



Bordering on crisis: A qualitative analysis of focus group, social media, and news media perspectives on the Republic of Ireland-Northern Ireland border during the ‘first wave’ of the COVID-19 pandemic

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ABSTRACT

Rationale: International border controls were among the earliest and most effective of measures to constrain transmission of COVID-19. However, such measures are complex when established borders are open yet politically contested, as for the border that divides the Republic of Ireland (ROI) from Northern Ireland (NI). Understanding how this border affected the everyday lives of both populations during the pandemic is important for informing the continued development of effective responses to COVID-19 and future health crises.

Objective: This multi-methods study aimed to explore public perspectives on how the ROI-NI border affected experiences of and responses to the ‘first wave’ of the pandemic.

Method: The study collated data from focus groups ($n = 8$), news articles ($n = 967$), and Twitter posts ($n = 356$) on the island of Ireland, which mentioned the ROI-NI border in relation to COVID-19. Thematic analysis was used to explore the range of perspectives on the role played by the border during the early months of the pandemic. **Results:** Analysis identified three themes: *Cross-Border Interdependencies* illustrated the complexity and challenges of living near the border; *Interpretations of Cross-Border Policy Disparities* showed that lay publics perceived NI and ROI policy approaches as discordant and politicised; and *Responses to Cross-Border Policy Disparities* revealed alternating calls to either strengthen border controls, or pursue a unified all-island approach.

Conclusions: Results reveal clear public appetite for greater synchronisation of cross-border pandemic responses, emphasise the specific vulnerability of communities living near the border, and highlight the risk of long-term socio-political repercussions of border management decisions taken during the pandemic. Findings will inform implementation of pandemic responses and public health policies in jurisdictions that share a porous land border.

1. Introduction

The novel coronavirus (clinical descriptor COVID-19) has caused unprecedented levels of illness, death, and societal disruption. While the

COVID-19 pandemic is global in scope, societal responses have diverged between countries. Lack of trans-national harmonisation of policy, data and supply chains represents a major barrier to efforts to contain infectious disease (Lee et al., 2020; World Health Organization, 2017).

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Restrictions on public movement, which include closure of international borders, have been key mechanisms to prevent spread of the virus from infected to non-infected areas (Eckardt et al., 2020; Hossain et al., 2020). While effective at containing viral transmission, border controls also involve costs, including to economic activity, individual freedom, and geopolitical relations (Guild, 2020). Informed decisions regarding border management in future waves of COVID-19 and other pandemics require information on how societies adapt to maintenance of open international borders in a pandemic. The current article reports a multi-methods study that explores public perspectives on how the border within the island of Ireland affected experiences of and responses to COVID-19 during the early months of the pandemic.

1.1. Research context: the ROI-NI border

The border between the Republic of Ireland (ROI) and Northern Ireland (NI) has a long, contested and politically fraught history. This border was originally instated by the Government of Ireland Act 1920, implemented by the Parliament of the United Kingdom (UK), of which Ireland was then part. The Act partitioned the island into ‘Southern Ireland’, comprising 26 counties with a predominantly Catholic population, and a six-county, Protestant-majority entity titled ‘Northern Ireland’. When the Irish War of Independence led to the creation of the Irish Free State and ultimately the declaration of a Republic in 1948, NI remained within the UK. Unrest regarding NI’s position within the UK continued throughout the 20th century. During the violent years of ‘The Troubles’ (1968–1998), the number of border crossing-points were reduced and British military checkpoints were placed on the border, becoming a frequent target of paramilitary attacks (Ferriter, 2019). After the 1998 Good Friday Agreement brought an end to armed hostilities, border checkpoints were removed. Since the 2000s, the border has been largely invisible; aside from road signage, there are no indications of border infrastructure or impediments to travel in either direction.

Political tensions around the NI-ROI border resumed after the 2016 UK vote for ‘Brexit’, i.e. leaving the European Union (EU) (Trumbore and Owsiak, 2019). Repercussions of this decision for NI, where a

majority voted to remain in the EU, became a major stumbling block in the ensuing Brexit negotiations (Hayward, 2020). The NI protocol to the Withdrawal Agreement finally agreed in October 2019 proposed a *de jure* land border within the island, but a *de facto* border subject to customs checks along the Irish Sea. This came into force in January 2021.

Thus, when the COVID-19 pandemic began in early 2020, the ROI-NI border was fully open, yet politically charged, and subject to uncertainty regarding its future operation. The very first confirmed case of COVID-19 on the island, reported on 27th February, involved a person who had travelled from Italy to Dublin and onward to NI. Despite inevitable viral cross-transmission between ROI and NI, early policy responses deviated across both jurisdictions. For example, on 12th March, ROI schools, higher education and childcare facilities closed and social gatherings were restricted. Similar measures were not mandated in NI until 23rd March. Other inconsistencies emerged in relation to travel restrictions, testing and isolation periods, despite the 7th April signing of a Memorandum of Understanding between both Departments of Health endorsing cross-border collaboration in pandemic responses. Fig. 1 illustrates the timelines of key decisions in both jurisdictions, overlain against daily incidence rates.

1.2. Public perspectives on borders during the pandemic

The implications of border management policies for citizens’ experiences of the pandemic have received limited empirical investigation (de Rooij et al., 2020). Across the world, controls on international borders were among the earliest and most effective of measures to curtail the spread of COVID-19 (Eckardt et al., 2020). In a survey of European populations’ attitudes to COVID-19 countermeasures, border closures enjoyed the highest public support (Sabat et al., 2020). Internationally, the island of Ireland was unusual in maintaining an entirely open international border during the first wave of the pandemic (Connor, 2020). Understanding how communities responded to these unique circumstances is critical for anticipating the implications of specific border management policies in future waves of this pandemic, or other similar crises, in Ireland and beyond. For instance, decisions to restrict cross-border movement should consider whether this may

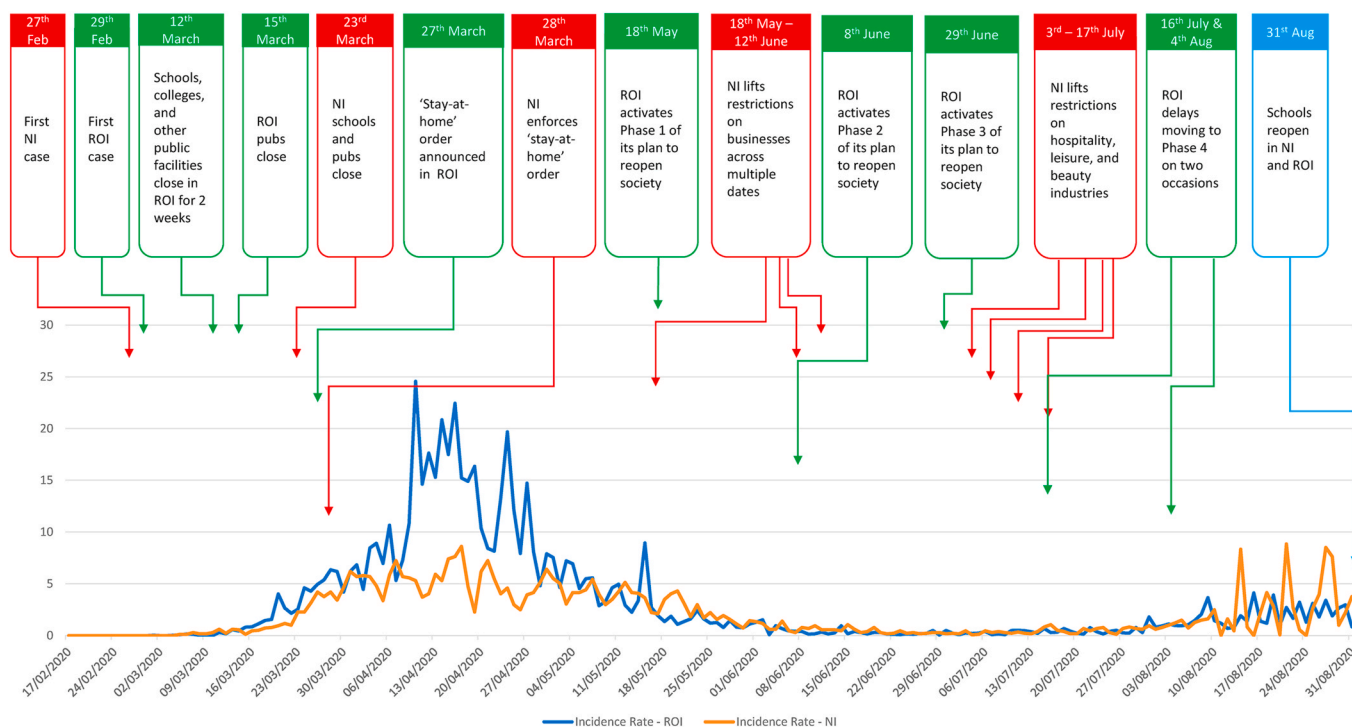


Fig. 1. Timeline of policy actions and incidence rates.

