

# **Supplementary Materials**

**for**

## **Intragroup Communication in Social Dilemmas: An Artefactual Public Good Field Experiment in Small-Scale Communities**

Nils Christian Hoenow (Christian.Hoenow -at- rwi-essen.de)

Adrian Pourviseh (Pourviseh.Adrian -at- gmail.com)

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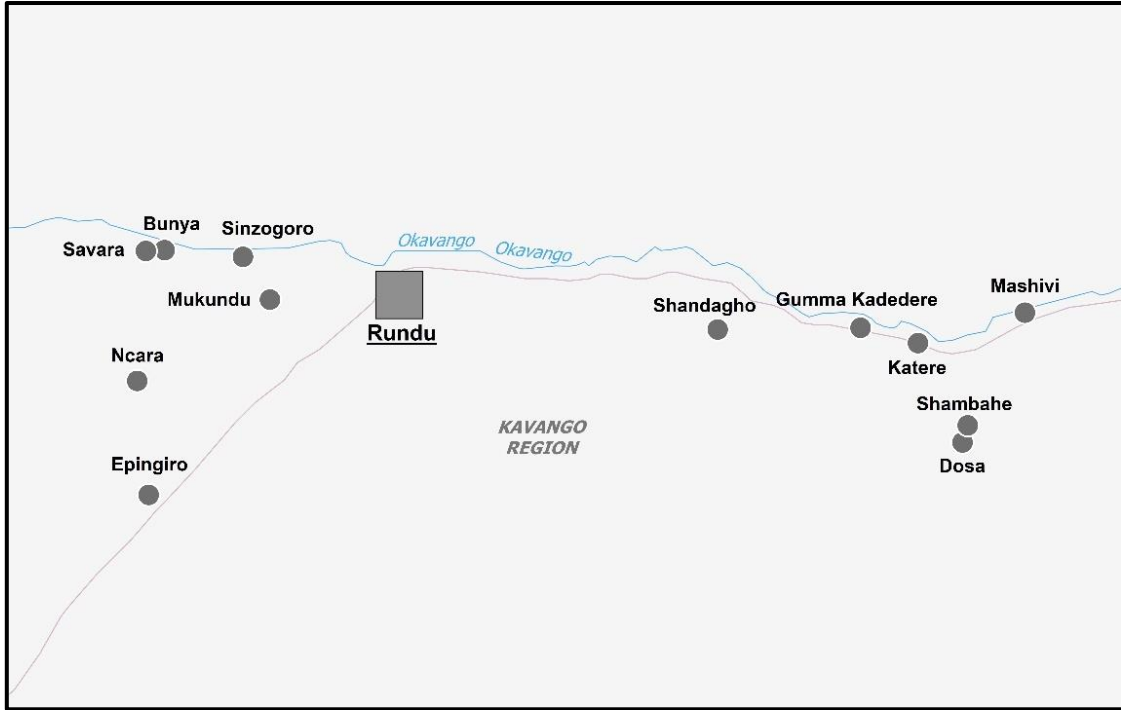
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## Supplement A: Appendix

### A.1 Map of selected villages



### A.2: Description of the public good game payoffs

The public good game payoffs  $P_i$  can be formalized with the following equation for individuals (equation 1) and for the group as a whole  $S$  (equation 2):

Equation 1:

$$P_i(e_i, c_i, c_j) = e_i - c_i + \frac{m}{n} c_i + \frac{m}{n} \sum_{j=1}^{n-1} c_j$$

Equation 2:

$$S(e_i, c_i) = \sum_{i=1}^n P_i(e_i, c_i)$$

$$S(e_i, c_i) = n * P_i(e_i, c_i)$$

$$S(e_i, c_i) = n * e_i - n * c_i + m \sum_{i=1}^n c_i$$

$P_i$  = Payoff of player  $i$

$e_i$  = endowment player  $i$

$c_i$  = contribution decision of player  $i$ ,  $\in \{0, \dots, 10\}$

$c_j$  = contribution decision of player  $j$ ,  $\in \{0, \dots, 10\}$

$m$  = multiplier of group account

$n$  = number of players in the group

$S$  = Sum of all players' payoffs

With an endowment (e) of 10 coins, a group size (n) of 4 player and the social multiplier (m) set to 2, the payoff equation becomes (equation 3):

Equation 3:

$$P_i(c_i, c_j) = 10 - c_i + \frac{2}{4}c_i + \frac{2}{4}\sum_{j=1}^3 c_j$$

$$P_i(c_i, c_j) = 10 - \frac{1}{2}c_i + \frac{1}{2}\sum_{j=1}^3 c_j$$

With  $c_i$  being the only variable that player  $i$  can manipulate, it becomes obvious that contributing nothing is the individually best option. For the group payoff (equation 4), on the other hand, there is:

Equation 4:

$$S(c_i) = 4 * P_i(c_i)$$

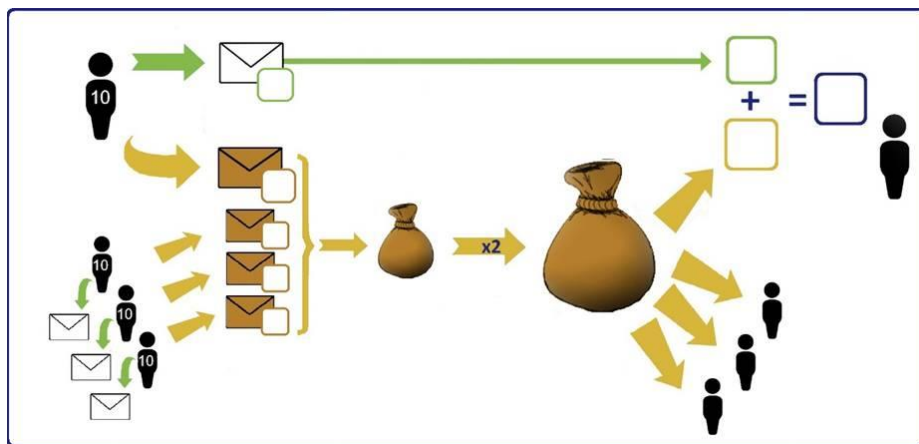
$$S(c_i) = 40 - 4 * c_i + 2 \sum_{i=1}^4 c_i$$

$$S(c_i) = 40 - 4 * c_i + 2 * 4 * c_i$$

$$S(c_i) = 40 + 4c_i$$

This shows that, for the group, contributing as much as possible leads to the highest payoff. Since  $c_i$  is capped at 10, this is the social optimum in the game. The minimum payoff in the experiment is 5 coins (25N\$) for someone, who contributes everything while in a group with three free riders. The maximum payoff is 25 coins (125N\$) for a free rider in a group with three cooperators. Plus, the bonus for correctly estimating the other players' contribution, the maximum amount that can be earned is  $125 + 20 = 145\text{N\$}$ .

