

Supplemental Materials

Social heuristics and social roles: Intuition favors altruism for women but not for men

by D. G. Rand et al.

1. Details of the experiments included in the meta-analysis of Study 1

Table S1. Details of the experiments analyzed in Study 1. Gender data from Oberholzer-Gee and Eichenberger (2008) were unavailable, and so this study was not included in the meta-analysis. The indicated sample size includes only participants for whom gender data was available.

Exp	Subject pool	Manipulation	N	Other notes
A	MTurk	Time constraint (<5s vs >30s). Delay was enforced on the instructions page rather than the decision page.	154	\$0.10 stake.
B			158	\$0.10 stake.
C			192	\$0.40 stake.
D	MTurk	Conceptual prime: Write about a time in your life where [following your intuition worked out well or carefully reasoning through a problem worked out poorly] vs [following your intuition worked out poorly or carefully reasoning through a problem worked out well].	125	\$0.10 stake.
E			114	\$0.10 stake.
F			134	\$0.40 stake.
G	MTurk	Conceptual prime: Please write a paragraph (approximately 8-10 sentences) describing a time [your intuition/first instinct] vs [carefully reasoning through a situation] led you in the right direction and resulted in a good outcome.	225	\$0.30 stake. "Intuition good" prime was implemented incorrectly, so this study was more like "Reason good" vs baseline. Also, decision options were given in 5 cent increments, but the \$0.05 option was accidentally omitted.
H			189	
I	eLab	Time constraint (<10s vs >10s)	340	\$10 stake. 1/10 chance of decision actually being implemented.
J	MTurk		104	\$1 stake.
K	MTurk	Conceptual prime: Write about a time in your life where [following your intuition worked out well or carefully reasoning through a problem worked out poorly] or [following your intuition worked out poorly or carefully reasoning through a problem worked out well].	715	\$0.30 stake. Also analyzed in Study 2.
L			619	
M			439	
N	Physical lab	Conceptual prime: instructed to decide according to their first impulse, their gut-feeling and intuition; or to deliberate and take their time before deciding	48	20€stake. Kinnunen and Windmann (2013).
O	Physical lab	Cognitive load (memorize random vs sequential 8-digit number)	150	1€stake, no equal split option. Cornelissen, Dewitte, and Warlop (2011) Study 1.
P			102	1.10€stake, no equal split option. Cornelissen et al. (2011) Study 2b.
Q			171	1.10€stake, no equal split option. Cornelissen et al. (2011) Study 3.
R	Physical lab	Cognitive load (memorize random vs easy 9 digits of letters & numbers)	60	NOK 300 stake. Subjects played 2 DGs, first with take frame than with give frame; we average fraction given over the 2 DGs. Hauge, Brekke, Johansson, Johansson-Stenman, and Svedsäter (2014) Study 2.
S		Cognitive load (memorize random vs easy 7 digits of letters & numbers)	74	SEK 160 stake. Hauge et al. (2014) Study 3.
T	Physical lab	Cognitive load (memorize 7 digit number vs nothing)	37	300 peso stake. Benjamin, Brown, and Shapiro (2013) Study 3.
U		Cognitive load (remember # of times a sequence of musical tones was played)	60	\$1.00 stake. Benjamin et al. (2013) Pilot Study.
V	Snowball sampling via email and Facebook	Conceptual prime: Write 100-150 words about a time intuition or reflection lead to a positive outcome	156	Played 8 DGs with stakes between 5€and 44€ 1/10 chance of one DG being randomly selected for payment; we average fraction given over the 8 DGs. Evans (2014).

2. Second moderator in Study 2

In addition to the BSRI, the moderator questionnaire in Study 2 included five questions about the extent to which participants reported internalizing societal gender norms in their daily lives, which we loosely adapted from Devine, Monteith, Zuwerink, and Elliot (1991) and Brescoll (2012): “In your everyday life, how important is for to you to behave in ways that are considered socially appropriate for your gender?”; “How committed are you to behaving in ways that are considered socially appropriate for your gender?”; “How central to your self-concept (i.e., your view of your self) is behaving in ways that are considered socially appropriate for your gender?”; “Would you be concerned that you might be disliked for behaving in ways that are considered socially inappropriate for your gender?”; “Would you be concerned that people would judge you for behaving in ways that are considered socially inappropriate for your gender?”

These items were intended to capture the extent to which gender norms were enforced in participants’ lives, which affects the strategies that were typically adaptive – and therefore was predicted to affect intuitive responses: greater importance (and internalization) of gender norms was predicted to amplify sex differences, leading women to be more intuitively altruistic and men to be more intuitively selfish.

We averaged responses to these 5 items to form an aggregate measure ($\alpha=.89$). Unlike the BSRI results reported in the main text, there was no significant 3-way interaction between gender, cognitive processing mode, and internalization of gender norms $F(1, 1823)=1.95, p=.16$; and no other terms involving internalization of gender norms were significant, $p>.10$ for all.

We believe that this null result was most likely explained by limitations of the (not previously validated) explicit self-report measure we used, rather than indicating a theoretically meaningful lack of moderation. This is especially true given that in addition to not observing the

predicted three-way interaction with gender and cognitive processing mode, we also found no significant effects of the measure whatsoever.

Unlike the BSRI, which directly asked participants about how they identified with specific traits, our second measure asked more abstract questions about the influence of gender roles; and it seems likely that people may not have been able to accurately assess the extent to which they were influenced by societal gender norms (i.e. may lack consciously awareness of this influence; particularly because we predicted an impact on *intuitive* responses). It may be also the case that people were not motivated to report that they are subject to, and care deeply about, societal gender norms. Being unwilling and unmotivated to admit being influenced by such norms is analogous to the way that people are reluctant to admit that they *personally* are influenced by the media or advertising, though the data clearly show that individuals are powerfully influenced by such forces. To help clarify these issues, future work should investigate whether *implicit* attitudes regarding the internalization of gender norms moderate the relationship between intuition, deliberation, and altruism for women.

3. Supplemental Materials References

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