

Communicating Research Results to Media and Policy Audiences

Mathew E. Hauer, Ph.D.

Applied Demography Program
University of Georgia

Key Take Away

Presentations

<u>Publications</u>

K.I.S.S.

The title says it all

• Keep It Simple, Stupid

Keep It Simple, Stupid

Table 2. Multivariate Analysis for Red, White, and Processed Meat Intake and Total and Cause-Specific Mortality in Men in the Na., pal Institutes of Health–AARP Diet and Health Study^a

| Mortality in Men | Quintile | | | | | | |
|---------------------------------------|---------------|------------------|-------------------|------------------|------------------|-------------------|--|
| (n=322 263) | Q1 | Q2 Q3 | | Q4 | Q5 | P Value for Trend | |
| | | Red Meat Int | take ^b | | | | |
| All mortality | | | | | | | |
| Deaths | 137 | 7835 | 9366 | 10 988 | 13350 | | |
| Basic model ^c | 1 [Refere. 9] | 1.07 (1.03-1.10) | 1.17 (1.13-1.2) | 1.27 (1.23-1.31) | 1.48 (1.43-1.52) | <.001 | |
| Adjusted model ^d | 1 [Reference] | 1.06 (1.03-1.10) | 1.14 (1 1 1.18) | 1.21 (1.17-1.25) | 1.31 (1.27-1.35) | <.001 | |
| Cancer mortality | | | | | | | |
| Deaths | 2136 | 2, 4 | 3309 | 3839 | 4448 | | |
| Basic model ^c | 1 [Reference] | 1.10 (1.04- | 1.23 (1.16-1.29) | 1.31 (1.24-1.39) | 1.44 (1.37-1.52) | <.001 | |
| Adjusted model ^d | 1 [Reference] | 1.05 (0 5-1.11) | 1.13 (1.07-1.20) | 1.18 (1.12-1.25) | 1.22 (1.16-1.29) | <.001 | |
| CVD mortality | | | | | | | |
| Deaths | 1997 | 2304 | 21. | 3256 | 3961 | | |
| Basic model ^c | 1 [Refere ce] | 1.02 (0.96-1.08) | 1.10 (1.04-1 | 1.24 (1.17-1.31) | 1.44 (1.37-1.52) | < .001 | |
| Adjusted modeld | 1 [Pinerence] | 0.99 (0.96-1.09) | 1.08 (1.02-1.15) | 18 (1.12-1.26) | 1.27 (1.20-1.35) | <.001 | |
| Mortality from injuries and sudden of | deaths | | | 130 | | | |
| Deaths | 184 | 216 | 228 | 20. | 343 | | |
| Basic model ^c | 1 [Reference] | 1.02 (0.84-1.24) | 0.97 (0.80-1.18) | 1.09 (0.90-1.3. | 1.24 (1.03-1.49) | .01 | |
| Adjusted model ^d | 1 [Reference] | 1.06 (0.86-1.29) | 1.01 (0.83-1.24) | 1.14 (0.94-1.39) | 26 (1.04-1.54) | .008 | |
| All other deaths | | | | | | | |
| Deaths | 1268 | 1636 | 1971 | 2239 | 2962 | | |
| Basic mael ^c | 1 [Reference] | 1.13 (1.05-1.22) | 1.25 (1.17-1.35) | 1.33 (1.24-1.42) | 1.68 (1.57-1.86) | <.001 | |
| Ad sted modeld | 1 [Reference] | 1.17 (1.09-1.26) | 1.28 (1.19-1.38) | 1.34 (1.25-1.44) | 1.58 (1.47-1.70) | - 001 | |

Enrollment Patterns

- Created a unique sequence to describe 18 semesters 6 years of enrollment information. For example:
 - E = Enrolled Undergraduate Student
 - T = Transient Undergraduate Student
 - R = Inter-System Undergraduate Transfer (Out of System)
 - A = Intra-System Undergraduate Transfer (Within the System)
 - C = Co-Enrolled Students
 - G = Graduated with Highest Degree
 - --- = No Enrollment Records
- EE-EE-EE-EEGGGGGGG ← 4 year graduation, no summers
- EE-AE-EEEEEGGGGGG ← Intra-system transfer in 2nd fall, 4.5 year graduation
- Sample: 396,915 students who enrolled in between 2003—2008.





