

Self-Rated Participation in Children with Developmental Disabilities via Video Communication – The Feasibility of Administering Picture My Participation in Zoom

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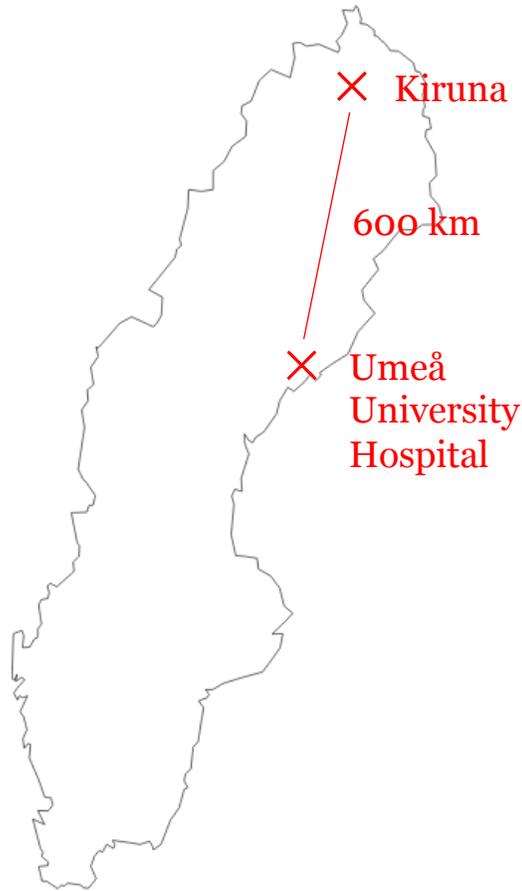
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Conducted within the CHILD-PMH program

