BUILDING A DATA-READY CULTURE

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Iowa State University
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COMMUNITY CATALYST WEBINAR SERIES OVERVIEW

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Dr. Mike Lambur

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OCTOBER 21, 2020
featuring
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NOVEMBER 4, 2020
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Dr. Shawn Dorius

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WHAT IS LIFE LIKE IN RURAL AMERICA?

GO TO WWW.MENTI.COM
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WHAT IS LIFE LIKE IN URBAN AMERICA?

GO TO WWW.MENTI.COM
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TODAY WE WILL EXPLORE HOW TO BUILD A DATA READY CULTURE:

1. WHAT IS A DATA READY CULTURE?

2. WHAT IS PLACE BIAS? WHERE DOES IT COME FROM? AND WHY SHOULD IT MATTER TO YOU?

3. HOW CAN EXTENSION PROMOTE A MORE EQUITABLE DATA READY CULTURE?
   - HOW CAN YOU DETECT BIAS?
   - HOW CAN YOU CORRECT BIAS?
• Data are powerful, both for good and for bad

• Communities can use their own data to chart their own, unique path (CLD3)

• Place-based bias limits opportunities for many rural communities

• We need new and better ways to measure and talk about rural places to reduce place bias
• When we search for information using a web browser (e.g. Google or Firefox), the results are determined by algorithms.

• Algorithms are bits of code...a program...designed to help us find what we’re looking for. They are based on:
  • Prior search history
  • Search histories of people like us

• Search results reveal hidden biases, assumptions, and unchecked stereotypes about people and places.
When people search for information about rural & urban places this is what they see
What is life like in Google’s rural America?
What is life like in Google’s **urban** America?
When people search for information about places, what they ask tells how they think
Oregon

- why is oregon so
- why is oregon so weird
- why is oregon so expensive
- why is oregon so beautiful
- why is oregon so dry
- why is oregon so foggy
- why is oregon so cold
- why is oregon so poor
- why is oregon so cheap
- why is oregon so hot right now
- why is oregon so green

Iowa

- why is iowa so
- why is iowa so humid
- why is iowa so boring
- why is iowa so flat
- why is iowa soil so good
- why is iowa caucus so important
- why is iowa so windy
- why is iowa and new hampshire so important
- why is iowa so important in the presidential nomination process
- why is iowa so important in elections
- why is iowa so important in politics
We collected the top-10 English language terms about every country of the world. We collected these data as though the searches were coming from each country, about every country.

What happens when you search for countries?

- We collected the top-10 English language terms about every country of the world.
- We collected these data as though the searches were coming from each country, about every country.

FIGURE 1. Measuring national and developmental perceptions in Google search data.

A Developmental Worldview

The less we know about a place, the more negatively we perceive it.

The less developed a place, the more negatively we perceive it.

What might this mean for how people view rural places in the US?
How Implicit Attitudes (Bias) Work

<table>
<thead>
<tr>
<th>Attitudes in Theory</th>
<th>Attitudes in Practice</th>
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</thead>
<tbody>
<tr>
<td><strong>COGNITIVE:</strong></td>
<td><strong>COGNITIVE:</strong></td>
</tr>
<tr>
<td>What we <em>think</em> about someone or something</td>
<td>I think people are poor because they are lazy</td>
</tr>
<tr>
<td><strong>AFFECTIVE:</strong></td>
<td><strong>AFFECTIVE:</strong></td>
</tr>
<tr>
<td>How we <em>feel</em> about someone or something</td>
<td>Poor people disgust me</td>
</tr>
<tr>
<td><strong>BEHAVIORAL:</strong></td>
<td><strong>BEHAVIORAL:</strong></td>
</tr>
<tr>
<td>What we (intend to) <em>do</em> to someone or something</td>
<td>I’m not going to administer the program in Poor Town because it will only reward bad behavior.</td>
</tr>
</tbody>
</table>
Do Place-based Biases Impact Your Work?

- People have well-developed perceptions of places
- Often highly stylized and stereotypical beliefs about urban and rural places
- Beliefs shape actions
- Place-based bias lives in the shadow of more visible biases

Place Bias and Extension:

1. Extension programming is largely place-based
2. Extension professionals, and the people they serve, are not immune to the effects of and exposure to place-based stereotyping
Place Bias in Extension Culture

It is difficult to change place bias, but a good starting place is to recognize it exists and be aware of our preferences, attitudes, and stereotypes about places and the people that live there.

Where do we start?

We can start with data

- Measure for presence of bias
- Both anti-rural and anti-urban (cosmopolitan)
- Correct for bias in our teams and in our data
PLACE-BASED BIAS IN DATA
CASE STUDY #1
When Resources Matter: Identifying Recovery Ready Communities

- Community resources significantly predict substance use recovery
- We collected data on 17 different types of resources for every community in Iowa
- Over 15,000 individual resources were mapped and analyzed to identify Recovery Ready Communities in Iowa
Mapping recovery resources helped us to identify recovery hotspots & recovery infrastructure deserts.

Larger circles identify larger number of total resources.

But this approach favors large and populous cities.
Tips for Correcting for Place Bias in Research

1. Include rural places in your sample

2. Use many different measures to capture strengths & assets of various groups and places

3. Adjust data for population size (e.g. per capita)

Result: Rural places were better represented. Initially, just 7 of 30 communities selected were small towns (populations of less than 15,000). After adjustment, 13 of 30 communities selected were small towns.
QUESTION BREAK WITH LINDSEY & SHAWN
PLACE-BASED BIAS IN THE WORKPLACE

CASE STUDY #2
We asked teams...

We measured top-of-mind associations about rural places among students in a data science training program.
How can a data scientist help rural communities?

Responses point to a collaborative, partner-oriented approach to community engagement (e.g. appreciative inquiry).
What is life like in rural America?

Strong evidence of developmentalist thinking worldview when answering this question.
What is the worst thing about living in rural America?

Deficit-based orientation toward rural places. Focus on what is missing or deficient in rural places.
Tips for Correcting for Place Bias in the Workplace

1. Embed opportunities in your workplace to become aware of bias.

2. Discuss how bias might impact your outreach, study design, analysis, or results. Then keep discussing!

3. Employ strategies to break the habit of bias, such as:
   - Individuation
   - Perspective taking
   - Counter-stereotypic imaging

Result: After perspective-taking discussion, students committed to explore asset-based approaches to data collection and analysis during their data science internship (e.g., Community Capitals + health resources).
WHAT IS LIFE LIKE IN RURAL AMERICA?

LET’S LOOK AT YOUR DATA
QUESTION BREAK WITH LINDSEY & SHAWN
Conclusions and Wrap-up

• Be aware of your own biases.
• Be intentional about minimizing their harmful effects on others (wear a mask).
• Be aware of bias in your teams.
• Be aware of bias in your data.
• Correct for bias in your teams and data as a conscious part of your work.

Risk is that we perpetuate and acerbate tired old stereotypes about urban and rural places.

Build a data ready culture for community work.

• Be aware of your own place-based biases, the biases of your teams, and the biases in your data (this is an ongoing and iterative effort).
• Be intentional about minimizing the harmful effects of these biases on others.

GOAL

Better support the communities we live, learn, and work in by reducing place-based biases.

VISION

• Build a data ready culture for community work.
• Be aware of your own place-based biases, the biases of your teams, and the biases in your data (this is an ongoing and iterative effort).
• Be intentional about minimizing the harmful effects of these biases on others.

GOAL

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QUESTIONS?

WE APPRECIATE THE OPPORTUNITY TO TALK WITH YOU ABOUT BUILDING A DATA-READY CULTURE FOR EXTENSION!

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