disproportionately disadvantage certain groups; conversely, maintenance of open borders requires understanding how cross-border travellers manage jurisdictional differences in public health guidelines.

Alongside public perspectives on cross-border movement, it is also important to know if cross-border policy disparities affect citizens' beliefs or behaviours in ways that impact public health. One possibility is that exposure to differing public health guidelines in neighbouring jurisdictions undermines confidence in their legitimacy. Discrepant policy regimes may compromise trust in decision-makers by raising suspicions that political interests, rather than medical rationales, are dictating decisions. Any reduction in political trust is likely to decrease compliance with regulations (Marien and Hooghe, 2011): emerging international evidence suggests that trust in government is associated with stronger intentions to engage in COVID-19 protective behaviour, self-reported and objective measures of behavioural compliance, and lower infection and mortality rates (Bargain and Aminjonov, 2020; Fancourt et al., 2020; Pagliaro et al., 2021; Wright et al., 2021; Ye and Lyu, 2020).

Understanding how interpretations of cross-border policies interact with socio-political attitudes is particularly important in a context of recent political conflict. Attitudes and behaviour in relation to COVID-19 are shaped by and reinforce existing socio-political agendas (Gollwitzer et al., 2020; Maher et al., 2020; Pagliaro et al., 2021; Shao and Hao, 2020; Wnuk et al., 2020). Interpretations of the role of the ROI-NI border during the pandemic may express pre-existing political commitments. Such interpretations could have wider socio-political significance at a time of political uncertainty on the island due to Brexit (Boland and O'Riordan, 2019; Hayward, 2020; Trumbore and Owsiak, 2019). For example, a sense that one jurisdiction is at risk from the policy errors of the other could inflame ethnocentrism. Alternatively, highlighting the porous nature of the border could foster a sense of collective identity across both jurisdictions in the face of a common threat. While stronger shared identity can reduce risk perception and increase risk behaviour (Cruwys et al., 2020), stronger national identity also predicts higher compliance with COVID-19 regulations (van Bavel et al., 2020). How such relationships play out on a landmass containing multiple, historically antagonistic national identities remains unclear.

Cross-jurisdiction policy discrepancies (e.g., in travel restrictions or retail closures) may especially affect communities living near the border, who depend on cross-border travel for work, education, shopping, and recreation. Border communities' capacity to contribute to collective efforts to contain the virus may be impeded by confusion due to separate policy regimes within close geographical proximity. Two of the most important predictors of health behaviour are social norms and self-efficacy (Sheeran et al., 2016); both social consensus and individual understanding of public health recommendations may be undermined by witnessing disparity in the behaviours of near neighbours. The heightened vulnerability of border communities on the island of Ireland is underscored by epidemiological data showing that for extended periods during the pandemic, incidence rates of rural border counties were multiple times those of other areas, even exceeding the densely-populated capital cities of Dublin and Belfast (Department of Health, 2020; Health Protection Surveillance Centre, 2020). It is not known how the general public made sense of these epidemiological data.

1.3. The current study

The ways lay publics represent and respond to national borders during the pandemic may have wide-ranging implications for cross-border travel patterns; socio-political attitudes, identity and inter-group relations; unequal distribution of vulnerability to the virus and its countermeasures; public trust of government; and compliance with public health guidelines. Understanding the range of implications is critical for informing policy decisions regarding border management and cross-border synchronisation. Minimal research, either in Ireland or internationally, has studied how lay publics have accommodated the

maintenance of open international borders during the pandemic. This study adopts a multi-methods approach to explore lay perspectives on the role played by the ROI-NI border in the social, political and public health impacts of the COVID-19 pandemic. Triangulation of three data sources - focus groups, news media articles, and social media posts - facilitates a comprehensive account of the range of perspectives on the border within the island of Ireland.

2. Methods

2.1. Design

This qualitative analysis synthesised data from three complementary sources: focus groups, news media articles, and social media posts across the island. News media are the primary vessel by which scientific and medical issues are transmitted to public awareness (O'Connor et al., 2012; Washer et al., 2008); 94% Europeans report closely following news coverage of COVID-19 (Sabat et al., 2020). Moreover, the coronavirus pandemic has garnered unprecedented engagement on social media platforms (NewsWhip, 2020). Twitter ranks among the most popular social networking sites in Ireland, with approximately 30% of the population holding an account (Ipsos MRBI, 2020), and was selected for this study due to its accessibility for research purposes. While social media are trusted less than national news, half of Europeans report relying on the internet for COVID-19 information (Sabat et al., 2020). Both news and social media content were analysed to elucidate how the border affected life on the island and how public discourse framed the border's interaction with the public health crisis. More personal, first-hand experiences of living with the border were illuminated by focus groups with purposively-selected populations in NI and ROI. The data offer naturalistic, real-time insight into how lay publics made sense of the impact of the border during the first wave of the COVID-19 pandemic. The study formed part of a larger project exploring the psychological, behavioural, media and governmental responses to COVID-10 on the island of Ireland (Darker et al., 2020). Ethical approval was granted by the National Research Ethics Committee for COVID-19 research (ref. 20-NREC-COV-037).

2.2. Data collection

2.2.1. News media

News articles were harvested via the NewsWhip Analytics service. NewsWhip Analytics facilitates keyword searches of its continuously-updated database of news media articles, comprising online content from national (e.g. Irish Times, BBC NI) and local (e.g. Donegal Daily, Derry Journal) news sources, as well as fully digital news platforms (e.g. www.thejournal.ie, www.belfastlive.co.uk). Coverage extends to over 600 sources published on the island of Ireland. Boolean searches identified articles containing the keywords "COVID*" / "corona" / "coronavirus" / "SARS-Cov-2", which also contained the word "border". The search was restricted to articles published between 31/12/2019-31/08/2020. The search identified 844 articles from ROI and 123 from NI. The full text of all articles was copied into a spreadsheet for analysis.

2.2.2. Social media

Twitter content was purchased from a media analytics service (Vicinitas). The dataset contained all public tweets, geolocated to NI or ROI, which contained the words or hashtags "COVID" / "COVID19" / "COVID-19" / "COVID_19" / "coronavirus" / "corona" / "COVID19ireland" / "coronavirusireland" / "COVID19northernIreland" / "COVID19NI" / "COVID19UK". Further searches within this dataset identified tweets that contained the word "border" and were published between 31/12/2019-31/08/2020. In total, 247 tweets from ROI and 109 from NI were extracted for analysis. Usernames and Twitter handles were excluded to avoid identification.

