

effects of treatment that proceeds from complex to simple category items (atypical to typical) compared to treatment that proceeds from simple to complex items (typical to atypical). Based on the CATE, it was hypothesized that treatment of atypical items in a semantic based treatment would result in greater generalization.

The primary objective of this paper is to critically appraise the existing literature on the effectiveness of using semantically complex items versus simple items for facilitating generalization to untrained items in a semantic based naming treatment for individuals with aphasia. Evidence based recommendations regarding the clinical value of these findings will also be discussed.

Search Strategy

Computerized databases, including PubMed, CINAHL, ScienceDirect and ASHA publications were searched using the following key terms: ((Anomia) OR (word finding deficits)) AND ((semantic naming treatment) OR (semantic treatment)) AND (typicality) AND (generalization). Reviewing the reference list of retrieved articles yielded further studies for review.

Selection Criteria

untrained probes was not described in detail. Acceptable inter-rater reliability was reported for measures taken during the treatment.

Overall, this study provided compelling evidence that generalization occurs to untrained items when atypical examples are used and the same effects were not seen when typical items were used in training.

In a similar study, **Stanczak, Waters and Caplan (2006)** investigated naming in 2 participants with anomic aphasia using 2 animate categories. Outcome measures included standardized tests commonly employed in this type of research administered before and after treatment, and probes (naming of trained and untrained words) measured during baseline (4-7 measures), treatment (every other session), and at follow up (1 measure, 6-7 weeks post-treatment). The order of categories trained were counterbalanced across sessions and the order of items within each category was kept constant. Treatment was administered once a week for 2 hour sessions and was discontinued when 7/8 items were named in either semantic category. The treatment protocol consisted of a 3 step process: 1) naming the picture, 2) feature verification task and 2) naming the picture again. Results were analyzed using visual inspection and appropriate statistical analysis was used (C-statistic). A stable baseline was established and there were appropriate number of data points to measure change. Results from this study indicated that 1 of the 2 participants trained using atypical items demonstrated

It is recommended that further research be conducted to replicate and confirm the effectiveness of generalization using atypical items. To strengthen the evidence future research designs could consider the following recommendations:

- 1) Using more subjects to increase the confidence in implementing this treatment in a clinical setting.
- 2) Utilizing appropriate statistical analysis to account for the frequency in which untrained probes are used and the impact they have on the outcome of the treatment.
- 3) Incorporating a consistent treatment protocol to allow for comparison between studies.