

Violence Against Journalists and Reporting on Civic Space*

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Violence against journalists poses a threat to press freedom and democracy. Journalists worldwide face various forms of violence, ranging from physical attacks and intimidation to arrest and even assassination. Often these acts aim to suppress the freedom of expression, silence critical voices, and undermine the public’s right to information. Such actions not only endanger the lives and well-being of journalists but also impede their ability to investigate and report on civic space.

While there are dozens of politically-motivated arrests and murders of journalists each year, we have little systematic evidence on the impact of those acts on news coverage. If the goal of violence against journalists is to intimidate the press, does it ‘work’? Incorporating data from millions of articles across 91 papers in 20 countries, this report analyzes the impact of over 200 violent events against journalists on the press’s willingness to report on politically sensitive topics in the weeks and months following those events. We combine dated arrest and murder data from the Committee to Protect Journalists (CPJ) with data from the Machine Learning for Peace (MLP) project to examine if the ‘shock’ of a violent event changes reporting on 7 different civic space event types in the weeks and months following the event.

Our analysis produces three key findings:

- Coverage of several types of civic space events does not change in response to violence against journalists.
- Nevertheless, the *arrest* of journalists **represses** the coverage of some civically sensitive topics, including police raids, corruption and defamation cases. However, we also find an **increase** in the coverage arrests.
- In contrast, the *murder* of journalists **increases** the incidence of reporting on corruption, legal actions and police raids.

*Report prepared for the INSPIRES Machine Learning for Peace project.

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We suspect that the conflicting findings on the effects of arrests and murders result from a backlash associated with the murder of journalists. While the lower level of intimidation associated with arrests seems to mostly repress civic coverage, outright murders mobilizes civic coverage. One possibility is that while arrests are clearly attributable to government action, it is often less clear who is responsible for murders of journalists, even when they are politically motivated.

The Press, Democracy and Violence Against Journalists

The media represents the primary source of political information for much of the world (Mukhongo and Macharia (2016)). Ideally, the media watches over the government (Ferguson and Patten, 1993) and provides a venue for political dissent (McNair, 2007). Therefore, the media plays an essential role in democracies (Leighley (2004)).

Given its key role as a source of information, it is not surprising that media repression is a common tool for government’s intent on shaping political narratives, avoiding democratic accountability and maintaining power. Recent years have seen significant attacks on press freedoms across many countries. According to UNESCO, approximately 85% of the world’s population has seen a decline in press freedom in the past 5 years (UNESCO, 2022). A 2022 UN report noted that since 2016 journalists have faced not just increased censorship through legal restrictions, but also increased threats and acts of violence (UNOHCHR, 2022). The Committee to Protect Journalists notes that between 2016 and 2023, over 470 journalists were killed (CPJ, 2023) and over 1100 were arrested (CPJ, 2022).

Efforts to control the media can involve everything from legal restrictions on media to defamation cases against journalists to physical intimidation of the press. Intimidation can include both direct and indirect violence (Brambila and Hughes, 2019). This violence “hampers journalistic professional practice, produces a chilling effect upon colleagues and, ultimately, limits press freedom and the right to information. They also harm journalists as human beings with civil and human rights.”¹ Consequently, journalists often self-censor in response to intimidation and political pressure (Rožukalne, 2020; Walulya and Nassanga, 2020).

Previous research has provided suggestive evidence that manipulation and control of the media can be an effective means of wielding political influence. While extant evidence suggests that direct violence does lead to self-censorship (Brambila and Hughes (2019), Walulya and Nassanga (2020), Rožukalne (2020)), it is unclear to what extent and how backlash to repression factors into media responses. Moreover, most prior research is limited to qualitative analyses of a small number of sources in single-country studies. Here we provide an analysis of millions of daily articles across a large number of media sources, countries and violent acts against journalists.