### A.3: Poster used to explain the public good game

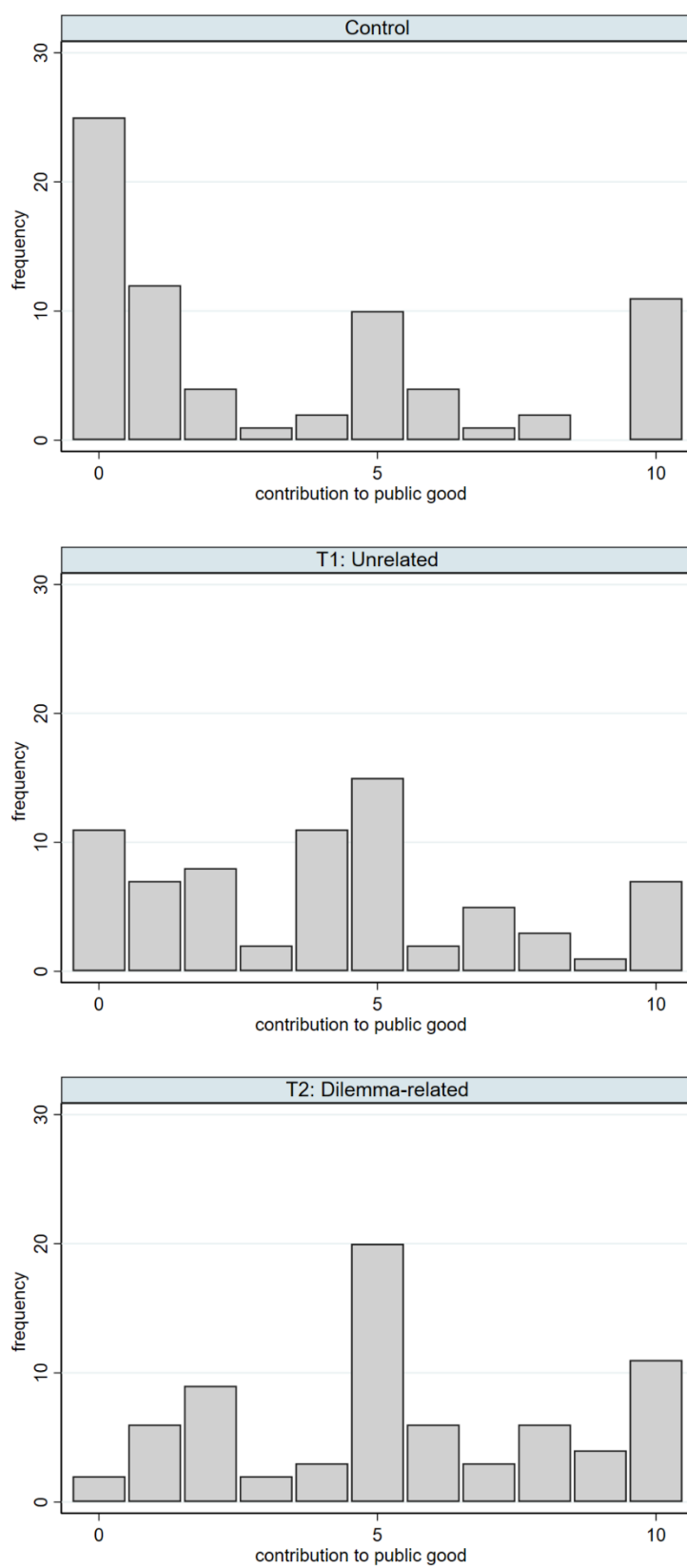


## A.4 Distribution of social ties across experimental conditions

	Control	T1: Unrelated	T2: Dilemma-related	Total
<b>strangers</b>				
0	70	72	66	208
1	1	0	1	2
2	0	0	2	2
3	0	0	3	3
<b>acquaintances</b>				
0	45	39	27	111
1	7	10	18	35
2	8	14	11	33
3	11	9	16	36
<b>friends</b>				
0	40	42	42	124
1	17	20	12	49
2	4	7	12	23
3	10	3	6	19
<b>family (or same HH)</b>				
0	24	20	36	80
1	15	17	21	53
2	10	14	6	30
3	22	21	9	52

Numbers in parcels show the frequency of reported social ties. Given a sample size of 216 participants and each participant stating the relationship to three group members, 648 social ties should have been reported in total. Since one participant left the workshop before surveys were finished, we only have 645 reported social ties in our data.

## A.5 Distribution of contributions across experimental conditions



## A.6 Full Tobit regression models for contributions

### A.6.1 Tobit regression: contribution - basic models

<b>Dep. var: contribution</b> <i>models without interaction terms</i>	<b>model 1</b> <i>coeff./(std. err.)</i>	<b>model 2</b> <i>coeff./(std. err.)</i>	<b>model 3</b> <i>coeff./(std. err.)</i>	<b>model 4</b> <i>coeff./(std. err.)</i>
T1: Unrelated	1.331 (1.15)	1.647 (0.97)	1.474 (1.06)	1.906* (0.91)
T2: Dilemma-related	3.129* (1.28)	2.851** (1.06)	3.372** (1.20)	3.216** (0.99)
#FdsFam		-0.081 (0.27)		0.003 (0.24)
expectation		0.540*** (0.15)		0.497*** (0.15)
age		0.008 (0.03)		0.002 (0.03)
female (d)		-0.055 (0.78)		-0.566 (0.78)
schooling years		-0.255** (0.08)		-0.168 (0.09)
hectares		-0.189 (0.15)		-0.069 (0.14)
bags yield		0.105** (0.03)		0.050 (0.04)
farmer (d)		-1.611* (0.66)		-1.238 (0.74)
migrant (d)		1.097 (0.76)		1.376 (0.74)
constant	2.635** (0.99)	2.028 (2.07)	2.175* (0.92)	1.375 (1.70)
<i>exclude misunderstood</i>	<i>no</i>	<i>no</i>	<i>yes</i>	<i>yes</i>
var(e.contribution)	19.814*** (3.59)	15.027*** (2.58)	14.958*** (3.10)	11.738*** (2.30)
N	216	215	173	172

Tobit regression models with standard errors clustered on group (n = 4) level, censoring at the lower (0) and upper (10) endpoint for contributions, #FdsFam = number of friends and family members (in one's group)

Expectation = one's expectations ('beliefs') of the other three group members' average contributions

Significance levels: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001

### A.6.2 Tobit regression: contribution - models with interaction effects

<b>Dep. var: contribution</b> <i>models with interaction terms</i>	<b>model 5</b> <i>coeff./ (std. err.)</i>	<b>model 6</b> <i>coeff./ (std. err.)</i>	<b>model 7</b> <i>coeff./ (std. err.)</i>	<b>model 8</b> <i>coeff./ (std. err.)</i>
T1: Unrelated	5.567** (1.96)	6.741** (2.36)	5.633*** (1.41)	6.992*** (1.84)
T1 × [#FdsFam]	-1.791* (0.71)		-1.694** (0.59)	
T1 × [FdsFam = 1]		-4.905* (2.38)		-5.244* (2.09)
T1 × [FdsFam = 2]		-4168 (3.07)		-6.125* (2.36)
T1 × [FdsFam = 3]		-6.487** (2.28)		-6.127** (1.89)
T2: Dilemma-related	6.530*** (1.94)	6.873** (2.28)	7.274*** (1.59)	8.103*** (2.08)
T2 × [#FdsFam]	-1.784** (0.67)		-1.988*** (0.57)	
T2 × [FdsFam = 1]		-2.720 (2.56)		-4.060 (2.41)
T2 × [FdsFam = 2]		-3.586 (2.87)		-5.445* (2.50)
T2 × [FdsFam = 3]		-5.713* (2.26)		-6.619** (2.06)
#FdsFam	1.181* (0.57)		1.370** (0.46)	
[FdsFam =1]		2.962 (2.22)		4.195* (2.05)
[FdsFam =2]		2.390 (2.74)		3.942 (2.34)
[FdsFam =3]		4.083* (1.94)		4.929** (1.67)
expectation	0.521*** (0.15)	0.522*** (0.16)	0.456** (0.14)	0.469** (0.15)
age	0.006 (0.03)	0.006 (0.03)	-0.001 (0.03)	-0.001 (0.03)
female (d)	-0.165 (0.74)	-0.109 (0.74)	-0.647 (0.72)	-0.562 (0.72)
schooling years	-0.267** (0.08)	-0.264** (0.08)	-0.171 (0.09)	-0.175 (0.09)
hectares	-0.168 (0.14)	-0.155 (0.16)	-0.072 (0.13)	-0.007 (0.15)
bags yield	0.094** (0.03)	0.093** (0.03)	0.043 (0.03)	0.039 (0.04)
farmer (d)	-1.372* (0.66)	-1.372 (0.70)	-1.024 (0.78)	-0.995 (0.76)
migrant (d)	1.086 (0.81)	1.028 (0.87)	1.463 (0.79)	1.350 (0.84)
constant	-0.643 (2.31)	-1.244 (2.55)	-1.437 (1.95)	-2.594 (2.30)
<i>exclude misunderstood</i>	<i>no</i>	<i>no</i>	<i>yes</i>	<i>yes</i>
var(e.contribution)	14.332*** (2.43)	14.144*** (2.44)	10.964*** (2.04)	10.751*** (2.05)
N	215	215	172	172

Tobit regression models with standard errors clustered on group (n = 4) level, censoring at the lower (0) and upper (10) endpoint for contributions, #FdsFam = number of friends and family members (in one's group), Expectation = one's expectations ('beliefs') of the other three group members' average contributions, Significance levels: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001



## A.7 Alternative regression model specifications: contributions

### A.7.1 Tobit regression: contribution – basic models without expectations

<b>Dep. var: contribution</b> <i>models without interaction terms</i>	<b>model 1</b> <i>coeff./ (std. err.)</i>	<b>model 2</b> <i>coeff./ (std. err.)</i>	<b>model 3</b> <i>coeff./ (std. err.)</i>	<b>model 4</b> <i>coeff./ (std. err.)</i>
T1: Unrelated	1.331 (1.15)	1.540 (1.06)	1.474 (1.06)	1.935* (0.97)
T2: Dilemma-related	3.129* (1.28)	3.006* (1.23)	3.372** (1.20)	3.472** (1.10)
#FdsFam		-0.034 (0.31)		-0.014 (0.29)
age		0.007 (0.03)		0.004 (0.03)
female (d)		0.024 (0.88)		-0.644 (0.90)
schooling years		-0.286*** (0.09)		-0.186 (0.10)
hectares		-0.195 (0.16)		-0.104 (0.15)
bags yield		0.094** (0.03)		0.032 (0.04)
farmer (d)		-1.022 (0.75)		-0.803 (0.85)
migrant (d)		1.39 (0.76)		1.606* (0.74)
constant	2.635** (0.99)	4.848* (2.18)	2.175* (0.92)	4.100* (1.83)
<i>exclude misunderstood</i>	<i>no</i>	<i>no</i>	<i>yes</i>	<i>yes</i>
var(e.contribution)	19.814*** (3.59)	17.273*** (3.24)	14.958*** (3.10)	13.657*** (2.88)
N	216	215	173	172

Tobit regression models with standard errors clustered on group (n = 4) level, censoring at the lower (0) and upper (10) endpoint for contributions, #FdsFam = number of friends and family members (in one's group)

Model 1 and 3 are the same as reported in table 5 (did already not contain expectations)

