

The Role of Fingerspelling in the Early Communication, Language and Literacy Acquisition with Deaf Children

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Introduction to the Study

The focus of this study is to examine the development and importance of fingerspelling among young Deaf children of Deaf parents for communication, and learning about language and pre-literacy in their natural home environment.

Background of the Problem

- More to learning to read than just decoding
- Five important components
- The question becomes:
 - Do Deaf children learn to read using these same components or is there another component?

Theoretical Frameworks

Traditional Epistemology



Deaf Epistemology



Auditory Phonological Awareness

- Overarching term for skills like rhyming, alliteration and syllabication
- Metacognitive skills
 - Word and syllable boundaries
 - Isolation of phonemes
 - Awareness of the sound structure of the English language

Visual Sign Phonology (VSP)

- Meaningless units or segments of the sign system
- Five aspects
- Includes fingerspelling
 - rhythmic patterns
 - lexicalization processes

Research Questions

- #1 How is fingerspelling used for communication at home?
- #2 What benefits does fingerspelling have for young Deaf children in literacy development?

Research Design

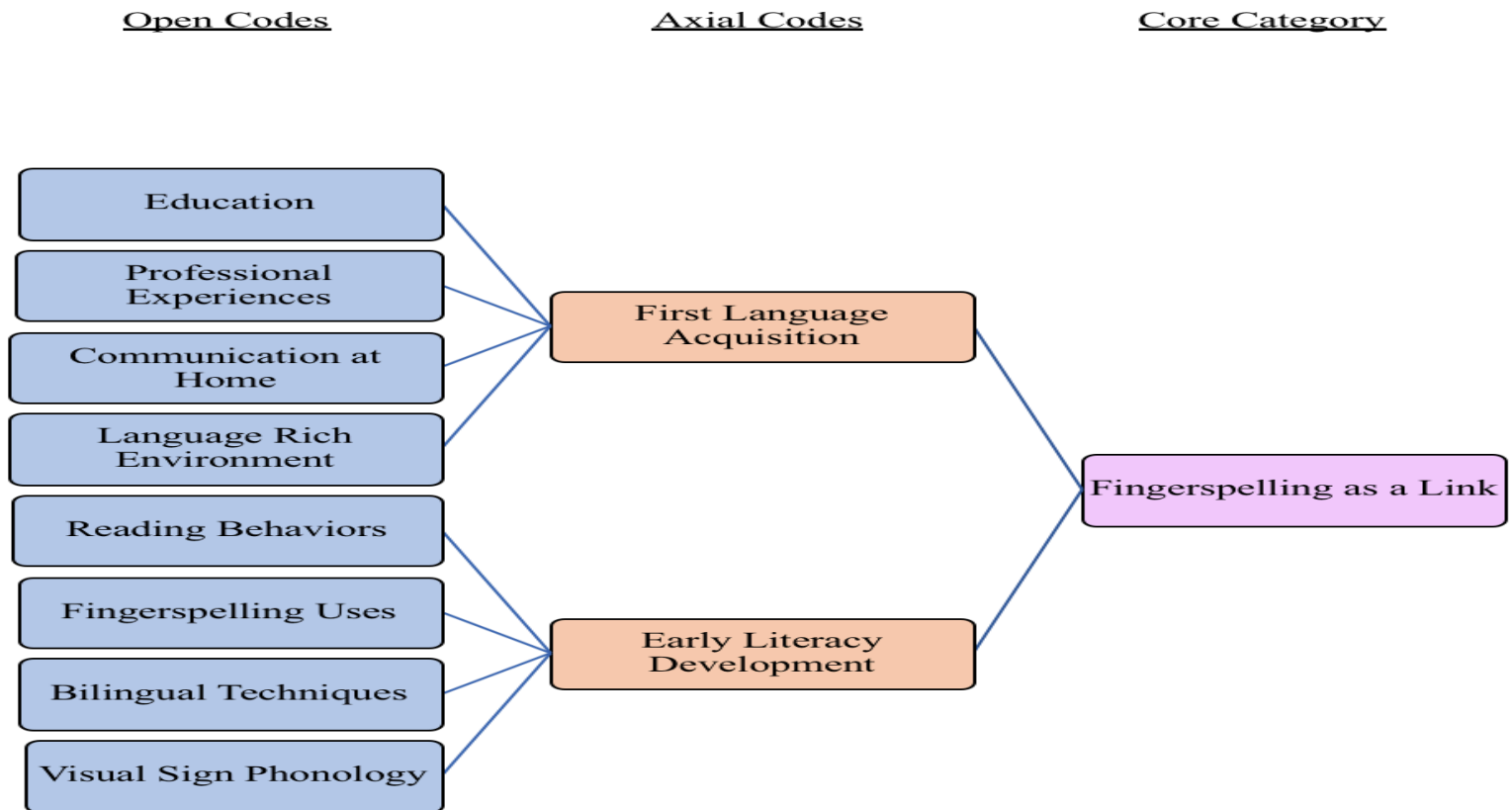
- Qualitative approach
 - Grounded theory
 - Constant comparison analysis (CCA)
- Participants
 - Three Deaf families
 - Must meet criterion



