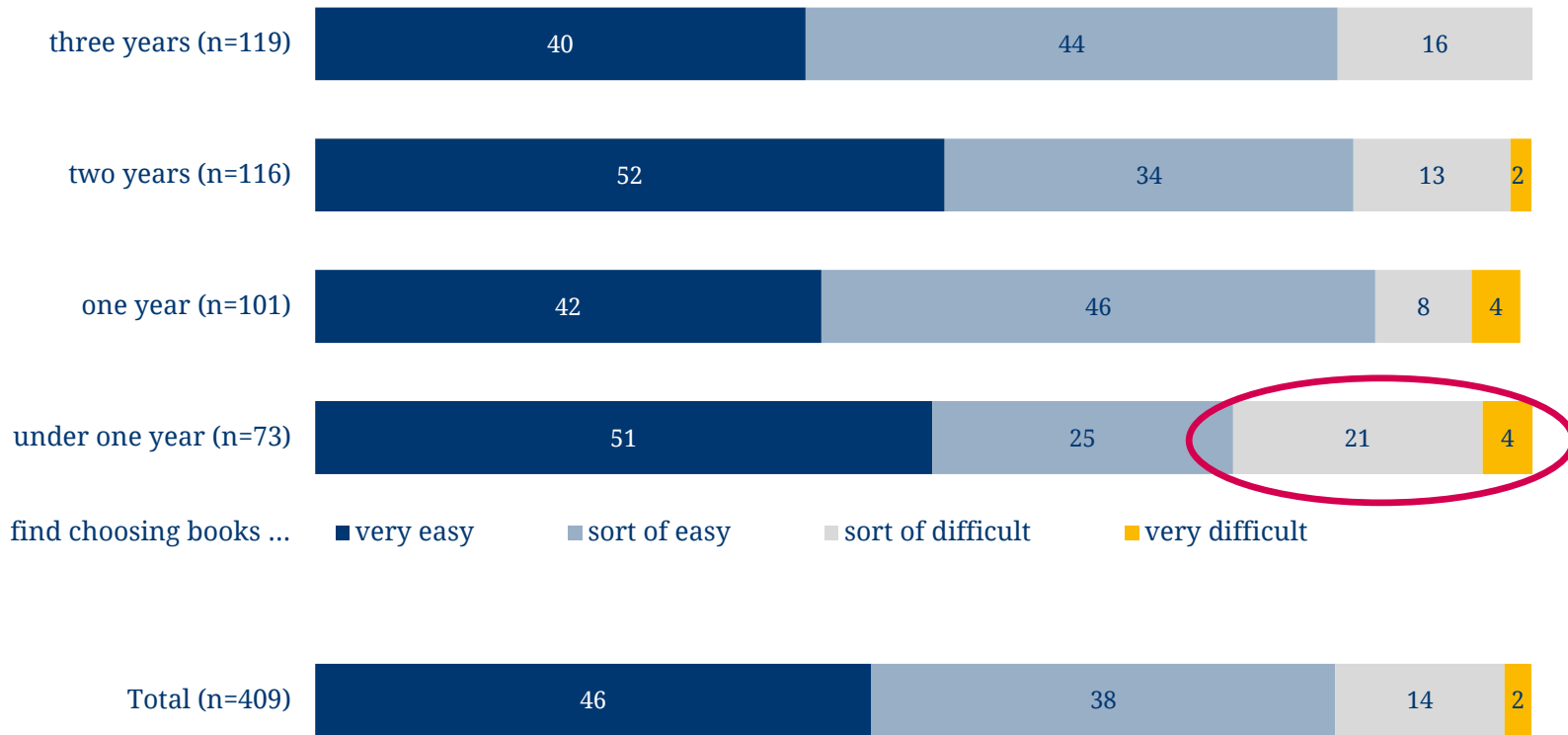
What can we do to support parents' early reading?

1. Facilitate book choices



Parents with very young children need extra assistance when choosing books

Families with children who are ...



find choosing books ... ■ very easy ■ sort of easy ■ sort of difficult ■ very difficult

Parents who read aloud (n=413) in %

“When you are choosing new books for your child, how easy or hard is it for you to make an age-appropriate choice?”

