

Incidental Video-Based Foreign Language Learning in Young Children: A Pilot Study in Home Settings

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Meaningful Learning in Different Settings



- Charline's bachelor thesis
- Limited time frame
- Proof-of-concept
- Pilot study
- Small sample size



Multilingual & multicultural context of **Luxembourg** (48% of residents are non-nationals, STATEC, 2018).

Especially challenging to succeed in school for children entering early education with **low proficiencies in German**; 50% higher risks of having to repeat a grade (MENJE, 2015).

High **practical value** to explore which educational resources and tools can be developed and/or used to promote the acquisition of **German language skills in non-native children**.

Many young children are indeed, nowadays, **exposed to videos on smartphones and tablets** (Kabali et al., 2015), especially in informal learning settings.

PERSONAL STARTING POINT



Anecdotal observations suggest that exposure to foreign language **videos** can lead **young children** to **incidentally acquiring** these foreign languages.

Scientific studies done with **older children** (Kuppens, 2010) have already shown the effects of **media exposure** on foreign language learning.

Laboratory-based research studies in adults (Franco et al., 2011) have also found that the **exposition to pseudo-languages** in the background can lead people to acquire at least some **implicit knowledge** (feelings of familiarity) about the **structure** of these pseudo-languages.

Implicit learning processes involved in (oral) language acquisition

- in a natural way; unconsciously (Hulstijn, 2011)
- acquired and consolidated through immersion (Decke-Cornill & Küster, 2010)
- passive listening and imitation (Eicher, 2017)

In how far can **incidental language learning** via **video** happen in **young children** in **ecologically** valid settings, like children's **homes**?

Developed a **mobile app** that contained **engaging videos** of animated cartoons in German, which young children (ages 3-7) could use at home as much and as often as they liked (and their parents allowed them to).

Main learning objective: develop a greater **sense of familiarity** with the German language (and eventually use it in other contexts).

Phase 1:	Design of the Learning-App, based on theories of language learning and the interests of young children
Phase 2:	Pre-Test: Language test
Phase 3:	Intervention: Using the App in their home setting Guided Observations by parents (overall: 3 months)
Phase 4:	Post-Test: Language test
Phase 5:	Interviews with parents and children
Phase 6:	Analysis of language tests and triangulation with observations and interviews

Design of the Learning App



Design considerations

- Engaging content for children of that age
- Content of “consumable” videos should be known by us in advance
- No tracking of the videos watched

Participants: aged 3-7 years

Names were changed



Name: Thomas

Alter: 5 Jahre

Sprachen Zuhause:

- Portugiesisch
- (Luxemburgisch)



Name: David

Alter: 7 Jahre

Sprachen Zuhause:

- Portugiesisch
- (Luxemburgisch)



Name: Mira

Alter: 4

Sprache Zuhause:

Portugiesisch



Name: Laura

Alter: 3

Sprachen Zuhause:

- Portugiesisch
- (Luxemburgisch)

Pre-test/Post-test: Assessment of their knowledge of the German language with the help of a language test (assessing speech comprehension, speech production and speech memory). The same test was done again **after the 3-month intervention** phase.

