



# Innovations in web-based public consultation

Is public opinion on genomics influenced by social feedback?

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# Norms Evolving in Response to Dilemmas (NERD)

- ◆ Context and motivation
- ◆ Survey I - Human health and genomics
  - Survey II (salmon)
  - Survey III (poplar)
- ◆ Results - social feedback

# Public participation and technological change

- ◆ Technology offers new solutions
- ◆ New options may challenge long held values
- ◆ Methods assuming stable norms fall short
- ◆ [www.yourviews.ubc.ca](http://www.yourviews.ubc.ca)

# NERD Design

- ◆ 12 questions increasing in technological, policy, ethical and social complexity
- ◆ Authoritative advisors offer information the public is unlikely to have
- ◆ Multiple choice answers and option to elaborate
- ◆ Web-based, easily accessible, large N



**Dr. Getwell**  
can answer your medical  
questions



**Rt. Hon. Funds**  
can speak to the public policy  
challenges



**Prof. Considerate**  
provides various ethical and  
religious perspectives



**Yes Advocate**  
reasons why you should say  
yes



**No Advocate**  
reasons why you should say  
no

## 1. Medical Research

### Facts:

A significant fraction of infant deaths in your country are known to be related to inherited disorders.

### Question: (1 of 12)

**Would you be in favour of a modest government research program to find a treatment for such disorders, which, if successful, could save an additional 5 infants for every 1000 live births?**

- a.Strong Yes
- b.Weak Yes
- c.Neutral
- d.Weak No
- e.Strong No
- f.Can't Answer

Should you be interested, please explain your answer: (500 character limit)

Next question



Rt. Hon. Funds

## Rt. Hon. Funds on medical research

While investing in medical research can be costly at the onset, and our country faces a limited health budget, the potential long term benefits can justify these initial investments. Advancements in medical and health research can arouse feelings of hope and optimism among the public, which can further stimulate the economy. Studies show that the public strongly be in favour of government funding of this sort of research.

[references: Bowdy, M. (2001). Public mandate prioritizes research as one key to better health, stronger economy and greater quality of life. Research America: An Alliance for Discoveries in Health. Alexandria, VA. 2004.

[www.researchamerica.org/media/releases/05\\_10\\_2001.html](http://www.researchamerica.org/media/releases/05_10_2001.html)]

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[Back to question](#)



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- d.Weak No
- e.Strong No
- f.Can't Answer

Should you be interested, please explain your answer: (500 character limit)

Next question

Percent figures show the proportion of your group that consulted each advisor.



**30%** **Dr. Getwell**  
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questions



**29%** **Rt. Hon. Funds**  
can speak to the public policy  
challenges



**29%** **Prof. Considerate**  
provides various ethical and  
religious perspectives



**24%** **Yes Advocate**  
reasons why you should say  
yes



**33%** **No Advocate**  
reasons why you should say  
no

## 1. Medical Research

### Facts:

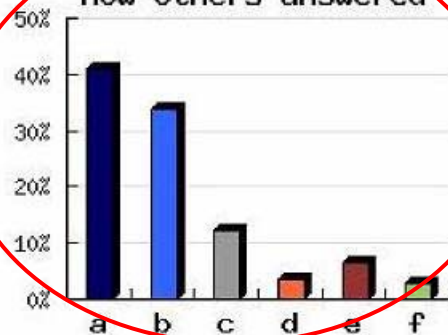
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How others answered



Should you be interested, please explain your answer: (500 character limit)