2.2.3. Focus groups

Eight focus groups were conducted with a total of 46 participants between 01/07/2020-19/08/2020. Participants were recruited by Ipsos-MRBI, a market research company. Participants received €40/£36 gift-vouchers as payment. Eligibility criteria were adults currently resident in ROI or NI and able to communicate in English. For all groups, sampling sought a 1:1 ratio between ROI:NI participants and a mixture of age cohorts (unless otherwise specified in Table 1). To diversify the range of perspectives sampled, additional group-specific criteria reflected particular themes or sectors that were prominent in the media at time of data collection. Table 1 outlines the sampling criteria and demographic details of each focus group. To ensure some 'common ground' to allow productive conversations within demographically diverse groups, sampling intentionally constructed a homogenous sample with respect to social class, targeting middle-income groups (social classes C1–C2). This facilitated an analytic focus on other characteristics deemed more relevant to the research questions, such as proximity to the border or previous diagnosis with COVID-19 (Freeman, 2006; Robinson, 2014).

Focus groups were conducted using video conferencing, allowing geographically disparate sampling and compliance with social distancing guidelines. Focus groups were semi-structured with open-ended questions that asked participants about their understanding of COVID-19, its impact on their life, trust in media and public health guidelines, opinions on government responses, and views regarding the idea of a coordinated 'all-island' approach to COVID-19. Focus groups were recorded and professionally transcribed. The current analysis extracts data that referred to the border, its impact, or cross-jurisdiction policy disparities or coordination.

2.3. Data analysis

The text of the news media, social media and focus group content was imported into NVivo 12 Plus for analysis. Thematic analysis was

Table 1
Sampling criteria and socio-demographic profiles of focus groups.

Focus group number	Date	Sampling criteria	Participants n	Females n (%)	Mean age (range)
FG1	01/07/2020	Response to the question "Should there be an all-Ireland pandemic response?" Equal ratio of participants responding yes and no were included.	6	4 (66.7)	48 (35–64)
FG2	16/07/2020	People aged 18-25	5	3 (60)	22 (19–25)
FG3	17/07/2020	People aged over 70	6	3 (50)	72.2 (69–79)
FG4	29/07/2020	People living in border counties in NI and ROI	6	3 (50)	41.2 (22–55)
FG5	05/08/2020	Parents of school-aged children	6	3 (50)	44.2 (36–49)
FG6	06/08/2020	Business-owners	6	3 (50)	40.5 (25–53)
FG7	13/08/2020	People previously diagnosed with COVID-19	6	3 (50)	47.7 (32–67)
FG8	19/08/2020	General population	6	3 (50)	38.8 (23–49)

chosen for its flexibility in analysing diverse datasets to provide a rich yet parsimonious account of complex data (Braun and Clarke, 2006; Nowell et al., 2017). An initial coding frame was developed through extensive reading of the data to identify recurring units of meaning. Codes were developed inductively, i.e. reflecting emergent patterns in the data rather than predetermined analytic concepts. To promote comparability across datasets, all data were analysed in a single NVivo project using the same coding frame. This allowed for a fully integrated analysis, which revealed both differences and similarities across the three datasets. Each media article and tweet was coded as a single data-unit, with multiple codes if relevant. Focus groups were analysed through rigorous line-by-line coding. The reliability of the coding frame was evaluated in a subset of data using NVivo's Coding Comparison tool. All codes showed a percentage agreement >80%, with Cohen's κ values mostly meeting acceptable thresholds (O'Connor and Joffe, 2020). Codes with $\kappa < .2$ ('slight' agreement) were removed from the coding frame, while codes with $\kappa = .2-0.4$ ('fair' agreement) were revised to tighten code definitions. All coding was reviewed by at least two team-members, with differences in interpretation resolved through discussion.

Once coding was complete, NVivo's Query, Crosstab and Matrix functions were used to explore links between codes and their distribution across the datasets. Related codes were grouped into basic themes, which in turn were grouped into higher-level superordinate themes. To maintain closeness to the raw data, basic themes were labelled using representative quotes. The thematic structure reflects the range of contexts in which the NI-ROI border was represented in the data. To guard against bias, the final analysis was reviewed by a multidisciplinary team, which included residents of both ROI and NI.

3. Results

Analysis identified three superordinate themes: *Cross-Border Interdependencies*; *Interpretations of Cross-Border Policy Disparities*; *Responses to Cross-Border Policy Disparities*. The content of each is outlined below with illustrative quotes.²

3.1. Cross-Border Interdependencies

The media, social media and focus group data highlighted extensive cross-border interdependencies, with most focus on links between jurisdictions' travel, employment and health systems. These illustrated the complexity and challenges of living on a small island with a porous border.

3.1.1. Travel: "crossing it every day"

The difficulty of implementing national travel restrictions on an island with a fully permeable international border was evident in the data. Articles and tweets and focus group participants in both jurisdictions highlighted the routine and necessary volume of cross-border travel.

Where we are standing now is only around 40 m from NI [...] they have totally different protective measurements in place. We have many young people from this area going to schools in the North and returning in the evening. (ROI article, Donegal Live, 14/03/2020)

² All quotes include the date of publication/focus group. Focus group quotes are identified according to the focus group number (see Table 1) and the individual speaker's participant number and jurisdiction of residence (ROI/NI). Articles and tweets are identified with the jurisdiction in which they were published, with articles also including the name of the source publication. Consistent with ethical guidelines on social media research (Hewson and Buchanan, 2013), tweets quoted in the Results are slightly paraphrased to minimise risk of identifying the original authors of quoted text. Edits involved substitution of synonyms and re-ordering of clauses that did not change meaning or tone of the raw data.

There's people crossing it every day to go to work and for pleasure (P3, ROI, FG3, 17/07/2020)

Discrepancies between ROI and NI travel restrictions (e.g., in the geographical limits imposed during 'lockdown' periods) were observed in all datasets. The proximity of a jurisdiction subject to different travel restrictions fostered confusion and frustration.

If my friend in the Republic has COVID19 & decides to visit me he can't leave the virus 2 minutes away at the border. IT'S ONE ISLAND! (NI tweet, 14/03/2020)

In both media sources and focus groups, the frequency of cross-border movement also prompted criticism of cross-jurisdiction discrepancies in policies on overseas travel.

Concerns have been raised about different restrictions around travel either side of the border. The UK has announced a list of more than 50 countries where people can travel to, and from, without needing to promise to quarantine. While Northern Ireland is following the UK, the Republic is maintaining its quarantine policy but allowing almost unrestricted in-bound travel, including from the United States, where cases in some of the states are soaring. (NI article, Belfast Telegraph, 11/07/2020)

Confirming the divided approach on the island: 2 weeks self-isolation for arriving travellers on one side of the border but none on the other side. (ROI tweet, 09/07/2020)

Divergent travel advice on two sides of a frequently-crossed border undermined confidence in the effectiveness of restrictions.

Ridiculous! People won't adhere to the 2km travel limit here when our Northern neighbours can come for daytrips across the border? (ROI tweet, 14/04/2020)

we opened different things at different times in the North and South, I think the pubs are open in the North so you would find young people tend to maybe travel up North a bit to socialise. (P1, ROI, FG4, 29/07/2020)

3.1.2. Employment & trade: "falling through the cracks"

Divergence between ROI and NI guidelines caused difficulty for individuals whose home and workplace lay in different jurisdictions. The early weeks of the ROI lockdown saw media reports about ROI residents instructed by their Government to avoid non-essential travel, yet still expected to present at their NI workplace by "employers on the northern side of the border who draw many of their workers from the Republic" (NI article, BBC News NI, 14/03/2020). In the other direction, NI residents who "live in the North but work in the South" (P5, NI, FG4, 06/08/2020) were deemed ineligible for an emergency social welfare payment that the ROI government established for laid-off employees, a situation deemed "definitely not fair" (P5, NI, FG4, 06/08/2020). Media reports and focus group discussions outlined the distress and anxiety caused by "falling through the cracks" (NI article, Derry Journal, 26/03/2020) of two governments' social welfare regimes.

