

APPENDIX A. STIMULUS MATERIAL

Figures A1 and A2 provide examples of the stimulus material used in the experiment.

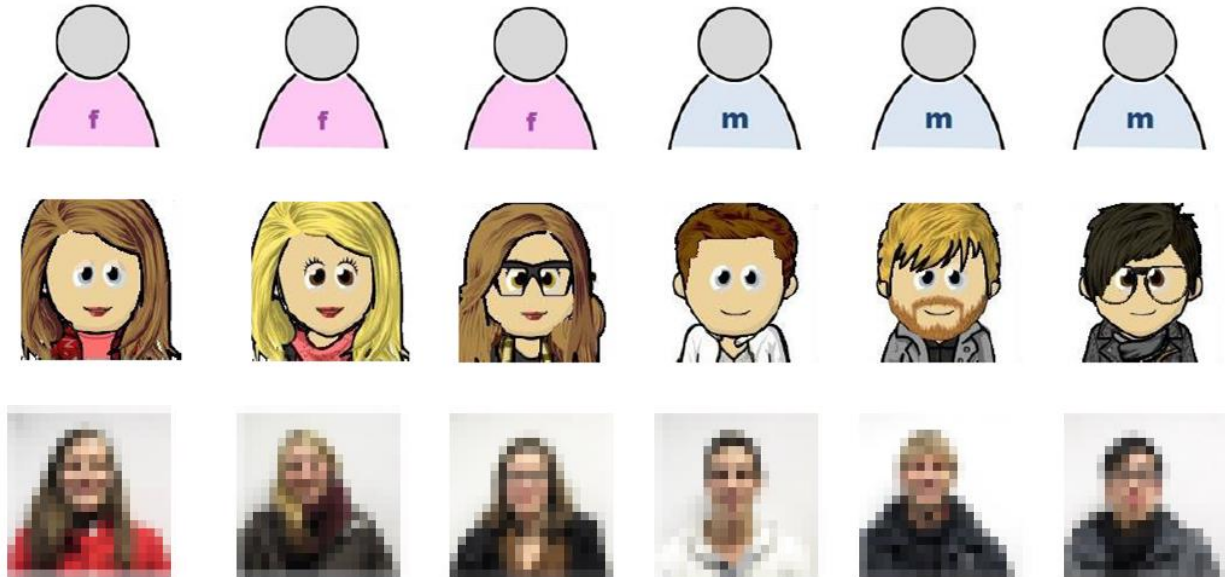


Figure A1. Examples of profile imagery used in the default images (top), avatar (middle), and photo (bottom) condition¹.

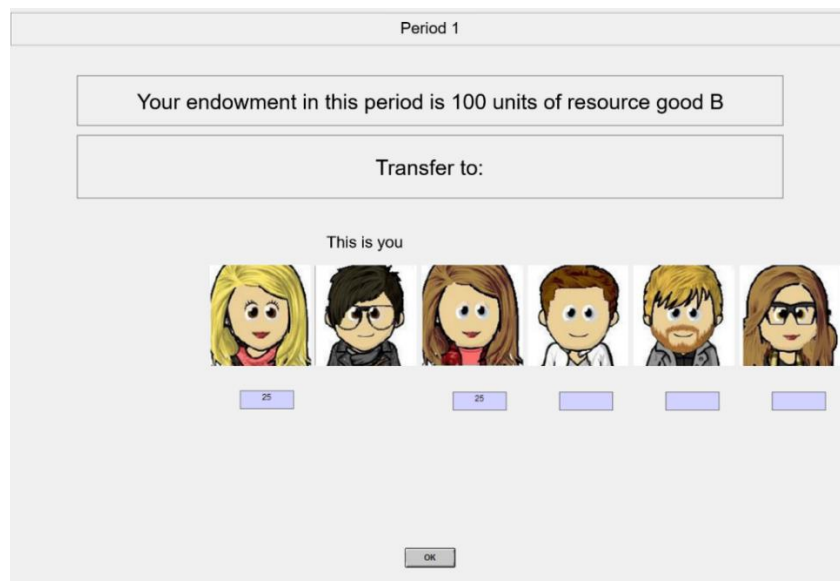


Figure A2. Example screen of participants' user interface to submit transfers (avatar condition; translated to English).

¹ The photos are pixelated here for publication purposes.

APPENDIX B. PARTICIPANT INSTRUCTIONS

[The following instructions are English translations from the original documents.]

General Information

You are participating at an experiment in which your actions are rewarded with actual money. Throughout the course of the experiment, you may earn virtual monetary units (MU). These MU are converted into EUR at the end of the experiment and paid to you in cash. The exchange rate from MU to EUR is 10 MU = 1.00€. Your payoff will depend on your own decisions and actions, as well as on those made by the other participants.

The Experiment

The experiment entails 15 periods and is conducted in groups of 6 participants. You and the other five members of your group will remain in the very same group over the entire course of the experiment. At the end, we will randomly select 10 out of the 15 periods for each participant individually. Those 10 periods will be relevant for payoff. Each combination of periods is equally likely to be chosen. Your individual payoffs for your selected periods will then be added, converted into EUR, and paid to you in cash. You will be asked to conduct a couple of short questionnaires before the experiment and after its main part.

Period Structure

In each period, each participant is endowed with 100 units of a specific resource. Each participant receives a different type of resource good. The 6 resources are denoted A, B, C, D, E, and F. One participant holds 100 units of resource A, another participant holds 100 units of resource B, and so on. Each participant can choose to transfer any amount of his or her resource to any of the other participants individually. The individual amounts may have different values—the sum must of course not exceed the initial endowment of 100 units. To this end, you will see 5 text input areas below the profile pictures of the other 5 participants in which you may enter the amount you wish to transfer. The transferred amount will be deducted from your account and—based on your input—credited to the other participants. If you do not want to transfer any units to another participant, please enter the value “0” or do not type anything at all.

