

# Cognitive desensitization as a model of systematic desensitization

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Cognitive desensitization as a model of systematic desensitization In an experiment on systematic desensitization (Valins and Ray, 1967), subjects with fear of snakes were made to believe that images of snakes were not affecting their heart rate; this reduced their fear upon exposure to live snakes. A second group was told that their heart rate increased while receiving electric shocks, they showed more avoidance behavior upon repeat exposure to shocks. The authors concluded that 'cognitive restructuring' occurs if one is made to believe that a feared stimulus is not causing internal effects - leading to systematic desensitization.

A similar experiment was conducted (Sushinsky & Bootzin, 1970) to validate these findings. Subjects were first exposed to live snakes and rats, then shown rat images and made to believe their heart rate was stable. No such perception was given for snake images shown next. They were then asked to interact with the animals again. It was anticipated that, due to 'cognitive restructuring', subjects would report less fear towards rats than snakes in the last exposure.

However, no significant difference was found between the fear scores for rats and snakes - they failed to replicate Valins and Ray's (1967) findings. Sushinsky & Bootzin (1970) concluded that the heart-rate model was not effective an effective tool for inducing systematic desensitization. The Valin and Ray technique was likely flawed. Their study may have had overestimated the results due to non-comparable stimuli used - shocks cause pain and thus cause more fear than simply seeing a snake. Also, their study may have used more subjects not truly afraid of snakes, who did not report a high degree of fear on snake exposure. It is likely that for a

procedure to be effective in causing systematic desensitization, subjects must be led to expect improvement, also, they should be allowed to compare the negativity of physical cues such as pain with the ambiguity of effects of feared stimuli. Thus, this heart-rate model alone cannot be validated as a reliable tool for systematic desensitization.

#### References

Sushinsky, L. W., & Bootzin, R. R. (1970). Cognitive desensitization as a model of systematic desensitization. *Behav, Res. & Therapy*, 29-33.

Valins, S., Ray, A. A. (1967). Effects of cognitive desensitization on avoidance behavior. *J per. Soc. Psychol*, 345-35.