

Interactive experience and expectation show different fairness preferences



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ABSTRACT

Interpersonal interaction affects people's decision-making progress. Being accepted by others is one of the most basic social needs. Nevertheless, social exclusion undermines the basic need of belonging to a social group and dampens positive and sustainable social connections. The two opposite interpersonal relationships further impact social behavior in distinct patterns observed through fairness preference demonstration.

The current study is designed to investigate how different types of social interaction (social exclusion/social inclusion) contribute to fairness preferences for people of different interactive opportunities (former partner/future partner). Specifically, how interactive targets in an economic game influence fairness-related decisions from the perspective of a third party, as targets are who shared unique previous experiences with us or a new partner to communicate with. A visual balltossing game was used to manipulate social exclusion and social inclusion conditions. In a bid to eliminate the confounding effect of self-utility and fairness orientation, a novel revised TPUG (Third Party Ultimatum Game) was exploited to investigate the behavioral patterns of fairness preferences. Our results were consistent with previous findings that fairness significantly affected the rejection rate that more unfair proposals induced higher rejection. In addition, different types of group interaction, to a certain extent, improved individuals' susceptibility to their principle of fairness. However, different interaction types demonstrated selective concerns in TPUG, as indicated by the higher rejection rate of unfair offers for receivers of different interactive histories. Nevertheless, the same behavioral pattern of high rejection rate could reflect completely different assumptions. Excluders were more concerned about the interests of those who previously excluded them, which was aligned with the social reconnection hypothesis. However, those who were previously accepted in the cyber-ball game showed more concern for potential partners. Therefore, previous interaction and potential interactive opportunities influence human fairness preferences.

METHOD

Participants

80 participants from 17 to 24 years (11 male) in the experiment.

Procedure

The participants were instructed that this was a study of psychological imagination. In order to get familiar with people in the following task and train their visualization ability, they had to imagine a interactive online game with another two partners as vividly as possible.

Exclusion manipulation

Cyber-ball Game includes 50 trials, participants need to pitch a virtual ball immediately after receiving it from one of the two palyers. In order to increase authenticity, virtual players' tossing interval is randomly set from 1.5 s to 2 s. Out of 50 trials under exclusion condition, participants will receive the ball 10 times at random (20% chance of receiving the ball), after 10 random catches, participants will not receive the ball any more. In the inclusion condition, participants will receive the ball 35 times out of 50 passes (70% chance of receiving the ball), and after receiving the ball 35 times at random, participants will not receive the ball any more. Other trials are those virtual two players throwing to each other.

Once the ball is received, participants can pass it to the player on the left by pressing "f" and "j" to the player on the right.

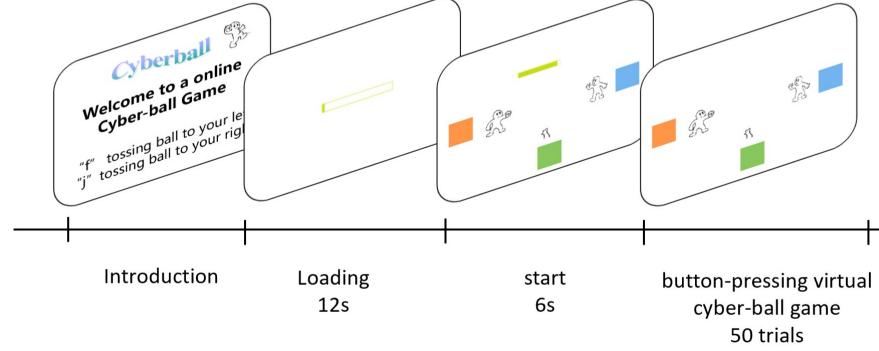


Figure 1. The social exclusion/inclusion manipulation.