Significance levels: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001

### A.7.2 Tobit regression: contribution - models with i.e.s without expectations

<b>Dep. var: contribution</b> <i>models with interaction terms</i>	<b>model 5</b> <i>coeff./ (std. err.)</i>	<b>model 6</b> <i>coeff./ (std. err.)</i>	<b>model 7</b> <i>coeff./ (std. err.)</i>	<b>model 8</b> <i>coeff./ (std. err.)</i>
T1: Unrelated	6.161** (2.19)	7.166** (2.42)	6.999*** (1.57)	7.925*** (1.97)
T1 × [#FdsFam]	-2.115** (0.79)		-2.314** (0.71)	
T1 × [FdsFam = 1]		-4.850* (2.15)		-4.763* (2.17)
T1 × [FdsFam = 2]		-4.595 (3.25)		-6.354** (2.41)
T1 × [FdsFam = 3]		-7.319** (2.37)		-7.678*** (2.23)
T2: Dilemma-related	6.888** (2.31)	7.215** (2.55)	8.084*** (1.86)	8.626*** (2.21)
T2 × [#FdsFam]	-1.862* (0.79)		-2.209** (0.68)	
T2 × [FdsFam = 1]		-2.684 (2.48)		-3.365 (2.37)
T2 × [FdsFam = 2]		-3.749 (3.19)		-5.224* (2.37)
T2 × [FdsFam = 3]		-5.781* (2.52)		-6.922** (2.24)
#FdsFam	1.364* (0.65)		1.659** (0.50)	
[FdsFam =1]		2.86 (1.99)		3.504 (1.94)
[FdsFam =2]		2.227 (2.97)		3.455 (2.05)
[FdsFam =3]		4.543* (2.07)		5.531** (1.69)
age	0.004 (0.03)	0.001 (0.03)	0.001 (0.03)	-0.002 (0.03)
female (d)	-0.116 (0.83)	-0.039 (0.84)	-0.758 (0.82)	-0.67 (0.84)
schooling years	-0.298*** (0.09)	-0.298*** (0.08)	-0.181 (0.10)	-0.186 (0.09)
hectares	-0.177 (0.15)	-0.147 (0.17)	-0.116 (0.14)	-0.046 (0.16)
bags yield	0.084** (0.03)	0.080* (0.03)	0.027 (0.03)	0.020 (0.03)
farmer (d)	-0.795 (0.75)	-0.708 (0.76)	-0.592 (0.88)	-0.464 (0.87)
migrant (d)	1.369 (0.80)	1.326 (0.85)	1.724* (0.78)	1.659* (0.82)
constant	1.811 (2.59)	1.367 (2.71)	0.323 (2.01)	-0.381 (2.17)
<i>exclude misunderstood</i>	<i>no</i>	<i>no</i>	<i>yes</i>	<i>yes</i>
var(e.contribution)	16.424*** (3.06)	16.180*** (3.1)	12.540*** (2.43)	12.310*** (2.46)
N	215	215	172	172

Tobit regression models with standard errors clustered on group (n = 4) level, censoring at the lower (0) and upper (10) endpoint for contributions, #FdsFam = number of friends and family members (in one's group)  
Significance levels: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001

### A.7.3 OLS regression: contribution - basic models

<b>Dep. var: contribution</b> <i>models without interaction terms</i>	<b>model 1</b> <i>coeff./ (std. err.)</i>	<b>model 2</b> <i>coeff./ (std. err.)</i>	<b>model 3</b> <i>coeff./ (std. err.)</i>	<b>model 4</b> <i>coeff./ (std. err.)</i>
T1: Unrelated	0.833 (0.75)	1.165 (0.65)	0.93 (0.72)	1.382* (0.63)
T2: Dilemma-related	2.153* (0.87)	2.048** (0.73)	2.383** (0.84)	2.396** (0.71)
#FdsFam		-0.064 (0.18)		0.019 (0.17)
expectation		0.392*** (0.09)		0.395*** (0.10)
age		0.005 (0.02)		-0.001 (0.02)
female (d)		-0.224 (0.55)		-0.585 (0.57)
schooling years		-0.192** (0.06)		-0.142 (0.07)
hectares		-0.146 (0.11)		-0.079 (0.12)
bags yield		0.065*** (0.02)		0.039 (0.03)
farmer (d)		-0.919* (0.45)		-0.709 (0.56)
migrant (d)		0.723 (0.54)		0.983 (0.56)
constant	3.306*** (0.64)	2.848 (1.47)	2.925*** (0.61)	2.215 (1.25)
<i>exclude misunderstood</i>	<i>no</i>	<i>no</i>	<i>yes</i>	<i>yes</i>
N	216	215	173	172

Ordinary-Least-Squares regression models with standard errors clustered on group (n = 4) level

#FdsFam = number of friends and family members (in one's group)

Expectation = one's expectations ('beliefs') of the other three group members' average contributions

Significance levels: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001

#### A.7.4 OLS regression: contribution - models with interaction effects

<b>Dep. var: contribution</b> <i>models with interaction terms</i>	<b>model 5</b> <i>coeff./ (std. err.)</i>	<b>model 6</b> <i>coeff./ (std. err.)</i>	<b>model 7</b> <i>coeff./ (std. err.)</i>	<b>model 8</b> <i>coeff./ (std. err.)</i>
T1: Unrelated	3.347** (1.18)	4.029** (1.31)	3.456*** (0.84)	4.197*** (0.87)
T1 × [#FdsFam]	-1.017* (0.43)		-1.007** (0.26)	
T1 × [FdsFam = 1]		-2.947* (1.30)		-3.042* (1.2β)
T1 × [FdsFam = 2]		-1.993 (1.93)		-3.097* (1.26)
T1 × [FdsFam = 3]		-3.743** (1.27)		-3.531** (1.09)
T2: Dilemma-related	4.160*** (1.08)	4.165** (1.16)	4.893*** (0.89)	5.145*** (1.00)
T2 × [#FdsFam]	-1.060* (0.40)		-1.268*** (0.36)	
T2 × [FdsFam = 1]		-0.980 (1.44)		-1.971 (1.38)
T2 × [FdsFam = 2]		-1.769 (1.65)		-2.911* (1.21)
T2 × [FdsFam = 3]		-3.165* (1.25)		-3.894** (1.14)
# FdsFam	0.637* (0.31)		0.823** (0.26)	
[FdsFam =1]		1.507 (1.10)		2.270* (1.02)
[FdsFam =2]		0.670 (1.49)		1.551 (0.99)
[FdsFam =3]		2.149* (0.95)		2.788*** (0.78)
expectation	0.381*** (0.09)	0.379*** (0.10)	0.372*** (0.09)	0.375*** (0.10)
age	0.003 (0.02)	0.001 (0.02)	-0.003 (0.02)	-0.005 (0.02)
female (d)	-0.29 (0.52)	-0.233 (0.53)	-0.635 (0.54)	-0.548 (0.56)
schooling years	-0.203** (0.06)	-0.204** (0.06)	-0.148* (0.07)	-0.150* (0.07)
hectares	-0.132 (0.11)	-0.115 (0.12)	-0.079 (0.11)	-0.025 (0.13)
bags yield	0.059** (0.02)	0.056** (0.02)	0.035 (0.03)	0.029 (0.03)
farmer (d)	-0.792 (0.47)	-0.746 (0.51)	-0.57 (0.59)	-0.492 (0.61)
migrant (d)	0.686 (0.56)	0.685 (0.61)	1.002 (0.58)	0.942 (0.63)
constant	1.476 (1.46)	1.285 (1.51)	0.646 (1.32)	0.185 (1.36)
<i>exclude misunderstood</i>	<i>no</i>	<i>no</i>	<i>yes</i>	<i>yes</i>
N	215	215	172	172

Ordinary-Least-Squares regression models with standard errors clustered on group (n = 4) level

#FdsFam = number of friends and family members (in one's group)

Expectation = one's expectations ('beliefs') of the other three group members' average contributions

Significance levels: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001

## A.8 Contributions by treatment conditions and social contexts

number of friends and family in group	control none		treatment 1 unrelated		treatment 2 dilemma-related	
	count	contribution mean ( <i>std. dev.</i> )	count	contribution mean ( <i>std. dev.</i> )	count	contribution mean ( <i>std. dev.</i> )
0	11	1.45 (3.21)	9	5.56 (3.43)	21	5.86 (2.95)
1	8	3.13 (3.56)	14	4.07 (2.81)	11	6.27 (3.29)
2	8	1.88 (3.35)	10	3.80 (2.82)	17	4.41 (2.83)
3	44	4.14 (3.70)	39	3.92 (3.14)	23	5.48 (2.97)
N		71		72		72

## A.9 Comprehension

### A.9.1 Comparison correctly and incorrectly answered control questions

Experimental condition: communication:	control none	treatment 1 unrelated	treatment 2 dilemma-related	differences		
	mean (std. dev.)	mean (std. dev.)	mean (std. dev.)	T1-C $\Delta$ (p)	T2-C $\Delta$ (p)	T2-T1 $\Delta$ (p)
contribution if control question correct	2.92 (3.51)	3.85 (2.60)	5.31 (2.91)	0.93 (0.59)	2.38*** (0.59)	1.45** (0.51)
contribution if control question wrong	4.37 (3.99)	5.06 (4.19)	6.86 (3.58)	0.69 (1.36)	2.49 (1.71)	1.80 (1.81)
# correct control questions <sup>A</sup> (% share of 72)	53 74%	55 76%	65 90%	2	12**	10*
differences in contributions between correct and wrong control questions						
$\Delta$ (std. err.)	1.44 (0.97)	1.20 (0.84)	1.55 (1.18)			

