

The effects of mood and social relationship on rudimentary sympathy of adults

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Is sympathy universal in human?

Preverbal 10-month-old infants' preference for others in distress (Kanakogi et al., PLoS ONE 2013)

To investigate universality of rudimentary sympathy:

Does mood affect the sympathy?

Does irrelevant social relationship affect the sympathy?

Stimuli: Aggressor and Victim Interactions

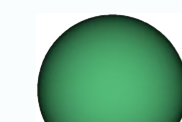


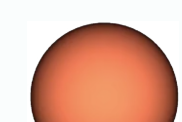
4 geometrical objects: 2 shapes x 2 colors

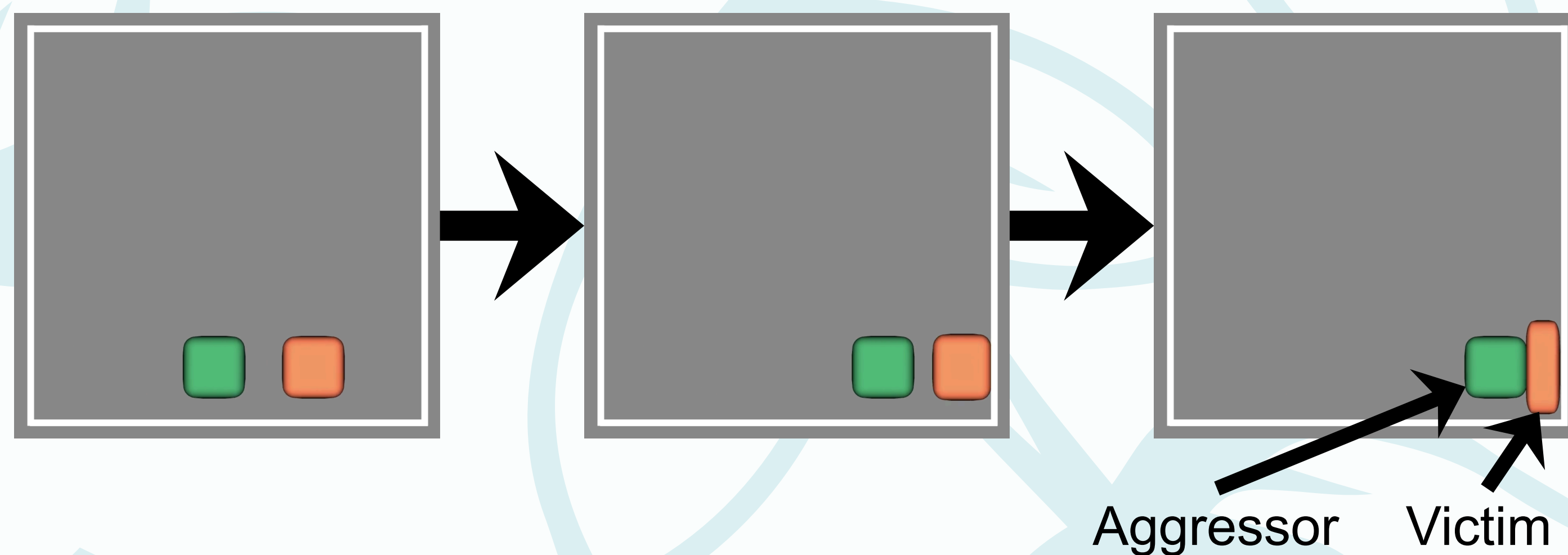
20s interaction of an aggressor and a victim

Roles (aggressor / victim) were changed between groups

Shapes and colors were counterbalanced across groups

8 interactions for each participants

-   Aggressors for participant group 1 (Victims for group 2)
-   Aggressors for participant group 2 (Victims for group 1)

