



# Susceptibility of Stress Mindset in Response to Stress

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## Introduction

- Stress mindset can either be positive (stress-is-enhancing) or negative (stress-is-debilitating; Crum, Salovey, & Achor, 2013).
- This study is a continuation of a previous study that induced stress in participants, manipulated their mindset, and then measured their cognitive performance. This study does not include stress induction.
- We hypothesized that stress mindset will influence cognitive performance.
- We hypothesized that participants who are not under induced stress will be more likely to change their mindset after manipulation compared to participants who undergo stress induction.

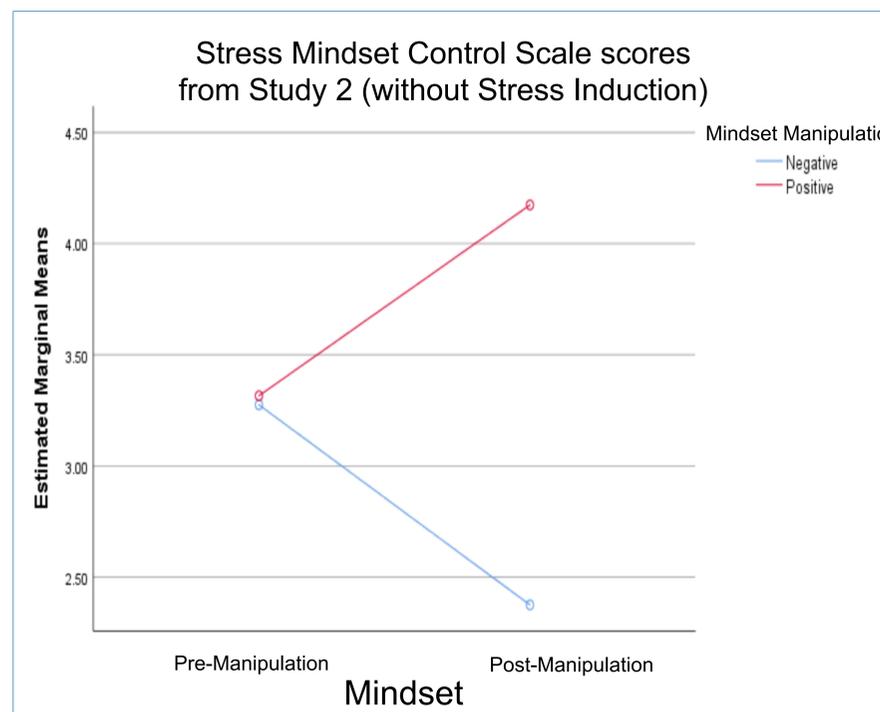
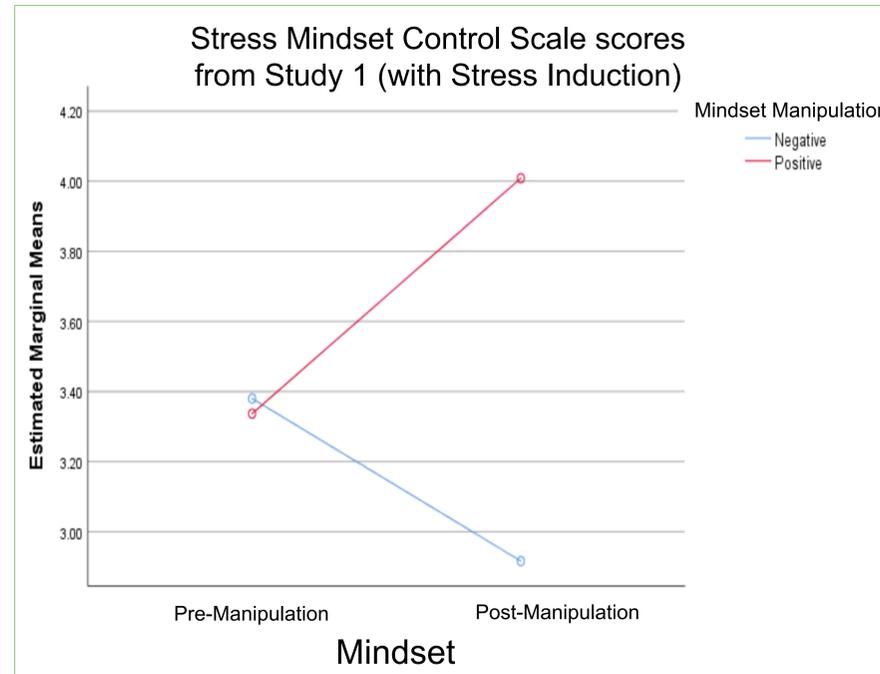
## Participants

- Participants (N1=28, N2=23) were recruited through our university's Psychology Research Pool and randomly assigned into two groups: Positive Mindset and Negative Mindset.

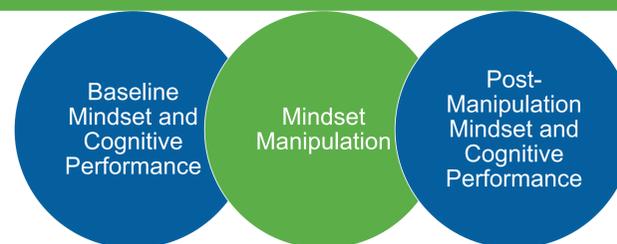
	Study 1	Study 2
Age	27 years old	22 years old
Gender	89% females	65% females
Race	54% white	48% white

## Measures

- Stress Control Mindset Measure (Keech et al., 2018): measures **stress mindset**
- Perceived Stress Scale (Cohen et al., 1983): measures stress over past month
- Single-item scale measures current stress level
- Dispositional Resiliency Scale (Bartone et al., 1989): measures psychological hardiness
- Life Orientation Test (Scheier, Carver, & Bridges, 1994): distinguishes between optimism and neuroticism
- Stroop task (Hochman, 1967): measures cognitive performance
- 3-minute videos biased toward positive or negative mindsets (Crum et al., 2017): used as **mindset manipulation**



## Procedure



## Results

- A two-way mixed ANOVA was used to analyze the effect of mindset manipulation (positive or negative) and participants' baseline stress mindset (positive or negative) on participants' cognitive performance.
- There was a statistically significant interaction between SCMM scores pre- and post-manipulation and the mindset manipulation,  $F(1,19) = 12.475, p < 0.01$ .
- Results indicated a non-significant trend in the predicted direction, demonstrating that stress mindset does not statistically significantly influence cognitive performance.

## Conclusions

- The statistically significant interaction between mindset pre- and post-manipulation and the mindset video manipulation demonstrates that the mindset manipulation videos influenced the participants' mindsets, regardless of their baseline mindset. This result supports our hypothesis and is in line with previous research on stress mindset (Crum et al., 2013).
- The results did not statistically significantly support our second hypothesis that participants who underwent stress induction (study 1) would be less susceptible to mindset manipulation than participants who did not undergo stress induction (study 2).
- The results did not statistically significantly support our hypothesis that having a positive mindset would improve cognitive performance. However, an improvement in cognitive performance could be interpreted through the trend that is present. This corresponds with mixed findings of previous research (Keech et al., 2018).

## Limitations

- The small sample size collected within the university community limits statistical analysis.
- Improvements in cognitive performance testing can be explained by practice effect.