



Content Analysis of Climate Change Coverage in Trinidad and Tobago's Print Media

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ABSTRACT

To address the existential threat to Small Island Developing States posed by climate change it is important that the public is informed and empowered to act. Print media is still widely considered to be the penultimate source of environmental information after television among Trinidad and Tobago citizens. This study analyses the coverage of climate change in newspaper articles written by local journalists and contracted columnists in Trinidad's print media over the period 30 July 2019 – 12 July 2021. Climate change reporting was analysed in four different ways: frequency of articles among the three most popular newspapers; placement of articles within daily publications; dates of publication and content focus on science, impacts, responsibility, and action. This analysis revealed that only 3.66% of articles that mentioned 'climate change' were solely about the issue, while most articles were published around dates of international observances or adverse events, like flooding. Further, articles favoured reporting on the science and impacts of climate change and less so on responsibility and action. Finally, for articles whose original publication placement could be determined 45% of articles were found to be in the middle of the paper, on page 25 on average. These findings highlight the need for further media sensitisation of newspaper

editors, greater advocacy for environment-centred news outlets and for dedicated sections in newspapers for promoting environmental action.

Keywords: Climate Change; Trinidad and Tobago; Media

1.0 INTRODUCTION

Climate change poses an existential threat to not only mankind but the planet itself [1]. Like other Small Island Developing States (SIDS) globally and in the region, Trinidad and Tobago is particularly vulnerable to the effects of climate change [2]. These effects which include increased average daily temperatures, changes in precipitation patterns and intensity and sea-level rise have been observed to be rapidly increasing since the 1960s [3]. Moreover, micro-climate variations and extreme weather events are becoming increasingly frequent, resulting in consecutive years of pay-outs under Trinidad and Tobago's catastrophe insurance policies [4,5,6,7]. These impacts directly obstruct Trinidad and Tobago's pandemic recovery plans which have focused on diversification towards the agricultural sector [8]. Agricultural and ecological droughts in the Caribbean are projected to increase with 2°C warming



[2,9]. Trinidad and Tobago alone estimates losses of up to \$1.815 million annually due to agricultural droughts [9].

Trinidad and Tobago formalised its commitment to global collective action against climate change by ratifying the Paris Agreement in 2018 [10]. In doing so, it pledged to keep global warming to below 2°C compared to pre-industrial levels and aims to keep warming below 1.5°C [11]. The latest report from the Intergovernmental Panel on Climate Change indicates that the 1.5°C target is likely to be crossed in all climate scenarios within the coming decade [2]. Through the country's 2018 National Environmental Policy, the government recognises that achieving this global goal requires the combined and sustained efforts of all sectors and strata of society [12]. Furthermore, it calls for the fostering of an environmentally responsible society by way of communication, education and public participation [12].

The importance of public education and awareness in addressing the modern climate crisis is widely established and accepted [13]. Under Article 12 of the Paris Agreement, Parties are asked to take action on climate change education, training, public awareness, public participation and public access to information [11]. A citizenry that is aware of the perils and appropriate responses needed can become important agents of change that can drive climate action. Previous studies have shown how mass media has influenced public knowledge on environmental issues such as climate change [14]. Thus, the mainstreaming of climate change reporting in mass media is important to both policy creation and implementation.

In Trinidad and Tobago, past surveys such as the 2013 National Institute of Higher Education, Research, Science and Technology (NIHERST) and 2016 Environmental

Management Authority (EMA) surveys, revealed that although there is a moderate level of environmental awareness, few people consider climate change a serious environmental concern [15,16]. The 2013 NIHERST Survey on Environmental Awareness and Practices showed that only 8% of respondents thought climate change was the most pressing environmental concern [15]. The survey further showed that individuals with higher levels of education generally thought climate change was the most important concern [15]. The EMA's 2016 National Environmental Literacy Survey further showed students were more informed on climate change issues when compared to businesses and households [16]. From those survey results, only 5% of household respondents and 5% of industry respondents thought climate change was the most pressing issue for the country [10]. These findings suggest that whereas school-based programmes have improved climate change awareness among students, there is limited reach to adults who consume environmental information through television and newspapers [15,16].

Both regionally and locally there have been several efforts to increase local journalists' ability to accurately report on climate change through increasing their knowledge via workshops and handbooks [17,18,19]. In 2005 a handbook was co-developed by the Trinidad and Tobago Environmental Management Authority which aimed to help journalists understand climate events and the threat it poses to the region to better be able to relay that information to their readers [17]. In 2020, there was a modernisation of the 2005 handbook published by UNESCO, again with the aim of improving climate change reporting in the Caribbean [19]. The Government of Trinidad and Tobago also conducted a media sensitization workshop aimed at equipping journalists with the knowledge to report on climate change issues, initiatives, and impacts in 2019 [18].



As the window for achieving the 1.5°C target of the Paris Agreement narrows, it is critical that the messaging on climate change carried by Trinidad and Tobago's print media be evaluated. Content analysis of print media has been used across multiple countries to better understand variations in public understanding on global environmental issues, and subsequent motivations to action [20, 21, 22, 23, 24]. By quantifying qualitative data through coded categories over a broad period, social scientists can gain nuanced understanding of strengths and opportunities in climate change reporting. This study analyses the frequency, timing, placement and content of climate change articles written by local journalists and contracted columnists in Trinidad and Tobago's print media over the period 30 July 2019 to 12 July 2021.

