

Exploring Autism Spectrum Conditions As an Individual Difference in Context Effects in Choice

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Participants with more autistic spectrum related traits showed about the same degree of contextual sensitivity in preference as those with fewer.

INTRODUCTION

- Previous work shows that people with more autistic spectrum traits often show reduced sensitivity to contextual stimuli in perceptual and cognitive tasks.
- Recently this has been demonstrated in preference formation, with those higher in ASC traits showing a reduced **asymmetric dominance effect (AD)** while also making more consistent decisions when presented with similar choice sets multiple times (Farmer, et al., 2017)
- This study attempted to extend the result to the **compromise decoy effect (C)** as well as to study decoy effects without the additional influence of consistency by presenting each choice set once.

METHODS

- **Participants:** N = 612 (68.8% female, $M_{Age} = 19.3$) undergraduates at SIUE participated for course credit.
- **Autistic Spectrum Conditions (ASC):** ASC was measured using the **AQ short** ($\alpha = .68$) (Hockstra, et al., 2011). PPs were split into the **upper** ($N = 73$, $M = 75.19$) and **lower** ($N = 65$, $M = 50.75$) deciles for analysis, $t(136) = -40$, $p < .001$. Total scores were also used for correlations.
- **Choice Sets:** Participants were shown 20 three-item choice sets of consumer products described on two attributes. Each set had two equally attractive alternatives and an asymmetric dominance (10 sets) or compromise decoy (10 sets). Participants were told to select the alternative from each set they preferred.
- **Context:** Context was manipulated by moving the decoy to **target** (i.e. increase preference for) one of the other alternatives in the set between-subjects. The **competitor** is the non-targeted alternative in the set.
- **Dependent Variables:** Preference was measured for an alternative when it was the **target**, **competitor**, and **decoy** as the percentage of times it was chosen with each type of decoy. Higher scores for **target** indicate a stronger context effect.

RESULTS

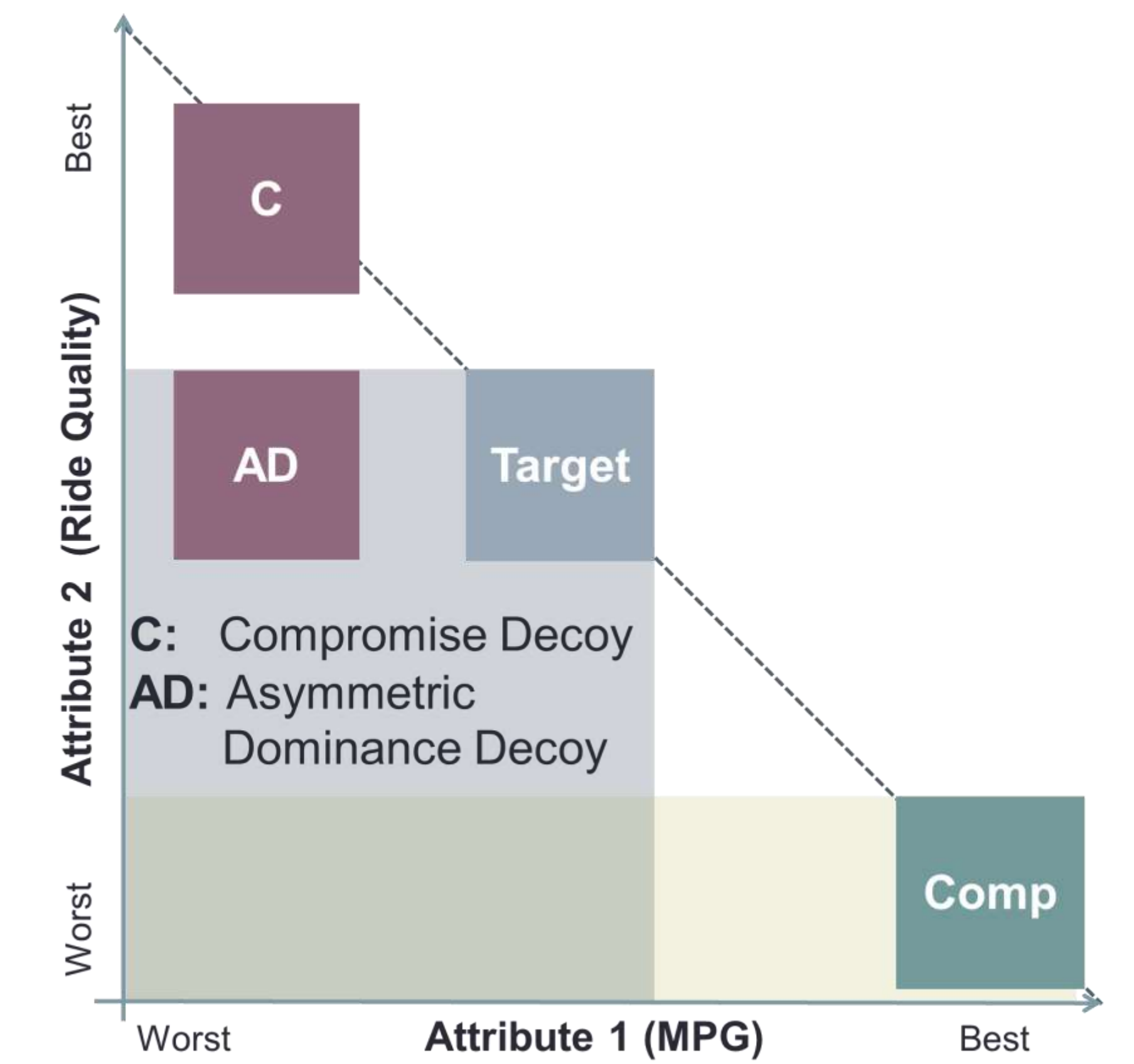
- Strong **AD** and **C** effects were found for both high and low AQ groups, with no significant differences between them.
- Correlations between preference and AQ scores for the total sample also showed no relationship.
- A small reduction in the C effect was found for those higher on the social subscale of AQ short.
- More time spent making a decision was associated with stronger context effects.

