

The influence of success priming on self-efficacy and emotions in achievement situations

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Introduction

According to the control-value theory (Pekrun, 2006), achievement emotions are determined by two factors: *perceived control* over the outcome and *subjective value* of the outcome. Thereby the factor *perceived control* can be seen as equivalent to Banduras (1977) concept of domain specific self-efficacy. Hansen und Wänke (2009) found that self-efficacy mediates the effect of (stereotype) priming on achievement. What remains unclear is, if priming self-efficacy can influence achievement emotions. The purpose of this study was to help answer this question.

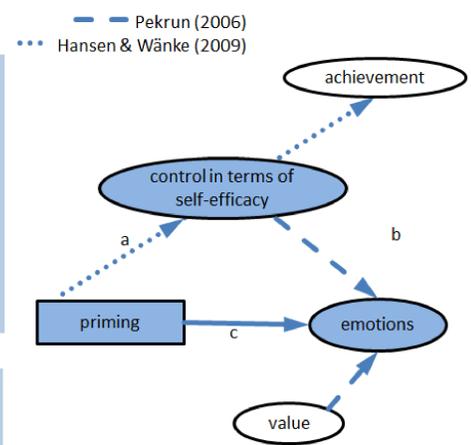


Figure 1. (un-) known relations

Research Question

Does self-efficacy mediate the effect of priming on achievement emotions? (Path *ab*, figure 1)

Methods and Measures

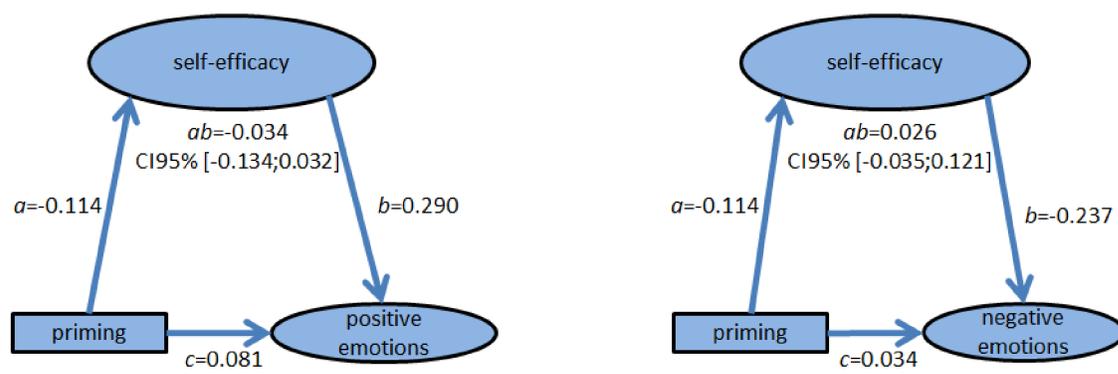


Figure 2. Mediation models

Results

Separate mediation analysis with positive/negative emotions as DV (fig. 2):  
**Path a:** No significant effect of the priming intervention on self-efficacy.  
**Path b:** The effect of self-efficacy on positive emotions was only marginally significant ( $p=.057$ ).  
**Path c:** No significant effect of the priming intervention on emotions.  
**Path ab:** The indirect effect of the priming intervention on emotions was not significant.

Model	pos. emotions as DV	neg. emotions as DV
path <i>ab</i>	$ab = -0.034, CI_{95\%} [-0.134; 0.032]$	$ab = 0.026, CI_{95\%} [-0.035; 0.121]$
model fit	$\chi^2(6, N = 130) = 98.85, p < .001, RMSEA = 0.346, CI_{90\%} [0.288; 0.408]$	$\chi^2(6, N = 130) = 96.78, p < .001, RMSEA = 0.342, CI_{90\%} [0.288; 0.404]$

Discussion and Future Prospects

Take-Home

No significant group differences in self-efficacy and emotions: The priming intervention did not effect the DVs. The indirect effect on emotions was not statistically significant: No mediation! **However:** The effect of self-efficacy on positive emotions was marginally significant. Maybe an indication for a causal relation (control-value theory)?

Limitations

The generalizability of these findings are questionable, because testing this mediation models requires an *effective* priming intervention. Moreover, the chosen ability test was not difficult enough for this sample, so that it remains unclear, if the achievement situation created here was challenging enough to display differences in self-efficacy.

Future Prospects

Revision of the priming intervention and replication with a more challenging ability test: Is it possible to influence self-efficacy and emotions in achievement situations by priming? How does this relate to performance?

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