2.0 METHODOLOGY

2.1 Selection of the articles

For this analysis the three major print media in Trinidad and Tobago were used, the Trinidad and Tobago Guardian (Guardian), the Daily Express (Express) and the Trinidad and Tobago Newsday (Newsday). The online versions of each newspaper were used and searched for the keyword "climate change" and was filtered for dates between 30 July 2019 to 12 July 2021. The start date of 30th July 2019 was selected as it was immediately after the media sensitisation workshop for journalists in Trinidad and Tobago. From this search the Guardian yielded 605 results, the Express yielded 292 results and the Newsday yielded 633 results. The study sought to examine coverage only by local journalists and contracted columnists. As such the following results were excluded: business, high school features, advertorials, political advertisements, letters to the editor, reprints of regional/international stories, special sections and articles mentioning 'climate change' within the title of a

person or organisation. From this refinement, the final dataset was established with the Guardian yielding 84 results, the Express yielding 31 results and the Newsday yielding 131 results.

2.2 Analysis of Articles

The dataset was analysed using an adapted coding system from Billet (2009) that was modified to fit a contemporary, Caribbean context [20]. The codes were changed to focus on climate change reporting in Trinidad and Tobago as well as the Caribbean, coverage of the Paris Agreement instead of the defunct Kyoto Protocol, and codes were added to analyse mitigation and adaptation coverage. The articles were coded based on the science (Table 1), impacts (Table 2), responsibility (Table 3), and action (Table 4) of climate change. Codes 1-2 focused on science, code 3 focused on impacts, codes 4-6 focused on responsibility and codes 7-12 were focused on action. Science refers to the existence and causes of climate change, such as greenhouse gas emissions from various sources (natural or anthropogenic). Impacts refers to the effects of climate change, for instance, some articles identified flooding and biodiversity loss as effects of climate change. Responsibility looks at the countries which have a greater influence on climate change and their concomitant actions. Finally, Action includes actions/plans to mitigate/adapt/become more resilient to climate change or argues that these are needed.

This approach specifically modifies the text of Billet's method (2009), but not the overall methodology, which remains true to Billet's paper (2009) and the methodology developed by Krippendorff (2004). Consequently, the coding methodology when tested for reliability and validity in Krippendorff's methods for qualitative text analysis, returns the coefficients of 0.812 and 0.919 respectively.



Table 1. Codes 1-2 showing the coverage of the science of climate change

Code 1- coverage of existence of climate change	
S1	Article argues that rapid, unusual climate change does not exist today
S2	Article argues that rapid, unusual climate change may exist today
S3	Article argues that rapid, unusual climate change does exist today
Of those coded S3: code 2—coverage of the causes of climate change	
S4	Suggests that present-day climate change is naturally forced
S5	Suggests that present-day climate change may be naturally and/or anthropogenically forced
S6	Suggests that present-day climate change is anthropogenically forced
R1	Uses environmental change as evidence for climate change
R2	Uses scientific research as evidence for climate change

Table 2. Codes 3 showing the coverage of the impacts of climate change

Of those coded S2 and/or S3: code 3—coverage of impacts resulting from identified climate change	
A1	Article refers to the impacts of climate change in Trinidad and Tobago
A2	Article refers to the impacts of climate change in Caribbean region
A3	Article refers to the impacts of climate change globally
A4	Article refers to the impacts of climate change as a threat in Trinidad and Tobago
A5	Article refers to the impacts of climate change as a threat in Caribbean region
A6	Article refers to the impacts of the climate change as a threat globally

Table 3. Codes 4-6 showing the responsibility of climate change

Code 4—coverage of the responsibility for identified climate change	
G2	Argues that responsibility for climate change is global and equal
G3	Argues that responsibility for climate change rests with developed countries



G4	Argues that responsibility for climate change is common but differentiated
Code 5 —coverage of responsibility for climate change within Trinidad and Tobago	
L1	Argues that there should be domestic emissions cuts for Trinidad and Tobago
L2	Argues that there should not be domestic emissions cuts for Trinidad and Tobago
L3	Does not mention domestic stratification of Trinidad and Tobago's responsibility or emissions
L4	Does mention domestic stratification of Trinidad and Tobago's responsibility or emissions
Of those coded L4: code 6—coverage of potential mitigation by high emitters in Trinidad and Tobago	
L5	Argues that there should be emission cuts by government of Trinidad and Tobago
L6	Argues that there should be emission cuts by both government and the public (that is including the private sector, non-governmental associations, and individuals) in Trinidad and Tobago

Table 4. Codes 7-12 showing the action of climate change

Code 7—coverage of action and decisions regarding mitigation action on identified climate change	
H1	Argues that mitigation action should be global and equal
H2	Argues that mitigation action should be undertaken by developed countries
H3	Argues that mitigation action should be common but differentiated
Code 8—coverage of the Paris Agreement	
P1	Argues that the Paris Agreement is a good policy
P2	Argues that the Paris Agreement is a bad policy
P3	Mentions the Paris Agreement but does not argue whether it is a good or bad policy
110	Suggests that developed states are blocking action on climate change
Code 9—coverage of specific negotiating countries’ / political blocs’ positions and actions on climate change	
12	Article shows empathy for other developing/ emerging economies
13/3A	Shows a positive/negative attitude towards the EU



