

Expressive vocabulary development in children with Down's syndrome age 18 to 33 months: profiles and growth patterns

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Aim of the study

To describe the expressive vocabulary development of young children with Down's syndrome with regard to modality (sign and/or speech), and nature of the vocabulary growth.

Instruments

- Lexilist Netherlands based on Language Development Survey
- Dutch version of Bayley Scales of Infant Development, Third Edition

Participants

31 children with DS (22 boys and 9 girls) aged 12 to 24 months (M = 16;55, sd = 4;16) (Table 1).

Results

Profiles

Sufficient data for interpreting the profiles were available for 26 out of the 31 children with DS.

Three different profiles were evident (Figure 1):

- 65% of the children showed a 'predominant sign profile' (at least 50% of the words in signs in all lists)
- 23% of the children showed a 'sign and speech profile' (at least 50% of words in signs in one list and at least 50% of words in speech in other list)
- 12% of the children showed a 'predominant speech profile' (at least 50% of words in speech in all lists)

Growth trajectories

The variability in vocabulary growth was considerable between the 31 children with DS (Figure 2).

32,3% of the children showed a vocabulary growth spurt. The mean age of the onset of the vocabulary growth spurt was 26.9 months (sd=3.9), with an average of 34.3 words (sd=14.1)

- 58,1% of the children showed a linear growth
- 9,6% hardly showed any progress

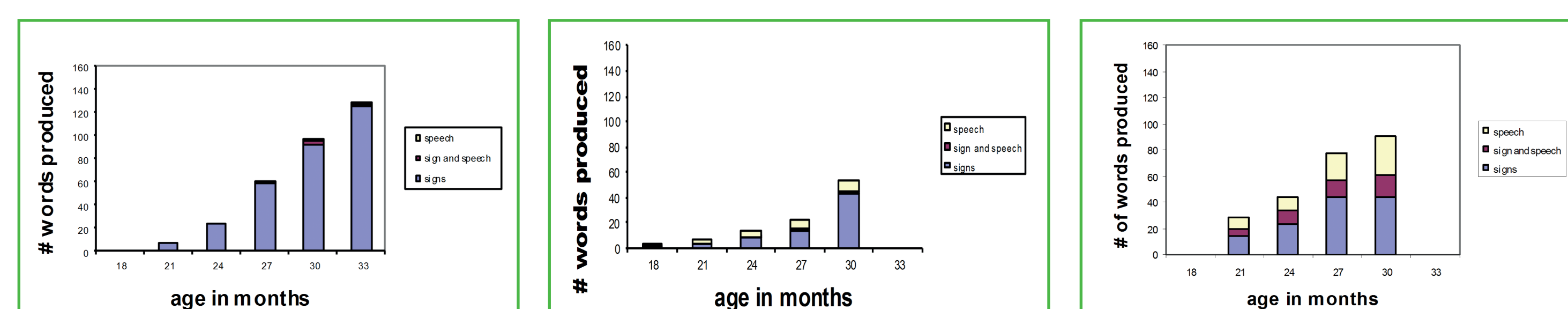


Table 1. Profiles expressive vocabulary development.

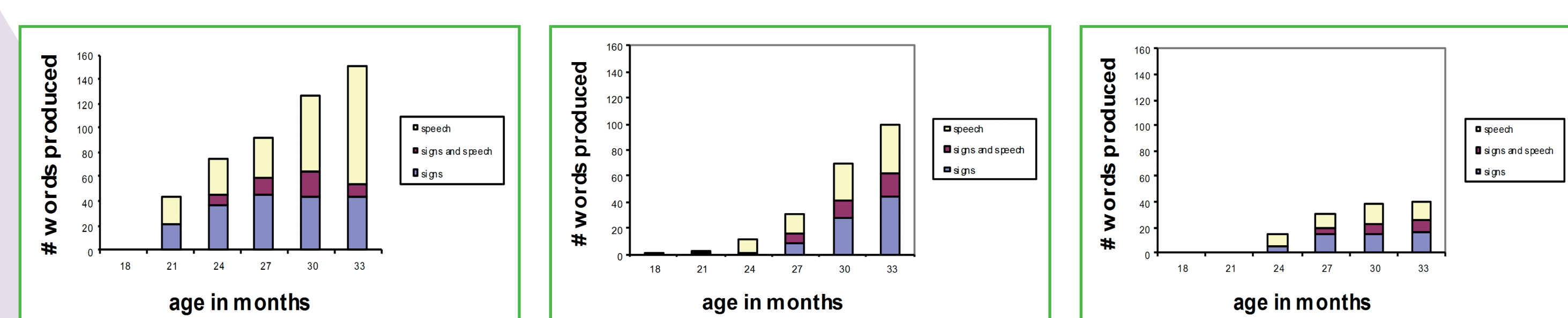
	Predominant sign	Sign and Speech	Predominant speech
Boys	13	3	2
Girls	4	3	1
Total	17	6	3

