

Advancing Understanding in News Information, Political Knowledge and Media Systems Research

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Media Effects Research

- The traditional media play a privileged role in informing citizens through their provision of news and current affairs programming.
- Potential for secondary data analysis to address major debates within and across political communication and media studies.
- cross-sectional (non-experimental) data's strength lies in the potential for studying people who have been exposed to real-world treatments, as they naturally encounter political information

Media → Attitudes & Behaviour?

- Research Question: Do (and under which conditions) the media influence attitudes and behaviour?
- Existing research - from minimal effects to mixed results

Media → Attitudes & Behaviour?

- Methodological Factors
 - Designs
 - Statistical Power
 - Temporal Variation
- Country-Level Factors
 - Media Systems (funding)
 - Competition

assigned to 'watch' or 'not watch', it is at least conceivable that their differing outcomes are the result of other, perhaps hidden, factors not directly related to media exposure. "There's always going to be that question, because it's not like a randomized clinical trial," says Primack.

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Types of Designs

- Where? Within one country versus across countries
- Who? Within a respondent vs. across respondents
- When? Events before survey or during
- Which? Local events or cross-national
- How? Exposed sample (via media) or entire country

Between Subject (within survey)/Cross-section

Country J, Exposed	X_t	$O_{j \text{ exposed}, t+1}$
Country J, Unexposed		$O_{j' \text{ unexposed}, t+1}$
$QI = O_{j, \text{ exposed}} - O_{j', \text{ not exposed}}$		

Exposed – reported media use

Drawbacks:

- Selection
- Generally no measure of media content

X =event (i.e., treatment)

O =survey data observation

QI =quantity of interest (i.e., effect)

j =unit that is exposed or experiencing the media event/coverage

j' =other units not exposed to media event/coverage

Within Subject/Within Survey Design

Country J, Individual i, Item 1a	X_t	$O_{q1a, t+1}$
Country J, Individual i, Item 1b		$O_{q1b, t+1}$
Country J, Individual i, Item 1c		$O_{q1c, t+1}$

$$QI = (O_{q1a, t+1} - O_{q1b, t+1}) \text{ or} \\ (O_{q1a, t+1} - O_{q1c, t+1})$$

Treatment varies within individual

Advantages

- Control for unobserved effects within individual
- Link to media content

X =event (i.e., treatment)

O =survey data observation

QI =quantity of interest (i.e., effect)

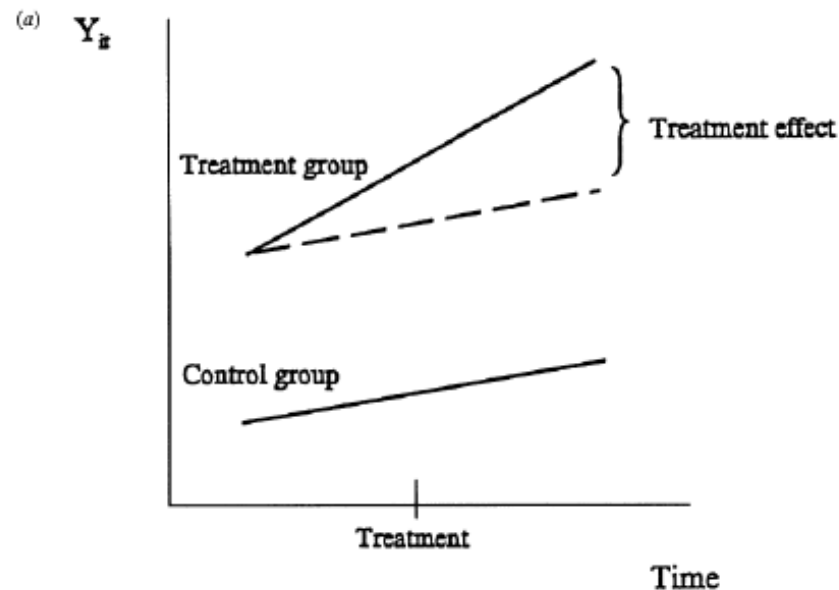
j =unit that is exposed or experiencing the media event/coverage

\bar{j} =other units not exposed to media event/coverage

Difference in Differences Design

Country J	O_{t-1}	X_t	O_{t+1}
Comparison Group	O_{t-1}		O_{t+1}

$$QI = (O_{j, t+1} - O_{j, t-1}) - (O_{j', t+1} - O_{j', t-1})$$



Differences Across Countries – matched groups

Country J_1	X_{ij}	O_1
		O_2
Country J_2	X_{ij}	O_1
		O_2
Country J_k	X_{ij}	O_1
		O_2

$$QI_j = (O_1 - O_2)_j$$

$$QI_j = Z_j + e$$

- Treatment varies between subjects
- Equivalent treatment & control groups (unobserved factors)
- Variation in media content across countries