14/4A	Shows a positive/negative attitude towards the USA
15/5A	Shows a positive/negative attitude towards the UK
16/6A	Shows a positive/negative attitude towards China
17/7A	Shows a positive/negative attitude towards Brazil
19	Suggests that developed states are facilitating action on climate change
110	Suggests that developed states are blocking action on climate change
Code 10—coverage of adaptation and/or resilience measures to climate change	
M1	Argues that there should be adaptation and/or resilience action/plans in Trinidad and Tobago
M2	Argues against adaptation and/or resilience in Trinidad and Tobago
M3	Mentions adaptation and/or resilience actions that are being undertaken in Trinidad and Tobago
N1	Argues that there should be adaptation and/or resilience action/plans in the Caribbean region
N2	Argues against adaptation and/or resilience in the Caribbean region
N3	Mentions adaptation and/or resilience actions that are being undertaken in the Caribbean region
U1	Argues that there should be adaptation and/or resilience action/plans globally
U2	Argues against adaptation and/or resilience globally
U3	Mentions adaptation and/or resilience actions that are being undertaken globally
Code 11 - coverage of mitigation measures to climate change	
T1	Argues that there should be mitigation action/plans in Trinidad and Tobago
T2	Argues against mitigation in Trinidad and Tobago
T3	Mentions mitigation actions that are being undertaken in Trinidad and Tobago
V1	Argues that there should be mitigation action/plans in the Caribbean region
V2	Argues against mitigation in the Caribbean region
V3	Mentions mitigation actions that are being undertaken in the Caribbean region
X1	Argues that there should be mitigation action/plans globally



X2	Argues against mitigation globally
X3	Mentions mitigation actions that are being undertaken globally
Code 12—coverage of adaptation vs mitigation strategies in Trinidad and Tobago	
Q1	Argues that mitigation should be the primary focus as opposed to adaptation
Q2	Argues that adaptation should be the primary focus as opposed to mitigation
Q3	Argues that both adaptation and mitigation are equally important

An understanding of the **timing** of publication was gleaned by isolating and clustering the dates of each published article by month. This was then cross-referenced with the occurrence of notable international environmental observances or in-country activities centered on climate change.

Except for the Trinidad and Tobago Guardian newspaper, the online archives did not present page numbers or images of the articles as they appeared in print. Thus, analysis of placement of climate change articles in local print media was restricted to an examination solely of the Trinidad and Tobago Guardian.

3.0 RESULTS

The results of this paper are divided into four categories. The first category of results deals with the overall coverage of climate change reporting in print media in Trinidad and Tobago. The second category of results presents the distribution of articles published by journalists and contracted columnists over 24 months from July 2019 – 2021. The third category deals with the content analysis of climate change reporting in Trinidad and Tobago's print media. The final category examines the page placement of climate change-focused articles in the Trinidad and Tobago Guardian sub-set of the dataset.

3.1 Overall coverage of Climate Change Reporting in Trinidad and Tobago's Print Media

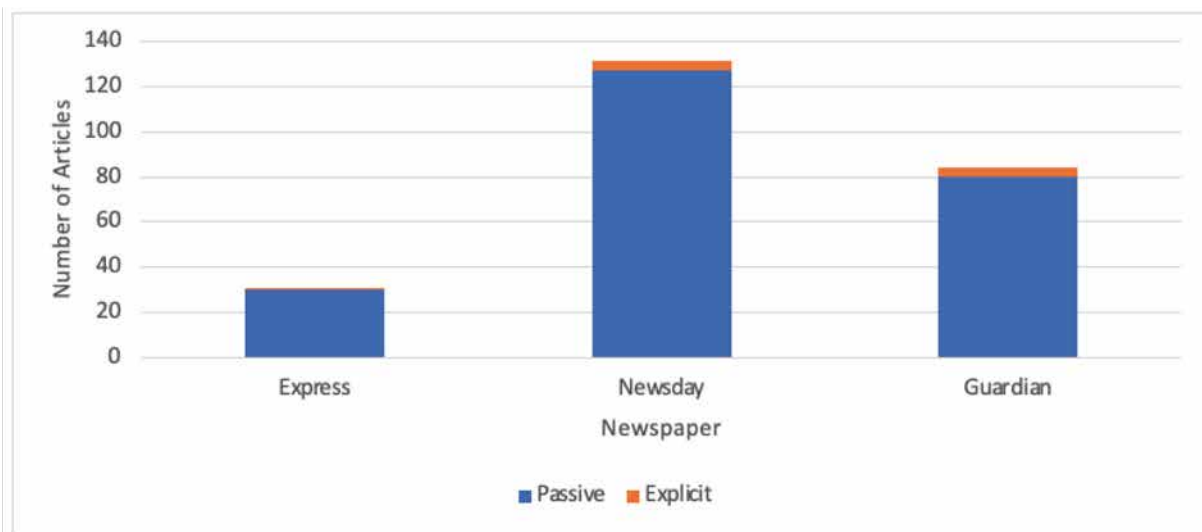


Figure 1. Number of Articles that Passively Mentioned Climate Change vs. those that Explicitly Focused on Climate Change in Each of the Three Newspapers.

Figure 1 shows that Newsday had the most articles reporting on climate change with a total of 131 articles, the Guardian with 84 articles in total and the Express with the fewest articles (31) over the period. Figure 1 covers the 'explicit' and 'passive' coverage of climate change in the three major newspapers in Trinidad and Tobago. 'Passive' coverage refers to where climate change was mentioned briefly and was not the sole focus of the article whereas 'explicit' refers to articles in which climate change was the sole focus.

Figure 1 also illustrates that most articles passively mentioned climate change with only 9 articles of the 246 articles, or 3.65%, explicitly covering climate change. The Newsday and Guardian newspaper both

had 4 articles each explicitly covering climate change while the Express newspaper had 1 article explicitly covering climate change. Of the 9 articles that explicitly covered climate change, 2 articles covered the same event, and 2 articles covered the same press release.