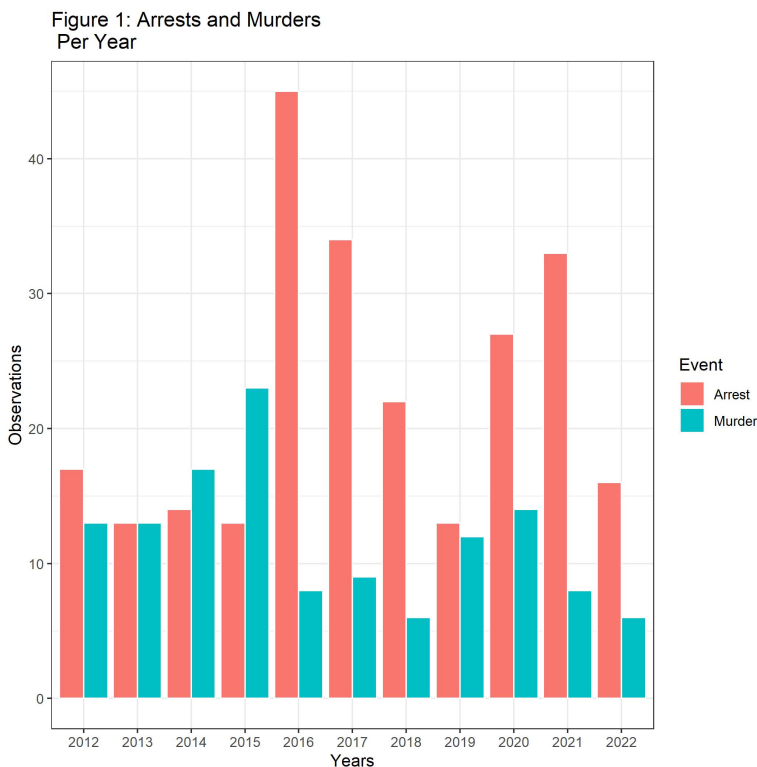
Data and Approach

We investigate the repressive effect of targeted journalist killings and arrests on the coverage of politically sensitive aspects of civic space. To do so we combine the *daily*

¹Brambila and Hughes (2019): pg.1.

publication of articles gathered from the Machine Learning for Peace (MLP) project with the Committee to Protect Journalist’s (CPJ) data on the dates that journalists are murdered or arrested. To narrow our focus, we examine the impact of violent events only on those aspects of civic space coverage that we expect might be sensitive to repression. More specifically, we focus on coverage of misdoings by state actors (corruption, bureaucratic purges), coercive activity by police (raids, arrests), collective action by citizens (protests) and intimidation of the press (censorship, defamation cases). For a more detailed description of these civic space event types, how we gather articles and the model we use to classify them, see our [technical report on the MLP project](#).

We have overlapping civic space data on 75 of CPJ’s murders.² We have overlapping data for 136 arrests and 46 double arrests (i.e. multiple arrests on a given day).³ All told, our data covers 20 countries and millions of articles in the days and weeks before and after these repressive events.⁴ Figure 1 presents the number of both murders and arrests across the years under analysis.



To analyze the relationship between murders/arrests and civic space coverage, we compare the share of news articles covering civic space events in the 7 days, 30 days,

²The data excludes murders with personal motives.

³The CPJ records the arrests of journalists on December 31st of each year, but it includes the initial date of arrest for each of them. We use these latter dates in our analysis.

⁴The countries included in the analysis Azerbaijan, Bangladesh, Belarus, Benin, Cambodia, Cameroon, DR Congo, Ecuador, Ethiopia, Honduras, Mauritania, Morocco, Nicaragua, Niger, Nigeria, Philippines, Rwanda, Turkey, Ukraine and Uzbekistan.

and 60 days before and after a murder or arrest of a journalist; the days and weeks before serve as the ‘control group’ against which we compare coverage in the days and weeks afterward. We utilize an interrupted panel data approach to estimate the change in publication rates by comparing the days immediately preceding the murder with the days following the murder.⁵ We account for events where a second murder or arrest takes place in the days and weeks after the first arrest by including an additional control for days after the initial arrest. We also narrow the “treatment” days to only those specified after the first event, regardless of the occurrence of a second event.⁶ We estimate the model:

$$y_{it} = \beta_0 + \beta_1 m_{it} + \beta_2 d_{it} + \lambda_i + \epsilon$$

Where y_{it} is the articles published around event i in time t . m_{it} is the “treatment” of a journalist murder or arrest and d_{it} is a control for a second murder or arrest. λ_i represents the individual event-specific fixed effects around event i , while ϵ is the error term. The quantity of interest is β_1 , i.e. the impact of murders or arrests of journalists on civic space reporting in the weeks and months afterward.

