

Prosocial Decision-Making in Young Adults with Alcohol Use Disorder

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Conclusion

- Altruistic-, and Reciprocal trust decisions are reduced in young adults with Alcohol Use Disorder (AUD) across Swedish and US samples, while Fairness-, Trust-, Punishment-, and Compensation decisions are not.
- Fast response time, and moral attitudes disfavoring impartial beneficence partly explained prosocial reduction in Alcohol Use Disorder.

Introduction

Addiction is associated with progressive social exclusion and deficits in social cognition which in turn promotes continued drug use (2;5). However, valid experimental measures of social behavior are lacking.

To address this, we quantified behavior in individuals (18-24y) with moderate-severe alcohol use disorder (AUD) and healthy controls (HC) using established behavioral economic (BE) tasks (Dictator Game, Ultimatum Game, Trust Game, Third Party Game) of prosocial decision-making (1;4).

Research questions

- Do young adults with Alcohol Use Disorder have impaired prosocial decision-making compared to Healthy Controls?
- What clinical and cognitive constructs are associated with the impairments (*given group differences under 1.*)?

Methods

- 120 (60 females) clinically diagnosed moderate-severe AUD, and 120 (60 females) HC in a Swedish lab-sample, performed six one-shot (2-5 rounds) BE tasks of Altruism; Fairness; Trust; Reciprocal Trust; Altruistic Punishment; and Altruistic Compensation (Study 1)
- 136 (66 females) self-reported moderate-severe AUD, and 144 (86 females) HC in a US online-sample on Prolific completed online versions of the same BE tasks (Study 2)
- Clinical and cognitive constructs assessed: emotion regulation; empathy; moral cognition (i.e. Oxford Utilitarianism Scale [3]); psychiatric-, and substance symptom load (Study 1-2)

