Before starting the task, participants were given the following information:

*You are about to play several games. You will receive instructions at the start of each game. In the games you can win points. Each point helps determine the value of your gift voucher. So: the more points you have the larger the value of your gift voucher.*

Participants played the games on a Dell laptop. The instructions for each section were administered via a video recording to ensure that participants with low levels of literacy understood the task. The order of the sections were fixed. Points were accumulated across the entire game and shopping vouchers were given out depending on the number of points earned (vouchers ranged between 5-7 pounds). Participants were not told how many points they had earned until the end of the game. Participants were told that they were playing against a student at another school who was also taking part in the experiment, however, they were just playing against programmed computer responses.

*Dictator game*

In this task, participants are asked to decide how to split a set of points with another player. They have six decisions to make. In round one the choice is 10 for self and 0 for other or 5 for self and 5 for other. If they choose 5/5 in the first round, the next round is 10 for self and 0 for other or 4 for self and 4 for other, followed by 10 for self and 0 for other or 3 for self and 3 for other, till the final round where it is 10 for self and 0 for other or 0 for self and 0 for other. If they choose to split 10/0 in the first round, the next round is 10 for self and 0 for other or 6 for self and 6 for other, followed by 10 for self and 0 for other or 7 for self and 7 for other, till eventually it is 10 for self and 0 for other or 10 for self and 10 for other.

*Ultimatum 1*

In this task, participants are told they are playing against a different player than task 1. In this task, participants are given 10 points and they are asked to make a proposal to the other player on how the points should be split. If the other player accepts the offer, they both receive the points that the participant has proposed. If the other player rejects the proposal, both the participant and the other player receive no points. They only make one proposal to the other player. The choices are 10 for self 0 for other, 9 for self 1 for other, 8 for self 2 for other, 7 for self 3 for other, all the way through to 0 for self 10 for other.

A check question was administered prior to starting the task to check for understanding.

*Ultimatum 2*

In this task, participants are told they are playing against a different player than task 1 and task 2. In this task, the participant sees six proposals from the other player and must decide to accept or reject each proposal. If the participant accepts the offer, they both receive the points that the other player has proposed. If the participant rejects the proposal, both the participant and the other player receive no points. The first proposal the participant sees is a 5 for participant and 5 for other split, the next proposal is 4 for participant and 6 for other. The points for the participant continue to reduce by one and the points for other continue to increase by one till proposal six where the point split is 0 for participant and 10 for other.

A check question was administered prior to starting the task to check for understanding.

*Learning Tasks*

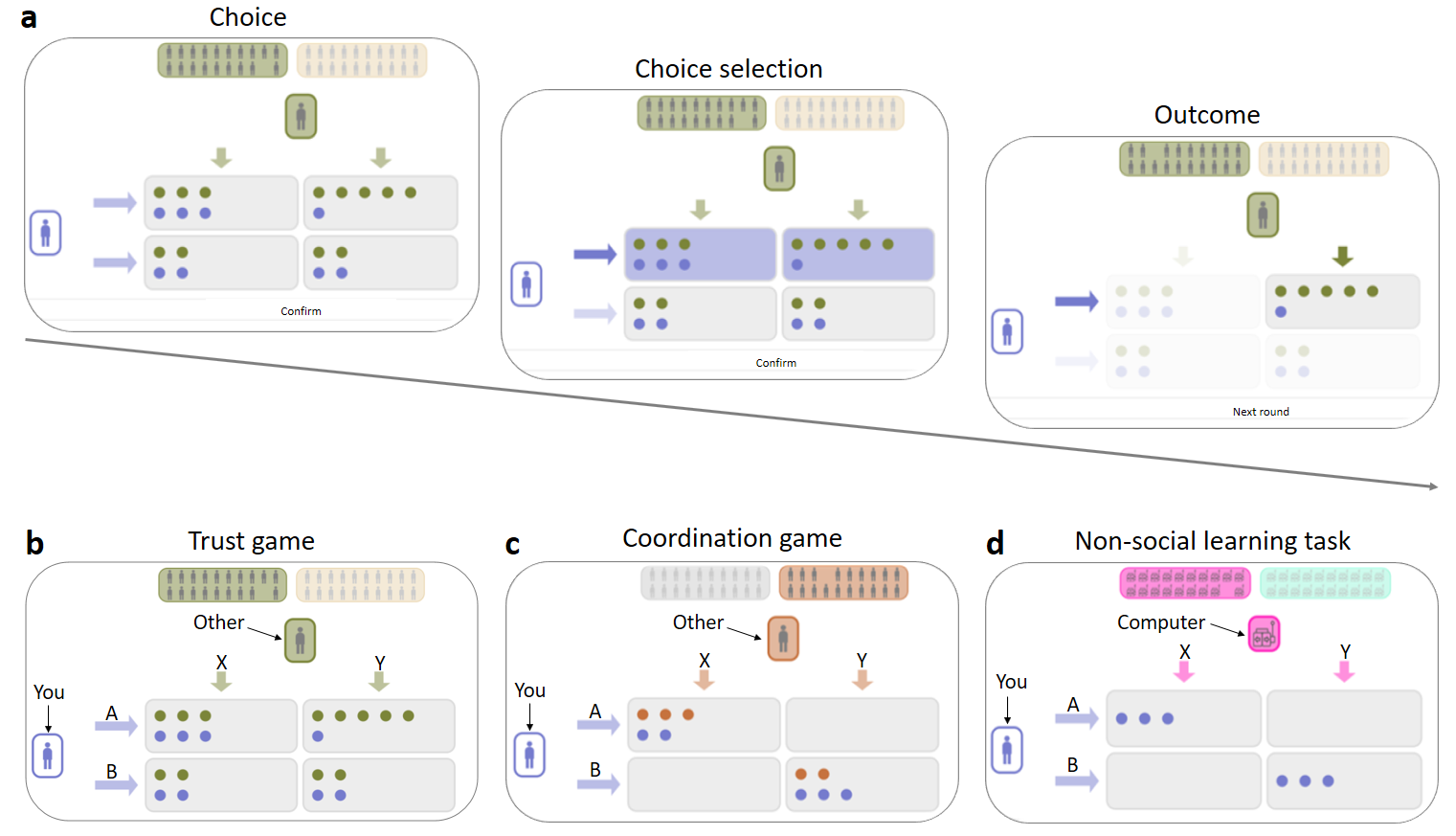
Participants performed two incentivized social economic games with different payoff structures (see Figure 1). Each game was composed of 30 trials in total: each round was a single-shot game with a new anonymous interaction partner. Participants were instructed that the choice of the others were previously made by anonymous other students from a similar age. Every round the participants chose from 2 options (here denoted as option A and B) to distribute points between themselves and the other. After their decision they could see the choice of the interaction partner (here denoted as option X and Y) and the corresponding outcomes for themselves and the interaction partner. Outcomes for self and the interaction partner resulted from their combined choices, as shown with payoff matrix where in each of the cells entries with and without apostrophes indicate payoffs for, respectively, the other and self (in bold).

