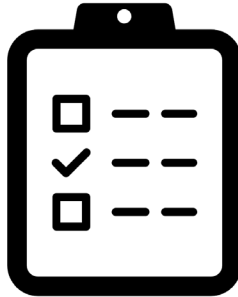
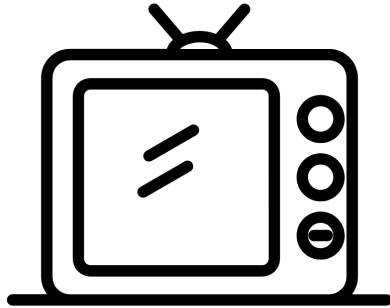


Countering the Anti-Science Movement

Evidence and Implications

Sarah Gollust, PhD Division of Health Policy & Management
[@sarahgollust](#)

My Research Approach



- News media content analysis
- Surveys of public opinion, media exposure, media effects
- Qualitative interviews with journalists, PR representatives, policymakers, scientists

Three Research Findings

1. Most policymakers want to base their decisions on evidence, but they face challenges in doing so
2. The public's views on the politicization of science are nuanced, and vary by issue area
3. There are consequences for policy support if the public's trust in science gets eroded

There are still bright spots!



1. Research findings: evidence-based policy

Use of Research Evidence in State Policymaking for Childhood Obesity Prevention in Minnesota AJPB 2014

Sarah E. Gollust, PhD, Hanna A. Kite, MPH, Sara J. Benning, MLS, Rachel A. Callanan, JD, MNM, Susan R. Weisman, JD, and Marilyn S. Nanney, PhD, MPH, RD

41% of legislative materials related to 13 obesity-related bills in MN cited research evidence

Majority of 51 legislators, agency staff, and advocates recognized the value of research evidence in supporting policy decision, educating the public, and countering ideological arguments

Using Obesity Research to Shape Obesity Policy in Minnesota: Stakeholder Insights and Feasibility of Recommendations JHPMP 2018

Judy Jou, PhD; Marilyn S. Nanney, PhD, RD; Elizabeth Walker, MPH; Rachel Callanan, JD; Susan Weisman, JD; Sarah E. Gollust, PhD

Mutual Distrust: Perspectives From Researchers and Policy Makers on the Research to Policy Gap in 2013 and Recommendations for the Future

INQUIRY: The Journal of Health Care Organization, Provision, and Financing
Volume 54: 1-11
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DOI: 10.1177/0046958017705465
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Majority of 40 state policymakers from around U.S. want to use research in decisions

Sarah E. Gollust, PhD¹, Jane W. Seymour, MPH², Maximilian J. Pany, BA³, Adeline Goss, MD⁴, Zachary F. Meisel, MD, MPH, MSHP⁵, and David Grande, MD, MPA⁵

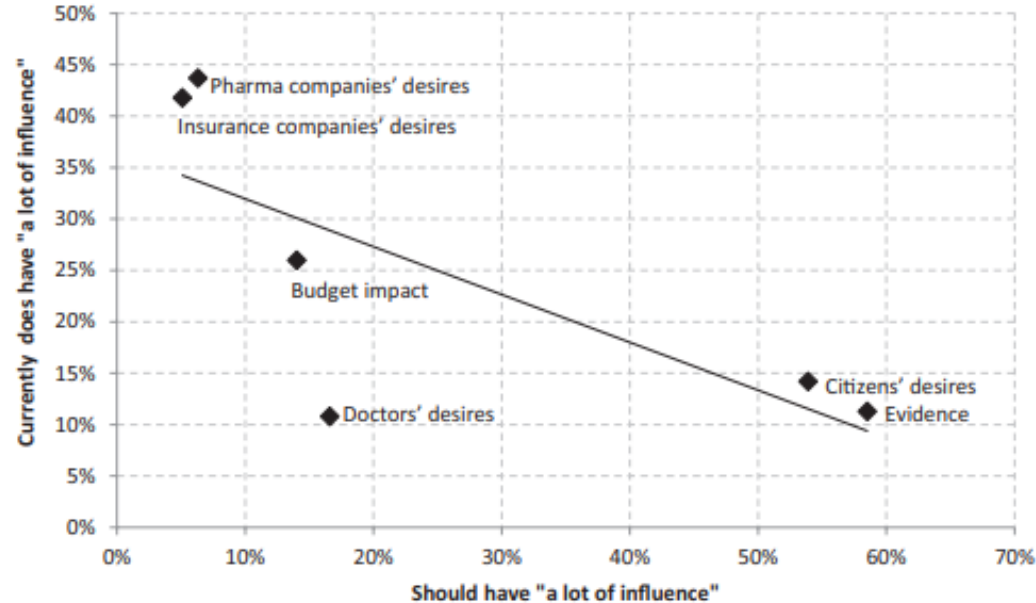
1. Research findings: evidence-based policy

