

2021: Volume 12, Issue 1 - [Table of Contents](#)**COVID-19 information on Trinidad and Tobago and Jamaica Facebook Groups**

[Shaheed N. Mohammed](#)

Department of Communications, Penn State Altoona

Abstract

Social media platforms such as Facebook have made possible the spread of a wide range of information both useful and potentially dangerous. The present paper examines COVID-19 related material posted to public discussion groups associated with the Caribbean nations of Trinidad and Tobago and Jamaica. Following on earlier research that found a largely domestic focus in such groups, the present investigation surveyed the material of interest in terms of whether sources and the scope of material were domestic or foreign. Given the potential for misinformation on social media the present research also examined the types of material sourcing and the role of conspiracy theories in the posts. *Keywords:* Misinformation, Facebook, Trinidad and Tobago, social media, COVID-19.

COVID-19 information on Trinidad and Tobago and Jamaica Facebook Groups

The outbreak of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2), otherwise popularly known as COVID-19 (for COroNVIrusDisease-2019) (Centers for Disease Control and Prevention, 2020), has presented a wide range of challenges to all nations. While many industrialized nations ranking at the top of indices such as the GHSI (Global Health Security Index, 2019) struggled to combat the disease, developing nations faced the threat with the additional hamstring of severely limited resources (Lone & Ahmad, 2020; Puri, 2020; Walker, et al., 2020). The challenges were even greater in small developing nations and regions such as the Caribbean with several small developing states. The situation was often dire as The Economist Intelligence Unit (2020) noted:

The region is heavily dependent on tourism and related services industries to drive growth (and tax revenue)... The shutdown has grounded international and regional flights for an indefinite period, while high-profile coronavirus outbreaks on cruises ships has led to widespread cancellations. In addition, a slump in commodities prices means that one of the most diversified economies, Trinidad and Tobago, is facing an abrupt downturn in oil and gas prices, even as tourism collapses. The region is also facing balance-of-payments strains from the expected collapse of inflows of workers' remittances.

With their limited resources, such nations supplemented their budget-straining public health measures with strong efforts at social information to spread awareness of the threat, spread and precautions against transmission (Bedford, et al., 2020). The present article follows on prior research published in NMEDIAC focusing on the public Facebook groups associated with Republic of Trinidad and Tobago and Jamaica, both island-nations in the Caribbean region. Rather than simply examining changes that may have emerged in the content of these groups in the decade or so since the initial research, the current investigation looked at COVID-19 related content on those groups and how official and non-official information about the disease wove its way into the discourse of posters. As news media and government officials attempted to inform the public on the progress of the disease in terms of case

numbers and death tolls as well as restrictions on gatherings and travel, various communities shared and discussed the discourse surrounding the disease.

Literature Review

The social media platform Facebook has, for many years, been among the most popular sites for both interpersonal and group discussions worldwide (Alexa.com, 2017). Despite its global reach, however, the platform often enables the formation and maintenance of local communities of interest, regardless of geography and, often, involving participants who are in relatively close proximity to one other (Mohammed, 2012; Mohammed & Thombre, 2012). This notion of the local versus global dynamic has been evident in studies of global networked technologies dating back to early studies of the World Wide Web such as Halavais' (2000) survey of 4000 sites which found that websites were more likely to link within their national borders than to sites outside. Prior research on Public Facebook groups associated with Trinidad and Tobago and Jamaica demonstrated that they tended to display much these same tendencies of local focus, often serving as local notice boards rather than sites of global or diasporic discourse. As the impact of COVID-19 became evident in these countries, the contents of their public Facebook groups began to reflect concerns over the global phenomenon.

Trinidad and Tobago

Trinidad and Tobago (officially "The Republic of Trinidad and Tobago") is a single country comprising the two southernmost islands of the Caribbean chain that gained independence from Great Britain on August 31st, 1962. Modern Trinidad and Tobago society comprises several historical and ethnic influences including those of Africans who were brought as slaves to Trinidad to work colonial plantations, later indentured laborers from India and smaller groups of Europeans, Chinese and Arabs (Kale, 1995; Khan, 2004; Lai, 1993). The World Bank (2021) estimated Trinidad and Tobago's 2019 population at 1.4 million and its 2019 Gross Domestic Product (GDP) at US\$24,270 billion dollars. The World Bank (2021) estimated that as of 2019 77.3% of the population of Trinidad and Tobago uses the Internet with about 25% of the population using broadband connections.



Figure 1. Maracas Bay, Trinidad and Tobago. Author (2017).

Trinidad and Tobago instituted strict travel restrictions and a nationwide lockdown as well as measures aimed at preventing large gatherings and promoting social distancing and masking in an effort to fend off the importation and spread of the COVID–19 virus in 2020. As a group of academic writers recounted:

Trinidad and Tobago is one of the few countries that have contained the COVID–19 outbreak with minimal deaths or spread of infection to its population. At the beginning of February, newspaper headlines declared that the country and the Caribbean had little possibility of importing the disease. By 12 March, however, Trinidad had its first imported case, and by 13 March the Prime Minister declared schools and all tertiary institutions of education closed. Additionally, a nationwide lockdown of non–essential services and businesses meant immediate removal of income to self-employed service providers and the consequent loss of access to child and elderly care... (Kalloo, Mitchell, & Kamalodeen, 2020, pp. 452–453).

The disease peaked at a rate of 217 new cases on September 18th, 2020 and a seven-day average of 118 cases, recording over 7,700 cases and 139 deaths by March of 2021 (Center for Systems Science and Engineering [CSSE] at Johns Hopkins University, 2021) (see Figure 2).

