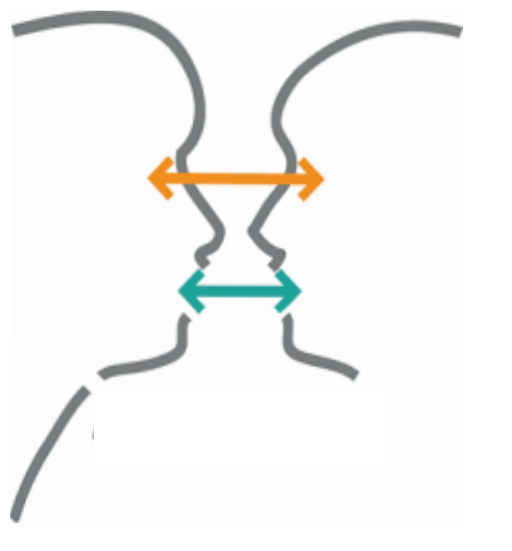


GEFÖRDERT VOM



Peer-Cooperation and Cardiophysiological Correlates in Youth With Maltreatment Experience

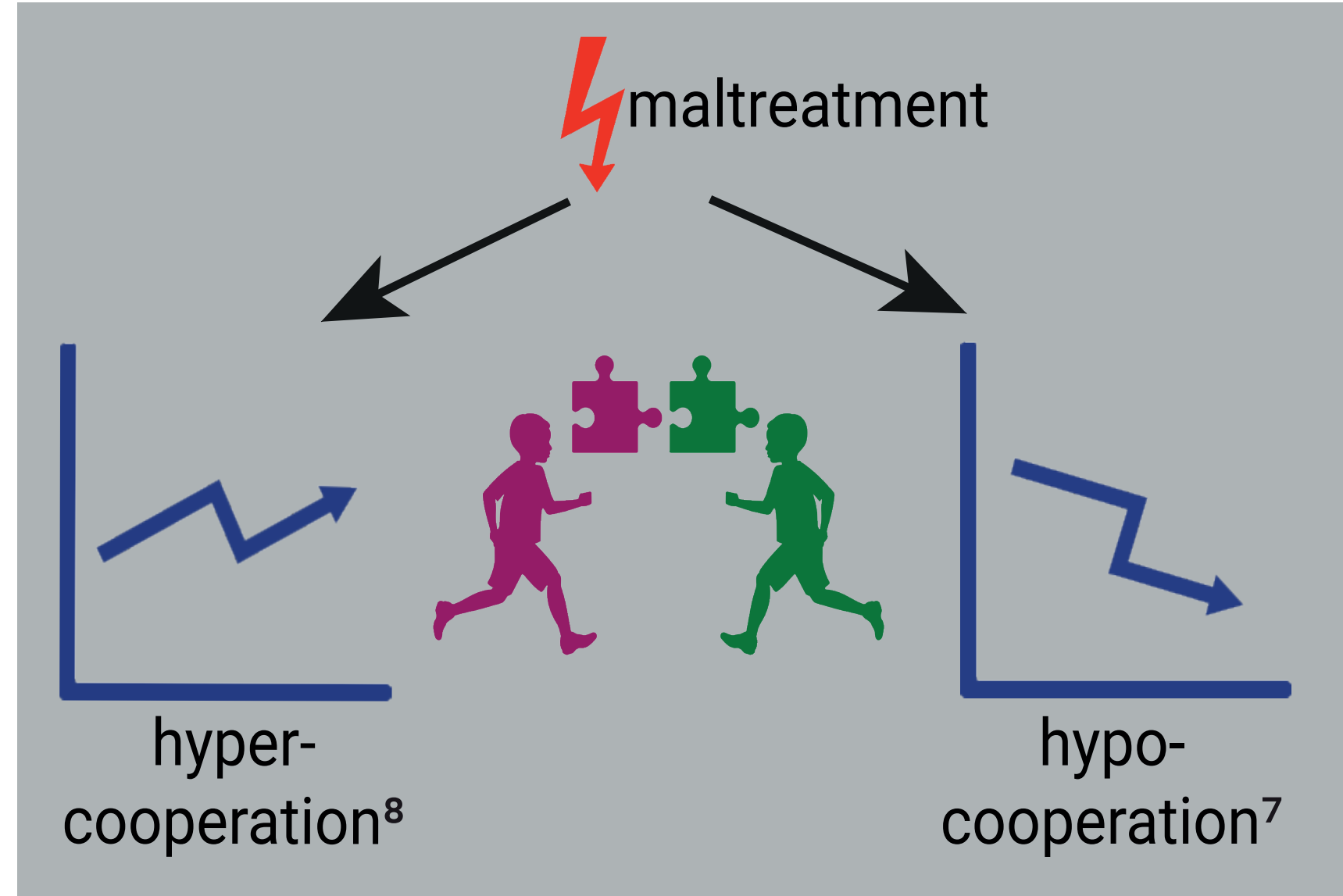


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Introduction

