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NAME AND ADDRESS

DATE

GERALD ALEXANDER  
289, PARK ROAD  
Palmerston North

24/2/87

THE CONTINUOUS PERFORMANCE TEST:

EXPLORATORY STUDIES

COMPARING SCHEDULES OF REINFORCEMENT

A thesis presented in partial fulfillment of  
the requirements for the degree of  
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ABSTRACT

The first study was designed to demonstrate that Continuous Performance Test responding was subject to reinforcement effects. A version of the CPT which requires detection of a target stimulus which had been preceded by another, and which required subjects to respond on one key to target stimuli and on another to all other stimuli was used. Responding during baseline was compared with conditions where correct responses to target stimuli were reinforced and all correct responses were reinforced for four intellectually handicapped subjects using an ABCBA design. The results demonstrated a rise in impulsivity with reinforcement delivery. The overall results although weak showed that reinforcement did alter behaviour on the CPT and reinforcing correct responding on both keys was better than just reinforcing correct responding on one key, in terms of accuracy, time on-task and efficiency. Experiment II used a version of the CPT which requires detection of a target stimulus, and which required subjects to respond on one key to target stimulus and on another to all other stimuli. To reduce anticipatory responding impulsivity was redefined by dramatically shortening the period of time available for impulsive responses to occur. Two intermittent schedules were compared to explore the capabilities of the CPT as a research tool to compare between schedules of reinforcement. An alternating treatments design, with baseline being one of the treatment conditions, was used with four intellectually handicapped subjects. The results, though weak, were

able to show a difference in performance under the schedules. As predicted, impulsivity was low. There were indications for the potential of developing the CPT as a research tool. Suggestions for further research were offered.

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## TABLE OF CONTENTS

	PAGE
ABSTRACT	ii
ACKNOWLEDGEMENTS	iv
LIST OF TABLES	ix
LIST OF FIGURES	xiii
CHAPTER 1. OVERVIEW.	1
CHAPTER 2. INTRODUCTION I: The Continuous Performance Test as a Research Tool	3
Reinforcement Schedules in Industrial, Organizational and Experimental Psychology	
Choice of the research tool	
Characteristics of the CPT	
History of the CPT:- Beginnings	
Signal Detection Analysis of the CPT	
CPT studies	
Motivation Studies done with the CPT	
Purpose of Experiment I	

## CHAPTER 3. METHOD I

23

Subjects

Task Description

Apparatus

Specification of the CPT programme

Reinforcement

Setting

Design

Procedure

Analysis of Results

Criteria for Visual Inspection

Signal Detection Analysis

-Analysis derived from the generalized  
matching law

-Signal Detection Theory analysis

Sensitivity measure

Decision criterion measure

## CHAPTER 4. RESULTS I

43

Hits

Correct Rejections

Correct Detections

Pseudo-Hits

Pseudo-Correct Rejections

Total Duration On-task



	PAGE
Sensitivity Measurement	
Decision Criterion Measurement	
Response Bias	
Summary of Results I	
 CHAPTER 5. DISCUSSION I	 85
 CHAPTER 6. INTRODUCTION II: Further exploratory tests	
of reinforcement on the CPT	94
 Types of Schedules of Reinforcement	
Thinning Schedules of Reinforcement	
Comparison between Variable Ratio	
and Variable Interval Schedules	
of Reinforcement	
Purpose of Experiment II	
 CHAPTER 7. METHOD II	 106
 Subjects	
Task Description	
Apparatus	
Specification of Computer Programme	
Reinforcements	
Setting	
Design	
Procedure	
Analysis of Results	

	PAGE
Signal Detection Analysis	
CHAPTER 8. RESULTS II	119
Hits	
Correct Rejections	
Correct Detections	
Impulsive Hits	
Impulsive Correct Rejections	
Total Duration On-Task	
Signal Detection Analysis	
-Sensitivity Measure	
-Decision Criterion Measure	
-Response Bias	
Summary of Results II	
CHAPTER 9. DISCUSSION II	170
CHAPTER 10. GENERAL DISCUSSION	179
Further Research	
Summary and Conclusion	
REFERENCES	192

LIST OF TABLES

	PAGE
TABLE 1 : Performance parameters recorded in all three CPT programmes.	28
TABLE 2 : The impulsive parameters recorded on the CPT(A-X).	29
TABLE 3 : The number of sessions for each subject for each experimental phase on the CPT.	43
TABLE 4 : Means of running averages of hits for each experimental phase.	45
TABLE 5 : Means of running averages of correct rejections for each experimental phase.	49
TABLE 6 : Means of running averages of correct detections for each experimental phase.	53
TABLE 7 : Means of running averages of pseudo-hits for each experimental phase.	57
TABLE 8 : Means of running averages of	

pseudo-correct rejections for each experimental phase.	61
TABLE 9 : Means of running averages of total duration on-task for each experimental phase.	65
TABLE 10: Signal Detection Analysis of Subject K's performance for each phase on the CPT.	70
TABLE 11: Signal Detection Analysis of Subject M's performance for each phase on the CPT.	71
TABLE 12: Signal Detection Analysis of Subject D's performance for each phase on the CPT.	74
TABLE 13: Signal Detection Analysis of Subject I's performance for each phase on the CPT.	74
TABLE 14: Schedules for delivery of reinforcers.	97
TABLE 15: Performance parameters recorded in all three CPT components.	110
TABLE 16: Impulsive parameters recorded in all three CPT programmes.	110
TABLE 17: Means of the major dependent variables	