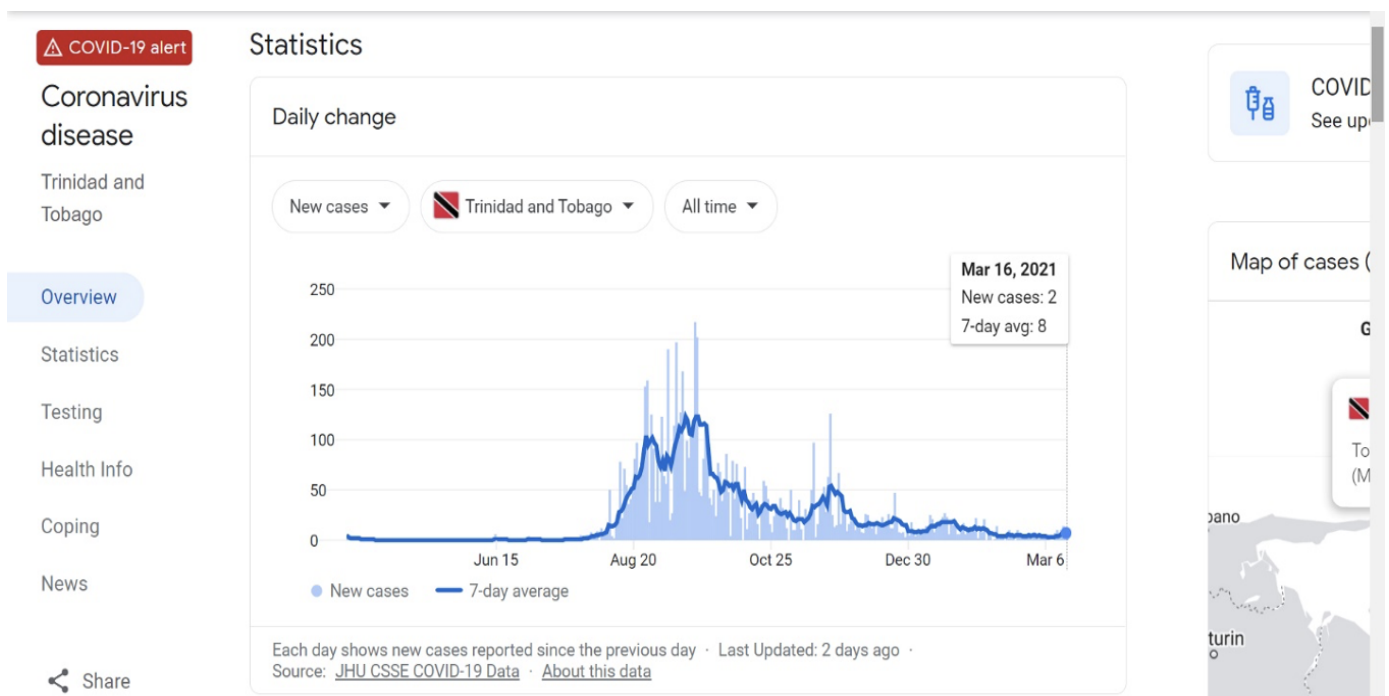


Figure 2. Graph showing COVID–19 cases in Trinidad and Tobago (2021). Retrieved from <https://www.google.com/>. Data from COVID–19 *data repository by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University* available at <https://github.com/CSSEGISandData/COVID-19>.

Jamaica

Jamaica gained its independence from Great Britain on August 6th, 1962. Its population is primarily composed of the descendants of African slaves whom the British colonizers brought to the island as captive labor for the British sugar cane plantations with smaller pockets of descendants of Caucasian, Chinese and Syrian groups. The indentured labor system which brought Indians to Trinidad and Tobago also took some indentured laborers to Jamaica though in much smaller numbers. The World Bank estimated Jamaica's 2019 population at approximately 3 million and its GDP at US\$16.458 billion (The World Bank Group, 2021). The World Bank (2021) estimated overall Internet usage in Jamaica at approximately 55% of the population in 2019 with about 11% of the population on broadband connections. Jamaica is the largest of the Anglophone Caribbean islands and enjoys relatively high recognition internationally as a tourist destination, having also made significant marks in the international arenas of music and athletics.



Figure 3. Dunn's River Falls, Jamaica. Author (2015).

The arrival of COVID–19 in Jamaica came with an announcement from Jamaica's Ministry of Health on March 10th, 2020 indicating that a Jamaican national had traveled in from the United Kingdom and tested positive for the virus (Nair, 2020). The government instituted numerous measures to mitigate against the spread of the disease, including a travel lockdown which negatively impacted its important tourism industry (The Economist Intelligence Unit N.A. Incorporated, 2020). As of May 7th, 2021, Jamaica was experiencing a peak of new cases at 723 with a 7–day average of 395. Total cases by March of 2021 were just over 26,000 with 453 deaths (Center for Systems Science and Engineering [CSSE] at Johns Hopkins University, 2021) (see Figure 4).



Figure 4. Graph showing COVID–19 cases in Jamaica (2021). Retrieved from <https://www.google.com/>. Data from COVID-19 data repository by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University available at <https://github.com/CSSEGISandData/COVID-19>.

Secondary Diasporas and Social Media

Despite their small size, nations like Trinidad and Tobago and Jamaica present complex and varied cultural landscapes stemming from historical global influences that brought different groups to their new "home" (Khan, 2004; Lai, 1993; Mohammed, 2017). In addition to these historical inflows, more modern trends have seen migration from Trinidad and Tobago and Jamaica to metropolitan centers of the United States and other industrialized nations in search of occupational and other prospects (Chamberlain, 2006; Mohammed, 1998; Sutton, 1987) creating what some have termed a "secondary diaspora" (Manuel, 1997-1998; Mohammed & Thombre, 2017). The United States Census Bureau (2019) estimated in a 2008–2012 survey that about two hundred thousand persons in the United States identified themselves as having Trinidad and Tobago origins while about one million persons in the United States were of Jamaican ancestry.

Often concentrated in busy urban environments, these migrant populations have played a role in what Sutton (1987) has described as the "Caribbeanization" of places such as parts of New York City and other metropolitan centers and have maintained media–scapes and other cultural and creative practices that have promoted a sense of home (Ramnarine, 2011). In the pre–Internet age such media–scapes featured newspapers and radio stations devoted to these communities. Social and networked technologies created opportunities for enhanced information flows among individuals in the diaspora (Kavoura, 2014) as well as a direct presence of home-country media via streaming technologies, contributing to what Miller and Slater (2000, p. 6) termed a "singular imaginary."

In creating opportunities for communication and community, social media also aid in the development of what Bourdieu and Wacquant (1992, p. 14) have termed "social capital" defined as "the sum of the resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition." For Caribbean users, social networks such as Facebook can be important resources for reconstructing "home" by creating and maintaining global ties between and among local and diasporic communities, sometimes even blurring the distinction between local and foreign as users form complex webs of communication, ideation and identity (Campbell & McLean, 2002; Potter, Conway, & Phillips, 2005; Waters, 1994).

Social media, Misinformation and Conspiratorial ideation

While we have previously established that social media networks have served important positive roles for local and diasporic communities in small developing nations such as Trinidad and Tobago and Jamaica, these platforms have increasingly also become the focus of attention as sources of disinformation, dangerous counter-science and conspiratorial notions (Fowler, 2020; Shin, Jian, Driscoll, & Bar, 2018). The increasing availability of information on social networks, largely devoid of editorial gatekeeping and only recently subject to review and evaluation has spawned concern among scholars and investigators over the quality of such information and the potential for misinformation (Metzger & Flanagin, 2013; Narayan & Preljevic, 2017; Smallman, 2018). In particular, some investigators have pointed to the role of such unchecked information in an erosion of established scientific discourse in favor of speculation and ungrounded skepticism (Brown, 2008; Gauchat, 2012; Goertzel, 1994; Mooney, 2005). For some scholars, this skepticism (often finding fuel in a wealth of spurious, baseless, unscientific, or biased claims online and growing communities of doubters) translates into an opposition to the most basic tenets of modern science (Charles, Polis, Sridhara, & Blum, 2008; Cook, Ellerton, & Kinkead, 2018; Eysenbach, 2008).

The wealth of information now freely available may be a double-edged sword, at once providing information and disinformation in potentially equal portions. Worse, considering the complexities of technical and scientific information, the balance may often tip in the favor of simpler and more palatable misinformation or disinformation (Mohammed, 2012). For Smithson (1993, p. 134) ever-increasing amounts of information and an increasing rate of delivery of such information creates a "shorter half-life" of knowledge. Scholars such as Eysenbach (2008), Metzger & Flanagin (2013) and Misra & Stokols (2012) have warned that such overload conditions may overwhelm recipients and reduce their ability to make sense of the information. Even more concerning is the observation from Johansen and Joslyn's (2008) research that even highly educated users are susceptible to online misinformation.

