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Analyses for Studies 1a & 1b conducted with regression analyses

Predicting perceptions of bias. To test whether bias was better captured by motivation to hold a particular position rather than honesty, we regressed perceptions of bias on the valence and concept manipulations as well as their interaction and centered perceptions of trustworthiness (Table & Figures below). Controlling for trustworthiness allowed us to examine whether shifts in the perception of trustworthiness were driving the effects on bias, as might occur if the variables were conceptually the same. It also allowed us to control for any conceptual overlap that might exist between perceptions of bias and trustworthiness. The Concept X Valence interaction was significant. The motivated/open descriptions predicted perceptions of bias, but the honest/dishonest descriptions did not. The fact that only the motivated/open manipulation predicted perceptions of bias corroborates the idea that motivation to take a particular position rather than dishonesty conveys bias.

Predicting perceptions of trustworthiness. We conducted the same analyses with trustworthiness as the outcome measure to examine whether trustworthiness expressed honesty more than motivated perception (Table & Figures below). In a regression with the concept manipulation, the valence manipulation, their interaction, and centered perceptions of bias as the predictor variables, the Concept X Valence interaction was significant. The honest/dishonest descriptions significantly predicted trustworthiness, but the motivated/open descriptions did not. This substantiates our proposal that honesty rather than motivation to take a position conveys trustworthiness.

Table. Effects of the Valence and Concept Manipulations, as well as their interactions and the motivated and dishonest simple effects on perceptions of bias and trustworthiness in Studies 1a and 1b.

	<i>Study a</i>				<i>Study b</i>			
	<i>b</i>	<i>t</i>	<i>p</i>	<i>d</i>	<i>b</i>	<i>t</i>	<i>p</i>	<i>d</i>
Effects on Bias								
Valence	1.36	3.28	.001	.60	1.12	2.95	.004	.55
Concept	.48	1.42	.16	.26	.43	1.19	.24	.22
Valence X Concept	1.74	2.51	.01	.46	2.55	3.48	<.001	.65
Motivated Simple Effect	2.22	4.79	<.001	.88	2.40	4.86	<.001	.90
Dishonest Simple Effect	.49	.81	.42	.15	-.15	-.27	.79	-.05
Effects on Trustworthiness								
Valence	2.06	6.29	<.001	1.16	.86	2.85	.005	.53
Concept	.97	3.39	.001	.63	.52	1.82	.07	.34
Valence X Concept	-2.96	-5.30	.001	-.62	-2.10	-3.64	<.001	-.68
Motivated Simple Effect	.57	1.30	.20	.24	-.19	-.44	.66	-.08
Dishonest Simple Effect	3.54	8.44	<.001	1.55	1.91	4.70	<.001	4.70

Studies 1a and 1b Means, Standard Deviations, and Covariance Matrices

Study 1a

	<i>M</i>	<i>SD</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
1. Valence	0.00	0.50	0.25	0.01	0.00	0.33	0.24
2. Concept	0.00	0.50	0.01	0.25	0.00	0.67	0.57
3. Valence X Concept	0.01	0.25	0.00	0.00	0.06	-0.17	0.05
4. Trustworthiness	4.66	2.27	0.33	0.67	-0.17	5.15	2.50
5. Bias	4.78	2.20	0.24	0.57	0.05	2.50	4.82

Study 1b

	<i>M</i>	<i>SD</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
1. Valence	-0.01	0.50	0.25	-0.01	0.01	0.30	0.40
2. Concept	0.02	0.50	-0.01	0.25	0.00	0.17	0.16
3. Valence X Concept	-0.01	0.25	0.01	0.00	0.06	-0.10	0.13
4. Trustworthiness	4.34	1.78	0.30	0.17	-0.10	3.16	1.31
5. Bias	4.52	2.23	0.40	0.16	0.13	1.31	4.99

Figure. Effects of the “motivated to take a position” and “dishonesty” dimensions on trustworthiness and a lack of bias.