for each treatment condition of each phase for Subject A.	121
TABLE 18: Means of the major dependent variables for each treatment condition of each phase for Subject B.	122
TABLE 19: Means of the major dependent variables for each treatment condition of each phase for Subject C.	125
TABLE 20: Means of the major dependent variables for each treatment condition of each phase for Subject G.	126
TABLE 21: Signal Detection Analysis of Subject A's performance for each treatment condition of each phase on the CPT.	155
TABLE 22: Signal Detection Analysis of Subject B's performance for each treatment condition of each phase on the CPT.	156
TABLE 23: Signal Detection Analysis of Subject C's performance for each treatment condition of each phase on the CPT.	159
TABLE 24: Signal Detection Analysis of Subject G's	

performance for each phase on the CPT.

160

LIST OF FIGURES

	PAGE
FIGURE 1 : The matrix of stimulus and response events in the yes-no detection task.	38
FIGURE 2 : Running averages of hits per session scored on the CPT.	46
FIGURE 3 : Running averages of correct rejections per session scored on the CPT.	50
FIGURE 4 : Running averages of correct detections per session scored on the CPT.	54
FIGURE 5 : Running averages of pseudo-hits per session scored on the CPT.	58
FIGURE 6 : Running averages of pseudo-correct rejections per session scored on the CPT.	62
FIGURE 7 : Running averages of total duration on-task per session on the CPT.	66

	PAGE
FIGURE 8 : Sensitivity on the CPT for Subject K.	72
FIGURE 9 : Sensitivity on the CPT for Subject M.	72
FIGURE 10: Sensitivity on the CPT for Subject D.	75
FIGURE 11: Sensitivity on the CPT for Subject I.	75
FIGURE 12: Decision criterion cutoff ( $z(S n)$ ) per session for Subject K.	78
FIGURE 13: Decision criterion cutoff ( $z(S n)$ ) per session for Subject M.	78
FIGURE 14: Decision criterion cutoff ( $z(S n)$ ) per session for Subject D.	80
FIGURE 15: Decision criterion cutoff ( $z(S n)$ ) per session for Subject I.	80
FIGURE 16: Hits per session for each treatment condition for subject A.	123
FIGURE 17: Hits per session for each treatment condition for subject B.	123
FIGURE 18: Hits per session for each treatment	



	PAGE
condition for subject C.	127
FIGURE 19: Hits per session for each treatment condition for subject G.	127
FIGURE 20: Correct rejections per session for each treatment condition for Subject A.	130
FIGURE 21: Correct rejections per session for each treatment condition for Subject B.	130
FIGURE 22: Correct rejections per session for each treatment condition for Subject C.	133
FIGURE 23: Correct rejections per session for each treatment condition for Subject G.	133
FIGURE 24: Correct detections per session for each treatment condition for Subject A.	136
FIGURE 25: Correct detections per session for each treatment condition for Subject B.	136

FIGURE 26: Correct detections per session for each treatment condition for Subject C.	139
FIGURE 27: Correct detections per session for each treatment condition for Subject G.	139
FIGURE 28: Impulsive hits per session for each treatment condition for Subject A.	142
FIGURE 29: Impulsive hits per session for each treatment condition for Subject B.	142
FIGURE 30: Impulsive hits per session for each treatment condition for Subject C.	143
FIGURE 31: Impulsive hits per session for each treatment condition for Subject G.	143
FIGURE 32: Impulsive correct rejections per session for each treatment condition for Subject A.	145
FIGURE 33: Impulsive correct rejections per session for each treatment condition for Subject B.	145

FIGURE 34: Impulsive correct rejections per session for each treatment condition for Subject C.	146
FIGURE 35: Impulsive correct rejections per session for each treatment condition for Subject G.	146
FIGURE 36: Total duration on-task per session for each treatment condition for Subject A.	148
FIGURE 37: Total duration on-task per session for each treatment condition for Subject B.	148
FIGURE 38: Total duration on-task per session for each treatment condition for Subject C.	151
FIGURE 39: Total duration on-task per session for each treatment condition for Subject G.	151
FIGURE 40: Sensitivity per session for each treatment condition for Subject A.	157

	PAGE
FIGURE 41: Sensitivity per session for each treatment condition for Subject B.	157
FIGURE 42: Sensitivity per session for each treatment condition for Subject C.	161
FIGURE 43: Sensitivity per session for each treatment condition for Subject G.	161
FIGURE 44: Decision criterion cutoff ( $z(S n)$ ) per session for each treatment condition for Subject A.	164
FIGURE 45: Decision criterion cutoff ( $z(S n)$ ) per session for each treatment condition for Subject B.	164
FIGURE 46: Decision criterion cutoff ( $z(S n)$ ) per session for each treatment condition for Subject C.	166
FIGURE 47: Decision criterion cutoff ( $z(S n)$ ) per session for each treatment condition for Subject G.	166