Early experiences of childhood maltreatment can have adverse effects on subsequent psychosocial development, including social development.¹



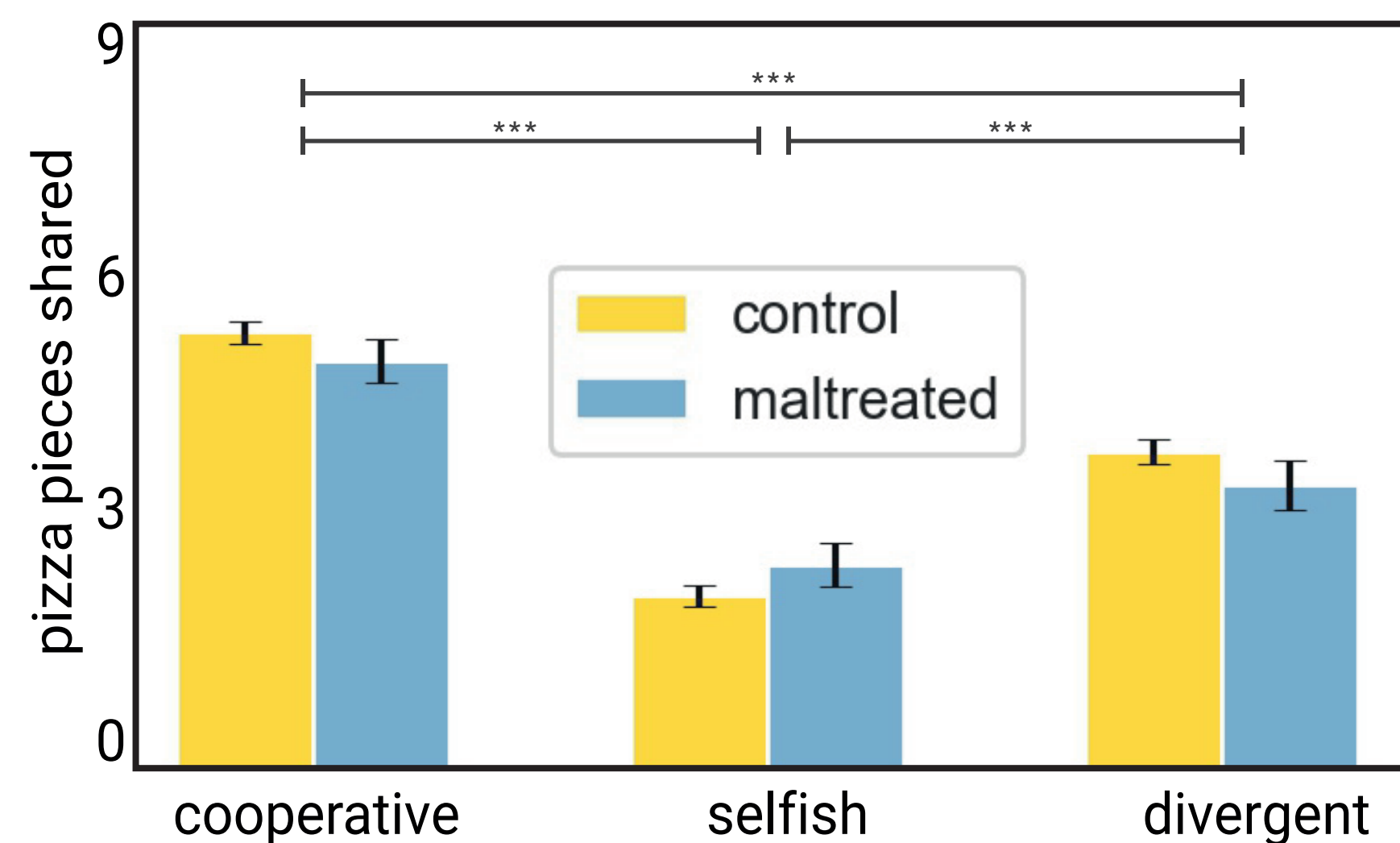
Recent meta-analytic work suggests, that high-frequency Heart Rate Variability (hf-HRV) may modulate the effect of maltreatment on psychosocial development.²