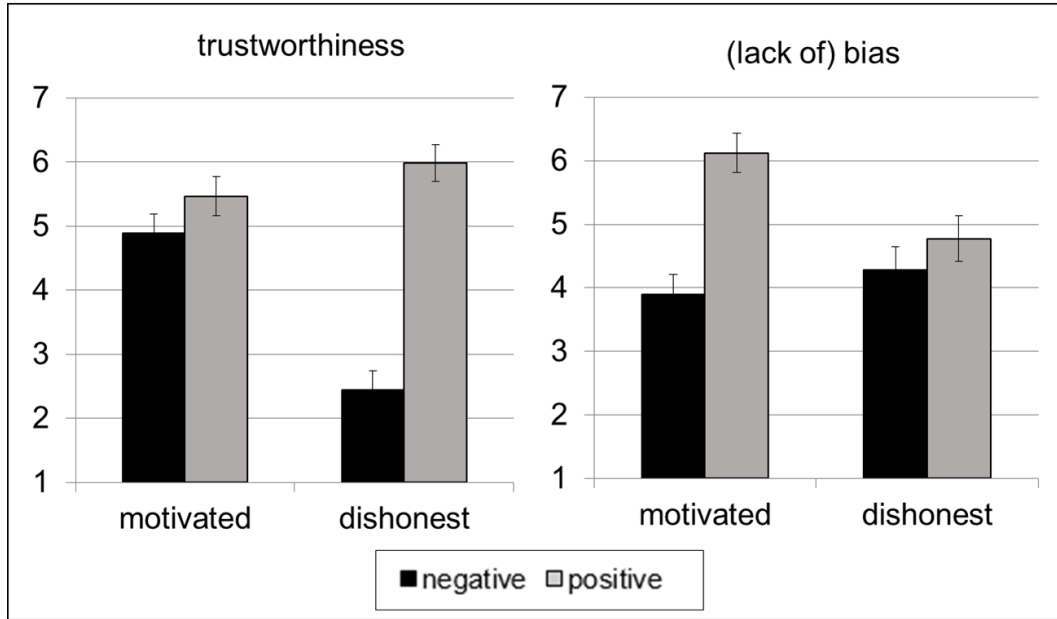
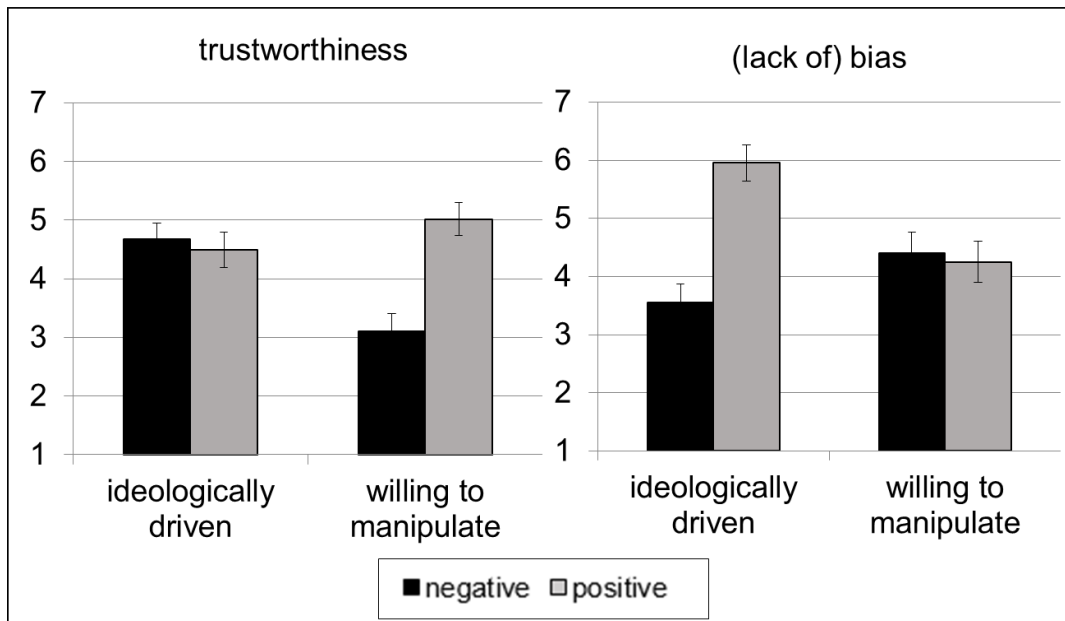


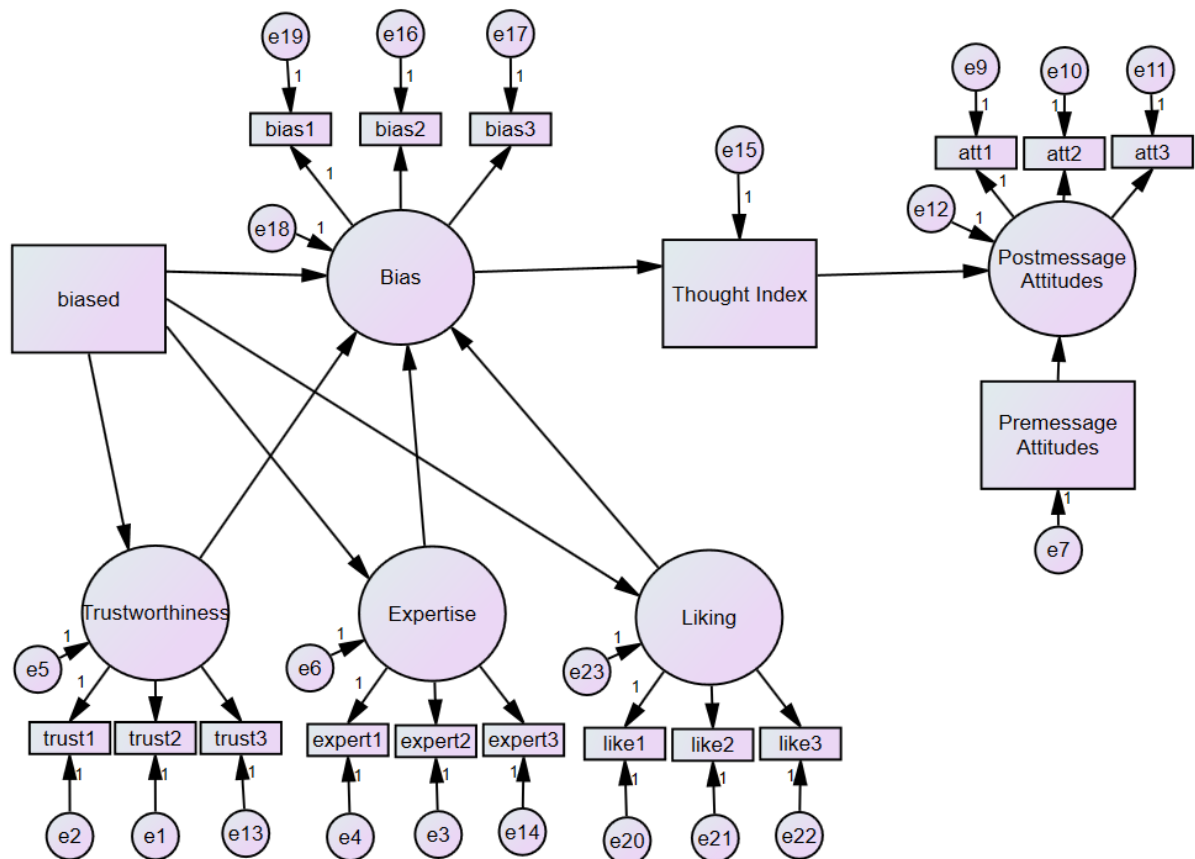
Figure. Effects of the “ideologically driven” and “willing to manipulate” dimensions on trustworthiness and a lack of bias.