- But state policymakers were not shy in expressing challenges:
 - Lack of time to find, understand, or engage with research
 - Cynical about “biased” science
 - Mistrust of research & research institutions

Most of the information that comes to legislators is not pure science data. It's typically biased, so you have to take the time to figure out who is publishing the article and what their agenda might be.

Who elected those institutions of higher education to do the research?
Who elected them to tell us what to do?

Bright Spot: Public perceptions of evidence in policy



59% believed evidence should influence policy, no differences by partisanship

Fig 1 | Percentage of respondents identifying each factor as something that should and currently does have "a lot of influence" on U.S. Congresspersons' health policy decisions. Spearman correlation coefficient = -0.841 , $p = .036$ (correlation between the percentage of respondents identifying each factor as something that should have "a lot of influence" on U.S. Congresspersons' health policy decisions and the percentage identifying the factor as something that does have "a lot of influence").

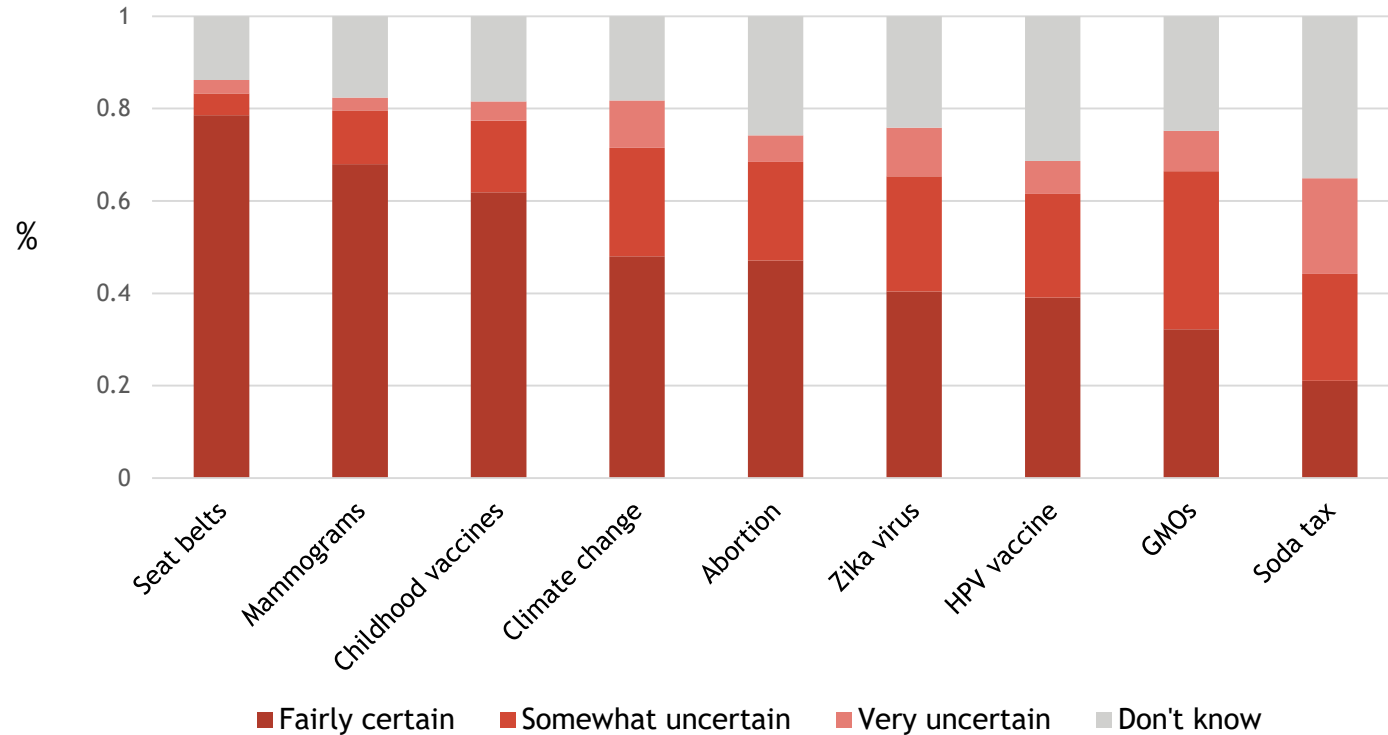
2. Research findings: Public's views on science politicization