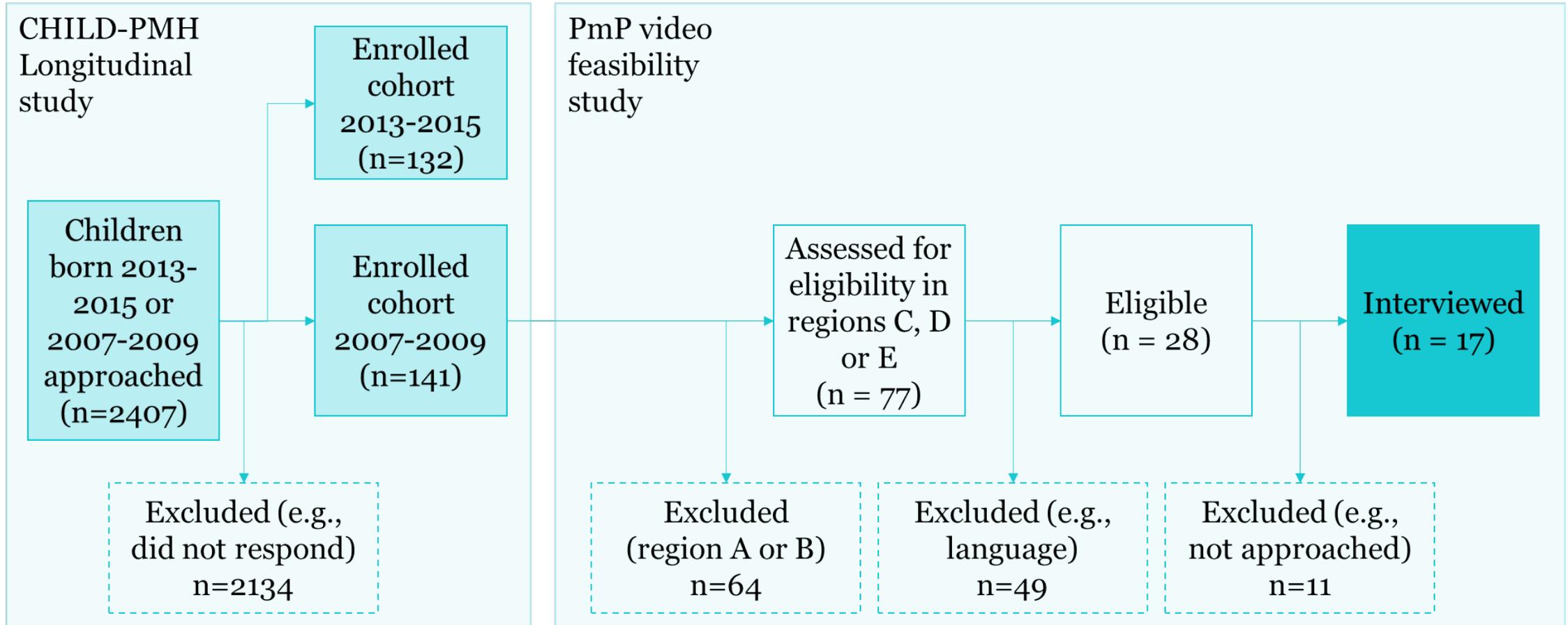


The appeal of self-rating via video communication

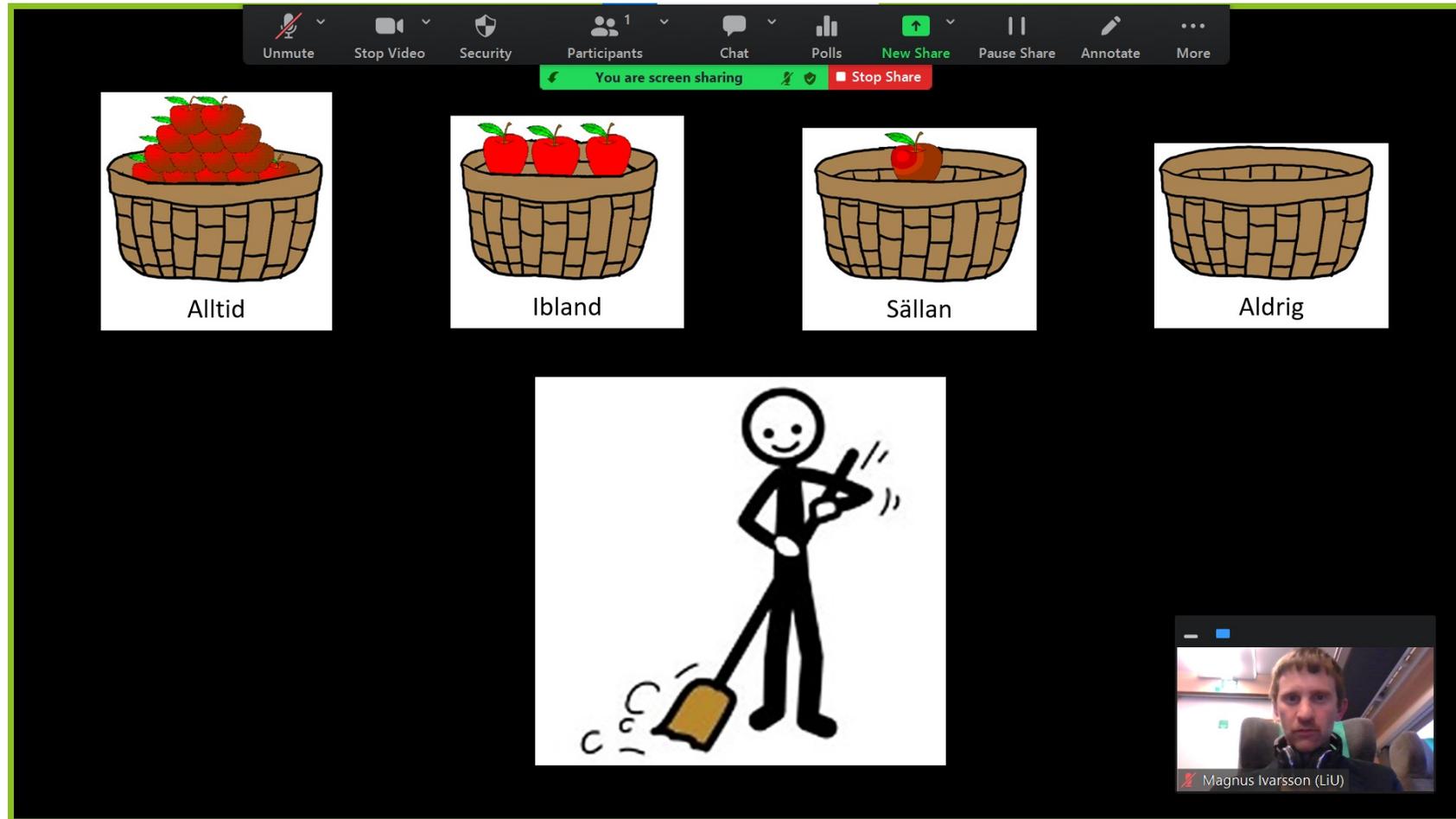


- Video interviewing could reduce barriers to clinical services and research
- Digital skills and knowledge is likely to have increased after Covid-19-pandemic
- Transferring AAC to the digital environment may be difficult
- New form of barriers could arise
- Aim of study: To investigate the feasibility of administering a self-rating instrument (PmP) via a video communication tool (Zoom) for children with DD

Flow of participants through the study



