When a Pedestrian or Bicyclist Dies, do the Media Cover it, and what do they say?

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INTRODUCTION & BACKGROUND

Policy narratives, defined as value-laden, stories, images, and metaphors,

- Exert a powerful influence on policy decision-making
- Scientific knowledge and expertise does not always influence what happens on the streets of local

RESEARCH QUESTIONS

To identify the factors that influence the characterization within a policy narrative of the vulnerable road user in a crash as a victim or villain

To assess and classify the policy narratives present in a random sample of 12 states from four regions for the period 2003-2015.

To test the statistical association between the policy narratives that emerge and the policy tools and infrastructure improvements used in 12 randomly selected states

To determine the rate of crash reporting based on a percentage of the total bicyclist and pedestrian fatalities

LITERATURE REVIEW

Policy Narratives - (Roe, 1994; Shanahan, McBeth, & Hathaway, 2011)

Policy narratives are constructed stories about an issue or event

A beginning, middle, and end

A sequence of events and positions

Characters, plots and causal relationships

Narratives that blame bicyclists and pedestrians for not behaving appropriately, i.e., not taking safety precautions or causing crashes, do much more than tell a story

Define the problem

Fault of the non-motorized party

Motorist behavior or the transportation infrastructure blameless

LITERATURE REVIEW CON'T

Policy Tools

Several instruments, or policy tools, to create healthy, livable transportation environments that support bicyclists, pedestrians and motorists

Improve the safety of transportation infrastructure

Improve motorist behavior

METHODOLOGY

MEDIA CRASH REPORTING RATE

NARRATIVE ANALYSIS

Most prevalent frame is episodic

Media reports primarily focus on the specific crash of either a bicyclist or pedestrian

This analysis suggests that narrative frames of victim/villain may have limited impact on policy changes in conservative states

Narratives	Articles Coded	% of Total
Victim	464	60%
Villain	220	28%
Neutral	92	12%
Total	776	100%

INFRASTRUCTURE ANALYSIS

Infrastructure changes at crash locations after the crash

Focuses on crashes occurring at intersections due to more reliable location data in the article

Bicyclist and pedestrian crashes happen at about 800 locations but only137 locations can be located using the media accounts

Scored using Google map historical images

Infrastructure changes

- 17.9 % of locations with bicyclist crashes
- 18.4 % of pedestrian crash locations
- 28.5 % of total crashes

POLICY ANALYSIS CON'T

Pedestrian policies directed at the drivers. However, some state policies are directed to pedestrians

All states have a pedestrian right of way statute in place; pedestrian has the right of way

Crosswalk

Sidewalks

Pedestrians must follow pedestrian control signals

Each state explicitly states that a pedestrian cannot leave the curb suddenly and prevent a motorist from stopping

Overall transportation policy changes relevant for bicyclists and pedestrians for each state.

Variations in the local level transportation policies especially between urban and rural areas will exist

Policy Changes	Count	% Count
Change	46	6%
No Change	730	94%
Total	776	100%

HYPOTHESIS TESTS

95 % Confidence, two-tail

Differences between bicyclists and pedestrians

    Victim characterization

    Crash reporting rate

    Infrastructure change

    Policy change

Differences between villain and victim rates

HYPOTHESIS TEST RESULTS – FULL SAMPLE

Victim and villain characterization does not appear to impact

- Policy change

- Infrastructure change

Bicyclists and Pedestrians different

- Pedestrians victim rate is higher

- Bicyclist crash reporting rate is higher

- Bicyclist policy change is higher

HYPOTHESIS TEST RESULTS – REGIONAL/STATE

Regional level

  Bicyclist crash reporting rate is higher for all regions

State level – many states lack adequate sample size

  Victim characterization rates

    Indiana

    Maine

    Pennsylvania

  Policy change

    Maine

    Pennsylvania

    Georgia

LOGIT MODELING

LOGIT MODELING – VICTIM CHARACTERIZATION

Pedestrian positive

Age (5-20) negative

Age (21-30) negative

Age (76+) negative

R-Square	9.40%

LOGIT MODELING – POLICY CHANGE

Crash reporting rate

Conservative political culture

State media source

Age (21-30) positive

Victim characterization

Age (76+) positive

Likelihood of Policy Change

LOGIT MODELING – INFRASTRUCTURE CHANGE

	0.0132
	1.0133

POLICY ANALYSIS

Bicyclist helmet use

    In Maine, North Carolina, and Tennessee helmets are required on any person under 16.

    In Pennsylvania, a helmet is required on any person 12 and under.

ADVOCACY ANALYSIS CON'T

Complete Streets

- For everyone regardless of age or ability
- Enable multimodal transportation for all users
  - Biking
  - Walking

Complete Streets policy implementation – 2014

- All EXCEPT Arizona, Idaho, and Nebraska
- Recently, some cities and metropolitan areas within these states have adopted the complete streets policy

States	2012 Complete streets policy? (Y/N)	2014 Complete streets policy? (Y/N)
Arizona	N	N
Georgia	Y	Y
Idaho	N	N
Illinois	Y	Y
Maine	N	Y
Nebraska	N	N
North Carolina	Y	Y
Pennsylvania	Y	Y
Tennessee	Y	Y
Washington	Y	Y
Wisconsin	Y	Y

LIMITATIONS

Originally, intended to utilize FARS data, however, few crashes could be matched with news articles

Gather news articles

Building database of crash fatalities

Limited number of states

CONCLUSIONS

Victim narrative highly prevalent in the narratives

 Narrative focuses only on the crash

 Not on the factors associated with the accident such as low visibility, poor road condition, texting while driving

Agenda-setting theory suggests for policy change the issue must receive

 Widespread visibility

 Salience

Technology innovation enhance pedestrian safety

No policy changes for bicycle and pedestrian safety at the state level

CONCLUSIONS CON'T

Content analysis of advocacy organizations websites - four strategic themes common to all the organizations

- Collaboration and networking

- Education and training

- Fundraising

- Lobbying

Identify strategies

- Favorable bicycle and pedestrian regulations

- Educating and informing the public about active transportation benefits

CONCLUSIONS CON'T

Victim characterization

Positive - Pedestrian

Negative

Age (5-20)

Age (21-30)

Age (76+)

Infrastructure change

Positive – population

Policy change

Positive

Crash reporting rate

Conservative political culture

State media source

Age (21-30)

Victim characterization

Age (76+)

RECOMMENDATIONS AND FUTURE RESEARCH

RECOMMENDATIONS AND FUTURE RESEARCH CON'T

Bicyclists victim characterization

    Identify causes

QUESTIONS?