

Supplementary Material

Vicarious Fear Learning depends on Empathic Appraisals and Trait Empathy

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Instructions to Participants:

Before watching the movie (Observation stage), each participants was given information related to both empathy appraisals and the particular self-relevance of the video that they were about to watch. In the *High empathy* condition, participants were given the following instructions:

“This person rated the shocks as “painful” after his experiment. Please, pay close attention to the discomfort he experiences as he anticipates and receives the painful shocks. Do your best to imagine what the person is thinking and how he is feeling as he waits to receive these shocks as well.”

In the *Low empathy* condition, participants were given the following instructions:

“The person in this movie received shocks that were hardly noticeable. He was told to act as though they were painful, for instructional purposes. Please, pay attention to the actor’s expressions, but only as a cue to help you understand the relationship between colors on the screen and shocks.”

In the *No instruction* condition, participants were not given additional information about the demonstrator’s state and no instructions regarding empathy appraisals.

The self-relevance instructions were given directly after the empathy appraisal instructions. In the *High self-relevance* condition, participants were told the following:

“The experiment you will be watching is the same one you’ll be participating in after watching the movie, so pay attention to which color is paired with a shock.”

In the *Low self-relevance* condition, subjects were told:

“Please, pay attention to which color is paired with a shock, because you will be asked to compare this movie with another one you will be watching later.”

Each participant participated in one High self-relevance condition and one Low self-relevance condition in a counterbalanced randomized order.

Before the Test phase began, each participant was told the following:

“You will now participate in the same experiment as the person in the movie. Importantly, you will receive shocks only with the same color as the person in the movie. You may remember that the person in the movie received 3 shocks. You’ll receive anywhere from 1 to 3 shocks, at least 1 and at most 3 shocks, paired with the same color in the movie.”

Table S1. Skin Conductance Responses (SCRs) in the Test stage for the Conditioned Stimulus (CS+) and Control Stimulus (CS-) as Function of Trial, Empathy, and Self-Relevance Condition.

Empathy Condition	Self-Relevance Condition		Trial				
			1	2	3	4	5
High empathy (M±SD), n = 31	Low	CS+	.82 (.51)	.66 (.39)	.61 (.36)	.48 (.43)	.42 (.44)
		CS-	.48 (.47)	.17 (.31)	.13 (.25)	.07 (.25)	.16 (.29)
	High	CS+	.76 (.36)	.58 (.39)	.46 (.40)	.38 (.35)	.43 (.42)
		CS-	.42 (.39)	.23 (.35)	.10 (.24)	.06 (.19)	.09 (.23)
No instruction (M±SD), n = 34	Low	CS+	.72 (.44)	.55 (.44)	.52 (.43)	.42 (.42)	.50 (.39)
		CS-	.45 (.61)	.24 (.37)	.17 (.31)	.12 (.28)	.17 (.32)
	High	CS+	.72 (.38)	.48 (.43)	.38 (.44)	.40 (.40)	.42 (.40)
		CS-	.35 (.39)	.22 (.35)	.15 (.31)	.25 (.39)	.18 (.32)
Low empathy (M±SD), n = 35	Low	CS+	.74 (.60)	.50 (.42)	.32 (.44)	.38 (.41)	.27 (.36)
		CS-	.38 (.59)	.20 (.32)	.16 (.29)	.16 (.32)	.09 (.22)
	High	CS+	.69 (.42)	.54 (.39)	.38 (.42)	.32 (.39)	.38 (.42)
		CS-	.43 (.47)	.16 (.33)	.09 (.30)	.07 (.24)	.15 (.36)

Figure S1. Conditioned responses (CS+ minus CS-) as a function of empathy group (High vs. No. vs. Low), and Self relevance (High vs. Low).