Newsday had the most articles passively covering climate change with 127 articles passively covering climate change. The Guardian newspaper had 80 articles passively covering climate change and the Express had the least number of articles with only 30 passively covering climate change. Most of these articles briefly mentioned climate change as a subtopic, in relation to other news or as a passing

reference. For example: “Soroptimist International Esperance said it aims to educate, enable and empower, and its video *Trash to Treasure* was designed to trigger thoughts on the issue of climate change in the young and not so young.” (Trinidad Newsday, “Soroptimist International targets food security, climate change”, 28 June 2021); “Senior Disaster Management Coordinator at the Ministry of Rural Development and Local Government, Jerry David, said because of climate change and other factors, flooding has become a worldwide phenomenon.” (Trinidad and Tobago Guardian, “Citizens Told to Adapt to Flooding”, 21 September 2020).

3.2 Timing of Climate Change Publications in Local Print Media

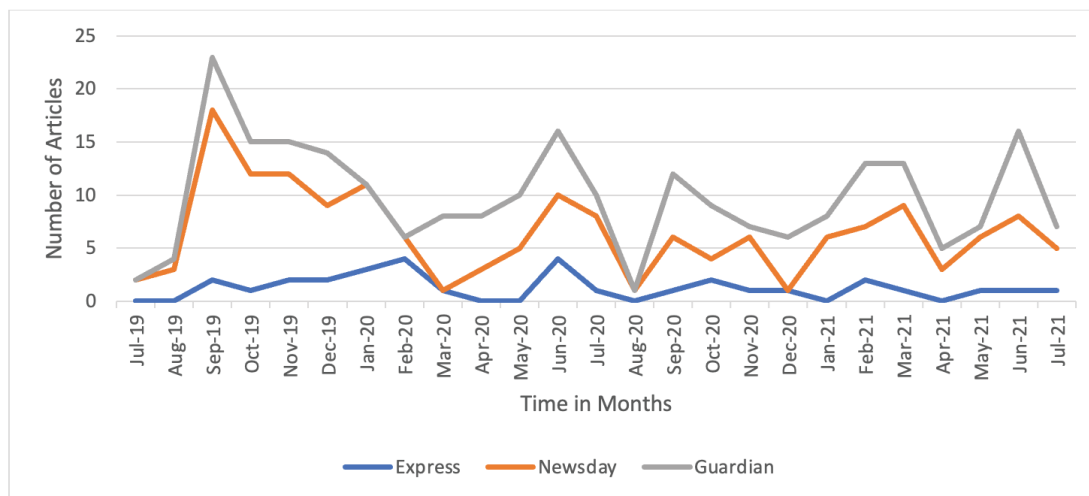


Figure 2. Number of Articles Mentioning Climate Change in Each Newspaper from 30 July 2019 to 12 July 2021.

Figure 2 shows that there is generally an increase in climate change reporting around certain months in the year. The results show that there is an increase in the climate change reporting in June and July – months in which there are significant environmental awareness days [25]. Figure 2 further revealed that September 2019 had the most climate change articles being published (23 articles in total). This was immediately following the media sensitisation workshop held in July [18]. The annual hurricane season from June to November also showed an increase in articles mentioning ‘climate change’. This can be related to the

occurrences and severity of natural disasters in recent years being linked to climate change. For example, one article in the Express mentioned: “With the evident effects of climate change, Bamboo people reported more floods over the last three years than in all of 30 preceding years” (“Private sector bailing out Bamboo”, 17 October 2019) [26].

3.3 Code Analysis of Climate Change Reporting in Trinidad and Tobago's Print Media

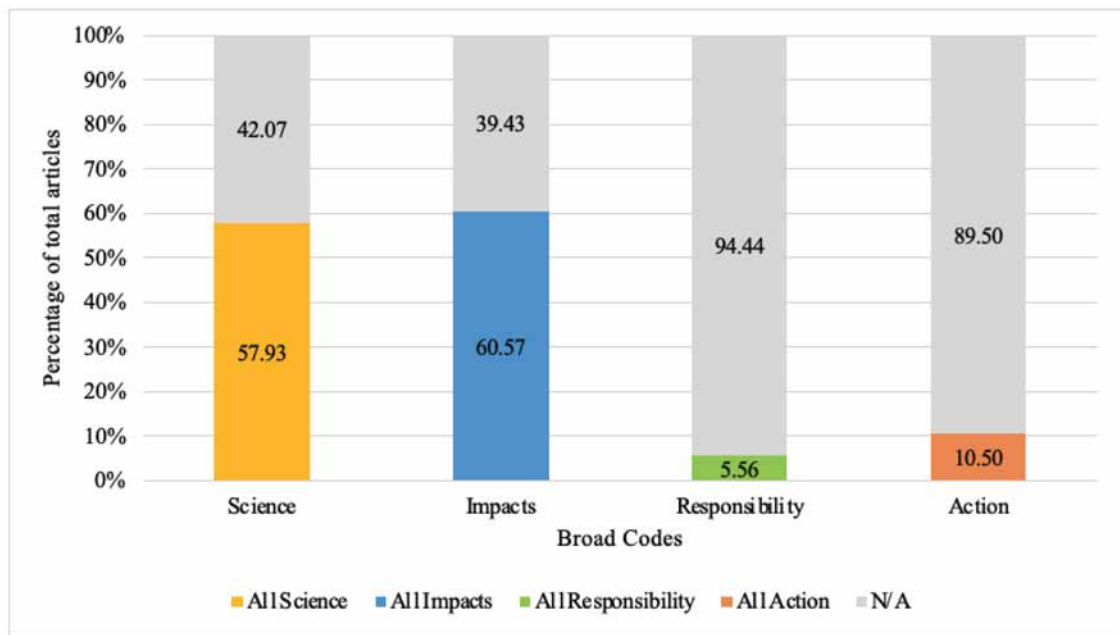


Figure 3. Percentages of Articles Classed Under the Broad Codes across All Three Newspapers from 30 July 2019 to 12 July 2021.

