

SEX DIFFERENCES IN COOPERATION AND COSTLY PUNISHMENT

UNDER HIGH EMOTIONAL STRESS: AN EXPERIMENTAL STUDY

Rostovtseva V.V.¹, Mezentseva A.A.¹,
Imameev E.R.^{1,2}, Sizov Y.O.¹



1. Institute of Ethnology and
Anthropology RAS, Moscow, Russia
2. Lomonosov Moscow State
University, Moscow, Russia

Aim

To assess potential sex differences in economic decision-making in a highly emotional context

Our experiment involved **high emotional stress**, which was realized through **real-time face-to-face economic interactions**, as well as **extremely unfair behaviour of the partner** (the “**actor**”) from the very beginning of the experiment

Experimental games

Trust Game >> **partner (actor) returned zero!**

[Kreps, 1990; Berg et al., 1995; Rostovtseva et al., 2023a]

Prosocial Punishment Game >> individual

propensity for costly punishment of selfishness

[Fehr & Gächter, 2002; Rostovtseva et al., 2023b]

Prisoner’s Dilemma Game >> propensity to

cooperate (or free-ride) after being treated selfishly

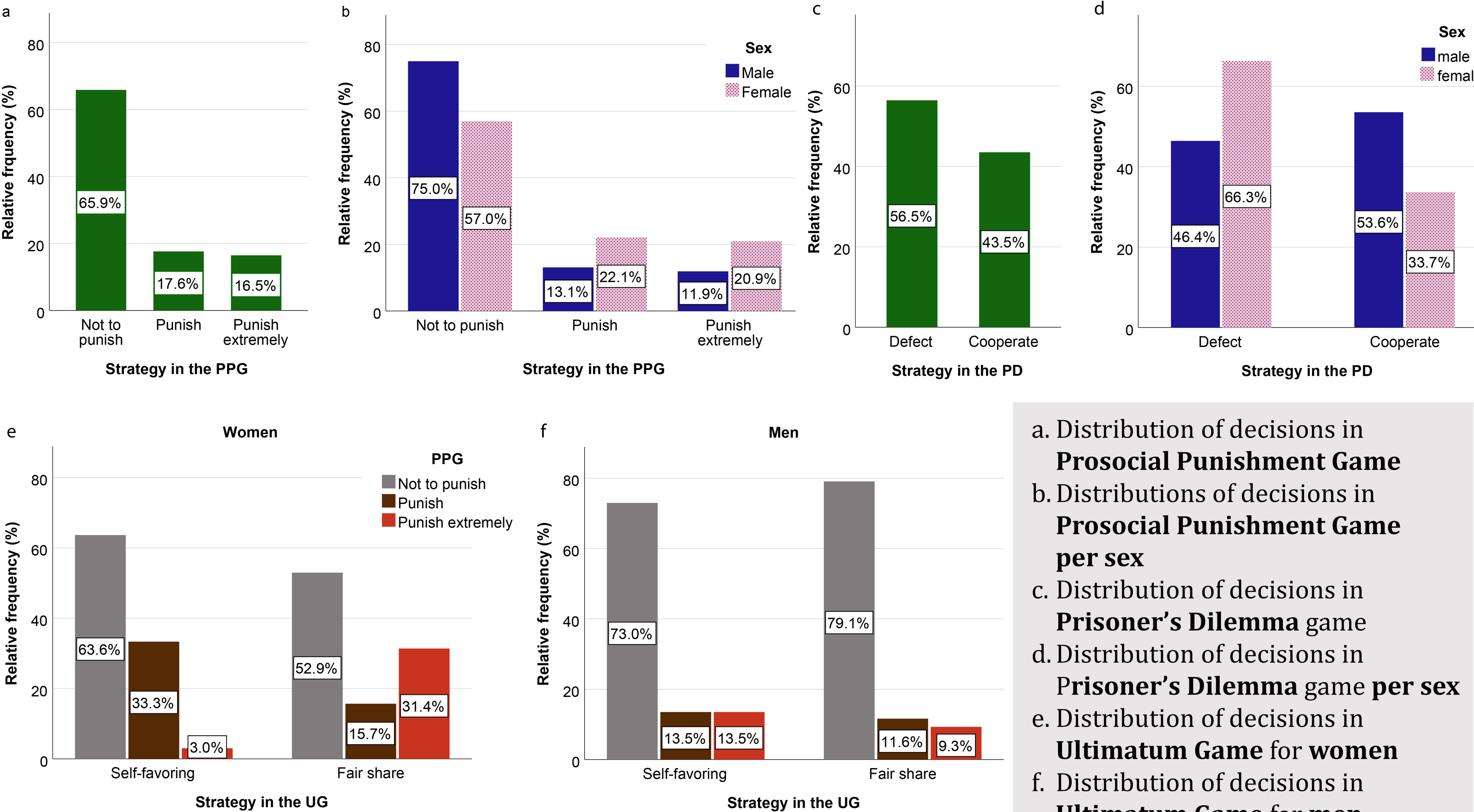
[Rapoport and Chammah, 1965; Axelrod, 1984]

Ultimatum Game >> sense of fairness

[Güth et al., 1982]

Results

N=173 ind. (88 females, 85 males), only significant results are presented



- a. Distribution of decisions in Prosocial Punishment Game
- b. Distributions of decisions in Prosocial Punishment Game per sex
- c. Distribution of decisions in Prisoner’s Dilemma game
- d. Distribution of decisions in Prisoner’s Dilemma game per sex
- e. Distribution of decisions in Ultimatum Game for women
- f. Distribution of decisions in Ultimatum Game for men

Conclusions

Men and women respond differently to the emotional aspects of economic interactions when dealing with selfish behaviour. Women were more inclined to spend their funds in PGG to teach an unfair player a lesson, and also tended to refuse further cooperation with selfish partner, unlike men. This suggests that women may be more sensitive to negative emotions triggered by unfair actions. Women who employed the extreme strategy of punishment also demonstrated fairness in their decisions in UG. This suggests a potential link between the emotions triggered by selfish behaviour and sense of fairness.