Successful Paths to Graduation

 Top 5 paths to graduation (approx. 37% of 4 to 5 year graduates)

EE-EE-EE-EE-EGGGGG
EE-EEEEEEEEEEGGGGG
EE-EE-EEEEEEEGGGGG
EE-EE-EEEEEEGGGGG
EE-EE-EEEEEEGGGGG

Traditional student enrollment pattern

After freshman year enrolled until graduation

No breaks – enrolled to graduation

After sophomore year enrolled to graduation

Traditional but stay enrolled after 4th year





Enrollment Patterns: Top Paths to Graduation

Top 20 Paths to Graduation by Term - All Students Regardless of Starting Semester or Degree Program

| 4 yrs | | 4 yrs + 1 term | | 4 yrs + 2 terms | | 5 yrs | | |
|-----------|------------------------|----------------|------------------------|-----------------|------------------------|----------|------------------------|----------|
| | Term 12 | Students | Term 13 | Students | Term 14 | Students | Term 15 | Students |
| | EE-EEEEEEEGGGGGGG | 4,972 | EEEEEEEEEEGGGGG | 1,647 | EE-EE-EE-EGGGGG | 1,545 | EE-EE-EE-EEGGGG | 1,690 |
| | EE-EE-EE-GGGGGGG | 4,512 | EE-EEEEEEEGGGGGG | 1,187 | EE-EEEEEEEEGGGGG | 1,471 | EE-EE-EE-EEEEGGGG | 1,266 |
| | EE-EE-EEEEGGGGGGG | 4,335 | EE-EE-EEEEEGGGGGG | 1,113 | EEEEEEEEEEEGGGGG | 1,448 | EE-EE-EEEEEEEGGGG | 1,165 |
| | EEEEEEEEEGGGGGG | 4,100 | EE-EE-EE-EEGGGGGG | 748 | EE-EE-EEEEEEGGGGG | 1,302 | EE-EEEEEEEEEGGGG | 1,135 |
| | EE-EEEE-EEGGGGGG | 2,614 | EE-EEEE-EEEGGGGG | 389 | EE-EE-EE-EEEGGGGG | 1,190 | EEEEEEEEEEEGGGG | 1,097 |
| | EEEEE-EEEEEGGGGGGG | 1,336 | EEEEE-EEEEEGGGGGG | 315 | EE-EEEEEEE-EGGGGG | 834 | EE-EE-EEEE-EEGGGG | 675 |
| | EEEEEEE-EEGGGGGG | 1,263 | EEE-EEEEEEEGGGGGG | 279 | EE-EE-EEEEE-EGGGGG | 817 | EE-EEEE-EEEEGGGG | 573 |
| | EEEEE-EE-EEGGGGGGG | 907 | EEEEEEE-EEEGGGGG | 203 | EE-EEEE-EE-EGGGGG | 589 | EE-EEEEEEE-EEGGGG | 494 |
| | EETEEEEEEEGGGGGG | 892 | EEEEEEEE-EEGGGGG | 184 | EE-EEEE-EEEEGGGGG | 542 | EE-EEEE-EE-EEGGGG | 491 |
| | EETEE-EEEEEGGGGGG | 523 | EEEEEE-EEEEGGGGGG | 178 | EEEEEEEEEE-EGGGGG | 528 | EEEEE-EEEEEEEGGGG | 428 |
| | EETEEEE-EEGGGGGG | 425 | EEE-EE-EEEEEGGGGGG | 169 | EEEEE-EEEEEEGGGGG | 480 | EEEEEEE-EEEEGGGG | 368 |
| | EE-EETEEEEGGGGGGG | 339 | EETEEEEEEEEGGGGG | 159 | EEEEEEE-EEEEGGGGG | 343 | EEEEEEEEEEE-EEGGGG | 340 |
| \ | EEEEEAEEEEGGGGGG | 302 | EEE-EEEEE-EEGGGGGG | 134 | EEEEEEEE-EE-EGGGGG | 293 | EEEEE-EE-EEGGGG | 312 |
| \rangle | EETEE-EE-EEGGGGGG | 293 | EEEEEAEEEEGGGGGG | 133 | EEEEE-EEEEE-EGGGGG | 283 | EEEEE-EE-EEEEGGGG | 272 |
| | EEEEE-AEEEEGGGGGG | 260 | EEEEE-EE-EEEGGGGGG | 130 | EEEEE-EE-EEEEGGGGG | 280 | EEEEEEEE-EE-EEGGGG | 247 |
| | EE-AEEEEEEGGGGGG | 239 | EEE-EE-EEGGGGGG | 126 | EEEEE-EE-EEGGGGG | 271 | EEEEE-EEEEE-EEGGGG | 206 |
| | EETEETEEEEGGGGGG | 218 | EE-EE-AEEEEEGGGGG | 106 | EE-EE-AEEEEEGGGGG | 175 | EE-EE-AE-EE-EEGGGG | 202 |
| | EE-EE-AEEEEGGGGGG | 197 | EEEEEE-EE-EEGGGGGG | 105 | EETEEEEEEEEGGGGG | 174 | EE-EE-AE-EEEEEGGGG | 187 |
| | EEEEEAEEEEEGGGGGG | 173 | EEEEEEEEEE-GGGGG | 99 | EEEEEAEEEEEGGGGG | 124 | EE-EE-AEEEEEEGGGG | 185 |
| | EE-EETEE-EEGGGGGG | 171 | EEEEE-AEEEEEGGGGGG | 94 | EEEEE-AEEEEEGGGGG | 120 | EE-EE-AEEEEGGGG | 135 |
| | Other graduation paths | 7,369 | Other graduation paths | 5,467 | Other graduation paths | 10,546 | Other graduation paths | 12,686 |
| TE | Total Graduates | 35,440 | | 12,965 | | 23,355 | | 24,154 |



