Role of Media in the Road Safety Feedback Loop for Transportation Engineers
How do journalists assign blame when reporting traffic fatalities?

To what extent is potential victim blaming associated with race?
Study Overview

- United States
- VRU fatality
- Age 5-9
- 2014
- Popular media
Data

• 99 fatalities total
  • Age, race, gender, travel mode, date, latitude and longitude, state

• 91 fatal crashes had articles

• 237 articles
  • Popular media, within 30 days
Jaden Vasquez Vallejo, age 6, Florida

- Jaden (6) and his brother (12) were walking to school
- Railford Reynolds (47) was driving a semi-truck when he hit Jaden
Richard Vejar, age 8, Arizona

- Richard was riding his bike, lighting was terrible
- 37-year-old woman driving a Dodge Nitro hit and killed him
Eli Sachar, age 8, Ohio

- Eli and his family were crossing in a crosswalk, with the right-of-way
- 62-year-old woman drove into him and three other family members
Naomi Guerrero, age 5, Wisconsin

- Naomi was standing on the sidewalk facing the street, waiting for her family.
- 16-year-old boy backed out of driveway, ran over her, heard screaming, pulled forward, and ran over her again.
Methodology

• Based on: *Editorial Patterns in Bicyclist and Pedestrian Crash Reporting*

• By Kelcie Ralph, Evan Iacobucci, Calvin Thigpen, and Tara Goddard
# Methodology - Sentence Types

<table>
<thead>
<tr>
<th>Type</th>
<th>Agency</th>
<th>Focus</th>
<th>Refers to</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Agentive</td>
<td>Auto</td>
<td>Vehicle</td>
<td>A car hit a VRU.</td>
</tr>
<tr>
<td>2</td>
<td>Agentive</td>
<td>Auto</td>
<td>Driver</td>
<td>A driver hit a VRU.</td>
</tr>
<tr>
<td>3</td>
<td>Agentive</td>
<td>VRU</td>
<td>Vehicle</td>
<td>A VRU was hit by a car.</td>
</tr>
<tr>
<td>4</td>
<td>Agentive</td>
<td>VRU</td>
<td>Driver</td>
<td>A VRU was hit by a driver.</td>
</tr>
<tr>
<td>5</td>
<td>Non-agentive</td>
<td>VRU</td>
<td>Not applicable</td>
<td>A VRU was hit.</td>
</tr>
<tr>
<td>6</td>
<td>Non-agentive</td>
<td>Auto and VRU</td>
<td>Vehicle</td>
<td>A VRU and car collided.</td>
</tr>
<tr>
<td>7</td>
<td>Non-agentive</td>
<td>Auto and VRU</td>
<td>Driver</td>
<td>A driver and a VRU collided.</td>
</tr>
<tr>
<td>8</td>
<td>Non-agentive</td>
<td>Auto</td>
<td>Vehicle</td>
<td>A car was in a crash.</td>
</tr>
<tr>
<td>9</td>
<td>Non-agentive</td>
<td>Auto</td>
<td>Driver</td>
<td>A driver was in a crash.</td>
</tr>
</tbody>
</table>
Results – Sentence Types

**HEADLINE:**
Sentence Type

<table>
<thead>
<tr>
<th>Type of Sentence</th>
<th>Number of Occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: CAR HIT VRU</td>
<td>11%</td>
</tr>
<tr>
<td>2: DRIVER HIT VRU</td>
<td>9%</td>
</tr>
<tr>
<td>3: VRU HIT BY CAR</td>
<td>77%</td>
</tr>
<tr>
<td>4: VRU HIT BY DRIVER</td>
<td>3%</td>
</tr>
</tbody>
</table>

**BODY OF ARTICLE:**
Sentence Type, First Mention

<table>
<thead>
<tr>
<th>Sentence Type</th>
<th>Number of Occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: CAR HIT VRU</td>
<td>14%</td>
</tr>
<tr>
<td>2: DRIVER HIT VRU</td>
<td>13%</td>
</tr>
<tr>
<td>3: VRU HIT BY CAR</td>
<td>68%</td>
</tr>
<tr>
<td>4: VRU HIT BY DRIVER</td>
<td>5%</td>
</tr>
</tbody>
</table>
Results – Counterfactuals

**ARTICLES WITH COUNTERFACTUALS**

- **Yes**: 47%
- **No**: 53%
Results – VRU in Marginalized Group

Percent of POC in Region vs Percent of POC killed as VRUs in each US region:

- **MIDWEST**: 20% POC, 44% VRUs
- **NORTHEAST**: 27% POC, 36% VRUs
- **SOUTHEAST**: 32% POC, 65% VRUs
- **SOUTHWEST**: 49% POC, 71% VRUs
- **WEST**: 34% POC, 64% VRUs
Results – Engineering

ARTICLES THAT MENTION DESIGN SOLUTIONS

- YES: 94%
- NO: 6%
What Does it All Mean?
1. Protected space for dining in the roadbed
2. Physical delineators and markings