Aim

Investigating the physiological concomitants (HRV) of cooperation, to delineate pathways through which maltreatment experiences give rise to aberrant cooperative strategies.

Cooperative Behaviors

Cooperative behaviors per Pizzagame condition and group

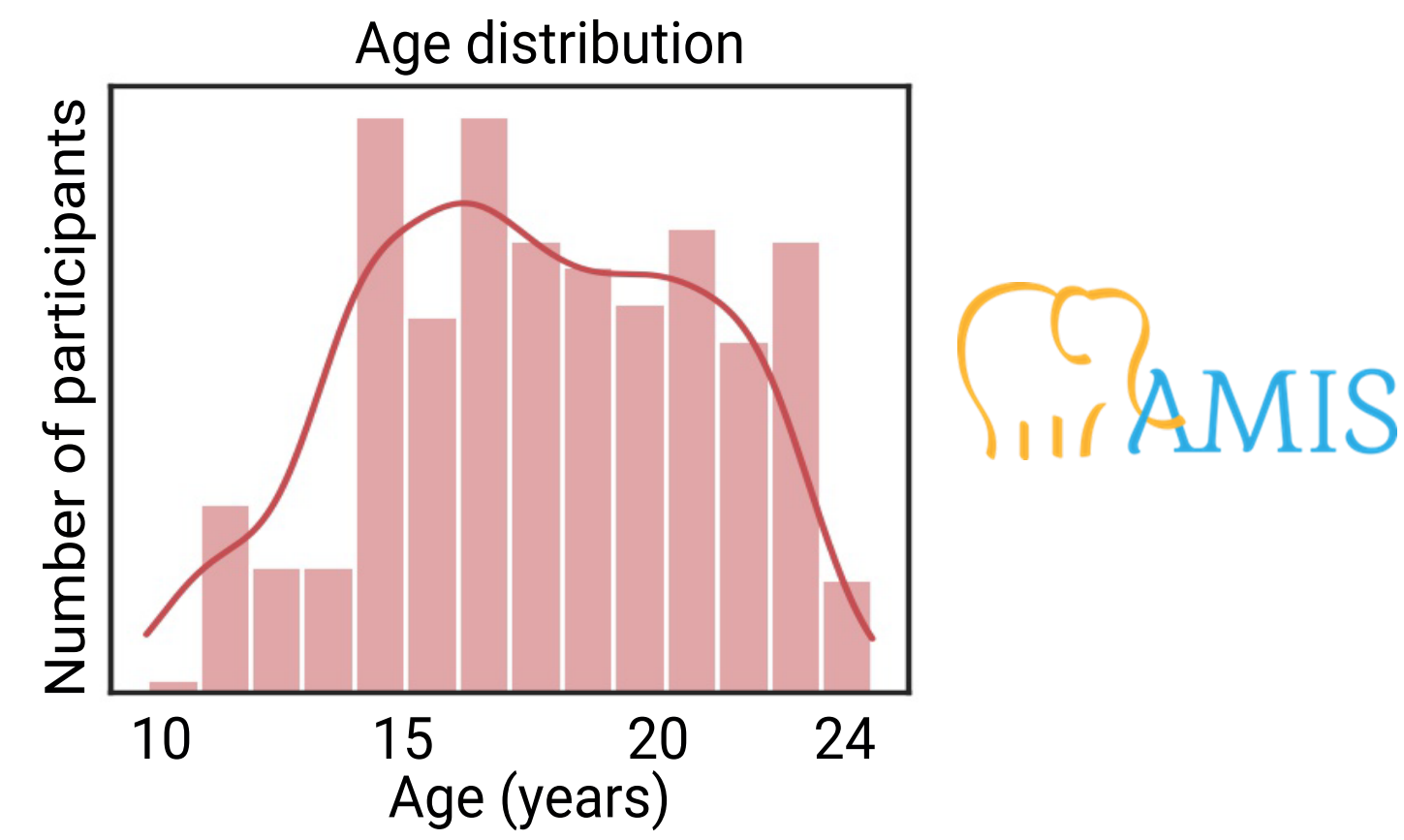


2x3 repeated-measures ANOVA revealed a significant interaction effect of maltreatment group and Pizzagame condition ($F(2, 714)=5.03, p=0.007$)