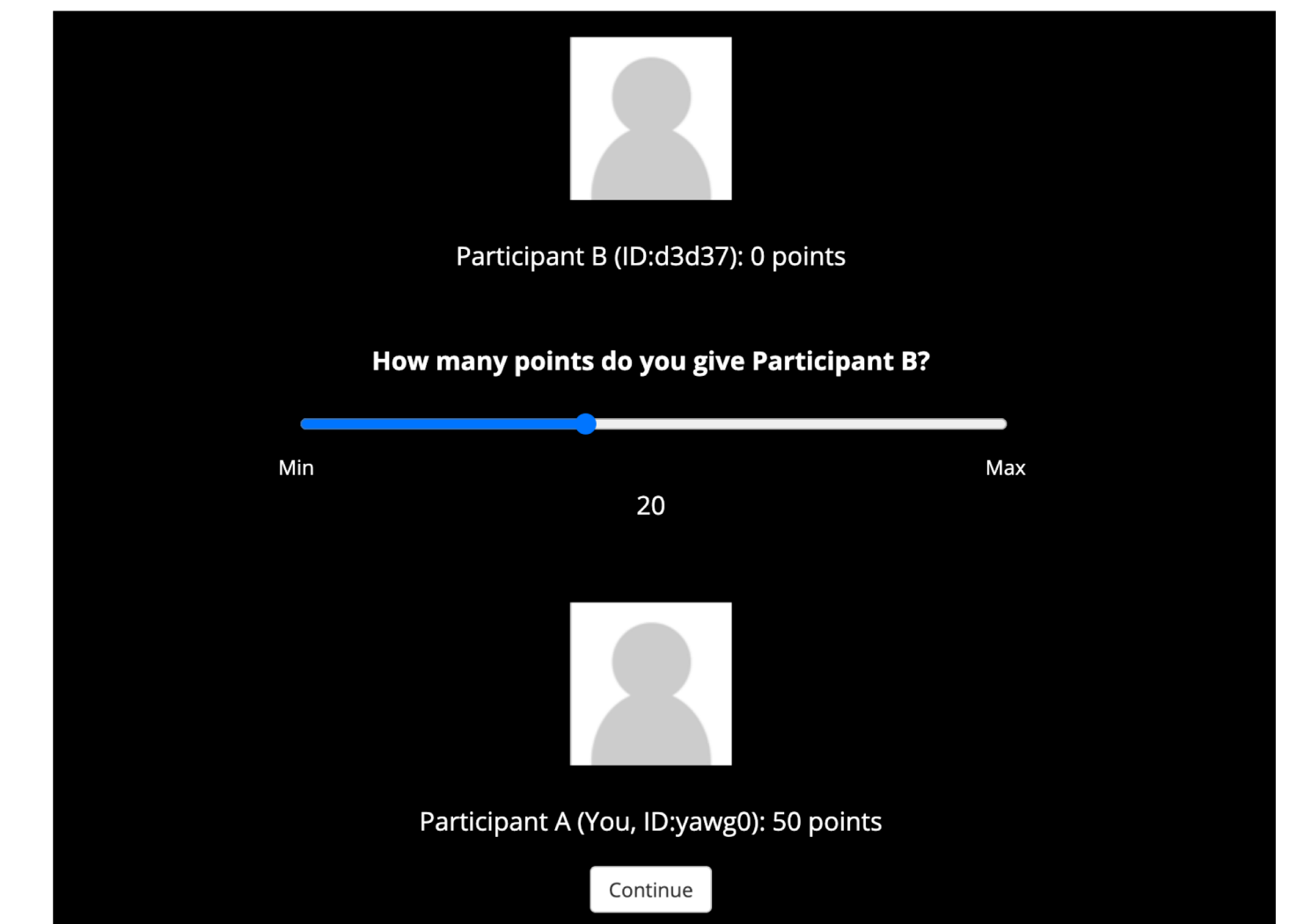
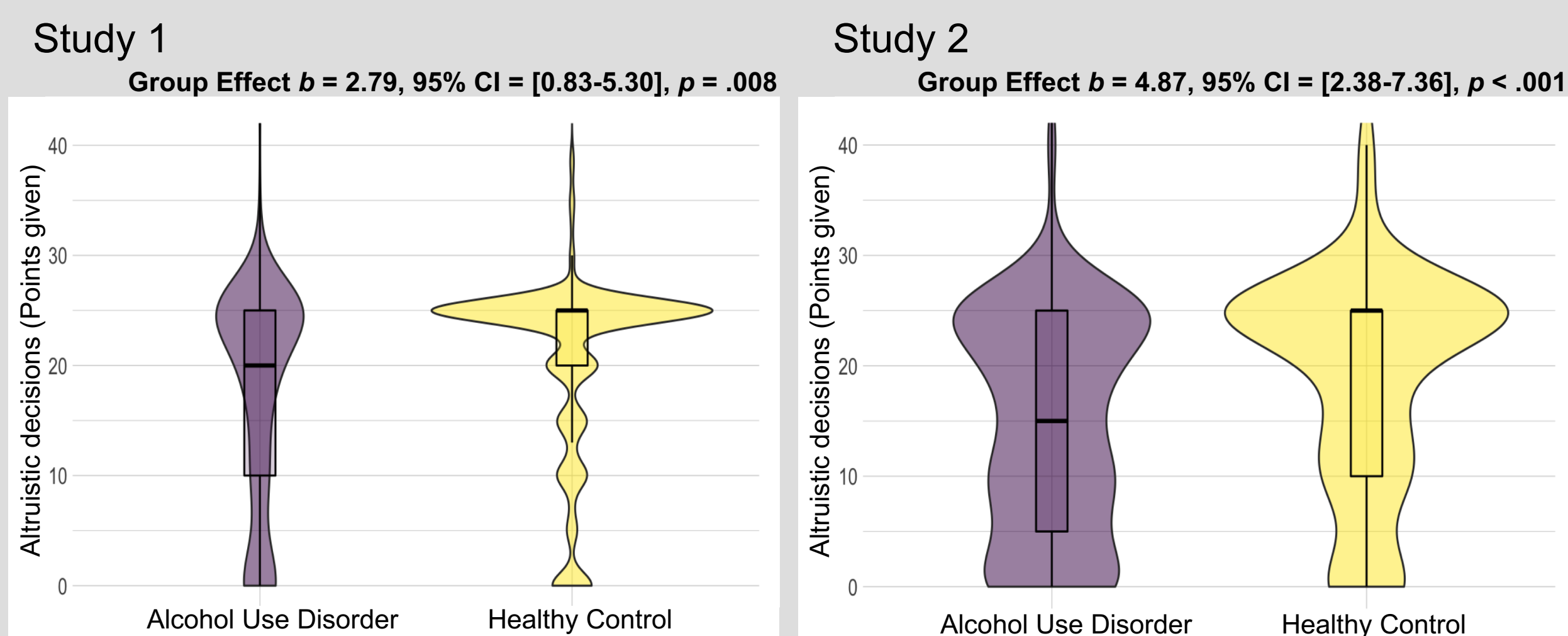


