Current Clinical Practices for Treating Late-Acquired Sounds, such as /r/: Results of a National Survey

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Introduction

Current clinical practice in treating speech sound disorders (SSD) varies from clinician to clinician. This variability may be caused by a variety of factors.

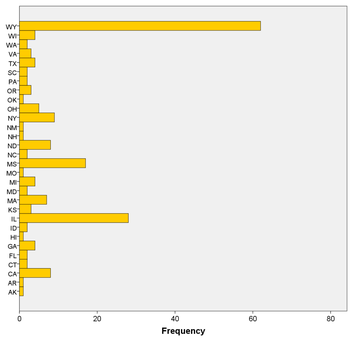
- Normative data sets are often used to determine a diagnosis and eligibility, but are also used to determine which sounds are selected as treatment targets in the developmental approach to treatment target selection (Rvachew & Nowak, 2001)
  - Normative data sets are outdated
  - Most data sets identify when 90% of children produce a sound correctly
  - Do not communicate the gradual nature of typical speech sound development
- Previous examinations of clinical practice for SSD suggests that clinicians often rely on few methods for treatment target selection, assessment and treatment, and use these methods consistently across clients (e.g. Skahan, Watson & Lof, 2007; Brumbaugh & Smit 2013;)
- There are many frameworks for choosing treatment targets, but the knowledge of and use of these may be tied to when the clinician attended graduate school.
- Treatment target selection can impact the effectiveness and the efficiency of treatment for SSD, which could impact caseload size if children remain in treatment longer.

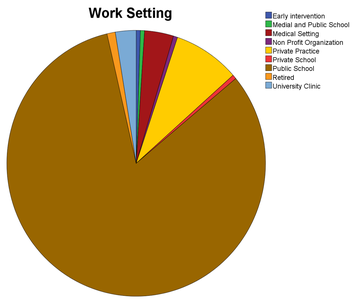
To better understand the current state of clinical practice in treating late-acquired sounds, we conducted a national survey to explore how late-acquired sounds are used and how they are treated in current clinical practice. This study addresses the following purposes:

1) ***Do SLPs differentiate their treatment methods based on the type of speech sound?***
2) ***What types of treatment methods are currently used for treating late-acquired sounds?***
3) ***Does waiting for a developmental age impact caseload size?***

Participants

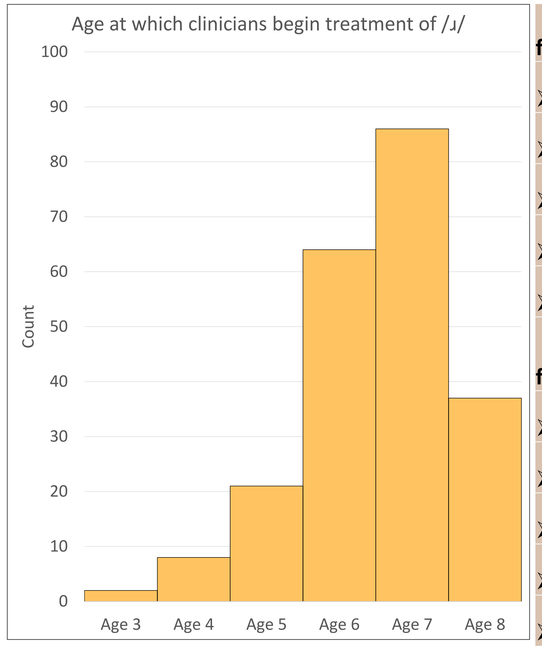
- 1,104 participants opened the survey, 204 speech-language pathologists completed (Completion Rate: 18.5%)
- International participants were excluded
- Representing 30 states





Methods

- Disseminated through social media postings, speech-language pathology forums, and state licensing board email list-servs.
- The survey was open from November of 2017 through February 2018
- Questions included (but not limited to)
  - ***How many children are currently on your caseload?***
  - ***How many years have you been practicing as a speech-language pathologist?***
- Participants were grouped depending on their answer about age for treating a late-acquired sound.
  - Treat early = Age 4-5 Treat late= Age 7-8



Five most frequently used methods for SSD	"Always"
➢Traditional Articulation Therapy	34.33%
➢Auditory Discrimination	29.78%
➢Auditory Bombardment	24.46%
➢Cycles	13.30%
➢Minimal Opposition	11.59%
Five most frequently used methods for late- acquired sounds	
➢Traditional Articulation Therapy	35.55%
➢Auditory Discrimination	42.18%
➢Auditory Bombardment	28.71%
➢Cued Articulation	13.88%
➢Minimal Opposition	11.96%

Results

Do SLPs differentiate their treatment methods based on the type of speech sound?

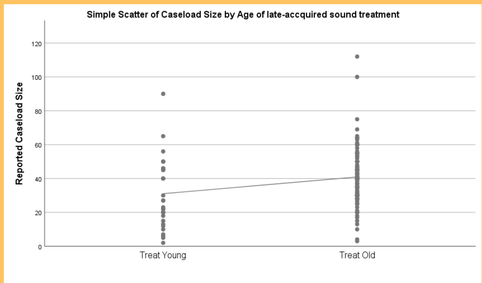
- No, current findings report that SLPs use the same methods for late-acquired sounds as for other speech sounds

What types of treatment methods are currently used for treating late-acquired sounds?

- Current findings suggest that most frequently used methods are traditional methods for treatment

Does waiting for a developmental age impact caseload size?

- An independent samples t-test revealed that SLPs who treat late-acquired sounds earlier (i.e. at age 4 or 5) have smaller caseloads than those that follow the common interpretation of normative data (i.e. age 7 or 8) [t -2.89, p = 0.004]
- On average, those who treated early had a caseload size of 31; those who waited had a caseload average size of 41.



Discussion

- Few treatment methods are being used for treatment of speech sound disorders, and these methods are not differentiated dependent upon the child's needs
- Late-acquired sounds are treated in the same way as other speech sounds
- Many SLPs report following normative data that may be out of date to determine when to treat speech sounds.
- Potential reasons for waiting
  - Eligibility guideline interpretation
  - Controlling caseload size
  - Out-dated normative data
- The consequence of waiting may result in children remaining in treatment longer, which results in an inflated caseload size, and less efficient treatment outcomes.

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