Cross border workers, many of whom have been working in the Republic for decades, have been told they cannot receive the COVID-19 payment because they live in the North. (ROI tweet, 02/04/2020)

Discrepancies in the timing of lockdown restrictions and their lifting resulted in unique trading conditions for businesses close to the border. Certain sectors of the economy closed or re-opened earlier in one jurisdiction, resulting in businesses on the closed side losing custom to the other jurisdiction. News media reported that businesses in ROI and NI held competitive advantages over each other at different times, depending on the sector, raising concerns that "people are going to move across the border and we're going to lose out on a lot of business" (NI article, Belfast Telegraph, 06/08/2020).

Mismatched Covid-19 rules north and south of the border has caused mass confusion for the public and left businesses feeling "abandoned". Traders, sports fans and politicians alike say the laws are a mess and must be unified. (ROI article, The Sun, 11/08/2020)

3.1.3. Health systems: "cross-border co-operation in human health"

While there was widespread agreement in principle that public health initiatives should be coordinated across jurisdictions, the data highlighted areas where this encountered difficulty in practice. Exemplifying how jurisdictional misalignment could impede public health, a focus group participant who had been diagnosed with COVID-19 reported difficulties accessing the testing services nearest to them as they lay in a different jurisdiction.

The closest testing centre to me is about 4/5 mile away and it's in the South and I don't know if I can go to it but the other is about 45-minute drive away in the North. (P3, NI, FG7, 13/09/2020)

Contact-tracing of COVID-19 cases in border counties, where individuals' contacts may span both jurisdictions, encountered challenges of sharing data across different agencies and systems. While there was hope of expediting contact-tracing through mobile phone apps that automatically logged individuals' contacts, this too encountered border-related challenges, leading to concerns that "people in Ireland could be forced to use two different contact tracing apps to safely travel over the border" (NI article, Belfast Telegraph, 10/05/2020). Commentators lamented that the contact-tracing apps for use in ROI and NI were developed using different, initially incompatible platforms (though interoperativity was eventually established in late-July).

Seems relevant to anyone crossing the border: 'While the app is an all-island application, it is not currently active in Northern Ireland.' (ROI tweet, 07/07/2020)

The news media did highlight some examples of effective cross-border cooperation, for example in procurement of personal protective equipment. The success of such exercises was attributed to precedents from certain pre-existing cooperative structures, for example in ambulance services, cancer care and previous viral outbreaks.

Cross border cooperation on Covid as in foot & mouth is the only way to protect the economies on this island and prevent an unrelentingly bleak and devastating winter (ROI tweet, 15/08/2020)

There are also important precedents for successful cross-border co-operation in human health. The Co-operation and Working Together network of health professionals in the border region, now nearly 30 years old, has shown what can be achieved when health administrators, doctors, nurses and other health workers work together to achieve better services and reduced waiting times (NI article, Belfast Telegraph, 02/04/2020)

3.2. Interpretations of cross-border policy disparities

All datasets indicated that lay publics perceived NI and ROI policy decisions as highly discordant during the months studied. This was attributed to politicisation of pandemic responses and positioned as incongruous with the inevitability of cross-border viral transmission.

3.2.1. "Two very different approaches"

Disparities in policies between NI and ROI were highlighted in all data sources. Almost universally, discrepancies were presented as a threat to the health of both populations.

different approaches to Covid-19 containment on both sides of the border could "pose threats to us all". (ROI article, Irish Examiner, 11/06/2020)

Two very different approaches are being taken between the Republic and the North, a big headache for border communities and implications for the effort to fight #COVID19 (ROI tweet, 12/03/2020)

There shouldn't be this miscommunication of "One's doing this, one's doing the other" [...] it's just confusing and I live right on the border so I always just go for the highest precaution there is like but this communication North/South is just nonsense (P3, NI, FG3, 13/09/2020)

Across data, there was consensus that policy disparities caused particular confusion for NI residents, who had the added complexity of exposure to a third source of advice: the UK Government. The UK Government response was sometimes equated with an approach of "herd immunity".

Northern Ireland Ministers have found themselves caught between conflicting advice from health experts; managing differing timetables for school closures; negotiating different approaches to community COVID-19 testing; and, ultimately, navigating the ethical distance between an approach based on 'flattening the curve', on the one hand, and one premised (initially) on the cultivation of 'herd immunity', on the other. (ROI article, iaces.ie, 19/03/2020)

I feel for my friends in the North. It's frustrating to see part of your country take measures to stop the spread of #COVID19 and the other experiment with herd immunity (ROI tweet, 16/03/2020)

it was very confusing because Boris [UK Prime Minister] was telling us one thing, Leo [ROI Taoiseach/Prime Minister] was telling us another thing and we were like "Well we're one island so really we should be working together" (P4, NI, FG1, 01/07/2020)

News and social media focused on two main sources of ROI-NI policy divergence: the speed and scope of lockdown measures, and approaches to COVID-19 testing. Regarding the latter, NI criteria for test eligibility for most of March and April were more restrictive than those in ROI, with testing concentrated in hospital settings. Media discussion of testing discrepancies favoured the more expansive ROI approach, though this did not emerge as a topic of focus group discussion.

the Republic is attempting to limit the spread of, and thus terminate, the outbreak as rapidly as possible through widespread and intensive community testing and contact tracing, a practice which was abandoned in Northern Ireland on March 13. Testing here, as in the rest of the UK, is now largely reserved for hospital in-patients and health service staff. (NI article, Belfast Telegraph, 02/04/2020)

Discussion of differences in lockdown policies particularly centred around their initial implementation in mid-March, when ROI initiated a mandatory closure of schools and non-essential businesses, which was not matched in NI until one week later. Similar discussions re-emerged in May, when ROI published a 'roadmap' of five phases for gradually lifting lockdown measures, with no NI equivalent emerging for nearly two weeks. The temporal misalignment was criticised both on grounds of public health risks and confusion for border communities.

You know Ireland sort of closing schools earlier than we did and you know it caused worry thinking "If they're closing why aren't we doing the same thing?" (P6, NI, FG8, 19/08/2020)

Bizarre stuff with the south in lockdown but 'business as usual' in the north. UK continuing to digress from other countries. (NI tweet, 12/03/2020)

In all datasets, the more cautious ROI approach tended to be favoured. There were some reports of NI border communities independently electing to follow ROI precedent over NI guidelines. For NI residents, ROI served as a reference standard against which to judge NI's response, often leading to anxiety.

I think because we were quite slow to respond and I think especially being in Northern Ireland seeing how the Republic responded ... I felt they were quicker and stricter on things ... that they were dealing with it much more decisively than we were" (P6, NI, FG8, 19/08/2020)

3.2.2. "Polarisation along orange and green lines"

All datasets included claims that in NI, responses to the pandemic had been politicised in line with prevailing political affiliations.

There has been a tendency to polarisation along orange and green lines, with Unionists tending to favour alignment with the rest of the UK and Nationalists advocating greater synchronicity across the island of Ireland. (ROI article, iaces.ie, 19/03/2020)

#Coronavirus has nothing to do with green and orange but some political parties are trying to use it to demonstrate power #StrongerTogether (NI tweet, 15/03/2020)

it needed to have a unified response based on the geographic logic of it rather than the politics [...] Everything is a political issue there [NI] because it is two very different opinions (P1, ROI, FG8, 19/08/2020)

Meanwhile, the ROI Government attracted some criticism for not informing the NI Executive of their lockdown plans prior to publicly announcing them.

I remember Varadkar [ROI Taoiseach] announced lockdown [...] We didn't even know about it in Northern Ireland [...] I found that absolutely incredible, we're on the same island where people are moving back and forth, they decide to lock down one part and don't even bother to tell the other. (P5, NI, FG3, 17/07/2020)

Politicisation was generally seen as a threat to the efficacy of the pandemic response.

