Current protocol when working with children with speech sound disorders (SSD) is to use phonetic transcription, which is not flexible and "paint[s] a very incomplete portrait of the acquisition of sounds" (Munson, Schellinger, and Urberg Carlson, 2012).

It does not allow for the assessment of subtle phonetic changes either in normal speech sound development or in speech sound learning by children undergoing speech and language therapy.

A child who produces the "sh" sound as "s", will have her attempts at /s/ transcribed as either /s/ (when incorrect) or /ʃ/ (once correct).

Visual Analog Scaling (VAS) is a simple technique in which clinicians rate productions (i.e., of target "sh") along a particular dimension (from "s" to "sh") by marking the proximity of each production to the ideal endpoints.

VAS has been tested in laboratory experiments, but is it a feasible and accurate tool for SLPs to measure progress through speech therapy by children who have speech sound disorders (SSD)?

The purpose of the study was to:

- assess feasibility of VAS for SLP graduate student clinicians working with children with SSD, and
- examine the extent to which VAS measures in the clinical setting correlate with VAS measures of the same speech tokens in a laboratory setting.

The participating clinicians were completing their practicum in the university clinic of a large Midwestern university.

Eighteen undergraduate (n = 12) and graduate (n = 6) students with varying levels of experience working with children.

The correlation coefficient (r) and p-value (p) for VAS ratings:

- /ʃ/ had the highest correlation; /s/ had the lowest correlations between sets of ratings; /ʃ/ had the highest correlation; /s/ had a moderate-sized correlation. The ratings for /ʃ/ were moderately correlated, but the clinician’s perception was more categorical than the naïve listeners.

The VAS shows promise in being an effective and efficient tool for clinicians to utilize in tracking progress of speech sounds during the course of treatment.

A follow-up study will be conducted with more participants over a longer period of time to determine if the VAS can show progress over time.

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Key Reference