Using data to support students to graduation

Enrollment Pattern Analysis

- Analyzed nearly 400,000 student records
- Created unique 18 character string representing 18 semesters or 6 years of enrollment
- More than 20,000 different unique paths to graduation within 6 years







Using data to support students to graduation

- Most common paths to graduation:
 - Traditional student enrollment pattern
 - No breaks enrolled continuously to graduation
 - Start as a traditional student and then transitions to a continuously enrolled student until graduation
- Many students who graduated in four years took at least one class at another institution as a transient student







MONITOR.

onment Technology Science Culture

ENVIRONMENT

Six Feet 01 13.1 Millio



News Home

CLIMATE CHANGE

See How Y Rising Sea



Millions in US a Study

Sea Level Rise and Polar Melting

Millions projected to be at risk from sea-level rise in the continental United States, Nature Climate Change — Hauer, Evans, and Mishra

This study estimates that three to six feet of sea level rise will inundate between 4.2 and 13.1 million Americans by the end of the century. Most estimates of future sea level rise impacts assume the same number of people will live on our coasts in the future as there are today, which ignores the trend of people moving to our coastlines. This study projects how many more people might move into coastal areas and put themselves at risk (unless we deter people from doing so). There are a multitude of sea level rise studies, none of which give good news, just varying degrees of how bad it could be. This one's no different, but gives us a clearer picture of why we need to do things differently... very differently.

Takeaway: The ocean's getting higher and it's riskier to live on the coast...so why do so many people still want to live there? Go there for the beach and stay for the...well, um...don't stay.

million

2 maya

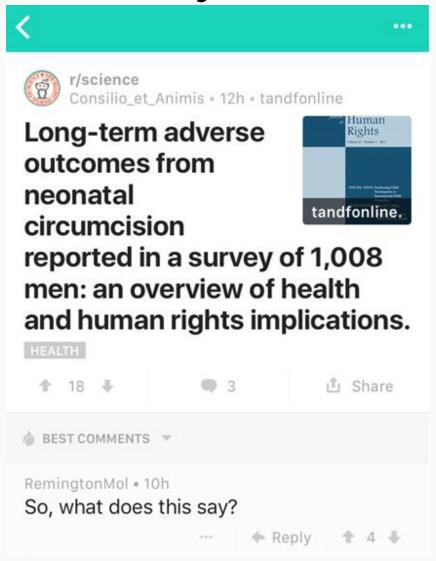
E EDUCATE EV

CATE EVENTS

Investigating Sea Level Rise on a Local Level

Millions projected to be at risk from sea-level rise in the continental United States

- 270+ news articles
- 37 interviews
- 21st most discussed article published on Climate Change in 2016
- 172nd most discussed article out of 277,000+ scientific articles



Medical error—the third leading cause of death in the US



Meeting the Sustainable Development Goals leads to lower world population growth



World population stabilization unlikely this century



Heat stress increases long-term human migration in rural Pakistan

NATURE CLIMATE CHANGE

Mashable -

Soa lovol rico could cond U.S. 'climate

NATURE CLIMATE CHANGE | LETTER

Migratian induced



Greater New Orleans

Rising sea to displace study says; see where



BIG JOURNALISM

BIG HOLLYWOOD

ish some U.S.

r from coast

Australia Femail Health Scien

THE OFFICIAL BREITBART STORE

New Simulati Predict the U States' Comi Climate Change Mass Migration

Sea level rise to trigger human migration, reshape inland cities

As sea levels rise, where will all the people go?

Climate change could do a number on inland cities



Key Take Away

Presentations

<u>Publications</u>

K.I.S.S.

The title says it all

• Keep It Simple, Stupid