Source: German Reading Foundation | 2017 Reading Aloud Study



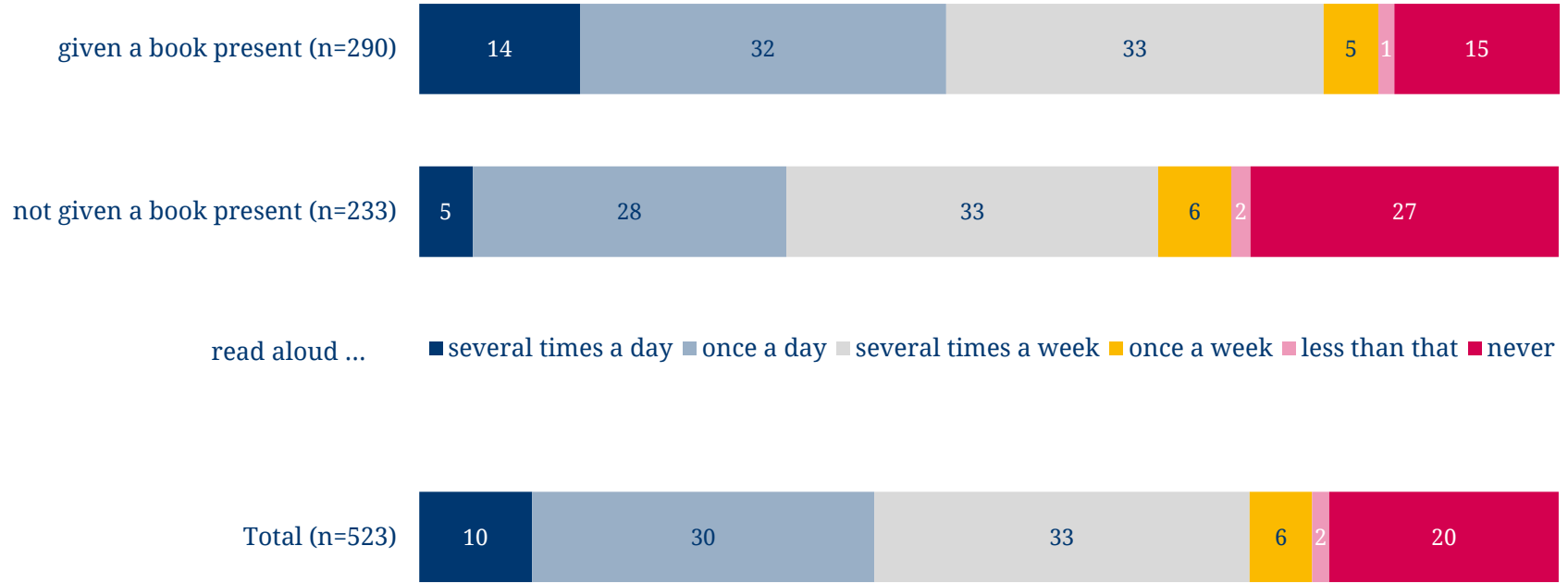
What can we do to support parents' early reading?

1. Facilitate book choices
2. Gifting books



The likelihood that parents start reading aloud early on increases if they are given book presents

Families, who were ...



read aloud ... ■ several times a day ■ once a day ■ several times a week ■ once a week ■ less than that ■ never

