

# ASSESSING THE CONTRIBUTION OF THE TOP-DOWN PROCESSING ON THE LEARNED PREDICTIVENESS EFFECT: A STRATEGY BASED ON SHORTENING THE DURATION OF THE TEST TRIALS

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## INTRODUCTION

The predictiveness of a cue influences the expression of future learning involving that cue and a novel outcome. This effect is termed the learned predictiveness effect.

This effect has been originally explained in terms of changes in stimulus associability: good predictors in the past will be learned about readily. However, there is evidence supporting alternative views that invoke to voluntary (top-down) integration processes carried out by the subjects.

## METHODS

- Sixty-eight students (48 female; Mage= 21.12 in a range from 18 to 34) from the University of the Basque Country who, after being informed, agreed to participate in an experiment that involved cognitive tasks. All of the students had normal or corrected-to-normal vision. The Research Ethics Committee of the University of the Basque Country (CEISH) approved the experimental protocol.

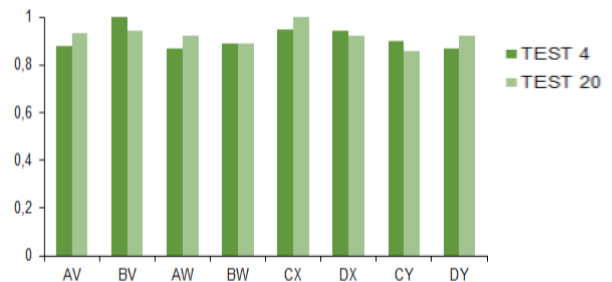
Present experiment			
Differential training	Test: O1 or O2?	Nondifferential training	Test: O1? O2?
AV→1	AV	AX→3	Group 20: test trials of 20 seconds
BV→2	BV	BY→4	
AW→1	AW	CV→3	
BW→2	BW	DW→4	
CX→2	CX		
DX→1	DX		
CY→2	CY		
DY→1	DY		
			Group 4: test trials of 4 seconds

## OBJECTIVES

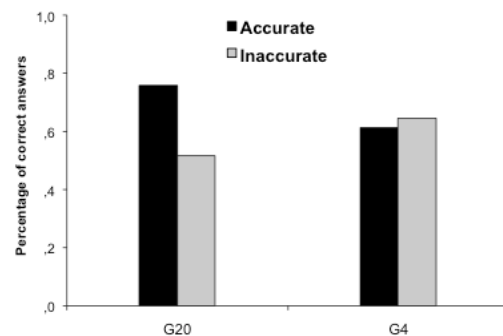
To assess whether the learned predictiveness effect is mediated either by changes in associability or by top-down processes

## RESULTS

The results obtained in the first test of the experiment showed no difference in accuracy in Groups 20 and 4.



Results from the second test showed an interaction: the LP effect was observed in Group 20 but not in Group 4:



## DISCUSSION

- The results obtained support the hypothesis that the LP effect is not caused by changes in associability. It seems that it reflects a mechanism based on inference. This mechanism would be top-down dependent and it would require some time to be fully processed and expressed.
- Modern associative models might reconsider the importance of the results from the LP procedure in order to discuss the mechanisms regulating stimulus associability.