Supplementary Materials for

Evaluating didactic and exemplar information: Non-invasive brain stimulation reveals message-processing mechanisms

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Supplementary Table 1

Main and Interaction Effects of Stimulation and Message Type on Number of Generated Arguments for Smoking Messages

	Number of Button Presses				Number of Spoken Reasons			
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Stimulation (sham = 0, stimulation = 1)	-.29*** (.07)		-.16 (.11)	-.21* (.11)	-.11+ (.06)		.05 (.09)	.02 (.09)
Message Type (exemplar = 0, didactic = 1)		-.17 (.38)	-.04 (.39)	-.01 (.41)		.005 (.35)	.15 (.36)	.20 (.38)
Stimulation x Message Type			-.27+ (.15)	-.20 (.15)			-.30* (.13)	-.26* (.13)
Agreement (agree = 0, disagree = 1)				-.36*** (.07)				-.21*** (.06)
Level of Support				-.006 (.004)				-.004 (.003)
Issue Importance				-.26* (.11)				-.10 (.09)
Education				.15 (.11)				.14 (.10)
Age				.0003 (.01)				-.003 (.01)
Female				.27 (.43)				.35 (.42)
Correctly Guess Stimulation				-.80 (.51)				-.79+ (.47)

Note: Coefficients with standard errors in parentheses were estimated using a mixed-effects regression. Independent variables were modeled as fixed effects and participants and stimuli were modeled as random effects. $^{***}p<.001$, $^{*}p<.05$, $^{+}p<.10$.

Supplementary Table 2

Main and Interaction Effects of Stimulation and Message Type on Average Response Times to Button presses for Health and Political Messages

	Model 9	Model 10	Model 11	Model 12
Stimulation (sham = 0, stimulation = 1)	.81*** (.24)		-.58^{+} (.35)	-.55 (.35)
Message Type (exemplar = 0, didactic = 1)		2.4 (1.61)	1.08 (1.63)	.46 (1.64)
Stimulation x Message Type			2.73*** (.49)	2.73*** (.49)
Agreement (agree = 0, disagree = 1)				1.53*** (.24)
Level of Support				.005 (.005)
Issue Importance				.24 (.20)
Education				-.99* (.44)
Age				.03 (.06)
Female				-2.02 (1.75)
Correctly Guess Stimulation				3.48+ (2.03)

Note: Coefficients with standard errors in parentheses were estimated using a mixed-effects regression. Independent variables were modeled as fixed effects and participants and messages were modeled as random effects. $^{***}p<.001$, $^{*}p<.05$, $^{+}p<.10$.

Supplementary Table 3

Main and Interaction Effects of Stimulation and Message Type on Average Amount of Disfluent Fillers for Health and Political messages

	Model 13	Model 14	Model 15	Model 16
Fixed Effects				
Stimulation (sham = 0, stimulation = 1)	.04* (.02)		-.06* (.03)	-.06* (.03)
Message Type (exemplar = 0, didactic = 1)		.11 (.21)	.02 (.21)	.15 (.22)
Stimulation x Message Type			.20*** (.04)	.21*** (.04)
Agreement (agree = 0, disagree = 1)				-.04^{+} (.02)
Level of Support				.0006 (.0005)
Issue Importance				.02 (.02)
Education				.05 (.06)
Age				-.007 (.008)
Female				.01 (.24)
Correctly Guess Stimulation				.38 (.27)

Note: Coefficients with standard errors in parentheses were estimated using a mixed-effects regression. Independent variables were modeled as fixed effects and participants were modeled as random effects. $^{***}p<.001$, $^{*}p<.05$, $^{+}p<.10$.

Supplementary Table 4

Interaction Effects of Stimulation and Message Type on Button Presses for Each of the Seven Political Issues and Health Behaviors

	Affirmative Action	Gun Control	Legalizing Marijuana	Universal Healthcare	Healthy Sleeping	Physical Activity	Healthy Eating
	Model 17	Model 18	Model 19	Model 20	Model 21	Model 22	Model 23
Stimulation (sham = 0, stimulation = 1)	.27^{+} (.16)	-.14 (.13)	.13 (.15)	-.15 (.15)	-.13 (.16)	-.12 (.23)	.47* (.19)
Message Type (exemplar = 0, didactic = 1)	-.08 (.54)	.02 (.40)	-.41 (.42)	.29 (.53)	-.24 (.63)	.13 (.61)	.25 (.69)
Stimulation x Message Type	-.64** (.22)	-.12 (.17)	-.26 (.20)	-.07 (.22)	-.19 (.24)	-.33 (.27)	-.79** (.28)
Number of Participants	28	42	38	23	21	21	22

Note: Coefficients with standard errors in parentheses were estimated using a mixed-effects regression. Independent variables were modeled as fixed effects and participants and messages were modeled as random effects. $^{**}p<.01$, $^{*}p<.05$, $^{+}p<.10$.

The number of participants varies for each issue and will be significantly lower than our main analyses. Although only the affirmative action and health eating issue achieved statistical significance for the stimulation by message type interaction, the signs of the coefficients for the interactions are in the predicted direction (i.e., negative). Given that we did not plan to examine each topic alone, the lack of a statistically significant effect for many of the individual issues is likely because of the decrease in sample size in terms of the number of participants and stimuli, and we view the consistent pattern of results as a strength.