While conspiracy theories, urban legends, and other forms of disinformation have detailed histories that pre-date online networks, social media platforms have created new and enhanced opportunities for their spread (Morello, 2004; Narayan & Preljevic, 2017; Smallman, 2018; Southwell, Thorson, & Sheble, 2018). Online and social networks provide questionable information on a wide range of topics from anti-vaccination campaigns to flat-earth claims (Mohammed, 2019) and disease misinformation (Smallman, 2018) which involve what Garwood (2007, p. 35) has called "a plethora of conspiracies, counter-cultural critiques and subversive discourses..."

Prior investigations of conspiracy theories and their adherents (Wood, 2017; Wood, Douglas, & Sutton, 2012) have defined conspiracy theories as proposed plots "by powerful people or organizations working together in secret to accomplish some (usually sinister) goal" (Wood, Douglas, & Sutton, 2012, p. 767), suggesting that these are plots are often global in scope and involve webs of deception and subterfuge by supposed perpetrators. Douglas et al, (2019, p. 4) similarly suggested that "Conspiracy theories" are attempts to explain the ultimate causes of significant social and political events and circumstances with claims of secret plots by two or more powerful actors.

Scholars have examined numerous possibilities surrounding the motivations for engaging in believing and spreading conspiracy theories, including the need to gain understanding of complex issues, the need to feel in control of one's life when faced with powerful forces over which one has no control and the need for social affirmation through belonging to a group of like-minded individuals or providing and holding a "true" version of events unknown to those outside the group (Douglas, Sutton, & Cichocka, 2017; Douglas, et al., 2019). Douglas, Sutton and Cichocka (2017, p. 540) concluded that "conspiracy theories valorize the self and the in-group by allowing blame for negative outcomes to be attributed to others." In this vein Knight (2000) similarly linked conspiracy theories to feelings of powerlessness against powerful forces such as governments or corporations while the notion that conspiratorial beliefs provide comfort to the powerless by suggesting that they at least possess an alternative or true version of reality hails back to earlier findings such as those of Goertzel (1994).

Some investigators have also been concerned with the manner in which conspiracy theories spread and their mechanisms of propagation – often even in the face of direct contradictory evidence. Wood (2017, p. 510) suggested that conspiracy theorists "adopt a strategy of sowing doubt and raising suspicion," using disbelief rather than data for their arguments. In order to evaluate the notion of conspiratorial ideation Bruder et. al (2013), proposed a generalized Conspiracy Mentality Questionnaire (CMQ) which measured belief in several key conspiracy ideas including 1) many very important things happen in the world, about which the public is never informed, 2) politicians usually do not tell us the true motives for their decisions, 3) government agencies closely monitor all citizens, 4) events which superficially seem to lack a connection are often the result of secret activities and 5) there are secret organizations that greatly influence political decisions. These items are reproduced in the present study with coding for these categories and several additional items from the literature being used as markers of conspiratorial ideas and conspiratorial methods in the content under investigation.

Research Questions

The present investigation evaluated the contents of Trinidad and Tobago and Jamaica public Facebook groups with specific reference to mentions of COVID-19 and with some attention to the locations of posters. The study therefore posed the first research question (RQ1) in two parts as:

RQ1a: What are the general content characteristics of COVID-19-related posts on public Facebook groups associated with Trinidad and Tobago and Jamaica?

and

RQ1b: How did the contents of COVID-19-related posts on public Facebook groups associated with Trinidad and Tobago and Jamaica differ between general groups and those specifically devoted to COVID-19?

As several studies of previous epidemics have established, social media and online sources can prove to be powerful sources of poor, deceptive, or dangerous misinformation and can pose challenges to dissemination of sound information regarding transmissible diseases (Dredze, Broniatowski, & Hilyard, 2016; Sharma, Yadav, Yadav, & Ferdinand, 2016; Smallman, 2018). For this reason, the present study examined the sources of information in the sampled posts, asking research question 2 (RQ2) as follows:

RQ2: What were the relative proportions of official and unofficial sources of COVID-19 related information on public Facebook groups associated with Trinidad and Tobago and Jamaica?

Unfounded conspiracy theories also play a major part in reducing the effectiveness of public education efforts and may help to undermine science in general. To address this issue, the present study posed research question 3 (RQ3) as:

RQ3: To what extent are conspiracy theories and misinformation evident in the contents of COVID-19 related posts on public Facebook groups associated with Trinidad and Tobago and Jamaica?

Methodology

The approach in the present study used content analysis of user posts (N = 600) on publicly accessible Facebook groups associated with the two countries of interest. The author collected the data from the groups in early 2021 when COVID-19 pandemic was underway with most countries having established mitigation efforts that included international travel lockdowns in both Trinidad and Tobago and Jamaica.

Content analysis

Content analysis is a well-established approach to the investigation of media discourses and has been used to study a wide range of issues in a variety of communication channels (Berelson, 1952; Holsti, 1969; Krippendorff, 2004). The approach generally involves the enumeration (or other forms of measurement) of what is often called the "manifest content" of communications (i.e., that which is actually presented as a message) to evaluate the extent to which particular items of interest may exist and their relative importance. The present study coded the content of interest on several objective and

evaluative criteria and started with a strategy for sampling a set of material from the social media platform.

Sampling

Facebook has instituted changes to its search facilities in recent months that have resulted in messages indicating that not all results were being shown and no indication of the number of results either found or returned. Due to these limitations, the researcher identified groups for sampling using the search engine Google with search terms including "Trinidad and Tobago" and "Jamaica" and limiters for the words "public groups" and specifying results for the site <https://www.facebook.com/groups/>. These searches indicated approximately 85,000 results for Trinidad and Tobago public groups and about 36,000 Jamaica-named public groups. However, since Google was also presenting multiple listings (e.g., by including sub-pages such as photo pages and listings with permalinks), these searches yielded more realistic estimates when particular terms (including "permalink" and "photos") were excluded, suggesting that Trinidad and Tobago may now list about 3,210 public Facebook groups and Jamaica about 8,050 public groups. This may be compared with the figures in the 2012 study published in NMEDIAC where Facebook listed 530 groups with the search term "Trinidad and Tobago" and 560 groups with "Jamaica" in their descriptions or titles with no public/private distinction at the time.

For the present study, the author identified the top listed groups for each country as presented in the Google results and then searched each group on Facebook for the term COVID, recording as many as twenty items from each group. Sampling continued until the data set contained 300 items from each country for a total of 600 posts. This strategy yielded a total of 45 groups overall with 24 from Trinidad and 21 from Jamaica. While most of the groups had their own specific focus, having been formed well before the start of the pandemic, there were a few that were formed with COVID-19 as the main topic of interest. Two such groups were included in the data for each country.

Coding dimensions

For each post the author recorded fixed properties such as the date of posting, the name of the group and the given location of the poster. The data also involved numerous evaluative decisions on dimensions that were guided by existing literature and prior research. These dimensions may be summarized into four groups that include: 1) functions of the posts 2) sources of information in the posts 3) elements of conspiratorial discourse and 4) indicators of conspiratorial thinking.

