

Forbidden Temptation

The Influence of Motivational States on Intentional Binding, moderated by Psychopathy and Trait Anxiety

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Introduction

Sense of agency results from subjective perception and construction of the world - hence, it can be inaccurate¹
It serves central social functions e.g. the attribution of social or legal responsibility¹⁻³
How can we decide in which states we should not trust our flawed sensation - resisting forbidden temptations?

- Negative arousing states such as fear⁴ and general arousal⁵ decrease sense of agency
- What about positive states e.g. pleasure and sexual arousal?



Goal and Hypotheses

- I. Action Binding:
 - a. Sexual arousal reduces (no perceived shift of key towards tone) as other cognitive/perceptual processes were impaired^{5,6}
 - b. pleasure increases (perceived shift of key towards tone) as positive affect showed benefits for cognition/perception^{7,8}
- II. Outcome Binding: No effects
- III. Interactions motivational states and personality traits (psychopathy, trait anxiety): exploratory

Material and Methods

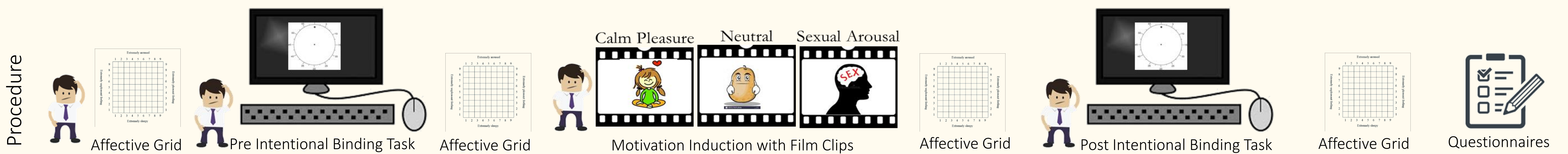
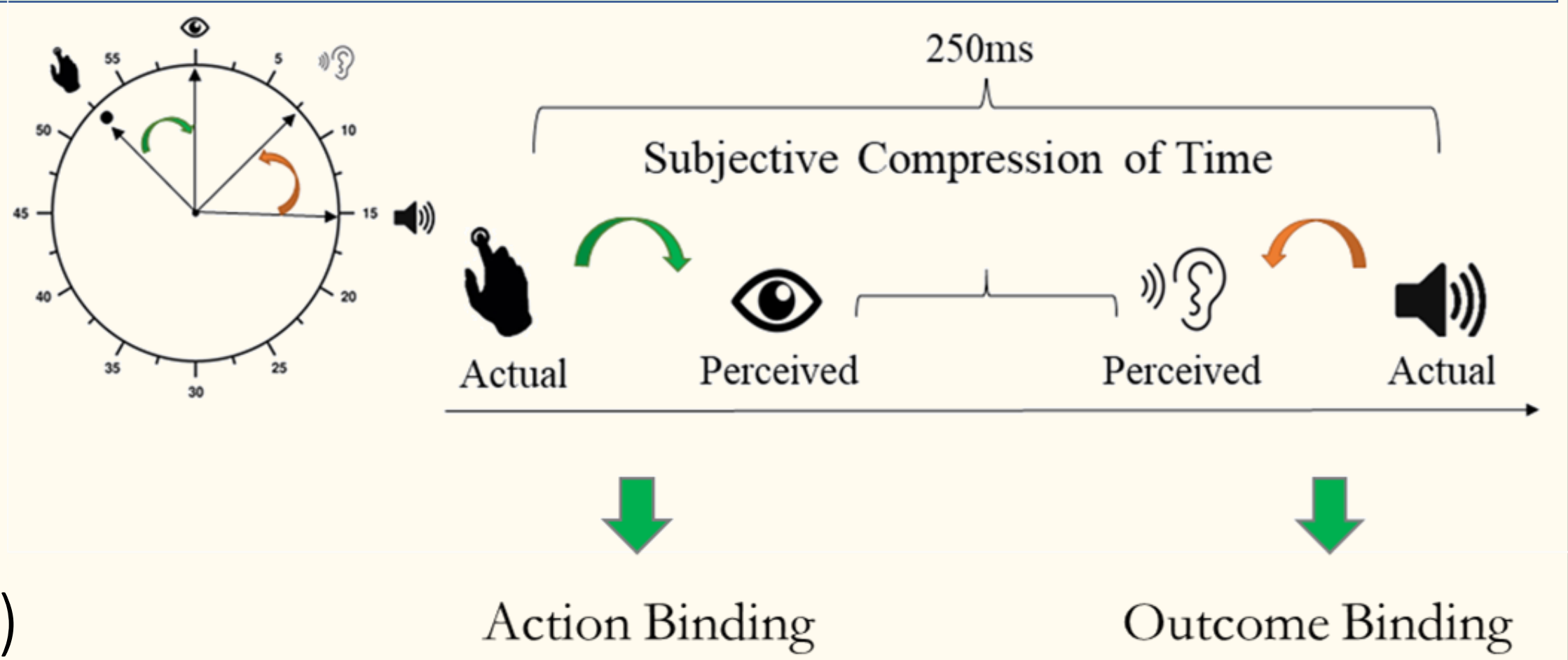
59 participants ($M = 23.75$, $SD = 4.21$) randomly assigned to 1 of 3 motivation inductions
Sense of Agency measured implicitly with intentional binding task⁹ (Libet Clock)