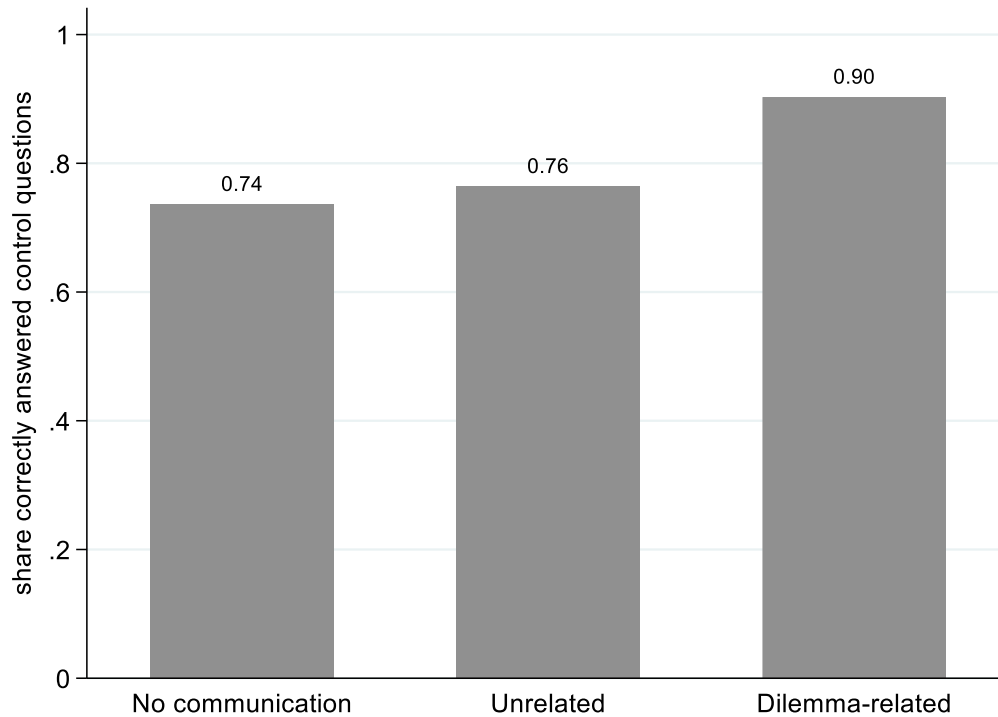
Control questions are considered as wrong if one or both control questions are answered incorrectly.

Test results according to student's t-tests. All test results are two-sided.

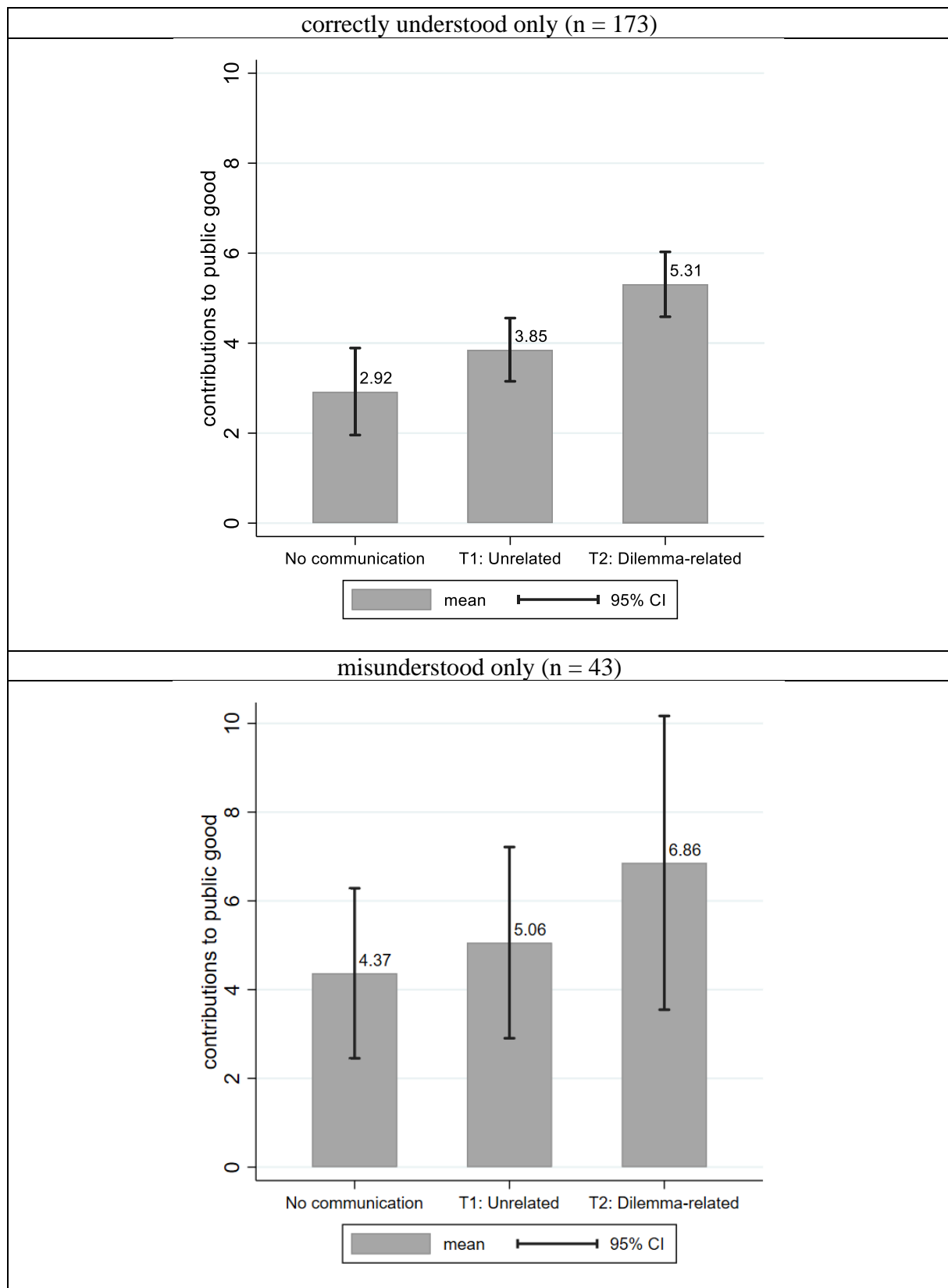
A: Chi-squared tests for differences in shares

Significance levels: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001

### A.9.2 Figure comprehension share



### A.9.3 Figure comprehension and contributions



#### A.9.4 Regressions: comprehension - without socioeconomics

<b>Dep. var:</b>	<b>control wrong</b>	<b>control wrong</b>	<b>contribution</b>
estimation method:	OLS <sup>o</sup>	Probit	Tobit <sup>T</sup>
	coeff./ <i>(std. err.)</i>	coeff./ <i>(std. err.)</i>	coeff./ <i>(std. err.)</i>
control question wrong			1.904* (0.96)
T1: Unrelated	-0.028 (0.09)	-0.087 (0.28)	1.403 (1.11)
T2: Dilemma-related	-0.167* (0.07)	-0.666* (0.30)	3.443** (1.25)
constant	0.264*** (0.06)	-0.631*** (0.19)	2.193*** (0.95)
var(e.contribution)			19.224*** (3.46)
N	216	216	216

<sup>o</sup> Using Ordinary-Least-Squares regressions on a binary outcome variable is known as Linear-Probability-Model regression.

<sup>T</sup> Tobit models for contributions with censoring at the lower (0) and upper (10) endpoint

All regression models with standard errors clustered on group (n=4) level

Significance levels: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001



### A.9.5 Regressions: comprehension - with socioeconomics

Dep. var:	control wrong	control wrong	contribution
estimation method:	OLS	Probit	Tobit <sup>T</sup>
	coeff./( <i>std. err.</i> )	coeff./( <i>std. err.</i> )	coeff./( <i>std. err.</i> )
control question wrong			1.077 (0.88)
T1: Unrelated	-0.014 (0.09)	-0.095 (0.29)	1.561 (1.04)
T2: Dilemma-related	-0.173* (0.08)	-0.845* (0.30)	3.190** (1.21)
#FamFds	0.03 (0.02)	0.167 (0.10)	-0.065 (0.31)
age	0.000 (0.00)	0.000 (0.00)	0.006 (0.03)
female (d)	0.078 (0.06)	0.361 (0.23)	-0.053 (0.87)
schooling years	-0.031*** (0.01)	-0.129*** (0.03)	-0.256*** (0.08)
hectares	-0.018 (0.01)	-0.066 (0.06)	-0.174 (0.17)
bags yield	0.002 (0.00)	0.005 (0.01)	0.093** (0.03)
farmer (d)	-0.105 (0.09)	-0.433 (0.35)	-0.911 (0.77)
migrant (d)	-0.002 (0.06)	-0.046 (0.26)	1.397 (0.77)
constant	0.264*** (0.06)	-0.631*** (0.19)	4.362*** (2.21)
var(e.contribution)			17.110*** (3.196)
N	215	215	215