Next question

# How does social feedback effect participants responses?

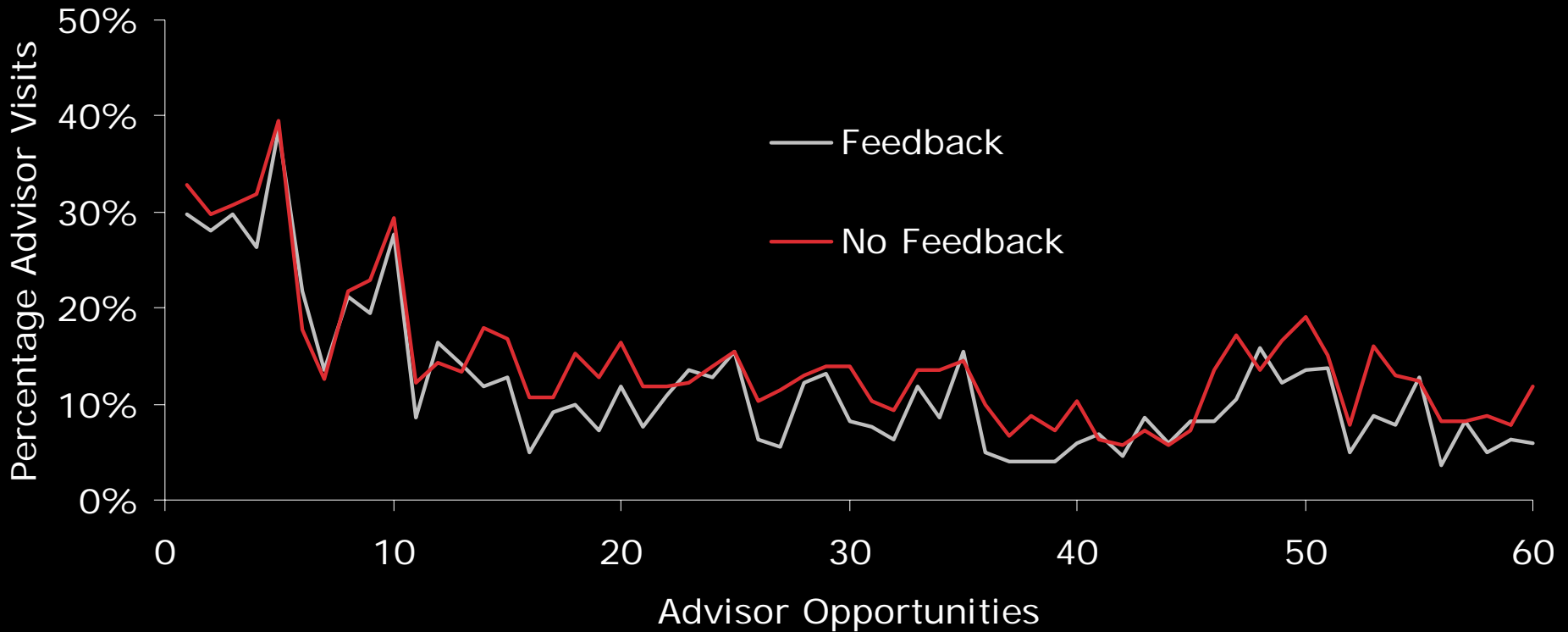
- ◆ Feedback impacts on
  - Answer means
  - Polarization
  - Advice seeking
  - Qualitative responses