Subjective arousal → affective grid¹⁰

Physiological arousal → Pupil dilation + GSR + HR

Dopamine activity → Spontaneous eye blink rates

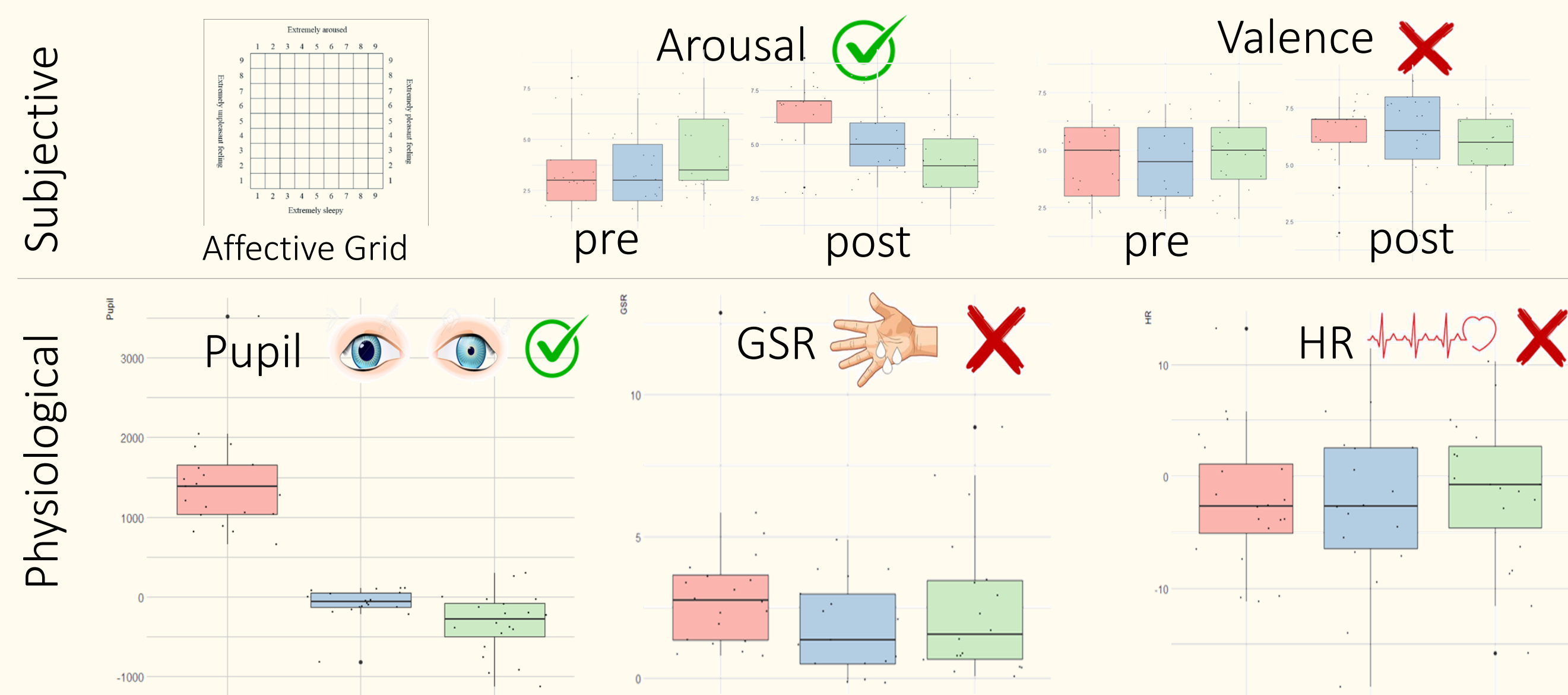
Personality Questionnaires → STAI¹² (trait anxiety) + PPI-R¹¹ (psychopathy)