Inter Coder Reliability

The study established inter-coder reliability from a comparison of test coding of a subsample of results performed by the author and an assistant. As in the prior NMEDIAC study, the assistant used was someone who had lived and worked in both Caribbean island nations with fluency in their dialects. Figures were calculated using the very conservative Cohen's Kappa. This calculation considers k scores of 0.01–0.20 to indicate slight agreement, 0.21–0.40 to indicate fair agreement, 0.41–0.60 to indicate moderate agreement, 0.61–0.80 to indicate substantial agreement and above .80 to indicate almost perfect agreement (McHugh, 2012). Results indicated substantial to complete agreement on all the categories with all k coefficients calculated yielding significant values ($p < .05$).

Findings

Though this topic provides the basis for a wide array of issues and investigations, this study focused its attention on the specific research questions described above. We address the results of data analysis regarding each of those questions below...

Characteristics of content

Research question 1 was concerned with the general content characteristics of COVID-19-related posts on public Facebook groups associated with Trinidad and Tobago and Jamaica. The sample yielded 45 groups overall with 24 from Trinidad, 21 from Jamaica and 300 posts from each. Groups were of varied interests with names such as Job Opportunities Trinidad and Tobago, Comic Collectors of Trinidad and Tobago, Local Cars for Sale Trinidad & Tobago, I am Jamaica and Jamaicans From Around the Globe Inc. The sample included two COVID-19-specific groups from each country with names such as Coronavirus Covid-19 Trinidad & Tobago, Solidarity amid COVID-19 in Trinidad & Tobago, Coronavirus Covid-19 Jamaica and Help the needy in jamaica # covid 19.

Among COVID-19-related posts whose geographical origins were evident or stated (and with the limitation that these may be falsified or misleading), 92.5% of Trinidad and Tobago posts ($n = 235$) were local in origin compared to 7.5% ($n = 19$) being of foreign origin. For Jamaica this was a much more even distribution with local posts accounting for 52.5% ($n = 144$) and foreign origin posts for 47.8% ($n = 132$).

The earlier NMEDIAC study of Facebook groups from these countries (Mohammed, 2012) focused heavily on the question of the local versus global focus of their contents, finding that they served more as local bulletin boards rather than sites of diasporic discourse. That study found that approximately 47 percent of Jamaican and 53 percent of Trinidad and Tobago discussions were predominantly local in scope. The present data again supports a local focus overall for these posts related to COVID-19 with those from Trinidad and Tobago groups being even more pronounced in their local focus (82.7% [$n = 248$] local versus 17.3% foreign, mixed or unspecified) than Jamaican groups (61% [$n = 183$] local versus 39% foreign, mixed or unspecified). This observed difference between items of local scope from the two countries was statistically significant ($X^2 [1, N = 431] = 9.8, p < .01$).

Functions

Bearing in mind that all posts recorded and coded here included some mention of the term "COVID" there was still a tremendous variety of message types and functions. The author developed the various categories from pilot coding exercises examining the ranges of concerns and purposes of the messages posted. Not surprisingly, the most frequent message function was to address social changes and challenges directly related to COVID-19 with some 39% ($n = 234$) of the total posts fitting into this category. Similarly, 29% ($n = 174$) of posts provided disease information including information about statistics and vaccines while 18.8% ($n = 113$) provided information on (or discussed) restrictions and rules related to the pandemic. Other posts sought to fulfil other functions such as strictly advertising businesses or sharing sentiments (such as greetings or well-wishes) or nostalgia and there was only passing reference to COVID-19 in some 20.8% ($n = 125$) of posts.

Perhaps more notably, across the two countries, 13.3% ($n = 80$) of the posts made political statements while also mentioning COVID-19 and 8.2% ($n = 49$) served to cast doubt on COVID-19, precautions and vaccines. These two categories often also coincided with conspiratorial notions which we explore later in this section. Examining these two items between the two countries reveals that while they were equally likely to feature political statements related to COVID-19, ($X^2 [1, N = 80] = 0, p = 1$) the Jamaican groups were significantly more likely (with 39 instances) than Trinidad and Tobago groups (10 instances) to feature items that cast doubt on the disease, precautions and vaccines ($X^2 [1, N = 49] = 17.16, p < .01$). These items are detailed in Table 1 which provides a list of all function codes and their relative prominence between the two countries.

Table 1

Comparison of Post Functions between Sampled COVID-19-related Posts of Trinidad and Tobago and Jamaica Public Facebook Groups

|--|--|--|--|--|--|

Post function	Trinidad and Tobago posts <i>n</i> = 300	Jamaica posts (<i>n</i> = 300)	χ^2	<i>df</i>	<i>p</i>
Advertises or promotes business or commercial event	43 (14.33%)	16 (5.33%)	12.36	1	.000*
Promotes or displays social event – including activism/slogans/songs	19 (6.33%)	27 (9%)	1.39	1	.238
Addresses general social, environmental or economic problem or issue	35 (11.67%)	21 (7%)	3.5	1	.061
Nostalgia (including folklore and history)	19 (6.33%)	16 (5.33%)	.257	1	.612
Sentiment including greeting/joke/prayer	25 (8.33%)	45 (15%)	5.72	1	.017*
Provides COVID-19 precaution information from a business	17 (5.67%)	0 (0%)	17.50	1	.000*
Addresses social changes or challenges/impact due to COVID-19	119 (39.67%)	115 (38.33%)	.07	1	.794
Provides COVID-19 disease information including statistics and vaccine information	100 (33.33%)	74 (24.67%)	3.89	1	.049*
Provides or addresses COVID-19 disease restrictions and rules	58 (19.33%)	55 (18.33%)	.08	1	.778
Makes political statement	40 (13.33%)	40 (13.33%)	0	1	1
Makes passing reference to COVID-19	61 (20.33%)	64 (21.33%)	.072	1	.788
Casts doubt on COVID-19/Vaccine/Masks etc. or lockdowns	10 (3.33%)	39 (13%)	17.16	1	.000*

Note. *indicates significance at the .05 level.

General versus COVID-19-specific groups

Analysis of the data comparing posts (*n* = 529) from general interest groups with posts from groups created with a focus on COVID-19 (*n* = 71) revealed several differences in the focus of the content in these two categories. As might be expected, posts in the general groups focused on a much greater range of topics and functions, such that elements including advertising businesses, addressing general social problems and nostalgia did not feature at all in the posts sampled from the COVID-19-themed groups. While the COVID-19 groups were fewer and the number of sampled posts was also small, one

might note that these groups did not feature discussions with items that sought to inform the public about private business measures and restrictions related to COVID-19, nor did the sample encounter any posts that sought to cast doubt on the pandemic, vaccines, masks or preventative measures.

COVID-19-themed group posts were much more likely ($n = 50$, 70.42%) than general group posts ($n = 124$, 23.44%) to provide disease information, including statistics and vaccine news ($X^2 [1, N = 174] = 67.11, p < .01$). COVID-19 group posts were also almost equally likely as posts in general groups to feature discussion of the social changes, challenges and impacts of the pandemic with about 35.21% ($n = 25$) of COVID-19 group posts focusing on this topic compared to 39.51% ($n = 209$) of posts in general groups ($X^2 [1, N = 234] = .486, p = .47$). Similarly, the posts in COVID-19 groups regarding restrictions and rules around the disease (16.9%, $n = 12$) did not differ significantly in their relative numbers from similarly-focused posts in the general groups (19.09%, $n = 101$) ($X^2 [1, N = 113] = .197, p = .657$). Full details of this analysis may be found in Table 2.