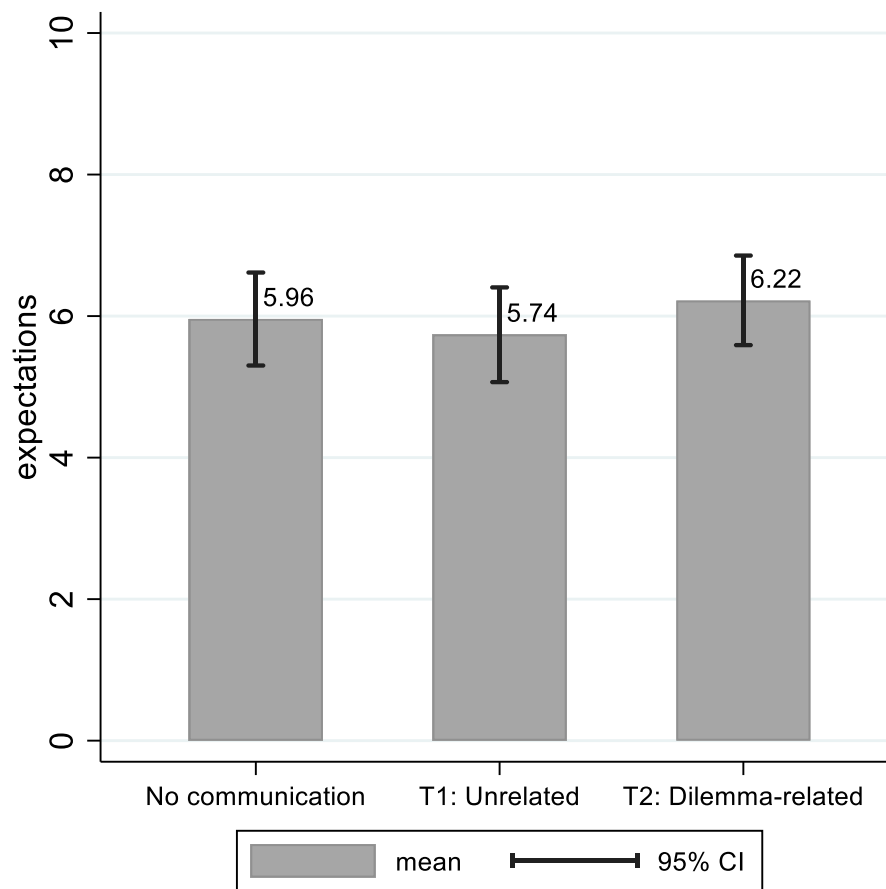
<sup>T</sup> Tobit models for contributions with censoring at the lower (0) and upper (10) endpoint

All regression models with standard errors clustered on group (n=4) level

Significance levels: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001

## A.10 Expectations

### A.10.1 Figure Expectations



### A.10.2 Tobit regression: expectations – basic models

<b>Dep. var: expectations</b> <i>models without interaction terms</i>	<b>E model 1</b> <i>coeff./ (std. err.)</i>	<b>E model 2</b> <i>coeff./ (std. err.)</i>	<b>E model 3</b> <i>coeff./ (std. err.)</i>	<b>E model 4</b> <i>coeff./ (std. err.)</i>
T1: Unrelated	-0.259 (0.90)	-0.513 (0.91)	-0.21 (1.06)	-0.196 (1.03)
T2: Dilemma-related	0.348 (0.92)	0.245 (0.92)	0.486 (0.99)	0.385 (0.91)
#FdsFam		0.125 (0.28)		-0.086 (0.30)
age		-0.003 (0.02)		0.008 (0.02)
female (d)		0.263 (0.58)		-0.114 (0.65)
schooling years		-0.077 (0.08)		-0.028 (0.10)
hectares		-0.008 (0.14)		-0.106 (0.14)
bags yield		-0.033 (0.02)		-0.053 (0.04)
farmer (d)		1.713* (0.75)		1.232 (0.83)
migrant (d)		0.575 (0.71)		0.479 (0.77)
constant	6.377*** (0.69)	5.353*** (1.58)	6.133*** (0.77)	5.773** (1.73)
<i>exclude misunderstood</i>	<i>no</i>	<i>no</i>	<i>yes</i>	<i>yes</i>
var(e.contribution)	14.330*** (2.48)	13.470*** (2.32)	13.421*** (2.61)	12.587*** (2.41)
N	216	215	173	172

Tobit regression models with standard errors clustered on group (n = 4) level, censoring at the lower (0) and upper (10) endpoint for expectations, #FdsFam = number of friends and family members (in one's group)

Expectation = one's expectations ('beliefs') of the other three group members' average contributions

Significance levels: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001

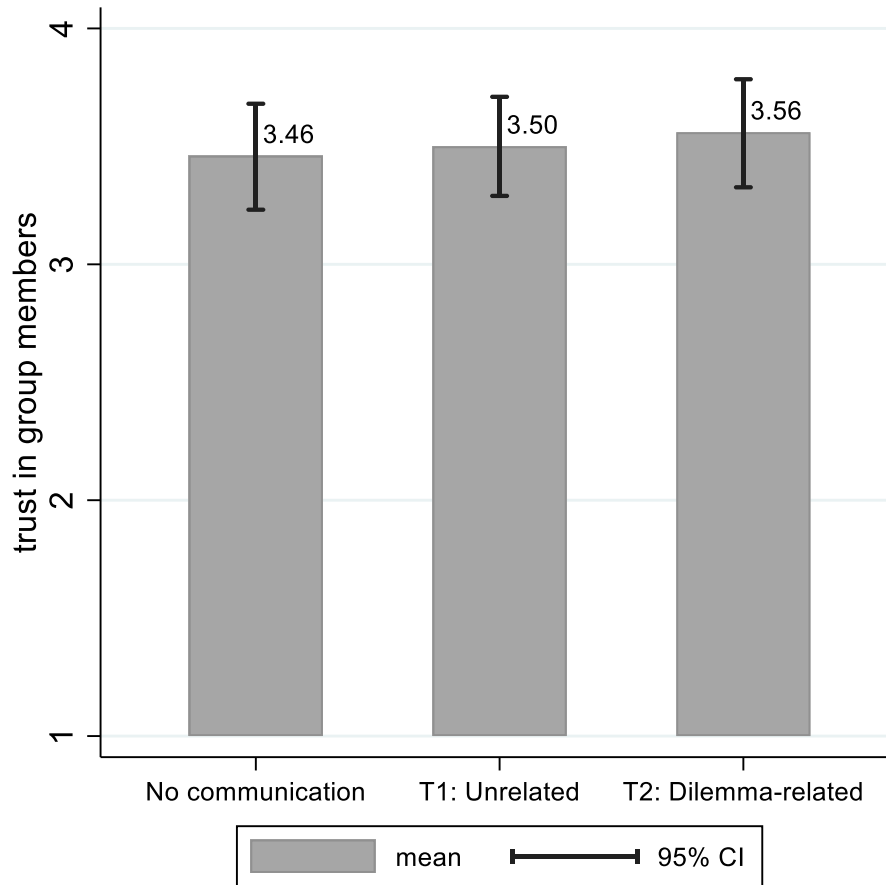
### A.10.3 Tobit regression: expectation – models with interaction effects

<b>Dep. var: expectations</b> <i>models with interaction terms</i>	<b>E model 5</b> <i>coeff./ (std. err.)</i>	<b>E model 6</b> <i>coeff./ (std. err.)</i>	<b>E model 7</b> <i>coeff./ (std. err.)</i>	<b>E model 8</b> <i>coeff./ (std. err.)</i>
T1: Unrelated	0.954 (1.78)	0.386 (2.48)	3.139 (1.65)	1.557 (2.06)
T1 × [#FdsFam]	-0.682 (0.66)		-1.578* (0.62)	
T1 × [FdsFam = 1]		0.833 (2.98)		2.963 (2.58)
T1 × [FdsFam = 2]		-1.004 (2.88)		0.159 (2.59)
T1 × [FdsFam = 3]		-1.562 (2.52)		-3.524 (2.14)
T2: Dilemma-related	0.537 (1.60)	0.613 (1.84)	1.418 (1.48)	0.412 (1.66)
T2 × [#FdsFam]	-0.085 (0.60)		-0.393 (0.61)	
T2 × [FdsFam = 1]		-0.012 (2.04)		3.088 (2.11)
T2 × [FdsFam = 2]		-0.617 (2.13)		1.394 (1.83)
T2 × [FdsFam = 3]		0.179 (1.94)		0.004 (1.93)
# FdsFam	0.363 (0.40)		0.543 (0.35)	
[FdsFam =1]		-0.616 (1.82)		-3.467 (1.91)
[FdsFam =2]		-0.379 (1.79)		-2.202 (1.47)
[FdsFam =3]		0.853 (1.34)		0.686 (1.12)
age	-0.003 (0.02)	-0.009 (0.02)	0.01 (0.02)	0.005 (0.02)
female (d)	0.219 (0.57)	0.257 (0.58)	-0.19 (0.62)	-0.238 (0.64)
schooling years	-0.075 (0.08)	-0.08 (0.08)	-0.015 (0.09)	-0.009 (0.09)
hectares	-0.013 (0.14)	0.025 (0.16)	-0.143 (0.13)	-0.138 (0.15)
bags yield	-0.034 (0.02)	-0.039 (0.02)	-0.052 (0.04)	-0.061 (0.04)
farmer (d)	1.749* (0.75)	1.999* (0.79)	1.297 (0.81)	1.532 (0.89)
migrant (d)	0.585 (0.69)	0.649 (0.73)	0.575 (0.71)	0.829 (0.84)
constant	4.819** (1.69)	5.182** (1.81)	4.259** (1.59)	5.556*** (1.58)
<i>exclude misunderstood</i>	<i>no</i>	<i>no</i>	<i>yes</i>	<i>yes</i>
var(e.contribution)	13.353*** (2.32)	13.102*** (2.28)	12.030*** (2.33)	11.475*** (2.23)
N	215	215	172	172

