Pre-registration Experiment 2

Contents

1 Descriptives

Table 1: Descriptives

discipline	impressiveness	impressed_mean	learn_mean	competence_mean	trust_mean	consensus_mean
archeo	basic	3.31	2.78	3.31	3.35	3.90
archeo	imp	3.98	3.48	3.70	3.60	3.92
entom	basic	3.10	2.76	3.22	3.36	3.78
entom	imp	4.04	3.84	3.82	3.76	3.59

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)	3.202***
	(0.102)
impressivenessimp	0.808***
	(0.121)
SD (Intercept id)	0.551
SD (Observations)	0.849
Num.Obs.	198
R2 Marg.	0.138
R2 Cond.	0.394
AIC	569.3
BIC	582.4
ICC	0.3
RMSE	0.74

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

	H1a (Competence)	H1b (Competence pooled)	H2a (Trust)	H2b (Trust pooled)
(Intercept)	3.263***	2.043***	3.354***	2.449***
	(0.086)	(0.185)	(0.086)	(0.177)
impressivenessimp	0.495***		0.323***	
	(0.091)		(0.077)	
impressed		0.407***		0.296***
		(0.048)		(0.045)
SD (Intercept id)	0.565	0.409	0.657	0.551
SD (Observations)	0.642	0.640	0.542	0.547
Num.Obs.	198	198	198	198
R2 Marg.	0.078	0.254	0.035	0.147
R2 Cond.	0.480	0.471	0.609	0.577
AIC	491.4	458.1	467.9	446.7
BIC	504.5	471.3	481.0	459.9
ICC	0.4	0.3	0.6	0.5
RMSE	0.53	0.56	0.43	0.44

+ 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)	2.768***	2.904***	1.899**	3.287***	2.965***
	(0.095)	(0.346)	(0.647)	(0.375)	(0.681)
impressivenessimp	0.889***	0.132		−0.371	
	(0.110)	(0.398)		(0.456)	
consensus		0.117	0.153	−0.006	−0.250
		(0.087)	(0.168)	(0.095)	(0.179)
impressivenessimp × consensus		0.054		0.230+	
		(0.103)		(0.118)	
impressed			0.391*		0.129
			(0.187)		(0.194)
impressed × consensus			−0.027		0.074
			(0.048)		(0.050)
SD (Intercept id)	0.535	0.634	0.552	0.547	0.390
SD (Observations)	0.775	0.548	0.548	0.641	0.648
Num.Obs.	198	198	198	198	198
R2 Marg.	0.183	0.056	0.155	0.101	0.262
R2 Cond.	0.447	0.596	0.581	0.480	0.458
AIC	539.3	473.5	457.3	495.0	467.7
BIC	552.4	493.2	477.0	514.7	487.4
ICC	0.3	0.6	0.5	0.4	0.3
RMSE	0.67	0.43	0.44	0.53	0.57

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

3 Plots