Figure 1. Examples of profiles expressive vocabulary development

Predominant sign



Sign and Speech



Predominant speech

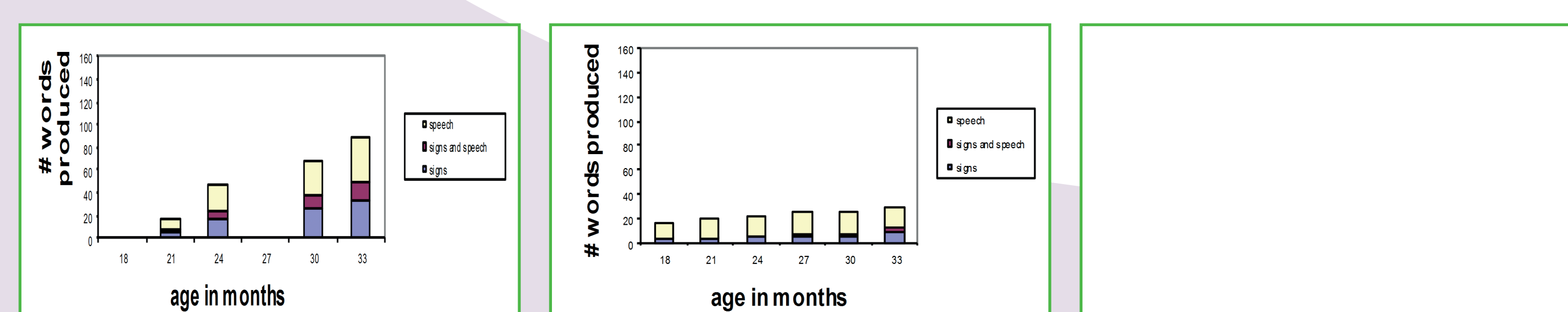
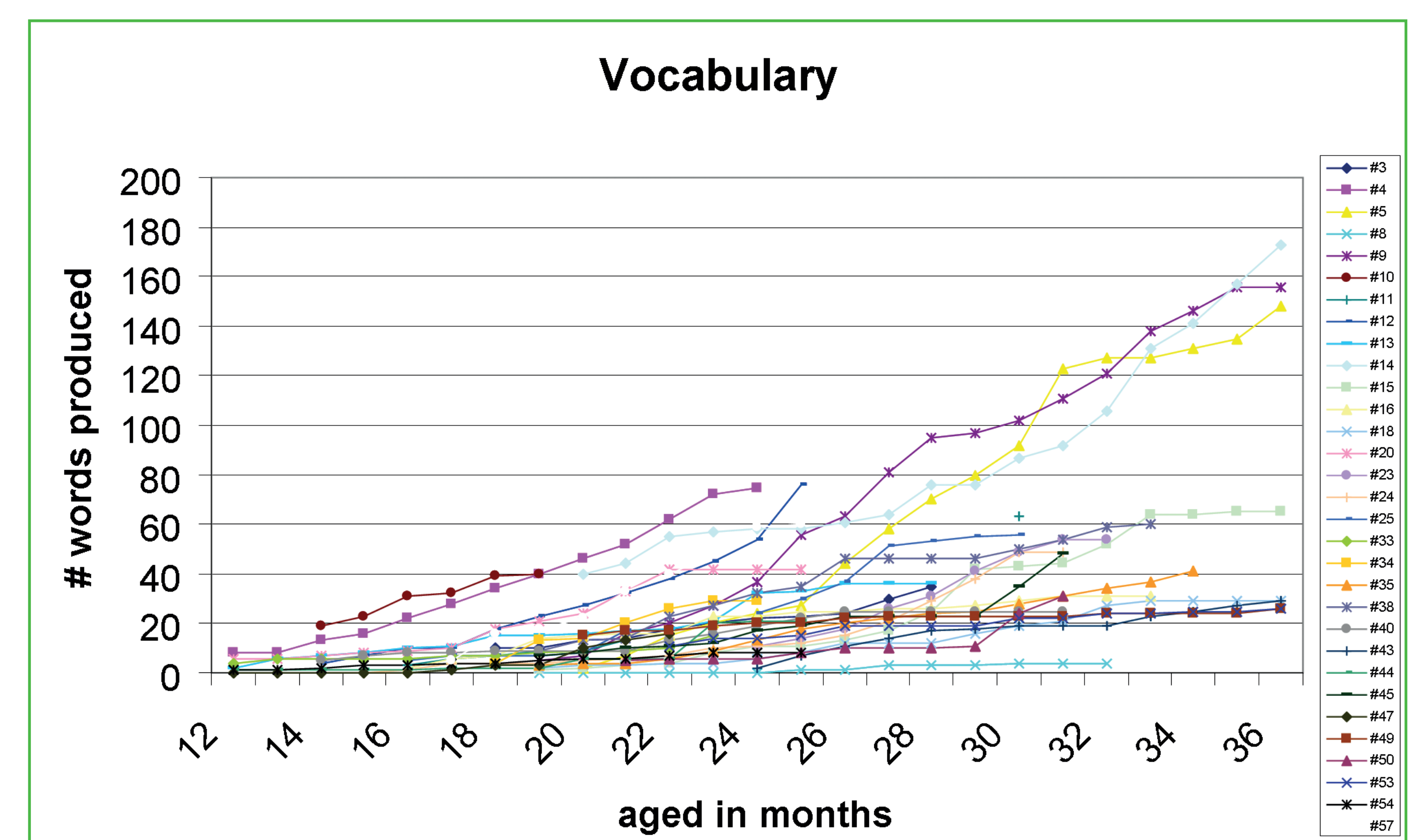


Figure 2. Vocabulary growth trajectories



Conclusion

Results suggest that the expressive vocabulary acquisition of children with DS is bimodal, with a slight preference for signs over speech. Although most children with DS showed a 'sign profile', the variability in vocabulary growth patterns was considerable

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