DISCUSSION

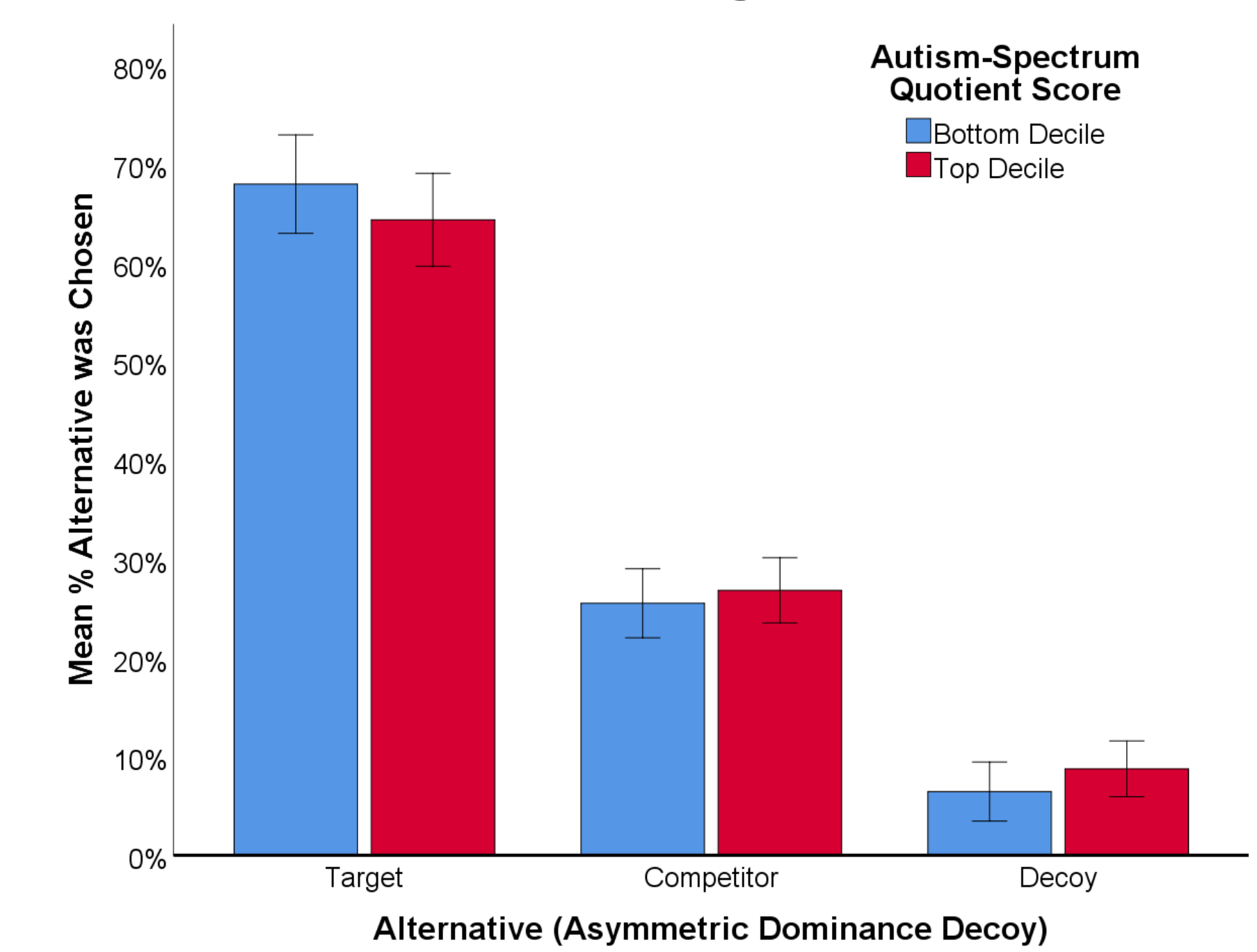
- This study **failed to replicate** the AQ Study results from Farmer et al. (2017) with a non-diagnosed sample.
- The reduction in the context effect previously shown may have been due more to greater consistency in preference than from reduced integration of context.
- Data collection is still ongoing to try to increase % of males and the range of AQ scores (40 to 86).