Table 2

Comparison of Post Functions between Sampled Posts from General and COVID-19-specific Groups among Trinidad and Tobago and Jamaica Public Facebook Groups

Post function	General Groups posts $n = 529$	COVID-19-Specific Groups posts ($n = 71$)	χ^2	df	p
Advertises or promotes business or commercial event	59 (11.5%)	0 (0.0%)	8.78	1	0.003*
Promotes or displays social event – including activism/slogans/songs	40 (7.56%)	6 (8.45%)	0.7	1	.791
Addresses general social, environmental or economic problem or issue	56 (10.59%)	0 (0.0%)	3.5	1	.061
Nostalgia (including folklore and history)	35 (6.62%)	0 (0.0%)	4.99	1	0.026
Sentiment including greeting/joke/prayer	67 (12.67%)	3(4.23%)	4.33	1	.038*
Provides COVID-19 precaution information from a business	17 (3.21%)	0 (0.0%)	2.38	1	0.0125
Addresses social changes or challenges/impact due to COVID-19	209 (39.51%)	25 (35.21%)	.486	1	.486
Provides COVID-19 disease information including statistics and vaccine information	124 (23.44%)	50 (70.42%)	67.11	1	.000*

Provides or addresses COVID-19 disease restrictions and rules	101 (19.09%)	12 (16.90%)	.197	1	.657
Makes political statement	76 (14.73%)	4 (5.63%)	4.131	1	.042*
Makes passing reference to COVID-19	119 (22.5%)	6 (8.45%)	7.49	1	.006*
Casts doubt on COVID-19/Vaccine/Masks etc. or lockdowns	49 (9.26%)	0 (0.0%)	7.161	1	.007*

Note. *indicates significance at the .05 level.

Sources and claims

Research question 2 was concerned with the relative proportions of official and unofficial sources of COVID-19 related information on public Facebook groups associated with Trinidad and Tobago and Jamaica. A majority of the surveyed posts (38.8%, $n = 233$) featured personal observations or opinions as the primary source of information for the content compared to only about 14.7% ($n = 88$) that referred to official local sources or 20.7% ($n = 124$) that cited local news sources. Some 22.8% ($n = 137$) of posts overall obtained their information from online non-news, non-official websites, social media or blogs. However, when considering only the items that were coded for providing disease information ($n = 174$), the numbers improved somewhat, indicating that 35.6% of such posts ($n = 62$) relied on local official information and 42% ($n = 73$) provided information from local news media sources.

Overall, posts from Trinidad and Tobago groups referenced local official information in 19.3% ($n = 58$) of their posts compared to about 10% ($n = 30$) of Jamaican posts referencing their local official information and pronouncements. The observed distribution was significantly different than might be expected by chance ($X^2 [1, N = 88] = 8.9, p < .01$). Trinidad and Tobago groups referenced local news sources in about 27.3% of their posts ($n = 82$) compared to 14% ($n = 42$) in posts from Jamaican groups. This observed difference was statistically significant ($X^2 [1, N = 124] = 12.9, p < .01$). References to foreign official sources such as the Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO) were less frequent in posts of both countries, numbering only 19 references overall (3.17%). Though these were overall very low, the number of Trinidad and Tobago posts using foreign official sources ($n = 14$) was higher than the number of Jamaican posts using foreign official sources ($n = 5$) and the observed difference was statistically significant ($X^2 [1, N = 19] = 4.26, p < .05$). Jamaican posts utilized foreign news sources in about 14% ($n = 42$) of their posts while posts from Trinidad and Tobago mentioned or cited foreign news sources only about 4 percent ($n = 12$) of the time. This difference was significant ($X^2 [1, N = 54] = 16.67, p < .01$).

The present coding captured an equal number of possible strong and weak sources for each post. Posts citing, referencing or reproducing material from local or foreign official sources or local or foreign news sources could be classified as using strong sources while those relying on personal opinions, non-official/non-news websites, social media and commercial advertising could be classified as using weak sources. This allowed for the creation of two scales, one for strong sources and another for weak sources that could range from 0-4 for each post. As might be expected these two measures showed a negative and statistically significant correlation, $r(600) = -.548, p < .001$. However, the coefficient appeared to be somewhat small, though this could be a result of multiple codings since items could contain multiple pieces of information, multiple sources and therefore multiple codes.

Country comparisons showed higher average scores on the strong sources index for Trinidad and Tobago posts ($M = .55, SD = .70$) than for posts from Jamaica ($M = .40, SD = .57$). The observed

difference was statistically significant ($t[573.17] = 3.02, p < 0.01, d = .25$). Similarly posts in Jamaican groups scored higher on average ($M = .86, SD = .58$) on the weak sources index than posts from Trinidad and Tobago ($M = .49, SD = .58$). The observed difference was statistically significant ($t[597.97] = -7.90, p < 0.01, d = .65$). Dedicated COVID-19 groups were, on average, higher on the strong sources index ($M = .83, SD = .63$) than general groups ($M = .43, SD = .63$). The observed difference was statistically significant ($t[598] = -5.09, p < 0.01, d = .64$).

Conspiracies and misinformation

Research question 3 asked about conspiracy theories and misinformation evident in the contents of COVID-19 related posts on public Facebook groups associated with Trinidad and Tobago and Jamaica. To address this question the study coded a basic indicator where posts appeared to cast doubt on the disease (as well as prevention measures), as well as coding for ten indicators of conspiratorial ideation (e.g., suggesting nefarious powers are manipulating society) and four conspiracy methods or approaches (such as using disbelief rather than data for evidence) derived and adapted from prior published research (Bruder, Haffke, Neave, Nouripanah, & Imhoff, 2013; Lewandowsky, Gignac, & Oberauer, 2013; Mohammed, 2019).

These measures were not necessarily coincident as not all posts which cast doubt on COVID-19 measures, for example, did so with conspiratorial overtones. Several posters from both countries posted images, for example, showing gatherings of large groups and casting doubt on whether prevention measures such as social distancing were actually being enforced or even necessary. Other posts provided examples of unproven cures and remedies (such as the Madagascar tonic) while not invoking classic conspiratorial tropes. Overall, while some 8.2 percent ($n = 49$) posts from both countries served to cast doubt on COVID-19 or preventive measures, only 5.8 percent ($n = 35$) of posts contained indicators of conspiratorial ideation or approaches.

The data suggested a marked difference in the appearance of conspiratorial posts between the two countries with only 1.7 percent ($n = 5$) of Trinidad and Tobago posts showing evidence of conspiracy theories and approaches compared to five percent ($n = 30$) of Jamaica group posts. While small, the observed difference was greater than would be expected by chance ($X^2 [1, N = 35] = 17.86, p < .01$).