Statistical Power



Electoral Studies 21 (2002) 107–120

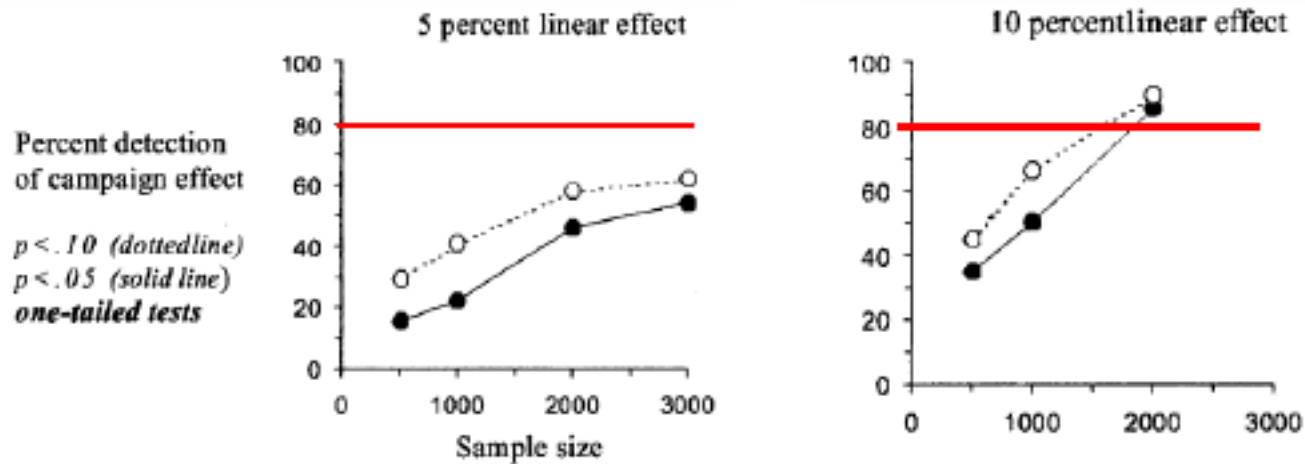
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Electoral
Studies

The statistical power of election studies to
detect media exposure effects in political
campaigns

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The State of Media Effects Research Designs

- 79 media effects studies in Politics & Pol Comm Journals 2009-13
- Between subjects comparison (cross-sectional) majority
- Media content absent in about 1/3 of studeis
- Cross-country comparisons still rare.

	Yes	No	Mixed
Within-Subjects	3	0	1
Between-Subjects	33	2	19
Aggregated	4	0	2
Other	9	0	0

(a) Comparison vs. Significance

	US	Cross-National	Other Country
Within-Subjects	4	0	0
Between-Subjects	31	6	19
Aggregated	3	1	2
Other	7	2	4

(b) Comparison vs. Country Under Study

SDA Requirements: Media Content Linked to Survey Data:

- European Election Study
 - Voter Study & Media Content Study (199, 2004, 2009)
- British Election Study
 - 2005 & 2010 BES with Loughborough Media Content
- European Social Survey
 - Survey linked to media events data

Outputs:

- The Information Environment and How It Shapes Political Knowledge
- Knowing More from Less: How the Information Environment Increases Knowledge of Party Positions
- Generalizing the Study of Media Effects
- Testing Media Exposure in the Lab
 - All available at - mediaeffectsresearch.wordpress.com
- Presented today:
 - Three Approaches To Gauging Media Effects in the UK
 - The Information Environment and Participation

Study I: The Information Environment and Participation using European Election Study & Matched Samples in Cross-national Survey

Information Hypothesis: As the availability of relevant information increases, the effect of being exposed to newspapers on reported voting increases as well.

Non-Linearity Hypothesis: At high levels of information the differences between exposed and control group will fail to increase any further (treatment effects non-linear with respect to saturation of the information environment).