TPUG(Third-party Ultimatum Game)

In the TPUG, the total amount is \(\frac{\pmathbb{4}}{10}\), and there are 9 distribution schemes (1:9 vs. 2:8 vs. 3:7 vs. 4:6 vs. 5:5 vs. 6:4 vs. 7:3 vs. 8:2 vs. 9:1), ranging from unfair-advantage to unfair-disadvantage, including fair scheme (5:5), unfair-advantage scheme (1:9 vs. 2:8 vs. 3:7 vs. 4:6) and unfair-disadvantage proposal (6:4 vs. 7:3 vs. 8:2 vs. 9:1). The dependent variables are the cognitive and emotional responses of the respondents in TPUG. Specifically, we looked into the rejection rate of the participants as the third party respondents to proposal in TPUG and a 5-point scale for each proposed proposal in terms of satisfaction (1 = very dissatisfied, 5 = very satisfied) and self-evaluation of anger (1 = not angry, 5 = very angry).

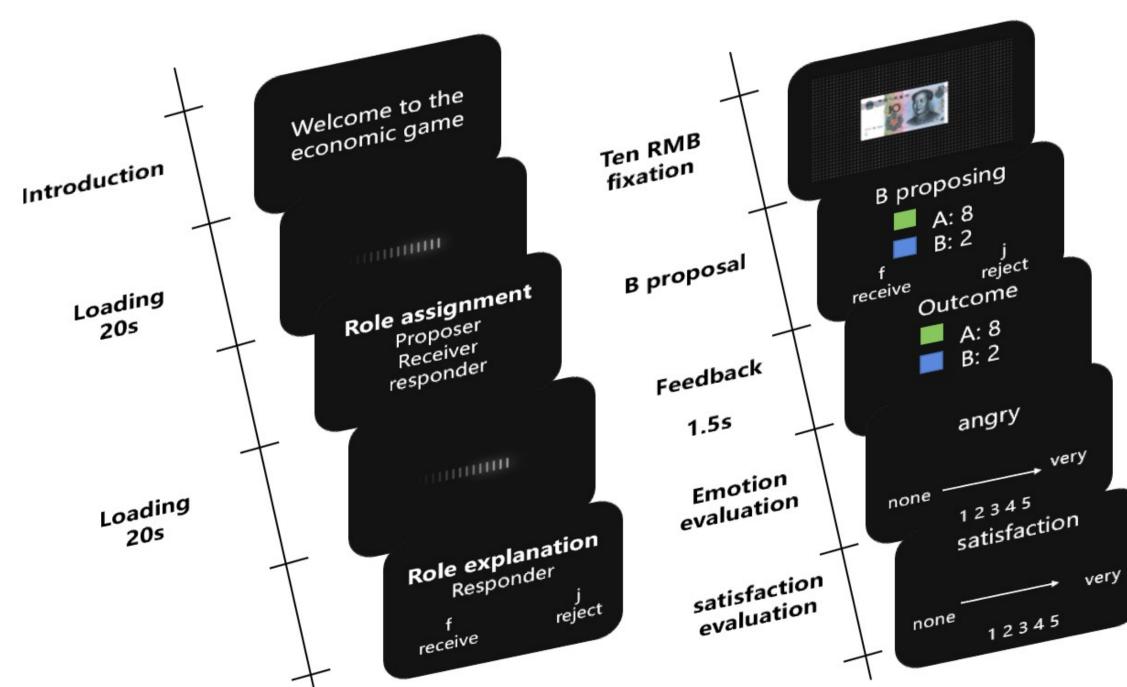


Figure 2. The TPUG procedure.