Results

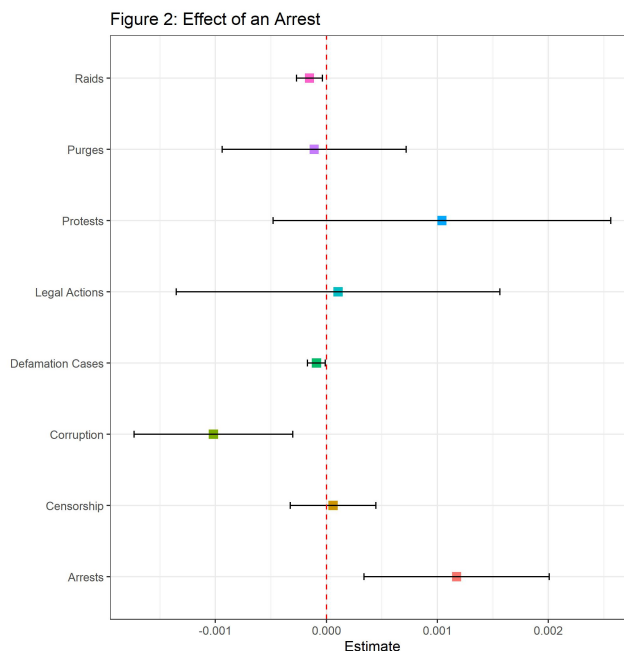
Figure 2 provides results on the impact of arrests on the publication rates of each civic space event category.⁷ The figure shows the estimate of the marginal effect of arrests along with 90% confidence intervals. When those confidence intervals cross zero, it suggests that journalistic arrests do *not* have an effect on coverage. Significant negative estimates indicate a repressive effect on coverage, and significant positive estimates indicate increased coverage. The results show that the arrest of journalists has no effect on coverage of administrative purges, protests, legal actions or censorship. The figure also shows that the arrest of journalists is associated with a statistically significant **increase** in reporting on arrests; this could simply be a function of increased reporting on the journalistic arrest itself rather than a reflection of broader reporting on protests across civic space. On the other hand, arrests are associated with a statistically significant **decrease** in reporting on police raids, corruption and defamation cases.⁸ That these results come for the model with data from 60 days before and after arrests suggests that the impact of arrests are quite persistent, and while the size of the effects might appear small, they are not insignificant. For example, there is a roughly 40 percent decline in articles about raids in the 60 days after an arrest.

⁵We use event fixed effects to make within event comparisons.

⁶In other words, we do not extend the treatment window in cases of a double event.

⁷These graphic results are from the model for 60 days before and after arrests. See Appendix Table 1 for the full tabular results.

⁸In the models with a 30-day window before and after arrests, there is also a statistically significant repressive effect on coverage of administrative purges. See 30-day results in the Appendix.

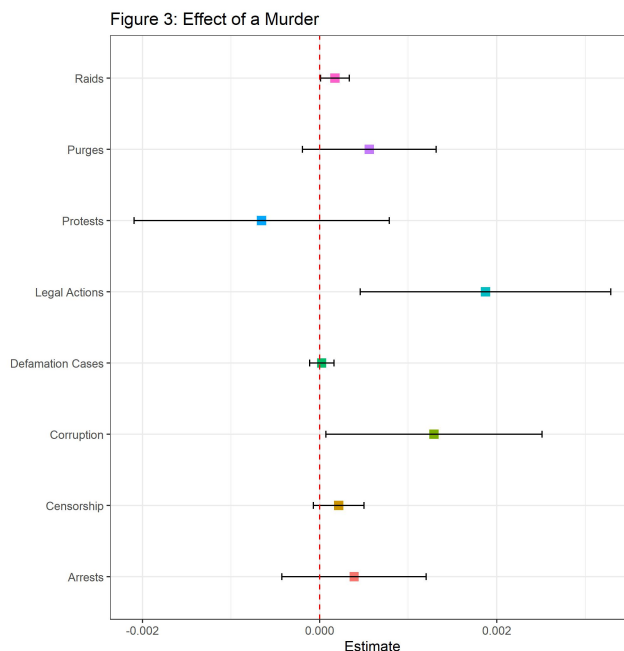


Note: The blocks represent point estimates for the impact of arrests on the amount of reporting on each civic space event type on the y-axis; the bars are 90% confidence intervals.