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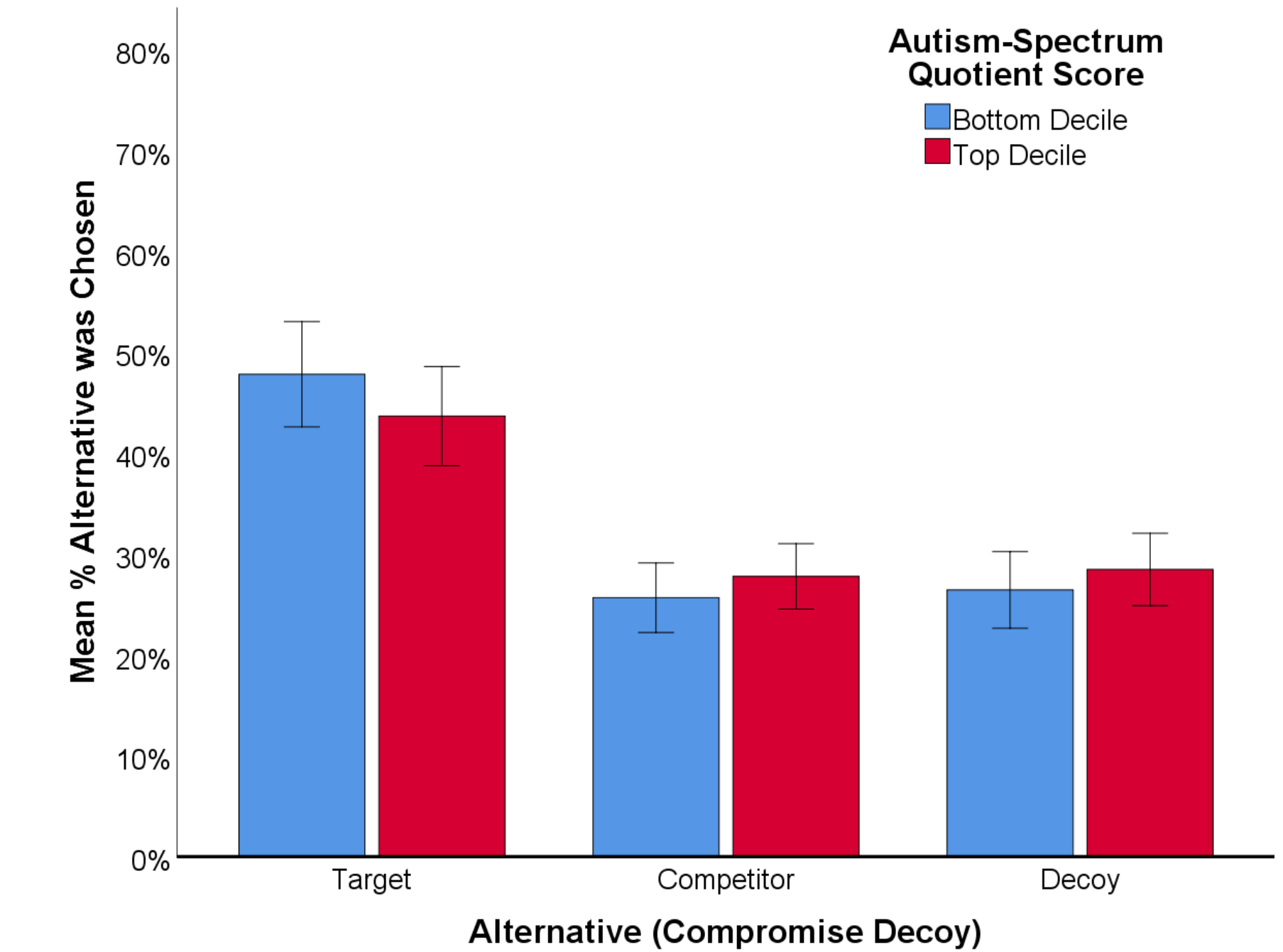
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Significant context effect (AD Decoy), no difference between AQ groups



Significant context effect (Compromise Decoy), no difference between AQ groups



No correlation between AQ scores and preference for total sample

	AQ Short	Social Subscale	Mean RT
Social Subscale	.73		
Mean RT	.04	.10	
Asymmetric Dominance Target	-.01	-.02	.15
Compromise Target	-.03	-.09	.17
Asymmetric Dominance Decoy	.05	.02	-.13
Compromise Decoy	-.02	.07	-.14

Note: All values are correlations, Bold = $p < .05$, $N = 612$