social exclusion

social inclusion

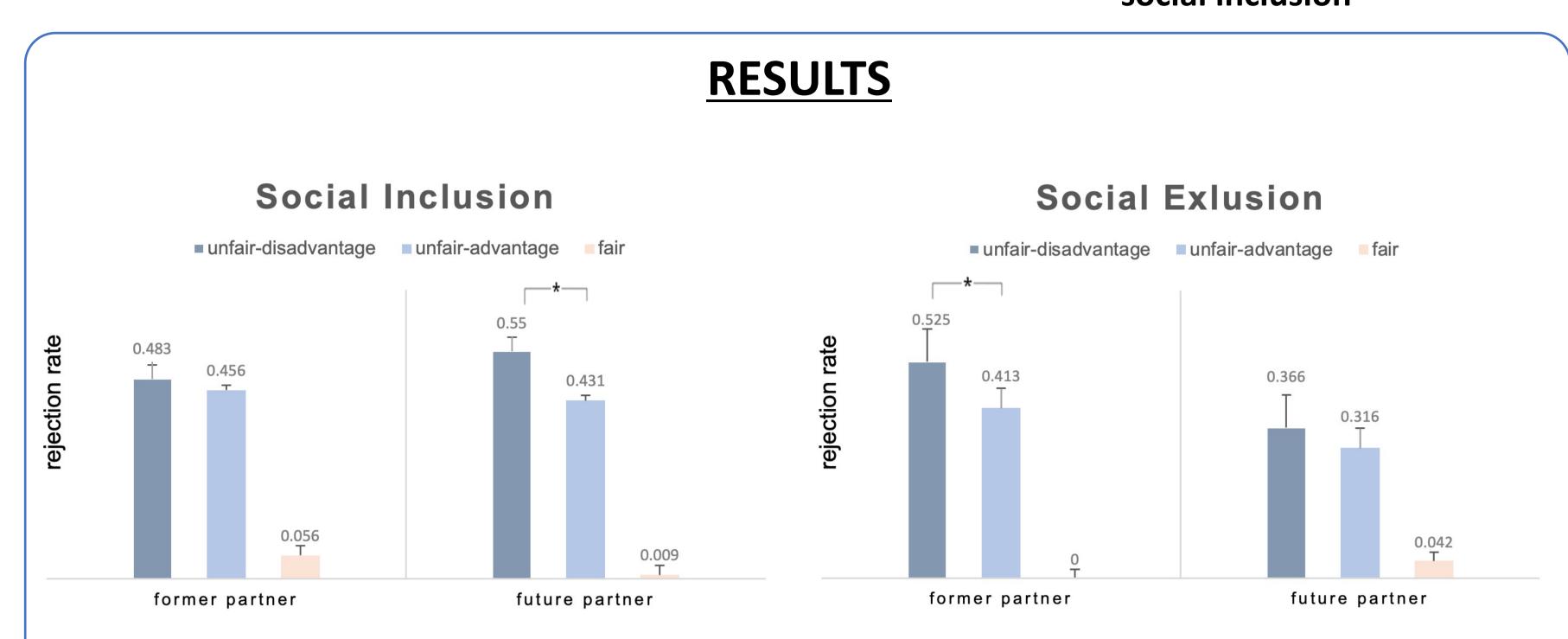


Figure 3. Bar charts displaying the rejection rate of each fairness condition (left: social inclusion; right: social exclusion).

