Bilingualism & Children with Down Syndrome

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Down Syndrome (DS)

- Trisomy 21
- Translocation or mosaicism of chromosome 21
- Genetic disorder that causes distinct facial appearance, intellectual disability (ID), developmental delays, and may be associated with thyroid or heart disease

Cognitive Impairment: 80% of children with DS have moderate ID

Hearing Loss (HL): 2/3 of children with DS experience conductive HL, sensorineural HL, or both

Oral Motor: Differences in oral structure and function

Social Skills: Many children with DS are highly engaging and affectionate; 15% of children with DS meet criteria for autism spectrum

Pre-linguistic/Non-verbal Communication: similar to that of typically developing (TD) infants

Goals of Research

The aim of this research is as follows:
- Identify course of development for simultaneous and sequential bilinguals with DS
- Explore effects of language exposure on language development
- Determine what language therapy is provided in for bilingual children

Bilingualism

Bilingualism—having systematic experience and/or communicative need in 2+ languages

Simultaneous Bilingual—an individual with systematic ongoing exposure (2+ languages from birth)

Sequential Bilingual—an individual with systematic exposure to one language and then acquires another later

Discussion

Simultaneous Bilingual Speakers with DS

- Same ability as TD peers to learn novel words
- No significant difference between monolinguals with DS in the majority of language skills
- The amount of exposure to L1 at the onset is significantly and negatively correlated with gains in the weaker language, but not the stronger language

Sequential Bilingual Speakers with DS

- No differences found between bilinguals and monolinguals with DS on any measure of language, cognition, or adaptive functioning

Implications

Further research needs to be done to determine the following:
- Analysis of language exposure on abilities on L2 in sequential bilinguals with DS
- Additional studies to augment current research
- Implications of findings on speech and language instruction, including dual language programs, in bilinguals with DS

Conclusions

- There is very limited research on bilingualism and DS
- Simultaneous and sequential bilinguals with DS are not disadvantaged by bilingual exposure
- Bilingual children with DS consistently perform comparably to monolingual peers with DS, especially in the majority language
- Similar profile of language strengths and weaknesses in monolinguals and simultaneous bilinguals with DS
- Input frequency may be an important determinant of growth for weaker language of bilingual children with DS
- Majority of SLPs currently treat children in one language

Current Speech Language Pathology Treatment Practices

Language used in Intervention

Rationale for Language Choice

Implications of findings on speech and language instruction, including dual language programs, in bilinguals with DS

References


Acknowledgements

This work was supported by the Illinois LEND Program [Grant Number: T37MC11047; U.S. Department of Health and Human Services—Health Resources and Services Administration (HRSA)].