Pre-registration Experiment 1

Contents

1 Descriptives

Table 1: Descriptives

discipline	impressiveness	impressed_mean	learn_mean	competence_mean	trust_mean	consensus_mean
archeo	basic	3.71	3.10	3.45	3.61	4.08
archeo	imp	3.67	3.18	3.63	3.61	3.88
entom	basic	2.43	2.49	3.35	3.39	3.98
entom	imp	3.65	3.78	4.02	4.02	3.78

2 Manipulation check, hypotheses, research questions

We have one manipulation check:

M1: Participants perceive the texts in the impressive condition as more impressive than the texts in the basic condition.

Our hypotheses are:

- H1a: Participants will perceive scientists as more competent than they did before after having read an impressive text about their discipline's findings, compared to when reading a basic text.

- H1b: Across all conditions, participants who are more impressed by the text about a discipline will also tend to perceive the scientists of the discipline as more competent.

- H2a: Participants will trust a discipline more than they did before after reading an impressive text about the discipline's findings, compared to when reading a basic text.

- H2b: Across all conditions, participants who are more impressed by the text about a discipline will also tend to trust the scientists of the discipline more.

Research questions:

- RQ1: Do participants perceive to learn more from the texts in the impressive condition, compared to the basic condition?

- RQ2: Do perceptions of consensus interact with the relationships proposed in the hypotheses, such that greater perceived consensus is a associated with a more postive relationship between impressiveness and trust/competence ?

	Manipulation check
(Intercept)	3.071***
	(0.121)
impressivenessimp	0.592***
	(0.158)
SD (Intercept id)	0.447
SD (Observations)	1.107
Num.Obs.	196
R2 Marg.	0.058
R2 Cond.	0.190
AIC	634.5
BIC	647.6
ICC	0.1
RMSE	1.03

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

	H1a (Competence)	H1b (Competence pooled)	H2a (Trust)	H2b (Trust pooled)
(Intercept)	3.398***	2.641***	3.500***	2.967***
	(0.093)	(0.183)	(0.090)	(0.172)
impressivenessimp	0.429***		0.316***	
	(0.110)		(0.091)	
impressed		0.288***		0.205***
		(0.050)		(0.046)
SD (Intercept id)	0.515	0.386	0.618	0.537
SD (Observations)	0.767	0.783	0.639	0.662
Num.Obs.	196	196	196	196
R2 Marg.	0.051	0.141	0.031	0.080
R2 Cond.	0.347	0.309	0.499	0.445
AIC	527.0	512.8	496.1	490.4
BIC	540.2	525.9	509.2	503.5
ICC	0.3	0.2	0.5	0.4
RMSE	0.67	0.71	0.52	0.56

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

	RQ 1	H1a x Consensus	H1b x Consensus	H2a x Consensus	H2b x Consensus
(Intercept)	2.796***	2.916***	2.166**	3.086***	2.083*
	(0.101)	(0.397)	(0.750)	(0.445)	(0.822)
impressivenessimp	0.684***	0.096		0.015	
	(0.112)	(0.504)		(0.586)	
consensus		0.145	0.211	0.077	0.145
		(0.096)	(0.189)	(0.108)	(0.207)
impressivenessimp × consensus		0.065		0.112	
		(0.126)		(0.147)	
impressed			0.328		0.411+
			(0.216)		(0.237)
impressed × consensus			−0.033		−0.032
			(0.053)		(0.058)
SD (Intercept id)	0.614	0.583	0.525	0.476	0.375
SD (Observations)	0.784	0.647	0.667	0.782	0.791
Num.Obs.	196	196	196	196	196
R2 Marg.	0.106	0.059	0.093	0.067	0.144
R2 Cond.	0.446	0.481	0.440	0.319	0.301
AIC	550.9	499.9	499.5	533.1	523.3
BIC	564.0	519.6	519.2	552.8	543.0
ICC	0.4	0.4	0.4	0.3	0.2
RMSE	0.66	0.53	0.56	0.69	0.72

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001