*I'm not a republican but the politicisation of #COVID19 by unionist politicians is disgraceful. We should follow the example of *every other country* including the one we share a border with, rather than the UK. People are DYING. (NI tweet, 14/03/2020)*

I even think that sometimes the two governments are in loggerheads together, maybe it's a power trip [...] I don't know, but I think with a lot of things they could have worked better together on it but haven't really. (P3, ROI, FG6, 06/08/2020)

Numerous commentators argued that the importance of political tensions or cultural identities paled in comparison to the COVID-19 threat, and should not affect public health responses.

it's a very sensitive subject and the ruling party here are the DUP, for them to say that they [...] will follow the Taoiseach and Ireland, it's not a very popular position. But it is a pragmatic position and it really is a very sensible position that should be adopted on one island and the border is open and free to travel between the two countries (P1, NI, FG1, 01/07/2020)

However, calls for unity across the island often came at the expense of engraining division between Ireland (both North and South) and Great Britain. Many arguments that the NI Executive should depoliticise its pandemic response implicitly assumed that the ROI approach was preferable, and often enfolded criticism of UK Government policies and their presumed ideological motivations.

The 'business as normal' approach of Boris Johnson telling people to avoid going out, but for businesses not to close, versus the repeated hard hitting solidarity of 'we are with you', it couldn't be clearer, which administration, holds the best interests for the full island of Ireland. (NI article, The Tab Belfast, 18/03/2020)

I think it's difficult in Northern Ireland because like we have two rule sets that we're seeing [...] I think it's clear that England like are one of the worst countries in the world and the handling of the virus there has been like a joke (P3, NI, FG2, 16/07/2020)

3.2.3. "The virus does not respect borders"

Throughout the data, there recurred a continual refrain that the coronavirus "does not respect borders" (ROI article, breakingnews.ie, 07/04/20). Variations on this aphorism were repeated regularly by journalists and focus group participants.

But it's all the same virus. There's no border. (P1, ROI, FG8, 19/08/2020)

The effect was to endow cross-border policy discrepancies with an air of absurdity when juxtaposed against the physical properties of the viral threat. On social media, the same point was often conveyed through humour or sarcasm.

When it arrives at the border the virus will say "I, COVID-19, recognise the 1921 Anglo-Irish Treaty and partition through God and Ulster" (NI tweet, 31/03/2020)

At times, this truism sparked broader reflection on the 'unreal' nature of a border that is inscribed on maps, but largely invisible to the naked eye.

#coronavirus is a huge gamechanger. Ireland needs to be treated as one because it's impossible to close an artificial made-up "border" (ROI tweet, 17/03/2020)

3.3. Responses to cross-border policy disparities

The final superordinate theme captured perceptions of differing risk levels across the jurisdictions and two alternative (and antithetical) proposals for responding to this: calls to strengthen border controls and calls for a unified all-island approach.

3.3.1. "Imposing border controls"

Alongside disproportionate confusion and inconvenience, counties close to the border in ROI reported high case and mortality rates relative to the rest of the country. Despite reporting refutations from the Chief Medical Officers of both ROI and NI that the higher caseload in border counties reflected "spillover" or "leakage" from NI, a dominant interpretation of these statistics in ROI media attributed them to cross-border transmission from NI.

A possible reason for these figures being so high in these areas is the difference in approach between the Republic and Northern Ireland. The North has had a higher numbers [sic] of cases and deaths relative to its population than the Republic despite initially testing less. The North was also later to adopt a lockdown, isolation periods, school closures and other key mechanisms adopted to curb the spread of the virus, particularly in the early stages of the crisis. (ROI article, buzz.ie, 27/04/2020)

In ROI, perception that NI was taking insufficient action to suppress the virus led to concern about the risk posed by NI residents travelling into ROI for work and recreation.

Brazen holidaymakers are using unmanned border checkpoints to flood into Donegal for the Easter holidays during the COVID-19 crisis. While Gardai are manning many of the major road networks into Donegal, visitors from the North are using the remote access points to cross despite warnings not to travel [...] The arrival of so many visitors from both the North and other parts of Ireland into Donegal has led to increased tensions locally. (ROI article, Donegal Daily, 09/04/2020)

The data revealed some resentment arising from the perception that

UK-wide policies increased risk to ROI residents.

The UK is a disaster and it's undermined the superior COVID 19 effort in ROI, especially near the "border". (ROI tweet, 29/04/2020)

Especially at the start when Ireland was taking some very decisive action it was very strange that, you know, a person from Northern Ireland could easily just drive across into Ireland and kind of scupper all those plans (P3, NI, FG2, 16/07/2020)

While concern about a risk from ROI to NI was rare in the initial stages of the outbreak, this changed as society began to reopen during the summer months. ROI continued to allow flights from regions with high incidence rates to land in Dublin, which raised concern about people who arrived into ROI from overseas and then travel to NI.

It comes as the Republic's coronavirus reproductive number increased to 1 [...] In Northern Ireland recent estimates have placed the R-rate at between 0.5 and 1. TUV leader Jim Allister had previously raised concerns that flights arriving in Dublin from COVID-19 hotspots could pose a threat to the situation in Northern Ireland. (NI article, Belfast Telegraph, 13/07/2020)

Construction of the border as a boundary between two zones of differential risk led to calls to tighten border controls and restrict cross-border traffic.

Ireland must now face the reality that our control measures will count for nothing unless our government imposes some control measures on entry points from the UK. [...] Imposing border controls may seem anathema to our present government leaders but I believe the present crisis now necessitates it. (ROI article, politics.ie, 18/03/2020)

UK policy of herd immunity is a real and present danger to us, their nearest neighbours. If this goes badly for them, we must close the northern border. (ROI tweet, 14/03/2020).

However, calls to close the border attracted opposition on social media.

I don't think your priority is containing the virus, you just want to seal the land border. I have news for you - there is no land border to seal on the island. (ROI tweet, 23/07/2020)

The only way to make Ireland "covid free" is to seal borders and enforce universal quarantine. This is blinkered nonsense and a 1-way ticket to financial ruin. (ROI tweet, 20/07/2020)

3.3.2. "Needs a one-island approach"

The existence of differing policy regimes on the island was widely acknowledged as a barrier to efforts to suppress the virus. Across jurisdictions and datasets, there were frequent calls for explicit alignment of COVID-19 strategies across the island.

I think there should have been more of a joined-up approach from the North and the South because obviously we cross the border every day (P4, NI, FG3, 17/07/2020)

As regards the border, like we're still on the one [island] even though we're separate as such, like we should have had the same rules instead of 'one set for one' and 'the other set for the other'. It was totally ridiculous. It's just spreading then (P2, ROI, FG8, 19/08/2020)

The island really needs a one-island approach to beat #COVID19 as people don't see a border, they come back and forth. This isn't rocket science, it's playing with people's lives (NI tweet, 21/03/2020)

In news media, calls for synchronisation sometimes took the form of proposals for specific cooperative enterprises in areas such as business, tourism and healthcare.

Two major business groups have written to the governments in Dublin and Belfast to urge co-ordination in the recovery from coronavirus. (NI article, BBC News NI, 03004/2020)

In social media and focus groups, calls for policy alignment more frequently manifested in the more abstract, unifying idea of an 'all-island approach', whereby the island would be "looked at as a single epidemiological unit" (ROI article, newstalk.com, 14/05/20).

a reciprocal all island approach is necessary. (NI tweet, 12/03/2020)

I think an all island approach would have been definitely beneficial [...] the idea of us having two separate arrangements and not talking to each other I don't think was a good idea (P3, ROI, FG3, 17/07/2020)

One idea, particularly frequent in the focus groups, suggested that Ireland's 'island status' or "beautiful natural border" (NI tweet, 20/03/2020) should be used as a public health advantage. In advancing this argument, some drew on a comparison with New Zealand, an island nation perceived to have effectively contained the virus.

Ireland is a very small island and it could have been shut down completely as they did in New Zealand and kept the numbers down (P4, NI, FG3, 17/07/2020)

An all-island approach was often justified with appeals to science, rationality, or a "common sense approach" (P5, NI, FG5, 05/08/2020), which were positioned as superseding domestic political concerns.