The present analysis considered a scale of ten conspiratorial ideation elements derived from prior research (Bruder, Haffke, Neave, Nouripanah, & Imhoff, 2013; Mohammed, 2019; Wood, 2017) and scored each item as 1 for present and 0 for absent using the following categories:

1. Powerful forces create a false narrative.
2. There are plots by multiple agents acting towards nefarious goals.
3. There exist webs of deception and subterfuge by supposed perpetrators.
4. We are powerless against powerful forces such as governments or corporations.
5. Many important things happen in the world, about which public is never informed.
6. Politicians usually do not tell us the true motives for their decisions.
7. Government agencies closely monitor all citizens.
8. Seemingly unconnected events are often the result of secret activities.
9. Secret organizations that greatly influence political decisions.
10. Belief in established conspiratorial narratives.

On this scale Trinidad and Tobago items flagged for conspiracy averaged 4.20 ($SD = 2.77$) while posts from Jamaica groups similarly flagged averaged 2.13 ($SD = 2.13$). These averages for conspiratorial content elements did not differ significantly across the two countries ($t[33] = 1.93$, $p = 0.062$, $d = .85$).

Similarly, the present analysis used a scale of four items indicating a conspiratorial approach. The items on this scale were:

1. Sowing doubt and raising suspicion.
2. Using disbelief rather than data for arguments.
3. Suggest possessing an alternative or true version of reality.
4. Attributing blame to others.

On this measure Trinidad and Tobago groups flagged for conspiratorial content ($n = 5$) averaged a score of 3.40 ($SD = .89$) while Jamaica ($n = 30$) averaged 2.90 ($SD = .99$). Again, the observed difference in scores were not statistically significant ($t[33] = 1.053$, $p = 0.3$, $d = .53$).

Discussion

Prior studies have identified the notion of social capital as a major factor in the roles and potentials of social media in national discourse, particularly in small and sometimes scattered nations. The earlier NMEDIAC study of Caribbean Facebook groups focused on nationalistic elements of social capital and the use of the groups as sites for bridging social distance by sharing information while engaging in nostalgia and imagined community formation. With a particular focus on COVID-19 there was a much more narrow focus in the present data. While some posts studied here did feature nostalgia (such as posters reminiscing about social events in "pre-Covid times") and community building, such as expressions of hope and support for those whom the disease had affected, the primary approach was one of information sharing and discussion of the disease and strategies with which to combat it. The present data suggest that the social media groups studied here served as locations for discussion of the COVID-19 pandemic and the often highly local concerns of the global disease in which participants shared, spread and dissected important information.

Examining social capital in this context may provide some insight into two important variations on the very notion of social capital (which itself has undergone various critical examinations over the past few years). Consistent with the prior NMEDIAC study, we may highlight the role of information sharing as a tool of social capital and community building. The material examined in the present study certainly suggests a building of social capital through a continuation of the bulletin board functions identified in 2012. Indeed, some of the posts were literally bulletins from local health authorities, intended for sharing and updating group visitors and members.

The material also suggests, however, that even this information function requires some interrogation, particularly in light of growing concerns about how social media platforms, often with little or no gatekeeping can become negative forces. As Ramadan (2017, p. 8) has noted: "Facebook groups – like any social capital – can just as easily be used for ill as for good, and social capital is not always an unalloyed good." Thus while the relative proportions were small, the very presence of misleading information and the promulgation of conspiratorial ideation and methods in the material studied may be taken to suggest that these groups may be "used for ill."

However, Douglas, et al. (2019, pp. 8-9) have articulated a somewhat more nuanced sense of the role of conspiracy theories, suggesting that there may be important social roles for these ideas and noting that "people generally have the need to maintain a positive image of the self, and conspiracy theories may assist people in maintaining this positive image." Douglas, et al. (2019, p. 9) further speculated that "perhaps conspiracy theories allow people to feel that they are in possession of rare, important

information that other people do not have, making them feel special and thus boosting their self-esteem."

Bearing this notion of the identity-boosting function of conspiracies in mind, one may take note of a continuing trend in Caribbean thought towards suspicion of information (including educational "indoctrination") as a possible tool of imperialism and continued dependency (Denny, 2020). For this reason, conspiracy theories may serve as a kind of caution or a form of social defense. Consider, for example, a post examined in the present study that raised doubts over the fact that a senior company official of a vaccine developer had not yet received a vaccination. This must be viewed not as simply an attempt to discredit the received information but also as an attempt to encourage critical examination of the dominant discourse.

We may thus conclude that the COVID-19 related posts on Facebook groups associated with Trinidad and Tobago and Jamaica examined here played important social roles in echoing and spreading useful information, often supported by official information and news sources. The presence of similar levels of concern in general groups and those specifically named for COVID-19 suggests that topics such as disease information and sharing official rules and restrictions pervaded the online discourse regardless of any specificity of topic in a group. Thus even groups on mushrooms, comic books, and used car sales featured discussion of COVID-19, indicating the breadth of concern in the online discourse sampled. That a group focused on funeral directors encountered in the sample contained a large number of concerned posts was also of no surprise and indicated something of the gravity of the situation.

While there were some instances of unsupported and questionable information including reference to conspiracy theories (even using words like "plandemic") these may (while incorrect or misplaced in terms of facts or science) also have performed important social functions and fit into a cultural propensity to guard against threats from afar. Insofar as this may be true, it may also signal a kind of nationalism or in-group insulation tendency in the discourse examined.

References

- Alexa.com. (2017, November 8). *The top 500 sites on the web*. Retrieved November 8, 2017, from Alexa.com: An Amazon.com company: <https://www.alex.com/topsites>
- Bedford, J., Enria, D., Giesecke, J., Heymann, D. L., Ihekweazu, C., Kobinger, G., . . . Wieler, L. H. (2020). COVID-19: towards controlling of a pandemic. *The Lancet*, 395(10229), 1015-1018. Retrieved from [https://doi.org/10.1016/S0140-6736\(20\)30673-5](https://doi.org/10.1016/S0140-6736(20)30673-5)
- Bourdieu, P., & Wacquant, L. J. (1992). *An invitation to reflexive sociology*. Chicago: University of Chicago Press.
- Brown, P. G. (2008). Choosing Ignorance within a Learning Universe. In B. Vitek, & W. Jackson (Eds.), *The Virtues of Ignorance: Complexity, Sustainability, and the Limits of Knowledge* (pp. 165-188). Lexington, Kentucky, USA: The University Press of Kentucky.
- Bruder, M., Haffke, P., Neave, N., Nouripanah, N., & Imhoff, R. (2013). Measuring individual differences in generic beliefs in conspiracy theories across cultures: Conspiracy Mentality Questionnaire. *Frontiers in Psychology*, 4(1). doi:10.3389/fpsyg.2013.00225
- Campbell, C., & McLean, C. (2002). Ethnic identities, social capital and health inequalities: factors shaping African-Caribbean participation in local community networks in the UK. *Social Science & Medicine*, 55(4), 643-657.
- Carpentier, N., Dahlgren, P., & Pasquali, F. (2013). Waves of media democratization: A brief history of contemporary participatory practices in the media sphere. *Convergence*, 19(3), 287-294.

doi:10.1177/1354856513486529

Center for Systems Science and Engineering [CSSE] at Johns Hopkins University. (2021, March 8). *COVID-19 data repository by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University*. Retrieved March 8, 2021, from CSSEGISandData: <https://github.com/CSSEGISandData/COVID-19>