- Related definitional concepts of “politicization”:
 - Strategic exaggeration of uncertainty of science
 - Scientific issues entering political discourse
 - Emphasis on controversy and debate

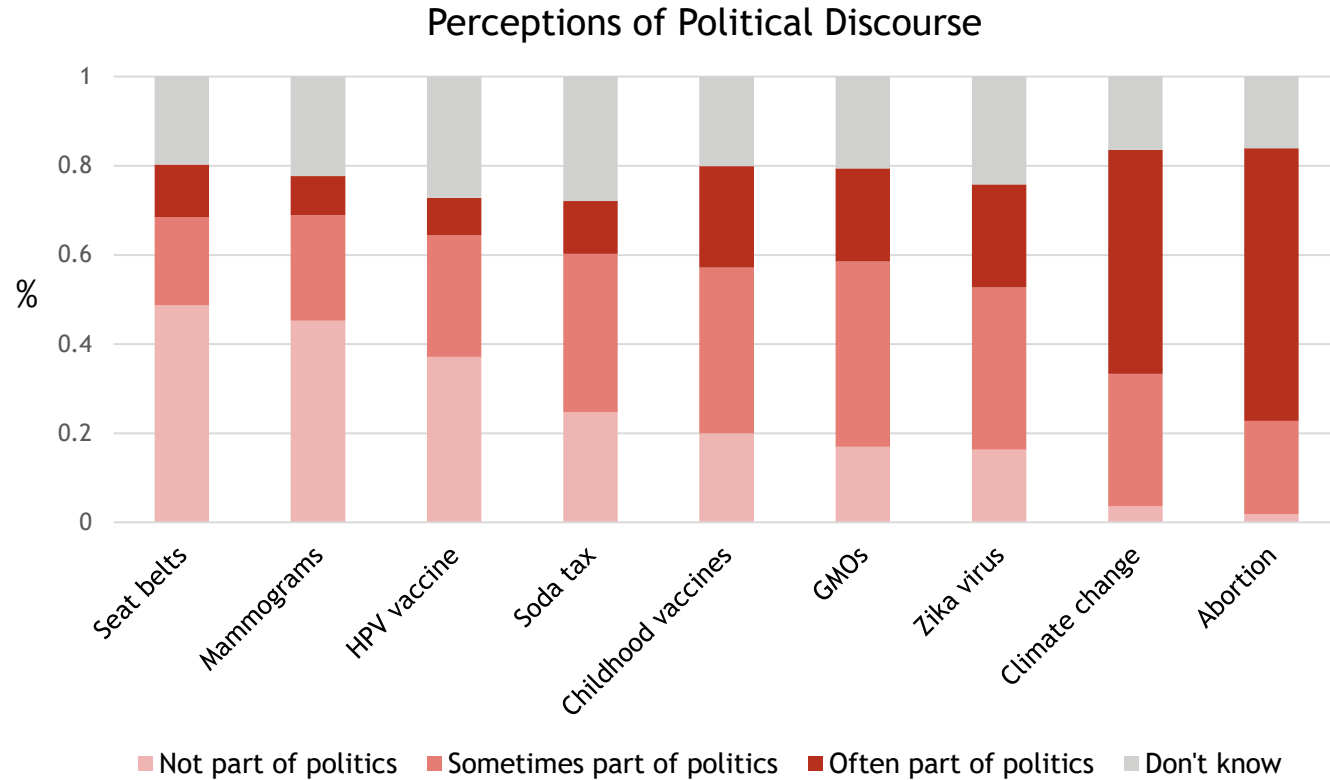
Fowler, Nagler, Gollust (2017) paper for Midwest Political Science Association