Latent Variable Analysis for Study 2

To mirror the analyses presented in the text, in this analysis, we were interested in the effect of the bias manipulation through the bias latent variable through thoughts on post-message attitudes controlling for effects of pre-message attitudes, as well as trustworthiness, expertise, and liking.

We included the bias manipulation as an observed exogenous variable, as well as bias, expertise, trustworthiness, liking, pre-message attitudes, and post-message attitudes as latent endogenous variables. We also included each of the indicators for these latent variables as observed variables (see figure for full model). We also included the thought index as an observed endogenous variable. In this model, the bias manipulation predicted bias, trustworthiness, expertise, and liking. Further, trustworthiness, expertise, and liking predicted bias. Bias predicted thoughts. Finally, thoughts and pre-message attitudes predicted post-message attitudes. We were primarily concerned with the path from the bias manipulation to bias to thoughts to post-message attitudes. However, we included trustworthiness, expertise, and liking in order to control for these other perceptions. We also included pre-message attitudes so that the effects on post-message attitudes would represent attitude change. As a reminder, we conducted this analysis in order to parallel the regression analysis in the text, but control for measurement error.



Results

The parameter estimates for each path in the model are available in the table below. Of most importance, the paths from the bias manipulation to bias to thoughts to attitudes are all significant. These results are consistent with those reported in the text and suggest that the results we reported in the text are likely not attributable to measurement error.

path			<i>estimate</i>	<i>standard error</i>	<i>critical ratio</i>	<i>p</i>
Bias	<---	Bias Manipulation	0.405	0.109	3.702	<.001
Thought Index	<---	Bias	-0.132	0.028	-4.762	<.001
Post-message Attitudes	<---	Thought Index	0.997	0.171	5.845	<.001
Expertise	<---	Bias Manipulation	-0.13	0.122	-1.071	0.284
Liking	<---	Bias Manipulation	-0.356	0.135	-2.642	0.008
Trustworthiness	<---	Bias Manipulation	-0.207	0.113	-1.828	0.067
Bias	<---	Expertise	0.055	0.066	0.829	0.407
Bias	<---	Liking	-0.315	0.064	-4.941	<.001
Bias	<---	Trustworthiness	-0.196	0.074	-2.651	0.008
Postmessage Attitudes	<---	Premessage Attitudes	0.484	0.052	9.27	<.001
bias1	<---	Bias	1.00			
bias2	<---	Bias	1.166	0.081	14.372	<.001
bias3	<---	Bias	0.441	0.096	4.58	<.001
expert1	<---	Expertise	1.00			
expert2	<---	Expertise	1.197	0.089	13.494	<.001
expert3	<---	Expertise	1.044	0.081	12.939	<.001
like1	<---	Liking	1.00			
like2	<---	Liking	0.904	0.052	17.552	<.001
like3	<---	Liking	0.803	0.056	14.373	<.001
trust1	<---	Trustworthiness	1.00			
trust2	<---	Trustworthiness	1.148	0.137	8.405	<.001
trust3	<---	Trustworthiness	0.69	0.098	7.055	<.001
att1	<---	Postmessage_Attitudes	1.00			
att2	<---	Postmessage_Attitudes	1.006	0.034	29.993	<.001
att3	<---	Postmessage_Attitudes	0.876	0.045	19.445	<.001

Study 2 Complete Mediation Model Results

Effects of bias manipulation and pre-message attitudes on perceptions of bias

	<i>b</i>	<i>t</i>	<i>p</i>
Bias Manipulation	.59	5.38	<.001
Pre-message Attitudes	-.13	-2.53	.012

Effects of bias manipulation and pre-message attitudes on perceptions of trustworthiness

	<i>b</i>	<i>t</i>	<i>p</i>
Bias Manipulation	-.18	-1.59	.11
Pre-message Attitudes	.15	2.91	.004

Effects of bias manipulation and pre-message attitudes on perceptions of expertise

	<i>b</i>	<i>t</i>	<i>p</i>
Bias Manipulation	-.13	-.99	.33
Pre-message Attitudes	.28	4.89	<.001

Effects of bias manipulation and pre-message attitudes on liking

	<i>b</i>	<i>t</i>	<i>p</i>
Bias Manipulation	-.31	-2.65	.009
Pre-message Attitudes	.25	4.64	<.001

Effects of bias manipulation, pre-message attitudes, and perceptions of bias, trustworthiness, expertise, and liking on thoughts

	<i>b</i>	<i>t</i>	<i>p</i>
Bias Manipulation	-.02	-.36	.72
Pre-message Attitudes	.06	3.03	.003
Bias	-.10	-2.98	.003
Trustworthiness	-.04	-1.06	.289
Expertise	.04	1.02	.309
Liking	.06	1.69	.093

Effects of bias manipulation, pre-message attitudes, and perceptions of bias, trustworthiness, expertise, and liking and thoughts on post-message attitudes

	<i>b</i>	<i>t</i>	<i>p</i>
Bias Manipulation	-.07	-.70	.48
Pre-message Attitudes	.38	7.97	<.001
Bias	-.03	-.45	.65
Trustworthiness	.06	.61	.55
Expertise	.08	1.09	.28
Liking	.38	4.71	<.001
Thoughts	.50	3.08	.002