Figure 3 shows that the science and impacts of climate change were the most discussed aspects of articles published, representing 57.93% and 60.57% of all news articles respectively. In contrast, only 10.5% of articles written by journalists and contracted columnists spoke to actions needed to address climate change while 5.56% addressed where the responsibility for addressing climate change lies.

Of the articles that fell under science, all of them affirmed the existence of rapid, unusual climate change, while 43.36% of them confirmed that climate change was due to anthropogenic activities (0.88% agreed that it was due to both natural and human

factors) and 52.21% used environmental change to prove the existence of climate change. Among those which discussed impacts, 77.85% of them spoke about the impacts of climate change as a threat at different scales.

Of those classed under responsibility, 21.95% of them referred to the common but differentiated responsibility for climate change globally, 58.54% spoke about domestic emissions cuts, while 14.63% referred to public sector emissions cuts, and 2.44% to public and private sector cuts.

Finally, among articles that fit 'action' categories, 7.10%

argued that mitigation action must be common but differentiated, 14.19% mentioned the Paris Agreement, 3.87% said that developed states are facilitating action on climate change, while 3.23% showed empathy for other developing states. Additionally, 31.61% of them either argued for or mentioned ongoing or future climate change adaptation plans locally, 22.58% of them either argued for or mentioned ongoing or future climate change mitigation plans locally while 3.23% talked about the importance of adaptation in relation to mitigation (and vice versa). Further analysis was done on the 9 articles with an explicit focus on climate change. Codes that didn't occur in these 9 articles were omitted from the graphs.

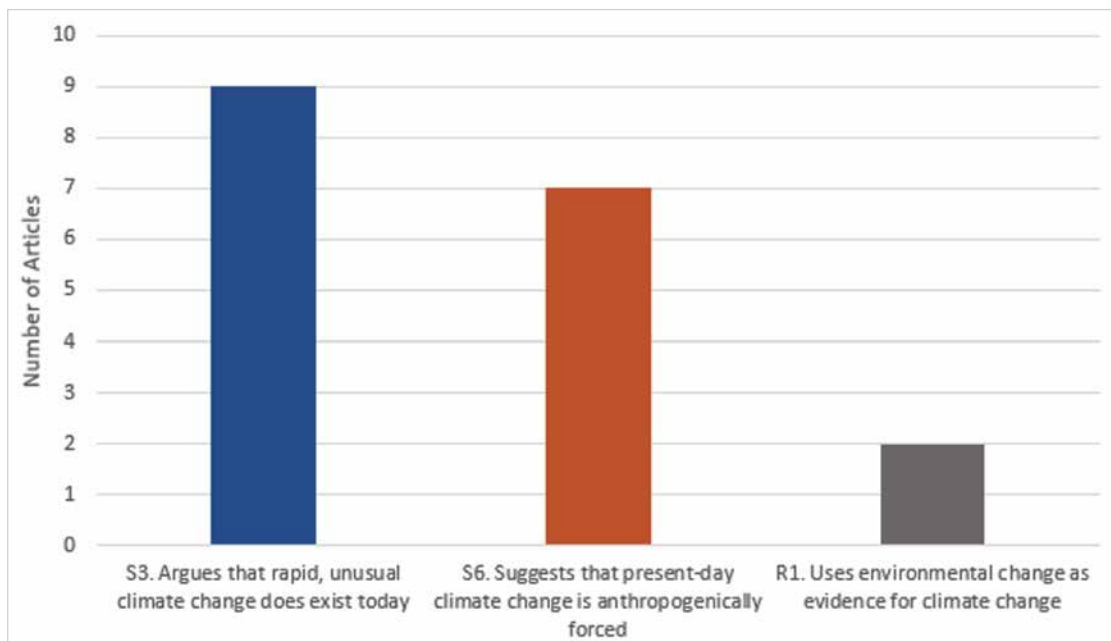


Figure 4. Code Analysis for the Science of Climate Change Focused Articles

Figure 4 analysed the science in the articles which explicitly focused on climate change. All 9 of these articles agreed that rapid, unusual climate change does exist today. Further to that, 7 of the 9 articles supported the notion that present-day climate change is anthropogenically forced while 2 articles used evidence of environmental changes to support the idea that climate change is occurring.

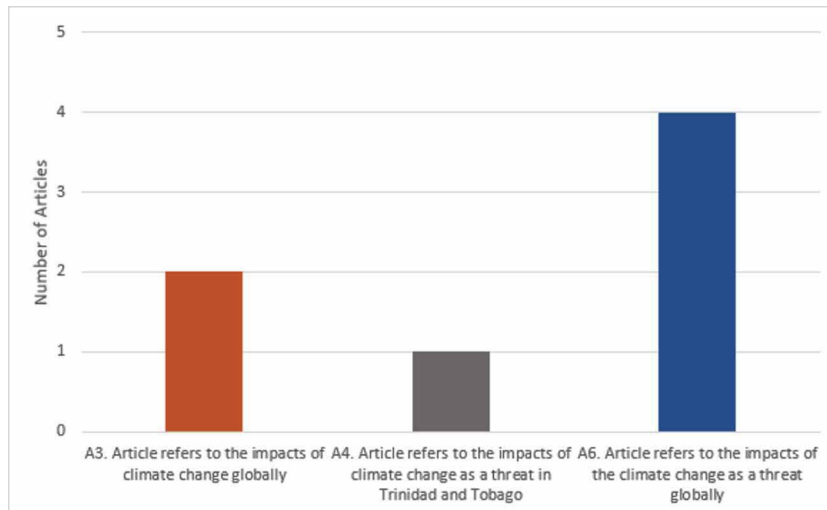


Figure 5. Code Analysis for the Impacts of Climate Change Focused Articles

From the 9 articles that were explicitly focused on climate change, 4 of them refer to its impacts as a global threat. Additionally, 1 of the 9 articles referred to the impacts of climate change as a threat to Trinidad and Tobago while 2 articles refer to the impacts of climate change globally.