Results

Manipulation Check

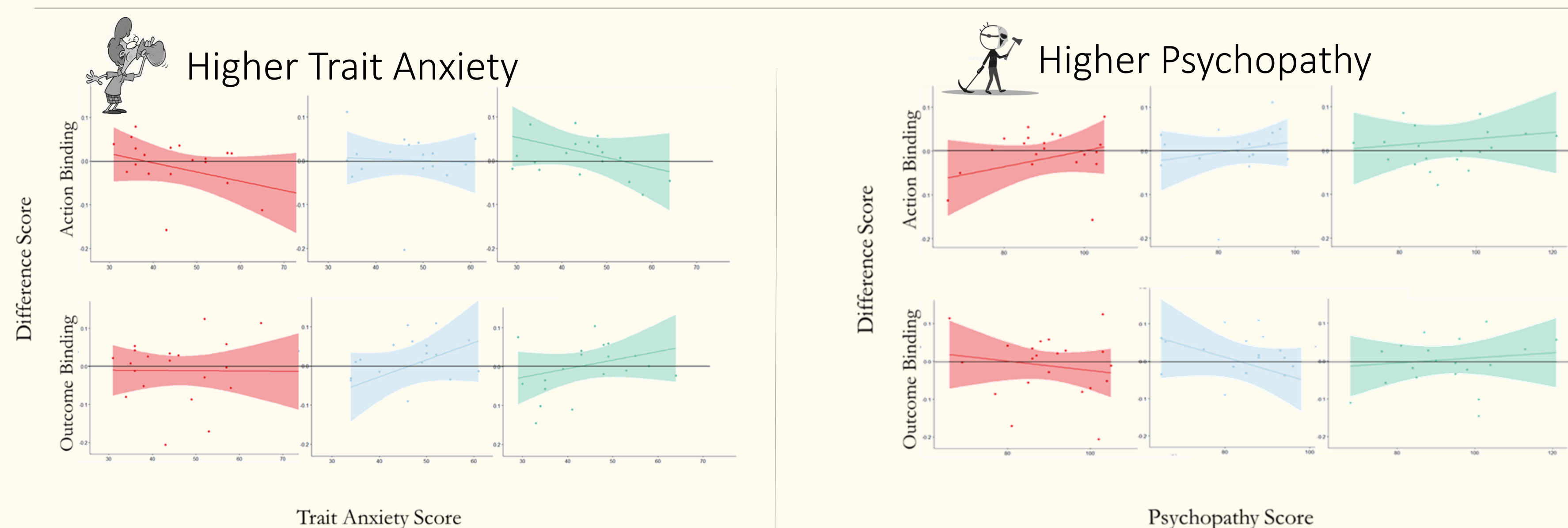
- Film Clip
- sexual arousal
 - pleasure
 - neutral



Motivational States

- I. Action Binding: reduced in sexual arousal induction, increased in neutral and no change in pleasant state
- II. Outcome Binding: reduced in sexual arousal

Interaction Personality & Motivational States



- III.
 - all motivational states: decreased action binding
 - neutral and pleasure: increased outcome binding
 - sexual arousal: intact action binding, impaired outcome binding
 - pleasure: action binding increased, outcome binding decreased
 - neutral: both increased

Conclusion

- Positive states can reduce our feeling of control as much as negative states
- Individuals higher on anxiety feel less in control over their actions in emotional states, nonetheless they are aware of the consequences
- Sexually aroused, individuals higher on psychopathy still feel in control but they omit thinking of the consequences!
- this has implications for treatment and sentence as sense of agency is crucial for the attribution of social and legal responsibility¹⁻³

Literature

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