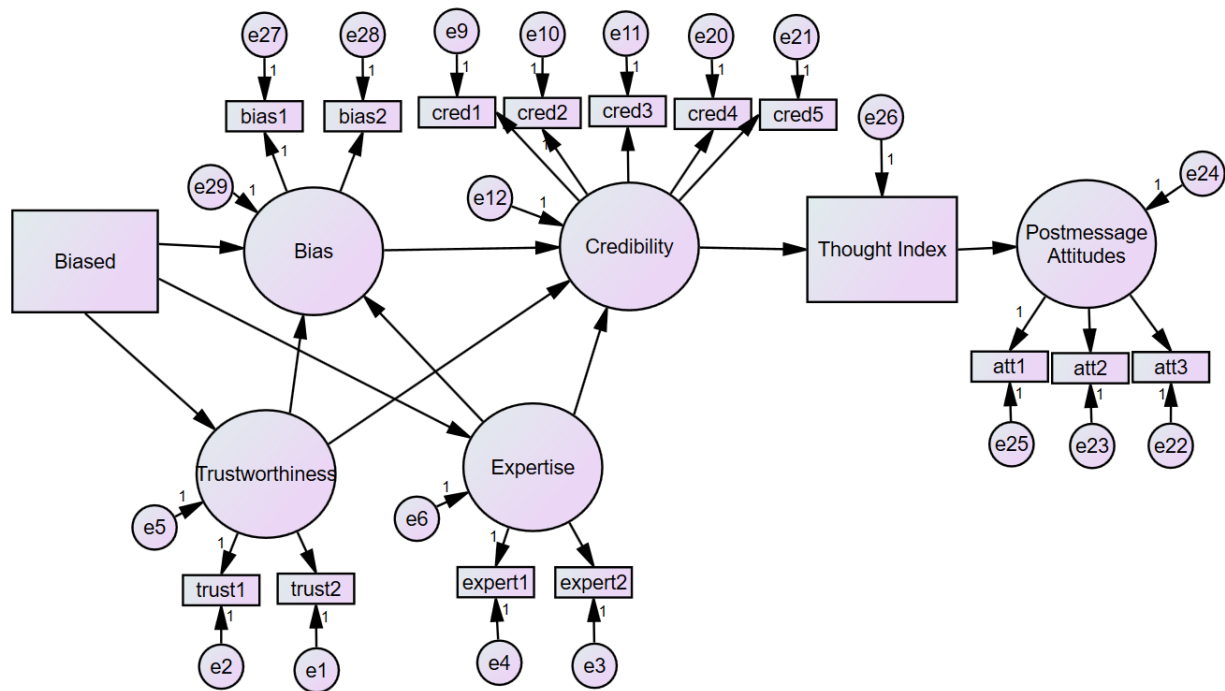
Study 2 Variable Means, Standard Deviations, and Covariance Matrix

	<i>M</i>	<i>SD</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>
1. Bias Manipulation	.00	1.00	1.01	-0.08	0.60	-0.19	-0.15	-0.33	-0.10	-0.32
2. Pre-message Attitudes	3.84	2.18	-0.08	4.74	-0.65	0.72	1.36	1.20	0.45	2.67
3. Bias	6.09	1.65	0.60	-0.65	2.73	-1.20	-1.11	-1.44	-0.38	-1.28
4. Trustworthiness	5.27	1.60	-0.19	0.72	-1.20	2.56	2.08	1.81	0.23	1.45
5. Expertise	4.98	1.87	-0.15	1.36	-1.11	2.08	3.49	2.03	0.35	1.92
6. Liking	3.83	1.74	-0.33	1.20	-1.44	1.81	2.03	3.03	0.39	2.15
7. Thoughts	-.56	.66	-0.10	0.45	-0.38	0.23	0.35	0.39	0.43	0.60
8. Post-message Attitudes	3.19	2.03	-0.32	2.67	-1.28	1.45	1.92	2.15	0.60	4.12

Latent Variable Analyses for Studies 3a, 3b, and 3c

In this analysis, we were interested in paralleling the analysis in the text in which we demonstrated that perceptions of bias had a negative effect on persuasion through credibility and thoughts controlling for perceptions of trustworthiness and expertise.

In this model, we included the bias manipulation as an exogenous observed variable. We also included trustworthiness, expertise, credibility, and post-message attitudes as endogenous latent variables, along with their indicators. Finally, we included the thought index as an observed endogenous variable. The model was set up such that the bias manipulation predicted bias, trustworthiness, and expertise. Further, trustworthiness and expertise predicted the bias latent variable. Additionally, bias, trustworthiness, and expertise predicted credibility. Credibility predicted the thought index. Finally, the thought index predicted post-message attitudes.



Results

The parameter estimates are available in the table below. Of most interest to us were the paths from the bias manipulation to bias to credibility to thoughts to post-message attitudes. Each of these paths were significant, providing additional support to the analyses reported in the text.

path			<i>estimate</i>	<i>standard error</i>	<i>critical ratio</i>	<i>p</i>
Bias	<---	Bias Manipulation	-0.51	0.113	-4.494	<.001
Credibility	<---	Bias	0.214	0.033	6.539	<.001
Thought Index	<---	Credibility	-0.025	0.009	-2.677	0.007
Attitudes	<---	Thought Index	1.862	0.19	9.825	<.001
Expertise	<---	Bias Manipulation	-0.593	0.074	-8.042	<.001
Trustworthiness	<---	Bias Manipulation	-0.125	0.082	-1.525	0.127
Bias	<---	Expertise	0.423	0.082	5.158	<.001
Bias	<---	Trustworthiness	0.02	0.072	0.282	0.778
Credibility	<---	Expertise	0.768	0.055	13.913	<.001
Credibility	<---	Trustworthiness	0.277	0.047	5.861	<.001
bias1	<---	Bias	1			
bias2	<---	Bias	0.904	0.054	16.701	<.001
trust1	<---	Trustworthiness	1			
trust2	<---	Trustworthiness	0.955	0.132	7.259	<.001
expert1	<---	Expertise	1			
expert2	<---	Expertise	0.999	0.055	18.208	<.001
cred1	<---	Credibility	1			
cred2	<---	Credibility	1	0.024	42.01	<.001
cred3	<---	Credibility	0.986	0.027	36.436	<.001
cred4	<---	Credibility	0.903	0.034	26.942	<.001
cred5	<---	Credibility	1.003	0.028	35.857	<.001
Smithatt1	<---	Postmessage Attitudes	1			
Smithatt2	<---	Postmessage Attitudes	1.022	0.022	47.141	<.001
Smithatt3	<---	Postmessage Attitudes	1.022	0.023	43.787	<.001