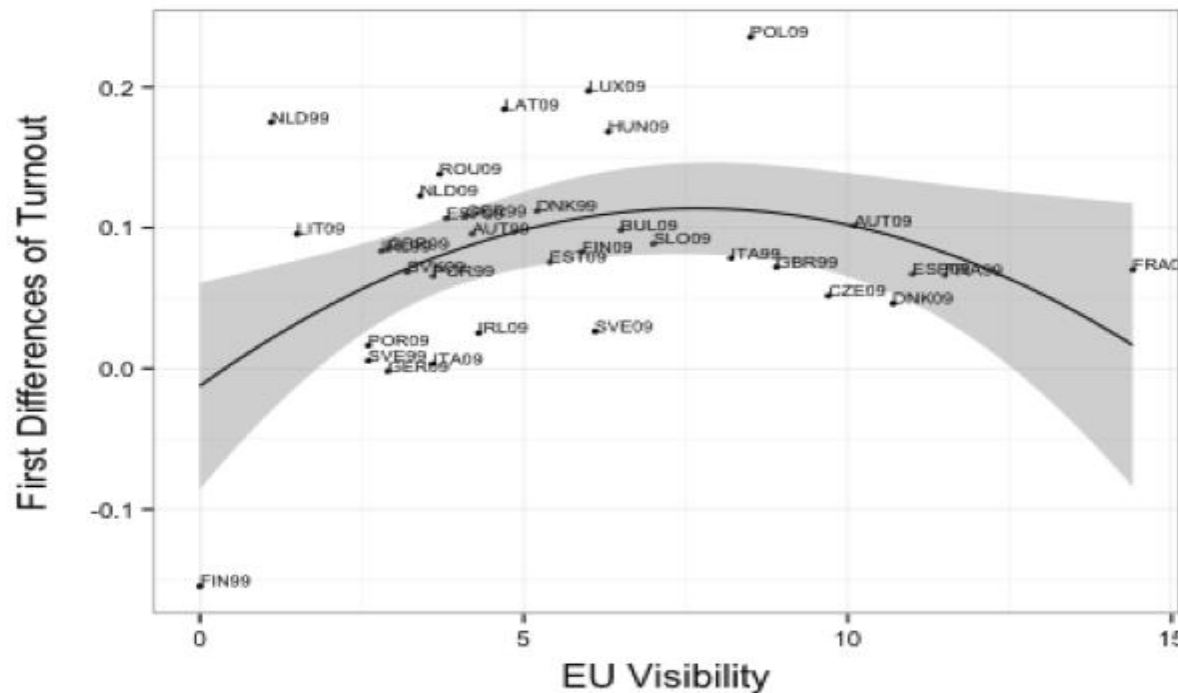
Mediation Hypotheses: Political knowledge, perceptions of increased importance of the elections, or more positive EU attitudes may mediate the relationship between information and turnout.

The Information Environment and Participation: European Election Study & Matched Samples in Cross-national Survey

- Create treated (read newspaper) and untreated (do not read) ‘matched’ groups
- Amount of information varies by country (estimated from media content analysis)
- Estimate the impact of visibility/information on the effect size of reading a newspaper.

The Information Environment and Participation

Figure 2: Treatment Effect of Newspaper Readership on Turnout



Note: This Figure displays the estimated effects of media intake on aggregated turnout across each election.⁵ The regression line shows that, across elections, the news-reading part of the electorate is more likely to turn out than the non-reading part of the electorate. The quadratic curve suggests that the EU content of the news matters in this regard but only up to point after which it tapers off.

Study II: Three Approaches To Gauging Media Effects in the UK

- Media effects difficult to establish in UK, limited
- Do tone of coverage and visibility influence perceptions of political parties?
- Are differences in media effects findings due to the design?

Three Approaches To Gauging Media Effects in the UK : Three Designs

- **between-subjects, within-elections design**, utilizing variation in media exposure across respondents;
- **within-subjects, within-elections design**, utilizing variation in media coverage for the same individual as opposed to variation in media exposure across individuals;
- **between-subjects, between-elections** design to analyze the effects of media on voter preferences over time;

Three Approaches To Gauging Media Effects in the UK : Comparing Three Designs

	Method	'05 Labour	'10 Labour	'05 Cons	'10 Cons	'05 LibDem	'10 Libdem
<i>Visibility</i>	BSWE	0	-	0	0	0	0
	WSBE	+	+	+	+	+	+
	BSBE		0		0		
<i>Tone</i>	BSWE	0	-	-	-	0	0
	WSBE	-	-	-	-	-	-
	BSBE		0		0		

Note: + = positive effect; - = negative effect; 0 = null effect; empty cell = not estimated.

Conclusions:

- Media matter
- Observational (survey) data well suited with appropriate design considerations
- Often small effects (in comparison to experimental findings) in the real world