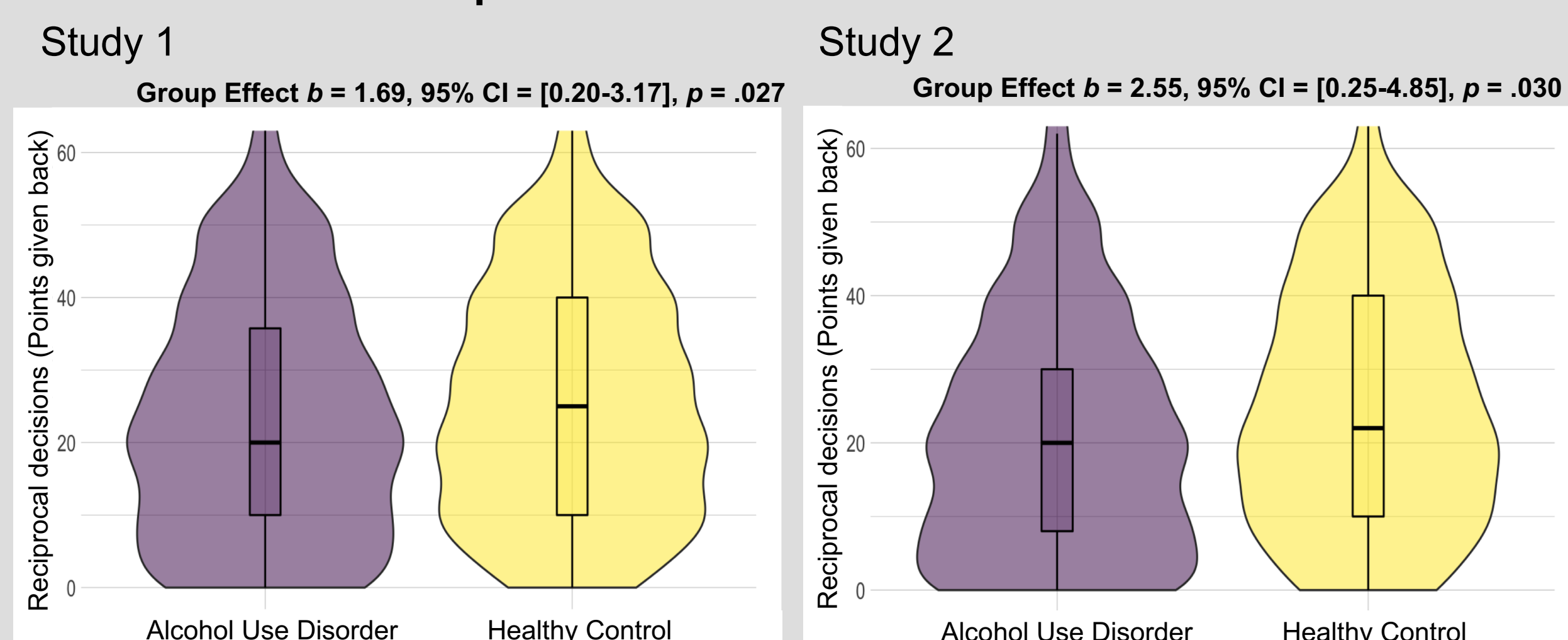
Illustration of 'Dictator Game' measuring 'Altruism'