Studies 3a, b, and c Complete Mediation Model Details

Effects of bias manipulation and perceptions of bias, trustworthiness, and expertise on credibility

	<i>b</i>	<i>t</i>	<i>p</i>
Bias Manipulation	-.36	-5.77	<.001
bias	-.19	-6.77	<.001
trustworthiness	.23	6.60	<.001
expertise	.57	14.57	<.001

Effects of bias manipulation and perceptions of bias, trustworthiness, expertise, and credibility on thoughts

	<i>b</i>	<i>t</i>	<i>p</i>
Bias Manipulation	.04	1.94	.05
bias	.00	.18	.86
trustworthiness	.02	1.92	.06
expertise	.02	1.24	.22
credibility	-.03	-2.34	.02

Effects of bias manipulation and perceptions of bias, trustworthiness, expertise, and credibility, and thoughts on attitudes

	<i>b</i>	<i>t</i>	<i>p</i>
Bias Manipulation	.10	1.29	.20
bias	.01	.22	.82
trustworthiness	-.06	-1.30	.20
expertise	-.09	-1.51	.13
credibility	-.09	-1.52	.13
thoughts	1.80	9.48	<.001

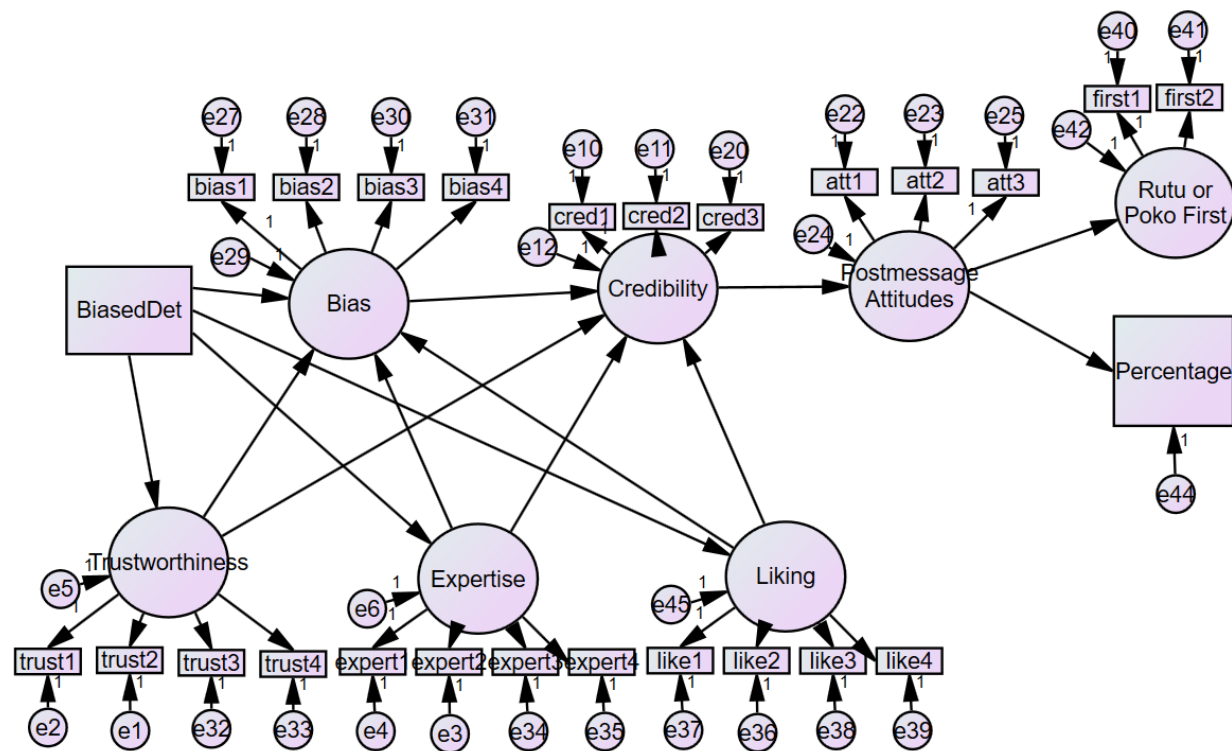
Studies 3a, 3b, & 3c Means, Standard Deviations and Covariance Matrix

	<i>M</i>	<i>SD</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
1. Bias Manipulation	-0.01	1.00	1.00	0.72	-0.12	-0.57	-0.85	0.05	0.34
2. bias	5.62	2.28	0.72	5.18	-0.44	-1.34	-2.10	0.07	0.57
3. trustworthiness	6.73	1.73	-0.12	-0.44	2.99	0.88	1.32	0.03	-0.33
4. expertise	5.51	1.69	-0.57	-1.34	0.88	2.85	2.29	-0.03	-0.62
5. credibility	4.68	1.96	-0.85	-2.10	1.32	2.29	3.85	-0.09	-0.89
6. thoughts	0.00	0.38	0.05	0.07	0.03	-0.03	-0.09	0.14	0.27
7. attitudes	4.60	1.71	0.34	0.57	-0.33	-0.62	-0.89	0.27	2.92

Latent Variable Analyses for Study 4

In this analysis, we were interested in paralleling the analysis in the text in which we demonstrated that perceptions of bias had a negative effect on credibility, which then influenced persuasion, which influenced the allocations decisions that participants made, controlling for perceptions of trustworthiness, expertise, and liking.

In this model, we included the bias manipulation as an exogenous observed variable. We also included trustworthiness, expertise, credibility, and post-message attitudes as endogenous latent variables, along with their indicators. Finally, we included the thought index as an observed endogenous variable. The model was set up such that the bias manipulation predicted perceptions of bias, trustworthiness, expertise, and liking. Additionally, trustworthiness, expertise, and liking predicted bias. Bias, trustworthiness, expertise, and liking predicted credibility. Credibility predicted post-message attitudes. Finally, post-message attitudes predicted the two allocation outcomes.