Figure 3 provides results for the impact of journalistic murders. Again, we see that this stark form of journalistic intimidation has no impact on coverage of protests, defamation cases, or censorship. But contrary to our findings on arrests, we find evidence that murders actually lead to an **increase** in the coverage of several civically relevant categories; coverage of police raids, corruption and legal actions all increase. Again, these results suggest a persistent and substantively important effect of murders on coverage. For example, we observe an 8% increase in coverage of both corruption and legal actions in the 60 days after murders happened.⁹

We interpret these results as suggestive that murder – the harshest form of violence against journalists – mobilizes the media to, if anything, cover some politically contentious issues more extensively. We can imagine two plausible mechanisms. First, it could be that journalistic murders are sufficiently dire that they attract international attention, support for the media and condemnation of repressive governments. We examined this mechanism by conducting an analysis of hundreds of thousands of articles from 14 international and regional newspapers, but we find that journalistic arrests and murders do not have a catalyzing effect on international coverage. Second, it seems plausible that the media perceives arrests and murders as resulting from different actors and respond accordingly. Since arrests are necessarily done by the state, the press is perhaps more likely to take the intimidation seriously and reduce coverage of sensitive civic space events. Murders, on the other hand, could be conducted by political opponents, cartels, rebels, etc. Absent a clear signal that the violence is explicitly from the state, the media is perhaps more likely to react with increased coverage.

⁹See Appendix Table 2 for the full tabular results.



Note: The blocks represent point estimates for the impact of murders on the amount of reporting on each civic space event type on the y-axis; the bars are 90% confidence intervals.

Conclusion

In this report, we examine the impact of the murder or arrest of journalists on media coverage immediately afterward. Using data from the MLP project and CPJ’s murder and arrest database, we show that while coverage of some aspects of civic space are unaffected, arrests do lead to a reduction in the coverage of raids, corruption, and defamation cases. These results are consistent with self-censorship by an intimidated press. Murders, on the other hand, induce a media backlash as indicated by *increased* coverage of corruption, legal actions, and raids - highly salient forms of civic activity. This represents the first large scale, article-level analysis of the impact of violence against journalists on the media. One important policy implication of these findings might be that foreign donors and civic watchdogs should be particularly supportive of independent media when and wherever journalistic arrests occur or are likely.

In future work we will examine how violence against journalists impacts the sentiment of media coverage, as distinct from the topics it covers. It seems plausible that the harassment of journalists might induce a more conciliatory tone in coverage rather than a change in the events that the press covers. For instance, an intimidated press might cover police raids just as they did before the arrest or murder of a journalist, even as they reduce the critical tone of that coverage. Using our data, future work can employ sentiment analysis to examine whether violent repression of journalists impacts the sentiment or criticality of media coverage.

References

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Appendix

Table 1: Effect of Arrests At 60 Days

<i>Dependent variable:</i>				
	Raids	Purges	Legal Actions	Arrests
	(1)	(2)	(3)	(4)
60 Days After	-0.000152** (0.000071)	-0.000110 (0.000505)	0.000105 (0.000889)	0.001174** (0.000509)
Double Arrest	-0.000721* (0.000430)	-0.000989 (0.000865)	0.005171 (0.005705)	0.000626 (0.002114)
Event FE	Yes	Yes	Yes	Yes
Observations	10,890	10,890	10,890	10,890
R ²	0.019914	0.019251	0.050551	0.026291
Adjusted R ²	0.011654	0.010985	0.042550	0.018085
<i>Note:</i>			*p<0.1; **p<0.05; ***p<0.01	

Table 2: Effect of Arrests At 60 Days

<i>Dependent variable:</i>				
	Protests	Defamation Cases	Corruption	Censorship
	(1)	(2)	(3)	(4)
60 Days After	0.001041 (0.000928)	-0.000090* (0.000049)	-0.001019** (0.000436)	0.000059 (0.000235)
Double Arrest	-0.001084 (0.001841)	0.000492** (0.000223)	0.002016* (0.001089)	0.000797* (0.000482)
Event FE	Yes	Yes	Yes	Yes
Observations	10,890	10,890	10,890	10,890
R ²	0.081664	0.027208	0.100168	0.011427
Adjusted R ²	0.073925	0.019009	0.092585	0.003096
<i>Note:</i>			*p<0.1; **p<0.05; ***p<0.01	

