Cross-National Media Coverage of Food Security: Community Structure Theory and Privileged Media and Resources

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Introduction

- Although food insecurity affects different parts of the world in different ways, it is still an alarming global issue. In 2018, an estimated 821 million people suffered from hunger worldwide, a numerical figure on the rise since 2015 (United Nations, 2020).
- A literature review on media coverage of the issue of food security around the world yielded few relevant results in the field of communication studies.

Community Structure Theory

- Connecting community demographics to content analysis of variations in media coverage of critical issues, the theory assumes that society sets media agendas (Pollock, 2007, 2013, 2015).

Research Questions

1. How much variation is there in cross-national coverage of food security?
2. How closely linked is that coverage variation to differences in national characteristics?

Hypotheses

- *Buffer*: Privileged communities are linked to coverage supporting human rights claims.
- *Vulnerability*: Vulnerable populations are associated with media supporting human rights claims.
- *Stakeholder*: Greater proportions of stakeholders can be linked to more media support for human rights claims.

Methodology

- 26 major newspapers, 573 total relevant articles coded
- Sample period: May 1st, 2010 to June 7th, 2020. **Start:** launch date of the U.S. government's Feed the Future initiative. **End:** celebration of World Food Safety Day.
  - Content direction was coded as government responsibility, societal responsibility, or balanced/neutral regarding food security.
  - Scott's Pi Coefficient of Intercoder Reliability: 0.7469

Statistical Analysis: Introducing Pollock's Media Vector

- Media Vectors combine measures of article "prominence" and "direction" into a single composite score.
- Pearson correlations and regression analysis compare country-level demographics with Media Vectors.
- Twenty-one out of 26 (80.8%) of Media Vectors emphasized "government responsibility" to promote food security.

MAJOR FINDING:

"Buffered" measures of freedom of the press and "resource privilege" were robustly connected to coverage supporting government responsibility for promoting food security.

SECONDARY FINDING:

Unexpectedly, measures of "agricultural dependence" are not significantly associated with variations in coverage of food security.

MEDIA VECTOR FORMULA*

g = sum of the prominence scores coded "government responsibility"
s = sum of the prominence scores coded "societal responsibility"
n = sum of the prominence scores coded "balanced/neutral"
r = g + s + n
If g > s (the sum of the government prominence scores is greater than the sum of the societal prominence scores), the following formula is used:
Government Media Vector:

$$GMV = \frac{(g^2 - gs)}{r^2} \qquad \text{(Answer lies between 0 and +1.00)}$$

If g < s (the sum of the societal prominence scores is greater than the sum of the government scores), the following formula is used:
Societal Media Vector:

$$SMV = \frac{(gs - s^2)}{r^2} \qquad \text{(Answer lies between 0 and -1.00)}$$

* Media Vector copyright John C. Pollock, 2000–2020

Media Vector Scores

Nation	Newspaper	Media Vector
India	*The Times of India*	0.5879
Zimbabwe	*The Herald*	0.5591
China	*China Daily*	0.529
Mexico	*El Universal*	0.4827
Chile	*El Mercurio*	0.3166
Malaysia	*New Strait Times*	0.3157
Argentina	*La Nacion*	0.2745
France	*Agence France- Presse*	0.1769
Canada	*Toronto Star*	0.174
Pakistan	*The Nation*	0.1354
Turkey	*Anadolu Agency*	0.1205
Nigeria	*The Guardian*	0.1139
Namibia	*The Namibian*	0.1023
Thailand	*The Nation*	0.0645
Kenya	*Daily Nation*	0.0581
United Kingdom	*The Times*	0.0516
Zambia	*Times of Zambia*	0.0378
Australia	*Sydney Morning Herald*	0.0273
United States	*The New York Times*	0.0252
Ghana	*Accra Mail*	0.0213
Germany	*Deutsche Press-Agentur*	0.0176
South Africa	*The Star*	-0.0077
Rwanda	*The New Times*	-0.0080
Uganda	*New Vision*	-0.0128
Japan	*The Japan Times*	-0.0493
Egypt	*Daily News Egypt*	-0.0564

Significant Pearson Correlations

Nation Characteristic	Pearson Correlation	Significance	Hypothesis Category
Coal Consumption	0.421	0.023*	B
Electricity Consumption	-0.323	0.054*	B

Key: B = buffer

Regression Analysis

Model	R	R^2 Cumulative	R^2 Change	F Change	Significant F Change
Freedom of Press Report	0.470[a]	0.221	0.221	4.810	0.043
Freedom of Press Report, Coal Consumption	0.542[b]	0.294	0.073	1.659	0.216
Freedom of Press Report, Coal Consumption, Electricity Consumption	0.593[c]	0.351	0.058	1.335	0.266
Freedom of Press Report, Coal Consumption, Electricity Consumption, Coal Production	0.638[d]	0.407	.055	1.298	0.274

References

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