Learning from Twins

Can marketers learn about consumers across the political divide by interacting with AI?

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Motivation

The Problem

Political polarization is high

- Marketers face ideologically diverse consumers
- Partisan misperceptions are widespread
- Can lead to ineffective marketing

Our approach

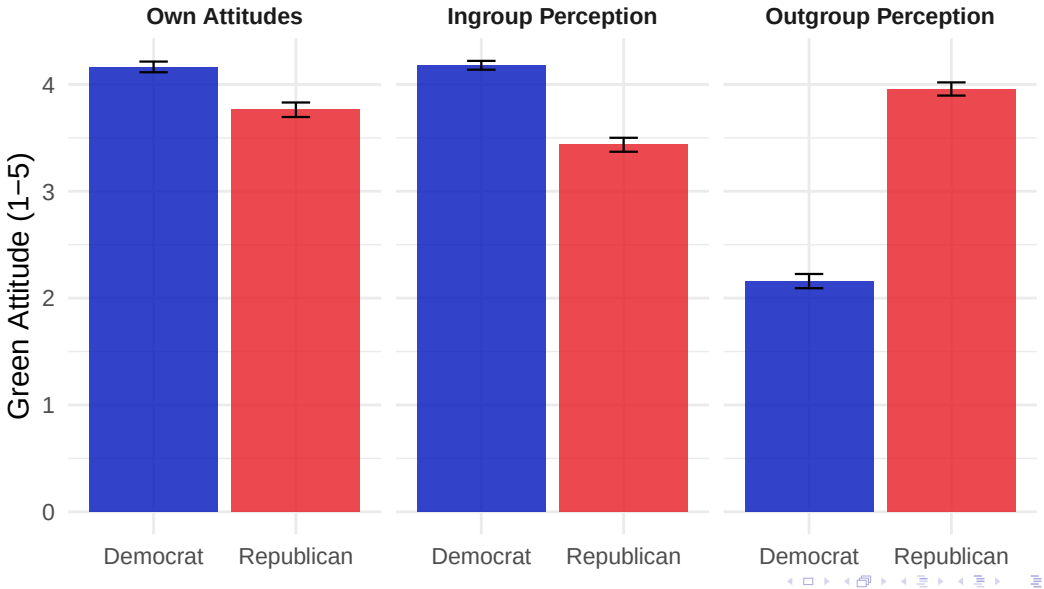
- Can AI chatbots reduce bias?
- Focus: environmental attitudes
- N = 474 participants

Research Questions

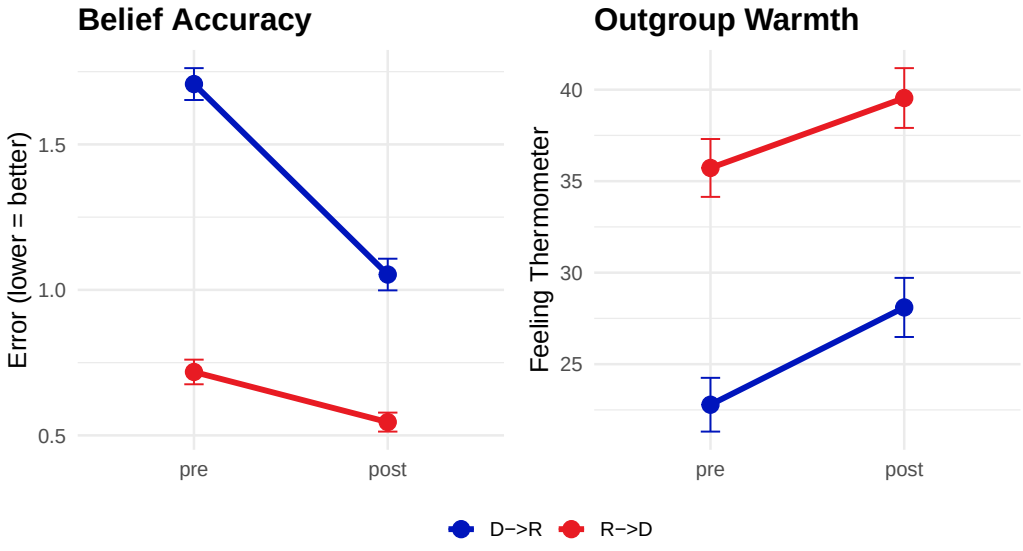
1. Do people update beliefs after chatbot interaction?
2. Is updating symmetric across political groups?
3. Do extreme partisans benefit equally?