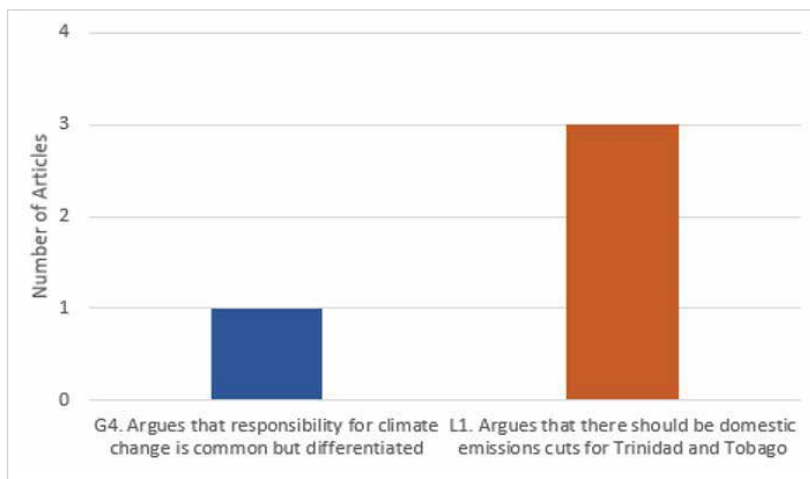


Figure 6. Code Analysis for the Responsibility of Climate Change Focused Articles

Responsibility was the lowest-reported category in the climate change focused articles in the analysis. Of the articles that are focused on climate change, only 1 argues that the responsibility for climate change is common but differentiated. Additionally of the 9 articles, 3 make reference to domestic emission cuts for Trinidad and Tobago.

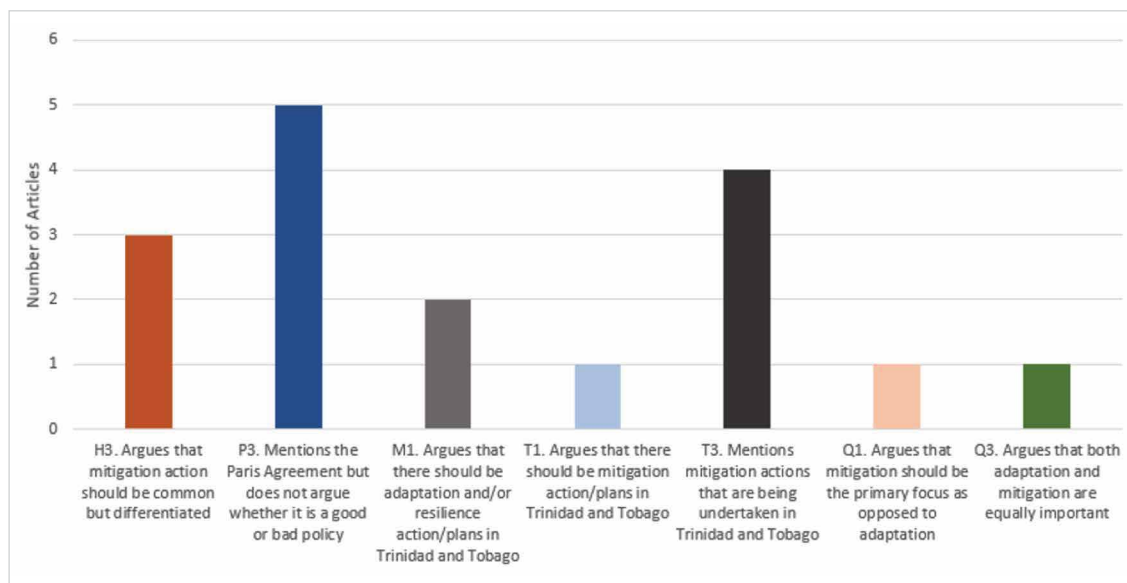


Figure 7. Code Analysis for the Action of Climate Change Focused Articles

Action had a high level of reporting among the climate change focused articles from the analysis. Of the 9 articles, 5 of them mentioned the Paris Agreement but did not state whether it was a good or bad policy. The articles focused on climate change placed a high importance on mitigation with 3 articles arguing that mitigation action should be common but differentiated, 1 article arguing that there should be mitigation plans in Trinidad and Tobago and 1 article mentioning current mitigation options being undertaken in the country. Additionally of the 9 articles, only 2 of those argue that there should be adaptation and/or resilience plans in Trinidad and Tobago, highlighting that there is less of an importance placed on these measures. From Figure 7 it was also highlighted that one article argues that mitigation should be the primary focus as opposed to adaptation whereas 1 article argued that both adaptation and mitigation are equally important.

3.4 Placement of Climate Change Articles in Trinidad and Tobago's Print Media

Placement of newspaper articles was only observed in the Trinidad and Tobago Guardian as this was the sole paper which had the page numbers and sections available for viewing.