The interaction partners were divided into two groups of 15 players each based on their responses on the pre-test (see Figure X). That is, in one group the majority (73%, i.e., 11 out of 15) preferred X whereas the second group preferred Y. Participants were instructed that in one group, players usually choose X (left), and in the other group players usually choose Y (right). Over trials, participants could learn the tendency of choosing X for each group of interaction players, and adjust their response accordingly. Participants were instructed to try to win as many points as possible by paying close attention to the behaviour of the other players. The current design underlines strategic one-shot interactions to avoid reputation effects, while allowing learning and adjusting to the general response tendency of a group of players. Moreover, these social interactions included real players that were anonymous, yet part of their relevant peer group.

The two different games represent different social interaction settings, each with a different payoff structure. For one of these games, denoted as the Trust Game with payoff matrix , participants can learn about the trustworthiness of others. That is, the group that tends to play (X) represents a trustworthy group as their players prefer an equal distribution of points. The group that tends to play (Y), however, represents an untrustworthy group as these players prefer the option that benefits themselves at the expense of the participant. Participants can decide to ‘trust’ the other, choosing the upper row (A), which is only beneficial to choose when the other will play X (i.e., most likely someone from the trustworthy group). A participant can also decide to ‘not trust’ the other choosing the lower row (B) guaranteeing a fair split of 2 points each, irrespective of the other player’s choice. For a participant to maximize their payoff, it is most optimal to decide to trust interaction partners from the trustworthy group (A), and not trust interaction partners from the untrustworthy group (B).

The Coordination Game with payoff matrix is an asymmetric Coordination Game where participants can learn about the tendency of others to play rather selfish (X) or rather prosocial (Y). That is, the group that tends to play X, represents a rather selfish group, as they have a preference to benefit themselves most. The group that tends to play Y, however, represents a prosocial group as these players prefer the option that benefits the participant more than themselves. For a participant to maximize their payoff, it is optimal to decide to coordinate with the selfish group by choosing the upper row (A), or coordinate with the prosocial group by choosing the lower row (B).

As a control condition, we included a basic Non-Social learning task with two communities of computer opponents (payoff matrix ). Similar to the other games, participants should coordinate their choices to the choices of the computer opponent to maximize their payoff. That is, choosing option A when playing against the group with a preference for X, and choosing option B when playing against the group with a preference for Y.



**Figure 1. Task for assessing adjusting behaviour. (d)** Example trial. Participant is represented on the left of the screen and can choose between the top and bottom row. After choice selection, the pre-recorded choice of the other player is shown. The other player is shown on top (colour indicates group membership), and has chosen either the left or right column. The choices of the participant and other player combined determine the outcome (number of dots in their corresponding colour). **(b)** In the Trust Game, that included a trust game payoff matrix, participants were confronted with a trustworthy (benign group, prefers choice X) and untrustworthy (adverse group, prefers choice Y) social environment. Maximizing payoff would mean choosing to trust (choose A) when matched with a person from the benign group, and choose to withhold trust (choose B) when matched with a person from the adverse group. **(c)** The Coordination Game included a cooperation payoff matrix and participants were confronted with a selfish (adverse group, prefers choice X) and prosocial (benign group, prefers choice Y) social environment. Here, maximizing payoff would mean choosing prosocially (choose A) when matched with the adverse group, and choosing selfishly (choose B) when matched with the benign group. **(d)** The non-social condition (“Non-social game”) also included a cooperation payoff matrix, and participants were confronted with two computer groups, identical in pay-off but either preferring X or Y. Contrary to the social games, participants needed to match the responses of these two computer groups.

*BEAST*

Participants observed an image showing a group of animals for 6 seconds and had to estimate the number of animals. Once the image had disappeared, participants entered their first estimate. They then observed the estimate of another participant (i.e. social information) who completed the task before entered their second estimate. This procedure was repeated for five rounds, in which social information was provided by a peer student. Participants did not receive any feedback about their accuracy (nor the accuracy of the social information) between trials.