Centers for Disease Control and Prevention. (2020, July 1). *Identifying the source of the outbreak*. Retrieved February 26, 2021, from Centers for Disease Control and Prevention: <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/about-epidemiology/identifying-source-outbreak.html#:~:text=This%20new%20coronavirus%20is%20similar,was%20discovered%20in%202019.>

Chamberlain, M. (2006). *Family Love in the Diaspora: Migration and the Anglo-Caribbean Experience*. New Brunswick, NJ: Transaction Publishers. Charles, V. E., Polis, C. B., Sridhara, S. K., & Blum, R. W. (2008). Abortion and long-term mental health outcomes: A systematic review of the evidence. *Contraception*, 78(6), 436-450. doi:10.1016/j.contraception.2008.07.005

Cook, J., Ellerton, P., & Kinkead, D. (2018). Deconstructing climate misinformation to identify reasoning errors. *Environmental Research Letters*, 13(1), 1-7. doi:10.1088/1748-9326/aaa49f

Denny, S. L. (2020). Edutocracy: The new West Indian plantocracy. *Sage Open*, 10(1), 1-15. doi:10.1177/2158244019899077

Douglas, K. M., Sutton, R. M., & Cichocka, A. (2017). The psychology of conspiracy theories. *Current Directions in Psychological Science*, 26(6), 538-542. doi:10.1177/0963721417718261

Douglas, K. M., Uscinski, J. E., Sutton, R. M., Cichocka, A., Nefes, T., Ang, C. S., & Deravi, F. (2019). Understanding conspiracy theories. *Political Psychology*, 40(S1), 3-35. doi:10.1111/pops.12568

Dredze, M., Broniatowski, D. A., & Hilyard, K. M. (2016). Zika vaccine misconceptions: A social media analysis. *Vaccine*, 34(30), 3441-3442. doi:10.1016/j.vaccine.2016.05.008

Elsasser, S. W., & Dunlap, R. E. (2013). Leading voices in the denier choir: Conservative columnists' dismissal of global warming and denigration of climate science. *American Behavioral Scientist*, 57(6), 754-776. doi:10.1177/0002764212469800

Eysenbach, G. (2008). Credibility of health information and digital media: new perspective and implications for youth. In M. J. Metzger, & A. J. Flanagin (Eds.), *Digital Media, Youth, and Credibility*, MIT Press, Cambridge, MA (pp. 123-154). Cambridge, MA: MIT Press.

Fowler, G. A. (2020, November 9). *Twitter and Facebook warning labels aren't enough to save democracy*. Retrieved November 28, 2020, from The Washington Post: <https://www.washingtonpost.com/technology/2020/11/09/facebook-twitter-election-misinformation-labels/>

Garwood, C. (2007). *Flat earth: The history of an infamous idea*. New York: Thomas Dunne Press.

Gauchat, G. (2012). Politicization of science in the public sphere: A study of public trust in the United States, 1974 to 2010. *American Sociological Review*, 77(2), 167-187. doi:10.1177/0003122412438225

Global Health Security Index. (2019). *Welcome to the Global Health Security Index*. Retrieved February 26, 2021, from Global Health Security Index: <https://www.ghsindex.org/>

Goertzel, T. (1994). Belief in conspiracy theories. *Political Psychology*, 15(4), 731-742. doi:10.2307/3791630

- Halavais, A. (2000). National Borders on the World Wide Web. *New Media and Society*, 2(1), 7-28. doi:10.1177/14614440022225689
- Hofstadter, R. (1970). *Anti-intellectualism in American life*. New York: Random House.
- Johansen, M. S., & Joslyn, M. R. (2008). Political Persuasion During Times of Crisis: The Effects of Education and News Media on Citizens' Factual Information about Iraq. *Journalism and Mass Communication Quarterly*, 85(3), 591-608.
- Kale, M. (1995). Projecting Identities: Empire and Indentured Labor Migration from Indian to Trinidad and British Guiana 1836-1885. In P. van der Veer, *Nation and migration: the politics of space in the South Asian diaspora* (pp. 44-73). Philadelphia: University of Pennsylvania Press.
- Kaloo, R. C., Mitchell, B., & Kamalodeen, V. J. (2020). Responding to the COVID-19 pandemic in Trinidad and Tobago: challenges and opportunities for teacher education. *Journal of Education for Teaching*, 452-462. doi:10.1080/02607476.2020.1800407
- Kavoori, A. (2015). Making sense of YouTube. *Global Media Journal*, 13(24), 1-25.
- Kavoura, A. (2014). Social media, online imagined communities and communication research. *Library Review*, 63(6/7), 490-504. doi:10.1108/LR-06-2014-0076
- Khan, A. (2004). *Callaloo nation: metaphors of race and religious identity among South Asians in Trinidad*. Durham, NC: Duke University Press.
- Knight, P. (2000). *Conspiracy culture: From Kennedy to the X-files*. London: Routledge.
- Lai, W. L. (1993). *Indentured Labor, Caribbean Sugar: Chinese and Indian Migrants to the British West Indies, 1838-1918*. Baltimore: Johns Hopkins Univ Pr.
- Lewandowsky, S., Gignac, G. E., & Oberauer, K. (2013, October). The role of conspiracist ideation and worldviews in predicting rejection of science. *PLOS One*, 8(10), 1-11.
- Lindgren, S. (2012). 'It took me about half an hour, but I did it!' Media circuits and affinity spaces around how-to videos on YouTube. *European Journal of Communication*, 27(2), 152-170. doi:10.1177/0267323112443461
- Lone, S. A., & Ahmad, A. (2020). COVID-19 pandemic – an African perspective. *Emerging Microbes & Infections*, 9(1), 1300-1308. Retrieved from <https://doi.org/10.1080/22221751.2020.1775132>
- Manuel, P. (1997-1998). Music, identity, and images of India in the Indo-Caribbean diaspora. *Asian Music*, 29(1), 17-35.
- McHugh, M. L. (2012). Interrater reliability: The kappa statistic. *Biochemia Medica*, 22(3), 276-282.
- Metzger, M. J., & Flanagin, A. J. (2013). Credibility and trust of information in online environments: The use of cognitive heuristics. *Journal of Pragmatics Volume 59, Part B, December 2013, Pages 210-220*, 59(1), 210-220. doi:10.1016/j.pragma.2013.07.012
- Miller, D., & Slater, D. (2000). *The Internet: An Ethnographic Approach*. New York: Berg.
- Misra, S., & Stokols, D. (2012). Psychological and health outcomes of perceived information overload. *Environment and Behavior*, 44(6), 737-759. doi:10.1177/0013916511404408
- Mohammed, S. N. (1998). Migration and the family in the Caribbean. *Caribbean Quarterly*, 44(3/4), 105-

121.