Please note: For each transfer (> 0 units) to other participants, you will encounter transaction costs of 1 MU. Your total transaction cost will thus be between 0 MU (not transferring to any of the other participants) and 5 MU (transferring some units to all other participants). Your period income will now depend on the remaining units of your resource, the received resources from the other participants, as well as your transaction costs. In order to convert the individual amounts of the resources A, B, C, D, E, and F into monetary units, the square root function will be applied to all individual values. Your payoff is hence denoted by:

$$Payoff = \sqrt{A} + \sqrt{B} + \sqrt{C} + \sqrt{D} + \sqrt{E} + \sqrt{F} - \text{transaction cost}$$

The following figure illustrates graphically how units of the resources A through F are converted into monetary units.



The result screen

At the end of each period, you will see summary screens, informing you about the amounts of resources you received from the other participants and how much you transferred to them. Moreover, you will see the resulting transaction cost and your resulting period income. This process will be repeated until the last period of the experiment. The current period number will be displayed in the upper part of the screen. The assignment and identification of participants will remain the same over the entire course of the experiment. Participant A will always be participant A and will always refer to the same person.

Code of Conduct

Communication with the other participants is not permitted. Please note that violation of this rule may result in exclusion from the experiment and therefore also from payoff. To ensure an undisturbed execution of the experiment, we would like to ask you to wear ear muffs, which will be handed out to you in a second. If you have any questions, please remain seated and call the experiment staff's attention by hand signal. Please ask your question as quiet as possible. Thank you.

APPENDIX C. MEASURES

Table C1. Summary of variables and measures in the experiment (CTR = control, AVA = avatars, PHT = photos)

Variable	Measure	Scale	Summary statistics (Mean)			
			Overall	CTR	AVA	PHT
Network Level						
Network value	The sum of all payoffs $\sum p_{i,t}$ realized within the network relative to its theoretical min and max in period t .	Numerical (ratio, 0–1)	.71	.63	.73	.77
Network density	The “number of actual links in the network as a ratio of the number of possible links” (Tichy et al., 1979, p. 508) in period t .	Numerical (ratio, 0–1)	.72	.66	.73	.78
Network reciprocity	The number of bidirectional links as a ratio of the number of relations with at least one transfer between i and j in t .	Numerical (ratio, 0–1)	.74	.68	.73	.80
Participant Level						
Transfer $x_{ij,t}$	The amount of a resource $x_{ij,t}$ that participant i transfers to participant j in period t .	Integer (0–100)	10.60	8.68	11.26	11.85
Total volume of transfers	The amount of a resource participant i transfers to all other participants (within the cohort) in period t	Integer (0–100)	52.98	43.39	56.28	59.27
Number of recipients	The number of participants that receive a positive resource transfer from participant i in period t	Integer (0–5)	3.62	3.31	3.67	3.88
Mean transfer	The average amount transferred to each recipient (i.e., to each other participant who actually receives an amount > 0)	Numerical (0–100)	14.07	12.13	15.08	15.00
General						
Period t	One of the periods in the <i>Gift Giving Game</i> . Periods 13–15 are omitted to avoid issues related to endgame effects (Berninghaus et al. 2008).	Ordinal (1–12)	—	—	—	—
Control variables						
Gender	Self-report question on whether the participant is female or male.	0: male 1: female	108 male 108 female	36 male 36 female	36 male 36 female	36 male 36 female
Risk attitude	Task-based assessment of subjects’ risk attitudes at the end of the experiment (Holt and Laury, 2002).	Ordinal (1–10)	5.884	5.875	6.000	5.778

References

- Berninghaus, S. K., Güth, W., and Vogt, B. 2008. “Spontaneous evolution of social exchange—An experimental study,” *Journal of Socio-Economics*, (37:3), pp. 976–997.
- Holt, C. A., and Laury, S. K. 2002. “Risk aversion and incentive effects,” *American Economic Review*, (92:5), pp. 1644–1655.

APPENDIX D. ADDITIONAL ANALYSES

In order to confirm that reciprocity is in fact a driver and sustainer of exchange relations, we conducted a complementary analysis of individual transfers at a peer-to-peer level (see Table D1). As can be seen in the significant path coefficient for the variable “received before”, the amount that a participant received from the respective other participant in the previous period ($t-1$) predicts one’s transfer in the current period (t).

Table D1. Regression models for individual transfers.

	Transfer			
	1 st period	2 nd – 12 th period		
Treatment: Photos	1.980 *** (.558)	3.138 *** (.712)	1.232 *** (.283)	1.195 ** (.396)
Treatment: Avatars	1.515 ** (.559)	2.626 *** (.712)	1.068 *** (.283)	1.248 ** (.396)
Period (coded 0-11)		.099 *** (.018)	.027 + (.016)	.034 (.028)
Photos × Period				.005 (.040)
Avatars × Period				-.026 (.039)
Received Before			.642 *** (.007)	.642 *** (.007)
Risk Aversion	-.719 *** (.163)	-.386 + (.208)	-.189 * (.083)	-.189 * (.083)
Gender(Sender): Female	-1.919 *** (.467)	-1.747 ** (.585)	-1.142 *** (.233)	-1.142 *** (.233)
Gender(Recipient): Female	1.005 * (.465)	-1.057 *** (.128)	-.053 (.105)	-.053 (.105)
Constant	13.510 *** (1.079)	11.707 *** (1.337)	4.630 *** (.548)	4.584 *** (.571)
N	1,080	11,880	11,880	11,880
R ²	.012	.010	.447	.447