

OBJECTIVES

The literature indicates that the cognitive activation of mindfulness-related words can promote positive cognitive and affective responses, increase wellbeing and self-esteem, and have a protective effect against stress or a social stressor. The present study attempts to better understand whether these benefits also extend to interpersonal behavior, particularly with regard to aggression and the response to aggression by others. We hypothesized that activating concepts related to mindfulness through implicit priming would reduce aggression—compared to priming neutral words not related to mindfulness—which would be moderated by individual differences in personality and higher cognitive functions (specifically, trait self-control, trait aggression, implicit aggression, and working memory capacity).

Research Question: Can priming mindfulness reduce aggression? Does personality or higher cognitive functions moderate this relationship?

METHODS

“Lexical Decision Task”

Turk Prime participants dragged words on the left to the box on the right to make sensical sentences. The remaining words on the left after a sentence was made were the priming words. In the experimental group, those are words related to mindfulness (e.g., “letting go”, “nonjudgmental”, “present moment”). In the control group, those are neutral words (e.g., “sky pencil”, “books street”, “apple yellow”). Participants were “primed” by the remaining words, though they were not necessarily aware of it.

Priming Mindfulness Group (n = 117)

Items	Drag words here
self	1 Suzan
observation	2 walks
	3 fast

Control Priming Group (n = 128)

Items	Drag words here
sky	1 Suzan
pencil	2 walks
	3 fast

Taylor Aggression Paradigm

Co-Player Settings		Your Settings	
Duration	Intensity	Intensity	Duration
2s	10	10	2s
1.83 s	9	9	1.83 s
1.67 s	8	8	1.67 s
1.5s	7	7	1.5s
1.33 s	6	6	1.33 s
1.17 s	5	5	1.17 s
1s	4	4	1s
0.83 s	3	3	0.83 s
0.67 s	2	2	0.67 s
0.5s	1	1	0.5s
0s	0	0	0s

Target Color Cues

- Green: Waiting for participants to set intensity and duration of blast & indicate “Ready”
- Yellow: Warning
- Red: React as fast as possible!