- Mohammed, S. N. (2012). Home Virtual Home? A case study of Caribbean groups on Facebook. *NMEDIAC – The Journal of New Media and Culture*, 8(1). Retrieved from http://www.ibiblio.org/nmediac/summer2012/Articles/home_on_facebook.html
- Mohammed, S. N. (2012). *The (dis)information age*. New York: Peter Lang.
- Mohammed, S. N. (2017). *Distant voices near: Historic globalizations and Indian radio in Trinidad and Tobago*. Kingston, Jamaica: University of the West Indies Press.
- Mohammed, S. N. (2019). Conspiracy theories and flat-Earth videos on YouTube. *The Journal of Social Media in Society*, 8(2), 84-102. Retrieved March 6, 2021, from <https://www.thejsms.org/index.php/TSMRI/article/view/527>
- Mohammed, S. N., & Thombre, A. (2012). Imagined communities, virtual diasporas or local hangouts? A study of Trinidad and Tobago groups on Facebook. *Electronic Journal of Communication*, 21(3-4), 21(3-4). Retrieved from <http://www.cios.org/www/ejc/v21n34toc.htm>
- Mohammed, S. N., & Thombre, A. (2017). An investigation of user comments on Facebook pages of Trinidad and Tobago's Indian music format radio stations. *Journal of Radio and Audio Media*, 24(1), 111-129. <https://doi.org/10.1080/19376529.2016.1252374>.
- Mooney, C. (2005). *The Republican war on science*. New York: Basic Books.
- Morello, C. (2004, October 7). Conspiracy theories flourish on the Internet. *The Washington Post*, p. B01. Retrieved March 6, 2021, from Thursday, October 7, 2004; Page B01
- Nair, A. (2020, March 10). Jamaica confirms first Imported case of Coronavirus. *US News and World Report*. Retrieved March 8, 2021, from <https://www.usnews.com/news/world/articles/2020-03-10/jamaica-confirms-first-imported-case-of-coronavirus>
- Narayan, B., & Preljevic, M. (2017). An information behaviour approach to conspiracy theories: Listening in on voices from within the vaccination debate. *Information Research-an International Electronic Journal*, 22(1). Retrieved from <http://InformationR.net/ir/22-1/colis/colis1616.html>
- Northrup, D. (1995). *Indentured labor in the age of imperialism, 1834-1922*. Cambridge: Cambridge University Press.
- Potter, R. B., Conway, D., & Phillips, J. (2005). *The experience of return migration: Caribbean perspectives*. Hants, England: Ashgate Publishing.
- Puri, S. (2020). SARS COVID 19 crisis – Developing nations to emulate what? *2020 Indian Journal of Community and Family Medicine*, 6(1), 13-16. doi:10.4103/IJCFM.IJCFM_27_20
- Ramadan, R. (2017). Questioning the role of Facebook in maintaining Syrian social capital during the Syrian crisis. *Heliyon*, 3(e00483), 1-30. doi:10.1016/j.heliyon.2017.e00483
- Ramnarine, T. K. (2011). Music in circulation between diasporic histories and modern media: exploring sonic politics in two Bollywood films *Om Shanti Om* and *Dulha Mil Gaya*. *South Asian Diaspora*, 3(2), 143–158.
- Sharma, M., Yadav, K., Yadav, N., & Ferdinand, K. C. (2016). Zika virus pandemic—analysis of Facebook as a social media health information platform. *AJIC: American Journal of Infection Control*, 35(3), 301-302. doi:10.1016/j.ajic.2016.08.022

- Shin, J., Jian, L., Driscoll, K., & Bar, F. (2018). The diffusion of misinformation on social media: Temporal pattern, message, and source. *Computers in Human Behavior*, 83(1), 278-287. doi:10.1016/j.chb.2018.02.008
- Smallman, S. (2018). Conspiracy theories and the zika epidemic. *Journal of International and Global Studies*, 9(2), 1-13.
- Smithson, M. (1993). Ignorance and Science: Dilemmas, Perspectives, and Prospects. *Knowledge: Creation, Diffusion, Utilization*, 15(2), 133-156.
- Southwell, B. G., Thorson, E. A., & Sheble, L. (2018). *Misinformation and mass audiences*. (B. G. Southwell, E. A. Thorson, & L. Sheble, Eds.) Austin: University of Texas Press.
- Sutton, C. (1987). The Caribbeanization of New York City and the emergence of a transnational socio-cultural system. In C. R. Sutton, & E. Chaney, *Caribbean Life in New York City: socio-cultural dimensions* (pp. 15-30). New York: Center for migration studies.
- The Economist Intelligence Unit N.A. Incorporated. (2020). *Caribbean countries seek multilateral support. Country report - Jamaica*. London: The Economist Intelligence Unit N.A. Incorporated. Retrieved February 26, 2020, from <https://link.gale.com/apps/doc/A622509735/GIC?u=suic&sid=GIC&xid=226d56ac>
- The Economist Intelligence Unit N.A. Incorporated. (2020). *Country report- Jamaica: Tourist arrivals to Jamaica collapse amid Covid-19*. London: The Economist Intelligence Unit N.A. Incorporated. Retrieved March 8, 2020, from <http://store.eiu.com/Product.aspx?pid=50000205>
- The United States Census Bureau. (2019, May 23). *Detailed look at sub-Saharan African and Caribbean ancestry*. Retrieved March 2021, 8, from Census.gov: <https://www.census.gov/library/stories/2017/12/sub-saharan-caribbean-population.html>
- The World Bank Group. (2021). *Individuals using the Internet (% of population) - Jamaica*. Retrieved March 6, 2021, from The World Bank: IBRD/IDA: <https://data.worldbank.org/indicator/IT.NET.USER.ZS?locations=JM>
- The World Bank Group. (2021). *Individuals using the Internet (% of population) - Trinidad and Tobago: International Telecommunication Union (ITU) World Telecommunication/ICT Indicators Database*. Retrieved February 26, 2021, from Worldbank.org: <https://data.worldbank.org/indicator/IT.NET.USER.ZS?locations=TT>
- The World Bank Group. (2021). *The World Bank/IBRD/IDA Jamaica: Data*. Retrieved March 5, 2021, from The World Bank/IBRD/IDA: <https://data.worldbank.org/country/JM>
- The World Bank Group. (2021). *Trinidad and Tobago*. Retrieved February 26, 2021, from The World Bank IBRD/IDA Data: <https://data.worldbank.org/country/trinidad-and-tobago>
- Walker, P. G., Whittaker, C., Watson, O. J., Winskill, P., Hamlet, A., Djafaara, B. A., . . . Brazeau, N. (2020). The impact of COVID-19 and strategies for mitigation and suppression in low- and middle-income countries. *Science* 369(6502), 413-422. Retrieved from <https://doi.org/10.1126/science.abc0035>
- Waters, M. C. (1994). Ethnic and Racial Identities of Second-Generation Black Immigrants in New York City. *International Migration Review*, 28(4), 795-820.
- Wood, M. J. (2017). Conspiracy suspicions as a proxy for beliefs in conspiracy theories: Implications for theory and measurement. *British Journal of Psychology*, 108(1), 507-527. doi:10.1111/bjop.12231

Wood, M. J., Douglas, K. M., & Sutton, R. M. (2012). Dead and alive: Beliefs in contradictory conspiracy theories. *Social Psychological and Personality Science*, 3(1), 767–773. doi:10.1177/1948550611434786

Author Note

Address all correspondence to Shaheed Nick Mohammed at snm11@psu.edu

[About](#) | [Issues](#)

© NMEDIAC & individual NMEDIAC authors, editors, and programmers.