Results

The parameter estimates are available in the table below. Of most interest to us were the paths from the bias manipulation to bias to credibility to post-message attitudes. Each of these paths were significant, providing additional support to the analyses reported in the text. Additionally, the paths from post-message attitudes to the allocation outcomes were also significant.

path			<i>estimate</i>	<i>standard error</i>	<i>critical ratio</i>	<i>p</i>
Bias	<---	Bias Manipulation	-0.996	0.264	-3.77	<.001
Credibility	<---	Bias	-0.151	0.053	-2.871	0.004
Attitudes	<---	Credibility	0.321	0.101	3.165	0.002
Rutu or Poko First	<---	Attitudes	0.794	0.087	9.117	<.001
Percentage	<---	Attitudes	3.591	1.337	2.686	0.007
Expertise	<---	Bias Manipulation	0.469	0.229	2.045	0.041
Liking	<---	Bias Manipulation	0.007	0.204	0.036	0.971
Trustworthiness	<---	Bias Manipulation	0.447	0.221	2.021	0.043
Bias	<---	Expertise	-0.262	0.093	-2.823	0.005
Bias	<---	Liking	-0.143	0.102	-1.395	0.163
Bias	<---	Trustworthiness	-0.117	0.094	-1.245	0.213
Credibility	<---	Expertise	0.42	0.066	6.382	<.001
Credibility	<---	Liking	0.182	0.07	2.613	0.009
Credibility	<---	Trustworthiness	0.122	0.063	1.935	0.053
bias1	<---	Bias	1			
bias2	<---	Bias	1.04	0.061	17.172	<.001
bias3	<---	Bias	1.105	0.056	19.683	<.001
bias4	<---	Bias	1.084	0.055	19.884	<.001
expert1	<---	Expertise	1			
expert2	<---	Expertise	0.962	0.055	17.341	<.001
expert3	<---	Expertise	0.981	0.055	17.834	<.001
expert4	<---	Expertise	0.918	0.054	17.157	<.001
like1	<---	Liking	1			
like2	<---	Liking	0.899	0.075	11.914	<.001
like3	<---	Liking	1.227	0.082	15.05	<.001
like4	<---	Liking	1.268	0.079	16.108	<.001
trust1	<---	Trustworthiness	1			
trust2	<---	Trustworthiness	1.118	0.068	16.491	<.001
trust3	<---	Trustworthiness	1.131	0.07	16.177	<.001
trust4	<---	Trustworthiness	1.107	0.07	15.886	<.001
cred1	<---	Credibility	1			
cred3	<---	Credibility	1.02	0.054	18.792	<.001
cred2	<---	Credibility	0.974	0.053	18.312	<.001
rutuatt1	<---	Postmessage Attitudes	1.056	0.057	18.424	<.001
rutuatt2	<---	Postmessage Attitudes	1.034	0.061	17.078	<.001
rutuatt3	<---	Postmessage Attitudes	1			
first1	<---	Rutu or Poko First	1			
first2	<---	Rutu or Poko First	1.03	0.068	15.04	<.001

Study 4 Complete Mediation Model Details

Effects of bias manipulation and perceptions of bias, trustworthiness, and expertise on credibility

	<i>b</i>	<i>t</i>	<i>p</i>
Bias Manipulation	-.06	-.60	.55
bias	-.13	-2.71	.01
trustworthiness	.11	1.62	.11
expertise	.41	5.06	< .001
liking	.14	1.78	.08

Effects of bias manipulation and perceptions of bias, trustworthiness, expertise, and credibility on attitudes toward sending aid to Rutu first

	<i>b</i>	<i>t</i>	<i>p</i>
Bias Manipulation	.09	.62	.54
bias	-.06	-0.76	.45
trustworthiness	.03	.33	.74
expertise	-.19	-1.44	.15
liking	.22	1.91	.06
credibility	.30	2.52	.01

Effects of bias manipulation and perceptions of bias, trustworthiness, expertise, credibility, and attitudes on preference for allocating resources to Rutu versus Poko first

	<i>b</i>	<i>t</i>	<i>p</i>
Bias Manipulation	-.12	-.93	.36
bias	-.03	-.38	.71
trustworthiness	-.22	-2.26	.03
expertise	-.31	-2.41	.02
liking	.22	1.92	.06
credibility	-.02	-.19	.85
Rutu attitudes	.75	9.97	<.001

Effects of bias manipulation and perceptions of bias, trustworthiness, expertise, credibility, and attitudes on percent of resources allocated to Rutu versus Poko

	<i>b</i>	<i>t</i>	<i>p</i>
Bias Manipulation	-0.47	-0.21	.84
bias	1.24	1.00	.32
trustworthiness	-1.28	-0.76	.45
expertise	4.32	1.99	.05
liking	-2.39	-1.25	.22
credibility	0.88	0.45	.65
Rutu attitudes	3.22	2.53	.01

Study 4 Means, Standard Deviations and Covariance Matrix

	<i>M</i>	<i>SD</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>
1. Bias Manipulation	-0.01	1.00	1.01	0.62	-0.22	-0.21	0.01	-0.25	0.01	-0.01	-0.71
2. bias	4.80	1.94	0.62	3.77	-0.86	-0.95	-0.72	-1.13	-0.52	-0.21	0.51
3. trustworthiness	6.74	1.58	-0.22	-0.86	2.49	1.25	1.13	1.07	0.45	-0.33	0.60
4. expertise	6.11	1.44	-0.21	-0.95	1.25	2.08	1.27	1.31	0.36	-0.35	5.37
5. liking	5.62	1.46	0.01	-0.72	1.13	1.27	2.14	1.04	0.63	0.29	0.78
6. credibility	6.06	1.47	-0.25	-1.13	1.07	1.31	1.04	2.17	0.71	0.13	4.51
7. Rutu attitudes	5.62	1.75	0.01	-0.52	0.45	0.36	0.63	0.71	3.06	2.21	9.36
8. Rutu-Poko first	4.54	2.08	-0.01	-0.21	-0.33	-0.35	0.29	0.13	2.21	4.32	15.36
9. Rutu-Poko %	56.39	27.66	-0.71	0.51	0.60	5.37	0.78	4.51	9.36	15.36	765.08

Additional Study Demonstrating Effect of Bias on Credibility

In addition to the studies reported in the text, we had another study demonstrating the effect of bias on credibility. This study was designed to test the hypothesis that a (lack of) bias, in addition to expertise and trustworthiness, should contribute to perceptions of source credibility.