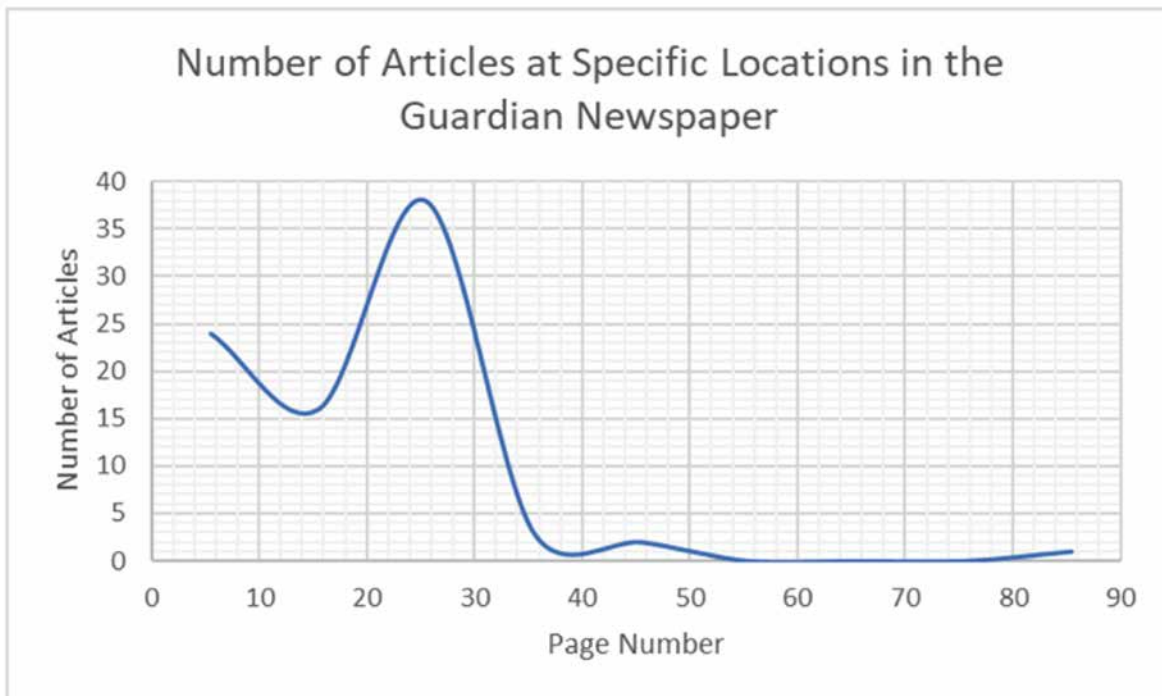


Figure 8. Placement of Climate Change Articles in the Guardian from 30 July 2019 to 12 July 2021.

Figure 8 shows that most articles mentioning climate change occurred at approximately page 23. There are more articles mentioning climate change at the front of the paper than at the back. The quality of these articles varies with placement, as the average page number of articles explicitly mentioning climate change was 25, while for those passively mentioning it were found closer to the front of the newspaper, at page 19.



4.0 DISCUSSION

In this study, the three major print media sources in Trinidad and Tobago were used to analyse the content and placement of climate change reporting written by local journalists and columnists over the period 30 July 2019 to 12 July 2021. This discussion is divided into two parts discussing both the results of the study as well as ways forward in climate change reporting in the country.

4.1 The extent of Climate Change Reporting in Trinidad and Tobago's Print Media

Despite the importance of climate change reporting in having an informed public who can drive climate action and influence policies, there is a serious gap in climate change reporting in Trinidad and Tobago's print media. The issue's share of attention in the print media is generally low, given that explicit focus on climate change was found in 3.66% of the articles studied over the period of 30 July 2019 to 12 July 2021. Further to that, few articles were unique with 4 out of the 9 articles focused on climate change being based on similar events. This lack of reporting from the media can create a gap between public knowledge and the information from scientists and governments and thus slow the momentum of climate action.

A pattern of reporting was observed in which articles mentioning climate change would be produced more frequently around the times of certain events, such as occurrences of natural disasters and environmental awareness days. The largest number of articles were published after the climate change media sensitisation held in late July 2019. However, this increase was not sustained, as in the following months, there was a decrease in climate change reporting. Additionally,

there was a greater prevalence of articles around natural disasters (hurricanes, flooding) as the media appears to make a link between them and climate change. Further, June (in both years) saw a larger number of articles due to World Environment Day. Therefore, special awareness days, media sensitization sessions and knowledge of the links between climate change and natural disasters may contribute to the publishing of articles. This, however, shows that these events do not have a sustained impact on publication of articles on climate change and rather a temporally localised effect.

From the content analysis of the articles, it was revealed that reporting focused on two main parameters: the impacts and science of climate change. Media generally focused on the impacts of climate change, linking it to a threat to humans and our way of life. Reporting also affirmed the existence of rapid, unusual climate change caused by anthropogenic factors, and that its existence is seen in environmental change. Thus, the media acknowledges climate change as a problem. However, it does not talk as expansively on responsibility of Trinidad and Tobago or its citizens to take action, or the types of climate actions that are needed. Of the articles in the dataset that reported on responsibility, 21.95% of the articles referred to common but differentiated responsibility of climate change. However, this made up 3.66% of all the articles, which indicated that little focus is given to Trinidad & Tobago's contributions to climate change in the media. As Trinidad and Tobago is an oil producing country, its emissions are higher than typical SIDS and this needs to be reported on to drive action if net zero emissions are to be met. Citizen responsibility for climate change mitigation also had little focus in the print media along with the differences in greenhouse gas emissions from various sectors of society.