Picture my Participation via Zoom



The image shows a Zoom meeting interface with a poll displayed on the screen. The poll consists of four baskets of apples, each representing a different level of participation:

- Alltid**: A basket overflowing with many red apples.
- Ibland**: A basket containing three red apples.
- Sällan**: A basket containing one red apple.
- Aldrig**: An empty basket.

Below the baskets is a large drawing of a stick figure holding a broom and sweeping, with the text "C'est fini" written next to it. In the bottom right corner, there is a small video thumbnail of a participant named Magnus Ivarsson (LiU).

The Zoom toolbar at the top includes icons for Unmute, Stop Video, Security, Participants, Chat, Polls, New Share, Pause Share, Annotate, and More. A green bar indicates "You are screen sharing" and a red bar indicates "Stop Share".

Can we recruit appropriate participants?¹

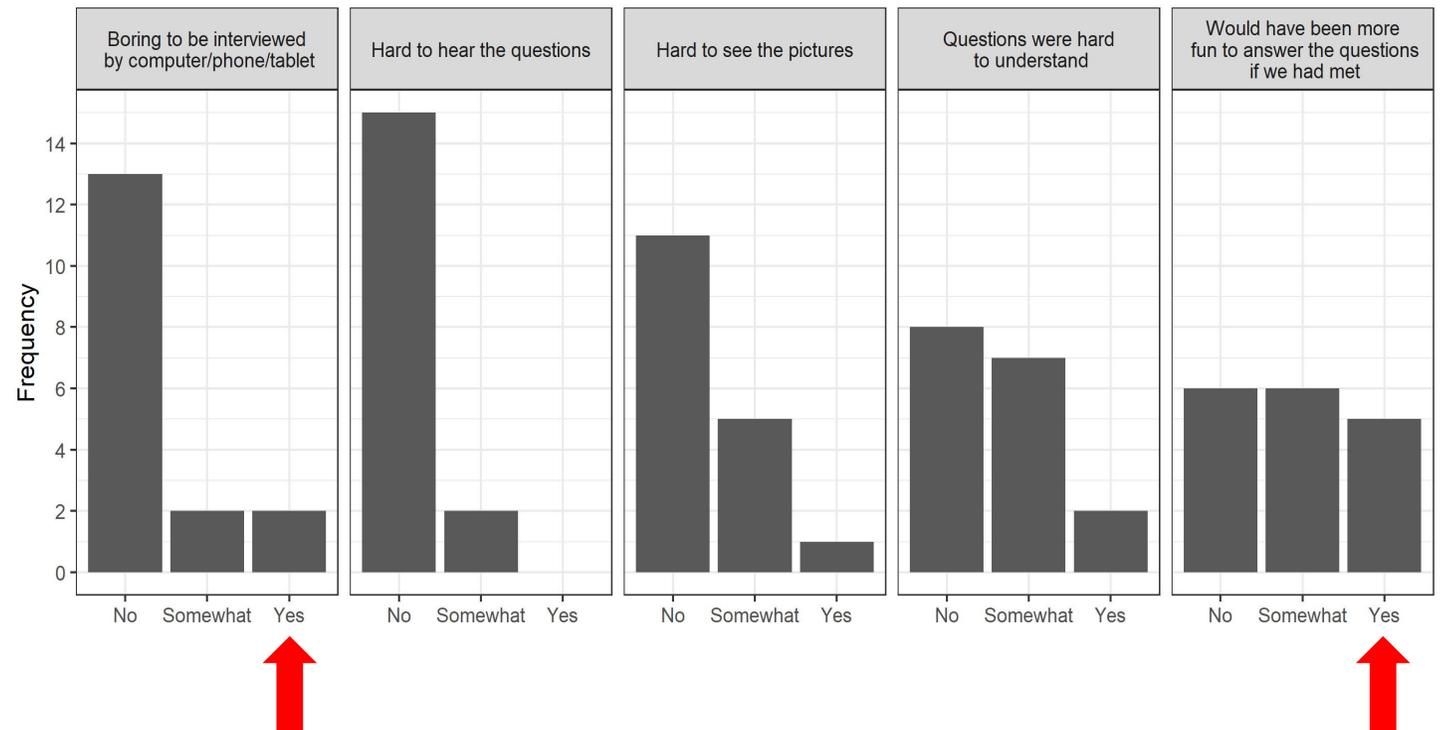
- More difficulties relating to movement and slightly less to cognition/communication
- Could risk introducing bias
- One child, who did not want to use the camera and microphone, answered via chat function