Table 3: Effect of Murders At 60 Days

<i>Dependent variable:</i>				
	Raids	Purges	Legal Actions	Arrests
	(1)	(2)	(3)	(4)
60 Days After	0.000172* (0.000099)	0.000561 (0.000461)	0.001873** (0.000863)	0.000389 (0.000497)
Double Murder	-0.000233 (0.000149)	-0.001816* (0.000941)	0.000307 (0.001712)	0.000765 (0.001301)
Event FE	Yes	Yes	Yes	Yes
Observations	7,623	7,623	7,623	7,623
R ²	0.036545	0.110750	0.169777	0.104436
Adjusted R ²	0.028387	0.103220	0.162746	0.096852

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 4: Effect of Murders At 60 Days

<i>Dependent variable:</i>				
	Protests	Defamation Cases	Corruption	Censorship
	(1)	(2)	(3)	(4)
60 Days After	-0.000655 (0.000878)	0.000024 (0.000084)	0.001290* (0.000743)	0.000216 (0.000175)
Double Murder	-0.000524 (0.002205)	0.000092 (0.000154)	-0.001513 (0.001082)	-0.000425** (0.000209)
Event FE	Yes	Yes	Yes	Yes
Observations	7,623	7,623	7,623	7,623
R ²	0.221003	0.043634	0.240725	0.015103
Adjusted R ²	0.214407	0.035535	0.234296	0.006763

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 5: Effect of Arrests At 30 Days

<i>Dependent variable:</i>				
	Raids	Purges	Legal Actions	Arrests
	(1)	(2)	(3)	(4)
30 Days After	-0.000183*	-0.001024**	0.000615	0.001309*
	(0.000095)	(0.000422)	(0.001106)	(0.000777)
Double Arrest	-0.001083	0.000185	-0.000474	-0.002870
	(0.000866)	(0.000680)	(0.005526)	(0.002666)
Event FE	Yes	Yes	Yes	Yes
Observations	6,832	6,832	6,832	6,832
R ²	0.024831	0.051158	0.062633	0.032997
Adjusted R ²	0.008428	0.035198	0.046866	0.016732

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 6: Effect of Arrests At 30 Days

<i>Dependent variable:</i>				
	Protests	Defamation Cases	Corruption	Censorship
	(1)	(2)	(3)	(4)
30 Days After	-0.000145	0.000008	-0.000716	-0.000031
	(0.000759)	(0.000047)	(0.000483)	(0.000126)
Double Arrest	0.001913	0.000426	0.002970	0.000746
	(0.002584)	(0.000434)	(0.002066)	(0.000484)
Event FE	Yes	Yes	Yes	Yes
Observations	6,832	6,832	6,832	6,832
R ²	0.093421	0.034065	0.090813	0.028730
Adjusted R ²	0.078172	0.017818	0.075520	0.012393

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 7: Effect of Murders At 30 Days

<i>Dependent variable:</i>				
	Raids	Purges	Legal Actions	Arrests
	(1)	(2)	(3)	(4)
30 Days After	-0.000086 (0.000117)	0.000221 (0.000376)	-0.000064 (0.001006)	-0.000082 (0.000457)
Double Murder	-0.000096 (0.000316)	-0.000967 (0.000767)	0.001360 (0.002665)	0.000909 (0.000638)
Event FE	Yes	Yes	Yes	Yes
Observations	5,795	5,795	5,795	5,795
R ²	0.024504	0.099211	0.156786	0.152331
Adjusted R ²	0.008069	0.084034	0.142580	0.138049

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 8: Effect of Murders At 30 Days

<i>Dependent variable:</i>				
	Protests	Defamation Cases	Corruption	Censorship
	(1)	(2)	(3)	(4)
30 Days After	-0.000001 (0.000930)	0.000009 (0.000070)	-0.000349 (0.000729)	0.000357* (0.000208)
Double Murder	0.001285 (0.001500)	-0.000023 (0.000287)	0.002155 (0.002113)	-0.000354* (0.000194)
Event FE	Yes	Yes	Yes	Yes
Observations	5,795	5,795	5,795	5,795
R ²	0.229414	0.063519	0.273991	0.021178
Adjusted R ²	0.216431	0.047741	0.261760	0.004687

Note:

*p<0.1; **p<0.05; ***p<0.01

Figure 4: Marginal Effects of an Event at 30 Days