Interviews

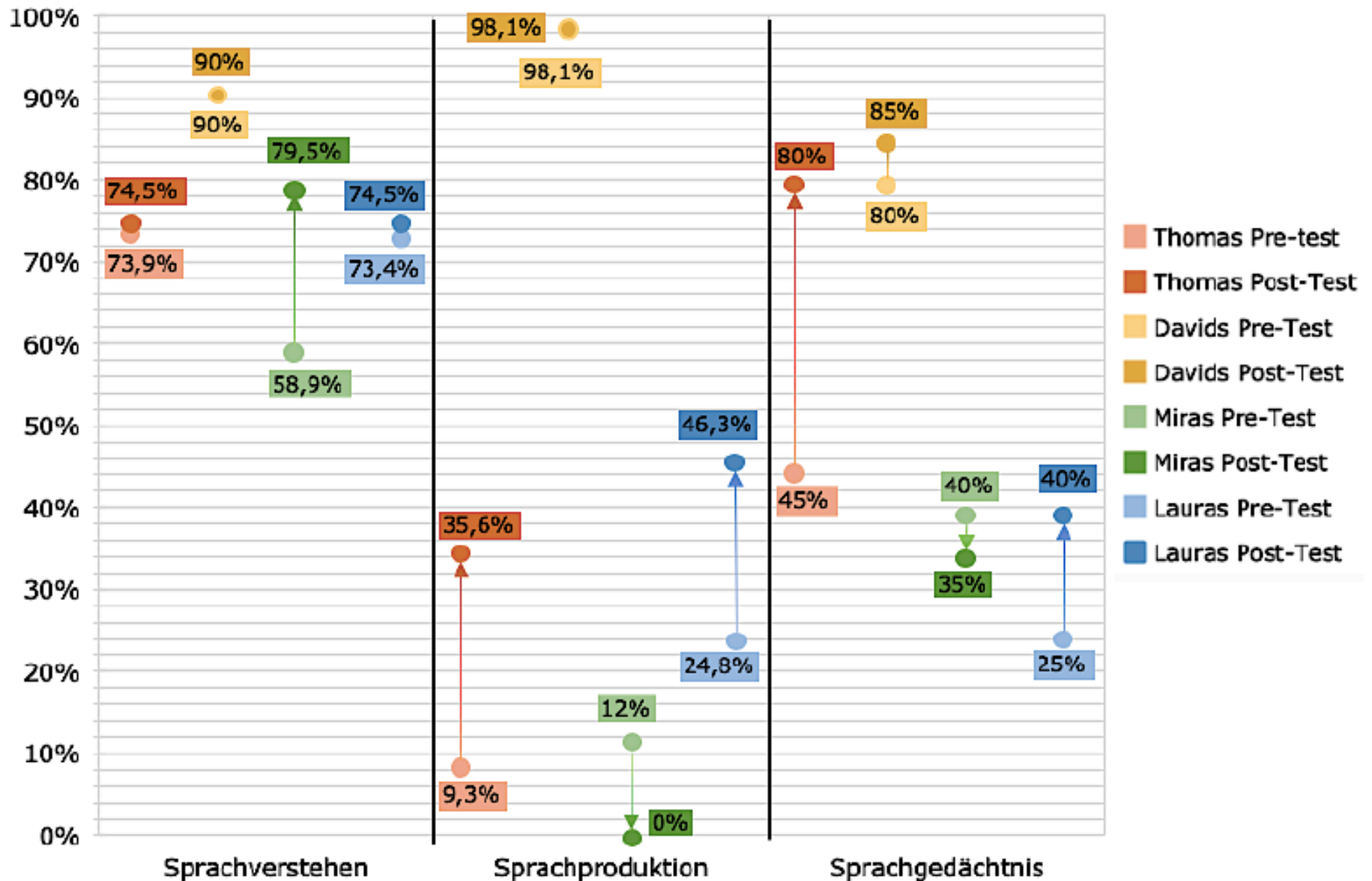
- with the **children** about their use of the app
- with their **parents**, who had been asked to conduct **regular observations** of their children's use of the app, using a **structured observation grid**.

The interviews allowed us to get a better grasp of **how often** children used the app, **how engaging** the app was to them and **how much** its use led them to use German **in other everyday life situations**.

Results from the pre- and post-tests, from the observations and the interviews with the parents and children, showed that **all children improved their language skills**, even if only **slightly**, in all the tested domains (speech comprehension, speech production and speech memory).

The greatest advances were observed in **speech memory** and **speech production**, while there was very little improvement in speech comprehension.