		CHILD-PMH (N=68)	Current study (N=17)
Girls		23 (33.8%)	6 (35.3%)
Birth year	2007	20 (29.4%)	5 (29.4%)
	2008	20 (29.4%)	7 (41.2%)
	2009	28 (41.2%)	5 (29.4%)
Difficulty walking or moving arms or is weak or rigid in arms or legs		12 (17.9%)	7 (43.8%)
Sometimes has seizures becomes rigid or loses consciousness		11 (16.4%)	1 (5.88%)
Does not speak at all		10 (15.2%)	0 (0%)
Seems to have difficulty comprehending or is slow		41 (63.1%)	9 (52.9%)
Mean TQS score (SD)		0.23 (0.20)	0.20 (0.17)



Are the study procedures suitable for and acceptable to participants? How appropriate is the procedure for the intended population and aim of the study?¹

- All children were able to navigate the digital environment independently
- Most needed some assistance from a parent to log in
- No unexpected adverse events
- Few technical issues
- Assisting in solving problems may be more challenging online as environment is only partly shared

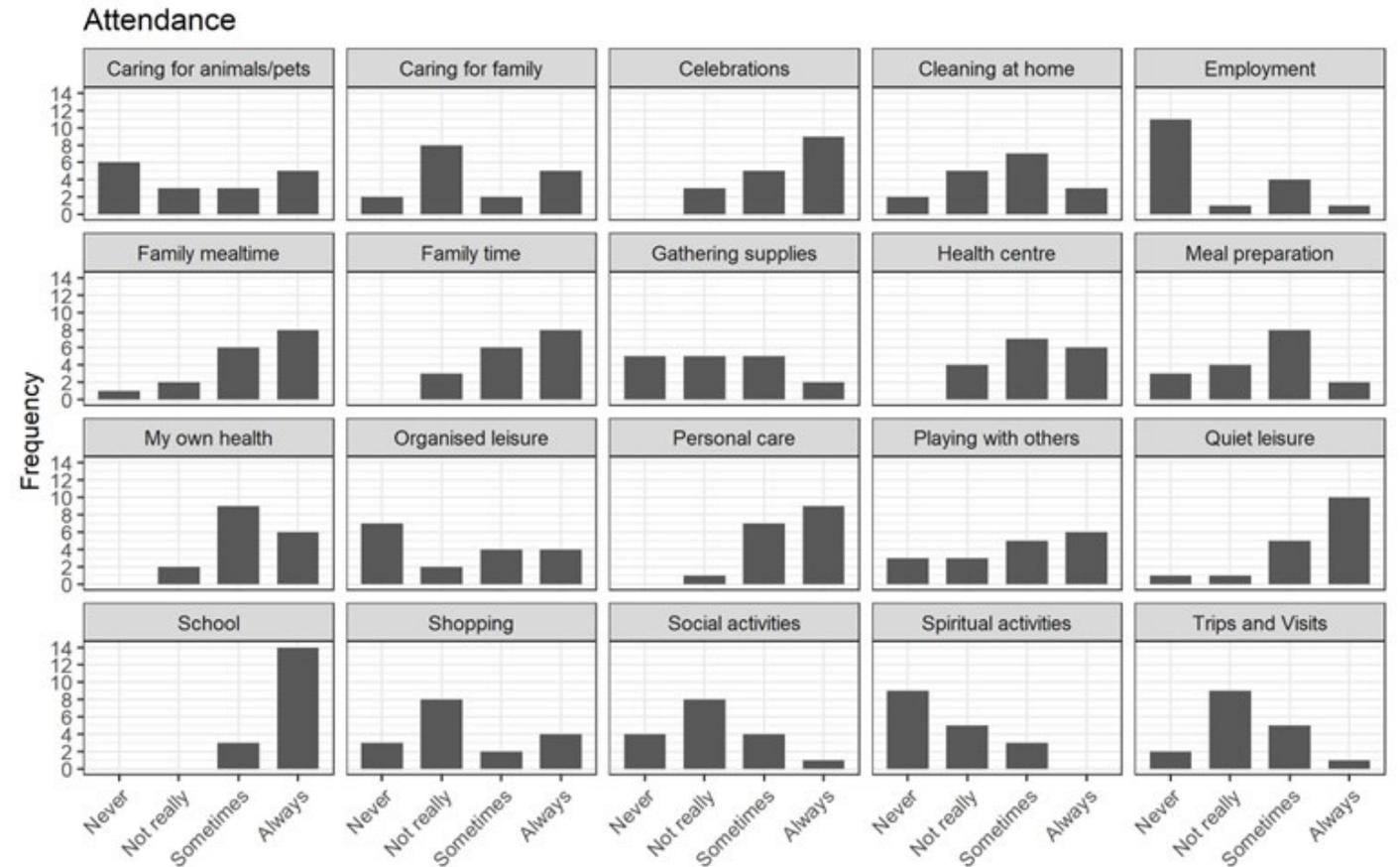


Does the research team have the resources and ability to manage the study? What are the ethical implications and necessary considerations of the study?¹

- Time for actual interview approximately the same as in real-life interviews
- Less time spent on traveling
- No extensive training needed for data collectors
- No costly equipment
- New challenges in preserving confidentiality:
 - How is data stored?
 - Who may be listening in?

Does the study show promise of being successful with the intended population?¹

- No distinct problematic response patterns
- As in earlier studies^{2,3}, skewness towards more positive responses
- All response options utilized
- Low degree of missingness (6.5%)
- Missing data related to scale as such rather than digital context



Conclusions

- Interviewer-guided self-ratings of participation and related constructs through video communication is a feasible procedure for many children with DD from age 11
- Offer video communication as an alternative to in real-life interviews
- Procedure and necessary applications should be tested and practiced by all data collectors, on different types of devices, in advance

References

¹Orsmond GI, Cohn ES. The Distinctive Features of a Feasibility Study: Objectives and Guiding Questions. OTJR Occup Particip Health. 2015;35:169–177.

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³Arvidsson P, Dada S, Granlund M, et al. Content validity and usefulness of Picture My Participation for measuring participation in children with and without intellectual disability in South Africa and Sweden. Scand J Occup Ther. 2020;27:336–348.

Thanks to the children participating in the study and Jennifer Gothilander for help with data collection

There are no conflict of interest to declare.

We acknowledge the support from the Swedish Research Council in funding this study.

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Thank you!