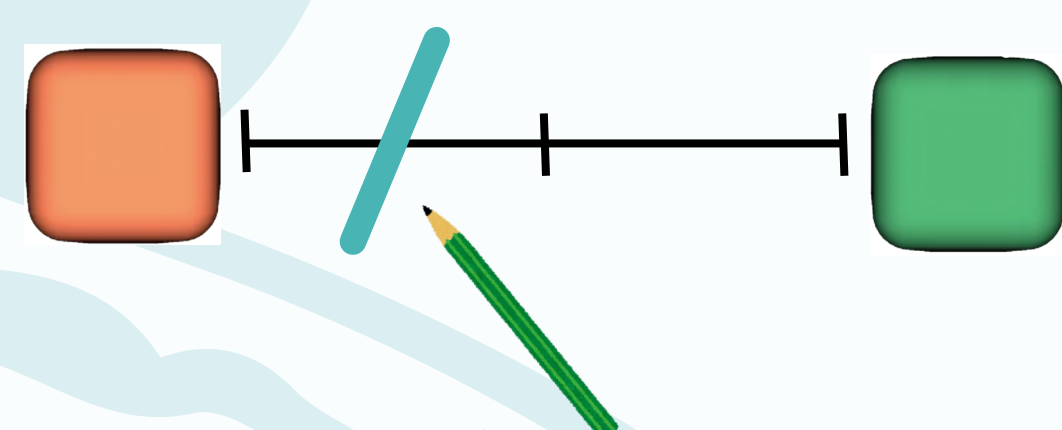


Procedure: Preference by Visual Analog Scale

Stimuli were presented on a large screen in front of participants

Each stimulus was followed by a preference task:

Which is more preferable for you?



Experiment 1: Modulation of mood

Methods:

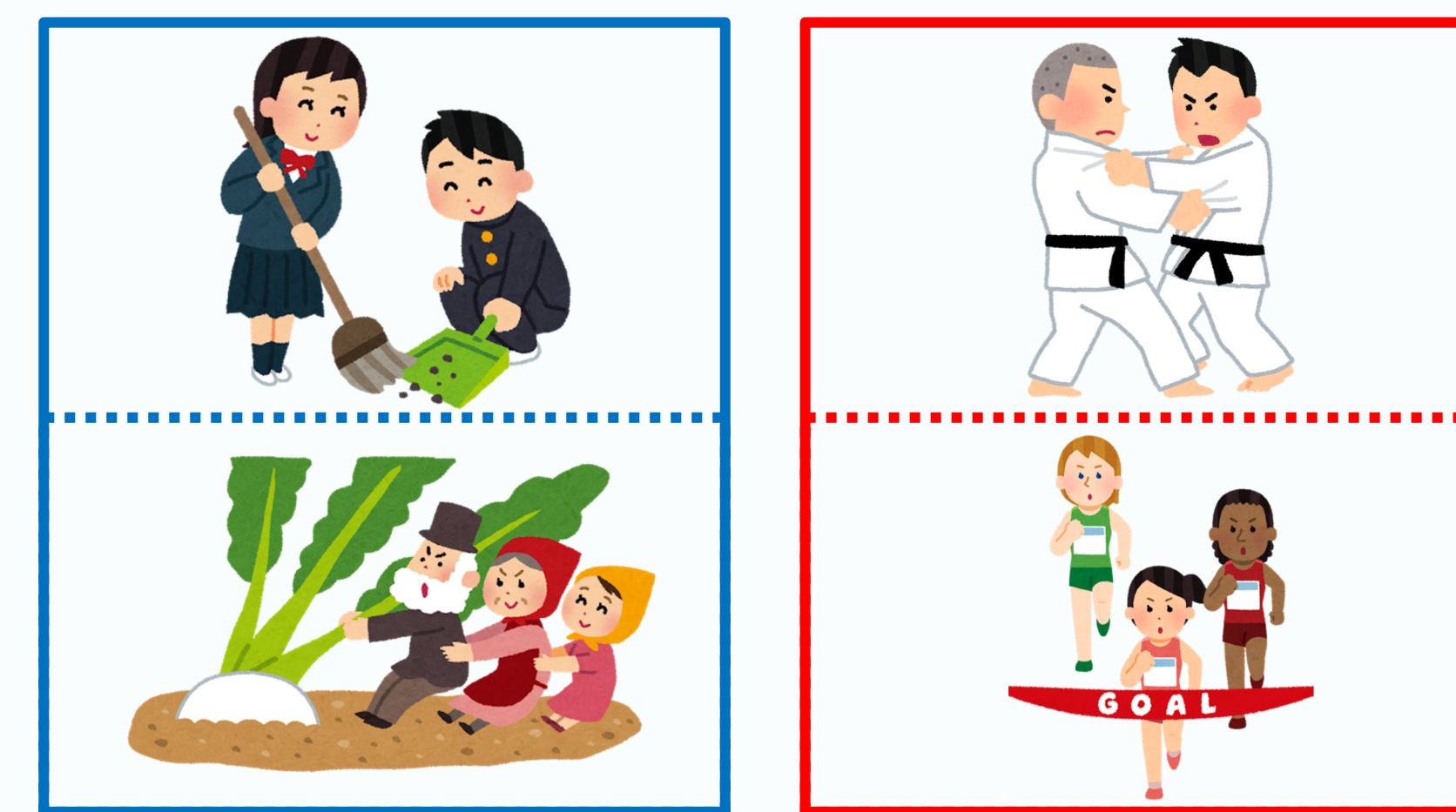
Participants: 57 university students

Stimulus: 2 cooperative and 2 competitive pictures

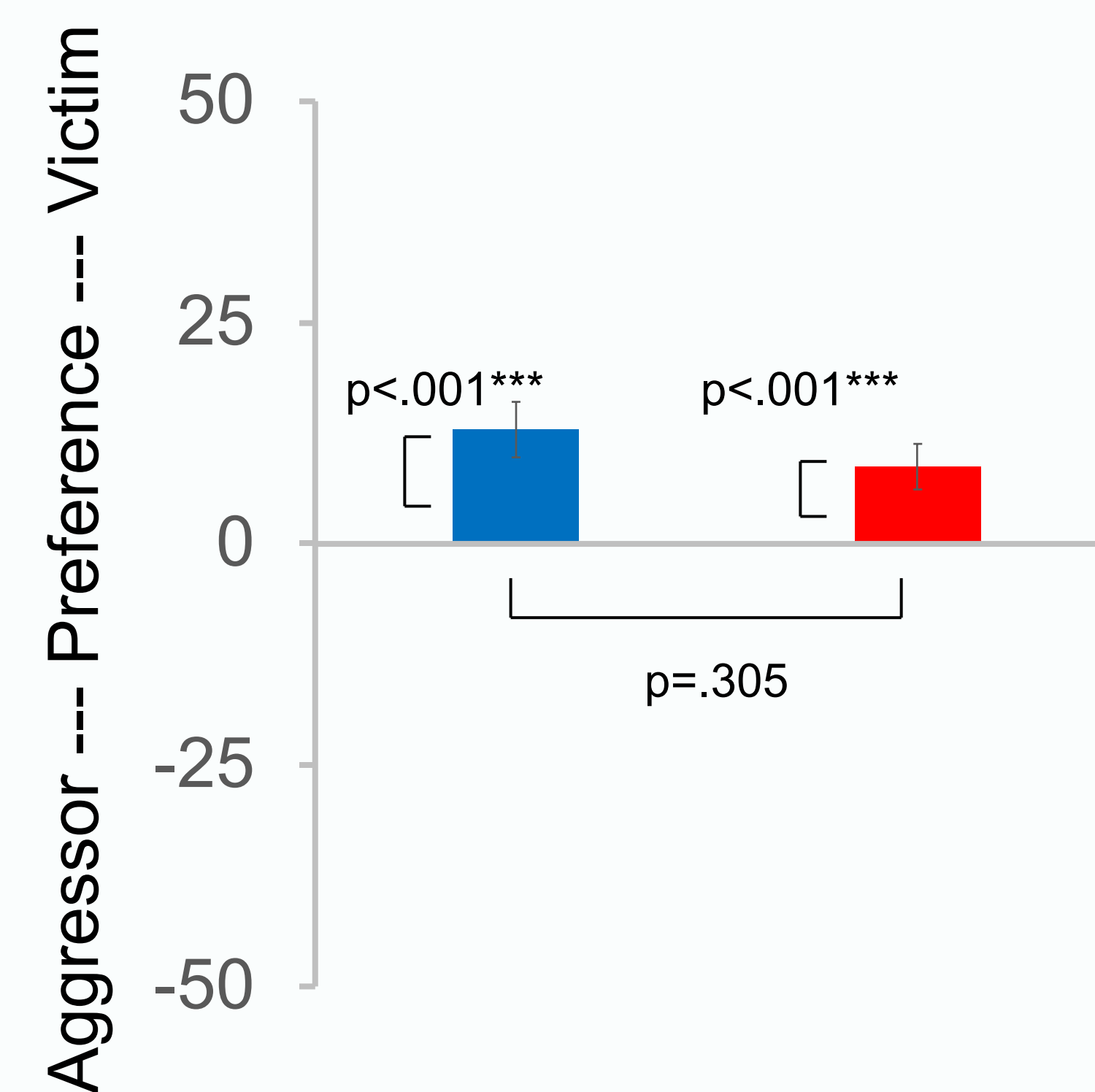
(between subjects/groups design: N=28 and 29)

Task: To make an imaginary story for each picture for 2min, followed by the aggressor-victim animation and VAS

Cooperative condition Competitive condition



Results: Victims were preferred in both condition



Experiment 2: Modulation of irrelevant social relationship

Methods:

Participants: 32 university students

Stimulus: 12 simple 2AFC questions

eg., Which do you like? Dog or Cat

Task: Cooperation and competition game

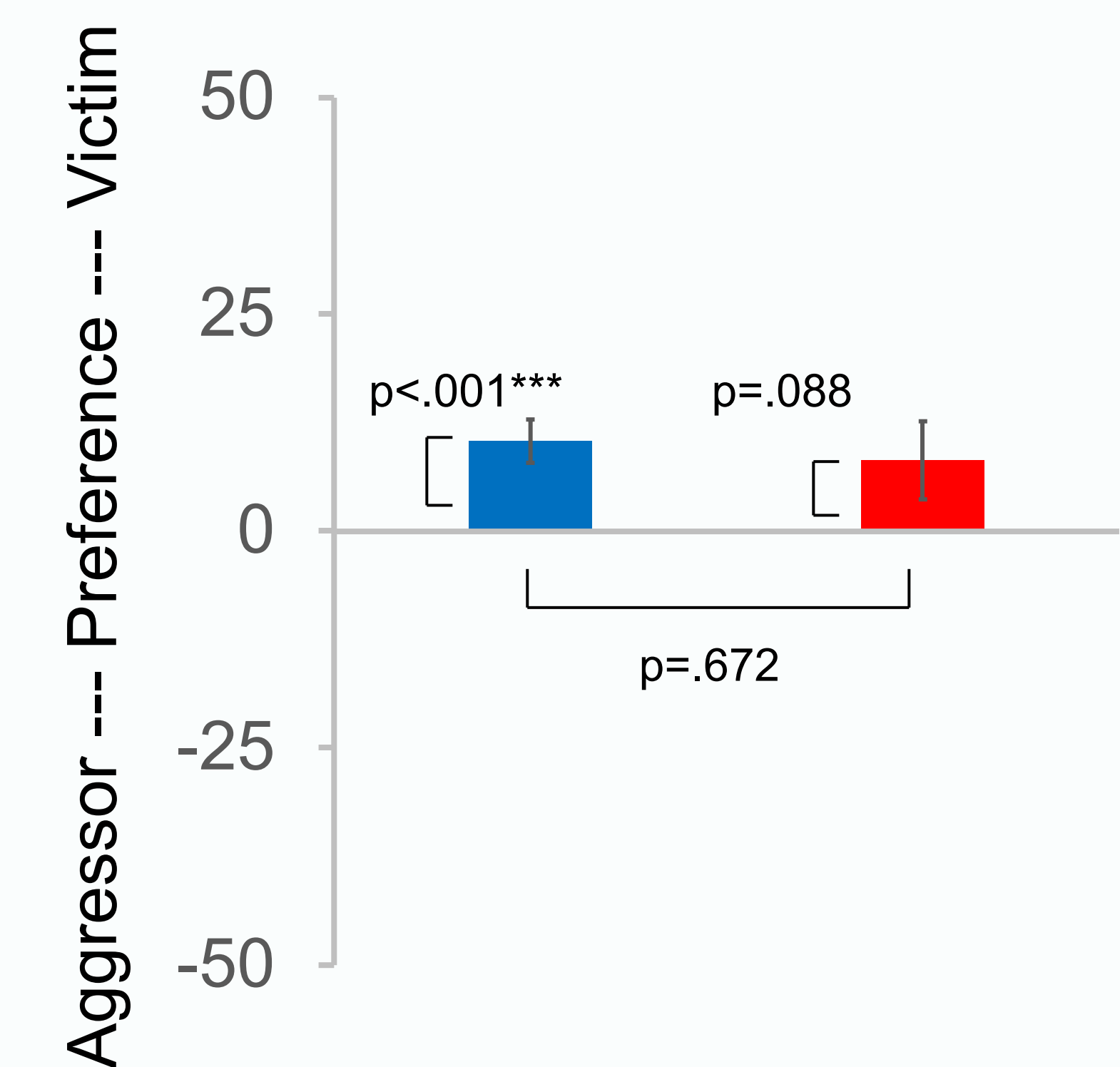
(Wolosin, et al., J. Exp. Soc. Psychol. 1973)

(between subjects/groups design: 8 pairs for each)

Cooperative condition: If pair's answers are same, they both get rewards for each question.

Competitive condition: Participants were asked to anticipate and avoid opponent's choices. Only one of pair get rewards for each question.

Results: Victims were preferred only in the cooperative condition



Discussion: Rudimentary sympathy is relatively universal.

The participants' mood may not affect the rudimentary sympathy (Experiment 1).

The preference for the victim might be weakened in the socially competitive relationship (Experiment 2).

However, we need to test how much the mood and social relationship were affected by the experimental procedures.