I don't understand why some political parties don't accept a one island approach. It's not rocket science - it would benefit everyone on this island (NI tweet, 18/03/2020)

Other arguments for an all-island approach appealed to a sense of collective unity in the face of a common threat. The importance of cross-border solidarity was invoked as a public health mechanism.

we need to come together as an all-island collective, using all of our resolve and determination to make Ireland a virus-free land. (NI article, Belfast Telegraph, 13/04/2020)

I think it should be an all-Ireland approach because it's not about power after all [...] It should be all in together and try and save people's lives and not where you want to be and what the government want. (P3, ROI, FG4, 29/07/2020)

However, references to an all-island approach also sometimes involved criticism of those perceived to oppose it – notably, Unionist politicians and parties in NI (although it should be noted that the analysis revealed no explicit objection to cross-border synchronisation from any party or individual).

Only the DUP take medical advice from a different island. Absolutely pathetic, we need a one island approach that's responsible for everyone on this island with no borders (NI tweet, 16/03/2020)

All references to an all-island approach in the media data argued in its favour. However, some focus group participants raised cautionary points regarding the potential complexity of implementing a synchronised response across jurisdictions. These were framed as implementation barriers rather than objections to synchronisation.

I wouldn't be against it I suppose if they could come up with a workable way of doing it [...] In the North they politicised the whole COVID and so I'd imagine the same thing would happen if you tried to make it an all-Ireland approach, it would probably end up in one big mess. (P1, ROI, FG5, 05/08/2020)

If you look towards the NHS [UK National Health Service] and then the HSE [ROI Health Service Executive] would they be very contrasting, very different things? Just to turn around and say 'OK, we're going to have that exact same system', would that put more of a hindrance, it would make

people feel better by all means but would that put more of a strain on the healthcare workers? (P6, ROI FG1, 01/07/2020)

4. Discussion

COVID-19 has highlighted the distinct challenges of maintaining open borders when faced with a strongly contagious virus with long incubation and high asymptomatic transmission (Eckardt et al., 2020; Laroze et al., 2021). Such challenges are compounded when those borders are socially, politically and historically fraught. Understanding the stakes of border management decisions requires information on how specific border arrangements are experienced by the affected populations. This study explored public perspectives on the role of the NI-ROI border during the COVID-19 pandemic, through a rigorous examination of news media, social media and focus group data collected over the pandemic's 'first wave'.

The study shows that during the early months of the COVID-19 pandemic, lay publics were highly sensitive to the considerable interdependence between ROI and NI's commercial, travel and health systems. There was widespread agreement that this interdependence impacted disproportionately on regions near the border. All data sources suggested that residents of the island, and particularly border communities, were inconvenienced and confused by their proximity to different jurisdictions, which at times pursued different policy pathways. This may have compounded psychological stress during an already disorienting time (Hyland et al., 2020). Results suggest that given the widespread prevalence of legitimate cross-border movement, residents of the island would benefit from accessible, joined-up guidelines on negotiating divergent policy regimes during a single journey. While the current qualitative analysis cannot directly connect the perceived vulnerability of border communities to morbidity or mortality, it is notable that relatively sparsely-populated border regions have frequently ranked among the areas with highest COVID-19 incidence on the island (Department of Health, 2020; Health Protection Surveillance Centre, 2020).

In the early months of the pandemic, all data sources framed ROI and NI policy responses as discordant in both the nature and timing of decisions taken. Importantly, this is not necessarily an accurate reflection of the degree of inconsistency in political responses: independent policy analysis suggests the two jurisdictions' responses were more compatible than media reports suggest (Nolan et al., 2021). Regardless, the data show that public discourse reproduced an antagonistic narrative that set the two jurisdictions' approaches in opposition. Perceived discrepancies resulted in frustration and confusion for all residents on the island, but particularly for NI residents, who exist in the centre of a 'governmental Venn diagram' between Dublin, Belfast and Westminster. While NI is part of the UK and British Commonwealth, there is legal recognition of the Irish Government's interest in NI, reflected through participation of the NI Executive in the North/South Ministerial Council and the British-Irish Intergovernmental Conference. This political complexity, which has been purposefully designed to achieve peace on the island, has resulted in some confusion for NI citizens when seeking clear, concise direction during this pandemic. The purportedly more cautious ROI decisions were generally favoured by commentators on both sides of the border, but it should be noted that (consistent with its larger population) there was more representation of ROI news and social media in the data (although focus groups overcorrected for NI representation by recruiting equal numbers of ROI and NI residents).

The analysis suggested that exposure to differing policy regimes provoked questions about their rationale, which led to aspersions of vested political interests. This was particularly apparent for NI, where choices that aligned with ROI vs. UK policies were interpreted through the lens of "green vs. orange" affiliations (green being a colour traditionally associated with ROI and orange with Unionist political traditions). Despite the presence of such politicisation in aspects of the data,

all data sources strongly condemned perceived political interests in important public health decisions, noting the logical fallacy of premising policies on jurisdictional boundaries that viruses do not recognise (Laroze et al., 2021). Since evidence suggests political distrust undermines compliance with public health regulations (Bargain and Aminjonov, 2020; Fancourt et al., 2020; Pagliaro et al., 2021; Wright et al., 2021; Ye and Lyu, 2020), these interpretations of cross-border policy disparities are likely to impede efforts to control the virus.

Reflecting public disquiet with perceived jurisdictional policy discrepancies, there were widespread calls for an all-island public health response. The consistency of the endorsement of cross-border synchronisation from all data sources was striking, with the analysis unearthing no antipathy to an all-island approach, beyond some concerns about practical barriers. Arguments for an all-island approach were made through the prism of scientific data, appeals to 'common-sense', and emotive claims on collective identity. While numerous commentators noted the potential sensitivity of this proposal, political statements were noticeably absent from most endorsements of an all-island approach, only invoked as old-fashioned politics that should cede way to pragmatism. However, it should be noted that since it was not feasible to systematically sample or assess the political affiliations of newspapers, Twitter accounts or focus group participants, it is possible that NI's Unionist communities, who may be less favourable towards an all-island approach, were under-represented in the data.

While there was widespread support for an all-island strategy, the analysis also implied that if cross-border synchronisation is not forthcoming, public opinion may pivot to supporting border reinforcements to prevent viral cross-transmission. It is notable that this idea had apparently evolved into an acceptable suggestion in public discourse, immediately following the Brexit negotiations in which a 'hard border' was anathema across the island (Hayward, 2020). During the pandemic, the meaning of the border expanded from a demarcation between nation-states, to a boundary between differing policy ecosystems and disease zones. In this context, 'the other side' became a source of threat, and cross-border travellers vectors of risk (Joffe, 1999). The analysis illustrates how in a context of recent political conflict, the emergence of a transnational public health crisis risks exacerbating political tensions and ethnocentrism.

4.1. Strengths & limitations

This study is among the first to examine public perspectives on COVID-19 in Ireland, and one of the first analyses internationally of how the pandemic may affect populations living with open borders. Findings have relevance for other countries that may be considering refraining from border closures in future pandemic waves, particularly if such borders are contested (e.g. the Basque Country, Taiwan). This said, findings pertain only to the island of Ireland and the qualitative design does not claim international generalisability.

