Morphemic Awareness and Reading Comprehension: A Descriptive Study

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We believe . . .

- Reading achievement of elementary and middle school deaf students need not plateau and can be commensurate with that of hearing peers.
- And we will outline the results of a descriptive study of 17 deaf students, who demonstrate this ability.

Rationale

- The ability to access and understand the meaning of multi-morphemic English words is essential for the development of age-appropriate reading comprehension for all students.
- The purpose of this poster is to report the correlations between the language and reading skills of a sample of students who are deaf or hard of hearing (N=17) and who are encouraged to speak and sign standard English grammar, which is constantly modeled for them as their first language. Test results are compared to hearing norms provided by standardized measures.

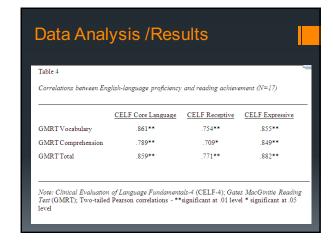
Participants

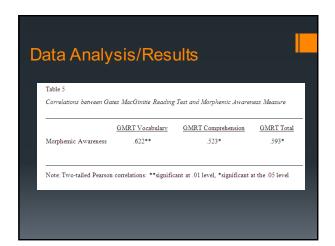
- 17 Deaf/hard of hearing children (8 boys, 9 girls)
 - Preschool 8th grade school school for the deaf
 - •7;6 years (2nd grade) to 13;9 years (8th grade)
 - Diversity among the participants
 - •11 of 17 Caucasian, 3 Asian, 3 biracial and
 - socio-economic status varied and
 - other background variables: family structure, factors related to the parents (level of education and signing with their child, and school involvement).

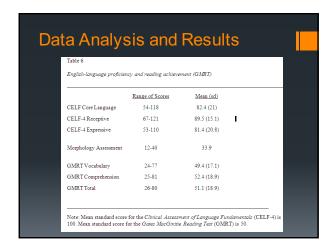
. it age, information on hearing, and language assessment (CELF) score. Core Lang. HA (6) vIoderate Data collected on HA (6) Severe to CT (0) CI (6) profound HA (S) 112 9.11 116 severe HA (6) CI (8) profound 10.11 HA (7 11.2 CI (10) 98 profound CI (9) 11.8 CI (5) 91 96 89 11.8 orofound CT (6 : 64 profound 13 CI (8) 58 12.5 15 CI (10) 85 63 oro found 13.9 HA (12) 118

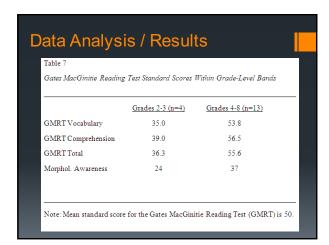
| | Table 2 Aided hea | ring, CELF r | eceptive si | andard score, grade/s | esting leve | i, and rea | ding asses. | sment stan | dard |
|--------------------------|-------------------|---|-------------------------|----------------------------------|---------------|--------------|---------------|----------------|------|
| | Aided RTA | Equip. (number of years with it) | CELF Recep- Lang. | Grade Level & GMRT Test Level | GMRT Vocab | GMRT Comp | GMRT Total | GMRT ChEqiv | MA |
| | 43 | HA (6) | 86 | 2 | 29 | 32 | 28 | 1.9 | 12 |
| on | 83 | HA (6) | 73 | 3 | 34 | 34 | 33 | 2.6 | 36 |
| | 10 | CI (9) | 76 | 3 | 48 | 55 | 52 | 3.9 | 31 |
| \mathcal{L} | 20 | CI (6) | 83 | 3 | 29 | 35 | 32 | 2.5 | 18 |
| # | 20 | HA (8) | 116 | 4 | 72 | 75 | 75 | 8.6 | 40 |
| 2 | 20 | HA (6) | 96 | 4 | 51 | 42 | 46 | 4.3 | 38 |
| Jata colloected | 20 | CI (5)* | 102 | 4 | 54 | 55 | 55 | 5.3 | 36 |
| $\overline{\overline{}}$ | 13 | CI (8)* | 79 | 4 | 42 | 51 | 46 | 4.3 | 34 |
| Ö | 75 | HA (7) | 90 | 5 | 58 | 68 | 62 | 7.4 | 37 |
| Œ | 20 | CI (10) | 90 | 5 | 77 | 81 | 80 | 12 | 37 |
| Ħ | 27 | CI (9)* | 67 | 5 | 32 | 25 | 26 | 3.6 | 32 |
| 0 | 20 | CI (5)* | 96 | 5 | 67 | 68 | 67 | 8.4 | 39 |
| ш | 20 | CI (6) * | 79 | 5 | 36 | 27 | 31 | 3.8 | 38 |
| | 13 | CI (8)* | 76 | 6 | 24 | 52 | 38 | 5.4 | 34 |
| | 15 | CI (10)* | 85 | 6 | 50 | 38 | 43 | 5.8 | 35 |
| | 10 | CI (12)* | 121 | 8 | 66 | 75 | 74 | 13 | 40 |
| | 40 | HA (12) | 107 | 8 | 71 | 77 | 80 | 13 | 40 |

