

University of Texas of the Permian Basin

FalconCommons

College of Arts & Sciences

Dissertations & Theses

5-1981

Patterning of the Electromyographic Response on a Simple Verbal Conditioning Task

Truman G. Reid

University of Texas Permian Basin

Follow this and additional works at: <https://falconcommons.utpb.edu/utpb-cas>



Part of the [Applied Behavior Analysis Commons](#), and the [Behavior and Behavior Mechanisms Commons](#)

Recommended Citation

Reid, Truman G., "Patterning of the Electromyographic Response on a Simple Verbal Conditioning Task" (1981). *College of Arts & Sciences*. 56.

<https://falconcommons.utpb.edu/utpb-cas/56>

This Research Project Report is brought to you for free and open access by the Dissertations & Theses at FalconCommons. It has been accepted for inclusion in College of Arts & Sciences by an authorized administrator of FalconCommons. For more information, please contact pappas_j@utpb.edu.

XA09944

THE UNIVERSITY OF TEXAS OF THE PERMAN BASIN

BF

39.5

.R45

1981

c.1

PATTERNING OF THE ELECTROMYOGRAPHIC RESPONSE ON A
SIMPLE VERBAL CONDITIONING TASK

APPROVED BY SUPERVISORY COMMITTEE:

J. Greenman

Chairman

Robert G. White

R. Collier Ph.D.

Alan Marks

James Olson

PATTERNING OF THE ELECTROMYOGRAPHIC RESPONSE ON A
SIMPLE VERBAL CONDITIONING TASK

by

TRUMAN G. REID, B.A.

RESEARCH PROJECT REPORT

Presented to the Faculty of Psychology of Arts and Education

The University of Texas of the Permian Basin

in Partial Fulfillment

for the Degree of

MASTER OF ARTS

THE UNIVERSITY OF TEXAS OF THE PERMIAN BASIN

May, 1981

ABSTRACT

Twenty-four subjects from the University of Texas of the Permian Basin volunteered to participate in an experiment designed to determine if patterning of EMG responses occur when recorded from the Frontalis, or the Flexors of the preferred arm on a paired-associate verbal conditioning task. Six groups of four subjects each were provided either positive, negative reinforcement, or no reinforcement depending on their respective group. Groups one (PRF), and three (PRA) were positive reinforcement groups. Groups two (NRF), and four (NRA) were provided negative reinforcement. Groups five and six were control groups. Positive and negative reinforcement consisted of subjects being provided the response syllables "right", or "wrong", respectively. EMG activity was recorded when each stimulus was presented, and when each verbal response was made. The only significant differences made were between Frontalis EMG activity, and from the preferred arm. No significant patterns developed in relation to learning, the presentation of the stimulus, or the verbal response. Specific recommendations for further research were made. It was determined that more rigorous controls are needed and that the task employed for this experiment may not have been of sufficient difficulty or duration to cause an EMG pattern to develop.