Results

Baseline Bias



Main Effects: Pre to Post



Asymmetric Effects

Accuracy

- Democrats learning about Republicans: **0.65** point improvement***
- Republicans learning about Democrats: **0.17** point improvement***
- Democrats show larger gains

Warmth

- Both groups increase warmth
- No significant difference
- 4-5 degree increase on 100-point scale

Political Extremism

Baseline: More extreme partisans have greater bias ($b = 0.013$, $p < .001$)

Intervention: Political extremism does NOT moderate the effect ($p = 0.152$)

Even highly polarized individuals can learn from AI

What Predicts Learning?

Bot Informativeness predicts better accuracy (b = -0.101, p = 0.001)

Bot Empathy does NOT predict outcomes

Engagement (word count, turns) shows mixed results

Discussion

Key Findings

1. **AI chatbots can reduce partisan bias** — participants became more accurate and warmer
2. **Effects are asymmetric** — Democrats showed larger accuracy gains
3. **Works across extremism levels** — even highly polarized individuals benefit
4. **Informativeness matters** — perceived quality of information predicts learning

Limitations & Future Directions

Domain specificity

- Environmental attitudes may differ from other domains

Temporal dynamics

- Only immediate effects; durability unknown

AI vs. reality

- Does learning from AI transfer to real people?

Need comparisons

- How does this compare to perspective-taking, information search, etc.?

Implications for Practice

Scalable tool for marketers

- Cheaper than focus groups
- Accessible way to understand diverse consumers

Particularly valuable for

- Cross-partisan messaging
- Environmental/sustainable products
- Understanding outgroup preferences

Thank You

Questions?

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Appendix

Summary: All Regressions I

	Accuracy			Warmth		
	Accuracy (ME)	Accuracy (Int)	Accuracy (Ext)	Warmth (ME)	Warmth (Int)	Warmth (Ext)
Time (Post)	-0.417***	-0.655***	-0.748***	4.578***	5.317***	5.435***
	(0.040)	(0.054)	(0.176)	(0.551)	(0.773)	(1.450)
Learner Party (R→D)		-0.989***	-0.894***		12.939***	14.118*
		(0.067)	(0.195)		(2.228)	(6.217)
Political Extremism			0.009*			-0.418***
			(0.004)			(0.114)
Time × Learner Party		0.482***	0.777***		-1.496	-4.621*
		(0.077)	(0.226)		(1.101)	(1.865)
Time × Extremism			0.002			-0.003
			(0.004)			(0.034)
Party × Extremism			-0.002			-0.083
			(0.005)			(0.152)
Time × Party × Extremism			-0.008			0.087+
			(0.006)			(0.046)
Num.Obs.	948	948	948	948	948	1896

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

Summary: All Regressions II

	Accuracy			Warmth		
	Accuracy (ME)	Accuracy (Int)	Accuracy (Ext)	Warmth (ME)	Warmth (Int)	Warmth (Ext)
Time (Post)	−0.42***	−0.65***	−0.75***	4.58***	5.32***	5.43***
Learner Party (R→D)		−0.99***	−0.89***		12.94***	14.12*
Political Extremism			0.01*			−0.42***
Time × Learner Party		0.48***	0.78***		−1.50	−4.62*
Time × Extremism			0.00			0.00
Party × Extremism			0.00			−0.08
Time × Party × Extremism			−0.01			0.09+
Num.Obs.	948	948	948	948	948	1896