Method

Participants. Eighty-two Ohio State University undergraduate students participated in this study for course credit. One participant's data were excluded from analyses because the participant indicated that he or she did not read the description of the source (the primary manipulation in this study). This left 81 participants for analysis.

Design and Procedure. After consenting to participate in the study, participants were instructed to imagine that someone was trying to persuade them of the benefits of phosphate-based laundry detergents. Then they read that the source was biased or objective in his opinion of phosphate detergents. Participants reported how much they saw the source as credible, biased, trustworthy, and expert. In order to control for order effects, we manipulated whether credibility was measured before or after the constituent source perceptions. We also manipulated the order of the bias, trustworthiness, and expertise questions in a latin square (i.e., in BTE, ETB, and TEB orders). The order manipulations did not moderate the results ($ps > .20$). Finally, participants were thanked for their time and debriefed about the purpose of the study.

Perceptions of bias. In the biased condition, participants were told that Dr. Brown had the reputation of being quite biased and one-sided in his view of phosphate based detergents because his "personal investment in the product has motivated him to view the detergents more positively than they actually are." In the objective condition, participants were told that Dr. Brown had the reputation of being quite objective and open-minded in his view of phosphate-based detergents. His investment in the product "provided him with an even more objective view of phosphate detergents." Thus, we held constant Dr. Brown's involvement with the product, but manipulated how his involvement had affected his view of phosphate detergents. In order to fix perceptions of trustworthiness and expertise at high levels, in both conditions, participants were told that Dr. Brown was knowledgeable about phosphate detergents and had developed his company's newest line of detergents as well as that he honestly believes that phosphate detergents give the cleanest clothes possible.

Dependent measures.

Perceptions of bias and trustworthiness. In the current study, the measures of bias and trustworthiness contained the negated version of each characteristic (i.e., unbiased and untrustworthy). Otherwise, perceptions of bias and trustworthiness were measured the same as in Studies 1a & 1b, but referred to phosphate detergents as the relevant topic. The two bias items were correlated ($r = .51, p < .001$) and were averaged to create a composite index of source bias. The two trustworthiness items were correlated ($r = .56, p < .001$) and were averaged to create a composite index of source trustworthiness.

Perceptions of expertise. The expertise items were the same as the second two expertise items in Study 2 with two exceptions. First, we measured expertise in the negated form (inexpert). Second, the items referred to phosphate detergents rather than the university service program as the topic. The two items were correlated ($r = .37, p < .001$), and were averaged to create an overall index of perceived expertise. Despite the relatively low correlation between

these two items in the current study, these items were highly correlated in Study 2, as well as other studies conducted in our lab, but not reported in the current paper as they are not related to the focal hypotheses.

Perceptions of credibility. Perceptions of source credibility were measured with five items, each on nine-point scales. Participants were asked “How much would you see this person as a credible source?” (1 = *very non-credible*, 9 = *very credible*), “To what extent would you view this person as a credible source of information on this topic?” (1 = *very non-credible*, 9 = *very credible*), “To what extent would you view this person as a high quality source of information?” (1 = *very low quality*, 9 = *very high quality*), “How much would you see this person as a compelling source?” (1 = *very un-compelling*, 9 = *very compelling*), and “How much would you see the author as a reliable source?” (1 = *very unreliable*, 9 = *very reliable*). The five items were averaged to create an overall index of perceived credibility, $\alpha = .91$.

Results

Manipulation check. The biased source ($M = 6.62$, $SD = 1.62$) was viewed as significantly more biased than the objective source ($M = 4.63$, $SD = 1.78$), $t(79) = 5.29$, $p < .001$, $d = 1.19$.

Testing the effect of bias on credibility. The bias manipulation had a significant effect on perceived source credibility, with participants viewing the source as more credible in the unbiased condition ($M = 7.37$, $SD = 1.30$) compared to the biased condition ($M = 5.94$, $SD = 1.27$), $t(79) = -5.02$, $p < .001$, $d = -1.13$.

