

# Truth, Trust, and Scientific Uncertainty

## Examining Trust in Experts, Mainstream and Counter-Mainstream Media Across the Pandemic

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After the CDC reversal to recommend mask-wearing, the relationship between trust in experts and mask-wearing switched from **negative** to **positive**, while the relationship between trust in Fox News and mask-wearing switched from **positive** to **negative**. This may reflect Fox's counter-mainstream positioning.

Trust in mainstream institutions such as the CDC and scientists has been on the decline since the beginning of the pandemic, which may be linked to less precautionary behavior.

This study examined trust in mainstream and counter-mainstream sources across the COVID-19 pandemic, and how that trust was related to precautionary health behaviors.

### Samples

**April 2020**  
Open-access dataset (Ballew et al., 2020; Goldberg et al., 2020)  
Drawn from a variety of research panels  
Census-matched on sex, race, age, education, income, region  
Divided into 3 datasets to examine trust before and after CDC mask recommendation.

**April 3:** N = 1744, 612 Democrat, 665 Republican  
**April 4:** N = 1682, 659 Democrat, 530 Republican  
**April 5-7:** N = 507, 227 Democrat, 100 Republican

**March 2021 & 2022**  
Recruited through CloudResearch.  
Separate samples collected on the first and second anniversary of the WHO pandemic declaration.

**March 11, 2021:** N = 798, 377 Democrat, 191 Republican  
**March 11, 2022:** N = 1227, 549 Democrat, 290 Republican

### Measures

**Trust Measures**  
How much do you trust [experts, CDC, Fox News, etc.] as a source on COVID-19?  
(strongly distrust, somewhat distrust, somewhat trust, strongly trust)

**Mask-Wearing**  
2020: How often in past 7 days? (0 to 10+)  
2021 & 2022: How often in past year? (0 = never to 10 = always)

**Distancing Behavior**  
2020: 5 items (yes/no)  
2021: 3 items (0 = never to 10 = always)  
2022: 4 items (0 = never to 10 = always)

**Vaccination**  
2021: Intend to receive the vaccine? (1 = definitely not to 4 = definitely) or already received vaccine? (yes/no)  
2022: How many doses? (unvaccinated, vaccinated, vaccinated + booster)

### Zero-Order Correlations

After the CDC announcement recommending mask-wearing, the relationship between trust in experts and mask-wearing switched from **negative** to **positive**, while the relationship between trust in Fox News and mask-wearing switched from **positive** to **negative**.

Trust in experts and the CDC were consistently **positively** related to distancing, while Fox News was typically **negatively** related.

Trust in mainstream national news was consistently **positively** related to mask wearing, distancing, vaccine dosage, and vaccine intentions.

		Trust and Health Behavior Over Time				
Trust Variable	Health Behavior	April 3 2020	April 4 2020	April 5-7 2020	2021	2022
Trust in Experts	Mask Wearing	-.09***	-.02	-.04	.40***	.45***
	Distancing Behavior	.28***	.23***	.28***	.41***	.35***
	Vaccine Dosage	—	—	—	.14***	.52***
Trust in CDC	Mask Wearing	-.06*	.02	-.002	—	—
	Distancing Behavior	.21***	.19***	.21***	—	—
	Vaccine Intentions	—	—	—	.58***	—
Trust in Fox News	Mask Wearing	.18***	.17***	.09	-.09*	-.18***
	Distancing Behavior	-.08***	-.04	.09	-.14***	-.12***
	Vaccine Dosage	—	—	—	-.02	-.22***
Trust in National News	Mask Wearing	—	—	—	-.25***	—
	Distancing Behavior	.12***	.15***	.12*	.32***	.45***
	Vaccine Dosage	.08***	.14***	.13**	.39***	.39***
Trust in National News	Vaccine Dosage	—	—	—	.13***	.46***
	Vaccine Intentions	—	—	—	.48***	—

\* p < .05, \*\* p < .01, \*\*\* p < .001

### Path Model

Democrats were consistently more trusting of mainstream national news, while Republicans were consistently more trusting of Fox News

Trust in national news consistently **positively** predicted trust in experts across all time points.

Trust in Fox News **negatively** predicted trust in experts at all time points except April 5-7, 2020.

Trust in experts **negatively** predicted mask wearing on April 3 and 4, 2020, showed no relationship on April 5-7, 2020, and **positively** predicted mask wearing in 2021 and 2022.

Both indirect effects were significant at all time points except April 5-7, 2020