Treatment of the Data

- Videotaped storybook reading and writing activities
 - Transcribed into English by the researcher and two independent transcribe 30%
- Memo-ing
 - Themes or categories
 - Open codes
 - Axial codes and core category

Results



Fingerspelling

- Serves many roles for ASL users
- Has several representations
 - Signifier
 - Sandwiching
 - Chaining



BOX FOX

- Video – cannot be distributed

MOUSE HOUSE

- Video – cannot be distributed

Fingerspelling as a Link to Reading

- VSP is fully accessible
- Facilitate the transition between orthographic representations to reading acquisition
- As an aid to recognizing printed words
 - Visually decode print

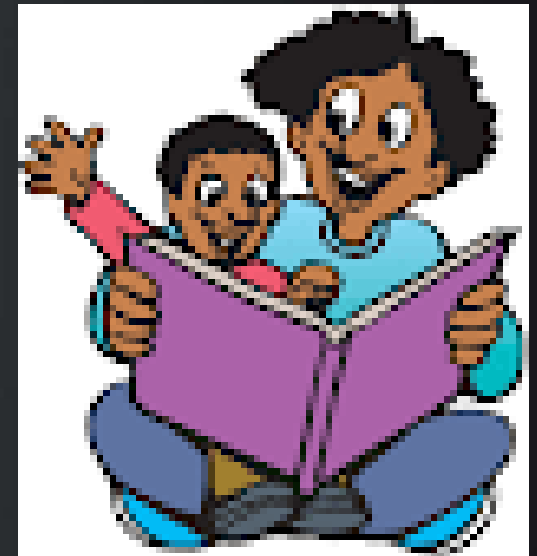


Rhythmic Patterns

- Video – cannot be distributed

Emergent Literacy Environment

- Literacy environment of the home provides reading behavior support
- Facilitated the development of early alphabetic knowledge of preschool-aged Deaf children
- Parental involvement promote children's early literacy skills
 - Storybook reading activities







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References

- Allen, T. E. (2015). ASL skills, fingerspelling ability, home communication context and early alphabetic knowledge of preschool-aged deaf children. *Sign Language Studies*, 15, 233-265. doi:10.1353/sls.2015.0006
- Allen, T. E., Letteri, A., Choi, S. H., & Dang, D. (2014). Early visual language exposure and emergent literacy in preschool deaf children: Findings from a national longitudinal study. *American Annals of the Deaf*, 159, 346–358. doi:10.1353/aad.2014.0030
- Berke, M. (2013). Reading books with young deaf children: Strategies for mediating between American Sign Language and English. *Journal of Deaf Studies and Deaf Education*, 18, 299-311. doi:10.1093/deafed/ent001
- Bingham, G. (2007). Maternal literacy beliefs and the quality of mother-child book-reading interactions. Associations with children's early literacy development. *Early Education and Development*, 18, 23-49. doi:10.1080/10409280701274428
- Blumenthal-Kelly, A. (1995). Fingerspelling interaction: A set of deaf parents and their deaf daughter. In C. Lucas (Ed.), *Sociolinguistics in the deaf communities* (pp. 62-73). Washington, DC: Gallaudet University Press.
- Brentari, D. (2001). *Foreign vocabulary in sign languages: A cross-linguistic investigation of word formation*. Mahwah, NJ: Lawrence Erlbaum.
- Clark, M., Gilbert, G., & Anderson, M. (2011). Morphological knowledge and decoding skills of Deaf readers. *Psychology*, 2, 109-116. doi:10.4236/psych.2011.22018
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Cupples, L., Ching, T. Y., Crowe, K., Day, J., & Seeto, M. (2014). Predictors of early reading skill in 5-year-old children with hearing loss who use spoken language. *Reading Research Quarterly*, 49, 85-104. doi:10.1002/rrq.60