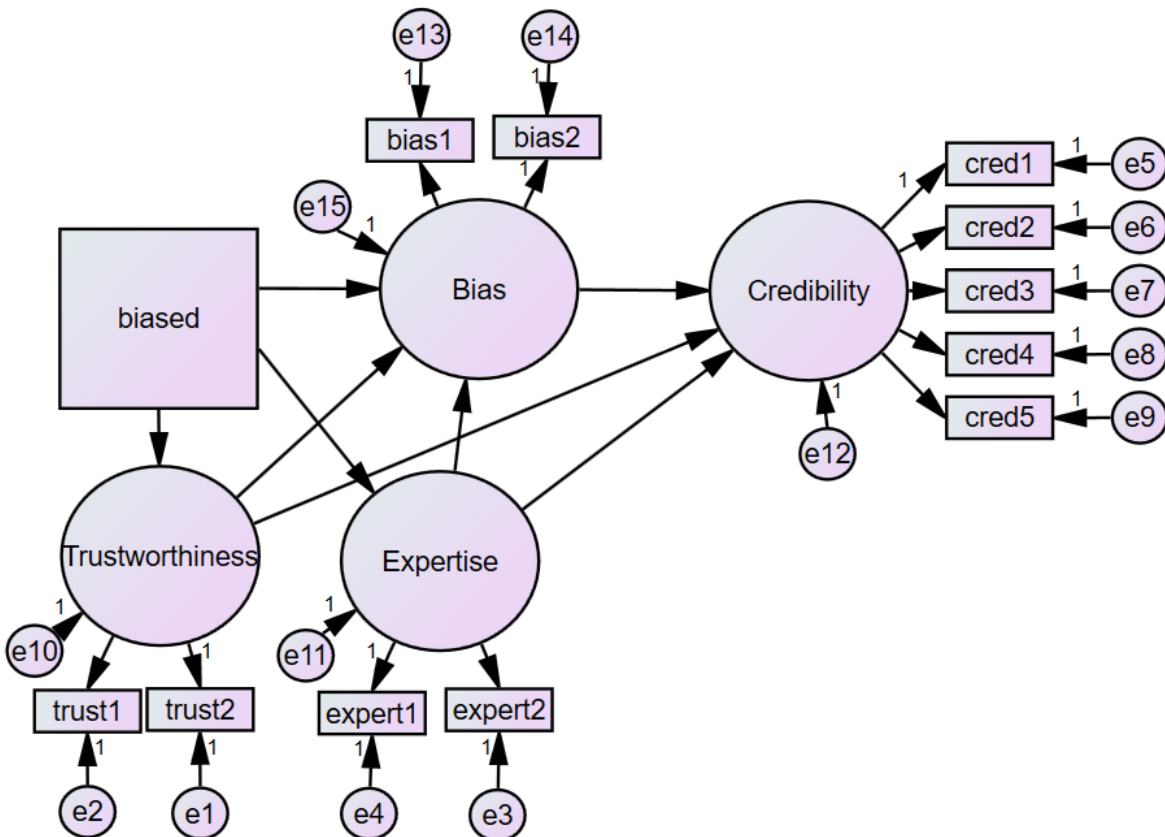
Parallel mediation. It is possible that bias had its effects through either expertise or trustworthiness or that contributions of trustworthiness and expertise to credibility would overwhelm the impact of bias. In order to test these possibilities, we conducted a parallel mediation model in which the bias manipulation could have had its effects on credibility through the perception of bias, trustworthiness, or expertise. As such, in separate regressions, we regressed bias, trustworthiness, and expertise on the bias manipulation. The bias manipulation had a significant effect on bias, $b = 1.00$, $t(79) = 5.29$, $p < .001$, 95% CI [.62, 1.37], $d = 1.19$, and trustworthiness, $b = -.53$, $t(79) = -3.31$, $p = .001$, 95% CI [-.85, -.21], $d = -.74$, but not expertise, $b = .03$, $t(77) = .15$, $p = .88$, 95% CI [-.34, .40], $d = .03$. We then regressed source credibility on the bias manipulation, and the measures of bias, trustworthiness, and expertise. Unexpectedly, the bias manipulation continued to affect credibility, $b = -.44$, $t(76) = -2.89$, $p = .005$, 95% CI [-.74, -.14], $d = .66$. The trustworthiness, $b = .20$, $t(76) = 1.90$, $p = .06$, 95% CI [-.01, .41], $d = .44$, and expertise, $b = .15$, $t(76) = 1.76$, $p = .08$, 95% CI [-.02, .32], $d = .40$, measures trended toward predicting credibility, whereas bias significantly predicted credibility, $b = -.18$, $t(76) = -2.15$, $p = .03$, 95% CI [-.34, -.01], $d = -.49$. When we used 10,000 Monte Carlo simulations to calculate indirect effects, there was a significant indirect effect through bias, 95% CI [-.37, -.01] and trustworthiness, 95% CI [-.26, -.0003], but not expertise, 95% CI [-.06, .07].

This study demonstrated that perceiving a source as biased negatively affects perceptions of source credibility. The fact that bias has an effect on source credibility above and beyond trustworthiness and expertise suggests that bias does indeed function as a third pillar of credibility.

Latent Variable Analyses for the Additional Study

In this analysis, we were interested in whether bias would contribute to credibility above and beyond trustworthiness and expertise. We conducted this latent variable analysis to parallel the regression analyses reported above, but control for measurement error.

We entered the bias manipulation as an observed exogenous variable. We also entered bias, trustworthiness, expertise, and credibility as latent endogenous variables with their indicators. In this model, the bias manipulation predicted bias, trustworthiness, and expertise. Trustworthiness and expertise also predicted bias. Finally, bias, trustworthiness, and expertise predicted credibility.



Results

Parameter estimates for each path are reported in the table below. Of most importance is that the bias manipulation significantly predicted bias, which significantly predicted credibility above and beyond any effects of trustworthiness and expertise. This parallels the results reported in the manuscript.

path		<i>estimate</i>	<i>standard error</i>	<i>critical ratio</i>	<i>p</i>
Bias	<--- Bias Manipulation	.623	.193	3.224	.001
Credibility	<--- Bias	-.651	.213	-3.052	.002

path		<i>estimate</i>	<i>standard error</i>	<i>critical ratio</i>	<i>p</i>
Bias	<--- Bias Manipulation	.623	.193	3.224	.001
Expertise	<--- Bias Manipulation	-.254	.187	-1.354	.176
Trustworthiness	<--- Bias Manipulation	-.402	.160	-2.519	.012
Bias	<--- Expertise	.004	.052	.076	.939
Bias	<--- Trustworthiness	-.740	.232	-3.192	.001
Credibility	<--- Expertise	.133	.171	.776	.438
Credibility	<--- Trustworthiness	-.076	.230	-.329	.742
bias1	<--- Bias	1.302	.249	5.224	<.001
bias2	<--- Bias	1			
expert1	<--- Expertise	1			
expert2	<--- Expertise	.324	.400	.810	.418
trust1	<--- Trustworthiness	1.893	.615	3.076	.002
trust2	<--- Trustworthiness	1			
cred1	<--- Credibility	1			
cred2	<--- Credibility	1.155	.122	9.462	<.001
cred3	<--- Credibility	1.080	.111	9.701	<.001
cred4	<--- Credibility	.971	.113	8.588	<.001
cred5	<--- Credibility	1.041	.150	6.960	<.001