PERCEPTUAL GENERALIZATION OF INTEROCEPTIVE FEAR EXTINCTION AND BASELINE HEART RATE VARIABILITY

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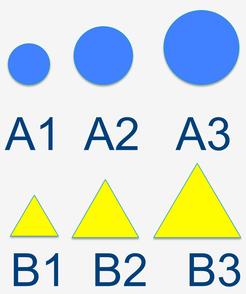
INTRODUCTION

Fear conditioning research has demonstrated that generalization of fear can vary along a gradient of perceptual similarity. The more a stimulus resembles the original conditioned stimulus (CS), the more fear it tends to evoke. The aim of the current study was to examine the presence of a perceptual gradient in generalization of fear extinction and to assess the potential role of ***interindividual differences in inhibitory capacity*** on fear extinction generalization.

METHODS

CSs



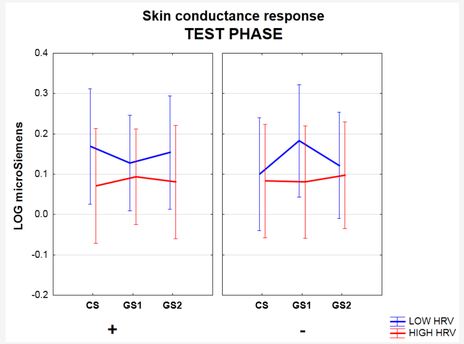
US: a breathing occlusion, 40% of personal breath holding time (BHT)

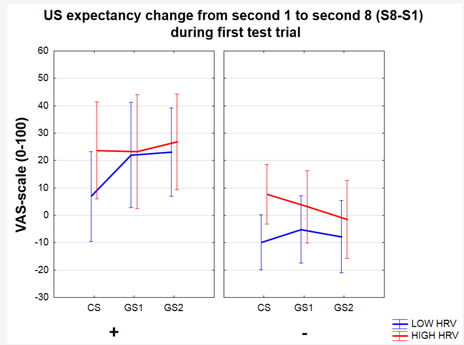
Measures: SCR, EMG startle eyeblink, US-expectancy

N= 39 healthy participants

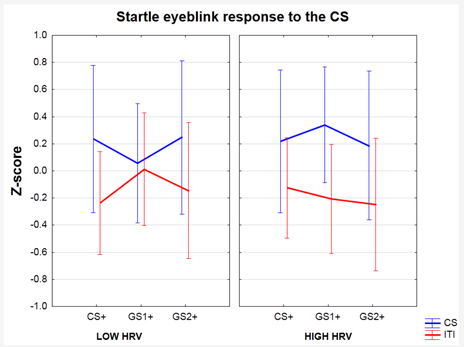
DAY 1	HRV BASELINE MEASUREMENT					
	ACQUISITION	BASELINE	CS	US (or no-US)	ITI	A1+, A2+, A3+, B1-, B2-, B3-
		10 S	8 S	40%BHT	20 S	4 x each
	EXTINCTION	BASELINE	CS	ITI		A1-, B1-
		10 S	8 S	40% BHT + 20 S		8 x each
DAY 2	TEST	BASELINE	CS	ITI		A1+, A2+, A3+, B1-, B2-, B3-
		10 S	8 S	40%BHT + 20 S		4 x each

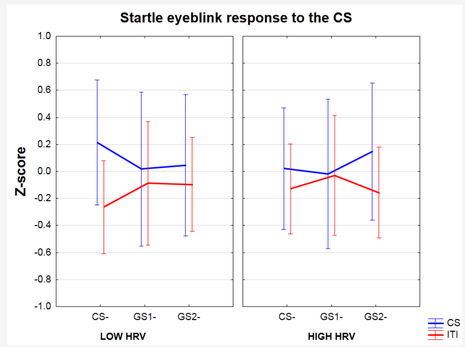
RESULTS TEST PHASE





Vertical bars denote 0.95 confidence intervals





DISCUSSION

- ✓ In general some preliminary evidence was found for generalization of fear extinction (not depicted)
- ✓ Strong spontaneous recovery on test day to the CS+, especially in high HRV
- ✓ Deficient safety learning to unreinforced stimuli in low HRV
- ✓ Do high HRV-persons more use context-information for extinction learning?

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