CS 8803 Social Computing: Polarization and Selective Exposure

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Assignment III

- Analysis and study of the location based social network Brightkite.

- One implementation question (compulsory)
- Two other implementation questions, alternatives are a design question and a literature review

- Due: 3:30pm November 24
- Grade: 10%
- Total points: 20

Echo Chambers Online?: Politically Motivated Selective Exposure among Internet News Users

Summary

- The paper performs a survey study to examine how online news reading affects opinion reinforcement
- 700 people were asked to read news on two news sites
  - Individuals more like to read news stories that reinforces their opinions than those which challenge them
- Important finding:
  - "Having decided to view a news story, evidence of an aversion to opinion challenges disappears: There is no evidence that individuals abandon news stories that contain information with which they disagree."
  - People don't actively seek to exclude information that challenges their opinions, unlike what popular knowledge indicated

Presenting Diverse Political Opinions: How and How Much

Summary

- The article presents a similar survey study to understand polarization and impact of selective exposure of political opinion
- Participants were presented with a mix of articles that reinforce and challenge their viewpoints
- Analyze participants' degree of satisfaction
- Findings:
  - Some people like to read diverse information, though this is small

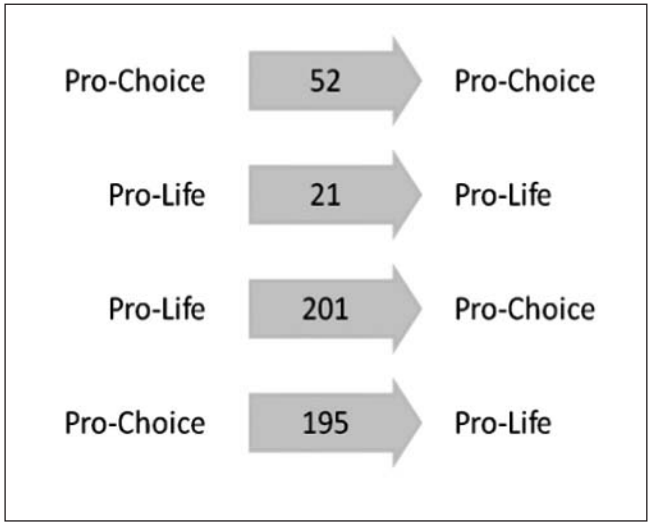
Dynamic Debates: An Analysis of Group Polarization Over Time on Twitter

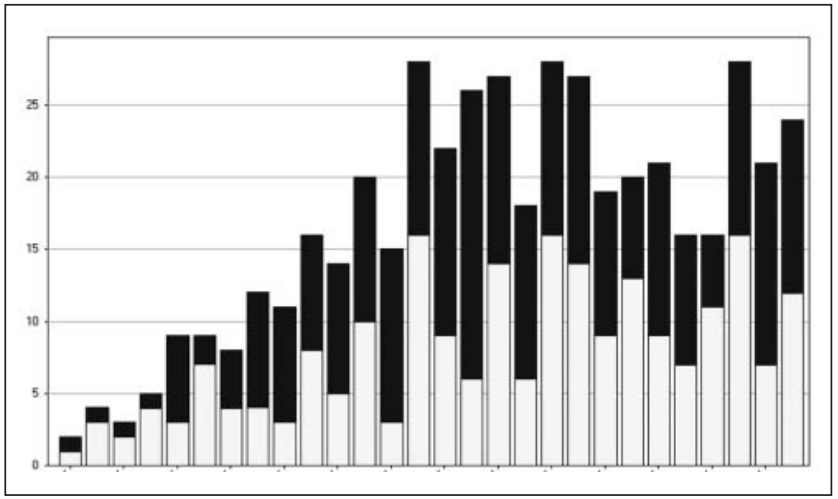
Summary

- The article analyses social participation on Twitter around exposure to like-minded and different minded opinions on the public timeline
- Analysis of #pro-life and #pro-choice advocacy in the context of Dr. Tiller's shooting and death – a late-term abortion doctor
- 30K tweets about the event and analysis of Twitter spanning next 60 days
- RQs:
  - How do people find and share news about the event?
  - What kinds of viewpoints are people exposed to and who do they share it with?
  - How do people respond to others who have differing viewpoints as well as to people who share the same viewpoints as their own?

Summary

- Findings:
  - Twitter indeed allows exposure to diverse view points unlike most communities which are built around encouraging homophily
  - Diversity of opinion negatively impacts the ability to engage in meaningful discourse





After all, polarization is bad. So should we abolish the idea of communities/groups in social computing systems?

In a prior reading, we read that communities with are close-knit tend to last for shorter time. Could you explain this with the theory on selective exposure?

Is algorithmic curation (aka Facebook's News Feed) making our online social spheres more polarized?

How would you tie tie strength with diversity of information exposure? For instance, Facebook being a network of mostly strong ties, does it imply more polarization?

Reading opinion-reinforcing content can have widespread impact on our perceptions what is real and what is fake. Could this impact our credibility perceptions? [Health myth example from last class]

Remember, humans have “agency”, so polarization should have something to do beyond just homophily and network structure. How would you incorporate a user’s intrinsic attributes to discourage polarized views of information?

If you were to design a new social computing system, such as the next “Twitter” or “Facebook”, how would you encourage diverse exposure?

Next class

- Monday 11/10
- Topic: “Trends and Forecasting”
- Assigned readings due by 11:59 pm Sunday