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Sample

$N = 369$; with 94 maltreated youth



Maltreatment Classification

Child Protective Services Reports: Maltreatment Classification System⁴
Semi-Structured Interview: Maternal Maltreatment Classification Interview⁴

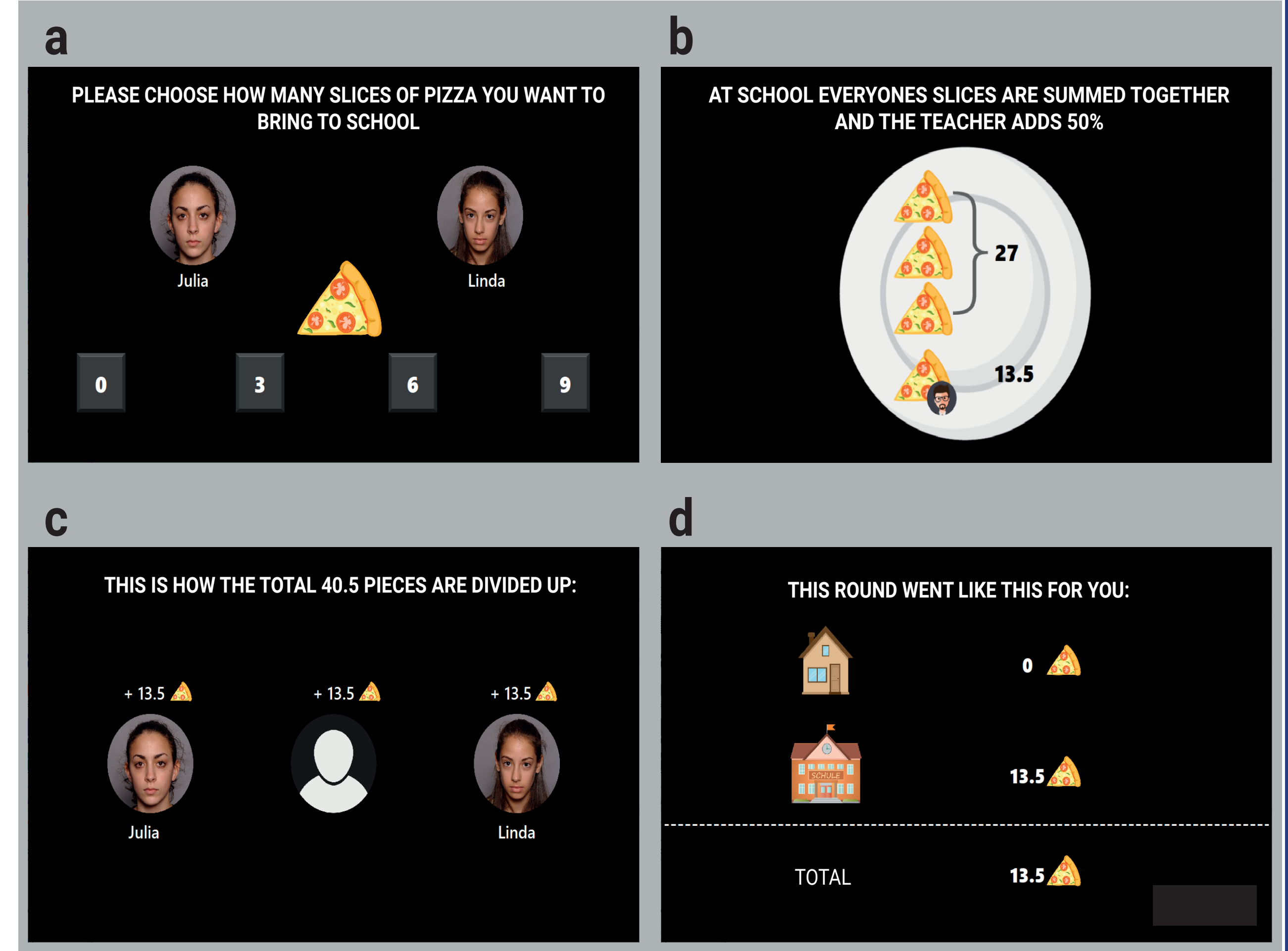
Electrocardiogram

ECG recording to assess Local Power⁵ a short-term estimate of hf-HRV

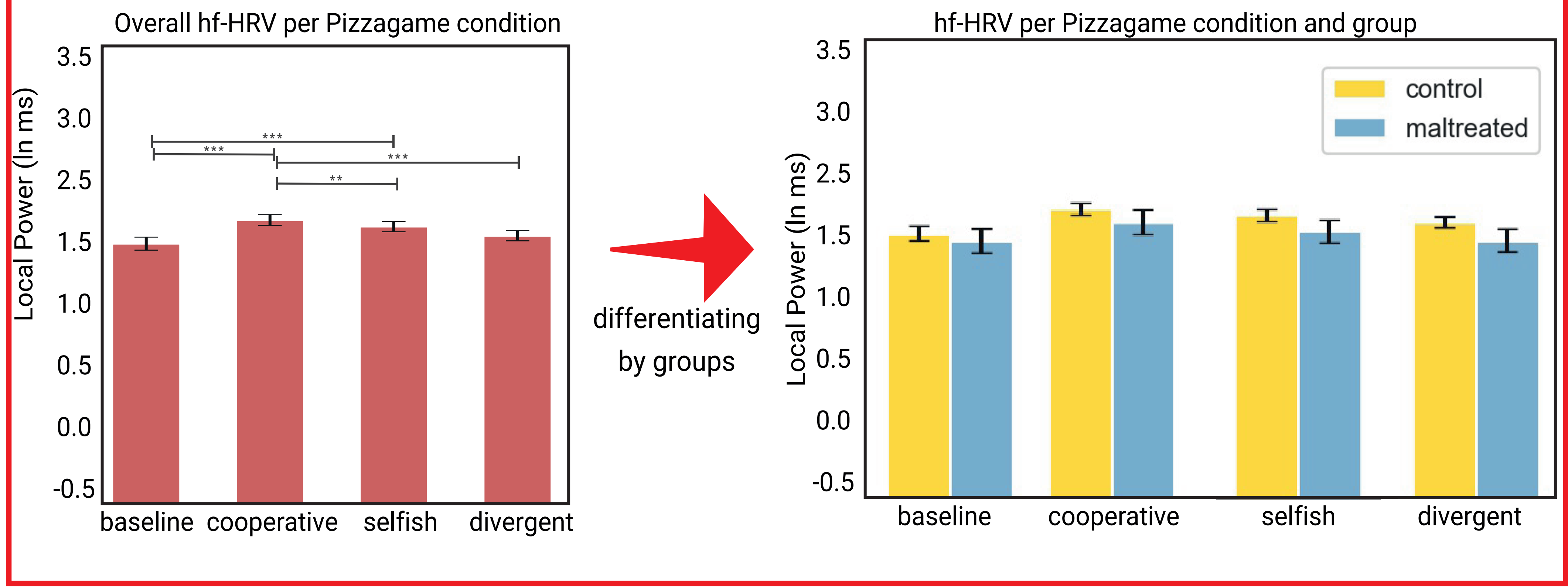
Methods

Pizzagame

Pizzagame⁶ a public goods game measuring cooperative behaviors with cooperative, selfish & divergent peer blocks



high-frequency Heart Rate Variability



differentiating by groups

Discussion

- ✓ Behaviour and hf-HRV adapt when faced with different peers.
- ✓ And cooperative behaviors vary as a function of maltreatment and peer conditions.
- ✗ However, hf-HRV does not vary as a function of maltreatment in the respective cooperative conditions.

Potentially, we did not find hf-HRV differences between maltreated and control groups due to the following reasons:

- hf-HRV may vary in respect to the different dimension(s) of maltreatment. e.g.
 - threat vs deprivation vs emotional maltreatment
 - chronicity and timing of maltreatment
- hf-HRV may not play a role in explaining cooperative behavior among maltreated children.

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