Q1: AUD and prosociality

Reduced Altruism in AUD



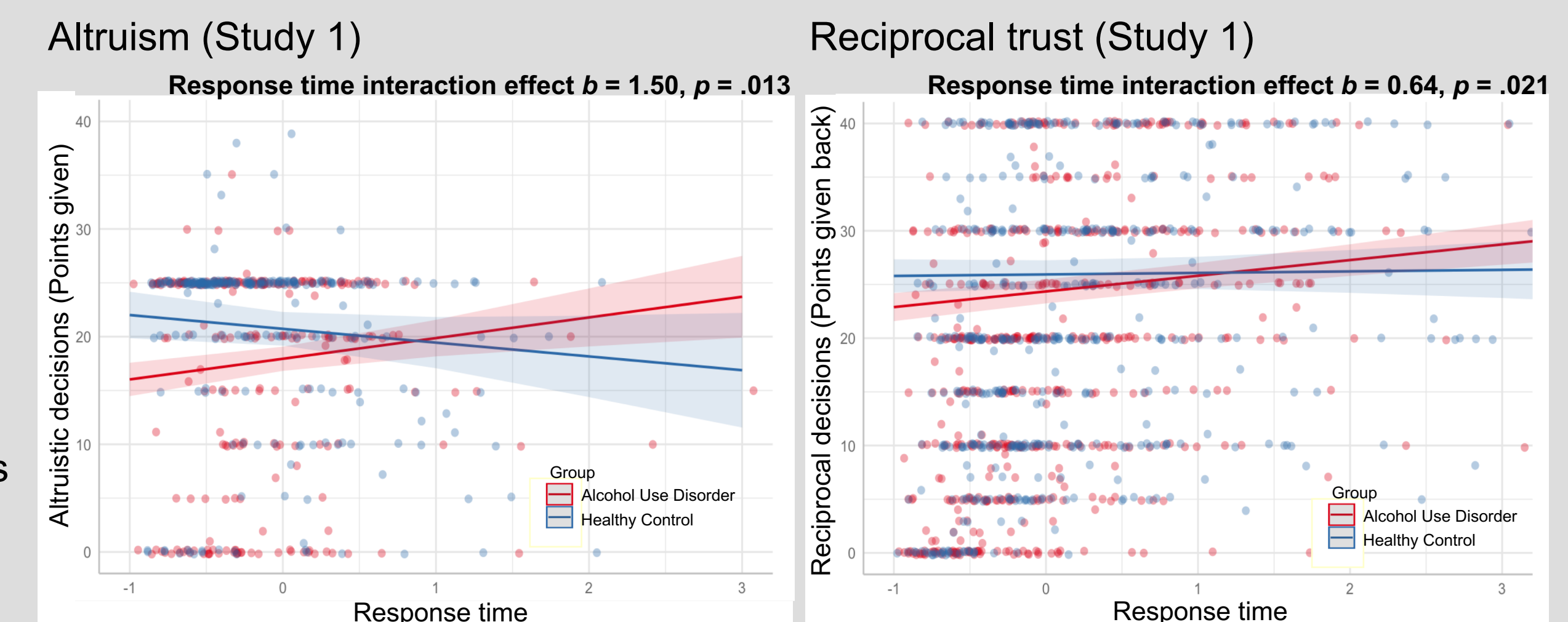
Reduced Reciprocal trust in AUD



Q2: Constructs associated with the impairments

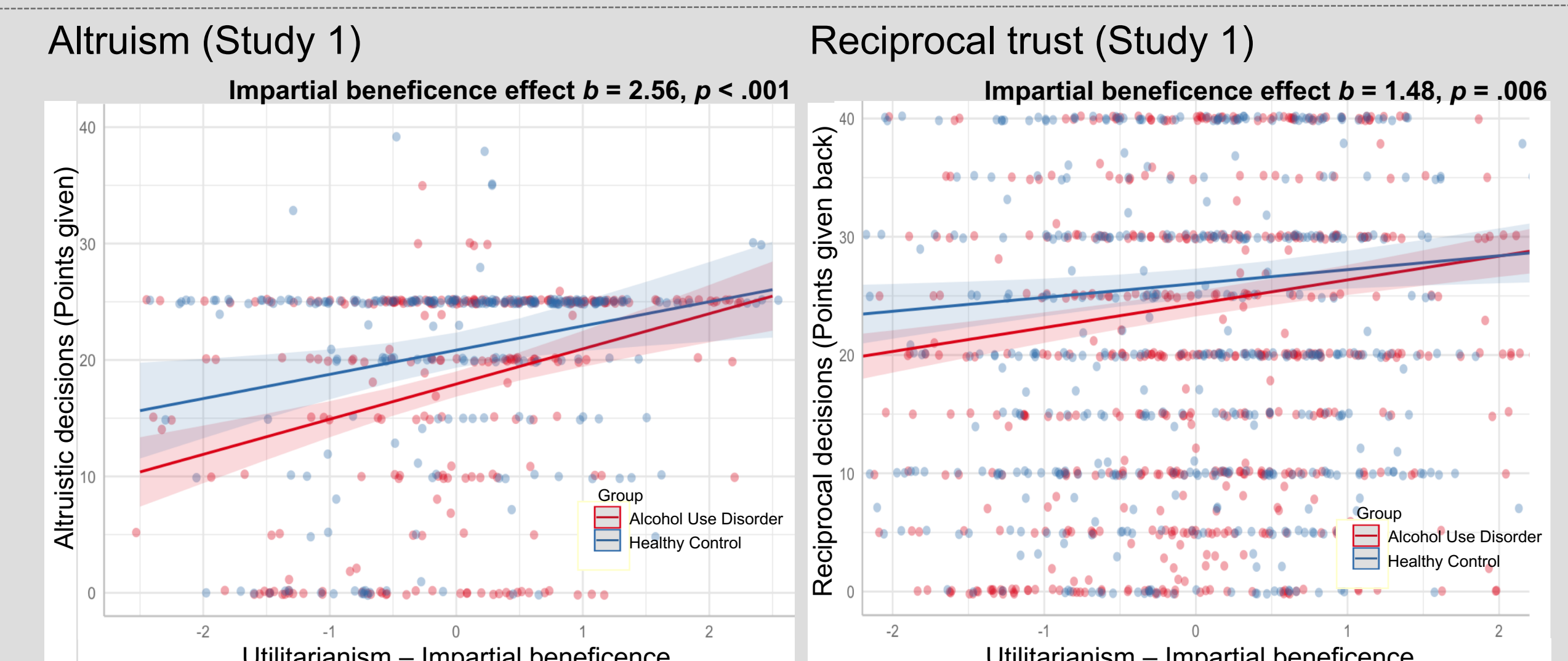
Fast responses in AUD predicts both Altruism and Reciprocal Trust

Results replicated in Study 2 as trending main effects