One key analytic strength is the triangulation of three data sources, which enriched understanding of each theme and mitigated source-specific bias. However, their synthesis into a single analysis sacrificed some nuance within each dataset. Each of the data sources had unique but complementary strengths and limitations. Media datasets were restricted to articles/tweets that contained the word 'border': while this would presumably encapsulate both explicit support and antagonism to cross-border cooperation, more implicit arguments for NI's alignment with either GB or ROI may not have been captured. The social media posts reflect real-time, naturally-generated expressions of individual opinion, but their restriction to public Twitter accounts with geolocation enabled means they may not be representative of all social media content. The news database covered a wide range of both online and print outlets, but included fewer NI-based publications. Additionally, media produced in mainland Britain were not included, which could have contributed to an under-representation of NI's Unionist communities who may preferentially consume British news. The focus group

participants were purposively selected to balance residence in NI and ROI, along with a range of other ecologically valid sampling criteria. However, though generalisability is not the core function of qualitative research, it should be noted that sampling was intentionally constrained to individuals from middle-class socio-economic backgrounds. Additionally, focus groups were conducted over a more limited time-period than the media data, during an ebbing of COVID-19 incidence over the summer months. Indeed, the entire analysis represents a snapshot in time rather than a longitudinal investigation of the pandemic. It remains to be seen how public perspectives have evolved since ROI and NI entered the 'second wave' of the pandemic in Autumn 2020.

5. Conclusion

In the months following this study, the disparity between ROI and NI COVID-19 incidence became more pronounced than during the period covered in the current analysis. During November 2020, the NI death rate from COVID-19 was four times that of ROI (Department of Health, 2020; Health Protection Surveillance Centre, 2020). These epidemiological disparities likely raised additional complexities regarding the open border, which may have been further compounded from January 2021, when it became not only the border between ROI and NI, but also between the EU and its former member-state the UK. The current study will be useful to all stakeholders involved in the continued response to COVID-19 on the island, by illuminating the varied implications of the border for the everyday lives of both populations. Results reveal clear public appetite for greater synchronisation of cross-border pandemic responses, emphasise the specific vulnerability of communities living near the border, and highlight the risk of long-term sociopolitical repercussions of border management policies during the pandemic. To promote the welfare of all residents of the island, these implications should be considered in determining future policies regarding border management and inter-jurisdictional cooperation.

Credit author statement

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Declaration of competing interest

None.