Tobit regression models with standard errors clustered on group (n = 4) level, censoring at the lower (0) and upper (10) endpoint for expectations, #FdsFam = number of friends and family members (in one's group), Expectation = one's expectations ('beliefs') of the other three group members' average contributions, Significance levels: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001

## A.11 Trust

*A.11.1: Figure trust*



### A.11.2 Regressions: trust

Dep. var:	Expectation	Contribution	Trust
estimation method:	Tobit <sup>T</sup>	Tobit <sup>T</sup>	Oprobit
	coeff./( <i>std. err.</i> )	coeff./( <i>std. err.</i> )	coeff./( <i>std. err.</i> )
T1: unrelated			0.142 (0.21)
T2: dilemma-related			0.412 (0.30)
FdsFam			0.326*** (0.08)
trust	0.677* (0.30)	0.569 (0.40)	
constant	3.975*** (1.02)	2.513 (1.37)	
cut1			-1.015*** (0.25)
cut2			-0.446 (0.24)
cut3			0.326 (0.24)
var(e.contribution)		23.542*** (5.35)	
var(e.expectation)	14.117*** (2.97)		
N	171	171	171

<sup>T</sup> Tobit models for contributions and expectation with standard errors clustered on group (n = 4) level, censoring at the lower (0) and upper (10) endpoint

#FdsFam = number of friends and family members (in one's group)

Expectation = one's expectations ('beliefs') of the other three group members' average contributions

Significance levels: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001

## Supplement B: Experimental Protocols

### B.1 Village meeting

#### **[VILLAGE MEETING]**

*[freely presented by Christian, interpreted by Moses (assistant)]*

To begin with, we would like to thank you all for coming here today. My name is Christian Hoenow. I am from the Marburg University in Germany. Together with the Ministry of Agriculture, Water and Forestry we are conducting research under the SASSCAL project. [NAME OF EXPERIMENTERS] are also part of the project.

Doing research means we are just here to collect data, but we do not bring any type of development project into the village. What you answer in the workshop will not have any impact on future projects.

Today we would like to conduct two small workshops with a certain number of people. During this workshop we will also ask you several questions. Unfortunately, not everyone from this village can participate since each workshop can only include a certain number of participants.

Since we want everyone to have the same chance to participate, we have prepared a bag with as many cards as people present. Each adult that is older than 18 years now will draw a card. We will ask you to fully concentrate on the workshop and we will be asking many questions. If you already know that you cannot attend for up to 5 hours, or do not wish to answer many questions, you should please not draw. Participation is, of course, voluntary!

- If you draw a red card, you will participate in the first workshop, which is conducted by Christian
- If you draw a blue card, you will participate in the second workshop, which is conducted by Adrian
- If you draw a white card, you unfortunately cannot participate in any of the events.

Do you have any questions?

**[let every adult draw a card]**

Now that everyone has drawn a card, we would like to ask all participants with a white card to leave the area. Thank you very much for attending the meeting.

Those who have drawn a blue card, please follow Adrian. He will right away start with the meeting.

**[wait for everyone to leave except Christian's participants]**

**[continue with general instructions in each condition]**

**[GENERAL INSTRUCTIONS]**

To begin with, we would like to thank you all for coming here today.

We will conduct a workshop and at the end you will receive some payment for participating.

The money is not our private money, but it is provided by the German government.

All information collected today will be used for research only. Neither the government of Namibia, Germany nor any other organization will receive the data for other purposes. Also, neither your names nor any village-specific information will be linked to the results. All answers will remain anonymous to others.

The schedule for today looks as follows:

1. We will explain the procedure of the workshop.
2. We will conduct a small workshop.
3. After the games each of you answers a short questionnaire.
4. Finally, you will receive the money.

Before starting, I would like to give you some general information:

1. If at any time, you think that this is something that you do not wish to participate in for any reason, you are free to leave. You will however only receive a payment if you stay until the end of the workshop.
2. If you already know that you will not be able to stay for at least 5 hours, then you should leave right away.
3. We require your complete and undistracted attention. Please, follow the instructions carefully and do not use your phone or engage in any other distracting activity.
4. It is not allowed to talk to each other during the workshop, unless we tell you to. You can ask questions after raising your hand. If you talk to each other when you are not allowed to, you will be excluded from the workshop and the payments.
5. Everyone of you has received a unique ID card. Please keep this ID until the end. You must return the ID before receiving the money at the end of the workshop.

After knowing these rules, is there anybody who does not want to participate?

Do you have any questions?

**[continue with treatment conditions]**



### **[COMMUNICATION GAME INSTRUCTIONS]**

We will now explain the procedure of the workshop. Please pay attention as for participating it is necessary that you understand everything. Also, we will later ask you questions individually to check whether you understood everything correctly. Each one of you will now receive an envelope that contains 10 Experimental Coins (EC). Each EC is worth 5 N\$. **[show coins]**. You will have to decide whether to contribute that money to a group account or not. What you put in the brown envelope is what you want to contribute to the group account, whereas what you wish to keep must be put in the white envelope **[show envelopes]**.

You can contribute any amount between 0 and 10 EC. The coins that you do not contribute are yours and you can keep them for sure. After the game we will change them for you: 5N\$ for every EC. [See graph with exchange rate] In total you can get between 25 and 125N\$, depending on your decisions and the decision of the others players in your group. You are playing the game with three other players, i.e., in groups of four.

- The number of ECs that were contributed to the group account are doubled. This doubled amount is then equally divided by all four players in the group.
- That means every player receives one fourth of the doubled group account.
- In total you will earn the ECs that you keep plus the share that you receive from the group account
- Note that the game is not about luck and not about being better than others. Everyone will receive exactly the amount as determined by the rules explained.

#### B.4 Examples

##### Example 1

**[use poster and fill with example numbers]**

4 players contribute half of their endowment to the group account.

- There are then  $5 \times 4 = 20\text{EC}$  in the group account.
- The 20EC in the group account are then doubled ( $20\text{EC} \times 2 = 40\text{EC}$ ) and divided equally to all 4 players.
- This means each player in the group receives  $40\text{EC} / 4 = 10\text{EC}$  from the group account.

Each player then ends up with the amount that he/she kept, which is 5EC and the amount that he/she received from the group account, which is 10EC. In total it results in 15EC for all players.

##### Example 2

**[use poster and fill with example numbers]**

3 players contribute all of their ECs to the group account and 1 player does not contribute anything.

- There are then 30EC in the group account.
- The 30EC in the group account are then doubled ( $30\text{EC} \times 2 = 60\text{EC}$ ) and divided equally to all 4 players.
- This means each player in the group receives  $60\text{EC} / 4 = 15\text{EC}$  from the group account.

The one player that did not contribute receives 15EC from the group account plus 10EC that he/she kept for himself, which is 25 EC in total.

The three players that contributed everything receive 15 EC each from the group account.

Example 3  
**[use poster and fill with example numbers]**

Imagine now that the one player also contributes. So, everyone contributes everything.

- Then the total contributions are  $4 \times 10 = 40$ . Multiplied by 2 = 80. 80 divided equally amongst all four players is 20EC for everyone.
- Then the three players get 20 instead of 15, and the one player who now also contributed also receives 20, instead of the 25 he/she would receive if NOT contributing.

### *B.5 Control questions for public use*

We would now like to ask you a few questions to check if everybody understood:

**[try to involve all participants]**

1. If no one contributes anything, that means everyone keeps his/her initial ECs. Then how much does every player end up with?  
**[10]**
  2. If everyone contributes all of his/her initial ECs, then how much does every player get? **[20]**
  3. Are the payoffs for everyone higher, lower or the same if all 4 players contribute 8EC, compared to when all players contribute 5EC?  
**[higher]**
  4. If you do not contribute anything are your own payoffs higher, lower or the same compared to when you contribute?  
**[always higher]**
  5. What is your payoff if you contribute all of your 10EC but no one else contributes anything?  
**[then only 10EC in the group account,  $10 \times 2 = 20$ , divided by four = 5ECs for everyone. Since you did not keep any of your initial EC, your final payoff is 5EC.]**
  6. How much does everyone else receive in this case?  
**[keep 10 for themselves + get 5 from your contribution = 15]**
  7. If you end up with 10 coins, how many N\$ will you get for that later?  
**[ $5 \times 10 = 50$  N\$]**
- Very good. Is there anything unclear about the rules or how the payoffs are calculated?
- Should we have another example?

