Non-linguistic learning in aphasia: Effects of training method and stimulus characteristics

Sofia Vaillá 1,2 and Swathi Kiran 3

1Harvard-MIT Division of Health Sciences and Technology, Boston, MA 2Aphasia Research Laboratory, Boston University, Boston, MA

Introduction

We suggest that individuals may differentially be more able to generalize from atypical to typical items following feedback or paired-associate instruction. In previous studies, learning ability of atypical vs. typical exemplars was shown to be different for aphasia learners, with many patients (6/10) who learned following Typical training to their baseline tasks, many learners showed generalization to novel items only after feedback training. For example, patients showed generalization of category learning.

We conducted a 2 (task: FB & PA) x 2 (stimulus type: Typical and Atypical) x 2 (learner type: Aphasia and Normal populations) study to explore the difference between instruction method and category learning. To make the difference between instruction method and category learning, we conducted a 2 (task: FB & PA) x 2 (stimulus type: Typical and Atypical) x 2 (learner type: Aphasia and Normal populations) study to explore the difference between instruction method and category learning. To make the difference between instruction method and category learning, we conducted a 2 (task: FB & PA) x 2 (stimulus type: Typical and Atypical) x 2 (learner type: Aphasia and Normal populations) study to explore the difference between instruction method and category learning.

Methods

Participants & Sample Baseline Data (previous study with training on animals at distances 1-9)

10 patients with aphasia participated (12 control participants also participated in baseline study).

We suggest that for these patients, the most efficient therapy might be therapy that targets complex stimuli (i.e., most likely patients to show generalization to typical items when trained on atypical items in therapy).

Summary of results from baseline study:

- 10/12 controls learned following both training conditions.
- 9/12 patients showed learning of category structure.
- Of these, 3/9 patients showed control-
- 6/9 patients learning following only one method of training.
- 10/13 did not learn category structure

We suggest that individuals may differentially be more able to generalize from atypical to typical items following feedback or paired-associate instruction. In previous studies, learning ability of atypical vs. typical exemplars was shown to be different for aphasia learners, with many patients (6/10) who learned following Typical training to their baseline tasks, many learners showed generalization to novel items only after feedback training. For example, patients showed generalization of category learning.

We suggest that individuals may differentially be more able to generalize from atypical to typical items following feedback or paired-associate instruction. In previous studies, learning ability of atypical vs. typical exemplars was shown to be different for aphasia learners, with many patients (6/10) who learned following Typical training to their baseline tasks, many learners showed generalization to novel items only after feedback training. For example, patients showed generalization of category learning.

We suggest that individuals may differentially be more able to generalize from atypical to typical items following feedback or paired-associate instruction. In previous studies, learning ability of atypical vs. typical exemplars was shown to be different for aphasia learners, with many patients (6/10) who learned following Typical training to their baseline tasks, many learners showed generalization to novel items only after feedback training. For example, patients showed generalization of category learning.

We suggest that individuals may differentially be more able to generalize from atypical to typical items following feedback or paired-associate instruction. In previous studies, learning ability of atypical vs. typical exemplars was shown to be different for aphasia learners, with many patients (6/10) who learned following Typical training to their baseline tasks, many learners showed generalization to novel items only after feedback training. For example, patients showed generalization of category learning.

We suggest that individuals may differentially be more able to generalize from atypical to typical items following feedback or paired-associate instruction. In previous studies, learning ability of atypical vs. typical exemplars was shown to be different for aphasia learners, with many patients (6/10) who learned following Typical training to their baseline tasks, many learners showed generalization to novel items only after feedback training. For example, patients showed generalization of category learning.

We suggest that individuals may differentially be more able to generalize from atypical to typical items following feedback or paired-associate instruction. In previous studies, learning ability of atypical vs. typical exemplars was shown to be different for aphasia learners, with many patients (6/10) who learned following Typical training to their baseline tasks, many learners showed generalization to novel items only after feedback training. For example, patients showed generalization of category learning.

We suggest that individuals may differentially be more able to generalize from atypical to typical items following feedback or paired-associate instruction. In previous studies, learning ability of atypical vs. typical exemplars was shown to be different for aphasia learners, with many patients (6/10) who learned following Typical training to their baseline tasks, many learners showed generalization to novel items only after feedback training. For example, patients showed generalization of category learning.

We suggest that individuals may differentially be more able to generalize from atypical to typical items following feedback or paired-associate instruction. In previous studies, learning ability of atypical vs. typical exemplars was shown to be different for aphasia learners, with many patients (6/10) who learned following Typical training to their baseline tasks, many learners showed generalization to novel items only after feedback training. For example, patients showed generalization of category learning.

We suggest that individuals may differentially be more able to generalize from atypical to typical items following feedback or paired-associate instruction. In previous studies, learning ability of atypical vs. typical exemplars was shown to be different for aphasia learners, with many patients (6/10) who learned following Typical training to their baseline tasks, many learners showed generalization to novel items only after feedback training. For example, patients showed generalization of category learning.

We suggest that individuals may differentially be more able to generalize from atypical to typical items following feedback or paired-associate instruction. In previous studies, learning ability of atypical vs. typical exemplars was shown to be different for aphasia learners, with many patients (6/10) who learned following Typical training to their baseline tasks, many learners showed generalization to novel items only after feedback training. For example, patients showed generalization of category learning.

We suggest that individuals may differentially be more able to generalize from atypical to typical items following feedback or paired-associate instruction. In previous studies, learning ability of atypical vs. typical exemplars was shown to be different for aphasia learners, with many patients (6/10) who learned following Typical training to their baseline tasks, many learners showed generalization to novel items only after feedback training. For example, patients showed generalization of category learning.

We suggest that individuals may differentially be more able to generalize from atypical to typical items following feedback or paired-associate instruction. In previous studies, learning ability of atypical vs. typical exemplars was shown to be different for aphasia learners, with many patients (6/10) who learned following Typical training to their baseline tasks, many learners showed generalization to novel items only after feedback training. For example, patients showed generalization of category learning.

We suggest that individuals may differentially be more able to generalize from atypical to typical items following feedback or paired-associate instruction. In previous studies, learning ability of atypical vs. typical exemplars was shown to be different for aphasia learners, with many patients (6/10) who learned following Typical training to their baseline tasks, many learners showed generalization to novel items only after feedback training. For example, patients showed generalization of category learning.