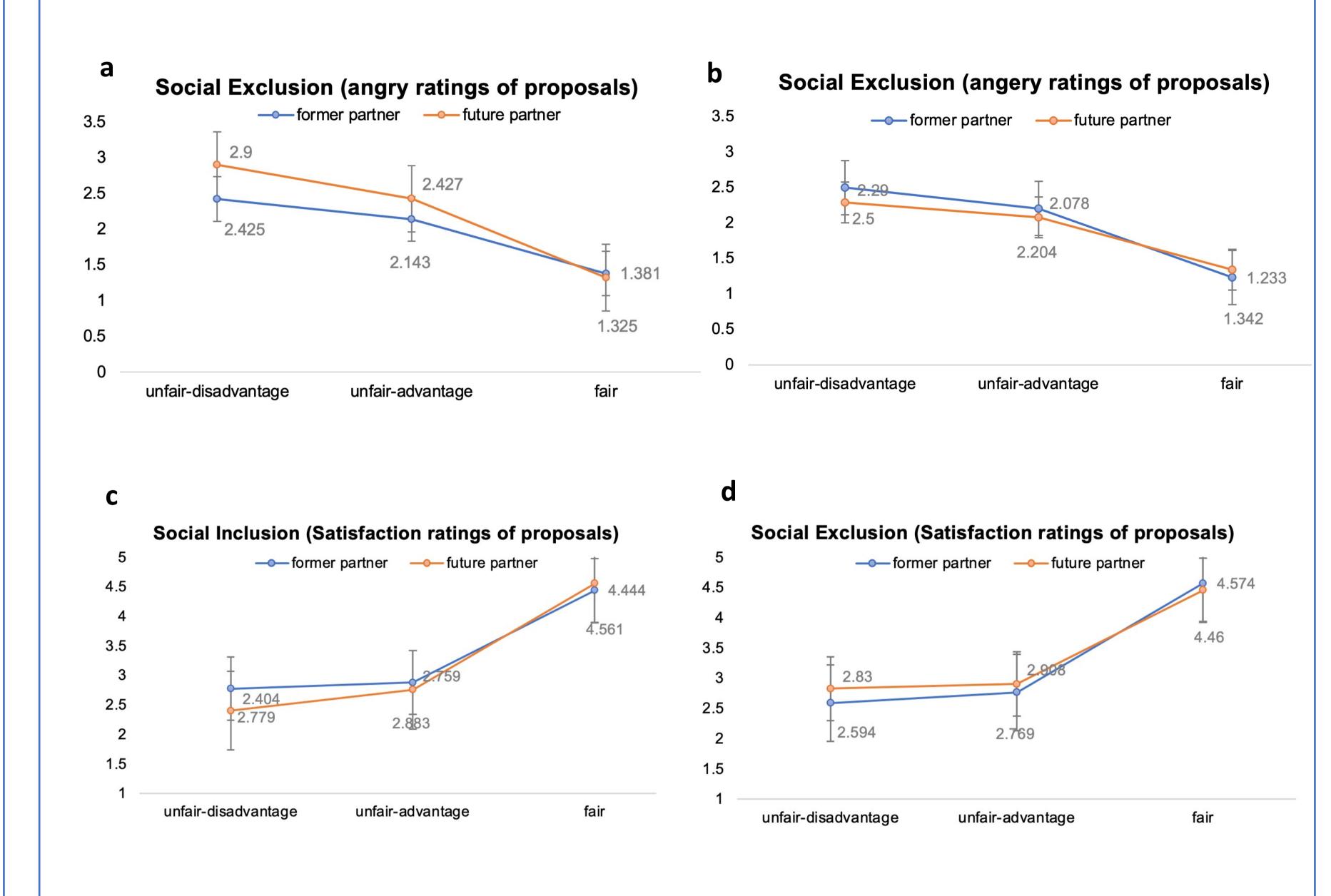


Figure 4. Line charts displaying the ratings of anger and satisfaction evaluations towards proposals divided into three fairness conditions.

CONCLUSION

Our result was consistent with previous findings that fairness significantly affects the rejection rate that unfair proposals induce more rejection. Additionally, the rejection rate under the social inclusion condition was higher than in the social exclusion condition, reflecting their higher sense of fairness after being accepted by others. Social acceptance is the embodiment of the basic human belonging needs are met, being accepted by the society is more likely to have a positive mood and pro-social behavior as demonstrated by fairness preferences. Social acceptance makes individuals consider more about the benefits of passive receivers, and become more willing to shoulder the responsibilities of maintaining justice. Therefore, people being socially accepted are more inclined to eliminate the disadvantage of adverse situation, embodying the pursuit of their fairness, as rejection indicates punishment for selfish proposers who are dominant.

The interactive history or future potential will generate distinct fairness preferences. To some extent, social interactions influence individuals' susceptibility to protect fairness principles, whereas manifesting selective concerns. People who suffered from social ostracism were more concerned about the interests of those who performed exclusion to them. However, people who were welcomed by others showed more preference towards the status of future partners. Therefore, previous experience as well as potential interactive possibilities both dissimilarly influence fairness-related decision-making. However, what determines such differences and whether these inconsistent behavioral patterns have different trade-off processes need further investigation.

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