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References

- Bargain, O., Aminjonov, U., 2020. Trust and compliance to public health policies in times of COVID-19. *J. Publ. Econ.* 192, 104316. <https://doi.org/10.1016/j.jpubeco.2020.104316>.
- Boland, M., O'Riordan, M., 2019. Preparedness and management of global public health threats at points of entry in Ireland and the EU in the context of a potential Brexit. *Glob. Health* 15, 53. <https://doi.org/10.1186/s12992-019-0496-4>.
- Braun, V., Clarke, V., 2006. Using thematic analysis in psychology. *Qual. Res. Psychol.* 3, 77–101. <https://doi.org/10.1191/1478088706qp063oa>.
- Connor, P., 2020. More than Nine-In-Ten People Worldwide Live in Countries with Travel Restrictions amid COVID-19. Pew Research Center. URL: <https://www.pewresearch.org/fact-tank/2020/04/01/more-than-nine-in-ten-people-worldwide-live-in-countries-with-travel-restrictions-amid-covid-19/>. accessed 11.27.20.
- Cruwys, T., Stevens, M., Greenaway, K.H., 2020. A social identity perspective on COVID-19: health risk is affected by shared group membership. *Br. J. Soc. Psychol.* 59, 584–593. <https://doi.org/10.1111/bjso.12391>.
- Darker, C.D., O'Connell, N., Dempster, M., Graham, C.D., O'Connor, C., Zgaga, L., Nolan, A., Tobin, K., Brennan, N., Nicolson, G., Burke, E., Mather, L., Crowley, P., Scally, G., Barry, J., 2020. Study protocol for the Covid-19 Toolbox for All IslaNd (CONTAIN) project: a cross-border analysis in Ireland to disentangle psychological, behavioural, media and governmental responses to COVID-19. *HRB Open Res.* 3 <https://doi.org/10.12688/hrbopenres.13105.1>.
- de Rooij, D., Belfroid, E., Hadjichristodoulou, C., Mouchtouri, V.A., Raab, J., Timen, A., for the EU HEALTHY GATEWAYS Joint Action consortium, 2020. Educating, training, and exercising for infectious disease control with emphasis on cross-border settings: an integrative review. *Glob. Health* 16, 78. <https://doi.org/10.1186/s12992-020-00604-0>.
- Department of Health, 2020. COVID-19 - daily dashboard updates [WWW Document]. URL: <https://www.health-ni.gov.uk/articles/covid-19-daily-dashboard-updates>. accessed 12.8.20.
- Eckardt, M., Kappner, K., Wolf, N., 2020. Covid-19 across European regions: the role of border controls. In: CEPR Discussion Paper DP15178.
- Fancourt, D., Steptoe, A., Wright, L., 2020. The Cummings effect: politics, trust, and behaviours during the COVID-19 pandemic. *Lancet* 396, 464–465. [https://doi.org/10.1016/S0140-6736\(20\)31690-1](https://doi.org/10.1016/S0140-6736(20)31690-1).
- Ferriter, D., 2019. *The Border: The Legacy of a Century of Anglo-Irish Politics*. Profile Books, London.
- Freeman, T., 2006. 'Best practice' in focus group research: making sense of different views. *J. Adv. Nurs.* 56, 491–497. <https://doi.org/10.1111/j.1365-2648.2006.04043.x>.
- Gollwitzer, A., Martel, C., Brady, W.J., Pärnamets, P., Freedman, I.G., Knowles, E.D., Van Bavel, J.J., 2020. Partisan differences in physical distancing are linked to health outcomes during the COVID-19 pandemic. *Nat. Hum. Behav.* 4, 1186–1197. <https://doi.org/10.1038/s41562-020-00977-7>.
- Guild, E., 2020. Covid-19 using border controls to fight a pandemic? Reflections from the European union. *Front. Hum. Dyn.* 2 <https://doi.org/10.3389/fhumd.2020.606299>.
- Hayward, K., 2020. Life and work across the Irish border through Brexit. *Ann. Mine.* 101–105.
- Health Protection Surveillance Centre, 2020. Epidemiology of COVID-19 in Ireland [WWW Document]. URL: <https://www.hpsc.ie/a-z/respiratory/coronavirus/novel-coronavirus/casesinireland/epidemiologyofcovid-19inireland/>.
- Hossain, M.P., Junus, A., Zhu, X., Jia, P., Wen, T.-H., Pfeiffer, D., Yuan, H.-Y., 2020. The effects of border control and quarantine measures on the spread of COVID-19. *Epidemics* 32, 100397. <https://doi.org/10.1016/j.epidem.2020.100397>.
- Hyland, P., Shevlin, M., McBride, O., Murphy, J., Karatzias, T., Bentall, R.P., Martínez, A., Vallières, F., 2020. Anxiety and depression in the Republic of Ireland during the COVID-19 pandemic. *Acta Psychiatr. Scand.* 142, 249–256. <https://doi.org/10.1111/acps.13219>.
- Ipsos, M.R.B.I., 2020. Social Networking Tracker 2019. Ipsos MRBI, Dublin.
- Joffe, H., 1999. *Risk and 'the Other'*. Cambridge University Press, Cambridge.
- Laroze, D., Neumayer, E., Plümper, T., 2021. COVID-19 does not stop at open borders: spatial contagion among local authority districts during England's first wave. *Soc. Sci. Med.* 270, 113655. <https://doi.org/10.1016/j.socscimed.2020.113655>.
- Lee, K., Worsnop, C.Z., Grépin, K.A., Kamradt-Scott, A., 2020. Global coordination on cross-border travel and trade measures crucial to COVID-19 response. *Lancet* 395, 1593–1595. [https://doi.org/10.1016/S0140-6736\(20\)31032-1](https://doi.org/10.1016/S0140-6736(20)31032-1).
- Maher, P., MacCarron, P., Quayle, M., 2020. Mapping public health responses with attitude networks: the emergence of opinion-based groups in the UK's early COVID-19 response phase. *Br. J. Soc. Psychol.* 59, 641–652. <https://doi.org/10.1111/bjso.12396>.
- Marien, S., Hooghe, M., 2011. Does political trust matter? An empirical investigation into the relation between political trust and support for law compliance. *Eur. J. Polit. Res.* 50, 267–291. <https://doi.org/10.1111/j.1475-6765.2010.01930.x>.
- NewsWhip, 2020. Coverage of the Coronavirus on Web and Social. NewsWhip.
- Nolan, A., Burke, S., Burke, E., Darker, C., Barry, J., O'Connell, N., Zgaga, L., Mather, L., Nicolson, G., Dempster, M., Graham, C.D., Crowley, P., O'Connor, C., Tobin, K., Scally, G., 2021. Obstacles to public health that even pandemics cannot overcome: the politics of COVID-19 on the island of Ireland. *Ir. Stud. Int. Aff.: ARINS* 32, 225–246. <https://doi.org/10.3318/asia.2021.32b.22>.
- Nowell, L.S., Norris, J.M., White, D.E., Moules, N.J., 2017. Thematic analysis: striving to meet the trustworthiness criteria. *Int. J. Qual. Methods* 16. <https://doi.org/10.1177/1609406917733847>, 1609406917733847.
- O'Connor, C., Joffe, H., 2020. Inter-coder reliability in qualitative research: debates and practical guidelines. *Int. J. Qual. Methods*. <https://doi.org/10.1177/1609406919899220>.
- O'Connor, C., Rees, G., Joffe, H., 2012. Neuroscience in the public sphere. *Neuron* 74, 220–226.
- Pagliaro, S., Sacchi, S., Pacilli, M.G., Brambilla, M., Lionetti, F., Bettache, K., Bianchi, M., Biella, M., Bonnot, V., Boza, M., Butera, F., Ceylan-Batur, S., Chong, K., Chopova, T., Crimston, C.R., Álvarez, B., Cuadrado, I., Ellemers, N., Formanowicz, M., Graupmann, V., Gkinopoulos, T., Jeong, E.H.K., Jasinskaja-Lahti, I., Jetten, J., Bin, K.M., Mao, Y., McCoy, C., Mehnaz, F., Minescu, A., Sirlöp, D., Simić, A., Travaglino, G., Uskul, A.K., Zanetti, C., Zinn, A., Zubieta, E., 2021. Trust predicts COVID-19 prescribed and discretionary behavioral intentions in 23 countries. *PLoS One* 16, e0248334. <https://doi.org/10.1371/journal.pone.0248334>.
- Robinson, O.C., 2014. Sampling in interview-based qualitative research: a theoretical and practical guide. *Qual. Res. Psychol.* 11, 25–41. <https://doi.org/10.1080/14780887.2013.801543>.
- Sabat, I., Neuman-Böhme, S., Varghese, N.E., Barros, P.P., Brouwer, W., van Exel, J., Schreyögg, J., Stargardt, T., 2020. United but divided: policy responses and people's perceptions in the EU during the COVID-19 outbreak. *Health Pol.* 124, 909–918. <https://doi.org/10.1016/j.healthpol.2020.06.009>.
- Shao, W., Hao, F., 2020. Confidence in political leaders can slant risk perceptions of COVID-19 in a highly polarized environment. *Soc. Sci. Med.* 261, 113235. <https://doi.org/10.1016/j.socscimed.2020.113235>.
- Sheeran, P., Maki, A., Montanaro, E., Avishai-Yitshak, A., Bryan, A., Klein, W.M.P., Miles, E., Rothman, A.J., 2016. The impact of changing attitudes, norms, and self-efficacy on health-related intentions and behavior: a meta-analysis. *Health Psychol.* 35, 1178–1188. <https://doi.org/10.1037/hea0000387>.
- Trumbore, P.F., Owsiak, A.P., 2019. Brexit, the border, and political conflict narratives in northern Ireland. *Ir. Stud. Int. Aff.* 30, 195–216. <https://doi.org/10.3318/asia.2019.30.12>.
- van Bavel, J.J., Cichocka, A., Capraro, V., Sjästad, H., Nezelek, J.B., Alfano, M., Azevedo, F., Cislak, A., Lockwood, P., Ross, R.M., Agadullina, E., Apps, M.A.J., Aruta, J.J.B.R., Bor, A., Crabtree, C., Cunningham, W.A., De, K., Elbaek, C.T., Ejaz, W., Findor, A., Gjonneska, B., Horiuchi, Y., Huynh, T.L.D., Ibanez, A., Israelashvili, J., Jasko, K., Kantorowicz, J., Kantorowicz-Reznichenko, E., Krouvel, A., Laakasuo, M., Lamm, C., Leygue, C., Mansoor, M.S., Mayiyar, L., Mapezou, H., McHugh, C., Mitkidis, P., Olsson, A., Otterbring, T., Perry, A., Packer, D., Petersen, M.B., Puthillam, A., Rothmund, T., Tewari, S., Tsakiris, M., Tung, H., Yucel, M., Vanags, E., Vlasceanu, M., Antazo, B.G., Barbosa, S., Bastian, B., Bilancini, E., Bogatyreva, N., Boncinelli, L., Booth, J.E., Borau, S., Buchel, O., Carvalho, C.F. de, Celadin, T., Cerami, C., Cian, L., Crespi, C., Cutler, J., Delouée, S., Decache, G., Paolo, R.D., Dulleck, U., Etienne, T.W., Farkhari, F., Fugelsang, J.A., Gkinopoulos, T., Gray, K., Griffin, S., Gronfeldt, B., Gruber, J., Harris, E.A., Hruska, M., Isler, O., Jangard, S., Jørgensen, F.J., Koppel, L., Leota, J., Lermer, E., Levy, N.L., Longoni, C., Miura, A., Muda, R., Myer (am7mv), A., Nash, K., Nitschke, J.P., Ohtsubo, Y., Mello, V.O. de, Pan, Y., Zsófia, P., Pärnamets, P., Paruzel-Czachura, M., Pitman, M.M., Pyrkosz-Pacyna, J., Rathje, S., Raza, A., Rhee, K., Régo, G.G. do, Robertson, C., Salvador-Ginez, O., Sampaio, W.M., Savage, D.A., Scheffer, J.A., Schönegger, P., Scott, A., Skali, A., Strickland, B., Stafford, C.A., Stefaniak, A., Sternisko, A., Tinghög, G., Torgler, B., Tucciarelli, R., Ungson, N.D., Uysal, M.S., Prooijen, J.-W. van, Rooy, D.V., Västfjäll, D., Vieira, J.B., Walker, A.C., Wetter, E., Willardt, R., Wojcik, A., Wu, K., Yamada, Y., Yilmaz, O., Yogeewaran, K., Zwaan, R., Boggio, P., Cameron, D., Tyralla, M., Gualda, E., Moreau, D., Palomäki, J., 2020. National Identity Predicts Public Health Support during a Global Pandemic: Results from 67 Nations. *PsyArXiv*. <https://doi.org/10.31234/osf.io/ydt95>.
- Washer, P., Joffe, H., Solberg, C., 2008. Audience readings of media messages about MRSAs. *J. Hosp. Infect.* 70, 42–47. <https://doi.org/10.1016/j.jhin.2008.05.013>.
- Wnuk, A., Oleksy, T., Maison, D., 2020. The acceptance of Covid-19 tracking technologies: the role of perceived threat, lack of control, and ideological beliefs. *PLoS One* 15, e0238973. <https://doi.org/10.1371/journal.pone.0238973>.
- World Health Organization, 2017. *Pandemic Influenza Risk Management*. World Health Organization, Geneva.
- Wright, L., Steptoe, A., Fancourt, D., 2021. Predictors of self-reported adherence to COVID-19 guidelines. A longitudinal observational study of 51,600 UK adults. *Lancet Reg. Health Europe* 4, 100061. <https://doi.org/10.1016/j.lanepe.2021.100061>.
- Ye, M., Lyu, Z., 2020. Trust, risk perception, and COVID-19 infections: evidence from multilevel analyses of combined original dataset in China. *Soc. Sci. Med.* 265, 113517. <https://doi.org/10.1016/j.socscimed.2020.113517>.