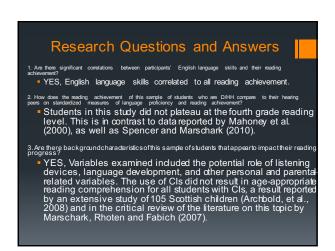












| of | | Table 8 Background Characteristics of Students Reading Within or Above Grade Level | | | | | | | | |
|----------------------------------|----------|---|----------------------------|----------------|-----------------------------|----------------------------------|---|------------------------|-------------------------|--|
| haracteristics ading within o | _ | Grade | Unaided Hearing Loss | Age Loss ID | Acquisition Age HA or CI | Aided Loss dBs/HA or CI | CELF Core %tile Within Average | Parent Sign Ability | Parental Involvement | |
| 芒里 | <u>e</u> | 3 | profound | @ birth | CI @ 2 yrs | 10/CI | No | Medium | High | |
| ⊕ ≥ | 6 | 4 | profound | @3 yrs | HA@3 ym | 20/HA | Yes | Medium | High | |
| 5 | | 4 | severe | @ 5 mths | HA @ 5.5 mths | 20/HA | Yes | Medium | Medium | |
| ing | Φ | 4 | profound | @ 13 mths | HA @ 1.5 ym | 20/CI | Yes | High | High | |
| <u>≒</u> :⊑ | Ō | | | | CI @ 6 yrs (fail) | | | | | |
| <u>얼</u> 절 | ਯ | | | | CI@7ys | | | | | |
| r Cha Readi | gra | 4 | profound | @ 15 mths | HA@2yrs | 13/CI | No | Medium | Medium | |
| ع ک | | | | | CI @ 4 yrs | | | | | |
| <u>., Щ</u> | Φ | 5 | profound | @ 4 yrs | HAR@4yrs | 75/HA | Yes | Low | Medium | |
| <u>ັ</u> ິ | 2 | | | | HAL@5ym | | | | | |
| <u> </u> | abov | 5 | profound | 13 mths | HA@15mths | 20/CI | Yes | High | High | |
| | ā | | | | CI @ 2 yrs | | | | | |
| 5 8 | | 5 | profound | 2 mths | HA @ 4mths | 20/CI | Yes | Medium | Medium | |
| Background Students | | | | | CI@Sym | | | | | |
| O 💥 | | 8 | profound | 9 mths | HA @ 9mths | 10/CI | Yes | High | High | |
| CO O | | | | | CI(L) @ 2 yrs | | | | | |
| | | | | | CI (R) @ 11 yrs | | | | | |
| | | 8 | severe to | 6 weeks | HA @ 3 weeks | 40/HA | Yes | High | High | |

Outcomes

- Overall, the English language development of these students is comparable to the hearing norms on the standardized tests.
 - A potential reason for this finding, even as the students mature, is that these students know how to represent the morphology of words in everyday communication and can access the morphemic understanding and use it to identify words independently in print, critical to decoding and understanding multi-morphemic words in English (Carlisle, 2004).
- Such words are present to a greater degree in reading materials in grades four and higher, particularly in the content areas of mathematics, social studies and science.
- The fact that some students, especially those in earlier grades, are still behind their age mates in both language and reading may be explained by less proficiency in language, possibly due to limited access to sign support at home.

Conclusion / Importance to the membership of ACE-DHH

- As demonstrated in this study, the reading achievement of elementary and middle school students who are Deaf/hard of hearing need not plateau and can be commensurate with that of hearing peers. Deaf students can reach the same levels of reading achievement as their hearing peers.
- Deaf students who fall behind their peers in reading development have a difficult time ever catching up (Juel, 1988; Stanovich, 1986).
- For this reason, it is imperative that we in the profession examine the variables that may affect the achievement of deaf students and advocate for changes in professional development and instructional practice in order for more students to reach their full potential as readers.