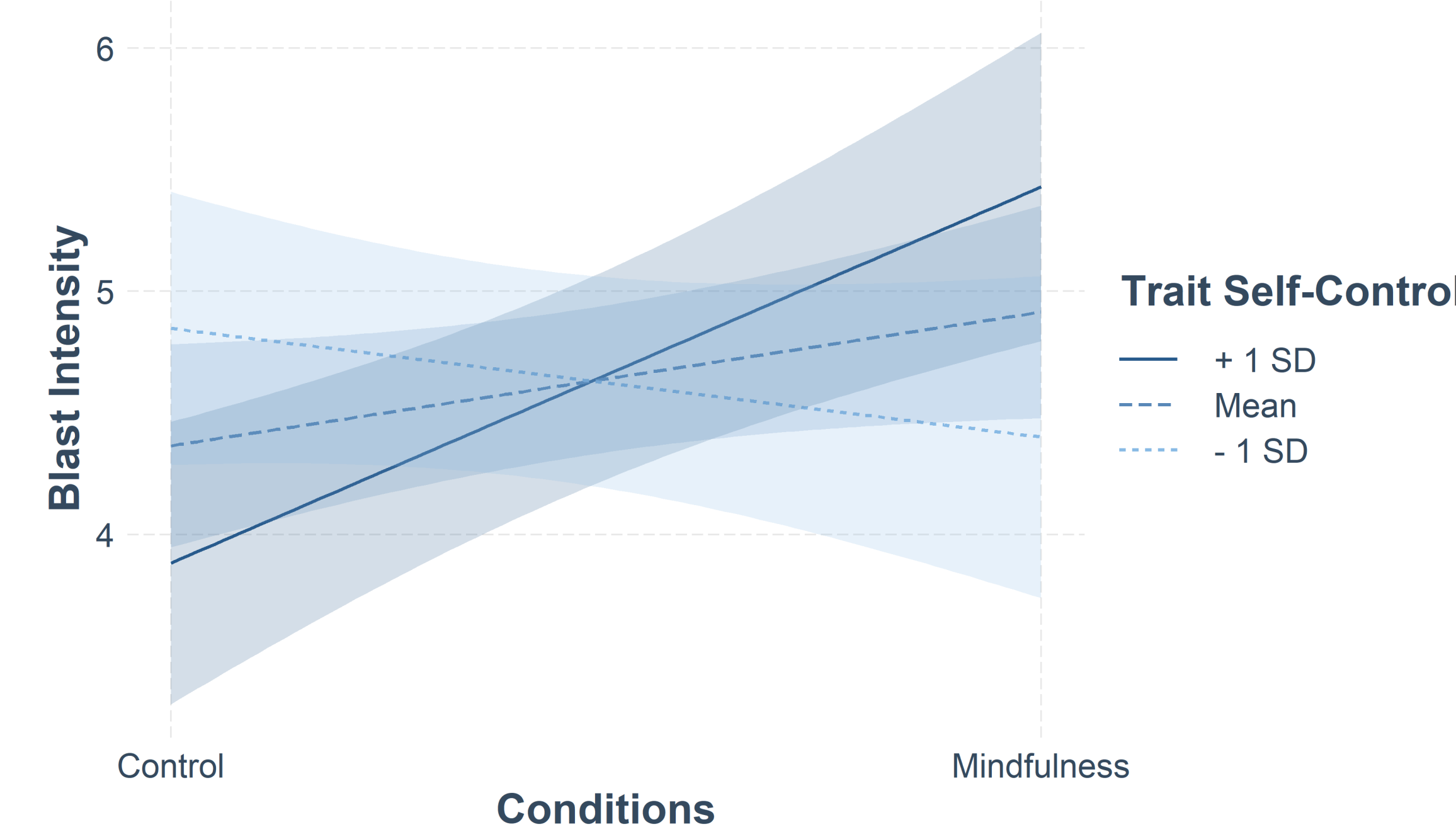
TARGET

READY

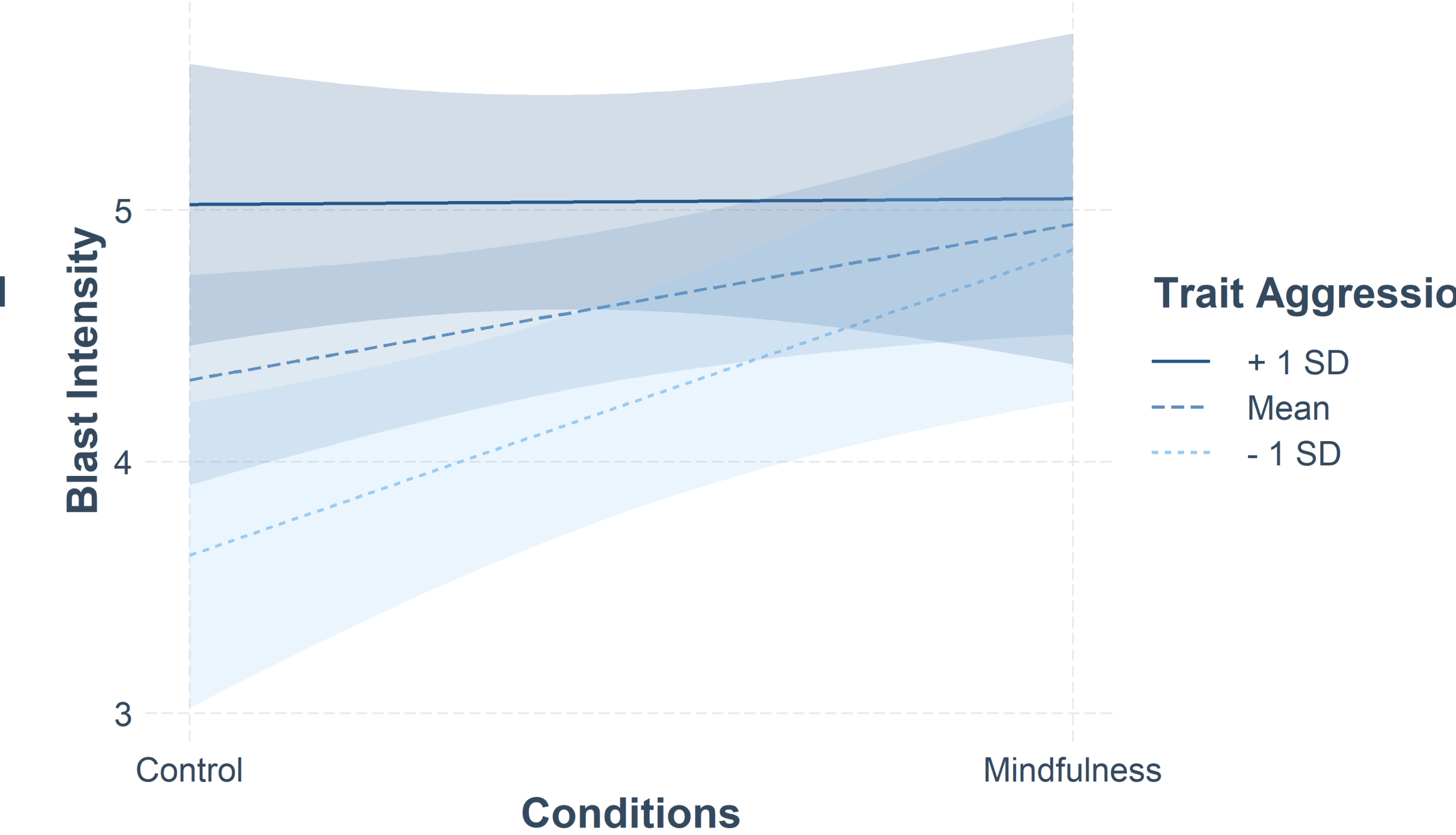