All parents (n=523) in %

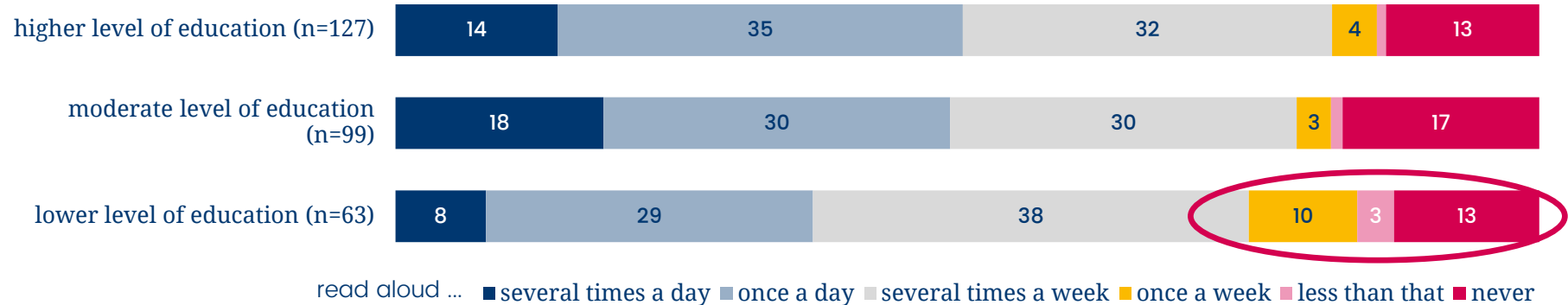
“When your first child was born, did you receive book gifts from family members, friends, or acquaintances?” | “Did you upon the birth of your child receive books from ministries or public offices, or from private companies like drugstores or diaper manufacturers, e.g., in a baby package, which you were able to register for online?”

Source: German Reading Foundation | 2017 Reading Aloud Study

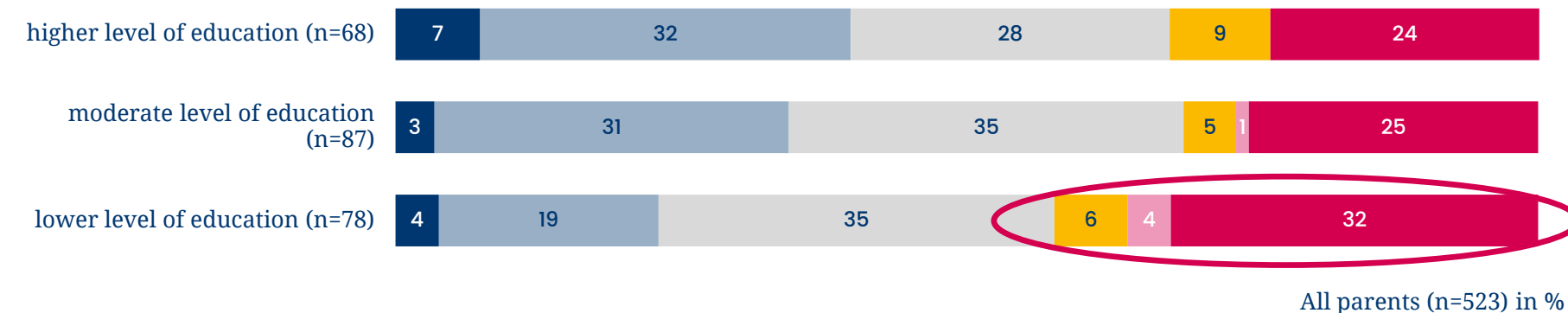


Children in households with lower educational background benefit enormously from book presents

Families, who received books with ...



Families, who did not receive books with ...



“When your first child was born, did you receive book gifts from family members, friends or acquaintances?” | “Did you upon the birth of your child receive books from ministries or public offices, or from private companies like drugstores or diaper manufacturers, e.g., in a baby package, which you were able to register for online?”

Source: German Reading Foundation | 2017 Reading Aloud Study



What can we do to support parents' early reading?

1. Facilitate book choices
2. Gifting books
3. Addressing parents with a low educational background



Ideas to directly address parents with low educational backgrounds



- Promoting digital reading with e-readers or tablets
- Cooperations with selected companies, e.g. McDonalds (providing books in HappyMeals)
- Motivating and educating parents so that they can act as role models



Children like to read...and it is never too early to begin!

Stiftung Lesen

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Astrid Wirth

Ludwig-Maximilians-Universität

Department Pädagogische Psychologie

D-80802 München

+49 89 2180-72506

astrid.wirth@psy.lmu.de

www.psy.lmu.de/ffp/persons/ag-niklas/astrid-wirth/index.html

Dr. Simone C. Ehmig

Stiftung Lesen

Roemerwall 40

D-55131 Mainz

+49 6131 28890 81

simone.ehmig@stiftunglesen.de

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