From the code analysis, only 9.76% of articles in the dataset referred to individual responsibility for cutting down emissions, while none referred to domestic stratification of emissions. Thus, the common but differentiated responsibility at the global scale is given some attention in the media, but the nuances of the local scale are left out. This can have implications for informed public actions on climate change.

Where climate action was mentioned, the discussion was nuanced. Action on climate change can include adaptation, resilience, and mitigation measures. The most reported parameter within action was adaptation/resilience action, with 22.76% of all articles either arguing for or indicating adaptation/resilience action/plans at different levels (global, regional, and local, with most falling under the local scale). On the other hand, 15.85% of all articles pushed for mitigation action at various scales (mostly local). Thus, the print media's narrative of climate change publicises both but adaptation to a greater extent. Few articles (5 out of 246), however, compared them with only 3 of these articles arguing that mitigation should be given greater focus than adaptation, while the rest argued for equal focus. Another aspect of action was division of action globally, in which 4.47% of articles agreed on a common but differentiated approach to climate change mitigation, while 0.81% argued that developed countries should shoulder the responsibility.

Scientists have put the planet on reaching the 1.5°C temperature increase within the coming decades and so urgent action is required to reach carbon neutrality to avoid the devastating effects of climate change [2]. Given the situation, while the newspapers did report on the impacts and science there needs to be greater reporting on individual action and what citizens can do to bring about change. While articles did argue that mitigation and adaptation efforts should be

undertaken, they were based on a governmental level and did not mention individual actions that citizens can do to make a difference to bring carbon neutrality or adapt to the effects of climate change.

Finally, placement of articles was noted since it can influence who and how many people view specific pieces [28]. Climate change news generally appeared in the upper middle of the paper (around page 25), where fewer viewers were assumed to look at them. However, articles that passively mentioned climate change were placed closer to the front than those that explicitly focused on it. Further, the placement of certain articles on climate change that are of interest to all citizens, were placed in seemingly incoherent sections, as indicated in the example where the Carbon Emissions Tracker notice by the Ministry of Planning and Development was placed in the Sports section. The Sports section caters to a particular audience, and thus, may not have gotten a large viewership. However, those articles that did appear in the foremost, news section of the paper, reflected similar content analyses to the broader picture.

4.2 The way forward in Climate Change Reporting in Trinidad and Tobago's print media

Currently, the way climate change is portrayed and reported in the media does little to drive civil action against the matter. It is known that well-informed citizens who are aware of the threats of climate change and the appropriate responses they can take can be a powerful driver of climate action in countries. Article 12 of the Paris Agreement explicitly focuses on parties including public awareness and public participations in the fight against climate change. Therefore, the paucity of climate change knowledge, particularly on the actions in response to climate change at a citizen level, shared in mass media has wide ranging implications that can drastically affect Trinidad and Tobago's



progress towards its climate goals and resilience. These may include decreased buy-in on net zero and just transition policies and plans, little support for civil society interventions, limited prioritisation of climate change by governmental organisations, absence of climate change in political discourse and failure to integrate climate change considerations into policy programmes.

Based on the inadequate reporting of climate change in Trinidad and Tobago there are various key steps moving forward that can be used to improve the quality and quantity of reporting. In recent years there has been an increase in electronic environmental news outlets and these sources may be used by journalists to their advantage to improve the robustness of their climate change reporting. These sources can be useful to close the gaps in reporting to bring higher quality climate change news to the public which will be necessary to drive climate action.

Furthermore, while the media sensitization workshops were successful in improving the number of climate change articles in the following months the change was not sustained. In the workshop the journalists indicated that editors and managers determined what assignments would be reported on as well as the layout of the newspapers [18]. Therefore, the editors and managers of these newspapers should be targeted for future media sensitization workshops to established sustained improvements in climate change reporting. Greater emphasis on subsequent training should be placed on underrepresented dimensions of responsibility and action, as it appears that the science and impact dimensions are relatively well understood. However, the responsibility and action dimensions are critical in driving citizen action and promoting an engaged citizenry around climate action.

From the analysis of the newspapers, to improve climate change reporting and generate a more informed public there should be the establishment of a specific section for environmental news in newspapers in Trinidad and Tobago. This practice is currently done in neighbouring territories. For example, the Jamaica Gleaner has a weekly column "Earth Today", which is published on Thursdays. One issue noted with the analysis of newspapers was the obscure placement of articles which can make it difficult for the average reader to see the climate change articles. To rectify this having a specific section of the newspaper dedicated to environmental news reporting can ensure that readers know where to find the latest environmental news and thus lead to a more informed public.

5.0 CONCLUSION

This study aimed to analyze the climate change coverage in Trinidad and Tobago's three major print media by journalists and contracted columnists over the period 30 July 2019 to 12 July 2021. The paper revealed that there is a significant gap in explicit climate change reporting with only 9 of 246 articles explicitly covering climate change. It also showed there is event-based reporting in the print media with articles being published around natural disasters and environmental days and less so constant reporting year-round. Further analysis of articles showed that there is more reporting of the science and impacts of climate change and very little reporting on responsibility and action that is being taken to drive climate action. These findings indicated that currently there is both low frequency and uneven coverage climate change reporting in Trinidad and Tobago's print media. Further, the social, political and cultural implications of this gap in climate reporting should be explored in further research around climate change mitigation and adaptation in Trinidad and Tobago. To have an informed public that is capable of driving climate action there should be further efforts to



utilise already existing environmental news outlets by journalists, sensitisation of newspaper editors and managers and establishment a devoted section in newspapers to environmental news. These findings and recommendations can be used to foster a more environmentally conscious, informed, and active public that can push for action to be taken by governments and individuals to combat climate change.

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