References

- De Clerck, G. (2010). Deaf epistemologies as a critique and alternative to the practice of science: An anthropological perspective. *American Annals of the Deaf*, 154, 435-446. doi:10.1353/aad.0.0121
- Dyer, A., MacSweeney, M., Szczerbinski, M., Green, L., & Campbell, R. (2003). Predictors of reading delay in deaf adolescents: The relative contributions of rapid automatized naming speed and phonological awareness and decoding. *Journal of Deaf Studies and Deaf Education*, 8, 215-229. doi:10.1093/deafed/eng012
- Easterbrooks, S., Lederberg, A., Antia, S., Schick, B., Kushalnagar, P., Webb, M., Branum-Martin, L., & Connor, C. (2015). Reading among diverse DHH learners: What, how, and for whom? *American Annals of the Deaf*, 159, 419-432. doi:10.1353/aad.2015.0002
- Ehri, L. (2005). Learning to read words: Theory, findings, and issues. *Scientific Studies of Reading*, 9, 167-188. doi:10.1207/s1532799xssr0902_4
- Fram, S. (2013). The constant comparative analysis method outside of grounded theory. *The Qualitative Report*, 18, 1-25. Retrieved from <http://nsuworks.nova.edu/tqr/vol18/iss1/1>
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Hawthorne, NY: Aldine de Gruyter.
- Hauser, P., O'Hearn, A., McKee, M., Steider, A., & Thew, D. (2010). Deaf epistemology: Deafhood and deafness. *American Annals of the Deaf*, 154, 486-492. doi:10.1353/aad.0.0120
- Herbold, J. (2008). *Emergent literacy development: Case studies of four deaf ASL-English bilinguals* (Unpublished doctoral dissertation). University of Arizona, Tucson, AZ.

References

- Hile, A. (2017). Signing deaf children's acquisition of fingerspelling. *Journal of Deaf Studies and Deaf Education*, 22, 1-8.
doi:10.1093/deafed/enw071
- Høien, T., Lundberg, I., Stanovich, K. E., & Bjaalid, I. K. (1995). Components of phonological awareness. *Reading and Writing*, 7, 171-188. doi:10.1007/bf01027184
- Holcomb, T. K. (2010). Deaf epistemology: The deaf way of knowing. *American Annals of the Deaf*, 154, 471-478.
doi:10.1353/aad.0.0116
- Humphries, T., & MacDougall, F. (2000). "Chaining" and other links: Making connections between American Sign Language and English in two types of school settings. *Visual Anthropology Review*, 15, 84-94. doi:10.1525/var.2000.15.2.84
- Luborsky, M. R., & Rubinstein, R. L. (1995). Sampling in qualitative research: Rationale, issues, and methods. *Research on Aging*, 17, 89-113. doi:10.1177/0164027595171005
- Mayer, C., & Trezek, B. (2014). Is reading different for deaf individuals? Re-examining the role of phonology. *American Annals of the Deaf*, 159, 359-371. doi:10.1353/aad.2014.0032
- National Reading Panel. (2000). *Report of the National Reading Panel. Teaching children to read--an evidence-based assessment of the scientific research literature on reading and its implications for reading instruction*. Jessup, MD: National Institute for Literacy at EDPubs.
- Padden, C. & Gunsauls, D. C. (2003). How the alphabet came to be used in a sign language. *Sign Language Studies*, 4, 10-33.
doi:10.1353/sls.2003.0026
- Padden, C., & Humphries, T. (2005). *Inside deaf culture*. Cambridge, MA: Harvard University Press.

References

- Padden, C., & Ramsey, C. (2000). American Sign Language and reading ability in deaf children. In C. Chamberlain, J. P. Morford, & R. I. Mayberry (Eds.), *Language acquisition by eye* (pp. 165-189). Mahwah, NJ: Lawrence Erlbaum.
- Paul, P. V., & Wang, Y. (2012). *Literate thought: Understanding comprehension and literacy*. Sudbury, MA: Jones and Bartlett Learning.
- Paul, P., Wang, Y., & Williams, C. (2013). *Deaf students and the qualitative similarity hypothesis: Understanding language and literacy development*. Washington, DC: Gallaudet University Press.
- Snow, C., Burns, S., & Griffin, P. (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.
- Stanovich, K. E. (1988). *Children's reading and the development of phonological awareness*. Detroit, MI: Wayne State University Press.
- Strauss, A. L., & Corbin, J. M. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage Publications.
- Wang, Y., & Williams, C. (2014). Are we hammering square pegs into round holes? An investigation of meta-analyses of reading research with students who are d/Deaf or hard of hearing and students who are hearing. *American Annals of the Deaf*, 159, 323-345. doi:10.1353/aad.2014.0029