### *B.6 Treatment conditions*

#### **[CONTROL: NO COMMUNICATION]**

##### **[read Game Instructions]**

In the following game, we will divide you into groups of four. That means each of you is playing the game with three other players. The other groups are playing the same game, but what they do does not influence your group or your payoffs. They do just play the same game simultaneously.

##### **[allocate groups]**

##### **[groups should sit together, but keep distance to avoid communication between groups]**

This is the group you will be playing with. Remember that you are not allowed to talk to each other.

##### **[then wait for 2 minutes in silence before starting the game]**

## **[TREATMENT 1: UNRELATED COMMUNICATION]**

**[allocate groups]**

**[groups should sit together, but keep distance to avoid communication across groups]**

We ask you to now please talk to each other for 5 minutes with your group members about how the different weather in this and in the last years affected the harvest. Also, think about which types of crops are doing good and which are doing bad in the different weather conditions.

**[move away, wait 5 minutes, return to groups]**

Please stop talking now as we are going to explain the rules of the game to you.

We will now explain what we are going to do in the workshop, you will be doing the workshop in groups of four, i.e., with the same 3 people that you just talked with.

The other groups are playing the same game, but what they do does not influence your group or your payoffs. They do just play the same game simultaneously.

**[continue with game instructions]**

**[after reading out game rules and examples note this:]**

your group is the group as allocated in the beginning during the discussions!

## **[TREATMENT 2: DILEMMA-RELATED COMMUNICATION]**

We will now explain to you the rules of the game.

In the following game we will divide you into groups of four. That means each of you is playing the game with three other players. The other groups are playing the same game, but what they do does not influence your group or your payoffs. They do just play the same game simultaneously.

**[read Game Instructions]**

**[allocate groups]**

**[groups should sit together, but keep distance to avoid communication across groups]**

You are now allowed to talk to your group members for 5 minutes. After the 5 minutes you will make your decisions in private. You may talk about anything you like.

**[move away, wait 5 minutes, return to groups]**

Please stop talking now as we are going to start with the decisions.

### **[DECISION MAKING]**

Your contribution will not be disclosed to the other participants. You will find out about the total contributions in your group at the end when we pay you, but no one will find out about how much other single players contributed. That means your own contribution is also anonymous to the other players. We will not disclose your decisions and you are under no obligation to tell anyone about how much you contributed.

In order to ensure anonymity in decision making, you will one-by-one come to the booth and make the decision there, in private. Please do not show other players how much you contributed, also not after you have made your contribution decision.

#### **[show both envelopes and how to do it]**

- Are there any questions about the procedure?

Before we start with the decisions, we would like to ask you two control questions, in order to check whether you have really understood the game. The answers you give here will not affect the money you earn; it is just for us as additional feedback information. [Assistant (me)] will ask you these questions, then you go directly to the booth and make your decision, then put the brown envelope, which contains your contribution to the group account into the box.

Please now come to the booth. We will call you one by one. Please remember to not talk to each other or communicate in any other way while waiting until everyone has made their decision. Also remember that there is no right or wrong in this game.

After the decision you may directly move to the snack area. There, you may talk again freely.

**[one-by-one to assistant to answer two control questions in private, then to booth to make decision, in convenient order]**

**[have a break with snacks and cold drinks for everyone]**

Thank you all for participating. You will now answer some short questionnaire and afterwards you will get the payments.

## Supplement C: Survey Questions (Sheets made with Kobo-Toolbox: “https://www.kobotoolbox.org/”)

Post-experimental individual survey after PG game	
<b>by_ enumerator</b> ENUMERATOR <input type="radio"/> James <input type="radio"/> Moses <input type="radio"/> Zypriaan <input type="radio"/> Other SPECIFY OTHER.	
<b>PLAYER ID</b> <i>put the exact ID number here</i>	
<b>TREATMENT GROUP</b> <input type="radio"/> 1. Group Anonymity <input type="radio"/> 2. Identification <input type="radio"/> 3. Smalltalk <input type="radio"/> 4. Coordination	
<b>PLAYER GENDER</b> <input type="radio"/> Male <input type="radio"/> Female	
<b>General</b> <b>AGE</b>	
<b>YEARS OF SCHOOLING (INCLUDING ALL SCHOOLS)</b>	
<b>SINGLE, MARRIED, DIVORCED, WIDOWED, PARTNERSHIP</b> <input type="radio"/> Single <input type="radio"/> Married <input type="radio"/> Partnership <input type="radio"/> Divorced <input type="radio"/> Widowed	

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Post-experimental individual survey after PG game	
<b>ARE YOU THE HEAD OF HOUSEHOLD?</b> <input type="radio"/> Yes <input type="radio"/> No	
<b>WHAT IS YOUR POSITION IN THE HOUSEHOLD?</b> <input type="radio"/> wife <input type="radio"/> brother/sister <input type="radio"/> son/daughter <input type="radio"/> elder <input type="radio"/> other	
<b>HOW MANY ADULTS LIVE IN YOUR HOUSEHOLD ?</b> <i>Members of the same household: People who sleep and eat in the same place. Adult = 16 years and above</i>	
<b>HOW MANY CHILDREN LIVE IN YOUR HOUSEHOLD?</b> <i>child = 0 to 15 years</i>	
<b>WHAT IS YOUR RELIGION?</b> <input type="radio"/> Lutheran <input type="radio"/> Catholic <input type="radio"/> Traditional <input type="radio"/> Evangelic <input type="radio"/> None <input type="radio"/> Don't know <input type="radio"/> Refuse to answer <input type="radio"/> Other SPECIFY OTHER.	

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Post-experimental individual survey after PG game	
<b>General Information</b>	
<p>IS FARMING YOUR MAIN PROFESSION?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p>	*
<p>HOW MANY BAGS OF CROP YIELDS DO YOU NORMALLY PRODUCE PER YEAR? (1BAG = 50KG)</p> <p><i>number of bags ( or add unit if interviewee wants to answer in NAD or other unit instead)</i></p>	*
<p>HOW MANY BAGS OF YOUR PRODUCTION DO YOU SELL? (1BAG = 50KG)</p> <p><i>number of bags ( or add unit if interviewee wants to answer in NAD or other unit instead)</i></p>	*
<p>AND THAT IS HOW MUCH INCOME PER YEAR FROM SELLING FARMING YIELDS?</p> <p><i>income from the WHOLE year or season in NAD</i></p>	*
<p>DOES YOUR HOUSEHOLD RECEIVE ANY REMITTANCES FROM PEOPLE WORKING ELSEWHERE? (E.G. IN RUNDU)</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p>	*
<p>IS YOUR HOUSEHOLD OR SOMEONE IN YOUR HOUSEHOLD RECEIVING ANY PENSIONS (E.G. OLD OR HANDICAPPED)</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p>	*
<p>TOTAL INCOME INCLUDING EVERYTHING YEARLY? IN NAD</p> <p><i>Income from: farming, remittances, pensions and other income</i></p>	*
<p>WHICH OF THE FOLLOWING ASSETS DOES YOUR HOUSEHOLD OWN?</p> <p><input type="checkbox"/> electricity from powerline</p> <p><input type="checkbox"/> generator for electricity</p> <p><input type="checkbox"/> radio</p> <p><input type="checkbox"/> television</p> <p><input type="checkbox"/> refrigerator</p> <p><input type="checkbox"/> motorized vehicle</p> <p><input type="checkbox"/> bicycle</p> <p><input type="checkbox"/> phone</p>	*

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Post-experimental individual survey after PG game	
<p>WHAT MATERIAL IS YOUR HOUSE MADE OF?</p> <p><input type="radio"/> tent</p> <p><input type="radio"/> reed house (nsugo sonombu)</p> <p><input type="radio"/> timber and termite mud</p> <p><input type="radio"/> corrugated iron</p> <p><input type="radio"/> stone</p> <p><input type="radio"/> bricks</p>	*
<p><b>Agriculture</b></p> <p>IN THE LAST 10 YEARS, DO YOU REMEMBER IN WHICH YEARS THERE WERE GOOD HARVEST YIELDS?</p> <p><input type="checkbox"/> 2007</p> <p><input type="checkbox"/> 2008</p> <p><input type="checkbox"/> 2009</p> <p><input type="checkbox"/> 2010</p> <p><input type="checkbox"/> 2011</p> <p><input type="checkbox"/> 2012</p> <p><input type="checkbox"/> 2013</p> <p><input type="checkbox"/> 2014</p> <p><input type="checkbox"/> 2015</p> <p><input type="checkbox"/> 2016</p> <p><input type="checkbox"/> 2017</p> <p><input type="checkbox"/> none</p> <p><input type="checkbox"/> don't know</p>	*