Disfavoring impartial beneficence predicts both Altruism and Reciprocal Trust

Results replicated in Study 2



Future Perspective

- Targeting altruism, and reciprocal trust might provide a basis for supplementing diagnosis and treatment at an early stage of AUD

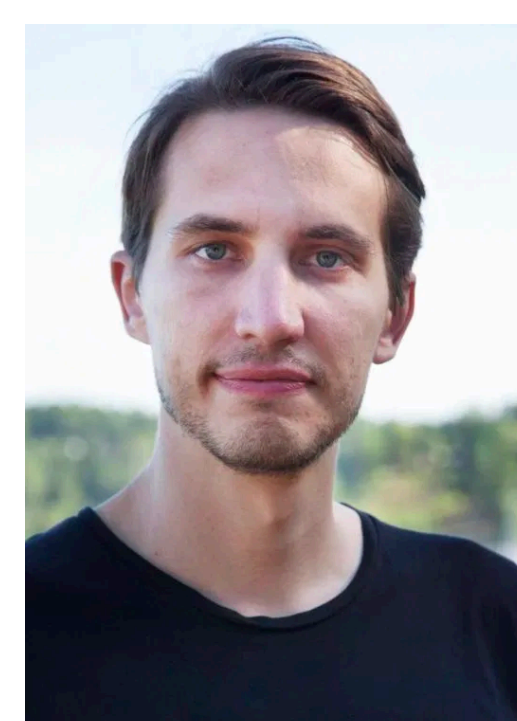
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