RESULTS

INTERACTION PLOTS

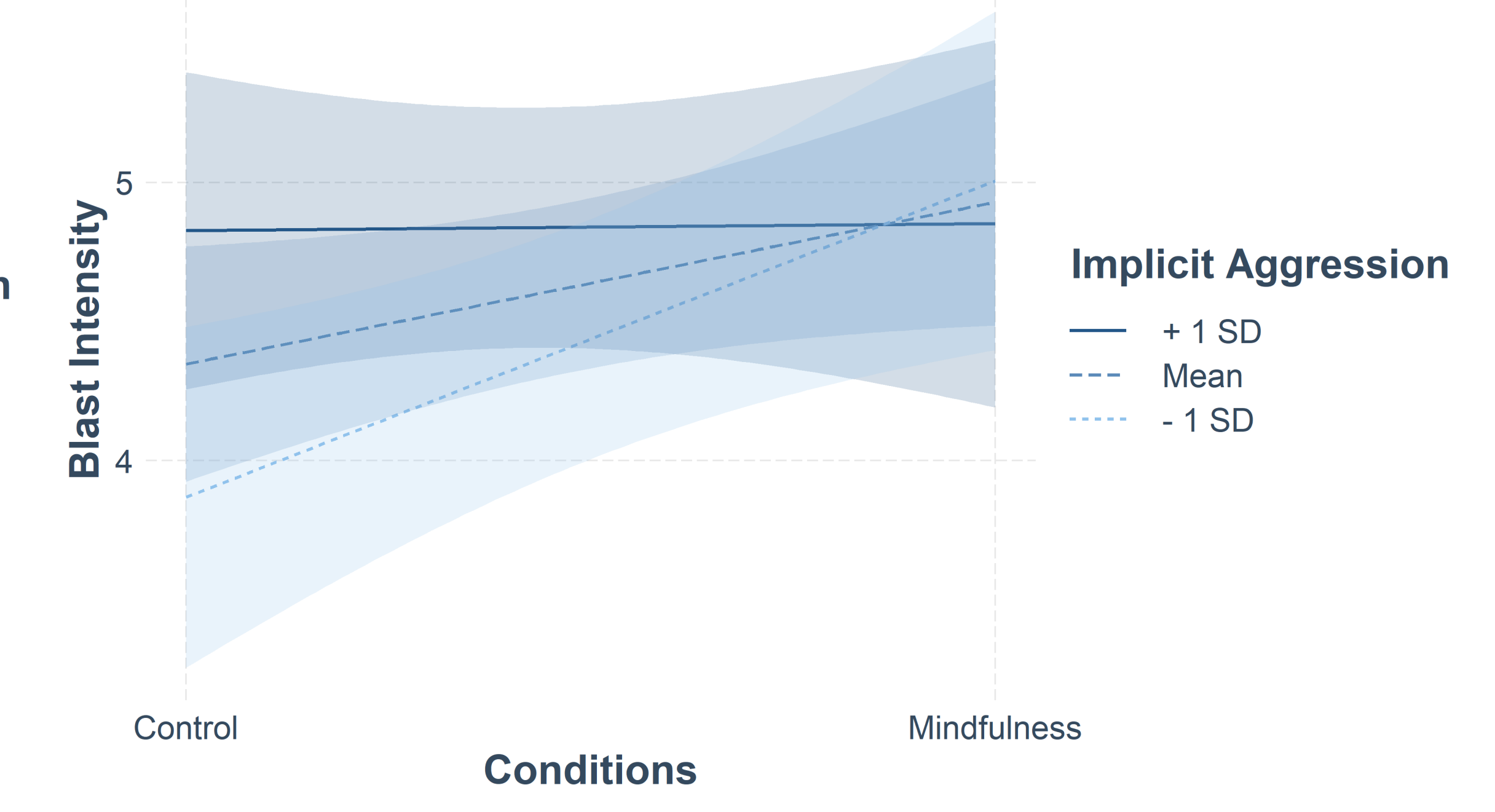
