



Coherence as a Generalized Conditioned Reinforcer

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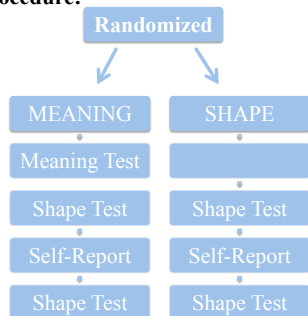
Purpose

The purpose of this investigation is to extend our understanding of the role coherence plays in complex human verbal behavior. Coherence can be defined as relating arbitrary concepts in ways that go together. Previous research has demonstrated that coherent relational responding has many of the same properties of non-verbal behavior in that it can be shaped and reinforced by the environment. This study is designed to demonstrate antecedent control of coherence by experimentally manipulating learning histories. In addition, the contribution of self-generated verbal rules will be assessed.

Methods

Participants: 89 undergraduate students

Procedure:

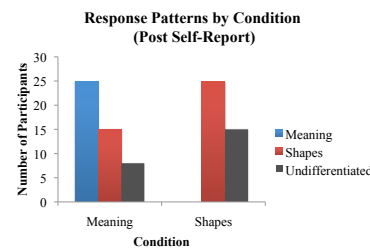
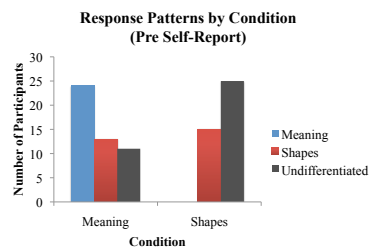
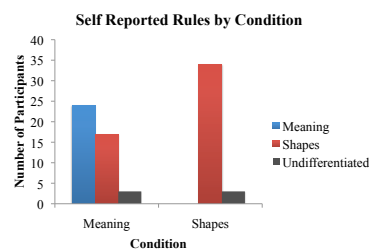


Meaning Test	27 MTS trials matching foods to meaning (healthy, unhealthy, disgusting)
Shape Test	27 MTS trials matching foods to shapes (triangles, circles, lines)
Self Report	Rule participants used to guide responding during the previous test phase.

Stimuli



Results



Discussion

Participants in the Meaning condition displayed response patterns consistent with following the meaning and shape rule while participants in the Shape condition displayed patterns consistent only with the shape rule. This finding indicates that coherent responding came under antecedent control in the absence of directly reinforced learning histories. This suggests that coherence is in itself a generalized conditioned reinforcer.

In addition, an analysis of self-reported rules and responding in the Shape condition lends support to the role verbal behavior plays in rule following. In particular, while the majority of Shape condition participants initially displayed undifferentiated responding, the majority shifted to Shape consistent responding after reporting the shape rule.

Future Directions

Protocol analysis (i.e., talk aloud procedures) can be used to measure rule formation in real time as an alternative to retrospective self-reports.

Identification of moderators of coherent responding can lead to the identification of factors that contribute to the acquisition of coherence as a reinforcer.

The relative strength of coherence as a reinforcer can be tested in a parametric design where participants experience a response cost of increasing magnitude for access to contexts where coherent responding is available.

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