6/13

Post-experimental individual survey after PG game	
<p>IN THE LAST 10 YEARS, DO YOU REMEMBER IN WHICH YEARS THERE WERE BAD HARVEST YIELDS?</p> <p> <input type="checkbox"/> 2007  <input type="checkbox"/> 2008  <input type="checkbox"/> 2009  <input type="checkbox"/> 2010  <input type="checkbox"/> 2011  <input type="checkbox"/> 2012  <input type="checkbox"/> 2013  <input type="checkbox"/> 2014  <input type="checkbox"/> 2015  <input type="checkbox"/> 2016  <input type="checkbox"/> 2017  <input type="checkbox"/> none  <input type="checkbox"/> don't know </p>	*
<p>HOW MANY CATTLE DOES YOUR HOUSEHOLD OWN?</p>	*
<p>DO YOU USE FERTILIZERS FOR CULTIVATION?</p> <p> <input type="radio"/> Yes  <input type="radio"/> No </p>	*
<p><b>Land tenure</b></p>	
<p>HOW MANY HECTARES OF FIELD DO YOU CULTIVATE</p> <p><i>one hectare = 100 x 100 meters = one large football field</i></p>	*
<p>AND THAT IS HOW MANY FIELDS?</p>	*
<p>DID YOU LEAVE ANY FIELDS FALLOW IN THE LAST 5 YEARS?</p> <p> <input type="radio"/> Yes  <input type="radio"/> No </p>	*
<p>DO YOU PLAN TO USE THEM AGAIN ONE DAY?</p> <p> <input type="radio"/> Yes  <input type="radio"/> No </p>	*
<p>FOR HOW LONG HAVE YOU BEEN USING THE LAND YOU CULTIVATE NOW? IN YEARS</p>	

7/13

Post-experimental individual survey after PG game	
<p>DO YOU HAVE ANY PLANS TO CHANGE LANDS OR EXPAND YOUR CULTIVATION AREA IN THE NEXT FIVE YEARS?</p> <p> <input type="radio"/> Yes  <input type="radio"/> No </p>	*
<p>WOULD YOU SAY THERE IS SUFFICIENT LAND FOR EVERYONE?</p> <p> <input type="radio"/> Yes  <input type="radio"/> No </p>	*
<p>DO YOU REMEMBER IN WHICH YEARS YOU CLEARED FOREST FOR A NEW FIELD?</p> <p> <input type="checkbox"/> none  <input type="checkbox"/> 2000  <input type="checkbox"/> 2001  <input type="checkbox"/> 2002  <input type="checkbox"/> 2003  <input type="checkbox"/> 2004  <input type="checkbox"/> 2005  <input type="checkbox"/> 2006  <input type="checkbox"/> 2007  <input type="checkbox"/> 2008  <input type="checkbox"/> 2009  <input type="checkbox"/> 2010  <input type="checkbox"/> 2011  <input type="checkbox"/> 2012  <input type="checkbox"/> 2013  <input type="checkbox"/> 2014  <input type="checkbox"/> 2015  <input type="checkbox"/> 2016  <input type="checkbox"/> 2017  <input type="checkbox"/> never  <input type="checkbox"/> don't know </p>	*
<p>HOW MUCH ON AVERAGE WHEN YOU DID SO PER YEAR? (surface in hectare or meters, add unit), put 0 if you they did not clear;</p>	*
<p>DO YOU NEED PERMISSION FOR CLEARING?</p> <p> <input type="radio"/> no  <input type="radio"/> yes, from headman  <input type="radio"/> Other </p>	*

8/13

Post-experimental individual survey after PG game	
SPECIFY OTHER.	
* HAVE YOU BEEN DENIED PERMISSION TO CLEAR IN THE LAST YEARS? <input type="radio"/> Yes <input type="radio"/> No	
* DO YOU FEEL THERE IS SOME TYPE OF RIVALRY OR CONFLICTS IN ACQUISITION OF NEW LAND? <input type="radio"/> Yes <input type="radio"/> No	
* DO YOU FEEL SAFE AND SECURE ABOUT YOUR OWN LAND (TENURE)? <input type="radio"/> very safe <input type="radio"/> pretty safe <input type="radio"/> somewhat safe <input type="radio"/> worried <input type="radio"/> unsafe	
* DO YOU THINK YOU WILL STILL USE THE LAND YOU USE NOW IN 10 YEARS? <input type="radio"/> Yes <input type="radio"/> No	
Environment	
* HAS THERE BEEN ANY CHANGE IN THE WEATHER OVER THE LAST YEARS? <input type="checkbox"/> more rain <input type="checkbox"/> less rain <input type="checkbox"/> hotter <input type="checkbox"/> colder <input type="checkbox"/> no change <input type="checkbox"/> don't know	
9/13	

Post-experimental individual survey after PG game	
* IN THE LAST 10 YEARS, DO YOU REMEMBER IN WHICH YEARS THERE WAS PARTICULARLY MUCH RAIN? <input type="checkbox"/> 2007 <input type="checkbox"/> 2008 <input type="checkbox"/> 2009 <input type="checkbox"/> 2010 <input type="checkbox"/> 2011 <input type="checkbox"/> 2012 <input type="checkbox"/> 2013 <input type="checkbox"/> 2014 <input type="checkbox"/> 2015 <input type="checkbox"/> 2016 <input type="checkbox"/> 2017 <input type="checkbox"/> none <input type="checkbox"/> don't know	
* IN THE LAST 10 YEARS, DO YOU REMEMBER IN WHICH YEARS THERE WAS PARTICULARLY LITTLE RAIN? <input type="checkbox"/> 2007 <input type="checkbox"/> 2008 <input type="checkbox"/> 2009 <input type="checkbox"/> 2010 <input type="checkbox"/> 2011 <input type="checkbox"/> 2012 <input type="checkbox"/> 2013 <input type="checkbox"/> 2014 <input type="checkbox"/> 2015 <input type="checkbox"/> 2016 <input type="checkbox"/> 2017 <input type="checkbox"/> none <input type="checkbox"/> don't know	
* DO YOU THINK THE FOREST WILL STILL BE THERE AND ROUGHLY THE SAME SIZE IN 10 YEARS? <input type="radio"/> Yes <input type="radio"/> No	
10/13	

Post-experimental individual survey after PG game	
<b>Extra</b>	
<p>ARE YOU BORN IN THIS VILLAGE?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p>	*
<p>FOR HOW LONG HAVE YOU LIVED IN THIS VILLAGE?</p> <p><input type="radio"/> more than 20</p> <p><input type="radio"/> more than 10</p> <p><input type="radio"/> more than five</p> <p><input type="radio"/> less than five</p>	*
<p>WHERE DID YOU LIVE BEFORE? (OPTIONAL)</p> <p><input type="radio"/> neighbour village</p> <p><input type="radio"/> far away village in Kavango</p> <p><input type="radio"/> Rundu</p> <p><input type="radio"/> other part in Namibia</p> <p><input type="radio"/> Angola</p> <p><input type="radio"/> other country</p>	*
<p>WHY DID YOU COME HERE? (OPTIONAL)</p> <p><input type="checkbox"/> expectation of better farming conditions</p> <p><input type="checkbox"/> marriage</p> <p><input type="checkbox"/> relatives</p> <p><input type="checkbox"/> better education for the kids</p> <p><input type="checkbox"/> job</p> <p><input type="checkbox"/> Other</p> <p>SPECIFY OTHER.</p>	*
<p>DO YOU SOMETIMES THINK ABOUT MIGRATING TO ANOTHER PLACE?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p>	*
<p>WHERE WOULD YOU CONSIDER MOVING TO?</p> <p><input type="radio"/> another village</p> <p><input type="radio"/> Rundu</p> <p><input type="radio"/> another part of Namibia</p>	*

11/13

Post-experimental individual survey after PG game	
<p>WHAT ARE THE REASONS FOR MIGRATING?</p> <p><input type="checkbox"/> expectation of better farming conditions</p> <p><input type="checkbox"/> marriage</p> <p><input type="checkbox"/> relatives</p> <p><input type="checkbox"/> better education for the kids</p> <p><input type="checkbox"/> job</p> <p><input type="checkbox"/> Other</p> <p>SPECIFY OTHER.</p>	*
<p>DO YOU PLAN TO OR HAVE YOU ALREADY TALKED TO OTHER PLAYERS ABOUT THE DECISIONS YOU MADE IN THE GAME?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p>	*
<p>IF YOU HAD TO DECIDE BETWEEN THE FOLLOWING TWO OPTIONS WHICH WOULD YOU PREFER? RECEIVING 1000 NAD FOR YOURSELF OR EVERY HOUSEHOLD IN THE VILLAGE RECEIVING 100NAD INCLUDING YOURSELF?</p> <p><input type="radio"/> 1000 NAD for yourself</p> <p><input type="radio"/> 100 NAD for everyone</p>	*
<p>IMAGINE A LADDER WITH 10 RUNGS. THE RICHEST PERSON IN THIS VILLAGE STANDS ON THE HIGHEST RUNG AND THE POOREST AND THE LOWEST. WHERE ON THAT LADDER DO YOU SEE YOURSELF?</p> <p><i>one is the poorest ten is the richest</i></p> <p><input type="radio"/> 10</p> <p><input type="radio"/> 9</p> <p><input type="radio"/> 8</p> <p><input type="radio"/> 7</p> <p><input type="radio"/> 6</p> <p><input type="radio"/> 5</p> <p><input type="radio"/> 4</p> <p><input type="radio"/> 3</p> <p><input type="radio"/> 2</p> <p><input type="radio"/> 1</p>	*
<p>DO YOU THINK, GENERALLY SPEAKING, MOST PEOPLE CAN BE TRUSTED OR THAT YOU NEED TO BE VERY CAREFUL IN DEALING WITH PEOPLE?</p> <p><input type="radio"/> Most people can be trusted</p> <p><input type="radio"/> Need to be very careful</p>	*

12/13