Brief Self-Control Scale



Brief Aggression Questionnaire

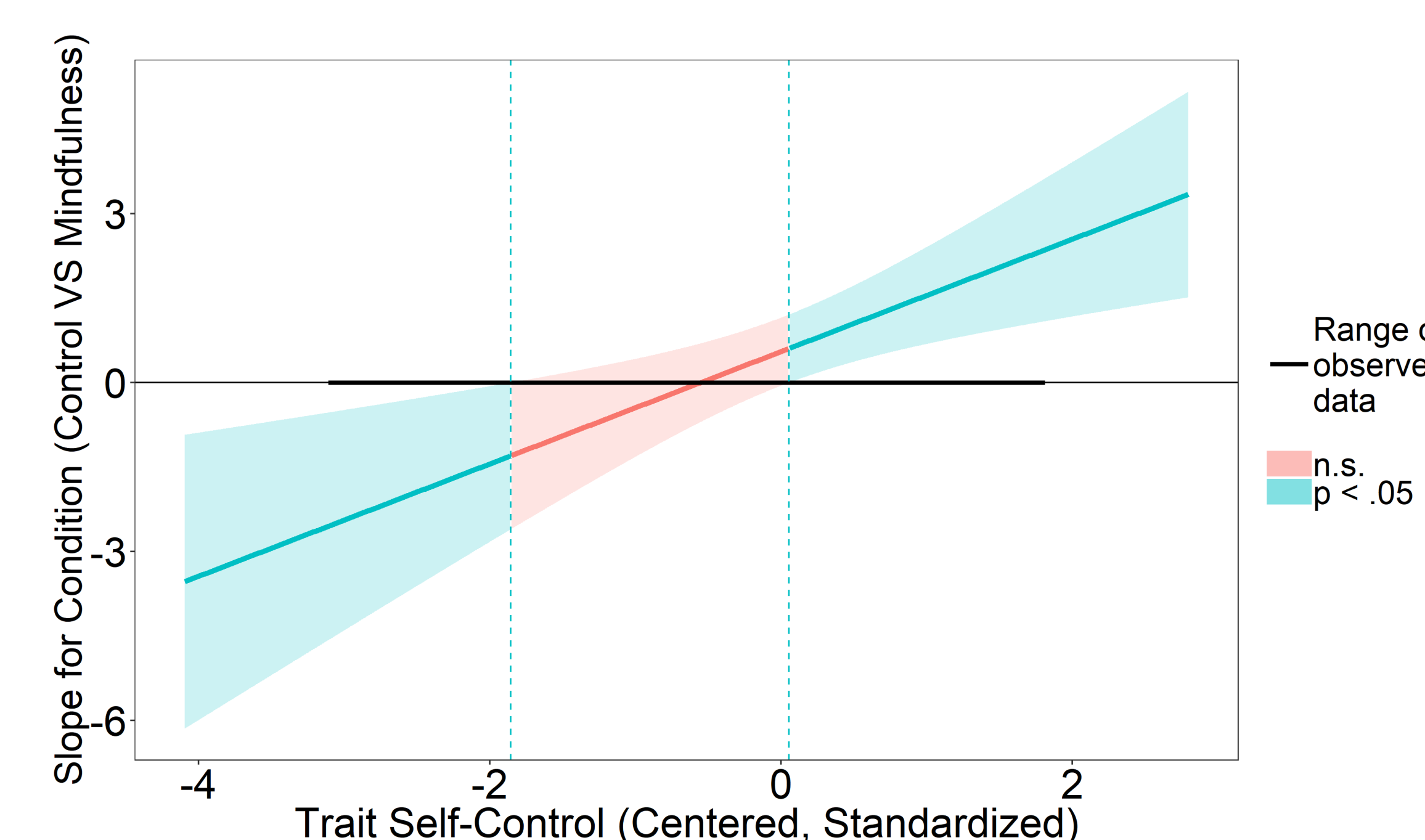


Implicit Association Test (Aggression)