Insgesamter Vergleich aller Teilnehmer in allen Bereichen

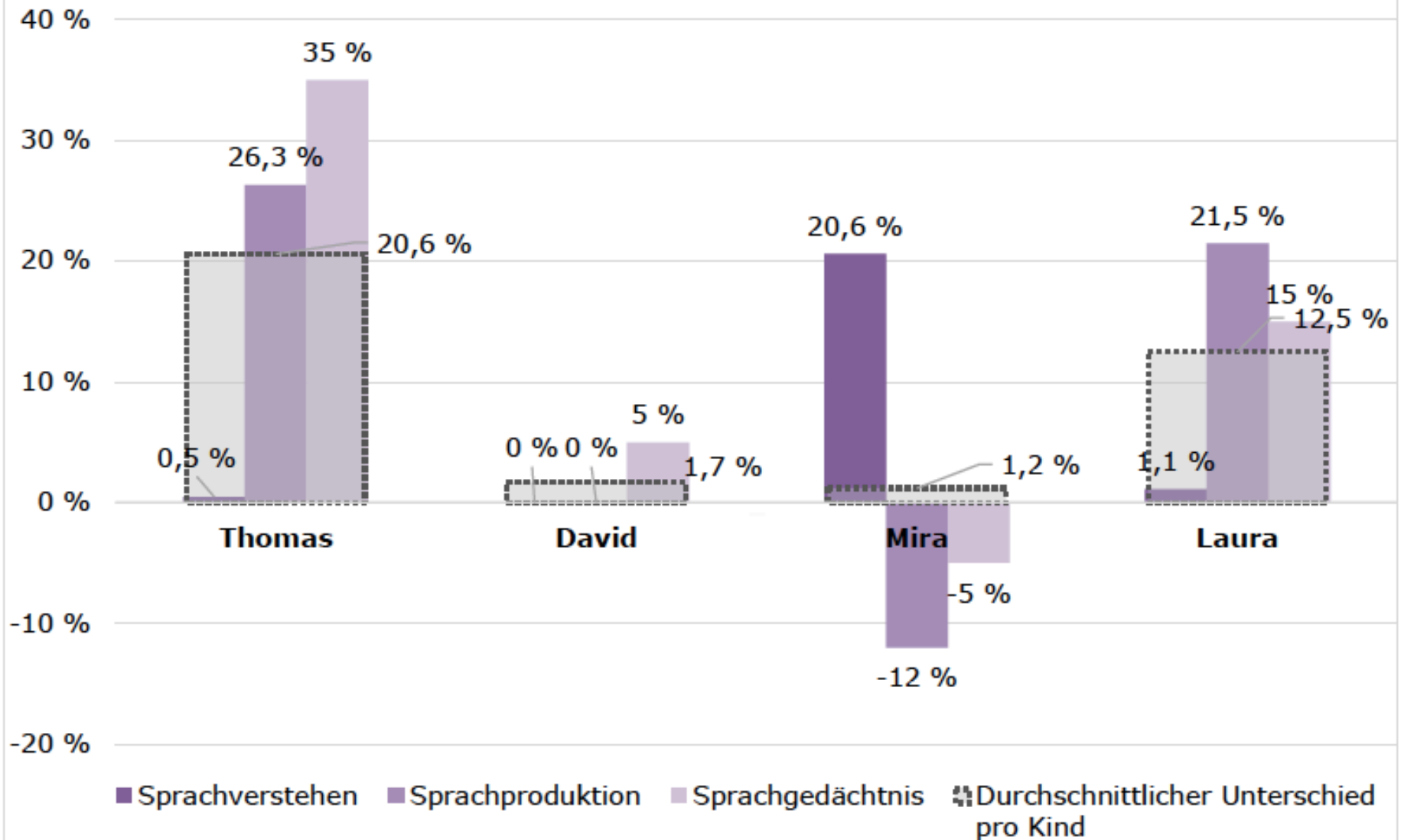


speech comprehension

speech production

speech memory

Leistungsunterschied zwischen Pre- und Post-Test pro Teilnehmer



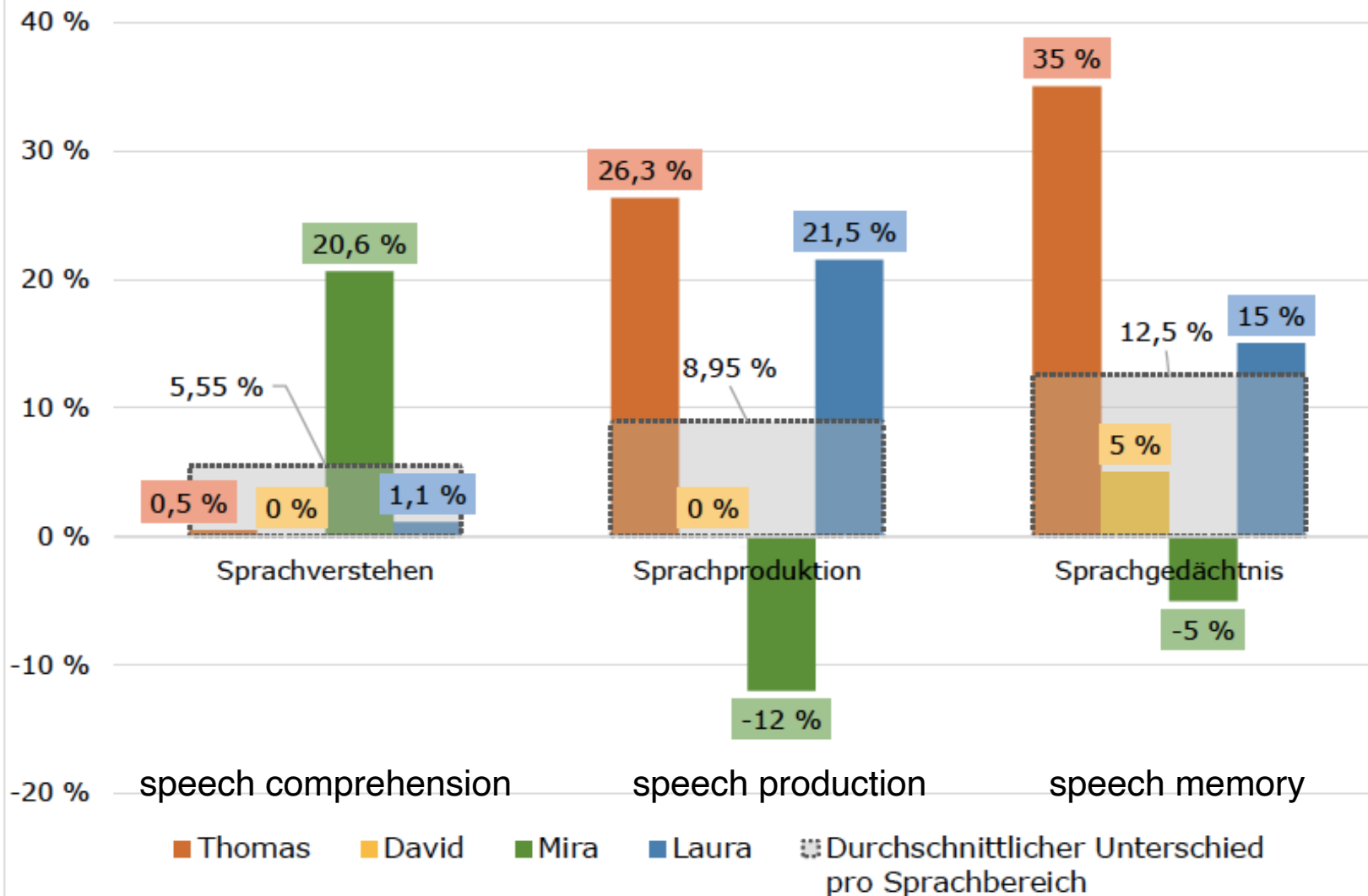
speech comprehension

speech production

speech memory

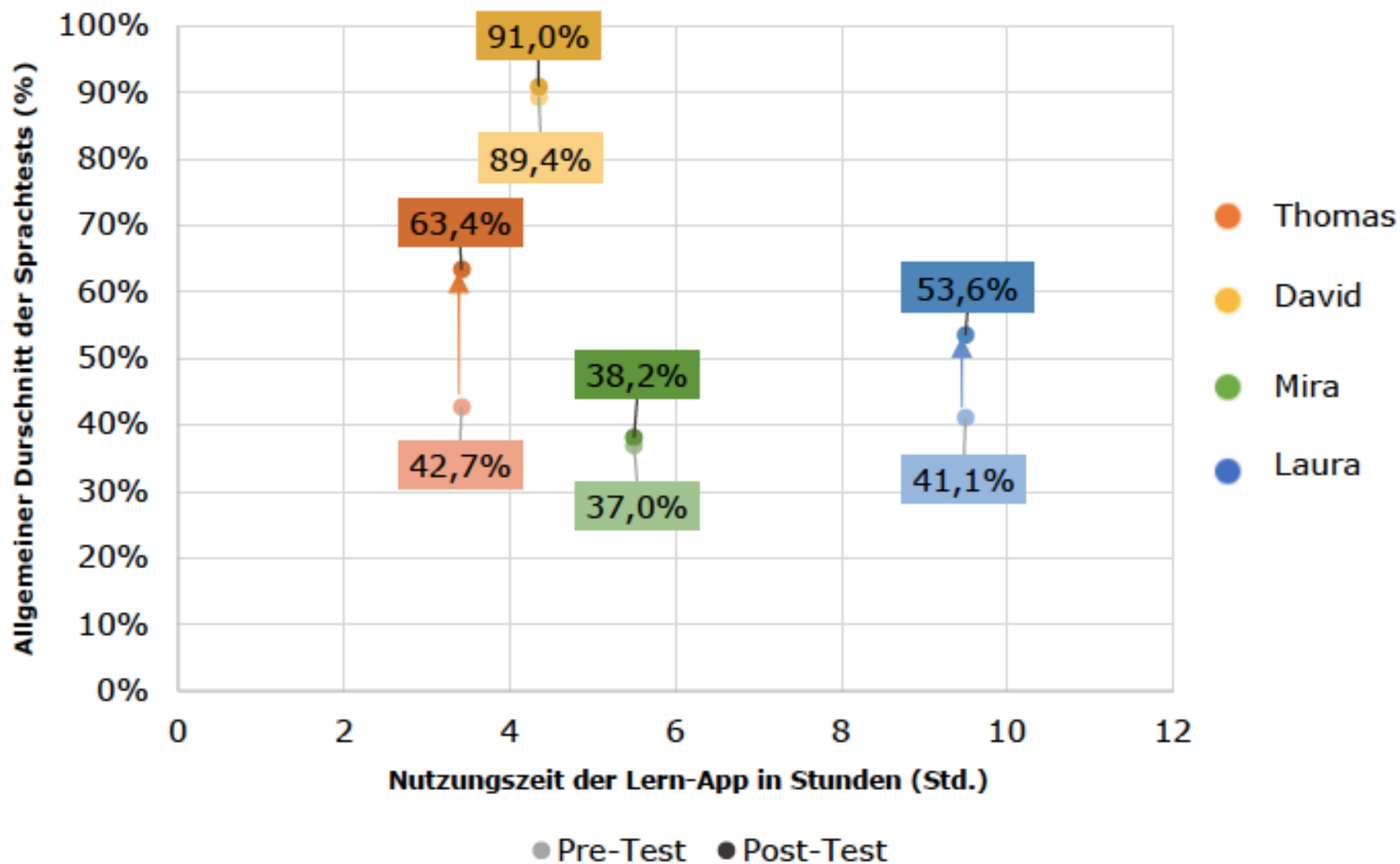
average difference per child

Leistungsunterschied zwischen Pre- und Post-Test pro Sprachbereich



average difference per language domain

Nutzungszeit der Lern-App in Bezug auf die Endergebnisse



The **interviews** with the **parents** showed that children seemed very **engaged** when using the app and that the children have been trying to use German words and sentences in their **everyday lives** by repeating words, singing songs, or answering in German.

Overall, these results are **promising** and suggest that our self-developed learning app is **engaging** for young children and that its use can help **foster** early childhood foreign language acquisition in **home settings**, which did **transfer beyond** the moments of exposure of the videos.

Incidental language learning processes had **observable effects** on the children's language skills in a foreign language.

- Video-based learning apps could be used to help children with foreign home languages to **incidentally develop the basic skills** in the official school languages,
- especially if they are used in **socially engaging learning settings** where adults **strategically use them** for that purpose and verbally interact with children while or after co-watching (Mendelsohn, Berkule & Tomopoulos, 2008).
- Animated videos very often contain **meaningful stories for young children** and provide them with **immersive language learning contexts**, while missing the interactive features of authentic communication-oriented language learning contexts.

- Further research is however needed to **test the effectiveness** of our mobile app in **different learning settings** using a **more systematic** and **experimental** research design.
- It would be interesting to test the application of incidental video-based language learning **in school settings**.

THANK YOU FOR YOUR ATTENTION!

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