# Conclusions

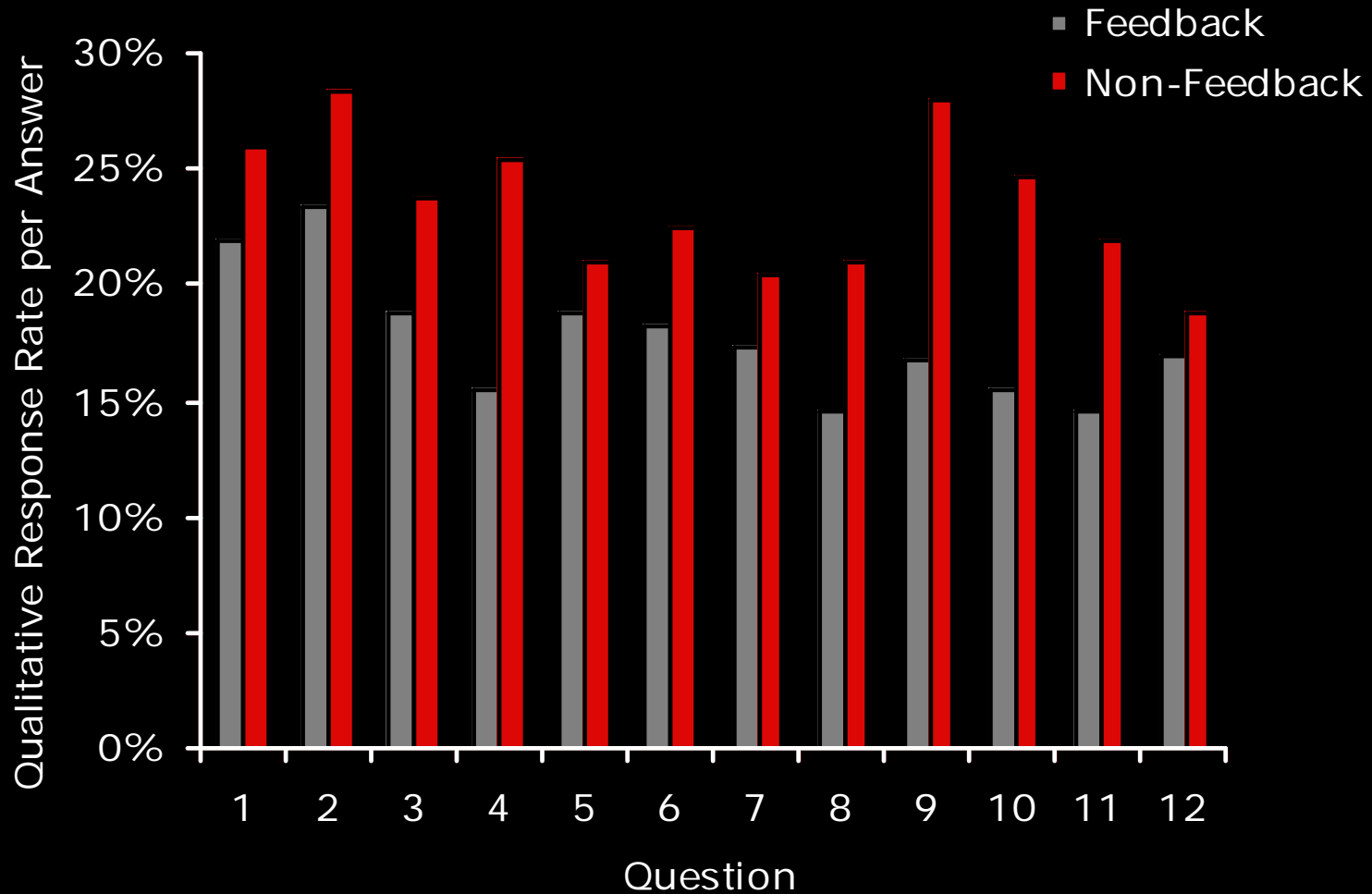
- ◆ Feedback impacts on
  - Answer means
    - Non-significant
    - Non-significant
    - Significant
      - Frequency ( $p < 0.01$ )
      - Time spent ( $p < 0.05$ )
  - Polarization
  - Advice seeking
  - Qualitative responses
    - Significant
      - Frequency ( $p < 0.01$ )
      - Length ( $p < 0.01$ )

Alpha = 0.05

# Advice-seeking, with and without feedback



# Qualitative responses, with and without feedback



# Acknowledgements

- ◆ Funding from Genome Canada, Genome British Columbia, and the U.S. National Science Foundation
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- ◆ Institute for Resources, Environment and Sustainability, UBC

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## Ongoing research:

- ◆ Clustering participants by answer pathway
  - 4 distinct clusters emerge
- ◆ Quantitative vs. qualitative data
  - *Why* do people answer the way they do?

Thank-you.



# Survey I: K-Means Clusters