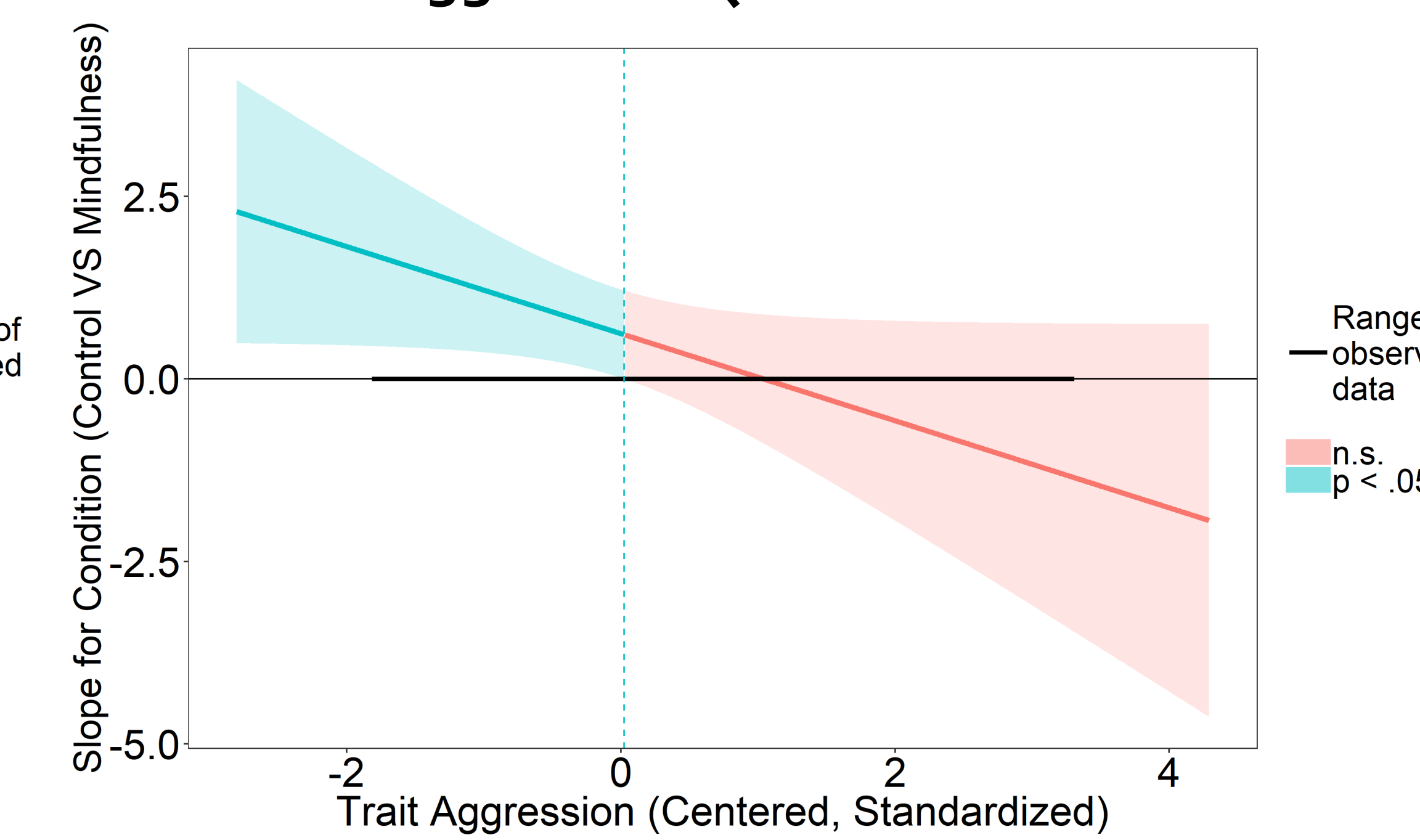


JOHNSON-NEYMAN PLOT

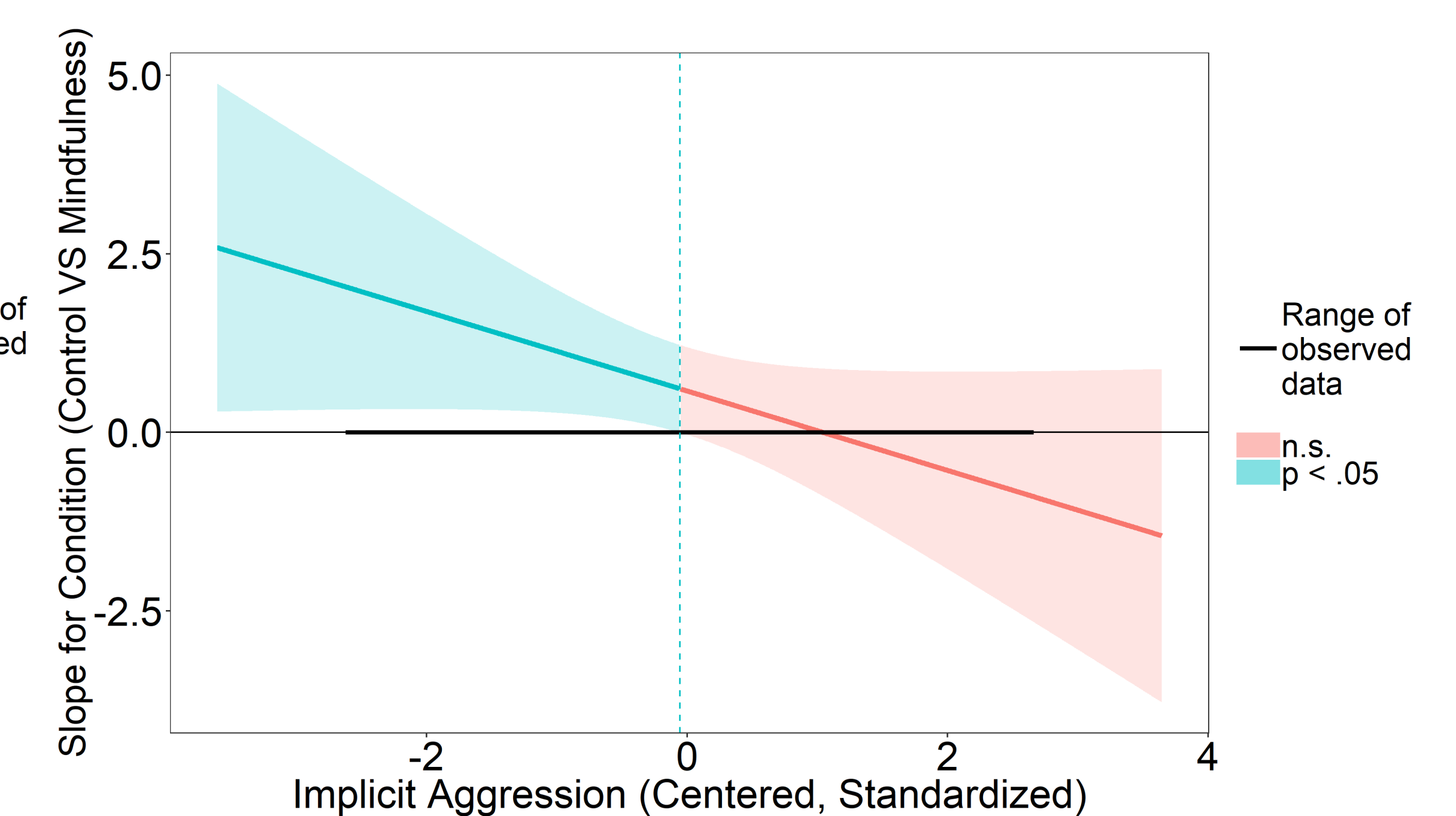
Brief Self-Control Scale



Brief Aggression Questionnaire



Implicit Association Test (Aggression)



DISCUSSION

At first glance, it seems like priming mindfulness does not impact aggressive behaviour. However, a closer look reveals that the effect of the priming in fact depends on individual characteristics, such as whether one is low or high in self-control. Unexpectedly, it also seems like this manipulation can actually increase aggression in certain people. Further research should attempt to elucidate more specifically why and when mindfulness might lead to increased aggression. One possibility is that those high in self-control are also higher in psychological reactance. Another possibility is that low self-controls are more likely to go with the flow and with suggestions and stimuli from the environment, including priming, while high self-controls might be more resistant to this kind of influence. Indeed, it seems like the general trend, regardless of self-control level, was that the mindfulness priming manipulation increased aggression. Accordingly, this general trend would be consistent for high self-controls (that is, it would not be different for them), but inconsistent for low self-controls (that is, only for low self-control would we see a reduction in aggression), meaning that it is low self-controls, and not high self-controls, that are different, perhaps more vulnerable to such influences.

It might be that mindfulness is beneficial only to a certain category of people (e.g., people low in self-control, and not those high in self-control). Furthermore, if a simple and subtle mindfulness manipulation can cause such detectable effects, it would be interesting to see whether these patterns of effects persist or are exacerbated with a more conventional mindfulness *meditation* practice. For instance, it might be that high self-control individuals benefit from mindfulness meditation but only when they are willfully and autonomously practicing it; not when they are practicing it against their will or because of extrinsic factors (e.g., pressure).

REFERENCES

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Schmidt, A. F., Zimmermann, P. S., Banse, R., & Imhoff, R. (2015). Ego depletion moderates the influence of automatic and controlled precursors of reactive aggression: A double dissociation. *Social Psychology*, 46(3), 132-141.