2. Research findings: Public's views on science politicization

Perceptions of Scientific Certainty



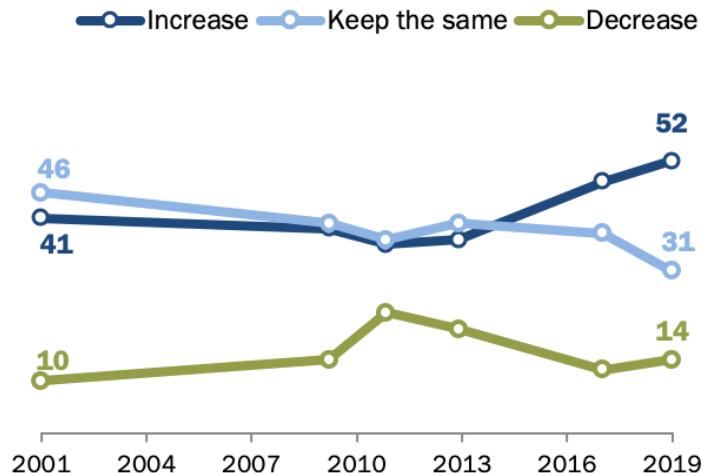
2. Research findings: Public's views on science politicization



Bright Spot: Public support of science

About half of Americans support more federal funding for scientific research

% of U.S. adults who say they would ___ federal spending for scientific research



62% of Democrats
40% of Republicans

Note: Respondents who did not give an answer are not shown.
Source: Survey conducted March 20-25, 2019.

3. Perceptions of scientific uncertainty have consequences

- **32%** of public perceives uncertainty in portrayal of the science of HPV vaccine
- Those who perceived more scientific uncertainty had significantly **lower support for policies** that would increase uptake of HPV vaccine, after adjusting for other factors

Perceptions of politicization and HPV vaccine policy support

Loren Saulsberry^{a,*}, Erika Franklin Fowler^b, Rebekah H. Nagler^c, Sarah E. Gollust^d

^a Department of Public Health Sciences, The University of Chicago, Chicago, IL, USA

^b Government Department, Wesleyan University, Middletown, CT, USA

^c Hubbard School of Journalism and Mass Communication, University of Minnesota, Minneapolis, MN, USA

^d Division of Health Policy and Management, School of Public Health, University of Minnesota, Minneapolis, MN, USA

Vaccine 2019

Bright Spot: Emerging collaborative research



Article

Using Experiments
to Correct
Misinformation
in Media

Emily K. Vraga

Science Communication
2017, Vol. 39(5) 621–645

RTI Press

Conference Proceedings

September 2019



Building and Maintaining Trust in Science:

Paths Forward for Innovations by Nonprofits and
Funding Organizations

Brian Southwell, Angelique (Angel) Hedberg, Christopher Krebs, and Stephanie Zevitas, Editors

Trust in Health Care

Bolstering Trust in Journalism Could Help When Trust in Medicine

D, MAPP¹; David Rousseau, MPH²; Gary Schwitzer^{3,4}

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Minnesota School of Public Health, Minneapolis

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Conclusion and Looking Forward

- Ongoing interdisciplinary & collaborative research:
 - Effectiveness of translating evidence into policy
 - Analysis of media coverage of public health issues
 - Effects of and buffers to politicization of science on the public



Questions and Discussion

Looking forward to the conversation!



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